Vol. 5, Issue 2 Fall / Winter 2007

## Advisory Board Endorses SURTC Efforts

At its Sept. 13 meeting, the SURTC Advisory Board endorsed the center's projects and progress and provided national, regional and local insight on transit issues.

The day-long meeting was held at the NDSU Alumni Center and included updates from SURTC staff on SURTC research, education, training and outreach projects. Advisory board members were able to ask questions, provide feedback and give observations on many transit-related issues.

"The Advisory Board brings together transit professionals from agencies, from state and federal government and from other organizations," notes SURTC director Jill Hough. "The input and insight they provide is very valuable in shaping our programs. They help keep us relevant and focused."

Ron Hynes, deputy associate administrator of the Federal Transit Administration, complimented SURTC on its track record of completing projects on time while meeting objectives. He recalled his visit to SURTC and to Valley City to view rural transit during SURTC's fifth anniversary celebration in May, noting that the experience has been useful as he worked with staff and transit agencies across the country.

Robert Padgette of the American Public Transportation Association also complimented SURTC's work. He noted that APTA is eager to collaborate with UGPTI to publish a special transit-focused issue of the *Journal of the Transportation Research Forum*. Hough is serving as guest editor for the issue.

Others attending the meeting included:

- Alan Abeson, Easter Seals Project ACTION
- Keven Anderson, Minnesota Department of Transportation

(Advisory Board continued on Page 2)



NDSU is an equal opportunity university

#### (Advisory Board continued)

- Ron Baumgart, River Cities Public Transit, Pierre, SD
- Julie Bommelman, Metropolitan Area Transit, Fargo, ND
- Joe Dougherty, Cheyenne Transit Program, Cheyenne, WY
- Bruce Fuchs, North Dakota Department of Transportation
- Lyn Hellegard, Montana Transit Association
- Ryan Marshall, Utah Urban and Rural Specialized Transportation Association
- Jackie Mattheis, South Dakota Department of Transportation
- Jim Moench, North Dakota Disabilities Advocacy Consortium
- Pam Ternes, Standing Rock Public Transportation, Fort Yates, ND
- Lori Van Beek, Metropolitan Area Transit, Moorhead, MN

At the meeting, a number of state transit officials and transit agency managers noted that added funds for transit in federal legislation has allowed them to purchase vehicles, build new facilities, add staff, and offer new services. Many of the agencies are seeing increased ridership.

That kind of growth was evident as the group

toured the new Fargo-Moorhead Metropolitan Area Transit bus garage. The facility is less than a year old and consolidates bus storage and maintenance for the two cities. The 55,860 square-foot building employs a number of energy-saving technologies. For example, roof water is captured for irrigation of the surrounding landscape, and water from the drive-through bus wash bay is recycled. The roof is reinforced to allow for the installation of solar panels sometime in the future. Waste oil from the buses can be burned to provide supplemental heating, and extra fuel tanks have been installed so alternative blends of biodiesel can be tested and used.

The growth that transit agencies have experienced has not come without worry. Agency managers expressed apprehension about meeting coordination mandates, raising matching funds to obtain federal funding, providing training to keep employees current with safety requirements, and improving mobility of underserved clients such as the elderly.

### **Fuel Price Increases Prompt Study Proposal**

Another, almost universal concern among transit agencies, is the rising cost of fuel and the effect it will have on budgets.

"Agencies recognize that rising fuel prices are a doubleedged sword," notes Hough. "Those prices drive increased ridership, but they also substantially increase operating costs."

In part as a response to concerns raised at the advisory

board meeting,
SURTC is developing
a proposal for a
research project to
estimate the effect
of gas prices on bus
ridership for small
urban and rural transit
agencies. The project
will also examine the
long-run implications
and determine if there
are different effects
for different types of
transit operations.



MAT Bus Facility

Hough said Jeremy Mattson, SURTC

associate research fellow, is heading up a research project that will collect data from transit agencies and develop a computer model to estimate the effect of gas prices on bus ridership. Ideally, data would be collected from various types of transit agencies including those that run shorter routes with greater ridership in larger towns and those that operate longer routes with fewer passengers in rural areas.

"The results of the study would provide insight on the ability of transit agencies to survive under rising fuel costs," Mattson says. "Will fare revenue increase enough to cover costs? If not, what are acceptable options? Increased fares? Reduced service? More efficient vehicles? Information from a study like this could be very useful for planning."



## **Bus Service Between Bismarck and Rapid City**



Pam Ternes

Pam Ternes
Director, Standing Rock
Public Transportation

Agreements between four transportation organizations in the Dakotas have resulted in the start of bi-weekly bus service between Bismarck, ND, and Rapid City, SD. Service began Monday, Feb. 26, on

what is known as the "North-South Shuttle."

Buses run two days per week, Mondays and Thursdays. Passengers are able to ride from Bismarck to Rapid City or from Rapid City to Bismarck each day. The cost for a one-way ticket is \$75.48.

