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As the Small Urban & Rural Transit Center approaches its 10th anniversary, our focus on mobility for residents of rural and small-urban areas has never been more timely or important. Demographic and economic trends have increased the need for mobility among rural residents while those same trends make meeting those needs ever more difficult.

Rural populations continue to consolidate around larger trade centers leaving the elderly, disabled and disadvantaged in rural areas with fewer mobility options. At the same time, rural transit agencies continually are being asked to do more with less. In other areas, energy development, particularly oil drilling, has increased the need for transit in order get workers to their work and to reduce congestion on overtaxed streets and roads.

In this environment, SURTC’s talented and hard-working staff continues to address personal mobility challenges through education, research and outreach.

We are excited to be in a new partnership with the University of South Florida in Tampa, the University of Illinois at Chicago and Florida International University in Miami to cooperatively conduct research, and provide training and outreach. Each of the partners brings unique strengths. We will contribute our expertise and experience in rural and small urban transportation and we hope to gain new insight and capabilities from our partners in this collaboration.

SURTC has built its success on such partnerships. We will continue to grow the relationships we’ve established with national, state and local organizations and agencies to enhance our research, education and outreach efforts. We look forward to continued collaborative accomplishments in all of our areas of activity.

This collaboration is particularly important in the area of workforce development for the transit industry where the need for trained and talented workers continues to grow. SURTC is leading a national effort to develop a standardized college transit curriculum that will meet the industry’s need for leaders. At the same time, our training and outreach programs continue to grow to meet the demand of existing transit employees and managers who want to expand their skills and enhance their agencies. Meanwhile, our research continues to address critical questions facing small urban and rural transit agencies.

Thank you for taking the time to read this report. If you have any questions about any of our projects and efforts, please contact us. We are anxious to share more information with you.

Best regards,

Jill Hough, Ph.D.
Director
SURTC is partner in U.S. DOT grant to study transit

SURTC is one of four university transportation centers that will cooperatively conduct research and provide training and outreach related to public transit under a $3.5 million grant awarded in January 2012 by the U.S. Department of Transportation.

NDSU is a partner with the University of Illinois at Chicago and Florida International University in Miami. The University of South Florida in Tampa will lead the effort. SURTC will provide expertise in rural and small urban transportation and will receive about $700,000 from the grant.

The grant was one of 22 awarded in the University Transportation Centers Program administered by the DOT’s Research and Innovative Technology Administration and was one of two grants specifically targeted to consortiums that will study public transportation.

“SURTC has developed expertise in transit management and coordination, among other areas specifically related to transit providers in rural and small urban areas,” notes SURTC Director Jill Hough. “Our participation in this effort brings added knowledge and awareness to assure that the issues faced by rural and small urban transit providers are addressed.”

Overall, the partnership will focus on the following topic areas:

- Enhancing transit safety
- Developing procedures and approaches to help agencies better care for their fleets and facilities
- Exploring how transit can enhance economic competitiveness of businesses, regions or communities
- Enhancing the livability of regions or communities through transit
- Improving environmental sustainability of transportation systems and transit operations

“In each of these areas we will bring a rural or small community focus,” Hough noted. “We will also gain ideas from our partners that may be transferable to the smaller transit providers we serve. Each of the four partner universities brings unique strengths and accomplishments to this consortium, but by working together we will enhance our overall collective contribution to the transit industry,” Hough said.

APTA conference set for Fargo

The American Public Transportation Association (APTA) 2012 Public Transportation & Universities Conference will be held in Fargo, North Dakota June 16-19, 2012. This biennial conference focuses on the unique needs of university communities and the population they serve. Please mark your calendar and plan to attend. More details will be posted on the APTA and SURTC websites. SURTC and Fargo-Moorhead MATBUS will serve as hosts and sponsors for the conference. The conference website is www.apta.com/mc/university/Pages/default.aspx
STAFF INVOLVED IN CONFERENCE ON RURAL & INTERCITY BUS TRANSPORTATION

SURTC’s staff members were heavily involved in the 19th National Conference on Rural Public and Intercity Bus Transportation Oct. 24-27, 2010, in Burlington, VT. Jill Hough, SURTC Director, served as chair of the conference.

The conference attracted approximately 350 attendees from across the country, including transit providers, transportation planners, and researchers. Researchers David Ripplinger, Del Peterson, and Jeremy Mattson presented papers and moderated sessions. Ripplinger gave presentations on technology use by rural transit agencies and use of Rural National Transit Database (Rural NTD) data, and moderated a session on the Rural NTD. Peterson presented a paper titled Ride or Relocate, which quantified the cost of living at home and riding transit versus relocating to an assisted living facility. He also moderated a session on commuter programs. Mattson presented the findings from two studies on mobility of older adults and people with disabilities in North Dakota. The full reports for all of these studies can be found on the SURTC website at www.surtc.org/research/reports.php.

STAFF CHANGES

Keven Anderson joined the SURTC in October as Coordinator for Training and Outreach. He was most recently the Transit Project Manager for the Minnesota Department of Transit. He served in that capacity for 12 years where his responsibilities included providing oversight and technical expertise for transit providers in a 12 county area and Greater Minnesota. Before that he managed a multi-county public transit system in Eastern Iowa which provided Dial-a-ride, Elderly/Disabled, Commuter and Para-Transit services. He brings almost 20 years of diverse transportation experience to SURTC. Anderson is a graduate of Concordia College in Moorhead with a degree in psychology/communications. Before beginning his career in transit, Anderson worked for several retail companies.

David Ripplinger left SURTC in January 2011 to begin working as a research assistant in the Department of Agribusiness and Applied Economics at North Dakota State University (NDSU). Dave had been at SURTC since 2004 and conducted numerous research projects and technology training.

