

The Transit Lane

Small Urban & Rural Transit Center • North Dakota State University
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Students Design Bus Shelters in SURTC Contest

Most of Fargo's bus shelters are unheated plastic and steel structures. They're durable and functional, but not much else. In the fall of 2003, SURTC director Jill Hough was surveying students to determine the demand for enhanced bus service on campus. Each time she passed those spartan shelters she knew there was so much more potential.

She approached NDSU architecture instructor Shannon McDonald and proposed asking students to design bus shelters. "We thought it would be great if we could develop state-of-the-art shelters that really reflected well on NDSU," Hough says.

When SURTC unexpectedly received a grant from Congress through the FTA for bus facilities, the students already had completed their designs. The funding meant at least one of the shelters will be built. The prospect of one or more of the shelters being built was a powerful motivator for students, McDonald says.

That's a sentiment echoed by students, including Chryso Onisiforou. "For the first time we would be working with a real client." A student from the Greek island of Cyprus, Onisiforou was one of the few students in the class intimately acquainted with public transportation. "I have

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Transit Leaders Meet for Steering Committee Meeting at NDSU

A who's who of transit officials from the national and regional level praised SURTC's progress at its third annual steering committee meeting Sept. 15 at the North Dakota State University Alumni Center.

"We would like to see SURTC replicated and adopted as a national model," said Pam Boswell, a member of the committee representing the American Public Transit Association in Washington, D.C. She said the association is addressing issues such as increased transit demand from an aging population and in university communities as well as a need for improved technical standards for equipment and operating procedures. "A large segment of our membership is rural and small urban transit operators."

SURTC is part of NDSU's Upper Great Plains Transportation Institute (UGPTI) and was created nearly three years ago to provide transit stakeholders, users, providers, suppliers and agencies information and training on technology and improved management and operations to increase the mobility of small urban and rural residents through improved public transportation.

"The steering committee continues to provide important input to shape our program and make its programs relevant to transit agencies and to those who depend on transit," noted Jill Hough, SURTC director.

Dale Marsico, a committee member representing the Community Transportation Association of America, also in Washington, D.C., explained that rural transportation issues were among the largest issues for rural lawmakers in terms of constituent calls.

The Federal Transit Administration is represented on the committee by Barbara Sisson, Associate Administrator for Research, Demonstration and Innovation. She reported that more than 60 federal agencies fund mobility programs across the country. "Consolidating or coordinating those efforts has the potential to allow us to provide \$700 million of added mobility to citizens annually," she says.

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no car and take the bus a lot. I see all the different people on the bus and at the stops and see a different perspective than some of the other students.”

Jennifer Burke grew up on a ranch near Bowman in western North Dakota. Her first exposure to mass transit was riding the school bus to the one-room school house where she attended elementary school. She and her design partner, Mark Schlanser, carefully studied bus stops, buses and passengers. “We wanted to keep the parts that worked well and focus on the parts that didn’t,” she recalls.

“Our goal was to create something different, a notable landmark,” says Daniel McGinnis, a student from Yankton, S.D. “We were to reinvent the archetypal bus stop.”

“It was clear which students came at this project purely from an architectural perspective and which students combined that with the perspective of a regular user,” notes Bruce Fuchs, transit program manager for the North Dakota Department of Transportation.

“The more simplistic, practical designs came from regular transit users. They seemed to understand the functionality factor; the placement of the shelter in relation to visually seeing the bus arriving and departing was critical,” says Julie Bommelman, transit administrator for the city of Fargo.

Fuchs, Bommelman and Hough served on the panel that evaluated the students’ efforts and selected the top designs. Other members included Gary Smith, chair of the NDSU construction management department; Wade Kline, community planner with the Fargo-Moorhead Council of Governments; Mark Shaul, a local architect; and Tim Lee, Chief of Police at NDSU. SURTC researchers Gary Hegland and Del Peterson also served on the panel.

“The technology suggestions were outstanding,” Bommelman says. “The GPS tracking and real-time bus locations were great ideas that we would love to implement someday if our budget will allow.”

“The competition brought to the table some innovations that address some of the design challenges of putting up a shelter in North Dakota as opposed to Florida,” Fuchs notes. He was particularly impressed with Burke and Schlanser’s idea of using steam to heat the benches in the shelter.