The four bus companies participating in the new service are Bis-Man Transit, Bismarck, ND; Standing Rock Public Transportation, Fort Yates, ND; River Cities Public Transit, Pierre, SD; and Jefferson Lines, a charter bus service in Rapid City, SD.

"The goal is to provide cost effective transit service for rural people in the central Dakotas," said Pam Ternes, director of Standing Rock Public Transportation, who arranged the schedule and helped facilitate agreements between the companies.

Until recently, the only service between Bismarck and Rapid City required an arduous 31 hour trip that included swings into Montana and Wyoming. Travel time on the new route will be less than eight hours.

"The North Dakota DOT is thrilled that we were able to work cooperatively with the South Dakota DOT, Bis-Man Transit, River Cities Public Transit, and Standing Rock Transportation to help put the Bismarck to Pierre bus route in place," said Dave Leftwich, division engineer. "There are close ties between these two areas, and this new route will make bus travel between the two cities much simpler and easier for local travelers."

"Likewise, we are very excited to be a part of this project," said Bruce Lindholm, program manager for the South Dakota DOT Office of Local Transportation Programs. "For the first time ever, people living in the

north central region of South Dakota will have access to Jefferson Lines intercity bus service and will be able to travel anywhere in the United States served by bus."

"The whole idea was to better coordinate existing transit programs in the region to provide a new service," said Ternes. "We think we will be able to deliver on that."

## Abeson Retires from Easter Seals Project ACTION



Al Abeson

Alan Abeson, director of Easter Seals Project ACTION, retired Oct. 23. His retirement also ended his service on the SURTC Advisory Board.

"Al brought a unique perspective to our Advisory Board. His knowledge of the transportation industry and his passion for

improving access for the disabled are imprinted on SURTC's programs," notes SURTC director Jill Hough.

Abeson became director of Project ACTION in September 2002, capping a 40-year career of working first with the Council for Exceptional Children and later as executive director of The Arc of the United States. In just five years, Abeson expanded the reach of the project to greater numbers of people with disabilities, including young people and older adults, and to transportation providers such as the taxi industry. Some of the fruits of his leadership can be seen in training opportunities, research, product development, networking and program evaluation.

Funded through a cooperative agreement with the U.S. Department of Transportation, Federal Transit Administration, Easter Seals Project ACTION promotes cooperation between the transportation industry and the disability community to increase mobility for people with disabilities under the Americans with Disabilities Act.



### Public Participation Encouraged Transportation Decision Making



Jon Mielke

Transportation infrastructure and personal mobility will be key issues discussed at a series of educational and public input workshops to be held across North Dakota in early 2008.

The sessions are designed to boost public interest and input into transportation and mobility

issues faced by the state. Recognizing that the state would face important decisions related to the costs of maintaining its transportation infrastructure and demands for improved facilities and services, the Upper Great Plains Transportation Institute (UGPTI) Advisory Council directed UGPTI staff to work with local, state, and federal entities to facilitate a public input process. SURTC is a program of the UGPTI.

Jon Mielke, SURTC associate research fellow, has been coordinating the effort. He noted that interim legislative committees assigned to explore highway funding and transportation infrastructure needs were informed of the UGPTI's plans and enthusiastically endorsed them. According to Mielke, "the key point of the entire effort is to generate public involvement."

UGPTI staff has convened a steering committee and developed a work plan which includes a series of eight local educational and input workshops to be held across the state during the first quarter of 2008. It is anticipated each workshop will include up to 100 participants, and that these individuals will represent local and county governments, local businesses, the Legislature, and individual citizens. Following these workshops, a state conference will be held to outline input that was generated and to present related recommendations.

"This process is not just about infrastructure, but also about personal mobility. That includes transit and other mobility related issues," Mielke says.

Resulting public input and recommendations will be presented directly to the Legislature's Interim Transportation Committee. "In addition to educating participants and gathering input on current issues, this project is designed to encourage future public involvement in decision-making processes regarding program design, project selection, and finance related to transportation infrastructure and transit," Mielke says.

Information about the local workshops will be available on the UGPTI website, **www.ugpti.org**, in early February.

### Cline Named 2007 Community Transportation Manager of the Year

by Scott Bogren, Director of Communications Community Transportation Association of America (CTAA)

Barbara Cline, CCTM, director of Prairie Hills Transit in Spearfish, SD, was named the 2007 Community Transportation Manager of the Year by the Community Transportation Association of America (CTAA) at its annual Awards Banquet in Reno, NV. The award was given in recognition for her efforts in building Prairie Hills Transit into a successful – and award-winning – transit operation.

The award, presented annually at CTAA's national EXPO, recognizes excellence by managers of community

transportation systems in serving the needs of people in their communities. Association **Board Member Dave** Marsh said in presenting the award, "Barbara Cline of Prairie Hills Transit in Spearfish, South Dakota, has long understood that the service her operation provides is so much more than just a ride; it's a chance to improve people's lives, build the local economy and to make a difference."