Marc Scott was a research analyst with SURTC as part of a one-year internship. Before the internship, Scott was a student research assistant with SURTC while earning his Ph.D. in transportation and logistics at NDSU. He conducted research on the importance of vehicle supplier attributes used as evaluation criteria by public transportation agency procurement decision makers and was involved in research relating to campus transit and state of good repair. In August 2011, Marc accepted a position with Wal-Mart Logistics at the company’s headquarters in Bentonville, AR.
SURC STAFF PARTICIPATE AT TRB AND TRF

Jill Hough and Jeremy Mattson participated in the Transportation Research Board’s (TRB’s) 90th Annual Meeting January 23-27, 2011 in Washington, DC. Hough gave two presentations: “Educating the Future Transit Workforce” and “Technology Adoption by Small Urban and Rural Transit Agencies.” She also presided over the TRB Rural Public and Intercity Bus Transportation Conference Planning Subcommittee. Mattson was involved in two poster sessions: “Public Involvement in Transportation” and “Safe Mobility of Older Persons.” In the first he provided an overview of the transit, technology, and public participation project being conducted by SURTC, and in the second he presented findings from his study on transportation, distance, and health care utilization for older adults in rural and small urban areas.

Mattson also participated in the TRB’s 91st Annual Meeting January 22-26, 2012. He presented “Marginal Cost Pricing and Subsidy of Small Urban Transit” David Ripplinger, formerly of SURTC and now with the NDSU Department of Agribusiness and Applied Economics was a co-author. Mattson also presented “Application of Attitudinal Structural Equation Modeling to Intercity Transportation Market Segmentation.” Co-authors include Ripplinger and Del Peterson. Finally, Mattson was invited to present “Transportation and Health Care Use for Older Adults in Small Communities” The study estimated the impacts of transportation and travel distance on utilization of health care services for older adults in rural and small urban areas.

Mattson also participated in the Transportation Research Forum (TRF) Annual Meeting March 10-12, 2011, in Long Beach, CA, where he moderated a session on transit & costs and presented “Marginal Cost Pricing and Subsidy of Transit in Small Urbanized Areas.”

Del Peterson presented “Ride or Relocate? Transportation and Housing Options for Senior Adults” at the TRF Annual Meeting March, 14-17, 2012 in Tampa, FL.

SURTC SPONSORS “WOMAN-UP” CONFERENCE

A workshop to help area women enhance their careers was held Sept. 20 at the North Dakota State University Alumni Center and sponsored by the Small Urban & Rural Transit Center. The full-day “Woman-up” workshop was attended by about 10 participants and was intended for senior managers, managers and rising stars. The workshop was facilitated by Holly Herman, a former CEO in the financial industry, marathon runner, entrepreneur, and trained executive coach. Herman created the workshop to give women tools and tips to take control of their work life. As a trained executive coach she has helped many corporate executives and entrepreneurs enhance their lives and careers. Herman is the daughter of Chuck Herman, the Upper Great Plains Transportation Institute’s first Agrey Award Winner and namesake of its Herman Scholarship. SURTC director Jill Hough said the workshop was well received by the participants and a second session may be held in the future. For more information about Holly Herman and her tips on skills and confidence building, go to her website at: www.achievingskills.com.
SURTC participates in conference on mobility of older adults

Researchers Jeremy Mattson and Del Peterson participated in a September 2011 conference on Emerging Issues in Safe and Sustainable Mobility for Older Persons. The conference, which highlighted the latest research regarding safe mobility for older persons, was hosted by the Transportation Research Board and the Committee of the Safe Mobility for Older Persons in Washington, DC. Mattson presented the results from a study analyzing the impacts of travel distance and access to transportation on use of health care services in small urban and rural areas. Peterson participated in a poster session, presenting the results from his Ride or Relocate study.

Ride or relocate webinar held with NCST

A webinar held by SURTC and the National Center on Senior Transportation (NCST) is now available for viewing online. The webinar addressed results from a study conducted in North Dakota which quantified the cost of living at home and riding transit versus relocating to an assisted living facility. In addition, potential marketing strategies were presented utilizing the results of the study to reach people who may be in the process of making these difficult decisions. Presenters included moderator Lucinda Shannon, NCST; Del Peterson, SURTC associate research fellow; Carol Wright, SURTC associate director of training and outreach; and Pat Hansen, executive director, South Central Adult Services Council, Valley City, ND. The webinar was cosponsored by the Community Transportation Association of America (CTAA) and the Community Transportation Assistance Program (CTAP) and was conducted on August 3, 2011. A recording of the webinar is available at www.surtc.org/training.
WEBINAR TO ADDRESS TRIBAL TRANSIT FUNDING

Tribal transit was the focus of a March 2012 SURTC webinar. SURTC researcher Jon Mielke discussed the results from his research on tribal transit funding. His recently completed study, “5311(c) Tribal Transit Funding: Assessing Impacts and Determining Future Program Needs,” assessed demographics and needs for transit on reservations, current 5311(c) tribal transit grants, tribal transit services and program results, and future funding needs. The SURTC website includes more details, including a recording of the webinar.

SURTC STAFF FEATURED IN MATBUS CAMPAIGN

Several SURTC staff members were among the individuals featured in the “210 in 2010” campaign by MATBUS in Fargo, North Dakota. The target audience for the campaign was students at North Dakota State University. The campaign included university administrators, student organizations, student government, university employees, dining services, alumni relations, and others. The campaign’s goal was to feature 210 people during the course of the 2010-2011 academic year who used MATBUS.

