# ANNUAL REPORT january 1, 2009—june 30, 2010

### **SMALL URBAN & RURAL TRANSIT CENTER**



**Upper Great Plains Transportation Institute** 

North Dakota State University • Fargo



### Small Urban & Rural Transit Center

Upper Great Plains Transportation Institute
North Dakota State University
NDSU Dept 2880 • PO Box 6050
Fargo, ND 58108-6050
Tel: 701.231.6447 • Fax: 701.231.1945

www.surtc.org

[Cover photo credit – Easter Seals Project ACTION]

North Dakota State University does not discriminate on the basis of race, color, national origin, religion, sex, disability, age, Vietnam Era Veterans status, sexual orientation, marital status, or public assistance status. Direct inquiries to the Chief Diversity Officer, 205 Old Main, (701) 231-7708.

### **Contents**

From the Director	1
SURTC News	2
Research	11
Education	19
Training & Outreach	24
Research Reports	29
Journal Articles	30
Popular Articles	30
Staff Presentations	30
Training and Outreach	31
Professional Involvement	33
Advisory Board	34

### **SURTC**Staff



Jill Hough, Ph.D. Director



Gary Hegland Training Coordinator



Jeremy Mattson Associate Research Fellow



Jon Mielke Associate Research Fellow



Del Peterson Associate Research Fellow



David Ripplinger
Associate Research Fellow



Carol Wright Associate Director Training and Outreach

### Faculty Affiliates \_\_\_



Al Abeson, Ed.D. Faculty Affiliate



Jim Miller, Ph.D. Faculty Affiliate



Bill Thoms, J.D. Faculty Affiliate

### SupportStaff

Marsha Allahar Administrative Assistant



Patrick Nichols Web Communications Manager



Dustin Ulmer Web Technician

### **Student**Assistants



Natalie Easterday Graduate Research Assistant



Mridula Sarker Graduate Research Assistant



Marc Scott Graduate Research Assistant



Yan Wang Graduate Research Assistant

Undergraduate Research Assistants Beth Brandt-Sargent Emily Gross

### from the Director

High fuel prices, economic concerns, changing demographics and other factors have combined to present significant challenges to transit agencies in small urban and rural areas. But those same factors have also created opportunities for those transit agencies to innovate and serve new needs. The Small Urban & Rural Transit Center's talented staff continues to help agencies address those challenges and take advantage of these new opportunities.

Our training programs continue to grow. Transit professionals recognize the need to manage their agencies better, to assure that their resources are used effectively and to communicate with clients, employees and funders more clearly. During 2009, we provided more than two dozen training sessions reaching more than 800 individuals on topics ranging from personnel and financial management to emergency evacuations.

We've found that the training needs of transit professionals in the Upper Great Plains are very similar to those of their colleagues across the country. Consequently, we've held training sessions from Alaska to Texas and from California to Rhode Island. Our staff members are in demand for their expertise nationwide. We provide outreach to industry, and our staff serve on Transportation Cooperative Research Program Panels, the FTA's National Bus Safety and Security Program Working Group, and other task forces and committees.

Similarly, our research effort continues to grow with projects addressing complex topics related to energy, technology, Native American transit programs, the mobility needs of the elderly, and transit planning. Our research program has two major thrusts:

- Addressing management and institutional issues faced by transit client groups; and
- Exploring technical and operating issues, with a special emphasis on Intelligent Transportation Systems.

Always, the goal is to make agencies more effective and to increase mobility.

SURTC has also been focusing on one of the largest areas in transit needing attention: workforce development. The center has been working with APTA's Blue Ribbon Panel on Workforce Development, as well as the Council of University Transportation Centers, to address this issue.

We are also addressing the role that transit and personal mobility plays in the "livability" of small urban and rural areas. This is an issue that has taken on increased importance within the U.S. Department of Transportation. SURTC will help assure that non-urban areas are a part of any national discussion on livability.

Finally, graduate and undergraduate students are taking on a greater role in SURTC's research program. There are now three students in NDSU's Transportation and Logistics Ph.D. program who are focusing on transit.

Thank you for your interest in SURTC and its programs. I hope that this report will give you a greater appreciation for the breadth and complexity of the issues and opportunities facing small urban and rural transit.

Jill Hough, Ph.D.



# SURTC hosts national summit on workforce development for public transportation

SURTC hosted a national conference, the "Solutions Summit for Public Transportation Workforce Development," in Fargo in September to bring experts from across the country together to exchange ideas and develop strategies to address the need for workers and leaders in the transit industry.

"The need for professionals in public transit could significantly hamper the industry's ability to meet the mobility needs of its clients," notes Jill Hough, director of the Small Urban & Rural Transit Center, a sponsor of the conference. "We're looking at how we can develop workers and leaders from technicians, mechanics and drivers to planners, schedulers and administrators. This is an industry that is poised for growth, but that growth will require a dynamic workforce."

# SURTC news

# Workforce Development



Jill Hough

Representatives from universities, public transit agencies, consulting companies and other organizations interested in a healthy public transportation industry attended. "This issue is crucial for all communities. Meeting growing demand for workers in public transportation will require innovative approaches," Hough says.

The goal of the summit was to bring together interested persons in public transportation to dialogue on workforce development needs and actions. The summit addressed the following questions:

- Who will lead public transit into the future?
- Who will plan the next generation of transit systems?
- Who will be the transit professionals of tomorrow?
- Where will we find these professionals?

Hough notes that increasing fuel prices, an emphasis on "green" transportation, and a growing reliance on public transportation by retiring baby boomers has sparked increasing interest in transit with a corresponding increase in ridership. However, a lack of qualified workers may be a roadblock in the otherwise bright future of the industry.

The more than 60 participants in the conference learned that there are now four generations in the workforce, and

each generation values different aspects of careers and work environments. For example, younger individuals look for job satisfaction and the use of technology, while older employees value flexible schedules. Tailoring management and training programs to the workers in each of those generations will be challenging but necessary, participants said.

Hough also noted that participants affirmed that successful managers and organizations treat employees as a valuable resource and take an "employees first" perspective – a time-tested and proven approach for attracting and retaining employees.

#### Keynote speakers included:

- Doran Barnes, executive director of Foothill Transit in West Covina, CA. Barnes is also vice-chair for human resources with the American Public Transit Association. He described workforce issues within the transit industry and outlined APTA's workforce development efforts.
- John M. Inglish, general manager of the Utah Transit
   Authority in Salt Lake City. Inglish outlined growth of the
   UTA and described steps the agency is taking to meet its
   workforce needs.
- Polly Kloster, chair and professor in the Department of Nursing at Concordia College in Moorhead, MN. Kloster described similarities between the workforce challenges faced by transit and those faced recently by the nursing field. She also outlined strategies used to boost the nursing workforce and suggested similar strategies could be used in the transit industry.

Copies of presentations and the final report are available at http://www.surtc.org/workforcesummit/

A response panel of sponsors, agency officials and industry experts provided reactions to the keynote speakers, adding their unique perspectives on workforce development efforts in transit and providing a broader context to set the stage for afternoon discussions. The response panel was moderated by Joung Lee of the American Association of State Highway and Transportation Officials and included Joseph Niegoski, American Public Transportation Association; Lydia Mercado, USDOT's Research and Innovative Technology Administration; Charles Dickson, Community Transportation Association of America; and Vincent Valdes, USDOT FTA Office of Research Demonstration and Innovation.



**Doran Barnes** 



John Inglish



Polly Kloster



Joung Lee moderating student panel

# U.S. DOT Reauthorization Outreach Tour



Ray LaHood

Participants heard from a panel of students about their impressions of possible careers in transit, what they are looking for in careers, their use of technology, and how they look for jobs. Breakout sessions allowed representatives from government, education, industry and other organizations to brainstorm solutions and approaches to meeting the need for workers in public transit. Breakout sessions focused on the following topics:

**Internships.** The discussion included variety and intensity of experience, amount and source of supervision, and the physical environment provided for interns.

