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SURTC Participates in Statewide Discussion on Mobility and Transportation

The Upper Great Plains Transportation Institute, SURTC's parent organization, has been hosting a statewide discussion on the mobility needs of North Dakota and the state of its transportation infrastructure.

Since March, the Institute has hosted regional workshops in Williston, Dickinson, Minot, Bismarck, Devils Lake, Jamestown, Grand Forks and Fargo. A state-wide conference to summarize and tap input from state leaders was held in Mandan May 1. All told, nearly 600 people attended the sessions. A summary of the discussions was presented to the North Dakota Legislature's Interim Transportation Committee at a



Jon Mielke

meeting in Fargo June 19.

"People expect a lot out of North Dakota's transportation system," says Jon Mielke, a UGPTI and SURTC researcher and

one of the organizers of the sessions. "Demands on that system, both for personal mobility and for economic activity are growing. At the same time, costs to maintain and improve the system are escalating, and revenues are not keeping pace."

While escalating costs for personal transportation have driven increased ridership at some of the state's transit systems, the corresponding revenue has not offset rising costs – especially those for fuel. "While increased ridership is wonderful, it doesn't begin to recover the cost



Pat Hansen

of that ride," notes Carol Wright, SURTC associate director for training and outreach.

Pat Hansen, program director at South Central Adult Services

which provides transit service for six counties in south central North Dakota, noted that fuel costs for the first eight months of the fiscal year were \$12,000 more than what her agency spent on fuel for the entire previous fiscal year.

Because of increasing fuel costs, transit agencies in North Dakota are on track to have a deficit of more than \$3.36 million dollars this fiscal year or more than \$6.7 million for the biennium. At the same time, those agencies are projecting a need for 21 new vans, 20 new buses, and a new bus garage. The local share of those expenses will be at least \$470,000. Those figures do not include expenses to meet demands for longer hours and new routes.

Other transportation needs will compete with transit for funding, experts at the meetings noted. Mielke noted that deferring maintenance on the state's road network is expensive because pavement deterioration is an accelerating process. Ride quality on new pavement declines by about 40 percent over the first 20 years of its life. After that, pavement deteriorates much more rapidly. That means a road rehabilitation project that occurs when pavement is 20 years old will cost 400 to 500 percent more if the project is delayed 7-8 years.

(Statewide Discussion continued on page 2)

Francis Ziegler, director of the North Dakota Department of Transportation, said the state's highway system is in a preservation mode and that 39 percent of the asphalt roadways are considered mediocre. He noted that demands on the road system are increasing. Manufacturing, energy production, and crop production have all



Francis Ziegler

increased substantially in the state with a corresponding need for freight mobility.

Mark Johnson, executive director of the North Dakota Association of Counties says with about half of all county roads in the state in fair condition and about one-third considered poor, delay is not an option. "We need to invest in our road network and now is the time to do it. We no longer have the luxury of expecting or waiting for federal funds," he says.

At the statewide meeting May 1, UGPTI researcher Alan Dybing presented results of a study that showed the annual roadway and bridge funding needs for North Dakota is nearly \$540 million. At the same time, the Federal Highway Trust Fund is expected to be depleted next year with the projected loss of \$70 million in federal highway funding as a consequence.

Complicating the problem has been inflation in the cost of building materials and fuel. Representatives from the city, township, county and state levels outlined how budgets are being squeezed. Mielke notes that the producer price index increased by 32 percent from 2001 to 2005. Revenue for the state highway system increased by only 18 percent during that time. From 2001 to 2008, the North Dakota Department of Transportation experienced construction cost increases of approximately 60 percent.

Transit operators are in a similar position. "While we can't have transit systems waiting just in case there will be riders, we do need to look at the future to see what our needs and priorities are," Wright says. "Sometimes we have to get squeezed a bit for us to determine exactly what those are. Because of people's preference for mobility independence and their desire to get in a car and go, we haven't built that capacity into our public transit

infrastructure. With the increases in fuel prices, people are looking to us to meet their mobility needs, but we can't turn around immediately to address those demands."

"We need to look at the human factors involved with these issues," Hansen said. "Roads and bridges are important, but we're transporting people, sometimes up to 300 miles round trip, for very important medical services," she said. "Mobility is not just about cost, it's about quality of life. I appreciated that I was able to make that point." Hansen was one of the state's transit managers who spoke up at the state-wide conference.

Hansen says the meetings performed the important task of providing the same information to transit operators, transportation officials, and state and local decision makers across the state. "I have a much better idea of what transportation issues are facing the state, and I can see the legislative issues and challenges that we're facing."

UGPTI director Gene Griffin told the group that several strategies could be employed to address the situation.

"We will need to continue to work smarter and make better use of our scarce resources," he said. "That ability is currently limited by technology, institutional barriers and collective and individual pride. We can make great strides if we can overcome those barriers or at least push them back."

Griffin also noted that decision makers will need to set clear priorities that take into account transportation needs. "This rationalization requires political will," he said. "But the result will be a transportation system that meets the state's fundamental needs and a set of minimal demands."