The ads included each of the people’s names, hometowns, major.department and year in college to further personalize them. Each of the participants held a yellow sign featuring a personalized reason for riding or supporting MATBUS. SURTC staff members featured included director Jill Hough, associate research fellow David Ripplinger, and research analyst Marc Scott. NDSU President Dean Bresciani and other NDSU administrators, faculty, staff and students were also featured.
SURTC staff conduct research on issues faced by rural transit users and providers. They also address emerging trends and challenges. Specifically, their work addresses management and institutional issues faced by transit client groups as well as technical and operating issues.
**Assessing impact of public transportation on access to health care**

Transportation is a vital issue for access to health care, especially in rural areas where travel distances are great and access to transit is less prevalent. SURTC researcher Jeremy Mattson studied the impacts of transportation and travel distance on use of health care services for older adults in rural and small urban areas.

In the study, a random sample of individuals aged 60 or older living in North Dakota, South Dakota, Montana, and Wyoming were surveyed by mail. Responses were received from 543 individuals. The study found that those who needed care were generally able to access it. However, those who cannot drive make more trips if someone else in the household can drive, and individuals traveling longer distances or those with fewer transportation options were more likely to report difficulties in making trips or to delay a trip. If someone delays a trip, he or she may not get the care at the time it is most needed.

By providing transportation to health care services, especially preventive care, people can manage their conditions better, their health status may improve, and, in the long-run, there could be a decrease in health care costs. The greatest problems reported for using public transportation were inconvenient schedules and infrequent service. The full report is available online at www.surtc.org/research/reports.php. For more information, contact Jeremy Mattson at jeremy.w.mattson@ndsu.edu.

**Assessing community transportation for people with disabilities**

A recently completed SURTC study led by Jeremy Mattson addressed issues of mobility for people with disabilities in North Dakota. Mattson surveyed a sample of individuals with disabilities in the state, collecting information regarding travel behavior, ability to make needed or desired trips, use of community transportation options, unmet needs, and difficulties encountered. A significant percentage of respondents were found to desire more trips than they are currently taking, and lack of transportation appears to be the main limiting factor.

The study examined specific problems with transit service, use of travel training, and use of door-to-door or door-through-door service, and it compared results from a similar survey conducted nearly a decade ago. The full report is available online at www.surtc.org/research/reports.php. For more information, contact Jeremy Mattson at jeremy.w.mattson@ndsu.edu.
ND REGIONAL TRANSIT COORDINATION IMPLEMENTED

SURTC launched a 15-month program in October 2011 to implement coordination-related recommendations in two North Dakota pilot regions. The recommendations were developed by SURTC in response to a mandate for increased coordination among the state’s transit providers enacted in 2009 by the N.D. Legislature. The work is being conducted under the direction of the state Department of Transportation.

Based on the recommendations, participating communities and counties will provide increasing coordination among the regions’ transit service providers, increase public awareness regarding the availability of local transit services, and promote overall operator effectiveness and efficiency.

SURTC associate research fellow Jon Mielke is the regional coordinator for the 7-county west central region, and SURTC training and outreach coordinator Keven Anderson is the coordinator for the 12-county south central region. The final step in the project will be a report on the effort for the 2013 Legislature. Contact Jon Mielke at jon.mielke@ndsu.edu or Keven Anderson at keven.anderson@ndsu.edu for more information.

TECHNOLOGY USE EVALUATED TO BOOST PARTICIPATION IN PLANNING

SURTC research may show transit agencies innovative ways to use technology and social media to improve public participation in transit planning. SURTC is investigating the use of technologies such as webcasts, mobile electronic devices, and social media as tools for reducing barriers to participation in transportation planning. Technologies being studied include:

- mobile electronic devices for conducting on-vehicle rider surveys
- webcasts to enable off-site attendees to view and comment on public input meetings
- social networking tools for notifying individuals of opportunities to participate in planning activities and disseminating planning documents
- online surveys for collecting information
- blogs for further discussing transit issues

The project is being conducted in Fargo-Moorhead. Three rounds of on-vehicle surveys have been conducted with the use of smartphones and tablets, and three online surveys have also been conducted. In September 2011, SURTC hosted a webcast of a public input meeting regarding Fargo-Moorhead’s transit development plan, and four additional webcasts of public input meetings for the transit plan and other studies were held in November 2011. Recordings of the webcasts were made available online for individuals to view and comment on at any time.

The 18-month project, which was initiated by David Ripplinger and is being led by Jeremy Mattson and Del Peterson, began in 2010 and will be completed in early 2012. For more information, visit www.surtc.org/ptpproject.
Subsidies to transit agencies result in lower average costs and increased returns, according to SURTC research. Jeremy Mattson and David Ripplinger found that small urban transit agencies experience increasing returns to scale and density. This implies that increasing service levels will result in lower average costs.

A full cost model was estimated that included the addition of external costs, such as environmental effects, and benefits. A benefit of increasing service levels is a reduction in rider waiting times. The study attempted to quantify this benefit. Results from the model were used to estimate the marginal social cost of providing service. Setting the fare equal to marginal social cost would maximize social welfare.

The results provide justification for subsidizing transit. The needed subsidy is calculated as the difference between the revenue generated by the optimal fare and that needed to maintain efficient levels of production. The rationale for subsidies is an important issue as many agencies have experienced recent reductions in operational funding. A survey found that nearly half of transit agencies in small urban areas have either reduced service or increased fares over the last two years, primarily because of decreases in operational funding. The full report is available at www.surtc.org/research/reports.php. For more information, contact Jeremy Mattson at jeremy.w.mattson@ndsu.edu.
Rural personal transportation market segmentation

Attitudes toward travel time, flexibility, and privacy have the strongest influence on intercity travel behavior and mode choice, according to SURTC research. The information will be valuable to transportation policy makers and industry leaders facing long-term strategic decisions. The attitudes of intercity travelers can be used to estimate changes in mode share and develop marketing strategies. Based on the information, transportation providers could tailor or expand existing service and identify market segments for promotion and education.

