SUBIC

2005 ANNUAL REPORT







SURTC

from the Director	1
Research	2
Education and Outreach	
Eddediton and Outreden	0
Training	9
Publications	10
Staff and Students	11
Advisory Board	12

SURTC On the Move



Live Hough

from the Director . . .

Establishing the Small Urban & Rural Transit Center at North Dakota State University's Upper Great Plains Transportation Institute in 2002 was the right idea at the right time. Mobility for those in smaller communities and rural areas had always been a challenge, but that challenge was being recognized by state and federal officials and by transit agencies and local community leaders as a key factor in quality of life, economic development and community viability.

SURTC is now four years old and has rapidly developed research, outreach, and education programs that address the mobility challenges posed by the demographics, distance and other characteristics that are unique to small urban and rural areas. Community leaders addressing mobility problems at the local level know that cooperation and teamwork are critical. At SURTC we also recognize the importance of collaboration. That's why we're working with national organizations and agencies like the Community Transportation Association of America and the Federal Transit Administration as well as local and state transit agencies and regional organizations such as the Dakota Transit Association.

We all have the same goal - to increase the mobility of small urban and rural residents through improved public transportation. SURTC serves as a clearinghouse or meeting place to address common challenges and opportunities related to that goal. Our programs and research efforts are a link between federal, regional or state programs and local transit agencies. Our frequent contact with transit providers allows us to build on the good ideas that originate on vans and buses or in local dispatch offices and meeting rooms.

This Annual Report, our first, provides an overview of our programs and research projects and related accomplishments for the past year. You'll see how our programs, originally targeted at North Dakota, South Dakota, Montana, Wyoming and Minnesota are attracting interest and having an impact across the nation.

If you think any of the projects outlined in this report could be helpful to your transit agency or community, let us know. Likewise, if this report prompts you to think of issues and challenges that we could address for your community, contact us with those ideas, too. We're proud of what SURTC has accomplished so far. And we're confident that it's just a beginning.

SURTC



SURTC research focuses on issues and challenges faced by transit users and providers in small urban and rural communities. The research program has two major thrusts:

• Addressing management and institutional issues faced by transit client groups.

SURTC Looks at Mobility in North Dakota

SURTC completed an 18-month comprehensive look at transportation methods, demographics, and geography in North Dakota to find ways to improve mobility for state residents.

The study was conducted for the North Dakota Department of Transportation (NDDOT) and SURTC researchers offered recommendations to DOT officials.

"There is no one silver bullet that will meet all of the mobility needs across the state," said Jon Mielke, the SURTC researcher who led the project. "That's because everybody's mobility needs are different and unique."

DOT director Dave Sprynczynatyk said he hopes the plan will eventually lead to the development of a mobility index that will allow the DOT to identify areas that require service enhancements and to continually monitor progress that is being made toward the achievement of mobility goals.

"Our ultimate goal is to compare existing service with needs to determine where the gaps are. Based on that, we'll develop a plan on how best to meet those needs and fill the gaps," says Jon Mielke.

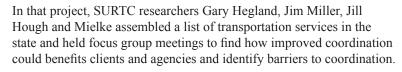
The effort was launched in April 2004 with a meeting of representatives from nearly two dozen public transportation-related organizations and agencies including social service agencies, transit providers, disability advocacy agencies, and the North Dakota Association of Counties. Those representatives form a steering committee for the study. They identified key issues and outlined concerns faced by transit providers.

The study is part of a statewide strategic transportation plan adopted in 2002 by the NDDOT to provide a shared vision for North Dakota's transportation system. The plan's goals call for a transportation system that facilitates optimum personal mobility. One of the initiatives is the development of a statewide personal mobility plan.

A copy of the report "Personal Mobility in North Dakota: Trends, Gaps, and Recommended Enhancements" (DP-165) and the executive summary is available for download at www.surtc.org/research/reports.php.

The research built on a project completed for the NDDOT last year. In that project, researchers studied transportation coordination among social service agencies in North Dakota. Based on the project, SURTC recommended establishing a state-level coordinating council and eight regional coordinating councils that

include representatives of providers and users of all publicly funded transportation programs.



"The cost of transportation services is going up while the demand for those services is growing. The study provides a roadmap to using existing dollars more efficiently and effectively to meet those needs," Hegland says. A copy of the report for that project is available at www.surtc.org/research/reports.php.