Barb Cline

In accepting the award on behalf of her colleagues at Prairie Hills Transit, Cline said, "It is a great honor to accept this award. This is something that you don't win by yourself. It's because of my many dedicated staff at Prairie Hills Transit who serve many people in a service area that's so big. I strive to be a reflection of the people we serve; to remember that Prairie Hills makes a difference in people's lives every day. The basics are to use good judgment, and to maintain high standards for myself and for the people on my team.

I continue to challenge, empower and inspire the people who work with me. Be ethical, but most importantly be a reflection of the people you work with and allow them to be a reflection of you."



#### Barker Receives APTA award



J. Barry Barker

J. Barry Barker, transit director in Louisville, KY, is the recipient of the 2007 American Public Transportation Association's (APTA) Outstanding Public Transportation Manager Award. Barker was saluted for his achievements and presented the award at the Awards Ceremony Oct. 9, in Charlotte, NC, during the

2007 APTA Annual Meeting.

Barker participated in SURTC's strategic planning process in August of 2006 and is a supporter of SURTC programs at the national level.

The APTA award honors a manager of a public transportation system who has made outstanding contributions to the public transportation industry. Barker was chosen for his innovative leadership, ability to forge uncharted territory, and his compassionate response to the needs of public transportation passengers. His active involvement at the federal and state levels for fair and equitable mobility for all, particularly for older adults and people with disabilities, also contributed to him being selected for the award.

Barker began his career in transit in 1974 and became the Transit Authority of River City executive director in 1994. He leads the team of 690 members to provide approximately 57,500 passenger trips every weekday with a fleet of 260 vehicles.

### SURTC Director is Guest Editor of JTRF Issue on Transit



Jill Hough

SURTC director Jill Hough will edit a special issue of the *Journal* of the *Transportation Research* Forum in 2008. The issue will focus exclusively on public transportation. This special issue is being published in partnership with the American Public Transportation Association (APTA).

The deadline to submit papers is April 30, 2008. A copy of the guidelines for authors can be found at the JTRF website <a href="http://www.trforum.org/journal/policy.php">http://www.trforum.org/journal/policy.php</a>. The issue is expected to be published in the fall of 2008 and will also be available on the Internet.

Potential paper topics include:

- Bus and paratransit operations
- Communicating with the public
- Commuter and intercity rail
- Customer service
- Intelligent transportation systems
- Maintenance issues
- Alternative fuels
- Service coordination
- Safety and security
- Workforce development

If you have any questions, please contact Hough at 701-231-8082 or **jill.hough@ndsu.edu**.

### **SURTC Accomplishments – FY 2007**

- 8 Completed research reports
- 7 Refereed journal articles
- 23 Workshops for government or industry stakeholders
- **28** Training workshops
- **576** Participants in training sessions
  - 1 Graduate course in public transportation offered to university students
  - **9** States in the geographical region served by SURTC North Dakota, South Dakota, Montana, Wyoming, Utah, Minnesota, Colorado, Nebraska and Alaska



## RESEARCH

### **COMPLETED RESEARCH**

## **Study Completed on Transportation and Apartment Choice**

A SURTC study has been completed on how the availability of various forms of transportation influences the residential choices of apartment dwellers.

SURTC researchers Xinyu Cao and Jill Hough interviewed about 400 apartment dwellers in the Fargo area for the project. The results will offer direction for transit planners examining the location of apartment dwellers; urban planners determining where to zone and build apartments; and property managers deciding how to price and market apartments.

The full report, "Hedonic Value of Transit Accessibility: An Empirical Analysis in a Small Urban Area," is located on the SURTC research report Web page, http://www.surtc.org/research/reports.php.

### Research Report Completed on Mobility of Rural Elderly Women



A report on research into the mobility of elderly women in rural areas is now available from SURTC.

"Realized Travel Demand and Relative Desired Mobility of Elderly Women in Rural and Small Urban North Dakota"

is available on the SURTC research reports Web page, <a href="http://www.surtc.org/research/reports.php">http://www.surtc.org/research/reports.php</a>. The report is the result of a study conducted by SURTC director Jill Hough.

She interviewed more than 1,000 women, half living in rural areas and half living in small urban areas. The research focused on women because their need for mobility is often particularly acute in rural areas. Women tend to live longer than men and many widowed women live alone. Studies also indicate that women tend to have

more health-related problems that impact their driving. Hough says the research examined factors that influence the mobility of women living in rural areas such as social networks (family, friends, neighbors, etc.) and environmental factors.

### **Tribal Transit Needs Assessment**

SURTC researchers Jon Mielke and David Ripplinger conducted a needs assessment to help identify the Indian reservations across the nation most in need of transit services. The assessment identified tribal transit needs for the distribution of funding under the 2005 SAFETEA-LU federal highway bill. This bill created a new program (5311c) to provide funding for tribal transit services in non-metropolitan areas.

There are approximately 332 federally recognized Indian tribes in the lower 48 states.