“I understand more clearly how students perceive transit and what we may want to target for improvements in our system. This generation is much more savvy and their expectations are higher,” Bommelman notes.

Burke and Schlanser’s first-place design retained the familiar rectangular shape, but incorporated a real-time map showing bus routes and bus locations projected on to the shelter’s glass walls. Louvers in the glass roof limited sun exposure during Fargo’s hot summers. Handicap accessibility was a key component.

McGinnis’s second-place design took its initial cues from a huge excavator bucket converted into a bus stop in Norway. He dubbed his design the “Bison Stop,” when he realized it was taking the stylized shape of a bison, the NDSU mascot. Amenities include a spacious interior with a comfortable table and chairs, computer kiosk, scrolling message center, voice automated announcements, vending area and video display.

Onisiforou’s design did not place in the competition but was cited by judges for creativity and striking appearance. She notes that the supporting elements that penetrate the roof “represent the ideal of humanity in different stages of development. Everything is so flat here that you feel the sky very heavy on your shoulders. The structure gives a contrast to that and creates an uplifting feeling.”

Other designs incorporated alternative energy sources and echoed design elements from teepees once used by the Native Americans in the region. One featured a spiral design while another featured a coffee shop. One design, entitled “Reaching out for Humanity,” was in the shape of a giant hand.

“The challenge in an architecture office is meeting reality and the client’s expectation while presenting something forward-thinking and innovative,” noted McDonald.

Hough says cost estimates for several of the designs have been developed by Joanna Johnson, a student from NDSU’s construction management department and architecture students. Construction is expected in the coming year. A portion of the \$400,000 grant from the FTA will be used to construct the first-place design by Burke and Schlanser. The FTA has asked SURTC to conduct a survey of bus manufacturers with a part of the grant. Depending on the cost of that study, a second shelter may also be built.

“With the project actually going into production and hopefully with the students’ participation, they will be able to understand the full architectural cycle,” McDonald says.



SURTC Sets Priorities for Coming Year

Helping transit agencies in the region find lower cost insurance and evaluating the feasibility of van pools for workers in North Dakota are among two priorities for SURTC in the coming year.

Many of the research projects and priorities are selected with input from the SURTC steering committee, notes Jill Hough, SURTC director. "The input of committee members is crucial to us. They help us focus on issues that are most important for transit providers and where we can provide the most practical help."

When SURTC's steering committee met Sept. 15, members representing small city and rural transit agencies outlined issues and challenges. Members discussed issues including consolidating efforts such as dispatching and record-keeping among transit agencies; reducing insurance costs; improving service to elderly and special-needs riders; finding and retaining qualified employees; finding affordable resources, such as scheduling software and equipment; and a lack of funding.

"For many of our agencies, savings doesn't have to be big to be significant," says Bruce Lindholm of the South Dakota DOT. "Our agencies are in the \$100 business not the \$1 million business."

Based on steering committee discussions, SURTC researchers are investigating the best ways for transit agencies to work together to purchase insurance. "Insurance costs are a huge issue for transit agencies. We want to find out if there are benefits to them for pooling their resources to purchase insurance together. What prevents them from doing that now? What can be done to make that process easier?" Hough says.

In addition, SURTC researchers will evaluate the feasibility of van pools for employees in the state. "Mobility is a key issue for employers and for employees. Finding enough good employees is a challenge for some employers. For employees, finding affordable transportation to work can be difficult. Perhaps van pools are an option," Hough says. That research will initially focus on the largest employers in the state.

Another area of concern for steering committee members is the amount of time and money devoted to maintaining a library in each state of materials provided by the Federal Transit Administration's National Rural Transit Assistance Program. "Those materials are valuable resources, but in sparsely populated regions it may make more sense for states to cooperate and establish a regional resource center," Hough says. "We'll be exploring that issue."

SURTC is also developing a business plan training program for transit managers. Handi-Wheels Transportation, Inc., of Fargo will be the pilot case for that program. "Our goal is to help transit agencies develop clear and effective business plans that will help them manage their resources better. As budgets become tighter, better management becomes more important," Hough says.

At the request of the Federal Transit Administration, SURTC will also examine the nation's bus manufacturing industry. The study will be an update of research conducted a decade ago. "We will provide a snapshot of the industry," Hough said. "We'll evaluate the structure and performance with an eye toward identifying areas of strength that can be built on and areas of weakness that need to be addressed."