**Higher education.** Key elements of the discussion included opportunities for "hands-on" experiential learning; an array of course offerings and opportunities for specialization; and linkages to post-graduation employment.

**Workforce retention.** Topics of interest included alternatives to increased financial compensation; creation and maintenance of a valued work environment; and opportunity for participation in decision making.

The results of the summit were provided to the Council of University Transportation Centers to contribute to that organization's National Workforce Development initiative.

Co-sponsors of the summit were the American Association of State Highway and Transportation Officials, American Public Transportation Association, Community Transportation Association of America, the Council on University Transportation Centers, the Federal Transit Administration, and the Small Urban & Rural Transit Center.

### U.S. Secretary of Transportation Visits North Dakota

U.S. Secretary of Transportation Ray LaHood visited North Dakota as part of the U.S. DOT's Transportation Reauthorization Outreach Tour. The event was part of a series of six meetings across the country that brought together federal, state, and local officials, as well as transportation providers, users and other stakeholders, to discuss the upcoming surface transportation reauthorization. SURTC director Jill Hough, Ph.D. was invited to provide testimony during the event on the importance of transit and mobility to the livability of rural areas. She noted that a single approach to improving livability is not likely to fit all situations. In particular, Hough emphasized the mobility needs of the elderly population in rural areas and the importance of meeting those needs in creating livable rural communities. During her testimony, she cited several examples of the

dramatic impact that rural transportation systems have made in the lives of elderly residents in North Dakota. She also emphasized the need for continued research, training and education focused on the mobility needs of individuals, particularly the elderly, living in rural areas. The event also featured a panel discussion of state department of transportation directors from North Dakota, Montana, South Dakota and Wyoming. Gene Griffin, director of SURTC's parent organization, the Upper Great Plains Transportation Institute, moderated that session. Senator Kent Conrad, Senator Byron Dorgan, Governor John Hoeven and Congressman Earl Pomeroy also provided comments on the state's transportation needs.

# SURTC Advisory Board provides research topic insight

National and regional transit experts met Sept. 9, 2009, at NDSU to provide input on SURTC's programs. The 19 visiting experts at the meeting noted that transit is seeing a resurgence of interest. Vincent Valdes, associate administrator for research, demonstration and innovation at the Federal Transit Administration, noted that the change in presidential administration and the investment of economic stimulus funds in transportation has placed mobility in a new spotlight. "It has been wonderful for us because we see a new interest in mobility, not just transit, but mobility overall," he says. Interest in transit has increased regionally as well. "Transit has often been treated as an afterthought. I'm telling legislators, the buses are no longer empty," noted Francis Ziegler, director of the ND Department of Transportation. "We have a population that needs this mode of transportation, and this group (SURTC) has an opportunity to shape that mode." That increased interest is not without challenges. Representatives of transit agencies on SURTC's advisory board described several research and outreach needs for SURTC to consider as they plan activities for the coming year.

Bruce Lindholm of the South Dakota Department of Transportation says the link between transit and economic development needs to be explored and documented. "If we go into a community, especially for airport projects, no one ever asks if it's good for our community. When transit asks for local match, it's often seen as a cost to the community not a benefit. Often it's said, we're not going to win an argument saying that rural transit is economic development, but do we really know?"



Jill Hough

### Research Topic Insight



Vincent Valdes



Keven Anderson



Ryan Marshall

Several advisory board members said technology may be helpful in improving mobility for residents in rural and small urban areas. Keven Anderson of the Minnesota Department of Transportation suggested that technology could enhance participation in ride-share programs. "There isn't any readily accessible place where you can go and log on to see if anybody else is interested except for the bulletin board at the laundromat. There should be some way of reaching those folks technologically."

Radio frequency identification (RFID) technology could be used to help carpoolers track rides and assist with record keeping. Lyn Hellegaard of the Montana Transit Association said some communities could use the technology to facilitate the use of "slug lines," a form of impromptu carpooling that is often used in more urban areas.

Ryan Marshall of the Utah Urban and Rural Specialized Transportation Association noted the need for low-cost technology solutions aimed at smaller transit agencies. Those agencies may not need the complex systems implemented in large urban agencies, but they do have a need for technology that improves service while reducing costs.

The bottom line, the board members agreed, was to maintain or expand transit services while keeping costs in check. The challenge is to maintain customer satisfaction. Jim Moench, North Dakota Disabilities Advocacy Consortium, suggested that SURTC could develop a method for assessing rider satisfaction that agencies could easily adapt for their own use.

"Each year we look to our advisory board to help us stay connected with the transit industry at all levels," noted SURTC director Jill Hough. "Their ideas are always insightful and help us ensure that our programs are directed to important issues and needs."

In addition to the brainstorming and idea-sharing sessions, SURTC researchers presented an overview of training and recently completed and on-going research. Guests offered regional and national perspectives on transit-related developments.

#### Other attendees included:

- Ryan Aasheim, Senator Dorgan's office
- Ron Baumgart, River Cities Public Transit, Pierre, SD
- Paul Benning, North Dakota Department of Transportation
- Julie Bommelman, Metropolitan Area Transit, Fargo, ND
- Charles Dickson, Community Transportation Association of America

- Joe Dougherty, Cheyenne Transit Program, Cheyenne, WY
- Bruce Fuchs, North Dakota Department of Transportation
- B. Leone Gibson, Utah Department of Transportation
- Gene Griffin, UGPTI, Director
- Mary Leary, Easter Seals Project ACTION
- Joseph Niegoski, American Public Transportation Association
- Lori Van Beek, Metropolitan Area Transit, Moorhead, MN



(Front Row L. to R.) Francis Ziegler, Marc Scott, Yan Wang, Julie Bommelman, Bruce Fuchs, Lori Van Beek, Lyn Hellegaard, Marsha Allahar. (Back Row L. to R.) Jill Hough, Gary Hegland, Jon Mielke, Bruce Lindholm, Jim Moench, Joe Dougherty, Del Peterson, Dave Ripplinger, Vincent Valdes, Ron Baumgard, Carol Wright, Jeremy Mattson, Charlie Dickson, Paul Benning, Ryan Marshall, Jim Miller, B. Leone Gibson, Gene Griffin, Joe Niegoski, Mary Leary, Al Abeson.

## Hough chairs planning committee for Rural and Intercity Bus Conference

SURTC director Jill Hough is chair of the planning committee for the 19th National Rural and Intercity Bus Conference to be held Oct. 24-27, 2010, in Burlington, Vermont. The conference will address key rural public and intercity bus transportation themes including accessibility; rural transit policy and planning; alternative fuels; intelligent transportation systems and rural transit; regional systems; networks and coalitions; operations, safety, and security; and tribal transportation. Hough says the meeting is held every other year and draws about 400 people. "It's an opportunity for education and networking as well as a chance to gain some fresh ideas and perspective on what's happening in the industry."





Carol Wright

# TRB Participation



89th Annual Meeting Investing in Our Transportation Future - Bold Ideas to Meet BIG Challenges

### Wright named to FTA's Bus Safety and Security Program Working Group

Carol Wright was chosen to serve on the national Bus Safety and Security Program Working Group for the Federal Transit Administration. The working group was established to improve program coordination and feedback on technical assistance materials before they are sent to a wide-scale audience. It consists of representatives from FTA, AASHTO, APTA, and CTAA, as well as representatives from industry organization committees and sub-committees, bus transit agencies, state departments of transportation, and from federal partners, including the National Rural Transit Assistance Program (RTAP) and the Transportation Security Administration (TSA). This program has launched its website (http://bussafety.fta.dot.gov) and state-by-state orientation sessions. SURTC will host the North Dakota orientation session for all North Dakota transit providers in August 2010.

### SURTC staff participate at TRB

Three SURTC staff members participated in the Transportation Research Board's 89th Annual Meeting January 10-14 in Washington, D.C. The meeting included more than 3,000 presentations in nearly 600 sessions addressing topics of interest to all attendees – policy makers, administrators, practitioners, researchers and representatives of government, industry, and academic institutions.