The study identified eight market segments, ranging from “lone rangers” (who value flexibility and privacy) to “delicate movers” (who are sensitive to travel time but not to schedule or privacy), based on attitudes toward these three characteristics. Mode shares for automobile, air, intercity bus, intercity rail, and van service were estimated for each market segment for regional trips by residents in the Upper Midwest. The analysis found that a decrease in travel time for intercity bus or rail service would result in these modes capturing a much larger market share. Results also showed that market segments with higher percentages of seniors were most likely to travel by bus, train, or van for intercity trips, and were less likely to travel by air for the longer trips. The size of these market segments will continue to grow as the population ages.

The full report is available online at www.surtc.org/research/reports.php. For more information, contact Jeremy Mattson at jeremy.w.mattson@ndsu.edu.

University of North Dakota campus transit studied

Students at the University of North Dakota (UND) value and desire convenience from the university’s campus shuttle service according to a SURTC study.

UND contracted with SURTC to complete a study to provide UND leadership with a better understanding of students’ attitudes toward, perceptions of, and satisfaction with shuttle services. They also wanted to identify service alternatives to improve both customer satisfaction and service efficiency and effectiveness. When asked about specific factors that influenced student mode choice, student survey respondents indicated that convenience was the major factor considered followed by weather, time, accessibility, and parking availability. Student respondents indicated that the key benefit of the current campus shuttle system was also convenience. This benefit was followed by reduced parking demand, money savings, and reduced traffic congestion. The full report is available online at www.surtc.org/research/reports.php.
**Funding for Tribal Transit Examined**

SURTC recently completed a study to assess the impacts of the federal 5311(c) tribal transit program and to determine future program funding needs.

Associate research fellow Jon Mielke identified more than 100 tribal entities that received start-up or enhancement program funding since 2006. Grantees were surveyed to identify impacts associated with the receipt of program funds, all of which are available for operating and capital purposes with no local match requirements. Program funding increased from $8 million for FY 2006 to $15 million for FY 2009, 2010, and 2011.

The study reviews prior work regarding personal mobility need indicators as they pertain to Indian reservations, as well as prior and ongoing work concerning the growth in local tribal transit services since the late 1990s. Survey responses were analyzed to identify former and current ridership levels, trip purposes, and funding sources. Results were also compared to National Transit Data findings on performance measures related to passenger trips per mile, operating expenses, and farebox recovery.

The study assesses how dependent tribal transit operators are on 100% 5311(c) funding. These assessments, along with projections regarding the initiation of new services, can serve as the basis for projecting future program funding needs. For more information, contact Mielke at jon.mielke@ndsu.edu. The final report is available at www.surtc.org/research/reports.php.

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**Use of Alternative Fuels and Advanced Vehicles by Small Urban and Rural Transit**

Transit agencies of all sizes across the country have been or are considering using alternative fuels or hybrid-electric vehicles. Smaller agencies may face greater difficulties in transitioning to alternative fuels or hybrids due to infrastructure costs, reliability and maintenance issues, or other concerns.

To better understand the problems and benefits with using biodiesel, E85, propane, natural gas, and hybrid vehicles in smaller communities, a survey of 115 small urban and rural transit agencies was conducted. The study described the use of alternative fuels and hybrids by these transit providers; identified motivating factors and deterrents for adoption; described the experience of transit agencies that have adopted these alternatives, including costs, fuel economy, maintenance, reliability, and overall satisfaction; and examined differences between those agencies that use these alternatives and those that do not, as well as differences between rural and small urban areas.

Larger agencies and those operating in urban areas tend to be more likely to adopt alternatives than smaller, rural providers. Improving public perception, reducing emissions, and reducing operating costs tend to be the greatest motivating factors for adoption, while concerns about infrastructure and vehicle costs, maintenance, and fuel supply are the greatest deterrents. Those agencies that have adopted alternative fuels or hybrids have been mostly satisfied, but some problems were identified. Findings provide useful information to transit operators considering adoption of alternative fuels and hybrids and to policy makers considering policies on alternative fuels and hybrids.
Transit and Community Livability

SURTC has launched a Community Livability Project to assist individuals and organizations involved in improving community livability throughout the United States. The project will identify differences in expectations of livability by individuals residing in rural and urban areas and quantify the relative livability of communities, especially with regard to mobility and transit.

“One critical factor in assessing the livability of communities is the mobility of residents and accessibility to services,” noted SURTC director Jill Hough. The objective of the project is to assemble information that provides a more complete understanding of transit and livability in the United States. Former SURTC researcher David Ripplinger identified transit-related livability statistics that complement existing transit data already collected by the Federal Transit Administration. Next, the Community Livability Index is developed to measure livability across regions, community types, and time.

Currently less than one in every 20 individuals consider transit availability as a factor when moving to their current home and only 3 percent use transit as their primary mode when commuting to work. “There are different ways to measure livability and livability looks different from one location to the next,” Hough said. “We want to help individuals and organizations make sure that mobility is part of their assessment of livability.” For more information on SURTC’s Community Livability Project contact Jill Hough at jill.hough@ndsu.edu.
Recognizing the need for leaders in the transit industry, SURTC staff have developed and teach a university graduate course in public transportation. Staff also work with faculty members at NDSU and other institutions to incorporate public transit into their curricula.
National Transit Curriculum Being Developed

SURTC director Dr. Jill Hough and Paul Larrousse, director of the National Transit Institute at Rutgers University, are leading an initiative to develop a semester-long public transit course that can be used at universities nationwide.

Currently there are at least a half-dozen public transit classes taught throughout the United States, but there is a lack of consistency in the materials covered. At the same time, other schools would like to offer such a course, but the time, effort, and practical expertise needed to develop the materials may not be available. The course will improve mobility and advance the transit industry by educating future decision-makers and workers on public transit issues, Hough says.