Other Research

Campus Transit. For the third consecutive year, SURTC surveyed students at North Dakota State University, Minnesota State University Moorhead, and Concordia College to learn their attitudes toward transit and how they use the Fargo-Moorhead Metropolitan Area Transit system's 27 fixed-route buses. Previous studies determined when and where the heaviest student



ridership took place, allowing MAT to adjust accordingly. "The first two years of studies established baseline information on transit use and attitudes among area college students," says Jill Hough, SURTC director. "Continuing surveys will reveal changes in transit use patterns and help MAT better tailor its services and promotional activities." A report on the first two years of research is available at www.surtc.org/research/reports.php. The study is being conducted by Hough and staff members Del Peterson, Gary Hegland, David Ripplinger, and Dustin Ulmer.

Express Bus. Nearly 50 percent of commuters surveyed by SURTC indicated they would use an "express" bus for their 50-mile commute between Fargo-Moorhead and Wahpeton-Breckenridge. The survey was conducted in cooperation with the Fargo-Moorhead Metropolitan Council of Governments at the request of Clay County Rural Transit. "As the economic landscape in both Fargo-Moorhead and Wahpeton-Breckenridge changes and evolves, we're seeing more commuters and a greater exchange of workers and commerce between the two areas," notes Del Peterson, the SURTC researcher who conducted the survey. The survey found that most people travel between



Wahpeton-Breckenridge and Fargo-Moorhead for employment, with more than 30 percent working in North Fargo.

Commuter Vanpooling in North Dakota. High gas prices and an evolution in demographics and business in North Dakota may revive interest in vanpools. SURTC and the North Dakota Department of Commerce are exploring the feasibility of establishing vanpools across the state. "We're looking at how this concept has changed since North Dakota last had an aggressive program in the late 70s and early 80s," says SURTC researcher Jon Mielke. There are new federal incentives for vanpooling programs. "Major employers like Pro-Gold, Dakota Growers Pasta, Marvin Windows and others have facilities located in relatively small communities that draw employees from a large area. We also have employees choosing to live in rural areas and commute to

larger communities for employment," Mielke notes. The study surveyed employers across the state to learn about employment trends and employer attitudes toward ride sharing. The study also analyzed fifteen vanpool programs that are operated by state and local entities around the country. Drawing from the most attractive features of those programs, the study presented a set of recommendations that may be considered if North Dakota decides to reinstitute a state commuter vanpool program. A copy of the final report is available at

www.surtc.org/research/vanpool.php.

Paratransit Service Boundaries Fargo-Moorhead's Metropolitan Area Transit (MAT) currently goes beyond the requirements of the Americans with Disabilities Act (ADA). However, continuing to do so will be a challenge in the face of a growing metropolitan area and increasing costs. To best address the community's changing needs, MAT contracted with SURTC to study the challenges and determine possible solutions, says Dave Ripplinger, SURTC researcher and coordinator of the project. "MAT's demandresponse service is being stretched," he says. "Management wants to determine the best balance between maintaining affordable service for as many clients as possible and





charging what is necessary to keep the system viable while remaining in compliance with federal regulations. We are helping MAT develop service zones as well as fare structures that will help it provide affordable, high quality service to its riders while remaining in compliance with ADA requirements." A copy of the report "Metropolitan Area Transit Paratransit Service Boundary Study" (DP-166) is available for download at www.surtc.org/research/reports.php.

Students Design Prototype Bus Shelter. As an outgrowth of an architecture student design contest sponsored by SURTC at North Dakota State University, the Federal Transit Administration funded the development of a prototype transit shelter for northern climate communities. "In the winter months, transit riders routinely face freezing rain, snow, ice, and extremely low temperatures," notes SURTC director Jill Hough. "Improving rider comfort in shelter usability is a key toward increasing transit use. I can't think of a better place for this project than Fargo." Hough worked with NDSU architecture instructor Cindy Urness and students Katie Evans and Daniel McGinnis on the project. The shelter prototype is modular so that it can be easily adapted to various sites and for varying numbers of waiting passengers. It is also solar powered and provides real time messaging with links to the transit system, weather, community news, and typical destination points. Cost effectiveness, energy efficiency, adaptability, environmental impact, communication technology, aesthetics, and accessibility were key considerations in the design. Urness and the students also worked with a local architect and construction company on construction of two of the bus shelters from SURTC's student design contest two years ago.