Jill Hough chaired a meeting of the Rural Public and Intercity Bus Transportation Conference Planning Subcommittee. That group is preparing for its annual meeting in Vermont in October.

Jeremy Mattson presented "Assessment of Demand for Rural Intercity Transportation Services in a Changing Environment" as part of the Rural Transportation Research paper session hosted by the Rural Public and Intercity Bus Transportation Committee. The paper, co-authored by Del Peterson, Dave Ripplinger, William Thoms, and Jill Hough, investigates the impact of individual and trip characteristics on mode choice for rural intercity travel.

Dave Ripplinger presented "Classifying Rural and Small Urban Transit Agencies" in the Rural Transportation Policy paper session. The paper presents the motivation behind, methodology, and results of classifying transit agencies that serve rural and small urban areas. Ripplinger also chaired the paratransit subcommittee meeting on research.

### Researchers present papers at TRF Annual Forum

Two SURTC researchers, Jeremy Mattson and David Ripplinger, presented their research at the Transportation Research Forum's Annual Forum in Arlington, VA. The forum, held March 10-12, drew 100 transportation experts and students from academia, government and private industry. It is an interdisciplinary forum for the exchange of ideas related to all modes of transportation, focusing on both domestic and international issues.

Mattson presented "Assessment of Demand for Rural Intercity Transportation Services in a Changing Environment." The paper investigates the impact of individual and trip characteristics on mode choice for rural intercity travel. Coauthors were Ripplinger, William Thoms, and Jill Hough.

Ripplinger presented "Modeling Transit Technology Adoption." The paper detailed results of a survey of small urban and rural transit agencies with the intent to assemble a publicly available database on existing and planned use of technology by transit agencies that receive Section 5311 funding. Bethany Brandt-Sargent, an NDSU student, was a coauthor of the paper.

## Ripplinger named to leadership post in TRF

SURTC researcher David Ripplinger was recently named vice president for membership of the Transportation Research Forum. The 250-member TRF is an independent organization of transportation professionals which provides an impartial meeting ground for carriers, shippers, government officials, consultants, university researchers, suppliers, and others seeking an exchange of information and ideas related to both passenger and freight transportation. As vice president for membership, Ripplinger will look for ways that the organization can bring value to existing and prospective members. "We want to assure that TRF continues to be a vibrant, relevant organization," Ripplinger says. "TRF has a strong track record, but any organization needs to continually recruit new members and reengage existing members."





Jeremy Mattson



David Ripplinger

Jon Mielke



Gene Griffin



Gary Hegland

### Mielke and Griffin honored by Association of Counties

Research fellow Jon Mielke along with Gene Griffin, director of SURTC's parent organization, the Upper Great Plains
Transportation Institute, received Dedicated Partners Awards from the North Dakota Association of Counties in recognition of their role in organizing a series of public information and input workshops around the state in 2008. The workshops prompted significant discussion in the state, which led to an increase in state funding for transportation infrastructure.

The awards honor those who have shown excellence through dedication, leadership and involvement for the good of all North Dakota counties. The awards program notes that, "Without ever compromising the integrity of their work, Gene and Jon contributed the hard facts without which local officials might never have succeeded in taking the first steps toward a brighter future for North Dakota's infrastructure."

### **SURTC Staff Changes**

As of Feb. 1, 2010, Gary Hegland became a self-employed consultant, providing services to transit agencies and the Dakota Transit Association. Gary had been at SURTC since 2002, coordinating training and outreach. Gary played a significant role in building SURTC's training program and expanding its network of industry contacts. We look forward to collaborating with him in his new role.

Marsha Allahar began work in the spring of 2009 as an administrative assistant with SURTC. Marsha and her family moved to Idaho Falls, ID, in March 2010, where her husband has taken a new job. Before joining UGPTI, she was an academic assistant in the Department of Criminal Justice and Political Science at NDSU for four years. In addition to being the first point of contact for many visitors to UGPTI, she provided administrative support to SURTC, including contract administration, accounting, publication development and other duties. Her people skills and administrative abilities will be missed.

### Sarker is new graduate student

Mridula Sarker of Mymensingh, Bangladesh, is conducting research on terrorism/violence occurring on public surface transportation systems such as buses and trains. Sarker received her bachelor's degree in 2000 and her master's degree in 2002 with a concentration in computer science from the Institute of Science and Technology in Bangladesh. In 2010, she received her master's degree in software engineering from NDSU. She plans to conduct research on system security plans and programs to protect passengers, employees, revenue, and property especially for small urban and rural transportation systems.



Mridula Sarker

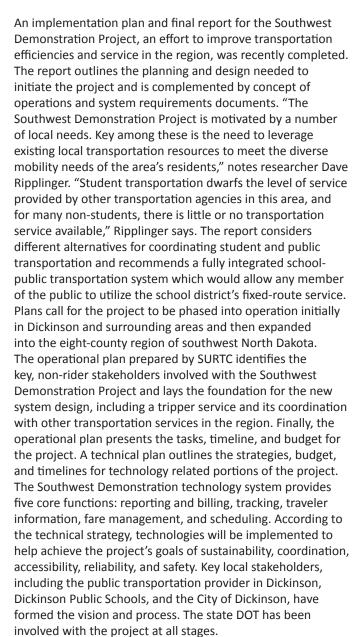
# Research

# Research assesses existing and needed community transportation for ND disabled

The transportation needs and the mobility of people with disabilities are being investigated in a study led by researcher Jeremy Mattson. "Mobility is fundamental for people to live full and satisfying lives in their communities," Mattson says. "With community mobility, people have opportunities for employment, civic involvement, health care, shopping, socialization, and participation in community activities. Without it, people experience isolation and depression. For adults with disabilities, access to community transportation is often very limited." SURTC is surveying people with disabilities across North Dakota via mail, phone, and the Internet. The survey asks questions about the ability of people with disabilities to make needed or desired trips, use of community transportation options such as buses, and unmet needs or difficulties encountered. With that information, state, regional, county and local public and private transportation operators and human service agencies will be able to assess their existing transportation services, identify gaps and needs, and plan improvements. Another goal is to create a survey instrument that could be used over time to assess progress in providing transportation for adults with disabilities in the state and could also be used by communities and states beyond North Dakota for collecting similar information.



### Implementation plan prepared in needsdriven Southwest Demonstration study



# Study of small city sprawl suggests transit should play larger role in urban planning

A study conducted by researcher Del Peterson recommends that transit agencies in small urban communities be more actively involved in the city's land-use planning process to deal with issues of sprawl. "Small urban sprawl has



Photo credit: Hartleys School Buses Inc.

# Implementation Plan



resulted in new housing developments and business centers that have never been served by transit," Peterson says. "Unfortunately, transit agencies are often not included in the land development process within small urban communities." Peterson surveyed transit agencies in small urban areas across the country to determine what steps these transit providers are currently taking to integrate transit service into sprawling communities and to determine what can be done to improve relationships with local governments during the land development planning process. Thirteen transit agencies in areas with metropolitan populations ranging from 50,000 to 200,000 responded to the questionnaire. Case studies were developed for four of these small urban communities. The study found that involvement in land-use planning varies widely from one community to the next. For some, the level of involvement includes meetings, planning activities, or personal networks, while for others there is no involvement and no communication with local city planners. The research suggests that transit agencies dealing with land use issues should take an active role during the planning process, make planners aware of the benefits of transit to new developments, express that communities who adequately fund transit have seen promising results, and make citizens aware of transit and how to use it. To view the study, go to www.surtc.org and click on research reports in the drop-down menu under resources. The report title is "Transit and Small Urban Sprawl."