Members of the National Transit Curriculum Committee, representing universities, transit agencies, federal government, national associations, and consultants, identified topics for the seven-module course. The curriculum will be piloted at universities in the United States and finalized by summer of 2012. Committee members include J. Barry Barker, Transit Authority of River City; Linda Bohlinger, HNTB Corporation; Pam Boswell and Joseph Niegoski, APTA; Ralph Buehler, Virginia Tech; Charles Dickson, CTAA; Barbara Gannon, Eno Center for Transportation Leadership; David Lee, CT Transit; James McLary, McLary Associates; Anthony Palmore at the University of California Davis; Lydia Mercado, USDOT Research and Innovative Technology Administration; Vincent Valdes and Jarrett Stoltzfus, FTA.

Student Mentoring ProgramIntroduced

It’s a case of tomorrow’s transit leaders learning from today’s transit leaders in the graduate public transportation course at NDSU. SURTC Director Dr. Jill Hough is instructor for the course and matches students with industry mentors from across the country. NDSU is the pilot university for the mentor program which may be replicated nationally. Hough developed the program in response to a call from industry professionals for better workforce development within higher education. The mentoring program was implemented in the spring semester of 2011 and will be used again at NDSU in the spring semester of 2012.

Students gather valuable insight from their mentors regarding real-world transportation challenges. “The greatest value of the program is that students are gaining a true understanding of how the industry works, rather than simply a theoretical, textbook understanding,” Hough says. Mentors and students discuss a variety of topics such as transportation policies, cost-effectiveness and efficiency, managing budgets, technology application, working with workers’ unions, and meeting overall challenges to organizational management.

As part of the program in the spring semester of 2011, the students participated in a roundtable discussion on “Higher Education and Workforce Development” at the 2011 American Public Transportation Association Bus and Paratransit Conference in May. Students met their mentors in person at the conference. The students’ attendance at the conference was sponsored by the Mountain-Plains Consortium, a USDOT-funded University Transportation Center led by NDSU.

Student-mentor pairings were: Dilip Mistry and Mr. David Lee, General Manager of Connecticut Transit; Mridula Sarker and Ms. Linda Bohlinger, Vice President of HNTB Corporation; Elvis Ndemebe and Mr. Robert Prince, Vice President of AECOM (formerly GM Boston).
National expertise shared with transit class

The real world paid frequent visits to NDSU’s graduate-level course in public transportation during the spring 2011 semester as several national leaders in transit provided guest lectures. The blend of public and private sector speakers kept the topics interesting and the dialogue fresh.

• William Thoms, retired law professor and specialist in transportation law, talked about the U.S. rail system, with special attention to commuter rail.
• Jim Gilmour, director of planning for the city of Fargo, discussed the important elements of city transit planning.
• Linda Bohlinger, vice president and national director of management consulting for HNTB Corporation, spoke about public transit funding issues. She also discussed her career with the Los Angeles County Metropolitan Transportation Authority and the South Florida Tri-County Commuter Rail Authority.
• Charles Dickson, associate director of the Community Transportation Association of America, spoke about community transportation and the importance of coordination.
• Robert Prince, former general manager of the Massachusetts Bay Transportation Authority and current vice president at AECOM, talked to the class about the good, bad, and the ugly of transit and the state of good repair.
• Michael Melaniphy, vice president public sector for Motor Coach Industries, discussed his experience of entering the transit field, working in the public sector, and transitioning to the private sector.
• Vincent Valdes, associate administrator of the Federal Transit Administration’s Office of Research, Demonstration and Innovation, spoke about risk analysis, planning, and how to make the best use of limited resources.
• J. Barry Barker, general manager of Transit Authority of River City in Louisville, Kentucky, discussed the state of public transit and the general manager’s role in workforce development.

Seminar series offered

Several SURTC staff members were part of the Upper Great Plains Transportation Institute Seminar Series during the fall 2011 semester. The series, organized by SURTC director Jill Hough, provides updates on transportation research and issues at the local, regional, and national levels.

Del Peterson presented results from a study on the built environment and how it influences transit ridership. Jeremy Mattson gave a presentation on marginal cost pricing and subsidy of transit in small urban areas. Jill Hough discussed ethics in the workplace in a seminar and Carol Wright provided strategies and techniques for giving effective presentations. Keven Anderson described the basic structure and organization of transit in Greater Minnesota. For more information about the seminar series or to view presentations or recordings of completed seminars, visit www.ugpti.org/events/seminar.
SCOTT EARNS PH.D.

Transportation and logistics student and SURTC graduate research assistant Marc Scott earned his Ph.D. in summer 2011. Scott began his Ph.D. work at NDSU in 2007. He holds both a BS in business economics and MS in transportation from South Carolina State University. Scott earned scholarships from the American Public Transportation Foundation in both 2008 and 2009. As he completed his degree requirements, Scott worked for SURTC as a research analyst until joining the logistics team at Wal-Mart headquarters in Bentonville, AR. Scott’s dissertation was, “Developing Input to ‘Best-Value’ Vehicle Procurement Practice: An Analysis of Supplier Evaluation and Selection in the U.S. Public Transportation Industry.” His research identified the vehicle supplier attributes that procurement decision-makers perceived to be most important when evaluating suppliers of both conventional fuel vehicles and alternative fuel vehicles. This study was published as UGPTI Departmental Publication No. 246 and is available at http://www.ugpti.org/pubs/pdf/DP246.pdf.