SURTC will also develop training materials for the Detroit Michigan area's Suburban Mobility Authority Regional Transportation (SMART) system. Researchers are establishing a school bus routing program to help schools in the region plan more efficient bus routes. These programs are featured elsewhere in this newsletter.

For more information on the SURTC Steering Committee and for meeting minutes visit <http://www.surtc.org/about/steer.php/>.

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The committee also includes representatives from transit organizations and state departments of transportation in North Dakota, South Dakota, Wyoming and Montana

"We need to change the thinking of people and decision-makers," noted Gene Griffin, UGPTI director. "We need to think of transit, not as transportation, but as mobility. And we need to think of mobility as systemic. What is health care, what is education, what is business, without mobility? We need to think of mobility as an integral part of the overall system."



SURTC Steering Committee



James River Transit Director Selected to Study in South America

With barely a month back on the job after an 18-day trip to study transit in South America, the transit director for Wells, Sheridan and Stutsman Counties in North Dakota is already reaping benefits from the adventure.



Carol Wright

“One of the big advantages of the trip was the opportunity to network with other professionals from across the country,” says Carol Wright, Executive Director of James River Transit and Wells/Sheridan Transit headquartered in Jamestown. “The people I partnered with are very knowledgeable in transit operations, networks and resources.”

Wright traveled with a dozen other transit professionals from across the United States to Rio de Janeiro, Brasilia; Sao Paulo, Brazil; Santiago, Chile; and Quito, Ecuador. Each participant was assigned topics to study during the tour and will report their observations through journal papers in the coming months. Wright was nominated for the trip by the North Dakota Department of Transportation and SURTC. The trip was coordinated by the Eno Transportation Foundation on behalf of the Federal Transit Administration. The foundation fosters innovative thinking and discussion about transportation issues.

The group assembled in Miami and from there they flew to Sao Paulo. “Our purpose was to look at innovations in transportation. As Americans we tend to have very big egos about how far advanced we believe our systems are. We were surprised at how advanced and sophisticated their transit systems were, particularly in Brazil and Chile,” she explains.

“We were also amazed at the caliber of people we met from each of the transportation systems and government organizations in each country. We were pleased and honored by the amount of time they spent with us. Without exception I was impressed with how they assisted us,” comments Wright.

Most of the trip focused on light rail transit. “The metro systems in all cases are run by the government whereas the bus systems are run by private operators overseen by the government. The governments have poured a great deal of resources into the metro systems to make them sophisticated and successful,” she says.

Speaking of her travel partners, Wright says, “What a great opportunity to meet that many individuals, each with their own expertise. “We formed a particularly close kinship after

spending 18 hours a day together for 18 days. I know these are people I will be able to call on from now on.”

Recently she received a package of documents on starting fixed-route bus service from Timothy Newby, assistant vice president of Dallas Area Rapid Transit and one of the trip participants. The packet included background and a complete set of planning documents for adding fixed-route service to an existing paratransit operation – something James River Transit is exploring. “This will be invaluable to us.”

Highlights included:

- A huge marketing campaign for the Sao Paulo metro focused on respect. “The campaign incorporated people as a part of the system and reminded them that they had a vested interest in keeping the system running properly and in keeping it clean,” Wright says.
- Art exhibitions in transit stations, also in Sao Paulo, that featured sculptures and other artwork. “The idea was that art could come to people in their daily lives,” she says.
- Libraries in transit stations. “This was a fabulous innovation in partnering with another organization to make life easier for the public,” she says. Similarly, many transit stations had book vending machines. “Many machines featured classics rather than typical paperbacks,” she notes.
- Pharmacy-like shops for urban poor in transit stop where people were able to fill prescriptions for free. “In large cities, this kind of accessibility could be incredibly important for someone who is very poor, Wright says.
- The texture of floor surfaces signal blind individuals that they are moving closer to trains. Special tracks in the floor provide guidance for canes.
- Braille on handrails provide warning for blind pedestrians as they approach the top or bottom of stairs. The Braille also provides directions to turn left or right at the end of the stairway.
- Personal attendants meet disabled passengers on special cars at each stop and escort them to their next destination.