Gene Griffin

With innovation and a rationalized approach to demands within the state will come a need for additional funds, Griffin said. "There is a growing recognition among federal, state and local agencies as well as within the private sector, that maintaining and enhancing our transportation system needs to be a priority."



Ronald Hynes Takes Position with the Federal Railroad Administration



Ron Hynes

Ron Hynes is now the director of Office of Policy with the Federal Railroad Administration (FRA). Ron was the deputy associate administrator for the Office of Research, Demonstration and Innovation within the Federal Transit Administration.

The Office of Policy provides support, analysis and recommendations on broad subjects relating to the railroad industry such as mergers and restructuring; economic regulation; rail economics; financial health; traffic patterns and network analysis; labor management issues; freight data and operations; intermodalism; environmental issues; and international programs.

We thank Ron for his invaluable support to SURTC. We wish him the best in his new position. ■

Events Calendar

ITSA - 2008 National Rural ITS Conference	September 3-5, 2008 • Anchorage, AK
URSTA - Fall Conference and Roadeo	September 19-20, 2008 • Park City, UT
DTA - 2008 Bus Roadeo	September 20, 2008 • Watertown, SD
DTA - 2008 Annual Conference	September 22-24, 2008 • Watertown, SD
MPTA - 2008 Annual Conference	Sept. 29 - Oct. 1, 2008 • St. Paul, MN
WYTRANS - 2008 Annaul Conference and Bus Roadeo	October 1-4, 2008 • Jackson, WY
APTA - Annual Meeting & EXPO 2008	October 5-8, 2008 • San Diego, CA
TRB - 18th National Conference on Rural Public & Intercity Bus Transportation	October 19-22, 2008 • Omaha, NE
ITS America - 2008 Annual Meeting & Exposition	November 16-20, 2008 • New York, NY
TRB - 88th Annual Meeting	January 11-15, 2009 • Washington, DC
TRF - 2009 Annual Forum	March 16-18, 2009 • Portland, OR

Please check www.surtc.org for updates

RESEARCH

SURTC Leads Research Summit

The efforts of SURTC staff led to the development of a research agenda at a summit hosted by the National Resource Center for Human Service Transportation Coordination.

SURTC researchers assisted in organizing the event, which was held in Washington, DC, Jan. 17, in conjunction with the Community Transportation Association of America (CTAA). SURTC director Jill Hough led the summit. She and SURTC staff members

"The research agenda developed at this summit provides guidance for an organized, national effort to provide solutions to the challenges currently facing the human service transportation industry."

David Ripplinger and Jim Miller led discussions on identifying research needs. The National Resource Center conducts research as part of its mission to promote mobility and the

delivery of human service transportation to all individuals with disabilities, persons with low incomes, seniors, and youth.

Based on the discussions at this meeting, SURTC staff authored the resulting research agenda which presented the identified, prioritized research topics in a uniform, accessible format. "The research agenda developed at this summit provides guidance for an organized, national effort to provide solutions to the challenges currently facing the human service transportation industry," Ripplinger notes.

Attendees, who included representatives from industry, government, and academia, participated in a series of activities aimed at identifying and prioritizing research opportunities related to human service related transportation coordination. Small group discussions focused on mobility management, technology, and operations.

High-priority research needs identified during the discussions include the development of a database of relevant service statistics for agencies involved in human service transportation; the development of a nationally accepted system for measuring community mobility needs and system performance in the human service transportation industry; the estimation of the net economic benefit of mobility managers on communities and other groups; and the study of how the next generation of the World Wide Web can play a greater role in communicating human service transportation information. Other research topics such as the adoption of technology and the required skills necessary for mobility managers were also identified as being priorities.

Rising Gas Prices and Its Effect on Bus Ridership



A 10 percent increase in gas prices can lead up to a 5 percent increase in transit ridership according to a study by SURTC researcher Jeremy Mattson, but so far, other factors such as service changes can influence ridership even more.

Jeremy Mattson "The increase in ridership brought about by the higher gas prices is not enough to cover the increased fuel expenses for transit agencies," Mattson says. "So far, travel behavior has generally not been too responsive to changes in gasoline prices, but as prices continue spiraling upward, motorists could become more responsive to the higher costs."

With diesel prices surpassing \$4 per gallon, fuel consumes an increasing proportion of the operating budgets of transit agencies. Over the last several years, fuel expenses have been increasing at a rate of more than 20 percent per year for many transit systems, and the trend shows no sign of slowing.

At the same time, fuel cost increases for motorists have prompted some to abandon their vehicles in favor of transit. In fact, ridership has been increasing for a number of transit systems across the country, including agencies of different types and sizes. While observers have linked the rising gas prices to increased transit ridership, few studies have been conducted to confirm this relationship or measure its impact.

Mattson's study analyzes data for a few small urban and rural transit systems in the region. The results of the study indicate that higher gas prices have led to increases in bus ridership, but other factors often have greater impacts, such as service changes or changes within the community that create increased demand for transit.