Improved Coordination Using ITS. SURTC researchers studied the impacts of Intelligent Transportation Systems (ITS) in three communities to determine how transportation agencies can use the technology to better coordinate their services. In a Federal Transit Administration (FTA) study, SURTC researcher David Ripplinger identified the impacts of ITS technology on coordination efforts in Kearney, Neb., and suburban Detroit, Mich. SURTC researcher Del Peterson examined the impacts on coordination efforts in North Dakota. "The study will help the FTA better understand how it can direct future policy with regard to ITS dollars," Ripplinger notes. "Also, researchers and transit professionals will see how ITS technology has been used and where it works and where it doesn't in terms of coordination."

SURTC Studies Bus Industry. SURTC researchers are examining the financial health of the small bus manufacturing industry and examining bus purchasing trends of the last 20 years. They are also examining FTA and local procurement policies and their impact on the manufacturing industry. Of the 50,000 transit vehicles purchased with Federal Transit Administration support from 1995 to 2001, 26 percent were buses smaller than 30 feet long and more than 35 percent were vans and other small vehicles. "Unfortunately, the transit bus supply chain is not a stable healthy industry," notes SURTC affiliate researcher Jim Miller. Miller will work with SURTC researchers Del Peterson and Jill Hough on the study. The 18-month study will also evaluate the impact of other laws and regulations, especially the Clean Air Act, the Americans with Disabilities Act and Buy America requirements. The study will attempt to identify incentives to adopting new technologies and the impact that standardization of bus specifications would have on production efficiency and cost. Other factors that will be studied include excess capacity in the industry and competition and subsidies.

Bus Routing Program Moves Ahead. SURTC selected the Enderlin, ND, school district to work with in testing its school bus routing program. SURTC researcher Dave Ripplinger said that it is an ideal size for this project, with around 120 school bus riders. SURTC is developing easy-to-use, low-cost software specifically designed to help rural and small urban school districts design bus routes that make the best use of buses and fuel while minimizing the amount of time students must spend on the bus. In addition to developing the software, Ripplinger is identifying common needs of North Dakota school districts in regard to school bus routing. Ultimately, SURTC plans to establish a help center to guide schools in routing buses more efficiently and explore policy issues related to school transportation funding. In addition, SURTC will explore the possibility of using school buses to transport non-students in rural areas. Ripplinger said the software is mostly complete but will be fine-tuned based on the

experiences in Enderlin. The project is expected to be complete in June and will include the software, the results of Enderlin's use of the program, and a research paper outlining how this program will impact transportation in school districts in North Dakota.

Students Help SURTC Gauge Bus Satisfaction. With the help of student bus riders, SURTC is helping Fargo-Moorhead's Metropolitan Area Transit gauge the satisfaction of its riders. "We want to see how people generally feel about the bus system," says Jim Gilmour, director of planning and development for the City of Fargo. "Most of the feedback we receive now is limited to when things go wrong." Gilmour says MAT has conducted surveys before, "but we really want to zero in on the people who are regularly riding the buses." In November 2005, students rode all routes in Fargo-Moorhead from dawn until well past dusk. They asked questions about how frequently riders ride the bus, how friendly they think the



drivers are, how easy it is to get information about bus routes, the cleanliness of buses, quality of buses, and other issues. "If there are areas of concern, we'll investigate those in more detail and make all the corrections we can," Gilmour says. In addition, the city will use the information in developing a five-year transit plan.



Managing public transit is an evolving, complex challenge that changes frequently with regulatory updates, new technology, competition, and changing demands and demographics. Consequently education and outreach form a cornerstone of SURTC's efforts. The center's educational goals focus on developing tomorrow's transit professionals. Primary goals include:

- Teach a university graduate course in public transportation
- Work with other faculty members to incorporate public transit into their curricula

In addition, SURTC works with transit agencies and organizations to address specific issues and opportunities. This focused effort results in sharing among agencies, new training programs, and the identification of topics for additional research. This outreach puts SURTC staff in direct contact with transit managers, operators, and employees. As a result, SURTC brings real-world perspectives to its work.

Students Look Ahead to Accessible Transit

The next generation of architects at North Dakota State University recently had a chance to design the next generation of accessible mass transit facilities.