Wright noted that the cities the team visited were very large. The Sao Paulo metropolitan area is the world’s third largest with more than 23 million people. “When you are talking about transporting 23 million people in an integrated transportation system, you’re taking on a monstrous challenge. That’s why these cities have such an emphasis on mass transit.”

Although the team studied primarily rail systems in very large cities, there are practical lessons that can be applied in small cities and rural areas like Jamestown that rely on buses, Wright says. “I can take some of the things we saw operationally and from a management perspective that I can apply to my project every day.”



As she applies those principles, she has a backup team in place to provide support and direction. “The networking opportunity was tremendous. I have incredible respect for the people I partnered with on this team. The trip was remarkable and I am very grateful for the chance to have participated.”

SURTC RESEARCH

SURTC Recommends Establishing Coordinating Boards

Based on a one-year study of transportation coordination among social service agencies in North Dakota, SURTC recommends 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 best approach to encouraging coordination is to take steps at both the state and local levels to increase the likelihood of successful efforts,” says Gary Hegland, the SURTC researcher who coordinated the study.

As public and human service programs developed and grew, individual agencies funded or operated their own transportation programs in support of their goals. Recently, federal and state funding expanded public transit services in many areas of the state.

“Using those transportation resources as effectively as we can is crucial because of increasing needs for service and increasing difficulty in providing those services, especially in the rural areas of the state where population is declining and the remaining population is aging,” Hegland notes.

The North Dakota Department of Transportation (NDDOT) has increasingly emphasized coordination among agencies in the state, especially those with transportation funds managed by the DOT and human service programs. NDDOT commissioned the SURTC study to examine policy as well as funding and operational options available to maximize the efficiency of transportation resources in the state.

SURTC outlined five steps in a one-year implementation plan.

1. Issue a governor’s directive to administrators of state agencies that fund transportation to appoint a member to the North Dakota Personal Mobility Council, assist in staffing the council and encourage local grantees to participate in coordination efforts.
2. Establish the North Dakota Personal Mobility Council to promote coordination and communication among state agencies and local agencies.

3. Establish regional transportation coordination boards and employ regional transportation coordinators to plan and implement coordinated transportation programs.

4. Provide state funding to support start-up and ongoing operation of regional boards.

5. Provide training and technical assistance to regional boards.

The recommendation calls for all state-managed transportation funds to flow through the regional coordinating councils. The state-level coordinating council will advise state agencies on funding allocations and barriers to increased coordination and will oversee the activities of the regional councils.

The N.D. Personal Mobility Council could include members from the NDDOT, the Department of Human Services, Job Service North Dakota, the Department of Public Instruction, at least one representative of a user advocacy group and a representative from a private-sector transportation provider. Regional Transportation Coordinating Boards could include representatives from fixed-route bus systems, public paratransit operators, city mayors, county commissioners, regional human services centers, county social services offices, Head Start programs, long-term care facilities, developmental disabilities facilities, businesses, consumer advocates and school districts.

Hegland worked with SURTC researchers Jim Miller, Jon Mielke and Jill Hough to assemble a list of transportation services in the state, including fixed-route, paratransit, taxis and services provided by agencies like the Veterans Administration, Head Start, Medicaid, nursing homes and others.

Next, the researchers held focus group meetings in each of the state’s eight economic planning regions to meet with representatives from transit and human service agencies. The focus groups discussed how improved coordination would benefit their customers and agencies and identifying some barriers to coordination.

“Those meetings showed us there is interest in making better use of transportation resources, but we also learned there are barriers standing in the way,” Hegland says.

The study found cases of overlapping transportation services. For example, vehicles from different agencies serving different clientele in the same region sometimes make trips to similar destinations. Ownership issues, funding, insurance and federally mandated policies are often key issues preventing more coordination and cooperation. In some cases, agencies serving similar clients in the same region weren’t aware of each other.

“The cost of transportation services is going up while the demand for those services is growing. We hope this study



provides a roadmap to using existing dollars more efficiently and effectively to meet those needs,” Hegland says.

A copy of the report is available at www.surtc.org/research/reports.php.

Fixed-Route Bus Service Recommended for Jamestown

As part of an effort to improve service and reduce the cost of public transportation in Jamestown, N.D., SURTC researchers are recommending a modified fixed-route service.