Mattson says the results indicate that a 10 percent increase in gas prices generally leads to an increase in ridership of about 1 percent to 2 percent, though in some cases it is found to be as high as 5 percent.

The study makes a few interesting observations. For example, individuals do not necessarily respond immediately to a spike in gas prices. Once the decision is made



to start riding the bus, they or she may not begin riding until a few weeks or months after the initial price spike. The study also finds that those in smaller cities are slower to adopt transit in response to higher gas prices than those who live in large urban areas, possibly due to them being less familiar with their transit options.

In the long-run, however, ridership in the small urban and rural areas can increase as much or more as it does in large cities. An additional finding shows that ridership on long-distance commuter routes may be more sensitive to gas prices since those who travel longer distances are affected more by these rising costs.

"Ridership gains brought about by higher gas prices could create the need for transit systems to increase service, because the increase in passenger trips is most likely to be for commuter travel during peak periods," Mattson says. Transit managers must carefully weigh the need for service increases against the additional costs that would be incurred because of those service increases. He concludes that further research may be necessary to help transit systems manage the continually increasing fuel costs and the associated uncertainty.

For more detail, see a full report on the research. Report DP-201, "Effects of Rising Gas Prices on Bus Ridership for Small Urban and Rural Transit Systems," is available on the SURTC web page, www.surtc.org. Click on "Research Reports" under "Resources."

Biodiesel Use in Fargo-Moorhead MAT Buses

Buses operating on biodiesel in Fargo-Moorhead did not see a decrease in fuel efficiency, according to a study conducted by SURTC researcher Del Peterson. Biodiesel's energy content is slightly lower than conventional diesel, but that factor was not reflected in fuel efficiency. Peterson also found the costs of operating buses on



Del Peterson

biodiesel are similar to those operating on conventional diesel.

Peterson has been studying the effects of the use of biodiesel in Fargo-Moorhead Metropolitan Area Transit (MAT) buses. The benefits of biodiesel prompted MAT to begin using a biodiesel-mixed fuel in its buses in 2005. It is a domestically-produced, renewable fuel that has been shown to reduce harmful emissions. Harold Pedersen, fleet services manager for the City of Fargo, is a member of the city's renewable energy committee. "The committee felt it needed to be proactive in utilizing and helping promote renewable energy resources, and one area was to start using biodiesel throughout the city fleet."

Peterson collected data from MAT for gas mileage and maintenance costs before and after the switch to biodiesel. He found that maintenance and repair costs had increased, but those costs could not be directly attributed to the use

of biodiesel.
"Those
increases were
most likely due
to the aging of
the buses and
rising costs
of parts and
labor," he says.



One concern often cited by those considering the use of biodiesel is that it may not perform well in cold weather. MAT has addressed this problem by reducing the level of biodiesel blended into the fuel as the temperatures drop and discontinuing the use of biodiesel during the coldest months.

The research also reviews previous studies which have focused on transit agencies that have incorporated biodiesel fuel into their transit fleet. The studies tend to

(Biodiesel continued on page 6)



(Biodiesel continued)

show that biodiesel has a positive impact on reducing emissions of harmful pollutants and greenhouse gases while having little or no negative effect on fuel economy, maintenance costs, or general performance.

"Using biodiesel can also have a positive impact on marketing and public relations because the public generally holds a favorable view of the alternative fuel," Peterson says. "However it's difficult to measure the effect that it might have on increasing ridership."

For more detail, see a full report on the research.

Report DP-200, "Biodiesel Use in Fargo-Moorhead MAT Buses," is available on the SURTC web page, www.surtc.

org. Click on "Research Reports" under "Resources."

Project to Improve Transportation Efficiencies in Southwest North Dakota



Dave Ripplinger

A growing list of challenges facing transportation providers in southwest North Dakota has led to a new, region-wide willingness to reorganize transportation resources.

SURTC researcher David Ripplinger is helping those providers lay the foundation for the implementation of

an innovative, community transportation system in the region that features improved coordination and use of intelligent transportation systems (ITS).

The goal of the project is to improve the efficiency of transportation systems in the region including K-12 student transportation, public transit systems, and human service transportation providers. "There are two primary ways that systems in the region can become more efficient," Ripplinger notes. "They can change their organization structure which would better allow them to coordinate their services with other agencies. They can also adopt new technology."

Bruce Fuchs, transit coordinator for the ND Department of Transportation, says the DOT is interested in the project as a way for improving the mobility of senior citizens and others so they can continue living on their farms and ranches. Fuchs says providing an opportunity for rural residents to ride a school bus to town in the morning and back in the afternoon would be an

inexpensive opportunity for them to reach jobs and other needs in area communities.

Ripplinger remarks that "there is a lot of interest in this project at both the state and local levels." The project working group includes members from the ND Department of Transportation



Bruce Fuchs

and the ND Department of Public Instruction as well as local school districts, the Dickinson City Council, and the local public transit provider.

