

## SURTC Releases Report on Transit and Community Livability

To assist individuals and organizations involved in improving community livability throughout the United States, SURTC investigated and measured the relationship between transit and community livability.

The resulting report, recently published by SURTC, attempts to provide a more complete picture of transit and livability in the United States. Public transportation is recognized as an integral component of livability because it provides low-cost, environmentally sustainable mobility to all community members.

The study, conducted by David Ripplinger, Elvis Ndembe, and Jill Hough, calculated transit livability statistics to provide an improved understanding of the availability,



accessibility, desirability, and use of public transportation in the United States. These statistics were calculated using data collected from the 2009 American Housing Survey (AHS), and the report provides information for different regions and community types.

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### Recent highlights from the SURTC Blog:

- Transit Curriculum Efforts Highlighted
- Dr. Hough Featured in APTA's Passenger Transport
- Working Document—Higher Education Mentorship Program for Public Transportation
- Highlight Video of APTA's Public Transportation & Universities Conference in Fargo

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## Use of Effortless Passenger Identification Systems Studied

A recently completed SURTC study evaluated the use of radio frequency identification (RFID) technology to track transit passengers. The technology is referred to as the Effortless Passenger

Identification System (EPIS).

The RFID tags used by EPIS can be read at longer distances than the contactless or proximity cards currently used in the industry. This characteristic allows passengers to be identified and counted as they board and alight vehicles without requiring them to physically present their card within a short distance of an on-vehicle reader.

This study, which was funded by the Transportation Research Board and led by SURTC researcher Del Peterson, evaluated the technical, operational, and economic feasibility of using medium-range RFID

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Front RFID antenna in paratransit bus

## Message from the Director

Greetings! Spring always brings change with rising temperatures, melting snow, and blooming flowers. Change is inevitable and no one is exempt from the change in seasons or from change in the workplace. Change at SURTC includes completing studies, beginning new projects, and personnel transitions. This newsletter highlights some of the projects recently completed by SURTC. We'll share some of our upcoming projects with you in our next newsletter. Keven Anderson, our training and outreach coordinator, has taken on the responsibility of becoming SURTC's lead trainer. As the flowers bloom, we hope any change you are experiencing brings you success. As always, thanks for reading!



Jill Hough

## Carol Wright Accepts New Position

Many of you worked with Carol Wright, SURTC's associate director for training and outreach, as she conducted training throughout the country. Carol accepted a new position as director at Easter Seals Project ACTION in Washington, DC. Her last day at SURTC was April 3.



Carol Wright

Carol conducted numerous training activities and developed many of the courses offered by SURTC, including Principles of Transit Management and Advanced Transit Management. We wish Carol the best in her new position.

The primary SURTC training contact now is Keven Anderson, [keven.anderson@ndsu.edu](mailto:keven.anderson@ndsu.edu) / 701-231-8231.

## Livability

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A Community Livability Index was also developed to serve as a measure of the relative level of livability across regions, community types, and time. Seven social and environmental indicators were used to construct the index: community services, crime, education, environment, housing affordability, retail opportunities, and

## Busy Training Schedule for SURTC

SURTC has continued to provide a number of training courses across the country in 2013 and has numerous activities planned for the remainder of the year.

In January, Carol Wright, former associate director for training and outreach, presented a coordination workshop to the South Dakota DOT and transit providers via video conferencing through the Transportation Learning Network (TLN). She also presented a customer service workshop via TLN video conferencing in February to five state DOTs. Later in February she traveled to Boise, ID, to present a Financial Management workshop at the Idaho Transit Conference.

Wright and Keven Anderson, coordinator of training and outreach, conducted the three-day Advanced Transit Management course in Corpus Christi, TX, in January and the three-day Principles of Transit Management in Salem, OR, in March.

transit.

The measures developed in this report will assist policy makers and researchers to better understand and evaluate the high-level impacts of federal livability policies. Being able to compare these statistics across regions and socioeconomic groups will

In late March, Wright and Anderson traveled to Anchorage, AK, to present a two-day workshop on Capital Asset Management and a one-day workshop on Succession Planning and Mentorship to the Alaska DOT and transit providers. They also presented a half-day Tribal Financial workshop at the Alaska Tribal Conference.



Keven Anderson

In April and May, Anderson conducted Principles of Transit Management in Albany, NY, with Dr. Jim Miller, Advanced Transit Management in St. Cloud, MN, with Dr. Jill Hough, and Capital Asset

Management in Austin, TX. Advanced Transit Management courses will also be conducted in Alaska and Texas this summer.

Contact Anderson regarding SURTC training at [keven.anderson@ndsu.edu](mailto:keven.anderson@ndsu.edu) / 701-231-8231.

help policy makers identify shortcomings and inconsistencies in the delivery and effectiveness of existing federal transit policies.

