

Upper Great Plains Transportation Institute

NORTH DAKOTA STATE UNIVERSITY

NDSU AT A GLANCE

- Enrollment = 12,527 (Fall 2007)
- Student/teacher ratio = 18.9/1
- Male/female ratio - 55/45%
- Total employees = 5,596 (includes temporary and student employee positions, 2007)
- Living alumni = 71,190
- Main campus size = 41 square blocks (258 acres)
- 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
- 69 doctorates awarded in 25 disciplines in 2007
- 2005 Research Expenditures = more than \$103 million (most recent available)
- Graduated 350 engineers and 58 in computer science at bachelors and graduate in 2006-2007

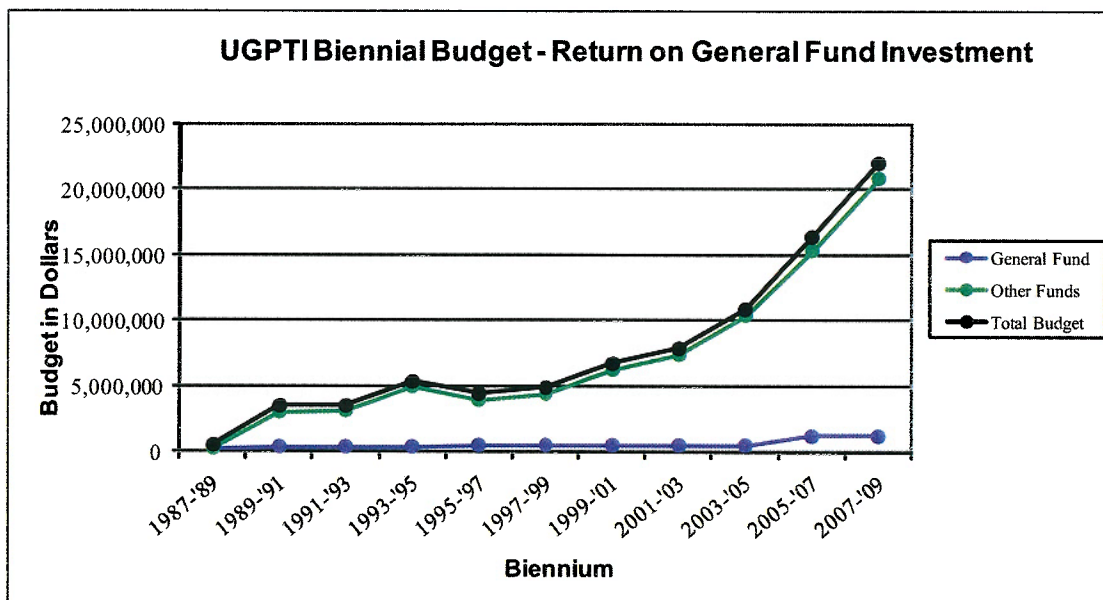
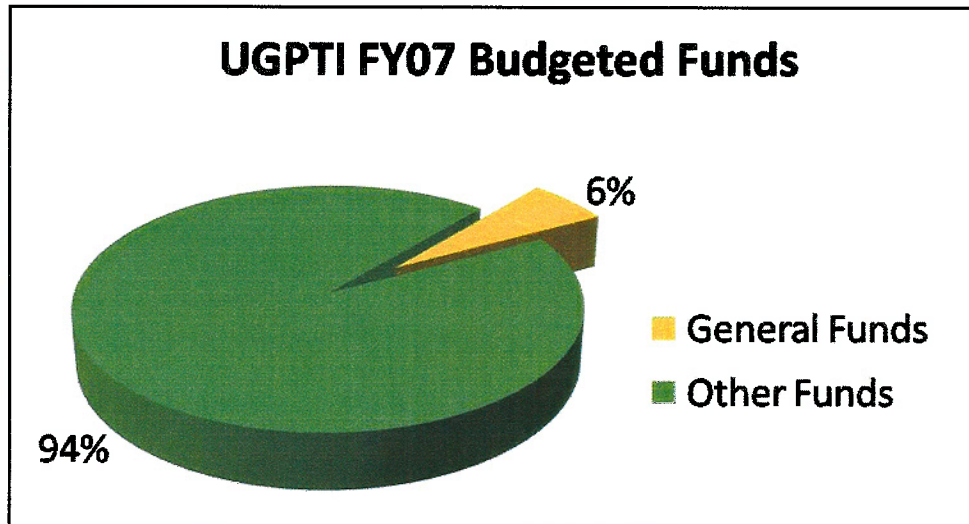
UPPER GREAT PLAINS TRANSPORTATION INSTITUTE

- Created in 1967 by ND Legislature at NDSU
- Statutory advisory council
- Separate line item budget
- Answers to the Provost and Office of the President
- Annual Budget of \$10,000,000
- Three Locations
- Approximately 50 employees
- About 50 students, graduate and undergraduate



1320 Albrecht Boulevard • Room 430 IACC Bldg., NDSU • Fargo, ND 58105 • (701) 231-7767
 515½ E. Broadway • Suite 101 • Bismarck, ND 58501 • (701) 328-9855
 1536 Cole Boulevard • Suite 140 • Lakewood, CO 80401 • (720) 238-0080

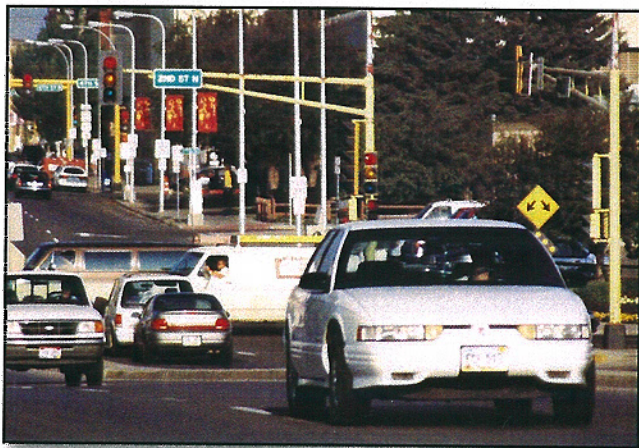
- Mission: To educate people, conduct research, and provide outreach in the areas of small urban and rural transportation and logistics to enhance the mobility of people, goods, and agricultural commodities.
- Vision: Excel as one of the premiere university transportation centers in the United States.