# Study to examine how public transportation influences health care access

A new study is examining how access to public transportation influences access to health care in North Dakota. There is significant evidence that health care utilization is generally lower in rural areas compared to urban areas. These differences could be due to a number of reasons including the longer travel distances and fewer transportation options available for people in rural areas. "While long travel distance makes trips to medical care burdensome, lack of transportation makes those trips impossible. In rural areas where travel distances are longer and access to alternative modes such as transit is less prevalent, transportation becomes a vital issue for access to health care," says researcher Jeremy Mattson. If providing transportation to health services for those who lack it increases the utilization of these services, there could be cost benefits in terms of reduced need for emergency care and preventable hospitalizations. The study will measure the impact of public transportation on access to health care services in rural and



Del Peterson



small urban areas. It will attempt to identify areas where there is a demand for more public transportation and ways in which the service could be enhanced to improve access to health care. A survey is being conducted to gather data on how distance from health care providers impacts individuals' ability to access health care services, and how public transportation can improve their ability to obtain health care.

SURTC study examines the adoption of new technologies by small urban and rural transit systems



"The decision to adopt a technology relies upon the expectation that its benefits will exceed its costs," notes researcher Dave Ripplinger. To assist individual transit agencies in quantifying the costs and benefits of a specific technology, demonstration projects have been conducted throughout the United States, many with the support of the Federal Transit Administration. At the same time, the U.S. Department of Transportation has expended considerable effort to support the advancement of Intelligent Transportation Systems (ITS) to increase the likelihood of success for transportation agencies in planning, developing, operating, and maintaining technology systems. These efforts have largely been successful, but in spite of this, there is little information available regarding which transit agencies have adopted which technologies or whether certain agencies are more likely to adopt particular technologies. "There is no formal, refined understanding of the factors that drive the technology adoption process by transit agencies," Ripplinger says. He is surveying small urban and rural transit agencies with the objectives of assembling a publicly available database on existing and planned use of technology by transit agencies that receive Section 5311 funding, calculating simple statistics on technology use, and rigorously investigating the relationship between agency and environmental factors that impact the adoption of technology. "These data and findings will serve as valuable tools for policymakers and researchers involved with transit technology issues and projects," comments Ripplinger.

# On-line transportation directory developed

SURTC worked with the NDDOT to develop an on-line transportation service directory that enables individuals to access information about available transit services across the state of North Dakota. The effort's intent is to improve mobility by providing easier access to passenger transportation service information. A website was developed that included information about transportation service providers, maps and an itinerary builder.

### Rural travel demand by mode

Researchers surveyed residents in North Dakota and northwest and west central Minnesota to learn more about how they choose modes of transportation including: automobile, bus, train, transit van, and air. They gathered information on how often respondents use each of these modes for trips of 30 to 500 miles. The researchers asked questions related to gas prices, travel distances, travel times, fares, service frequencies and the need for transfers. They also gathered demographic information and information on personal attitudes and preferences. "With that information, we were able to estimate the likelihood that people would choose a given mode of transportation based on the price of gas, travel distance, personal characteristics and attitudes, service frequencies, and other factors," noted researcher Jeremy Mattson. "The results provided information regarding the need for different forms of transportation and how resources should be allocated to improve the intercity transportation system in the region." To view the study, go to www.surtc.org and click on research reports in the drop-down menu under resources. The report title is "Assessing Demand for Rural Intercity Transportation in a Changing Environment."

# Research classifies transit agencies to aid in assessing performance, setting benchmarks, and evaluating

Classifying rural and small urban transit agencies into peer groups using statistical techniques and data from the Rural National Transit Database can provide a basis for assessing individual agency performance, set performance benchmarks, and analyze large-scale, transit programs, says researcher David Ripplinger. In the project, Ripplinger assigned rural and small urban transit agencies to three groups by service provided: demand-response, fixed-route, and demand-response and fixed-route service. A fourth group was created









to accommodate the large number of transit agencies providing demand-response service that did not report vehicle-hour data. The four groups were clustered using vehicle-mile, vehicle-hour (where available), and fleet size variables. Operating statistics for each cluster by group were also presented. Ripplinger notes that the Rural National Transit Database is a consistent, uniform national dataset. However, additional service area information would make the data even more useful for assembling groups of transit agencies for assessing performance. "The real value of this effort will be realized when individual agencies and regional entities employ it as a tool in planning and evaluation," he says. The construction of peer groups is also of value when implementing the performance-based funding such as that proposed by the U.S. House Transportation and Infrastructure Committee. The cluster analysis also provides researchers with the foundation for advanced econometric analysis. To view the study, go to www.surtc.org and click on research reports in the drop-down menu under resources. The report title is "Classifying Rural and Small Urban Transit Agencies."

### Student attitudes and the use of transit

David Ripplinger and Jill Hough continued a longitudinal study to survey NDSU students on their attitudes toward transit and their use of campus and municipal transit services. The same



group of students has been surveyed each of the past three years to monitor any changes in attitudes or behavior regarding transit. The analysis found that students prefer walking or biking to travel by automobile or transit. The study shows that increased fuel prices result in modest increases in transit ridership and pedestrian travel. The analysis also indicates that continued redevelopment of near-campus areas, resulting in shifts in the location of residence of off-campus students, will result in higher transit and pedestrian traffic. It also found that

express bus service between campus and off-campus areas with high student populations could attract a significant number of transit riders. However, the cost of providing the necessary service may outweigh the benefits, and limited resources may be better used to provide other services. "The survey will allow us to be much more confident in determining why students do or don't use transit," Ripplinger says. In addition, the information will be useful as NDSU and other campuses look at enhancing and marketing transit services."

To view the study, go to www.surtc.org and click on research reports in the drop-down menu under resources. The report title is "The Changing Attitudes and Behaviors of University Students Toward Public Transportation: Final Report."

### Survey assesses mobility needs and aging

Researchers analyzed the results from the transportation section of a survey conducted by AARP to learn about mobility and other concerns of AARP members in North Dakota. Researchers wanted to learn how informed and satisfied older adults are with their transportation options; how often they make different types of trips; if they desire more trips; if lack of transportation limits the trips they make; what improvements they would like to see made for them to stay in their neighborhood as they age; and what problems they encounter when using public transportation. The survey shows that most AARP members in North Dakota continue to drive, and they are more satisfied than dissatisfied with their transportation options. Although many drive, public transportation is important for certain segments of the population, and transportation becomes more of a limiting factor as individuals age. To view the study, go to www. surtc.org and click on research reports in the drop-down menu under resources. The report title is "North Dakota Transportation Survey: Aging and Mobility."



Researcher Jim Miller, Ph.D., is studying applications for Radio Frequency Identification Tags (RFID) in small urban and rural transit agencies. In the pilot project in Pierre, SD, passengers will use RFID-based passenger ID cards in demand-response systems to allow positive identification of persons that cannot give accurate information to drivers (i.e., very young children, persons with cognitive disabilities). The RFID project will also allow for more innovative fare payment options. Partners in the project include River Cities Public Transit, South Dakota Department of Transportation, Shah Software, Greyhawk Technologies, and Alien Technology.

### Evaluating costs to ride or relocate

Many aging individuals prefer to age in their own homes and communities, while critics of public transportation argue that the cost of providing transportation to facilitate this desire is too steep. The study conducted by researcher Del Peterson quantified the cost of riding transit in rural areas of North Dakota versus relocating to larger communities. The study





Jim Miller

reviewed existing information associated with transit costs and the cost of moving to an assisted living center or a nursing home. Finally, the research quantified the cost of riding transit versus relocating to the eight largest communities in North Dakota: Fargo, Bismarck, Grand Forks, Minot, Dickinson, Jamestown, Williston, and Devils Lake. Overall, results indicated that the cost of assisted living was almost always higher than the other three alternatives. Homeowners without mortgages had the lowest costs followed by apartment dwellers and homeowners with mortgages. "Every senior's situation is unique, and other factors such as amenities and safety may be more important than cost in considering quality of life and peace of mind for them and their families," notes researcher Del Peterson. To view the study, go to www.surtc.org and click on research reports in the drop-down menu under resources. The report title is "Ride or Relocate."