The tribal needs assessment proves a good starting point to identify areas of high need using census based demographic data related to mobility dependent populations such as seniors and the disabled. The key findings include:

- Nearly one-third of all reservations are less than one square mile in size. More than 10 percent cover over 1,000 square miles.
- More than three-fourths of all reservations have less than 5,000 residents. Only 10 reservations have more than 50,000 residents.
- Taken as a whole, reservations tend to mirror the nation in terms of the size of various mobility dependent subgroups. Certain reservations do, however, greatly exceed national averages.
- There is a stark difference in outcomes if need determinations are based on aggregate populations or on a percentage of population basis. It may, therefore, be appropriate to give consideration to both approaches.
- Many of the most need-intensive reservations, based on demographic data, received first-year 5311(c) tribal transit funding. However, several tribes and reservations with very small non-metropolitan populations also received funding.
- Demographic-based need assessments may be worthy of consideration by the Federal Transit Administration in future grant review, rating, and selection processes.



### **SURTC Examines Transit in Brookings**

South Dakota State University may be an NDSU rival on the football field, but SDSU and its home city of Brookings, SD, have been looking to NDSU and SURTC to make its transit system a winner.

The Brookings Area Transit Authority (BATA) asked SURTC to explore possible opportunities to provide better transit service to students.

"Often, university communities have characteristics including high density, land use, and travel patterns that make them amenable to transit service," notes David Ripplinger, the SURTC researcher who conducted the study. "Brookings and SDSU have many of those characteristics, and the Brookings Area Transit Authority (BATA) recognized that it could do more to satisfy the mobility needs of SDSU students, faculty, and staff."

"Often, university communities"

In 2006, BATA identified the possibility that transportation needs of SDSU community members were going unmet. In response, BATA commissioned a study to:

- Determine the SDSU community's interest in and willingness to pay for transit service,
- Develop possible service alternatives and operating cost estimates,
- Identify other relevant issues, and
- Provide a framework for implementation of service.

Ripplinger developed a survey to gather information from SDSU students, faculty, and staff; attended public meetings; and sought the guidance of an advisory board.

The study recommends that BATA phase-in new fixed-route transit services to meet the needs of SDSU. Other considerations include: beginning with two circulator routes; providing services on the weekend; charging a \$2/credit hour fee for students; using a UPASS program; implementing a fare of \$1 or \$2 per ride for non-students; reaching out to other entities to build support; and raising matching funds for operations and capital.

### City of Brookings Study

have characteristics including high

density, land use, and travel patterns

that make them amenable to transit

service," notes David Ripplinger

Based on the results of the campus transit research, the City of Brookings asked SURTC to help identify gaps between transportation needs and services in Brookings. The study was motivated by a desire among members of the Brookings City Council to revisit the city's role in providing community transportation, including the process of allocating local funds to support transportation service providers.

The study was conducted by SURTC researchers David Ripplinger and Jon Mielke. An advisory group was formed, consisting of representatives from the city, public and private transportation providers, social service agencies, SDSU, Brookings Public School District and

> downtown Brookings business representatives. The group first met to identify available services. During a second meeting, the group discussed areas of concern and recommendations. Ripplinger and Mielke also conducted personal interviews with service

providers and organizations whose clients use community transportation resources.

"The study did not identify any significant gaps in service, but did note certain areas that would benefit from ongoing attention," Ripplinger says. "These areas include service to areas of the city that are growing and opportunities that may arise to increase social welfare through expanded or coordinated transportation services." The major recommendations of the study are for the city to:

- Establish a coordinated transportation board
- Provide support for same-day coordinated service
- Revise the city transportation funding allocation and oversight policy
- Study expanded fixed-route service
- Consider the role of transportation in large event planning
- Consider the initiation of vanpool commuter services
- Incorporate community transportation into emergency planning



#### RECENT RESEARCH

### Public Transportation as an Emergency Management Tool



The importance of public transportation in a city's emergency operation plans was featured in a paper written by SURTC graduate research assistant Natalie (Beck) Easterday.

The article is entitled

"Transportation for Evacuations: The Variation in Planning between Urban and Rural Cities." She hopes to have the article published in a transportation journal.

As part of her study, Easterday examined how urban and rural cities use public transportation in their emergency preparedness plans.

Easterday analyzed the emergency plans of eight communities. Four urban communities and four rural communities were chosen from eight different states. The urban communities were Indianapolis, IN; Kansas City, MO; Boulder, CO; and Provo, UT. The rural communities were Hibbing, MN; Muskego, WI; Ankeny, IA; and Centralia, IL.

In evaluating the emergency operation plans, Easterday found that several parallels exist between urban and rural communities in their transportation-related planning.

First, both urban and rural emergency operation plans (EOPs) showed strong initial planning efforts involving hazard assessment. Second, each EOP identified the position responsible for ordering an evacuation. Third, each EOP identified primary and supporting agencies involved in evacuations. Fourth, each EOP identified the channels through which evacuation information would be disseminated.

The differences found in planning were relatively minor and were not directly related to city size. All of the cities, except one rural city, identified public transportation in their EOPs. However, only one city (Kansas City, MO) identified the transportation resources that would be available for use. Only Indianapolis, IN, included a representative from transportation to serve in the emergency operations center (EOC). None of the rural cities had pre-designated evacuation routes.