“What is probably the most feasible is a flex route,” says Del Peterson, the SURTC researcher who led a study of options for James River Transit. “The flex route allows riders to use a combination of the paratransit and fixed-route services at a lower cost than using the paratransit service solely.”

The service would provide fixed-route service at a reduced fare to riders willing to walk to the route’s path. However, the route would deviate within a few blocks on either side of its designated route to provide regular paratransit service at the paratransit fare. The route would run on a one-hour cycle with enough time between scheduled stops to allow for paratransit stops.

Another potentially feasible option is the half-town route. This route features hourly service to most transit destinations and to points generating most riders. A second bus could easily be added to reduce wait times and add capacity.

“We are tremendously excited about identifying additional transportation options for our passengers,” says Carol Wright, director of James River Transit. “This is not an elimination of any service, but a way of reducing costs for some riders. Our goal is for a larger percent of our riders to have an appropriate level of service at a lower cost.”

She notes that 97 percent of current riders are elderly, physically disabled, diagnosed with a chronic mental illness or developmentally disabled.

“We have large number of support services here, so we have a higher than average number of people with special needs,” Wright explains. “That’s all the more reason to explore development of a transit option like this. But we have to be sure that it meets the needs of the riders and not just the needs of the agency.”

Currently, James River Transit’s paratransit service charges \$2.50 per ride. SURTC is recommending a fare of \$1.50 for the fixed-route service. The study indicates that costs to James River Transit will drop as more riders switch to the fixed-route service. If 15 percent of riders switch, costs are projected to drop by nearly \$40,000 annually.



Peterson and SURTC researchers Dustin Ulmer and Jill Hough surveyed Jamestown residents and held focus groups with riders to learn about needs and perceptions of James River Transit. The researchers also studied transit systems in similar-sized towns in other states.

The study was submitted to the North Dakota Department of Transportation for review. “Based on the recommendation in the study and from the NDDOT, we’ll decide on the feasibility of adding service,” notes Wright. “We’ll take the recommendations and flesh them out with the costs of starting the service and maintaining it.”

The study may have implications beyond Jamestown, Peterson says. “A primary goal of the study is to provide a useful tool for other transit agencies to utilize in determining whether or not a fixed-route bus system is feasible in their communities. Comparing Jamestown to other communities can give us insight into what options are available to transit agencies in small towns. Ultimately, we hope the research will be a stepping stone to the modernization of transit agencies across the region.”

SURTC’s final report is available at <http://www.surtc.org/reports.php>.



Campus Transit Research Complete

Metropolitan Area Transit (MAT) of Fargo-Moorhead is better able to serve the needs of students at North Dakota State University, Minnesota State University Moorhead and Concordia College thanks to SURTC research.

For the second year, SURTC staff surveyed more than 1,600 Fargo-Moorhead college students on line to determine their transportation needs. The study explored options and opportunities in meeting those needs. Staff members Jill Hough, Del Peterson, Gary Hegland and Dustin Ulmer cooperated on the project.

MAT operates 27 fixed-route buses. The study determined when and where the heaviest student ridership took place, allowing MAT to adjust accordingly.

“We were able to justify adding a second bus on Route 13, the route that serves the NDSU downtown campus and NDSU,” notes Fargo transit planner Mike Simonson. “The research made it much easier to make a case to the City Commission to put another bus on that route.”



In addition to the changes made by MAT, Concordia College discovered there was enough demand among students to add taxi service for students. The \$2 taxicab (called The Deuce) is available seven days a week from 9 p.m. until 6:30 a.m. and takes students from a business to a residence. It is similar to a service provided at NDSU.

Other results of the survey showed convenience, time and parking as primary factors affecting students' choice of transportation. The survey also revealed that students often didn't know about their transit choices.

The Fargo-Moorhead Metropolitan Council of Governments and MAT worked with SURTC to analyze the results and develop ways to improve student mobility. The complete report is available at <http://www.surtc.org/>.

Mobility Study Looks at North Dakota Demographics and Geography



Jon Mielke

The North Dakota Department of Transportation (NDDOT) and SURTC are taking a comprehensive look at transportation methods, demographics and geography in North Dakota to find ways to improve mobility for the state's residents.

“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 SURTC researcher leading the effort.

The effort was launched in April 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 allows optimum personal mobility. One of the initiatives is the development of a statewide personal mobility plan.