After meeting with stakeholders, SURTC staff prepared the initial concept of operations document for what is being called the Roughrider Travel Management Coordination Center (RTMCC). This document, which was released in March, describes the capabilities, goals, and objectives of the RTMCC; how the RTMCC will meet these goals and objectives; and what is required to transition from the current system to the RTMCC.

"The purpose of the RTMCC is to serve as the technological hub of a regional, coordinated transportation system that meets the mobility needs of individuals in southwest North Dakota," Ripplinger says. "It would act as a mobility brokerage, matching riders with the appropriate service, and an information clearinghouse, providing timely, accurate information."

The *Concept of Operations* calls for school districts to allow the transportation of students with non-students, for other transportation providers to coordinate service and share resources, and for the adoption of necessary technologies. This document is available for the public to view and provide feedback, and it can be revised if reaction from the public suggests that such changes would be beneficial.

The next step in the project is to begin identifying and reviewing useful technologies that could be adopted. ■



SURTC to Assist with National Conference

The 18th National Conference on Rural Public and Intercity Bus Transportation will be held Oct. 19-22 in Omaha, with SURTC staff members playing key roles in the event.

The event is organized every two years by the Transportation Research Board. SURTC director Jill Hough is on the planning committee for the event and a number of SURTC staff members are already preparing presentations or will be serving on expert panels.

"SURTC's programs overlap with many of the topics that will be covered by this conference," notes Hough. "The conference will give us an opportunity to share our expertise, to learn from others and to make new connections with transit leaders from across the nation."

TRAINING and OUTREACH

Transit Manager Training Presented in Fargo

SURTC specialists presented an intensive "Introduction to Transit Management" training in Fargo July 28-30.

The three-day event was limited to 25 participants and aimed at beginning transit managers. The course provided an overview of transit-related issues and resources. Topics included human resource management, administration, service design and operations, financial management, procurement, vehicle and facility maintenance, safety, security and emergency management and drug/alcohol program compliance.

Instructors included associate director of training and outreach Carol Wright, training and outreach coordinator Gary Hegland, and affiliated faculty Dr. Jim Miller.

Miller is retired from Pennsylvania State University and is recognized as one of the nation's leading experts on small urban and rural transit systems. "We were excited to have Jim assist us with this training, and it was wonderful to have his expertise to draw on," Wright says.

Special JTRF Issue on Transit to be Published in October



Papers are being edited for a special issue of the Journal of the Transportation Research Forum focused on public transportation.

SURTC director Jill Hough is serving as guest editor of the issue which is scheduled to be published in October. This special issue is

being published in partnership with the American Public Transportation Association.

"We've had some exceptional article submissions which have been critiqued by peer reviewers," Hough says. "The special issue will be an important resource for those in transit research and for those who want to share their research."

The Transportation Research Forum is managed by the Upper Great Plains Transportation Institute, SURTC's parent organization.



The training was originally provided for transit managers in Alaska last November. "The transit managers knew they were helping us pilot the program. We've taken their comments and suggestions and used them to improve the training," Wright says. The training was open to transit managers across the country, but most came from SURTC's primary service area of the Upper Great Plains.

Throughout the course, participants used a resource manual on transit management prepared by SURTC. "The manual was designed to be a take-home resource on a large number of management topics that participants can refer to when they are back home," Wright says.



SURTC Training Itinerary Includes Texas, Montana, California and Minnesota

Gary Hegland, SURTC's training and outreach coordinator, conducted training sessions in Texas, Montana, California, and Minnesota during April.

On April 14, Hegland presented on risk management at the Texas Transit Association Conference where transit operators of all sizes, including



Gary Hegland

those from some of the largest systems in the state, were in attendance. "People often think of risk management as limited to minimizing vehicle accidents, but I talk about it on a global level addressing four major issues – people, property, reputation, and money as geared specifically to transit," says Hegland.

Hegland has been spicing up his training sessions with new "Turning Point" technology. The technology is an audience response system integrated into his PowerPoint presentations that allows the audience to submit answers to questions using a hand-held keypad.

"The Turning Point technology adds a lot of interest and interaction to my presentations," says Hegland. "It helps me keep my audience focused, allows me to ask them survey questions and see their responses immediately, and enables me to check for comprehension."

Hegland also spoke at the Montana Transit Association Spring Conference April 17. His presentation focused on coordination planning, and approximately 30 operators were in attendance to learn about implementing a coordination plan in their own communities. Hegland used the River Cities coordination plan that he wrote for Pierre, South Dakota as a primary example of what a plan should look like.

The California state transportation conference held April 21-23 was also an opportunity for Hegland to present. "The conference allowed me to explore opportunities for SURTC to get involved with conducting more training for rural transit operators in California," says Hegland. SURTC has had a number of contacts as a result of Hegland's attendance at the California Association for Coordinated Transportation Conference.

To wrap-up the month, Hegland also embarked on a three day Minnesota tour presenting on risk management in Mankato on April 28, St. Cloud on April 29, and Bemidji on April 30. "These training sessions are geared toward 5310 operators who work primarily with senior citizens and people with disabilities," notes Hegland. ■

Business Plan Training Will Provide Agency-Specific Info

An intensive business plan training course will provide five small urban or rural transit agencies with a jump start

on developing a business plan.