This research was funded by the Federal Transit Administration, and the report can be found on the SURTC website: <http://www.surtc.org/research>.

# SURTC Studies the Use of Technologies for Improving Public Participation

A study conducted by SURTC investigated the impacts of technology in improving public participation in the transit planning process. Public participation in that process is vital to ensure that transit services meet the needs of the public and provide the greatest benefit possible. However, the public is not always engaged in the planning process, and certain segments of the population may be underrepresented. New technologies, including smartphones, webcasts, online surveys, and social media, provide promise for engaging the public and removing barriers to participation.

The SURTC project consisted of four major activities: onboard surveys

using electronic mobile devices, online surveys, webcasts, and social media. The use of each of these tools was tested to determine their impacts on increasing public participation.



The study found that transit agencies can use online surveys and mobile devices for intercept surveys as complements to traditional surveys to reduce data entry costs, improve data quality, and increase participation, though there are limits to their

effectiveness. Transportation planners found webcast recordings to be very useful for providing information to the public and they plan to continue conducting webcasts for future public input meetings. The use of social media as a means for transit agencies and transportation planners to engage the public and disseminate information will continue to grow.

This research was sponsored by the Federal Transit Administration (FTA) and conducted by Jeremy Mattson ([jeremy.w.mattson@ndsu.edu](mailto:jeremy.w.mattson@ndsu.edu)), Del Peterson ([del.peterson@ndsu.edu](mailto:del.peterson@ndsu.edu)), and David Ripplinger. The full report will be posted on the FTA website and listed on the SURTC website when it is available. Contact Jeremy Mattson or Del Peterson for more information.

## SURTC Conducting Surveys to Evaluate Mobility Management and Coordination

SURTC will be conducting surveys across the country this summer to evaluate the effectiveness of mobility management and human service transportation coordination efforts.

Transit users will be surveyed to evaluate the impacts that transit services have on their lives and to assess the importance and effectiveness of mobility management and coordination programs.

Transportation providers and human service agencies also will be surveyed to identify types of mobility management and coordination activities being conducted and document barriers faced and successes achieved.



Jeremy Mattson

SURTC is collaborating on the project with researchers from the University of South Florida and the University of Illinois, Chicago, and the project is being funded by the University Transportation Centers Program. For more information, contact Jeremy Mattson, the lead investigator, at [jeremy.w.mattson@ndsu.edu](mailto:jeremy.w.mattson@ndsu.edu).

## EPIS

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technology to track transit passengers. The technology successfully recorded riders boarding the bus almost 90 percent of the time during field testing conducted at North Dakota State University (NDSU).

Controlled testing results indicated that the reader received a valid signal from the RFID card if it was in



Del Peterson

plain sight and there was no interference present.

Consumer acceptance surveys of college students, people with physical and mental disabilities, and parents of school-aged children yielded positive findings regarding the merit of this technology. The main obstacles are the issues of multiple reads occurring when riders get too close to the antennas, and the inability to read the cards successfully when interference is present.

A cost-benefit analysis showed that with proper ridership numbers, EPIS technology can provide an economic benefit to transit agencies.

This study will be published this summer. Visit the SURTC blog to receive information about the full report when it is available: [blog.surtc.org](http://blog.surtc.org).

For more details, contact Del Peterson at [del.peterson@ndsu.edu](mailto:del.peterson@ndsu.edu)

## 2013 Editions of *Rural Transit Fact Book* and *SURTC Research Digest* to be Published

SURTC will be publishing 2013 editions of the *Rural Transit Fact Book* and the *SURTC Research Digest*. Both will be available on the SURTC website by late spring or early summer. They will be available to view and download at [www.surtc.org/resources](http://www.surtc.org/resources), where older additions are currently available.

The *Rural Transit Fact Book* is a national resource of statistics and information on rural transit in America. 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 data, statistics are presented by state, FTA region, tribe, and mode, as well as other agency characteristics.

The *Rural Transit Fact Book* uses agency-level data from the Rural National Transit Database (NTD) and rural demographic and travel data from the American Community Survey and the National Household Travel Survey.

Articles in the *SURTC Research Digest* highlight recently completed research projects. The articles are non-technical summaries of the full studies.

The 2013 edition of the *SURTC Research Digest* includes articles on six research projects completed in 2012. Topics covered include the use of alternative fuels and hybrids by small urban and rural transit agencies, an economic cost study of rural transit agencies in North Dakota to determine the most efficient method for organizing transit in small communities, a survey of North Dakota State University students regarding transit, a study of travel behavior and mobility of transportation-disadvantaged groups, an effort to implement transit coordination in North Dakota, and the development of national transit livability statistics and the Community Livability Index. The intent of this publication is to make research findings accessible to a wider audience.

For more information about these publications, contact Jeremy Mattson at [jeremy.w.mattson@ndsu.edu](mailto:jeremy.w.mattson@ndsu.edu).