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
- Annual 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.

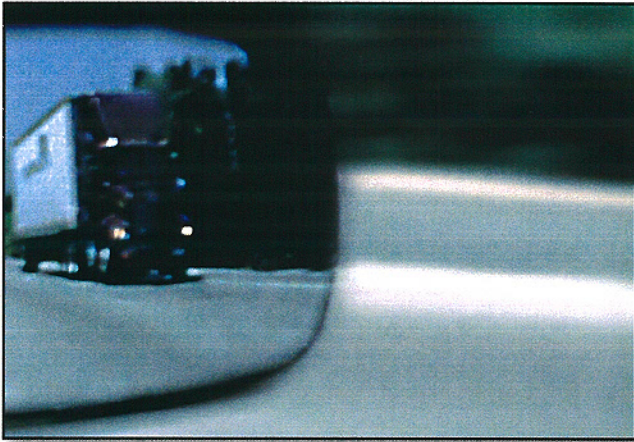
- Current FTE's: 4.0
- Annual Budget: \$850,000
 - 50% FHWA
 - 30% NDDOT
 - 15% ND MPO's
 - 5% Other States



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 multimodal national transport investments and policies, with special attention given to agricultural producers and rural businesses.

- Current FTE's: 1.25
- Annual Budget: \$85,000
 - 74% USDA
 - 18% ND Wheat Commission &
RRV&Western Railroad
 - 8% FHWA



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 NDDOT as it assesses issues and makes resource allocation decisions for the state's transportation system.

- Current FTE's: 2.0
- Annual Budget: \$150,000
100% NDDOT



Center for Multimodal & Waterway Freight Analysis – Doug Benson

Mission: Conduct and support economic and operational research integrating the major transportation modes. The center incorporates transportation economics, network modeling and specialized data management capabilities into its analytical approach.

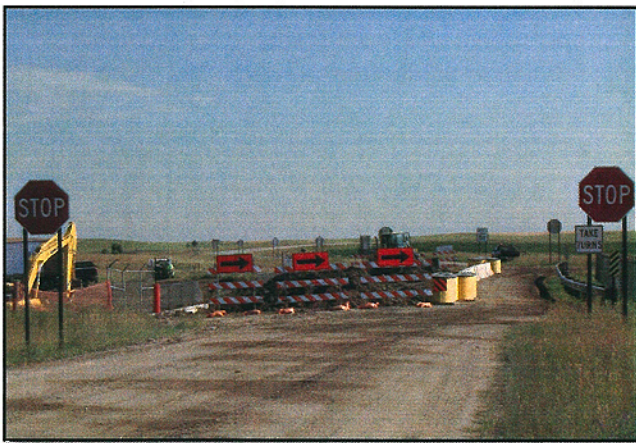
Two proposals have been submitted to the U.S. Army Corps of Engineers to provide initial funding for the center. The U.S. Army Corps of Engineers will be the major funding source.



DOT Support Center - Kurt Johnson

Mission: Provide intellectual capital to the ND Department of Transportation to solve complex problems. The center also addresses regional issues for 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. The design section provides real-life experience for engineering students, bringing valuable marketable experiences to future employers. The center also includes IT staff that provide support/development capabilities. The third function is to provide the DOT with research support in asset management, pavement rehabilitation, safety, innovative technology, and in support of the DOT's Strategic Plan.

- Current FTE's: 2.0
- Annual Budget: \$488,000
100% NDDOT
- Student training:
15 undergraduate students
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
- Annual Budget: \$338,000
41% FHWA
36% NDDOT
17% Other
6% ND Insurance Reserve Fund



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
- Annual Budget: \$1,633,000
100% RITA, USDOT



Small Urban and Rural Transit Center – Jill Hough

Mission: Enhance the mobility of residents in small urban and rural communities by providing transit users, operators, suppliers, and agencies with information and training that improves service efficiency and responsiveness. SURTC staff conduct transit research in areas of planning, operations, and technologies; offer training in various areas of management and operations; and teach graduate level courses relating to public transportation.

- Current FTE's: 8.0
- Annual Budget: \$1,500,000
90% FTA, USDOT
7% NDDOT
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
- Annual Budget: \$500,000
 - 70% FHWA, USDOT
 - 20% NDDOT
 - 10% FMCOG



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, and Wyoming and the Mountain-Plains Consortium universities. It currently has a video-conference network and a content-on-demand server, and will soon be adding web-conferencing and other learning management services for both TLN members and non-members.

- Current FTE's: 2.0
- Annual Budget: \$482,000
 - 67% Pooled Funds from MT, ND, and WY State DOTs
 - 33% 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: 11.0
- Annual 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 in Transportation and Urban Systems

- Approved by the NDSU Graduate Council
- Awaiting approval by the ND Board of Higher Education

NDSU TRANSPORTATION BUILDING INITIATIVE

- Approximately \$6,000,000
- \$3,000,000 raised to date
 - \$2,000,000 from SAFETEA-LU, Sec 5513(g)
 - \$1,000,000 from NDDOT, Transportation Enhancement funds
- Fund raising preparations are in progress
- Preliminary plans have been developed

OTHER UGPTI INITIATIVES

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