In addition, six best practices emerged from Easterday's research. These best practices are intended to act as guidelines when incorporating public transportation in emergency evacuation planning:

- Have a transportation provider representative at the EOC during an emergency situation.
- Identify and maintain a list of all transportation assets available during an emergency situation.
- Establish mutual aid agreements in communities with regular transportation service.
- Specify the role of the transit operator.
- Plan for the well-being of the transit operator's family.
- Plan for the return of evacuees using public transportation.

SURTC works to be responsive to the needs of the transit industry. Please let us know if your agency has transit-related problems or research needs that we can help you address.

Do you have any transit-related topics that you would like us to focus on in a future issue of the *Transit Lane*?

Please contact SURTC at:

P.O. Box 5074 Fargo, ND 58105

Phone: 701.231.7766 E-mail: info@surtc.org



### Biodiesel Use in Fargo-Moorhead MAT Buses

SURTC is teaming with the Fargo-Moorhead Metropolitan Area Transit (MAT) to determine how beneficial biodiesels really are. MAT has been using biodiesel mixed fuels in its buses for more than a year and is examining the effects biodiesel has had on its bus fleet and the Fargo-Moorhead community.

Biodiesel is said to have many benefits. It is homegrown; it reduces America's dependence on foreign oil; and it is renewable. It has been shown to burn cleaner than traditional fossil fuels and therefore substantially reduces emissions of pollutants. It also provides significant reductions in greenhouse gases that cause global warming. Additionally, biodiesel is believed to reduce wear on automotive engines by up to half.

SURTC researcher Del Peterson is working to examine the direct effects of the F-M MAT using biodiesel mixed fuels. MAT and city officials will be interviewed to identify changes they have seen since the switch to biodiesel from both a bus fleet and public relations perspective.



Del Peterson

"The goal of this study is to determine the overall effect biodiesel blended fuel has had on MAT's bus fleet as well as the auxiliary effect on the F-M community. Attributes such as fuel economy, ridership, emissions and service records will be analyzed," says Peterson.

SURTC will begin by reviewing the current state of biodiesel in public transportation. This will serve as a premise for MAT's experience as well as a means of comparison. Data analysis will follow with comparisons also drawn from similar transit providers located in other regions of the country.

### Getting the Most Out of Small Urban and Rural Transit



Dave Ripplinger

SURTC researcher David Ripplinger is studying organization of public transportation services in small urban and rural communities in North Dakota.

Public transportation services are as diverse as the areas they serve and can be very expensive. Diversity of services and tight budgets can often create challenges

in overseeing and organizing transit services in nonmetropolitan areas.

This study aims at providing state and regional administrators and policymakers with insight into how various forms of reorganization can help make the most of available resources. While this study focuses primarily on economic benefits, quality of service and preference for local providers are also main concerns.

"When it comes to employing advanced economic concepts to address this issue, there is a gap in rigorous academic research, especially in the context of small urban and rural transit," notes Ripplinger. "In essence, the outcomes will provide insight into the most efficient organization of services, whether that is for each community to have its own services, whether some communities would benefit from collaboration, or whether areas would benefit from regional services."

Quarterly data reported to the North Dakota Department of Transportation by transit agencies has been collected, and a companion survey of transit managers has been done. Ripplinger will apply widely-used tools and framework to this data to explore how services can most efficiently meet varied mobility needs, often spread across large geographic areas with limited resources. Methods used in this study will be replicable in other states and can act as a useful guide for future research.



## **EDUCATION**

## Transportation Seminars Feature Mobility Issues

The Upper Great Plains Transportation Institute (UGPTI) at NDSU is offering a seminar series during the 2007-2008 academic year. Several of the seminars have focused on transit and personal mobility issues and some have featured SURTC staff. SURTC director Jill Hough is coordinating the series. Personal mobility related seminars included:



Pat Mokhtarian

### Patricia L. Mokhtarian,

University of California, Davis, presented "When is Getting There Half the Fun? Understanding the Positive Utility of Travel" on Nov. 14. Mokhtarian is a professor of civil and environmental engineering, associate director for education of the Institute of Transportation Studies, and

chair of the interdisciplinary graduate program in Transportation Technology and Policy. Mokhtarian's presentation challenged the truism that the demand for travel is exclusively derived from the demand for spatially-separated activities. She discussed the threefold nature of the utility for travel: the utility of reaching the destination, the utility of activities that can be conducted while traveling, and the utility of travel itself. She also presented suggestions to begin data collection to establish the extent to which a positive utility of travel translates to "excess travel" and discussed how that data can be used for transportation planning.

Jill Hough, SURTC director, presented the findings of "Realized Travel Demand of Elderly Women" at the Dec. 5 seminar. As part of her doctoral degree through the University of California, Davis, Hough studied the mobility concerns and needs of the growing proportion of elderly women living in rural areas. She presented a portion of the results of this study including the importance of mental acuity and self-efficacy in maintaining elderly women's mobility.