The course, to be offered August 19-20 in Huron, SD, will give participating transit managers hands-on experience with information that is specific to their own agency. "Because this is intensive training on a very complex topic, we're limiting participation to five agencies," says Carol Wright,



Dr. Jim Miller

SURTC's associate director for training and outreach. "They will provide information to SURTC ahead of time, so that we can plug it into the business plan outline they'll be using during the training."

Affiliated faculty member Dr. Jim Miller is serving as the lead instructor for the training. Miller has more than 30 years of experience in public transportation planning, management and research. Carol Wright and Gary Hegland will also be contributors to the class.

During the course, participants will learn to implement performance measures and assemble a business plan using financial data and demographic information that is specific to their own agency. "They will leave with a business plan for their agency that is ready to put into action," Wright says. "It's easy to go home with good intentions after a training session. This is a way of assuring participants will go home with a tool they can use to better manage the planning and operating aspects of their transit agencies.

Although SURTC has offered business plan training previously, this is the first time it will include specific participant data. The course is being offered in cooperation with the South Dakota Department of Transportation.



SURTC's Financial Management Training is Part of Iowa Conference



Carol Wright

SURTC associate director for training and outreach Carol Wright presented a full-day training session on financial management for transit operators at the Iowa Public Transit Association Spring Conference in Des Moines.

The June 26 session was the first training session taught by SURTC in

Iowa. "This is an important step for SURTC as it continues to grow. We have a lot to offer to transit operators in Iowa because they share many of the same characteristics and challenges as transit operations across our region," Wright says. "At the same time, we have a great deal to learn from their experiences and talented personnel. We look forward to future interaction with our colleagues in Iowa."

The course provided transit operators with an advanced look at accounting fundamentals, benchmarks, revenue management, financial capacity, budgeting and other tools that transit managers can use to monitor and improve their agency's finances.

Grant Writing Training Offered for Dakota Transit Association

Members of the Dakota Transit Association learned the finer points of grant writing from Carol Wright, SURTC's associate director for training and outreach.

Wright provided grant-writing training April 8 as part of the DTA's spring conference. "I wanted to not only provide training, but give participants a tool kit to take back home with them," Wright says. "When it comes to writing grants, they now have everything they need."

The training and tool kit cover topics ranging from format and resources for grant writing to sources of information on grants like area foundations and websites that provide information on grant opportunities. A key part of the toolkit is a grant writing checklist that helps grant writers assure that their applications are as complete and competitive as possible.

Improved Transportation Coordination Endorsed at Summit

Mobility for residents of North Dakota took a significant move forward in April with pledges from Lieutenant Governor Jack Dalrymple and Dave Leftwich of the North Dakota Department of Transportation to work to improve coordination among transit providers in the state.

"The endorsement of this concept puts it on the front burner, politically, and will help make it a priority across the state," notes Carol Wright of the Small Urban & Rural Transit Center (SURTC), a part of NDSU's Upper Great Plains Transportation Institute. The endorsements came during a Transit Coordination Summit April 9 in Bismarck. The event was sponsored by SURTC and AARP North Dakota. The summit was part of AARP ND's livable community's commitment.

Within transportation, the terms coordination, cooperation, and collaboration all refer to groups of people, programs, and/or funding sources working together to improve services to clients through a more unified approach. "The underlying assumption is that a group of entities working together can create a greater benefit for society than individual programs and entities working separately," explains SURTC director Jill Hough.

Nearly 100 transit managers, county commissioners, state legislators, human service providers, department of transportation

The endorsement of this concept puts it on the front burner, politically, and will help make it a priority across the state.

professionals, and others attended the conference. "The idea was to get past the territorialism that sometimes occurs," Wright said. "We wanted them to view the big picture of mobility in the state and see where they fit."

The keynote speaker at the summit was Dr. Alan Abeson, a leading national advocate for transportation coordination. Abeson recently retired as director of Easter Seals Project ACTION, an initiative that promotes cooperation between the transportation industry and the disabled community to enhance mobility. Abeson contributed significantly to the development of the Americans with Disabilities Act. In his address, he emphasized the concrete results that could be attained through coordination.

(Summit continued on page 10)



(Summit continued)

Other speakers included Nancy Smith, AARP
National Committee Chair; Ron Hynes, Deputy
Associate Administrator of the Office of Research,
Demonstration and Innovation with the Federal Transit
Administration; Jeanne Erickson, Region VIII United We
Ride Ambassador with the Community Transportation
Association of America; and Janis Cheney, State Director
for AARP North Dakota.



(L to R) Nancy Smith, AARP; Jeanne Erickson, United We Ride Ambassador; Janis Cheney, NDAARP; Jill Hough, SURTC; Ron Hynes, Federal Transit Administration; Al Abeson, Disability Advocate; Jon Mielke, SURTC; Dave Leftwich, NDDOT.

