

Upper Great Plains Transportation Institute North Dakota State University

BRIEFING PAPER

FARGO METROPOLITAN AREA AT A GLANCE

- Fargo Population = 93,000
- Fargo/Moorhead metro population = 175,000
- Number of business establishments = 5,719
- Unemployment rate = 2.1%
- Center for education, retail, manufacturing, health care, finance, and agriculture
- Top Employment Sectors
 - ▶ Education and health service (16,420 employees)
 - ▶ Retail trade (14,719)
 - ▶ Government (14,022)
 - ▶ Professional and business services (11,893)
 - ▶ Leisure & Hospitality (11,358)
 - ▶ Manufacturing (9,431)
- Rankings
 - ▶ One of 10 most affordable places to live and work (*MSN Real Estate*)
 - ▶ Fourth in ranking of “Best Small Metro Areas for Business and Careers” (*Forbes Magazine*)
 - ▶ Top U.S. city for environmental health and quality of life (*Earth Day Network*)
 - ▶ 69th Best (*Money Magazine* “Best Places to Live” edition)
 - ▶ Third least angry city
 - ▶ 73rd least expensive place to live
- Center for higher education
 - ▶ 2 universities - NDSU, MSUM
 - ▶ 1 private college - Concordia
 - ▶ Approximately 23,000 total enrollment

SELECTED COMPANIES LOCATED IN FM

- | | |
|-------------------------|-----------------------|
| • Microsoft | • Case-New Holland |
| • Alien Technologies | • DMI Industries |
| • Navteq | • GEM Cars |
| • Phoenix International | • Amity International |
| • Packet Digital | • Crystal Sugar |
| • Pedigree Technologies | • Roman Meal |
| • Bobcat | • Anheuser Busch |

NDSU AT A GLANCE

- Enrollment = 12,258 (Fall 2006)
- Student/teacher ratio = 19/1
- Male/female ratio - 55/45%

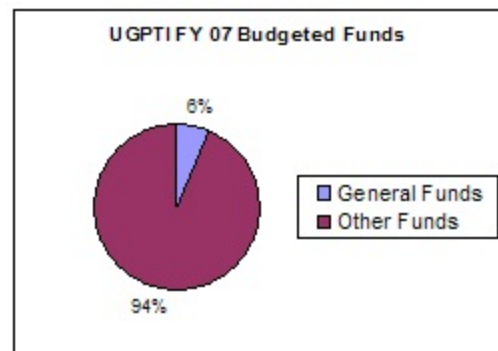
- Total employees = 5,222
- Living alumni = 63,800
- Main campus size = 41 square blocks (258 acres)
- 2005 Research Expenditures = more than \$103 million (*most recent available*)
- Ranked 34th in the nation in *The Scientist's* survey of best places for post doctorates
- Ranked 85th in the nation for research expenditures for science and engineering by NSF
- NDSU construction underway = \$50 million

UPPER GREAT PLAINS TRANSPORTATION INSTITUTE

- Created in 1967 by ND Legislature at NDSU
- Answers to the Provost and Office of the President
- Annual Budget of \$10,000,000
- Approximately 50 employees
- About 50 students, graduate and undergraduates
- Mission: To educate people, conduct research, and provide outreach in the areas of small urban and rural transportation and logistics to enhance the mobility of people, goods, and agricultural commodities.
- Vision: Excel as one of the premiere university transportation centers in the United States.