#### What's the best fit?

Agencies that provide transit in small urban and rural areas are being encouraged to coordinate their services. In some areas, all transit has been consolidated with one agency. Some agencies serve one community or county while others serve an entire region. Researcher Dave Ripplinger is trying to determine ways in which transit services can be organized to work best in certain communities or circumstances. "Properly organizing services is a way to most efficiently meet widely varied mobility needs of rural areas," he says. He is looking at costs of various organizational structures and studying the economies of scale, scope, density and capacity of transit agencies. He is using the information to develop a planning framework for policy makers and regional administrators.

### SURTC leads legislative study on coordination

More mobility for more people while making the best use of funds directed to transit is the focus of a new study authorized by the 2009 North Dakota Legislature. Through an RFP process, the North Dakota Department of Transportation selected SURTC to conduct the study which includes establishing two pilot regional coordination projects in the state. The focus of the study is to identify ways that public transportation can be better coordinated to improve mobility for residents and assure that the limited federal and state money directed at transit is spent most efficiently. "This is not an effort to force transit providers to consolidate their services," notes SURTC researcher Jon Mielke. "It is an effort to identify ways that they can better work together to



most efficiently use resources to reach the largest number of individuals." Mielke is collaborating with Carol Wright, SURTC's associate director of training and outreach, SURTC researcher David Ripplinger, and other SURTC staff on the project. The study comes as federal funding agencies are continuing to encourage coordination among transit providers and human service agencies that provide mobility services to their clients. As a part of those federal initiatives, SURTC has conducted several studies related to coordination of transit among rural and small-urban providers. The legislation directed that pilot projects be established to look at two regions in the state: one with a city of more than 35,000 residents, and one with a smaller city. The goal is to identify both barriers to transit coordination as well as ways that transit-providing agencies could better coordinate their efforts. Researchers will develop a report that identifies several approaches to transit coordination that could be employed in areas across the state. That report will be presented to the 2011 N.D. Legislature for review. Mielke says the report will likely include recommendations for the legislature to consider in regard to legislative changes that remove roadblocks to coordination or that enhance the ability of transit providers to work together.



Jon Mielke

# Education

### Transit class integrates guest lecturers

The NDSU graduate course in transit continues to feature guest lecturers to give students real-world perspective on the transit industry. As often as possible, each of the weekly three-hour class periods featured a theoretical section, a guest lecture from a professional in the transit industry, as well as a student seminar. "The guest lecturers focus on how theory applies in the field," noted Jill Hough, instructor for the course. TL 786: "Public Transportation" will continue to be taught on campus and via the Transportation Learning Network, an interactive network that makes the course available to students at universities across the country. Bob Prince, a consultant and former manager of the Massachusetts Bay Transit Authority, Boston's transit system, was a guest lecturer. Prince advised President Barack Obama's transition team on transit issues. Other



**Bob Prince** 



Michael Melaniphy

lecturers included SURTC affiliate faculty and former Easter Seals Project ACTION director Al Abeson; Vincent Valdez, FTA associate administrator for Research; Bill Millar, president of the American Public Transportation Association; Michael Melaniphy, vice president public sector for Motor Coach Industries; Keven Anderson, project manager for the Minnesota Department of Transportation; Jim Miller, Ph.D., SURTC affiliate faculty and former faculty member at Pennsylvania State University and former director of the Mid-Atlantic University Transportation Center; and Jim Gilmour, city planner for Fargo.

## Hough serves on APTA blue ribbon workforce development panel

SURTC director Jill Hough was named to the American Public Transportation Association's Blue Ribbon Panel on Workforce Development. The panel took a year-long look at workforce development issues facing transit agencies across the nation. The panel was tasked with reviewing the research and recommendations of the earlier workforce development initiative; identifying gaps, new opportunities, programs and services geared to helping to create and sustain a stronger, vibrant, and efficient and effective workforce; and defining APTA's role in providing ongoing support to members and the industry on these issues. Hough was named to the panel to provide leadership in addressing one of the panel's focus areas: higher education. The group looked at the role of universities, transportation research centers, community colleges and technical schools in providing the pipeline for public transportation careers, and focused on leveraging opportunities for development of core curricula in universities and community colleges. The blue ribbon panel was charged with developing immediate, short-term, mid-term and longer term (five years and beyond) action plans. The unified multiyear work program was presented to the APTA Executive Committee in October 2009. The final report will be available summer 2010. The work continued to strengthen SURTC's relationship with APTA. Recently Hough was also named to the advisory board for Passenger Transport, APTA's official bi-weekly publication. The new advisory board will serve as a sounding board for the editorial staff and will suggest innovative story ideas.

### SURTC staffers give presentations in seminar series

SURTC staff members have again contributed to the Upper Great Plains Transportation Institute's Transportation Seminar Series over the past academic year. The seminar series provides helpful updates on transportation research and issues at the local, regional and national level. The series is focused on educating Ph.D. students in the Transportation and Logistics program as well as students in the Master's in Managerial Logistics at NDSU, but is open to the public. For more information on the series including PowerPoint presentations from past seminars, go to http://www.ugpti.org/events/seminar/

#### SURTC contributions to the series:

- Jill Hough presented "Ethics in Transportation"
   April 29, 2010. She discussed some of the ethical concerns that arise in regard to transportation and in everyday decision making. She also provided tools for addressing those issues and situations.
- Del Peterson presented "Ride or Relocate." In his March 4, 2010 seminar, he examined the cost of living at home and riding transit in North Dakota versus relocating to an assisted living facility. Special attention was paid to three different living situations including homeowners with and without mortgages as well as apartment dwellers.
- Carol Wright presented "The Changing Face of America: Diversity and Its Implications for Public Transit." In her Feb. 18, 2010 presentation, she examined the dramatic shift in America's population with regard to color and age and presented information to help participants understand the magnitude of existing and emerging American diversity.
- Dave Ripplinger presented "Regionalizing Public Transportation." His Feb. 4, 2010 seminar presented considerations for regionalizing public transportation, offered models of regionalization, and an evaluation framework for identifying preferred regionalization alternatives. He also described the role of the economic characteristics of transit agencies on regionalization alternatives.
- Jeremy Mattson presented "An Assessment of Demand for Rural Intercity Transportation Services in a Changing Environment" on Jan. 28, 2010. The objective of his study is to determine the attitude of would-be passengers in their choice of mode and



Del Peterson



Jeremy Mattson

- the factors determining their choice in rural and small urban areas. The results can be used to show how demand for different modes will fluctuate with changes in demographics and economic conditions.
- Jill Hough presented "Transportation and Workforce Development." Her Dec. 8, 2009 presentation outlined the changing demographics as baby-boomers enter retirement and discussed transportation workforce needs as well as strategies for attracting and preparing the next generations of transportation personnel.
- David Ripplinger's presented "Section 508 Compliance: Ensuring Accessibility for Web-based Information," on Nov. 17, 2009.
- David Ripplinger's presentation, "How to Conduct a Review of a Peer-Reviewed Journal Article," on Oct. 13, 2009, described the peer review process and the role and responsibility of peer reviewers. He also offered tips and considerations to ensure that reviews are done well.
- Del Peterson presented "Transit and Small Urban Sprawl." His Sept. 29, 2009 presentation described a study to determine what steps small urban transit providers are currently taking to integrate transit service into sprawling communities, and what can be done to improve relationships with local governments during the land development planning process.
- Jon Mielke presented "Generating Public Involvement in Transportation Decision Making" on Sept. 22, 2009. His seminar discussed a recent initiative undertaken by the Upper Great Plains Transportation Institute to generate public involvement in transportation decision making and subsequent efforts to share research findings with key elected officials.
- Carol Wright's presentation, "Improving Your Writing Skills," on Sept. 15, 2009 reminded participants of the commonly broken rules and offered tips to help them avoid some of the most frequent errors in writing.
- At the invitation of SURTC, FTA Associate Administrator Vincent Valdes presented "The Challenge of Promoting Innovation in a Constrained Environment" on April 27, 2009.
- David Ripplinger presented, "Organizing Transit in Small Urban and Rural Communities," on March 18, 2009.
- Jim Miller presented "Application of Advanced Technologies to Small Urban and Rural Transit: The Promises and the Challenges" on March 9, 2009.