“Right now, our work is focused on a review of previous research in this area, a study of the demographics of mobility in the state and an inventory of the services available – everything from pedestrian trends, bikes and private automobiles to transit and paratransit systems,” Mielke says.

The steering committee for the study is scheduled to meet again Jan. 25 to review progress and help set targets for levels of mobility service across the state. Those levels of service will be dependent on geographic factors such as the size of cities and population density. Demographic factors such as the age of residents, income levels and disabilities will also be considered, Mielke says.

The study is scheduled to be complete by the end of June.



Pilot Schools to be Selected for Bus Routing Program

After information on the School Bus Routing Program was included in the North Dakota Council of Educational Leaders newsletter and in the registration packet for the group's annual conference Oct. 11, schools inquired about becoming pilot cases for the program.

"We plan to select two schools to pilot the program," says Jill Hough, SURTC director. "We're looking at the schools to select those that have busing challenges that are representative of issues faced by districts across the state."



Many districts are seeing continuing consolidation leading to longer routes with more distance between students. A few schools are seeing development and growth, prompting the expansion of routes. All school districts are feeling

pressure to make scarce dollars stretch farther. "We realize that the time, expertise and technology to develop bus routes is often lacking in school districts," says Jill Hough, director of SURTC. "We see that as a niche we can fill to help many districts across the state."

SURTC staff members are developing custom software to assist in designing efficient bus routes. The software builds on expertise in the center on rural roads and transportation as well as transit operations and mobility. "Our goal in working with the pilot schools is to identify any potential problems in our processes and software before we begin implementing the program on a wider basis," Hough says. "The benefit for participating districts is that they will be the first to see improved efficiency in their bus routes resulting in cost savings for their districts," Hough says.

Participating districts will share student lists and addresses with SURTC and provide feedback on how the routing program worked in their district.

SURTC TRAINING

Workshop Focuses on Marketing Skills



Lyn Hellegaard

Transportation organizations may not have the budget for large marketing plans. It takes resourcefulness and creativity to communicate inexpensively, yet effectively. A SURTC workshop Sept. 16 helped transit managers learn and polish communication skills.

"Marketing on a Shoestring Budget" was presented by Lyn Hellegaard, Director of Community Affairs for the Missoula Ravalli Transport Management Association. In her position, Hellegaard is responsible for all activities related to public relations and marketing.

The workshop covered topics ranging from how to develop a cost-effective marketing plan to finding the hidden marketing department in an organization. "Communicating with the public you serve and the entities that provide your funding is essential for survival," says Jill Hough, director of SURTC. "The lessons in the workshop are very applicable to transportation agencies."

The workshop provided managers and other personnel with practical ways to develop and implement a marketing plan on a limited budget, successful copywriting techniques and tips for publication design. Those skills can be used to identify target audiences and communicate effectively with funding agencies, customers and community.

The half-day workshop was accessible via the TEL8 system. Thirty-one people attended the workshop in North Dakota, South Dakota, Montana and Wyoming. Hough says, SURTC plans to repeat the workshop in the future.

Handouts and a form to request a video of the workshop are available on the Web at <http://www.surtc.org/training/shoestring/>.



SURTC to Offer Training to SMART in Detroit Metro Area

When a transit authority in suburban Detroit, Mich., went looking this summer for an organization to provide customized training for its workers, the Community Transportation Association of American (CTAA) sent them to the Small Urban and Rural Transit Center.

The Suburban Mobility Authority for Regional Transportation (SMART) includes about 60 community partners in three counties and provides transportation weekly 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."

Hough notes that the recommendation by the CTAA and the interest from SMART are an endorsement of the work SURTC is doing and the stature the center is gaining nationwide.

Under a preliminary agreement, SURTC will customize training modules from the 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're going to be looking at some 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. PASS training ensures that drivers have up-to-date expertise in passenger assistance techniques and sensitivity skills for serving riders with disabilities. The dispatching and scheduling course focuses on improving efficiency and customer service.

"SMART wants training for its personnel that is customized to address the unique needs of its region and clientele," Hough notes. "Although this is a new venture for us, we're well-suited to developing and providing that kind of training."

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. With that in mind, SURTC is making a significant contribution to the effort by covering administrative costs and some developmental costs.