UGPTI ADMINISTRATION

- Goal: Create an environment for the individual to grow intellectually, develop professionally, and succeed in their chosen area
- Current FTE's: 5.0
- FY 08 General Fund Budget: \$604,920



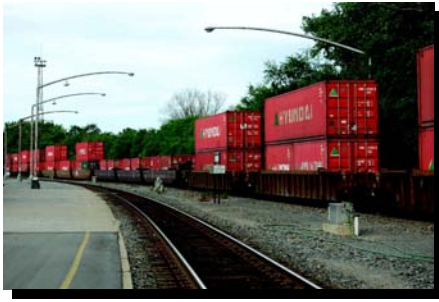
RESEARCH / OUTREACH PROGRAM OVERVIEW



Advanced Traffic Analysis Center - Ayman Smadi

Mission: Enhances transportation systems in small to medium-size cities by using advanced traffic analysis and Intelligent Transportation Systems to improve safety and mobility. The center's primary role is to support decision makers responsible for planning, operating and funding transportation systems at the local, regional and state levels. Primary efforts focus on intelligent transportation systems, traffic operations and travel demand modeling.

- Current FTE's: 4.0
- FY 08 Budget: \$850,000
 - 50% FHWA
 - 30% ND DOT
 - 15% ND MPO's
 - 5% Other States



Agricultural and Industrial Freight Center - Kim Vachal

Mission: Focus on policy and investment decisions that affect the competitiveness of U.S. goods in a global market. The scope of activities includes research on the efficient use of local resources in infrastructure investment and maintenance as well as effects of multi-modal national transport investments and policies, with special attention given to agricultural producers and rural businesses.

- ▶ Current FTE's: 2.0
- ▶ FY 08 Budget: \$130,000
 - 42% FHWA
 - 30% USDA
 - 13% ND Wheat Comm & RRV&W
 - 15% Other, including ATA



Biennial Strategic Transportation Analysis Center - Mark Berwick

Mission: Improve the competitiveness of ND firms through transportation enhancement by highlighting critical transportation topics in cooperation with the ND Department of Transportation. The program is dedicated to conducting ongoing research and outreach needed by the ND DOT as it assesses issues and makes resource allocation decisions for the state's transportation system.

- ▶ Current FTE's: 2.0
- ▶ FY 08 Budget: \$150,000
 - 100% ND DOT



DOT Support Center - Kurt Johnson

Mission: Provide intellectual capital to the North Dakota Department of Transportation to solve complex problems. The center also addresses regional issues within North Dakota and surrounding states. The center includes a student roadway design section supervised by on-site DOT design staff to employ, train and utilize undergraduate students in DOT design projects providing real-life experience for engineering students bringing valuable marketable experiences to future employers. The center also includes IT staff that provide support and development

capabilities to the DOT as well as a research arm that conducts timely research on issues confronting the DOT.

- ▶ Current FTE's: 2.0
- ▶ FY 08 Budget: \$700,000
 - 95% ND DOT
 - 5% ND Aeronautics Commission
- ▶ Student training: 15 undergraduate and 2 graduate students



North Dakota Local Technical Assistance Program - Gary Berreth

Mission: Foster a safe, efficient, environmentally sound, and cost effective highway, road, and street system by facilitating the exchange of transportation technology among local units of government and other transportation agencies through training, technical assistance, and information services as part of the U.S. Federal Highway Administration's nationwide LTAP network.

- ▶ Current FTE's: 3.0
- ▶ FY 08 Budget: \$280,000
 - 50% FHWA
 - 36% NDDOT
 - 7% ND Insurance Reserve Fund
 - 7% Other
- ▶ Student training: 15 undergraduate and 2 graduate students



Mountain-Plains Consortium - Denver Tolliver

Mission: Providing for safe, mobile, and sustainable freight and passenger transportation by being a leader in transportation and promoting its critical importance to the economic viability and quality of life through research, distance learning, and interdisciplinary education; while serving the unique and critical needs of the Mountain-Plains region.

- ▶ Current FTE's: 3.5
- ▶ FY 08 Budget: \$1,633,000
 - 100% RITA, USDOT



Small Urban and Rural Transit Center - Jill Hough

Mission: Assist small urban and rural transit systems and other transit entities by conducting relevant research and offering outreach and training. The Center will provide and facilitate the exchange of information. Special focus will be given to planning, operations, and technologies with an emphasis on "smart solutions" to problems.