Vincent Valdes

David Ripplinger presented "Interim Findings of the Southwest Demonstration Study" on Feb. 2, 2009.

### Scholarship renewed for SURTC grad student

SURTC graduate research assistant Marc Scott was awarded a renewal of his scholarship from the American Public Transportation Foundation. The foundation awards scholarships to increase and retain the number of young professionals entering the public transportation field as a career. The scholarship renewal was presented in October. Scott has a 4.0 grade point average and is pursuing a doctorate in transportation and logistics.

### Hough is guest lecturer

SURTC director Jill Hough was invited to present a guest lecture as part of the University of Vermont's seminar series Linda Bohlinger (APTF Chair) and Marc Scott in February 2009. Hough's seminar focused on mobility of the elderly, particularly in rural areas. In addition, she met with several graduate students and faculty to discuss rural and small urban public transportation.

### SURTC director provides briefing for Congressional interns

SURTC director Jill Hough was among the professionals selected to provide briefings to interns on the staff of Senator Kent Conrad. The U.S. Senate and the U.S. House of Representatives selects talented individuals to serve as interns, giving them an up-close experience to see how the federal government operates. During the summer of 2010, 15 high-school and college-age interns worked in Senator Conrad's office. Intern coordinator Dana Halvorson arranged for the students to meet weekly with professionals from diverse backgrounds so they could learn more about key issues. In addition to Hough, professionals included North Dakota native, Dr. Mary Wakefield, director of the Health Resources and Services Administration, as well as congressional research experts, lobbyists, news reporters, and Capitol Hill staffers. "It was an opportunity for me to provide these future leaders with background on public transportation – particularly rural transit – and introduce them to some of the challenges and opportunities related to transportation and public policy as well as education and career decisions they will make." Hough says.





ND Senator Kent Conrad

# Training & Outreach

The Small Urban & Rural Transit Center's Training and Outreach Programs have grown dramatically over the past year. The demand for our training programs and services is growing along with our reputation in the industry as a "Center of Excellence."

Over the past year, SURTC staff traveled to 18 states (several more than once) and conducted 6 three-day courses, 21 workshops/training sessions, and 18 individual presentations, plus provided PASS training to dozens of bus drivers in North Dakota and South Dakota. In addition, they field phone calls and answer email requests on a daily basis, giving them the opportunity to serve as a national resource for small urban and rural transit related issues.

# Transit management course gets new name, continues to be popular



Introduction to Transit Management debuted in 2008 (with a pilot project provided to the Alaska Department of Transportation and their transit providers in the fall of 2007). After receiving feedback from attendees, the class was renamed Principles of Transit Management and is currently marketed to include transit managers with multiple years of experience. The three-day course features eight modules covering all elements of basic transit management including: human resource management, financial management, administration, operations and service design, procurement, vehicle and facility management, safety/security/emergency management, and drug/alcohol compliance. The 300+ page course manual features an extensive resource section, and the class participants each receive five CDs to assist them in personalizing the class materials for their own transit agencies. The course has been taught in North Dakota, South Dakota, Texas, Rhode Island, Colorado, Oregon, Minnesota, and California. The course was developed by Carol Wright.

Future plans include the development of an advanced transit management course. Several states, including Texas, Colorado, and Oregon have arranged for multiple sessions in various locations. The class was offered as a 3-day pre-conference intensive at the 2010 Community Transit Association of America (CTAA) Expo in Long Beach, CA, in May. In 2010, SURTC is scheduled to teach the class in Oregon, Minnesota, Texas, Alaska, California and other locations. SURTC staff are also exploring the potential of offering a version of the course specifically for tribal transit managers. They are assessing what modifications may be needed to the course's curriculum to make it more responsive to the needs of tribal transit systems. Jon Mielke presented information on SURTC and the Principles of Transit Management course at a Tribal Transportation Planners Conference held in conjunction with the United Tribes Tribal Leaders Summit Conference in Bismarck in September 2009 and at the 2009 Intertribal Transportation Association Conference in Las Vegas, NV in December.

### SURTC develops diversity course

As the nation faces dramatic demographic changes in the coming years with millions of baby boomers approaching retirement, the nation's transit agencies will need to adapt both in the way they serve customers and how they recruit and retain workers. To help agencies plan for those transitions, Al Abeson, affiliated faculty and retired director of Easter Seals Project ACTION, and Carol Wright, SURTC's associate director for training and outreach, developed a one-day training course, "Diversity – the Changing Face of America: Implications for Public Transit." "In many areas of the country, various minority groups exceed the number of caucasian people living there," Wright notes. "At the same time, the growth in the number of elderly continues to escalate and those individuals are living more active lifestyles, are aging in place and have a high demand for mobility. Similarly, disabled individuals are more often employed and participate in other activities that require mobility." All of these factors have large implications for transit providers. In this course, practical instruction is combined with participant exercises to help transit providers:

- Understand the magnitude of existing and emerging American diversity,
- Adhere to the fundamental requirements of the Civil Rights Act of 1964,
- Recognize discriminatory beliefs and attitudes,
- Overcome communication barriers with people who speak limited English,



Al Abeson

- Provide effective customer service to older adults and people with disabilities, and
- Develop appropriate agency policies.

The course was presented to Texas transportation managers at an event sponsored by the Texas Department of Transportation in January.

### SURTC and NTI develop technology course for rural transit

In cooperation with the National Transit Institute, SURTC has developed a two-day course, "Implementing Rural Transit Technology." This course is geared for transit professionals, state DOT office staff, and regional planners involved in planning and implementing technology-based applications for rural transit operations. Researcher Dave Ripplinger co-developed the course. He noted that technology can transform scheduling and dispatching operations, provide new levels of customer service, and support innovative business practices. However, the process for planning and implementing appropriate technology-based applications can be challenging. "This course presents a structured approach for planning, implementing, and evaluating rural transit projects to help ensure that agency needs and expectations are met," he says. By the end of this course participants will be able to:

- Assess agency performance and develop operational objectives
- Identify technology-based solutions for meeting agency objectives
- Conduct cost-benefit analyses to prioritize projects
- Develop a project plan
- Review traditional and innovative funding sources for technology projects
- Discuss project implementation and management strategies
- Evaluate project effectiveness in meeting agency objectives

Ripplinger participated in an NTI curriculum development committee nearly two years ago. "It was evident that there was a disconnect between rural transit operators and technology use, and we began discussing ways to address that." As a result, the course was launched in June 2009 with a pilot offering in Fargo. The course was attended by 32 participants consisting of transit agency managers and State DOT transit project managers mainly from North Dakota,

South Dakota and Minnesota. Since then the course has been offered in New York, California and Wisconsin. The course was revised based on feedback from participants and was presented in Anchorage, AK, in May and Charlottesville, VA, in June 2010.

### NCST is partner in business plan training

Accountability for public dollars and a constant demand to do more with less is compelling transit agencies to look more closely at how they operate. To address that need, the National Center for Senior Transportation (NCST) and SURTC partnered in an effort to provide business plan training to transit agencies. "More than ever, agencies need to view themselves as businesses and hold themselves to business standards," notes Carol Wright, SURTC's associate director for training and outreach. After receiving frequent requests from agencies wanting to move to the next level of planning and development, the NCST partnered with SURTC to offer Business Plan Development Training. The three-day class was held in August for nine, two-person teams. Participating transit agencies were from Minnesota, Oklahoma, California, North Carolina, New Jersey, New York, Texas, and Kansas. NCST paid all expenses for participants and team members. SURTC affiliated faculty Jim Miller led the class while Wright and SURTC training coordinator Gary Hegland served as facilitators and provided individualized assistance. Core components of the business plans developed during the training include:

- System background and history
- Organization and governance
- Market for public transportation
- Evaluation of current services, operations, vehicles, and facilities
- System mission, vision, goals, and objectives
- New and expanded service options
- Five-year operating and capital budget plan

"During the early part of the class we develop a framework for an agency's business development plan," Wright says. "Then as we move forward, the participants are able to fill in the details with information from their own agencies." A completed business plan will help agencies plan for the next three to five years, providing benchmarks for measuring progress as well as identifying challenges and opportunities.