SURTC conducted a study for the NDDOT to explore the potential of increased transportation coordination in 2004. Since then, improved coordination has been an underlying theme in a number of SURTC research projects.

Improved mobility through coordination and other means was also a theme as SURTC's parent organization, the Upper Great Plains Transportation Institute, recently held eight regional workshops across the state. At the workshops, Institute staff members outlined concerns related to mobility and infrastructure and gathered input on how to deal with those concerns. Information from those workshops was presented at the summit by Jon Mielke, a SURTC researcher who has helped organize the workshops.

"As the demographics of North Dakota and other rural states continue to change, we are going to need to pay particular attention to the mobility needs of those who remain in rural areas," Wright notes. "The growing proportion of elderly residents will have significant transportation needs. To make the best use of resources and to provide the highest level of mobility to rural residents will require that agencies and organizations continually work to coordinate their services. This is a commitment shared by SURTC and AARP North Dakota. We look forward to a continued partnership with them in promoting transportation coordination throughout the state."

Fargo-Moorhead Sustainable Engineering and Planning Conference

The Fargo-Moorhead Metropolitan Council of Governments (COG) is hosting a conference on sustainable engineering and planning on October 20-21, 2008, at the Radisson Hotel in Fargo, ND. SURTC researcher Del Peterson has been attending Metro COG meetings to help organize and promote the event.

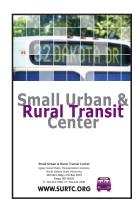
The conference will include a panel discussion on sustainable policy success stories and sessions on emerging trends and research in energy; transportation and technology, with discussions of alternative fuels, advanced vehicle technologies, and alternative modes of travel; land use development, such as passive building systems and green building programs; water resources, including new storm water storage systems; and energy, with a focus on different types of renewable energy technologies such as wind energy and biomass fuels.

While much of the conference will focus on engineering issues, transit will also be represented. Staff from Fargo-Moorhead Metropolitan Area Transit will be involved in a session focusing on transportation issues. ■

SURTC Brochure to Promote Programs

SURTC is promoting its programs with a new brochure in the coming months.

The new brochure reflects growth in SURTC's training and outreach programs as well as its expanded service area. The brochure features an up-to-date staff listing. "As we expand our programming to new audiences and new geographic areas, it's important for us to have a concise tool that we can use to market our programs and tell our story," says Jill Hough, SURTC director.



The brochure will be used at the many SURTC training and outreach events as well as by SURTC staff as they attend state transit association meetings and meetings with funding agency representatives and other stakeholders.



EDUCATION

Transit Class Offered Spring Semester

A course offered by SURTC during the spring 2008 semester provided college students with a comprehensive introduction to public transportation. The course TL 786: "Public Transportation" was taught by SURTC director, Dr. Jill Hough.

The class covered topics such as transit policy, planning, ridership, demand forecasting, and marketing, as well as issues related to livable cities, transportation demand management, transit and land use, transit and



Dr. Al Abeson

air quality, emergency management, intelligent transportation systems, paratransit, and the government's role in transit. The course related these issues to both rural and urban transportation systems.

Prominent guest speakers from across the country provided valuable insight to students on a variety of

issues. Al Abeson, former director of Easter Seals Project ACTION, spoke to the class about the Americans with Disabilities Act and how it affects public transportation. Ron Hynes, deputy associate administrator for the Federal Transit Administration, provided the students a breadth of information on rail transit. Bill Millar, president of the American Public Transportation Association, talked to the students about a range of important issues for public transportation. Lori Van Beek from Metropolitan Area Transit (MAT) in Moorhead, MN, met with the class to discuss transit marketing.

The course was taught via the Transportation Learning Network, an interactive network that makes the course available to students at universities across the country. Taking the class via this network were three students from South Dakota State University in Brookings, SD, one student in Sioux Falls, SD, and one



Bill Millar

student in New York. In addition, six students took the class at North Dakota State University.

Students presented seminars and worked on projects directly related to transit systems in their area. The students in Fargo studied ways in which Fargo's MAT bus system could improve service for North Dakota State

University students who will need to travel downtown to attend classes in a new off-campus building. The Fargo students presented their findings to MAT. The students in South Dakota worked with Sioux Falls Transit with the objective of improving ridership for an underperforming route.



Lori Van Beek

"It was rewarding to see the students' enthusiasm toward public transit as they presented seminars and class projects," Hough noted.

SURTC to Play Role in New Master's **Degree Program**

SURTC will be participating in a new graduate program under development by the NDSU College of Graduate and Interdisciplinary Studies. The proposed Transportation and Urban Systems program calls for two new degrees, a master of transportation and urban systems degree and a master of science in transportation and urban systems. The first degree is targeted at midcareer professionals and other candidates who do not wish to conduct advanced research. The second degree is aimed at individuals with strong research interests and capabilities.

The new degrees will be interdisciplinary in nature and will be part of the existing Transportation and Logistics program sponsored and coordinated by the Upper Great Plains Transportation Institute. In addition to the UGPTI, the departments of Architecture and Landscape Architecture, Civil Engineering; Geosciences, Sociology and Anthropology, and Emergency Management; and Criminal Justice and Political Science will participate.