NDSU's Small Urban and Rural Transit Center (SURTC) helped the university's Department of Architecture and Landscape Architecture develop a proposal for a class project. Fourth-year students in architecture and landscape architecture were assigned to develop a proposal for either a downtown or suburban mobility center that incorporated multi-modal transit and transit oriented development while incorporating the concepts of universal design. The assignment was part of the Advanced Urban Design Studio course.

"One of the focuses of the class was the concept of transit-oriented development. Everything we did during the semester revolved around transportation issues," says Cindy Urness, an instructor for the course.

"As future urban planners and architects, these students are a key audience for us," notes SURTC director Jill Hough. "We want to help make them knowledgeable about mobility and transportation issues and get them started early in incorporating those issues into their concepts and thought processes." SURTC's research and outreach programs are designed to increase mobility in small urban and rural areas.



"I think the project opened the students' eyes to transit and mobility issues in people's lives," Urness says. "It also gave them a new awareness of accessibility and universal design. The students are all aware of ADA requirements, but this project helped them realize that in many cases designers and builders comply with the letter of the law and not the spirit."

At the end of the intensive two-week project in December, proposals developed by the 15 students were judged by a panel of transit professionals from NDSU, local transit agencies and the North Dakota DOT. "It was a gift to have people who are actually involved in transit ask questions and talk about practical issues. There's nothing like having a real client review your work." Urness says.



Student Matt Brehmer is a Fargo native and appreciated the opportunity to develop a transit-oriented vision for his hometown's future. "I'm always biking and rollerblading so I knew there were some real gaps in accessibility around the community. It was exciting to design a new part of the city and make it completely accessible and pedestrian oriented."

Other Education and Outreach

SURTC is Home to Regional RTAP Library. SURTC established a regional library of transit-related training materials for North Dakota, Montana, and South Dakota. The Rural Transit Assistance Program (RTAP) is part of the Federal Transit Administration. National and state RTAP programs provide a wide variety of training and technical assistance services to rural transit professionals. "We don't have enough money to do a good job with the libraries," notes Bruce Fuchs, transit coordinator with the North Dakota DOT. "Consequently, they tend to get overlooked and the transit assistance they can provide doesn't get where it needs to go." Fuchs suggested consolidating the libraries at SURTC's last steering committee meeting. SURTC began exploring the regional library concept and now the three states have pledged support for the first year of the consolidated effort. Most of the first year's contributions will be used to purchase updated materials for the library. A committee with representatives from each state is being formed to guide the development of the library, evaluate old materials to decide what to keep, evaluate new materials to decide what to purchase and set policies.

Transit Course Offered. Students from across the United States participate in an "Introduction to Public Transportation" course coordinated by SURTC. The class features transit case studies, online discussions, and presentations on research projects. Lectures are recorded and streamed for student accessibility. Featured speakers for the course have included William Millar, president of American Public Transportation Association, and Barbara Sisson, Associate Administrator of the Federal Transit Administration. The course is offered on the NDSU campus and linked to students in other locations via the Transportation Learning Network. This interactive video network, with archived presentations and interactive features, allows each student to learn at their own pace and accommodate differing holiday breaks and schedules. Instructor for the course is Jim Miller, a retired faculty member from Pennsylvania State University. He has more than 30 years of experience in public transportation research planning and management and is a leader in developing transportation systems for rural areas.

Associate Degree in Transportation. An associate's degree program has been launched in cooperation with Bismarck State College to help students develop technical and management skills needed by transportation service providers and their customers in North Dakota. It is anticipated that program graduates will either enter the work force or pursue a related four year degree at NDSU. Transit is a key component of the class. More information on the program is available at www.bismarckstate.edu/academic/.

Other Education and Outreach

CCTM Study Guide is Updated. Transit managers across the country will benefit from recent work SURTC staff and cooperators completed with the Community Transit Association of America. SURTC recently updated the study guide for CTAA's Certified Community Transit Manager program. Transit managers who want to be certified in the program must pass an exam covering several topic areas. The study guide provides background for those studying for the exam. "The main reason we selected SURTC for this project is that it is uniquely placed to understand the training needs of rural transit providers," says Chris Zeilinger, assistant director for training and government affairs at CTAA. "The timing was perfect for this project; we were desperate to update the guide and SURTC provided the perfect environment for creative thinking. We are thrilled with the results," Zeilinger says. The updated study guide made its debut to transit managers at the Community Transportation EXPO conference in May 2005 in St. Louis.