HOUGH INVITED TO PARTICIPATE IN ITS PROFESSIONAL CAPACITY BUILDING WORKSHOP

SURTC director Jill Hough was invited by the US Department of Transportation and ITS America to participate in the Intelligent Transportation Systems (ITS) Professional Capacity Building workshop in Washington, DC, in January 2012. The event was sponsored by the USDOT’s Joint Program Office and was designed to help shape the office’s goal of incorporating ITS education into university curricula and learning programs. Hough was one of 12 university faculty members from across the country invited to participate in the workshop. Participants reviewed various ways that ITS is already being integrated into curricula. They examined potential models for integrating ITS concepts into coursework, and discussed issues, challenges and opportunities associated with teaching ITS.
To meet increasing demands for service, regulatory compliance and safety with limited resources, transit agencies look to SURTC for training to improve the skills of their employees. Key courses focus on transit management while others address business development, safety and security, fundraising, risk management and more.
PRINCIPLES OF TRANSIT MANAGEMENT IS LAUNCHING PAD FOR SURTC TRAINING

In 2011, nearly 200 transit managers participated in SURTC’s Principles of Transit Management three-day course. During that time, the course was offered in seven locations in five cities. But that’s just for starters. An advanced course has been developed as has a version of the Principles course for tribal transit managers. Other courses focus on limited English language proficiency, diversity, ethics, financial management, risk management, civil rights, and working with local elected officials.

The Principles of Transit Management course debuted in 2008 and has been refined and fine-tuned with each teaching. “While we knew there was a need for this kind of training for transit managers, we did not realize how eager small-urban and rural transit managers would be to bring a higher level of management to their operations,” noted Carol Wright, SURTC’s associate director for training and outreach. Trainers are already scheduling sessions into 2013.

ADVANCED COURSE DEVELOPED

Demand for the course and the eagerness of transit managers who have attended have prompted the development of additional training from SURTC. Based on the success of the Principles of Transit Management course, SURTC has developed its sequel, Advanced Transit Management. The advanced course targets transit managers who have attended the Principles of Transit Management class. The course is designed to build upon a transit administrator’s or supervisor’s existing base of knowledge and improve their current managerial skills.

Like the original course, the advanced course follows an intensive three-day format. Modules in the Advanced Transit Management course include:

- Human Resource Management and Performance including hiring, termination, conflict resolution, and performance appraisals.
- Operational Business Management including evaluation of operating and financial management trends, cost allocation, evaluating financial capacity and cash flow.
- Project Evaluation and Programming including evaluation of current service delivery, customer service, and moving from performance measurement to performance management.
- Transportation Operations & Service Development including route development and service design, evaluating and/or implementing service expansion or reduction, and marketing.
- Fleet and Facilities Operations including maintaining a state of good repair, assessing fleet and facility condition, and asset inventory and capital planning.
- Safety, Security and Emergency Management including assessing vulnerabilities, and coordinating emergency operations.
- Strategic Technology Management including communications, intelligent transportation systems, information management systems, and hardware/software decision making.
- Leadership and Personnel Development including communication, motivation, leading a small urban or rural transit organization, and staff recognition.

Each module includes a section of best practices in small urban and rural transportation management. In keeping with its predecessor, Advanced Transit Management will include additional class materials and take-home resources in a convenient three-ring binder. The course engages attendees by applying real-world scenarios and participants’ problem solving skills. Instructors are Carol Wright, Associate Director of Training & Outreach, and Keven Anderson, Training Coordinator.

Advanced Transit Management will make its debut at the 2012 Community Transportation Association of America Expo in Baltimore in May.

continued on next page
TRIBAL TRANSIT MANAGEMENT

SURTC staff have also tailored the Principles of Transit Management course for those who manage tribal transit agencies. Tribal Transit: Principles of Transit Management made its premiere at the Northern Plains TTAP Transportation Planning Conference and the United Tribes International PowWow in September 2011. The training was facilitated by Jon Mielke, with Carol Wright as the primary instructor. The 35 participants represented 26 tribes from 12 states.

“We specifically modified the course to address the unique perspective of tribal transit operations,” Wright said. “Particular attention has been placed on tribal governance, financial management, human resource management and procurement, since many of these issues vary even among various tribal entities.” The course is directed toward experienced managers and those who are relatively new to their positions, as well as front-line supervisors and those who are in a position to assist transit managers. Another session of the course is scheduled for April 2012 in Rapid City, SD.

LIMITED ENGLISH PROFICIENCY

SURTC’s ability to respond to transit agencies’ training needs has resulted in numerous additional course offerings. One example is its new Limited English Proficiency course.

All public transit systems, regardless of size, are required to have a Limited English Proficiency (LEP) Plan. SURTC has developed a specialized training for states and individual agencies responsible for implementing the requirements of a Limited English Proficiency plan.

Title VI of the Civil Rights Act of 1964 and Executive Order 13166 “Improving Access to Services for Persons with Limited English Proficiency” mandate that federal agencies examine the services they provide and develop and implement a system by which individuals who have a limited ability to read, write, speak or understand English (LEP persons) can meaningfully access those services. Public transit is a key means of achieving mobility for many LEP persons.

“At the request of our clients, we developed a one-day workshop which addresses all aspects of the requirements including: demographics, public participation and community involvement, implementation plan on language assistance, and staff training,” Wright said. In addition, the class is specifically customized for the state and region where the training is being conducted, including Census data, mapping, and literacy statistics. The course was taught in multiple locations in Texas in early 2012.

PROGRAM FLEXIBILITY

“SURTC has developed a network of resources related to small urban and rural transit. At the same time, our staff members have experience and familiarity with the operation of and challenges faced by transit agencies,” Wright said. “That combination places us in a unique position to address the training needs of smaller transit agencies.” Via its connections with transit agencies and professionals across the nation, it’s relationships with other university transportation research centers, and its links to federal agencies like the Federal Transit Administration, SURTC is able to rapidly develop training programs to meet requests from its clients.

“In many cases, these agencies are operated by talented and well-meaning individuals who merely need an introduction to management concepts in order for them to dig in on their own and make giant leaps forward in complying with legal requirements, improving their service to clients, and managing their resources,” she said.