Dave Leftwich

Dave Leftwich, Local Government Division, North Dakota Department of Transportation, presented "Why Does the North Dakota Department of Transportation Do Planning?" on Nov. 28. He noted planning is essential before specific decisions can be made relating to the layout and design of transportation facilities and infrastructure.

Leftwich discussed what type of planning studies NDDOT needs, why they need them, who conducts the studies, and how the NDDOT uses the planning studies in decision making.

Jon Mielke, SURTC associate research fellow, presented "Using Census Data to Quantify Public Transportation Needs" on Oct. 24. The 2005 federal highway bill created a new program which provides funding for tribal transit services in non-metropolitan areas. Mielke outlined a demographic needs analysis that was conducted to identify mobility-dependent Indian reservations. His presentation identified population subgroups that are traditionally mobility dependent, outlined study findings concerning reservations which appear to be most in need of transit services, and compared the Federal Transit Administration's list of program grant recipients with the study's findings concerning needy reservations.

**Rick Kasper**, president and chief operating officer of Global Electric Motors, LLC (GEM), presented "Ten Years in the NEV Business: The Top Ten Success



Rick Kasper

Factors." His Oct. 17 presentation encompassed a 'Top Ten' list of key growth and success factors for the evolving Neighborhood Electric Vehicle Industry (NEV). From start-up to acquisition by Chrysler, GEM has learned many lessons and developed into a growing and lasting business in the alternative fuel vehicle

industry. GEM is in its 10th year of business in the NEV, a milestone no other NEV has reached.

David Ripplinger, SURTC researcher, presented an overview of his study, "What does Rural and Small Urban Really Mean? A Methodological Approach," on Sept. 26. He focused on the differences in perceptions between terms like "rural" and "urban" and discussed a transit-specific set of classifications developed for use in public policy and research discussion.





Wade Kline

Wade Kline, Community
Development Planner for the
Fargo-Moorhead Metropolitan
Council of Governments, presented
the "Sub-Area Transit Planning
Metro Area Transit: Moorhead
Expansion & Alignment Study," on
Sept. 19. The Moorhead Expansion
& Alignment Study in 2007
developed transit expansion and

alignment opportunities in the Moorhead and Dilworth portion of the Metro Area Transit service area. Kline presented on the plan development process, including public input process, route analysis, and alternatives development and analysis.



Jim Miller

Jim Miller, SURTC affiliated faculty, presented the seminar "Demand and Cost Models for Small Urban and Rural Transit: Do They Really Work?" on Sept. 12. His presentation discussed some of the most frequently used approaches to demand forecasting and cost modeling and then discussed why the results depart

from actual experience. Miller illustrated these issues based on his previous experience in both Pennsylvania and North Dakota, and also used the River Cities Public Transit system in Pierre, SD, as a case study.



Carol Wright

Carol Wright, SURTC's associate director for training and outreach, presented "Common Pitfalls of Writing." Her Sept. 5 presentation identified some of the most common errors of academic writing and addressed the principles behind the rules as to help improve one's writing skills. She also gave attendees a checklist to evaluate

their own writing before submitting it for an assignment or to an editor for publication.

The full list of seminars and copies of the presenters' slides can be accessed on the UGPTI website at http://www.ugpti.org/training/seminar.php.

### **Transit Class Offered Spring Semester**

The spring 2008 semester will bring another opportunity for SURTC to introduce transit to college students across the country. SURTC will be offering the course TL 786: "Public Transportation" taught by SURTC director, Dr. Jill Hough.

The course will cover concepts and models used in both urban and rural transit industry settings. Issues such as policy, government's role in transit, transit planning, demand forecasting, performance evaluation, and system costing will be discussed.

Students will have the opportunity to work on projects directly related to transit systems and will be introduced to employment opportunities in the area. The course is scheduled for Mondays from 9-11:45 a.m. and is available to NDSU graduate students for three credit hours.

The course will be taught via the Transportation Learning Network, an interactive learning network that makes the course available to students at universities across the country. Transit professionals may also use the network to sit in on all or parts of the course. The technology also allows SURTC to tap the expertise of experts in federal agencies, transit organizations and other universities.

"Guest speakers from a variety of transit agencies will provide students with a solid foundation of industry functioning as well as a glimpse at the breadth and depth of the field," notes Hough.





# TRAINING and OUTREACH

## A Business Plan to Continue the Success of River Cities Public Transit

When one of the region's most successful transit agencies decided to develop an updated business plan, it asked SURTC for help.

River Cities Public Transit (RCPT) provides public transportation to Pierre, SD, and surrounding areas and has experienced phenomenal growth and success over the past six years. RCPT began as the Community Coordinated Transportation System, a non-profit corporation formed in 1998 to provide affordable transportation to elderly, disabled, and low-income individuals. As of 2007, RCPT offered about 25,000 oneway trips per month in an eight-county region serving a population of about 32,000 people.