- ▶ Current FTE's: 7.25
- ▶ FY 08 Budget: \$1,200,000
 - 85% FTA, USDOT
 - 12% ND DOT
 - 3% Other



Rural Transportation Safety and Security Center - Kim Vachal

Mission: Develop a thorough understanding of the dynamics of transportation safety and security in the region's rural environment and utilize that information to develop a research, education, and outreach program geared specifically for rural organizations and interests.

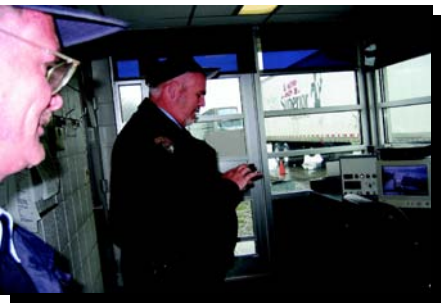
- ▶ Current FTE's: 3.0
- ▶ FY 08 Budget: \$500,000
 - 93% FHWA, USDOT
 - 7% NDDOT



Transportation Learning Network (TLN) - Julie Rodriguez

Mission: Support quality transportation through a network of people and technology that serves TLN members by enhancing communication, education, professional development, technology transfer and research. TLN serves the transportation departments in Montana, North Dakota, South Dakota, and Wyoming and the Mountain-Plains Consortium universities. It currently has a videoconference network and a content-on-demand server, and will soon be adding webconferencing and other learning management services for both TLN members and non-members.

- ▶ Current FTE's: 2.0
- ▶ FY 08 Budget: \$380,988
 - 72% Pooled Funds from MT, ND, SD, and WY State DOTs
 - 28% Mountain-Plains Consortium



Transportation Safety Systems Center - Brenda Lantz

Mission: improve the safety of our transportation network. We accomplish this through software development for state and federal safety enforcement specialists nationwide, safety-related research and analysis, as well as presentations and training.

- ▶ Current FTE's: 10
- ▶ FY 08 Budget: \$1,860,025
 - 96% FMCSA, USDOT
 - 4% Other (SAIC, Booz Allen, Computer Science Corp)

EDUCATION PROGRAM OVERVIEW

Doctorate of Transportation and Logistics - Denver Tolliver

- ✓ Interdisciplinary program involving 3 colleges, and 4 departments
- ✓ Coordinated by UGPTI
- ✓ 24 students fall of 2007 semester, 3 to 4 additional students in spring 2008
- ✓ Sponsored by MPC

Masters of Military Logistics (MML) - Brian Kalk

- ✓ 12 month cohort program
- ✓ 36 graduate credit professional degree program
- ✓ Targeted for career military officers and DoD civilians
- ✓ Interdisciplinary program involving 3 colleges and 4 departments
- ✓ Coordinated by UGPTI
- ✓ 13 students fall of 2007
- ✓ Graduated first class of 17 students May 2007
- ✓ Sponsored by DoD

Masters Degree Transportation Option - Denver Tolliver

- ✓ Civil Engineering and Agribusiness and Applied Economics
- ✓ CE - 12 students; AAE - 3 students for fall 2007
- ✓ Sponsored by MPC

BSC Associate Degree - Jon Mielke

- ✓ Collaborative effort
- ✓ Very few students signing up this semester
 - Needs to be reviewed

NDSU TRANSPORTATION BUILDING INITIATIVE

- Approximately \$6,000,000
- \$3,000,000 raised so far
 - \$2,000,000 from SAFETEA-LU, Sec 5513(g)
 - \$1,000,000 from NDDOT, Transportation Enhancement funds
- Fundraising will begin in November
- Architect will be hired in October

OTHER UGPTI INITIATIVES

- Real-Time traffic communications technologies
- Transportation Sensing Technologies, RFID and other
- Rural and Agricultural University Transportation Centers Program
- Masters degree in Transportation and Urban Planning
- NDSU School of Transportation