The list of training and outreach activities presented later in this report (page 26) gives an idea of the number and variety of training opportunities that SURTC has developed for agencies. Wright noted, “Our goal is to give employees and leaders in transit agencies the tools needed to succeed. Doing that is a win for us, a win for the transit agencies and a win for the individuals that rely on them for mobility.”
Workshop on Diversity Held in Oregon

Oregon transit managers brushed up on their knowledge of diversity issues and how they impact transit agencies at a SURTC-instructed pre-conference session at the Oregon Public Transit Conference in Seaside, OR. The Oct. 23 workshop, Title VI/Civil Rights: Diversity and Its Implications for Transit, included practical instruction and class participation from attending transit managers. Therese McMillan, FTA deputy administrator, provided opening remarks and attended the morning session along with Rick Krochalis, FTA Region 10 administrator. This day-long course provided participants with information regarding Title VI and Civil Rights policy including the ADA; environmental justice regulations; implications of the majority-minority shift; our aging society; hidden disabilities; language barrier issues and limited English proficiency requirements; responsiveness to cultural, gender and sexual orientation differences; minority community outreach; generational differences in the workplace; and requirements for federal assistance.

Ethics Training Offered

Scandals big and small point to a lack of ethics or failures to make ethical decisions in the marketplace. How do you or your employees integrate ethics into your decisions? Training can equip personnel to address ethical dilemmas. SURTC’s training walks participants through ethical tests and helps them apply those tests to situations to better understand the ethical decision-making process. For more information on ethics training contact Jill Hough at jill.hough@ndsu.edu.

SURTC Website

In the 18 months covered by this annual report, SURTC’s website logged more than 15,000 visitors who viewed more than 48,000 pages. Visitors from within the United States most often accessed the site from North Dakota, Texas, Minnesota, California and the District of Columbia. The site also had frequent visitors from Australia, India, Canada, and the United Kingdom.

“Our website continues to be a key element in our outreach efforts,” noted SURTC director Jill Hough. “While our efforts continue to be focused on the Upper Great Plains, our research, education and outreach often has applications in rural and small urban areas around the globe. The Web continues to bring our work to the world which often leads to opportunities for us to engage with new topics and new people.”
### SURTC Blog

SURTC has taken transit to the blogosphere by launching a blog to keep readers up-to-date on its training, research, and education efforts. In addition, the blog authors hope to make it a valuable resource for news and information pertaining to the world of small urban and rural transit. Topics covered in the blog include upcoming training, SURTC events, completed or ongoing research projects, industry news or significant events that impact small urban and rural transit, and other topics SURTC staff would like to share.

### SURTC Research Digest Published

To disseminate research findings to a wider audience, the SURTC Research Digest was introduced. The highly condensed, non-technical articles in the new publication discuss recently completed research projects. The articles provide more depth and detail than the highlights published in SURTC’s newsletter. The 2011 Research Digest includes articles on seven research projects completed in 2010. Topics range from mobility concerns of the elderly and people with disabilities to the impact of fuel prices on individuals’ travel choices. Additional topics include technology adoption by rural transit agencies, perceptions of higher education students in regard to employment in the public transportation industry, the role that public transportation plays in health care, and efforts to coordinate rural transit services. The 2012 Research Digest is expected to be published in April 2012. The digest can be downloaded at: www.surtc.org/research/digest.

### SURTC Publishes Rural Transit Fact Book

SURTC has published its first annual Rural Transit Fact Book. This publication is intended to serve as a national resource for statistics and information on rural transit in America. Information on transit service availability and cost is necessary to efficiently and effectively meet rural community mobility needs. Financial and operating statistics can be used by agency managers, local decision makers, state departments of transportation, the Federal Transit Administration (FTA), and lawmakers to assist in policy making, planning, managing operations, and evaluating performance.

Despite the widespread benefits, no regularly-published national rural transit information resource has been previously made available. The Rural Transit Fact Book is being initiated to provide information to assist the transit industry in the United States by providing valuable and much needed service to rural communities. It includes rural demographic and travel behavior data as well as financial, operating, and fleet statistics and performance measures for agencies receiving Section 5311 funding. In addition to national level data, statistics are presented by state, FTA region, tribe, and mode, as well as other agency characteristics.

The publication can be downloaded at www.surtc.org/transitfactbook. For more information, contact Jeremy Mattson at: jeremy.w.mattson@ndsu.edu. The second edition of the Rural Transit Fact Book is expected to be published in the first half of 2012.
Research Reports


Journal Articles


Mattson, Jeremy. (2011) Transportation, Distance, and Health Care Utilization for Older Adults in Rural and Small Urban Areas. Transportation Research Record: Journal of the Transportation Research Board, No. 2265, pp. 192-199.


Scott, Marc, Mridula Sarker, Del Peterson and Jill Hough. (2011) University of North Dakota Campus Shuttle Study. UGPTI Report SP-174, Upper Great Plains Transportation Institute, North Dakota State University, Fargo.
Staff Presentations


Transportation and Health Care Use for Older Adults in Small Communities, presented by Jeremy Mattson, Transportation Research Board Annual Meeting, January 2012, Washington, D.C.

Ethics in the Workplace, presented by Jill Hough as a keynote address at the Montana Association of County Road Supervisors Annual Meeting, Great Falls, MT, March 2011. Hough also gave the presentation to a regional meeting of Local Technical Assistance Programs (LTAPs) in Rapid City, October 2010 and as an on-campus seminar at NDSU, November 2011.

Transportation and Health Care Use for Older Adults in Rural and Small Urban Areas, presented by Jeremy Mattson, TRB Conference on Emerging Issues in Safe and Sustainable Mobility for Older People, September 2011, Washington, D.C.