"If the United States is going to continue to progress



economically and technologically, people with advanced knowledge in transportation are needed," notes Denver Tolliver, associate director of the UGPTI. "There is a critical shortage of people with that expertise now and that shortage is expected to worsen in the future."

With transit playing an increasingly important role in mobility and urban planning, SURTC staff will make important contributions to the program, says SURTC director Jill Hough. "SURTC staff will be involved as faculty and our outreach and research programs will serve as important resources for class projects, course planning, and guest lectures."

The program will train students to function in a wide variety of professional positions in federal, state, and metropolitan governments; consulting and transportation industries. The program will focus on urban transportation systems; linkages between transportation, land use, the environment; emergency response and logistical delivery systems; coordinated planning, operations, and security; integrated information systems and transportation technologies; and spatial dimensions of urban systems. ■

New Graduate Student Joins SURTC

Graduate student Marc Scott recently joined the SURTC staff. His primary research focus is on transit funding, finance and management. Other research interests include: policy and planning, transportation



Marc Scott

management, strategic planning and infrastructure finance and economics. Scott received both a B.S. in business economics and an M.S. in transportation from South Carolina State University. He is currently pursuing a Ph.D. in Transportation & Logistics at North Dakota State University.

NDSU Student Honored at National Transportation Meeting



Natalie Easterday

Natalie (Beck) Easterday was named SURTC's Outstanding Student of the Year by the U.S. Department of Transportation University Transportation Center program. Easterday received the award Jan. 12 during the Transportation Research Board's Annual Meeting in Washington, D.C.

The award recognizes Easterday's excellent communications skills and her academic contributions. Easterday is a master's student studying emergency management at NDSU. She also holds a bachelor's degree in business administration. She is interested in the role of transportation in emergency operations. The honor included a trip to the TRB meeting and a \$1,000 award. Each year, the U.S. DOT recognizes an outstanding student from each participating University Transportation Center.

Easterday was a graduate research assistant with SURTC. She has done research examining the planning differences between rural and urban communities with regard to the use of public transportation in emergency operations. Easterday also has become a student expert on the use of geographic information system software.

"I was very surprised by the recognition. I really enjoyed being at the meeting and having the opportunity to talk with other students from different universities, and sharing our experiences," Easterday says. "While at the



meeting, I had the opportunity to attend a subcommittee meeting on emergency planning in transportation. I found it really interesting, and I was very impressed by the progressive research being done in the area."

STAFF

SURTC Researcher Helps Develop Transportation Curriculum



Dave Ripplinger

SURTC researcher Dave Ripplinger's knowledge of rural transit and technology is proving a very valuable combination. Ripplinger met with a group of experts Feb. 26 in Washington, D.C. to help develop a new National Transit Institute (NTI) ITS curriculum.

As part of the meeting, Ripplinger helped to develop and define a list of core competencies that are essential for practitioners and agencies to know regarding how to incorporate technology into rural transportation.

"It may be hard for people to connect how a rural transit system, one which is small or very small with maybe only two buses, can use technology to its advantage. It's not the same as making a few adjustments to technology like they use in New York City. Rural transit has its own unique set of characteristics and needs," says Ripplinger.

The NTI, housed at Rutgers, the State University of New Jersey, is now in the process of designing educational and training material based on the recommendations collected from experts such as Ripplinger.

The NTI receives federal funding to provide training and education programs in support of public transportation. As part of its mission, it forms cooperative partnerships with institutions such as SURTC to promote and develop high quality training materials. For more information or to access several dozen other training modules provided by the NTI go to http://www.ntionline.com.

Researchers Participate in Transportation Meeting

Several SURTC researchers participated in the Transportation Research Board's (TRB) 87th Annual Meeting Jan. 13-17 in Washington, D.C.

The TRB Annual Meeting brings together more than 10,000 policy makers, administrators, practitioners, researchers, and representatives of government, industry, and academic institutions for a comprehensive look at all modes of transportation. The meeting offered more than 3,000 presentations in nearly 600 sessions. The TRB is a part of the National Academies of Science.

SURTC director Jill Hough gave a presentation on exploring travel behavior of elderly women in rural and small urban North Dakota using an ecological modeling approach. Her presentation was part of a panel discussion on the reality of travel behavior implications for an aging population.

Dave Ripplinger, UGPTI associate research fellow, facilitated a panel discussion titled "New Approaches to Improving Paratransit Services." Panel topics addressed transit schedules, demand-response and fixed-route transit, agency-dedicated vehicle transportation, and coordinated transportation.

SURTC associate research fellow Jeremy Mattson also attended the meeting.

SURTC Staff Participate at Transportation Research Forum



Several SURTC staff members participated in the Transportation Research Forum's Annual Forum March 17-19 in Fort Worth, TX.

Dave Ripplinger, UGPTI associate research fellow, moderated a panel on research and innovation in the transit industry.