SURTC

SURTC conducts training for transit agencies and professionals, particularly in the upper Great Plains states. Training is developed to meet user needs as determined through needs assessments and as SURTC's program develops. In addition, SURTC staff use already-developed training materials and courses from sources such as the national Rural Transit



Assistance Program program, Community Transportation Association of America, National Transit Institute, and other states. These resources are used and adapted to meet regional needs.

This service function will be carried out using both traditional and non-traditional methods of dissemination and assistance. The Transportation Learning Network (TLN) system, a telecommunications network linking four universities and three state DOT's, will be used to disseminate results and conduct workshops and seminars. This system can also link to other sites throughout the U.S.

How to Develop a Business Plan for Your Small Transit System. In October 2005, SURTC offered training on how to develop a business plan to transit managers. Participants learned to better help their agency set priorities, meet service needs, plan budgets, determine staffing and equipment needs, and organize cash flow. In addition, the workshop provided outlines and resources to help them develop a business plan.

Designing Your Own Website. SURTC staff helped transit professionals learn how to develop websites that are effective in reaching clients and others with critical information. The workshop helped participants learn to create and maintain a website using off-the-shelf and easy-to-use software.

SURTC Offers Training to SMART in Detroit Metro Area. When a transit authority in suburban Detroit, Mich., went looking for an organization to provide customized training for its workers, the Community Transportation Association of American (CTAA) sent them to SURTC. The Suburban Mobility Authority for Regional Transportation (SMART) includes about 60 community partners in three counties and provides weekly transportation for 200,000 riders. "At first this doesn't sound like a logical fit," notes Jill Hough, SURTC director. "But many of the areas served by SMART can be categorized as rural or small urban areas." SURTC customized training modules from CTAA for SMART drivers and other employees. "With the diversity of agencies involved in SMART, it's extremely difficult to get staff to traditional, classroom-based training, especially if the training requires one or more full days," Hough notes. "We looked at alternative delivery methods including interactive video conferencing, interactive websites, CDs, and DVDs." SURTC is developing a Passenger Service and Safety Certification (PASS) training module and another on professional dispatching and scheduling. The two training modules are being developed as a pilot program. "If things go well, it's likely we'll expand the program with SMART and we may customize or develop training programs for other transit agencies." Hough says.



Commuter Vanpooling

DP-174 Vanpooling in North Dakota: Feasibility and Operating Scenarios

Coordination

- MPC 97-77 An Evaluation of Regionalizing Rural Transit Systems in North Dakota
- DP-160 Enhancing Passenger Mobility Services in North Dakota through Increased Coordination

Fixed Route Development

- MPC 06-178 Express Bus Transit Study: A Case Study, 2005-06
- DP-159 Meeting Small Urban Transit Needs in North Dakota: A Case Study Perspective

ITS Transit Case Studies

- MPC 02-131 Intelligent Transportation Systems: Helping Public Transit Support Welfare to Work Initiatives
- DP-171 ITS Transit Case Studies: Making a Case for Coordination of Community Transportation Services Using ITS

Mobility for the Disadvantaged in North Dakota

• DP-151 An Evaluation of Transportation Needs of the Disadvantaged in North Dakota

Paratransit Service Boundaries

DP-166 Metropolitan Area Transit Paratransit Service Boundary Study

Small Urban University Transit: A Case Study

- MPC 05-169 Small Urban University Transit: A Tri-Campus Case Study, 2004-05
- SP-150 Mobility of NDSU Students
- SP-151 Mobility of NDSU Faculty & Staff
- SP-152 Mobility of MSUM Students
- SP-153 Mobility of MSUM Faculty & Staff
- SP-154 Mobility of Concordia Students)
- SP-155 Taxi Survey Results for Concordia College
- SP-156 Carpooling to NDSU
- SP-158 Tri-College Campus Transit Survey Spring (Year 3)
- SP-159 Mobility of NDSU Students (Year 2)
- SP-160 Mobility of Concordia Students (Year 2)
- SP-161 Mobility of MSUM Students (Year 2)

Statewide Mobility Plan

- Executive Summary for DP-165
- DP-165 Personal Mobility in North Dakota: Trends, Gaps, and Recommended Enhancements

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