Ron Baumgart

Despite its success, the RCPT's board and its manager, Ron Baumgart, asked SURTC to review its operations and to formulate a detailed business plan. The process helped RCPT to identify additional public transit markets, forecast future capital and fund needs, and communicate a clear vision to its stakeholders.

Jim Miller, faculty affiliate for SURTC, worked extensively with RCPT and helped develop the plan. "While RCPT is an outstanding transit system and a major asset to the communities it serves, it is faced with several hurdles in order to provide high quality transit to central South Dakota," Miller notes.

He said continued growth of the RCPT system will be limited primarily by funding. To meet its goals, state and federal funds need to increase by 30 percent and local funds need to grow more than 25 percent.

"Although the issues identified in this study are serious, the future looks bright for RCPT," Miller says.

### Transportation Glossary Now Available

A Transportation Glossary and Resource Manual is now available to help transit managers, academics, consultants and government agencies all talk the same language when it comes to transit.

The glossary is available on the SURTC web page at <a href="http://www.surtc.org">http://www.surtc.org</a> under the "resources" tab. SURTC is exploring partnerships with national transit organizations to boost awareness of the glossary and encourage its use.

The glossary, compiled by Carol Wright, SURTC associate director for training and outreach, has more than 200 pages of benchmarks, broad explanations, as well as examples of how the terms are used and how they're applied in the transit industry. The resource also includes information on a wide variety of federal and state transit programs and initiatives. Original sources are referenced so users can find additional information.

Following are a few examples of terms you will find in the glossary:

#### **Catchment Area**

Area from which primary transit ridership is drawn.

### **Discretionary Grant**

Financial assistance which is awarded on the basis of competitive merits from among proposals that are submitted. Projects may on occasion be earmarked by members of Congress; however, recipients are generally required to file applications and abide by the procedures of what was designed as a competitive grant-making process.

### **Mobility Services for All Americans (MSAA)**

A U.S. Department of Transportation Intelligent Transportation Systems (ITS) program designed to utilize ITS technologies to address rising human service transportation costs and the need to improve mobility services for all, especially those with special transportation needs.



### All Over the Map with Transit Training

Based on input from its strategic planning meeting in late 2006, SURTC staff decided to expand the center's outreach to a more national focus. As a result, transit staff from across the country are benefitting from SURTC training thanks to an ambitious schedule of travel and an array of educational offerings.

**Nebraska.** Gary Hegland attended the Nebraska Association of Transportation Providers Managers Workshop in June to present training on telephone etiquette. The focus of the session was to provide tips on improving telephone communication and to emphasize the importance of telephone courtesy in overall customer service. This conference was SURTC's first opportunity to work with the Nebraska Transit Association and its 75 member agencies.

Colorado. Sept. 10-11 Gary Hegland and Carol Wright were invited to the Colorado Association of Transit Agencies Fall Conference and Expo to give a presentation on fundraising and local match for transit agencies. Wright and Hegland emphasized that fundraising requires both the art of developing and nurturing relationships and the science of using data, research and tested fund-raising models. They discussed how

transit agencies could enhance funding by working with federal programs, developing coordination and partnership programs, achieving long-term financial stability, using in-kind match opportunities, and developing special fund-raising events. This was the first training SURTC conducted for the Colorado Association of Transit Agencies (CASTA). CASTA provides ongoing training, resources, technical assistance and leadership to its members which represent urban, suburban, rural and resort transit systems.

**Dakota Transit Association.** Wright and Hegland also provided training at the Dakota Transit Association 2007 Conference, Vendor Show and Roadeo Sept. 15-19 in Dickinson, ND. They presented a session on human resource management. The session focused on recruiting and retaining quality transit employees as well as other management issues. Hegland also gave a presentation on

the roles and responsibilities of transit board members. Dakota Transit Association is the result of a coordinated effort by the transit operators and the state Departments of Transportation of both North and South Dakota to enhance training and mobility options for both states.

**Alaska.** The Alaska Department of Transportation invited Gary Hegland to conduct training at the 2007 Alaska Community Transportation Transit Conference Sept. 25-27. He served on five panels at the conference and presented on finding coordination partners, overcoming barriers to coordination, risk management for transit agencies, marketing, and creative match sources.

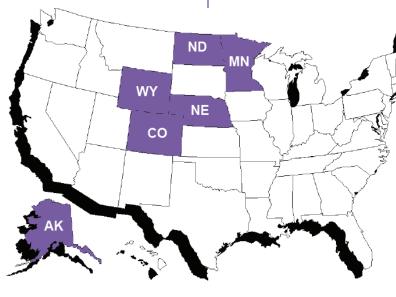
**Wyoming.** On Oct. 12, Hegland attended the Wyoming Transit Association's Annual Conference and Bus Roadeo in Casper. While Hegland has attended Wyoming's annual conferences since 2003, this is the first opportunity he has had to present. He taught a 4-hour class which focused

on using performance measures to aid in making management decisions.