Gary Hegland, UGPTI associate research fellow, presented information on alternative risk financing for transit organizations in a session on innovation in funding and pricing strategies. He also moderated a panel on risk management in small urban and rural transit systems. Carol Wright, also a UGPTI associate research fellow, participated in the panel.

(Transportation Research Forum continued on page 14)



(Transportation Research Forum continued)

Del Peterson, UGPTI associate research fellow, participated in a panel discussion on alternative fuel use in transit vehicles. He also presented a paper, "Advanced Small Transit Vehicle Technology Study."

Carol Wright moderated and participated in a panel discussion on public transit and mobility. She also moderated a panel on advanced transit technologies and design principals. Dave Ripplinger presented information during that panel on defining the terms "small urban" and "rural" in the context of transit.

The Transportation Research Forum is an independent organization of transportation professionals. It provides an impartial forum for the exchange of ideas among carriers, shippers, government officials, consultants, university researchers, suppliers and others related to both passenger and freight transportation. The Annual Forum draws nearly 150 practitioners, researchers, and government officials who share and discuss transportation-related research and issues. SURTC's parent organization, the Upper Great Plains Transportation Institute, is the administrative home of the Transportation Research Forum and the publisher of its journal. The 2009 annual Transportation Research Forum will be held March 16-18, 2009, in Portland, Oregon. ■

SURTC Graduate Publishes Safety Article in Bulletin

The role of public transportation in emergency situations such as terrorist attacks or natural disasters is the focus of a recently published article by SURTC graduate research assistant Natalie Easterday. The article is in the April 2008 International Association of Emergency Managers (IAEM) Bulletin.

Easterday's article is entitled "Public Transportation in Preparedness and Response." It emphasizes public transportation as a vital component in any emergency situation.

The article focuses on the role of transportation in both the preparedness and response stages of an emergency. Easterday writes that transportation provider must prepare for emergency situations in two primary ways. It must prepare for any effects the disaster will have on the agency itself through planning and coordination of resources. At the same time, it must also prepare to serve its community based on needs that may arise in an emergency situation. For example, the agency will need to consider how it would evacuate individuals who lack access to a private vehicle.

Easterday also writes that transportation is a vital part of the response phase. While transportation primarily assists with evacuation during response efforts, there are several roles an agency may play while an emergency is occurring based on its resources and dynamic capabilities. Easterday suggests that buses may be used for the transportation of volunteers or emergency workers to relief sites, as air-conditioned or heated shelters for workers or victims, as communication support if they are radio-equipped, and for tracking weather or determining safe travel routes.

Easterday worked with SURTC from the spring of 2006 through the spring of 2008. She continues to add to the work being done with her commitment to excellence and transportation.

"The purpose for writing the article was to emphasize public transportation in the field of emergency management. I wanted to raise awareness and encourage emergency managers to begin discussions with their local public transportation providers," says Easterday.

Easterday has been a student member of the IAEM since March 2007. The IAEM Bulletin is a members-only monthly publication designed to distribute timely information about association news, government policies relating to emergency management, and to exchange research sources and ideas. The Bulletin reaches over 4,000 emergency management officials per month.



SURTC Director Participates in Eno Executive Development Program

SURTC director Jill Hough was one of 25 individuals selected to participate in the Eno Center for Transit Leadership 2008 Executive Development Program in Washington, D.C., July 20-25. The program is designed for transit executives in both the public and private sectors who are preparing for top leadership positions.

The 6-day program included a variety of workshops and sessions including:

- Thinking as a CEO
- Leadership Perspectives
- A Transit Industry Roundtable
- New Paradigms in Transportation Management
- Serving Multiple Constituencies
- Building Strong Work Teams

The program is conducted by the Eno Transportation Foundation, in partnership with the American Public Transportation Association. The program's content was developed under a contract with



the Transit Cooperative Research Program and in consultation with many top transit leaders. According to the Eno Foundation, "Leading a transit organization requires more than the technical knowledge of transit operations, it demands strong management and communication skills, the ability to identify and analyze trends, the foresightedness to anticipate problems, and the skills to solve them."

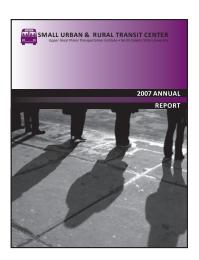
"It was a privilege to spend time learning from national leaders in the transit industry." Hough said. "What I've learned will be valuable in my role as SURTC director, but I also look forward to integrating this knowledge into our outreach and training programs so that we can share it with other transit leaders."

SURTC Annual Report Available

SURTC's 2007 Annual Report, a compendium of the center's research, education, training, and outreach activities has been completed.

The annual report is available in hard copy from SURTC and is available electronically at http://www.surtc.org/about/annrpt/. "The report gives a snapshot of our activities during 2007 and will be a valuable tool for showing funding agencies and other stakeholders the work that we're doing and the progress we've made," notes SURTC director Jill Hough.

The annual report is the third produced by SURTC and complements technical reports, research reports and training material. Much of that material is available on the center's website http://www.surtc.org.





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