Ride or Relocate: Transportation and Housing Options for Older Adults, presented by Del Peterson, Rural and Intercity Bus Conference, Burlington, VT, October 2010 and at the TRB Emerging Issues in Safe and Sustainable Mobility for Older People conference, August 30-September 1, 2011, Washington, DC. Peterson and Carol Wright also presented the information as part of a webinar hosted by SURTC and NCST to discuss senior housing and transportation options in North Dakota. Peterson also presented the information at the Transportation Research Forum Annual Meeting, March 2012 in Tampa, FL.

Carol Wright was invited to be a guest lecturer for a graduate transportation class at the University of Minnesota, October 2011. She provided an overview of rural transit operations in the United States.

Rural Transit and Rural Infrastructure Needs, presented by Jill Hough, 14th Transportation Infrastructure Conference, Dallas, Texas, August 2011.

Jill Hough participated in a panel, Livability – Other UTC Perspectives, Portland, OR, June 2011, Council of University Transportation Center’s summer meeting.


The American Public Transportation Association Bus and Paratransit Round Table on Workforce Development, May 2011, Memphis, TN, moderated by Jill Hough. Marc Scott participated and provided a student perspective.


Transportation, Distance, and Health Care Utilization for Older Adults in Rural and Small Urban Areas, presented by Jeremy Mattson, Transportation Research Board Annual Meeting, January 2011, Washington, D.C.

How Rural Areas are Using Technology, presented by David Ripplinger, Rural and Intercity Bus Conference, Burlington, VT, October 2010.

Mobility of Older Adults and People with Disabilities in North Dakota, presented by Jeremy Mattson, Rural and Intercity Bus Conference, Burlington, VT, October 2010.

Practical Uses for Rural NTD Data, presented by David Ripplinger, Rural and Intercity Bus Conference, Burlington, VT, October 2010.
**Training & Outreach**

**Principles of Transit Management**, a three-day intensive training course for transit managers and supervisors, taught by Carol Wright, Anchorage, AK, Mesquite, TX, Glenwood Springs, CO, Alexandria, MN, Helena, MT, Fargo, ND, Gaylord, MI, Lansing, MI, Clare, MI.

**Implementing Rural Transit Technology**, presented in conjunction with the National Transit Institute to industry professionals involved in planning, implementing and operating technology applications in rural transit systems, Huntington, WV, and Los Alamos, NM, August 2010. David Ripplinger was a co-trainer.

**Making your Case: Working with Local Governments**, presented by Carol Wright, Minnesota Public Transit Annual Fall Conference, Rochester, MN, September 2010.

**Transit Dollars & Sense: Sound Financial Management Using Performance Measures**, a two-day class, presented by Carol Wright, Houston, TX, and Salem, OR, February and March 2011 respectively. In each case, the class was sponsored by the respective state departments of transportation.

**Implementing Rural Transit Technology**, presented for the National Transit Institute, Lincoln, NE, April 2011. Jill Hough was a co-trainer.

**Limited English Proficiency and Civil Rights**, presented by Carol Wright, at the request of the North Dakota Department of Transportation, Bismarck, ND, May 2011.

**Changing Face of America: Diversity and Its Implications for Public Transit**, presented by Carol Wright and Al Abeson, Colorado Spring Transit Conference, May 2011, Pueblo, CO. The full-day class was sponsored by the Colorado Association of Transit Agencies and the Colorado Department of Transportation.

**Risk Management**, a full-day course, presented by Carol Wright for Texas transit providers and sponsored by the Texas Department of Transportation, July 2011.

**Tribal Transit: Principles of Transit Management**, a three-day transit management program was presented in conjunction with the Northern Plains TTAP Transportation Planning Conference and the United Tribes International PowWow, September 2011. The training was facilitated by Jon Mielke with Carol Wright as primary instructor.

**Title VI and Civil Rights**, a full-day course, presented by Carol Wright and Al Abeson for the Oregon Public Transit Conference, October 2011, Seaside, OR.

**Making the Case: Transit and Elected Officials**, a half-day course, presented by Carol Wright and Al Abeson for the Oregon Public Transit Conference, October 2011, Seaside, OR.

**Cost Allocation and Fare Structures**, presented as a 1 1/2-day workshop for ND transit providers, transit agency account staff and NDDOT public transit staff, Bismarck, ND, November 2011.
PROFESSIONAL INVOLVEMENT

• 19th Annual TRB Rural and Intercity Bus Conference, Chair – Jill Hough
• APTA Passenger Transport Advisory Board – Jill Hough
• APTA Higher Education Subcommittee, Chair – Jill Hough
• Transportation Research Board, Rural and Intercity Bus Subcommittee – Jill Hough
• Transportation Research Forum, Vice President for Membership – David Ripplinger
• Transportation Research Board, Paratransit Research Subcommittee – David Ripplinger
• Transportation Cooperative Research Program (TCRP) Panels
  o F-16 Building a Sustainable Workforce in the Public Transportation Industry – A Systems Approach – Jill Hough
  o SF-16 Improving Transit Safety through Rewards and Discipline – Carol Wright
ADVISORY BOARD

The SURTC advisory board plays an important role by providing guidance and expertise to the center. The committee is comprised of individuals within the public transit sector, and national and state organizations that focus on improving public transportation within the United States.

- Federal Transit Administration (FTA)
- Community Transportation Association of America (CTAA)
- American Public Transportation Association (APTA)
- Easter Seals Project ACTION (ESPA)
- State Departments of Transportation
- State Transit Associations

ADDITIONAL PARTNERS

- AARP
- Florida International University in Miami
- National Center for Senior Transportation (NCST)
- National Transit Institute (NTI)
- Transportation Research Board (TRB)
- University of Illinois at Chicago
- University of South Florida in Tampa
- Others involved in and affiliated with the transit industry