Nic Gray and Linda Leuckel, Services Programs for Aging Needs, Denton, TX



Judy Salvagni and Linda VanBuskirk, The Dale Association, Inc., Lockport, NY



David Ripplinger

# About 10. About 10. Baseach Facility Facility Control The propose of the forest behavior Education The propose of the forest behavior The propose of the forest behavio

### SURTC launches blog

As SURTC strives to improve its outreach activities and provide a greater variety of valuable and current information in an accessible format, we have launched the SURTC Blog. The intent of the blog is to facilitate the dissemination of information and dialogue on small urban and rural transit topics.

The blog keeps readers up-to-date on the training and research being conducted by SURTC staff. In addition, the blog endeavors to be a valuable resource for news and information pertaining to the world of small urban and rural transit. Included are posts about upcoming training, SURTC events, completed or ongoing research projects, industry news of significant events that impact small urban and rural transit, and other newsworthy topics we would like to share with you.

You can follow the blog by visiting the SURTC website at www.surtc.org. Posts appear in the news and events box located on the site's home page. You can also visit the blog directly at www.surtc.org/blog . For greater convenience, you can have posts sent straight to your inbox through our e-mail subscription, or you can follow the SURTC Blog with a RSS reader by using our RSS feed. For more information about our e-mail subscription or RSS feed, contact Dave Ripplinger by phone at 701-231-5265 or by e-mail at david.ripplinger@ndsu.edu.

#### Website continues to draw visitors

In 2009, the SURTC website was visited nearly 10,400 times with guests viewing more than 37,000 pages. Visitors came from 120 countries including Canada, India, Australia, Malaysia, South Africa and New Zealand. In the United States, visitors from 52 states and territories visited the site with the most traffic to the site coming from North Dakota, California, Minnesota and the District of Columbia, respectively. "Our website continues to be a valuable means of outreach," notes SURTC director Jill Hough. "The addition of our blog is an example of how we will continue to add innovations and features that will enhance our ability to share our research and expertise via the website." SURTC's Web address is www.surtc.org.

### Research Reports

Mattson, Jeremy, Del Peterson, William Thoms, David Ripplinger and Jill Hough. (2010) **Assessing Demand for Rural Intercity Transportation in a Changing Environment**, UGPTI Report DP-224, Upper Great Plains Transportation Institute, North Dakota State University, Fargo.

Mattson, Jeremy. (2009) **North Dakota Transportation Survey: Aging and Mobility.** UGPTI Report DP-221, Upper Great Plains Transportation Institute, North Dakota State University, Fargo.

Miller, James H., Jon Mielke and Marc Scott. (2009) **Business Plan for Brookings Area Transit Authority.** UGPTI Report SP-170, Upper Great Plains Transportation Institute, North Dakota State University, Fargo.

Miller, James H., Jon Mielke and Marc Scott. (2009) **Business Plan for Palace Transit.** UGPTI Report SP-173, Upper Great Plains Transportation Institute, North Dakota State University, Fargo.

Miller, James H., Jon Mielke and Marc Scott. (2009) **Business Plan for People's Transit.** UGPTI Report SP-171, Upper Great Plains Transportation Institute, North Dakota State University, Fargo.

Miller, James H., Jon Mielke and Marc Scott. (2009) **Business Plan for West River Transit Authority, Inc. (d/b/a/ Prairie Hills Transit).** UGPTI Report SP-172, Upper Great Plains Transportation Institute, North Dakota State University, Fargo.

Peterson, Del and Marc Scott. (2010) **Ride or Relocate**, UGPTI Report DP-223, Upper Great Plains Transportation Institute, North Dakota State University, Fargo.

Peterson, Del. (2009) **Transit and Small Urban Sprawl.** UGPTI Report DP-217, Upper Great Plains Transportation Institute, North Dakota State University, Fargo.

Ripplinger, David, Jill Hough, and Bethany Brandt-Sargent. (2009) **The Changing Behaviors of University Students Toward Public Transportation: Final Report.** UGPTI Report DP-222, Upper Great Plains Transportation Institute, North Dakota State University, Fargo.

Ripplinger, David. (2009) Implementation of Advanced Technologies in Rural Transit Service for the State of North Dakota, UGPTI Report DP-214, Upper Great Plains Transportation Institute, North Dakota State University, Fargo.

Ripplinger, David. (2009) Classifying Rural and Small Urban Transit Agencies. UGPTI Report DP-212, Upper Great Plains Transportation Institute, North Dakota State University, Fargo.

Ripplinger, David and Bethany Brandt-Sargent. (2010) **Technology Adoption by Small Urban & Rural Transit Agencies.** UGPTI Report DP-226, Upper Great Plains Transportation Institute, North Dakota State University, Fargo.

#### Journal Articles

Mattson, Jeremy, Del Peterson, David Ripplinger, William Thoms, and Jill Hough. **An Assessment of Demand for Rural Intercity Transportation Services in a Changing Environment.**Transportation Research Record: Journal of the Transportation Research Board, No. 2145, 2010, pp. 108-114.

Ripplinger, David, and Bethany Brandt-Sargent. **Classifying Rural and Small Urban Transit Agencies.** Transportation Research Record: Journal of the Transportation Research Board, No. 2145, 2010, pp. 100-107.

### Popular Articles

Hough, Jill. "Small Urban and Rural Transit Center Grows to Meet Industry Challenges," Passenger Transport, December 21, 2009. American Public Transportation Association, Washington, DC.

Hough, Jill. "Are We There Yet? Senior Mobility and Social Networking," NCST Today, September 2009. National Center on Senior Transportation, Washington, DC.

#### Staff Presentations

**The People of Rural Transit: Human Services and Human Resources** presented by Jill Hough at the Transportation Research Board 88th Annual Meeting in Washington, DC in January 2009.

**Effects of Gasoline Prices on Bus Ridership for Small Urban Transit Systems** presented by Jeremy Mattson at the Transportation Research Board 88th Annual Meeting in Washington, DC, in January 2009.

**Providing General Public Paratransit on the Northern Great Plains** presented by David Ripplinger at the Transportation Research Board 88th Annual Meeting in Washington, DC in January 2009.

**Organizing Transit in Small Urban and Rural Communities** presented by David Ripplinger at the annual meeting of the Transportation Research Forum in Portland, OR, in February 2009.

**Biodiesel Use in Fargo/Moorhead Metropolitan Area Transit Buses** presented by Del Peterson at the annual meeting of the Transportation Research Forum in Portland, OR, in February 2009.

**Public Transportation and Climate Change** presented by Jeremy Mattson at the Association of Transportation Law Professionals 80th Annual Meeting in Denver, CO, on June 28, 2009.

**Southwest Demonstration Study** presented by David Ripplinger at the National Rural ITS Conference in Seaside, OR, in August 2009.

**Tribal Transit Management** presented by Jon Mielke at the Tribal Transportation Planners Conference in Bismarck, ND, in September 2009.

**Workforce Development Round Table Discussion on Higher Education** presented by Jill Hough at the American Public Transportation Association Annual Conference in Orlando, FL, in October 2009.

**Research Update** presented by Jill Hough at the Research and Technology Committee Meeting during the American Public Transportation Association Annual Conference in Orlando, FL, in October 2009.