EDUCATION

Transit Class to be Offered Again Spring Semester

An introductory course in public transportation will be offered through interactive video for the second time by North Dakota State University in the spring semester. The course is coordinated by SURTC. During the spring semester of 2004, 12 students from five states participated in the class.

"Introduction to Public Transportation" features case studies analyzing real-world situations, online discussions of readings and a major research project presented to the class. Lectures will be recorded and streamed for student accessibility. During the spring semester of 2004, the course included speakers from the Federal Transit Administration and the American Public Transportation Association.

The course will be offered on the NDSU campus while linking to universities and departments of transportation in North Dakota, South Dakota, Colorado, Utah, Pennsylvania and Wyoming via the TEL8 system. This system is designed to enhance transportation research, education and technology transfer. The class may also be offered over the Internet for the spring semester.

Jim Miller, retired faculty member from Pennsylvania State University, is the instructor of the course. 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.



Dr. Jim Miller

"The TEL8 system and interactive video technology give us access to national-level expertise," says SURTC director Jill Hough. "Students and professionals across the region are able to share their common challenges and benefit from each other's unique perspectives and experiences."



CCRAFT: ITS for Smaller Transit Systems

While many small urban and rural transit managers wonder what, if any, benefits ITS can bring to their operations, a system developed at the University of New Mexico by the Alliance for Transportation Research Institute may provide solutions to many challenges managers face.

The system, Client Referral, Ridership and Financial Tracking (CRRAFT), is unusual because it is not a scaled-down version of those used in major metropolitan areas. It is a system that has been developed from the beginning to promote coordination in smaller systems.

The cornerstone of CRRAFT is a Web-based software program that aids users in scheduling rides, managing ridership data, and producing financial reports. Authorized users however, are not limited to those involved in transportation. By using a password, individuals from funding agencies can gain access to relevant information and reports as needed with the click of a button. This system is currently used by a number of regional demand-response providers throughout New Mexico as well as the state's Health Services Department.

The Alliance for Transportation Research Institute (ATRI) is expanding the scope of CRRAFT by implementing on-vehicle technology to help efficiently gather more accurate ride data. By making use of smart card technology, automatic vehicle location technologies and on-board electronics, the time and location and purpose of each trip are recorded on small, hand-held computers mounted near the driver. At the end of each day, the data is downloaded to the CRRAFT system. All hardware is available commercially and costs are relatively low, about \$1,200 per vehicle.

According to Eric Holm, a program manager at ATRI, the success that CRRAFT has enjoyed in New Mexico should be transferable to other small, demand-response providers. "CRRAFT is very portable and can be implemented in another state with some simple configuration. Once this setup is done, the system could be used with little or no change."

STAFF

SURTC Staff Present at DTA Annual Conference

Two SURTC staff members addressed transit professionals gathered for the Dakota Transit Association (DTA) Annual Conference Sept. 20-23 in Sioux Falls.



Jill Hough

SURTC director Jill Hough presented an overview of SURTC including summaries of its research, education and outreach programs. "The professionals at the conference represent the programs that SURTC is designed to help. It was a great opportunity for them to learn more about us and our mission," Hough says. "We want them to get to know who we are and what we

do so that they're comfortable approaching us with the issues and challenges they face."

Hough noted that as SURTC takes a greater role in DTA, it's important for members to see how DTA fits with the center's efforts. Hough also coordinated a day-long roundtable discussion on funding sources and transit finance.

SURTC researcher Gary Hegland presented preliminary results of a transportation coordination study being conducted for the North Dakota Department of Transportation. The study looks at opportunities and roadblocks facing coordination efforts among social service agencies and transit providers in the state. "As we look at providing the best service possible for the public investment in transit, coordination is becoming a bigger issue," Hegland says. More detail on the study is elsewhere in this newsletter.



Gary Hegland

Ulmer Makes Transition from Intern to Graduate Assistant

Dustin Ulmer joined SURTC on an internship in the summer of 2003. Following the completion of his B.S. degree in management information systems from NDSU he became a graduate research assistant with SURTC. Ulmer is working on his MBA. He is from LaMoure, N.D.



He creates databases, analyzes data and prepares reports. He is also interested in developing expertise in business planning for transit operations.