Minnesota. Hegland attended the 2007
Minnesota Public
Transit Conference
Oct. 29-31 in St. Cloud participating in the vendor show. As a result, Hegland will be conducting sessions on risk management for all Minnesota Section 5310 and 5311 projects in February.
Transit operators will be able to choose from sessions

offered in Bemidji, Rochester, or St. Cloud. This training is being coordinated by MNDOT's district supervisor, Keven Anderson, who serves on SURTC's Advisory Board.

Back to Alaska. Hegland and Wright were in Anchorage Nov. 14-15 at the request of Debbi Howard, Rural Transportation Program Manager of the Alaska Department of Transportation. They presented a 2-day short-course, Introduction to Transit Management, for beginning transit managers that provided an overview of transit-related issues and resources. Topics included human resource management, administration, service design and operations, financial management, planning, procurement, and customer service. Hegland and Wright have been asked to serve as trainers for Alaska's 2008 fall transit conference.





## STAFF

### Cao Accepts Position at University of Minnesota



Xinyu Cao

Researcher Xinyu (Jason) Cao left SURTC in August to accept a faculty position at the University of Minnesota. He is now an assistant professor of urban and regional planning at the Hubert Humphrey Institute of Public Affairs.

At SURTC, Cao researched transitoriented development and solutions in small urban and rural transit. His

research touched on gender-role based differences in activity participation and time allocation, the effect of neighborhood design on aging mobility, and residential and transit choices of apartment dwellers in small urban areas.

"Xinyu's contributions helped SURTC achieve a new level of excellence in transit research. He was a great asset to our team, and we wish him much success as he transitions into his new role at the University of Minnesota," says Jill Hough, SURTC director. Cao joined SURTC in 2006 as an associate research fellow.

### **Hough Invited to FTA Safety Meeting**

SURTC director Jill Hough was an invited presenter at a Federal Transit Administration State Safety Oversight Program Meeting in Minneapolis Sept. 17-20.

Ninety-five representatives from rail transit agencies, state safety oversight agencies, federal agencies, universities and industry associations attended the meeting. The FTA's State Safety Oversight program is designed to prevent public transportation fatalities, injuries, property damage, and system interruption and to ensure the capability of responding to any incidents that do occur.

Hough and representatives from three other University Transportation Centers outlined their programs and described how they interact with the transit industry. "The invitation to attend was an endorsement of SURTC and its work," Hough notes. "The FTA recognizes that our research and outreach can have a significant impact on the safety and security of transit agencies."

### **Mattson Joins SURTC Staff**



Jeremy Mattson

Jeremy Mattson joined the SURTC staff in October as an associate research fellow. Before joining SURTC, Mattson worked at NDSU as a research assistant in the Department of Agribusiness and Applied Economics where he studied agricultural trade and farm policy. He earned his master's degree in agricultural economics

from NDSU in 2000 and earned bachelor's degrees in economics and in management from the University of Minnesota, Morris, in 1998.

Mattson, originally from Lake Park, MN, joined SURTC because of his interest in transportation research. His expertise in economics will contribute to a variety of SURTC research projects including an analysis of biodiesel use in transit buses.

## SURTC Graduate Assistant Participates in Summer Internship with FHWA



Natalie Easterday

Natalie (Beck) Easterday, SURTC graduate research assistant, was an intern with the Federal Highway Administration (FHWA) as part of the Summer Transportation Internship Program for Diverse Groups (STIPDG) from June to August 2007. Easterday is an NDSU graduate student in emergency management and has been working

with SURTC since the spring of 2006.

"Under the direction of the Emergency Transportation Operation (ETO) team, I was able to connect transportation concepts with emergency management. I had the opportunity to gain valuable experience as well as network with a variety of professionals," says Easterday.

As part of her internship, Easterday completed several major projects. She studied contraflow plans and operations by interviewing five transportation specialists from four gulf coast states. Contraflow plans are used to alter the normal flow of traffic to aid in an emergency evacuation situation. Many states in southeastern United States have adopted hurricane evacuation plans using contraflow to increase the number of available outbound lanes.



Easterday also compiled an evacuation news story database. She conducted a Google query to obtain news stories pertaining to evacuations and evacuation planning for the previous six months and compiled the stories into a searchable database. This database will act as a resource for future emergency management efforts relating to evacuation planning.

In addition, Easterday wrote a paper that presented funding opportunities for state and local governments to host training exercises and emergency preparedness activities. Easterday also attended an interagency conference and participated in three field trips.

### **Events Calendar**

TRF 2008 Annual Forum

March 17-19, 2008 • Fort Worth, TX

APTA Transportation & University

Communities Conference April 5-8, 2008 • Reno, NV

APTA 2008 Bus & Paratransit Conference

May 3-7, 2008 • Austin, TX

CTAA EXPO 2008

June 1-6, 2008 • New Orleans, LA

APTA EXPO 2008

Oct. 6-8, 2008 • San Diego, CA

TRB 18th National Conference on Rural

Public & Intercity Bus Transportation

Oct. 19-22, 2008 • Omaha, NE

ITS America 2008 Annual Meeting & Exposition

Nov. 16-20, 2008 • New York City, NY

Please check www.surtc.org for updates





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