**Tribal Transit Planning** presented by Jon Mielke at the Tribal Transportation Planners Conference in Las Vegas, NV, in December 2009.

**Classifying Rural Transit Agencies** presented by David Ripplinger at the Transportation Research Board Annual Meeting in Washington, DC, in January 2010.

An Assessment of Demand for Rural Intercity Transportation Services in a Changing Environment presented by Jeremy Mattson at the Transportation Research Board Annual Meeting in Washington, DC, in January 2010, and the Transportation Research Forum Annual Meeting in Arlington, VA, in March 2010.

**Technology Adoption by Rural Transit Agencies** presented by David Ripplinger at the Transportation Research Forum Annual Meeting in Arlington, VA, in March 2010.

**Demographic Change and Its Implications for Transit** presented by David Ripplinger at the 2nd Annual Coordination Summit in Bismarck, ND, in April 2010.

### Training and Outreach

Pass Bus Driver Certification and Re-certification, Defensive Driving, and Maltreatment Abuse Prevention Training was offered by Gary Hegland for all transit drivers in North Dakota and South Dakota. In 2009, trainings were held in four locations in South Dakota -- Pierre, Brookings, Groton and Spearfish, with a total of 64 drivers participating.

**Show Me the Money: Fundraising and Local Match** was presented by Gary Hegland at the 2009 California Association for Coordinated Transportation's 25th Anniversary Conference and EXPO held in San Diego, CA in March 2009.

The **Iowa Public Transit Association** selected Carol Wright as their keynote speaker for their 2009 IPTA Fall Conference in Des Moines. She presented a full day course, "Managing People Effectively – Solving Human Resource Management Problems," followed by a half day course, "Choosing Your Attitude – How to Stay Positive Even in A Negative Environment."

The **Dakota Transit Association Coordination Summit** was held in Fort Pierre, SD in April. Gary Hegland serves as the Executive Director for DTA. He also delivered a presentation on United We Ride. Carol Wright facilitated a policy maker forum.

**Emergency Preparedness,** which focused on the preparations for and transit support during the 2009 Fargo flood, was presented by Carol Wright and Gary Hegland at the American Public Transit Association (APTA) Bus and Paratransit Conference in Seattle, WA, in May 2009.

**Principles of Transit Management,** a three-day intensive training course for transit managers and supervisors was taught in Chamberlain, SD; San Antonio, TX; Lakewood, CO; and as a preconference intensive at the 2009 CTAA EXPO in Providence, RI. From January through June in 2010, it was taught in Salem, OR; Redmond, OR; LeGrande, OR; Alexandria, MN; and at the 2010 CTAA EXPO in Long Beach, CA.

**The National Center on Senior Transportation** selected Carol Wright to be a faculty member for their Senior Transportation Institute held in Washington, DC in June 2009. She also presented a workshop on Small Urban and Rural Transit Issues.

**Emergency Evacuation during Natural Disasters** was presented in June by Gary Hegland at the 2009 Wyoming Public Transit Conference in Riverton.

**Implementing Rural Transit Technology,** a two-day training, was presented at North Dakota State University in Fargo, ND; Sacramento, CA; Wisconsin Rapids, WI, and Schnectady, NY in 2009 by David Ripplinger for transit agency managers and state DOT transit project managers. In early 2010, he presented the course in Anchorage, AK and in Charlottesville, VA.

**Business Plan Development Training** was co-sponsored by SURTC and the National Center on Senior Transportation in August 2009. A competitive application process yielded nine transit management teams from across the United States who participated in the intensive three-day training led by Dr. Jim Miller, SURTC faculty affiliate. Business Plan Development Training was also taught at Rutgers in New Brunswick, NJ in October 2009 and in Corpus Christi, TX in February 2010.

**Principles of Transit Management for Tribal Transit** (an overview) was presented by Jon Mielke at the National Tribal Transit Conference in Bismarck, ND in September 2009.

**Financial Management for Transit Systems,** a full day course, was presented at the 2009 Oregon Public Transportation Conference in Seaside in October. Carol Wright was also the noon keynote speaker where she presented, "Choosing Your Attitude: How to Stay Positive Even in a Negative Environment." While at the conference, she participated in a SWAT bus hostage rescue exercise. Financial Management was also presented in Willmington, NC in June 2010 at the North Carolina Public Transit Association Annual Conference.

**Planning for Implementation of Technology in Small Urban & Rural Transit Systems** was presented by Gary Hegland at the Alaska Public Transportation Conference in Anchorage in October 2009.

The Changing Face of America: Implications for Public Transit was developed by SURTC faculty affiliate Al Abeson and Carol Wright and sponsored by the Texas Department of Transportation in Austin, TX, Jan. 28, 2010.

**Cost Allocation for Human Service Agencies that Provide Transportation** was conducted as a telephone conference distance learning event to 50 participants in April 2010. The event was sponsored by the National Center on Senior Transportation and taught by Carol Wright.

### Professional Involvement

#### **NATIONAL**

- APTA Blue Ribbon Task Force, Workforce Development Jill Hough
- Council of University Transportation Centers, National Workforce Development Jill Hough
- National Transit Institute (NTI) Advisory Board, Rutgers University Jill Hough
- Transit Cooperative Research Program Oversight Project Selection (TOPS) Committee,
   Sponsored by the National Academies of Science Jill Hough
- 19th National Conference on Rural Public and Intercity Bus Transportation Conference Chair Jill Hough
- APTA Passenger Transport Advisory Board Jill Hough
- National Bus Safety and Security Program Working Group for FTA Carol Wright
- CTAA State Delegate for ND Carol Wright
- National Transit Institute's Rural ITS Curriculum Committee David Ripplinger
- Transportation Cooperative Research Program (TCRP) Panels:
  - J-11 Committee, Selection of APTA Research Projects Jill Hough
  - F-13 "Driver Recruitment, Retention and Performance in ADA Paratransit Operations" – Carol Wright
  - B-35 "A Handbook for Planning and Operating Flexible Public Transportation Services" – Del Peterson
  - J-6 "Assessing the Outcomes of Increased SAFETEA-LU Funding for Rural Passenger Services," committee chair – Jill Hough
  - F-16 "The Public Transportation Industry's Professional Development, Human Capital Needs to Build a Sustainable Workforce" – Jill Hough
- Transportation Research Board Paratransit Research Subcommittee, chair David Ripplinger
- Transportation Research Forum 2009 Annual Meeting Planning Committee, vice president-membership – David Ripplinger

#### STATE

- Steering Committee for Generating Public Involvement in Transportation Policy and Funding Decision Making Processes Jon Mielke
- Governing Summit: Livable Communities Jill Hough
- MeritCare Hospital Transportation Committee Jill Hough and Jeremy Mattson

### **AdvisoryBoard**



Audrey Allums Transit Section Supervisor Montana DOT



Keven Anderson District 4 Project Manager Minnesota DOT



Ron Baumgart Dakota Transit Association & General Manager River Cities Public Transit



Julie Bommelman Transit Administrator Metropolitan Area Transit City of Fargo



Joe Dougherty Director of Transit Cheyenne Transit



Rich Douglas Program Manager Wyoming DOT



Bruce Fuchs Program Manager North Dakota DOT



B. Leone Gibson Director of Public Transit and Programs Utah DOT



Lyn Hellegaard Coordinator Montana Transit Assn.



Mary Leary, Ph.D. Senior Director Easter Seals Project ACTION



Bruce Lindholm Program Manager South Dakota DOT



Ryan Marshall President Utah Urban Rural Specialized Transp. Assn.



Dale Marsico Executive Director



James Moench Executive Director ND Disabilities Advocacy Consortium



Robert Padgette Director of Policy Development & Research APTA



Pam Ternes Special Projects Coord. Standing Rock Public Transportation



Vincent Valdes Assoc. Admin. of RDI Federal Transit Administration



Lori Van Beek Transit Manager Metropolitan Area Transit City of Moorhead