Two Attend National ITS Conference

Two SURTC researchers presented information on the impacts of Intelligent Transportation Systems coordination at the 2004 National Rural ITS Conference held in Duluth, Minn., August 22-25. David Ripplinger and Del Peterson were among the six consultants, transit researchers and managers presenting on various technologies that could improve the efficiency of local transportation providers.



Del Peterson

Ripplinger discussed the experiences of Reach Your Destination Easily (RYDE), the local demand-response provider in Kearny, Neb. He outlined RYDE's use of the regional ITS architecture development process in implementing new technology while focusing on improving coordination. By closely following a federally-designed outline, the group has been considerably more successful than if RYDE had attempted to put ITS technology into action on its own.

Peterson addressed ndinfo.org. This Web-based service provides information about a number of agencies serving the state of North Dakota. Peterson outlined the service's impact on coordination in transportation.

Go to <http://www.ugpti.org/about/staff/presentations/> for copies of the presentations.

Sarker Brings Computer Expertise to School Bus Program

Susmit Sarker joined SURTC in September as a graduate research assistant. Sarker, a masters student in civil engineering and computer science at NDSU, has extensive background in software development and design. His efforts are focused on developing and refining software for the SURTC School Bus Routing Program. He earned a B.S. in engineering from the Bangladesh University of Engineering and Technology in Dhaka, Bangladesh.



Before joining SURTC, Sarker was a technology consultant with NDSU's Information Technology Services and was an intern with NAVTEQ, an international digital geographic mapping and database company.

Ripplinger Joins SURTC Staff

David Ripplinger joined the SURTC staff in June. Ripplinger previously worked with the SURTC's parent organization, the Upper Great Plains Transportation Institute, as a research assistant while earning his B.S. degree in agricultural economics from NDSU. He earned his M.S. in economics from Iowa State University in Ames. While at Iowa State he collected and analyzed data on international meat trade and conducted research on intellectual property rights in agriculture.



David Ripplinger

Ripplinger also served as an agricultural fellow in Washington, D.C., researching and writing briefs, speeches and papers for Iowa senator Charles Grassley. He also was a research assistant with the USDA's Economic Research Service.

Ripplinger, originally from Devils Lake, will use his expertise in computer modeling and statistics in a project to help North Dakota school districts develop more efficient bus routes. He will also work on traffic demand models and other computer modeling applications for the Small Urban and Rural Transportation Center.

Events Calendar

TRB - 84th Annual Meeting • January 9-13, 2005 • Washington, DC

TRF - 46th Annual Forum • March 6-8 • Washington, DC

ITS America - 2005 Annual Meeting & Exposition • May 2-4 • Phoenix, AZ

APTA - 2005 Bus & Paratransit Conference • May 15-18 • Columbus, OH

CTAA - EXPO 2005 • May 21-27 • St. Louis, MO

APTA - EXPO 2005 • September 26-28 • Dallas, TX

SURTC is scheduling training sessions. Please check www.surtc.org for updates.



Hough Presents University Transit Research at APTA Conference

SURTC director Jill Hough presented research on attitudes toward transit by college students in the Fargo-Moorhead area at the American Public Transit Association (APTA) Transportation and University Communities Conference held in Austin, Tex. June 26-29. The research focused on college students at North Dakota State University in Fargo, Minnesota State University Moorhead and Concordia College in Moorhead.

Based on survey responses, Fargo-Moorhead Metropolitan Area Transit (MAT) administrators identified students' needs and adjusted transit services to better meet those needs. Also, a night taxi service will most likely be added at Concordia College, based on demand identified during the study.

Hough said several sessions on university transportation subjects, including finances and past experiences, were available at the APTA meeting. The APTA University Conference addresses special transportation issues encountered on campuses nation-wide. APTA promotes transportation advancement and development.

“Our research is consistent with the kind of questions and issues faced on campuses across the country,” Hough says. “The meeting was an opportunity to share our work and learn from the experiences and work of other transit professionals and researchers.”

More detail on the research is presented elsewhere in this newsletter and Hough's presentation is available on-line at <http://www.ugpti.org/about/staff/presentations/>.

Season's Greetings

Small Urban and Rural Transit Center

Dustin Ulmer, Gary Helgand, Dave Ripplinger, Jill Hough, Jim Miller, Del Peterson, and Jon Mielke
(Not pictured: Susmit Sarker)



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