

Program Progress Performance Report for University Transportation Centers

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U.S. Department of Transportation
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Project Title: Tier 1 University Transportation Center
Small Urban and Rural Livability Center (SURLC)

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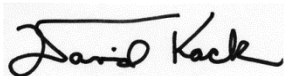
Recipient Organization: Montana State University
Bozeman, MT 59717

Project Grant Period: September 30, 2013 – September 30, 2019

Reporting Period End Date: March 31, 2019

Report Term: PPPR #11

Signature:



1. Accomplishments

What are the major goals and objectives of the program?

The major goals and objectives of the Small Urban and Rural Livability Center (SURLC) are to conduct research, and provide leadership, education, workforce development, and technology transfer in all transportation related aspects of livability, focusing specifically on small urban and rural areas.

What was accomplished under these goals?

During the 11th six-month period (October 2018-March 2019) of the Center:

- Work continued on *Automated Transit Technologies: Identifying Challenges and Potential Markets for Applications* at North Dakota State University. This study seeks to understand the transit automation technologies in the context of a transit agency's need for implementing these technologies. The project further works to understand the requirements and challenges for transit automation gathered from transit agencies, transit planners, and State DOTs; as well as requirements, inputs, and challenges gathered nationally from transit experts. More information may be found at <http://www.ugpti.org/research/projects.php?view=262&program=surtc>
- Work was completed on *A Systematic Pedestrian Safety Planning Tool for Small Urban and Rural Areas*. Once finalized, the report, a thesis document, will be posted to the SURLC website.
- Work continues on an on-going project (100% match funds) whereby a SURLC staff member acts as the Coordinator for the Big Sky Transportation District, which operates the Skyline public transit system in Big Sky, Montana.
- Work continues on *Dynamic Warning System to Alert Motorists to Cyclists*. This project will show how technology can be used to warn motorists of the presence of cyclists on rural roads that do not have separated facilities. This technology has the potential to increase the use of cycling in rural areas by increasing safety for both motorists and cyclists. Installation of equipment at the first pilot project site occurred during the summer of 2018, and additional pilot locations have been identified, and systems should be installed in the summer of 2019. This project uses Federal (CTIP/AID) funds.
- Work continues with the *Bozeman Area Transportation Demand Management (TDM) Initiative*. SURLC works with Montana State University and the City of Bozeman to implement and increase transportation choices to affect the rate of growth of vehicle miles traveled (VMT) in the area and ensure that Bozeman, "The Most Livable Place" (see www.bozeman.net), remains a livable community . As part of the TDM efforts, WTI/MSU staff have completed several pop-up traffic calming projects in Bozeman and Helena, MT. These projects are conducted in conjunction with City staff and neighborhood associations. An additional activity under the TDM effort included organizing the Campus Commute Week at Montana State University (October 1-5, 2018).

- The *Transit and Livability: Results from the National Community Livability Survey*, conducted by North Dakota State University in partnership with the Texas Transportation Institute at Texas A & M University, was completed. This study was a national survey to evaluate the nexus of transit and livability in rural communities. Project details may be found at <https://www.ugpti.org/resources/reports/details.php?id=927> and on the SURLC website.
- Work was completed on a project to better understand the impact of the Oil Boom and Bust Cycles that occur in Western North Dakota. It is important to understand what happens to rural public transit in these areas as they adjust to the boom and bust of oil, the workers, and the community population. The final report can be found at <https://www.ugpti.org/resources/reports/details.php?id=925&program=surtc> and on the SURLC website.
- Work continues with the *Ridesharing in a Rural Environment* project. This project examines challenging components of ridesharing business models in rural applications, as well as the opportunities in rural areas.
- Work continued on a project entitled *Survey of Culture Amongst Groups of Different Transportation Mode Users to Promote Safety of Inter-Modal Interactions*. The purpose of this project is to survey cyclists, motorists, and pedestrians to understand how they view their interactions with people using “other modes” and to determine how users of all modes may change their culture to allow for a safe interaction among all modes that share the roads. This project will conclude by June 2019.

What opportunities for training and professional development has the program provided?

- SURLC’s Director (David Kack), as well as one staff from WTI/MSU and four staff from SURTC/NDSU, attended the Rural Public & Intercity Bus Transportation conference in Breckenridge, Colorado (September 29 – October 3, 2018).
- The SURLC Director and two staff from WTI/MSU attended the National Rural ITS conference in Fort McDowell, AZ (October 21-24, 2018).
- Dani Hess, WTI/MSU, attended the Association for Commuter Transportation (ACT) Transportation Demand Management (TDM) Forum in Nashville, TN (November 11-14, 2018).
- The SURLC Director (David Kack) and Deputy Director (Jill Hough) attended the UTC and CUTC meetings, held in conjunction with the TRB Annual Meeting in Washington, D.C. (January 13, 2019).
- Three SURLC members from Montana State University, and four members from North Dakota State University attended the TRB Annual Meeting (January 13-17, 2019).
- Karalyn Clouser was named SURLC’s Student of the Year and attended the UTC/CUTC Banquet on the evening of January 13 and attended the TRB Annual Meeting.

How have the results been disseminated? If so, in what ways?

- Results have been disseminated through project reports (posted on the SURLC website and NDSU's Small Urban and Rural Transit Center's (SURTC) website), and through presentations at conferences (see Section 2. Products).
- Results from the various conferences have been shared in-house.
- Report summaries were discussed at the appropriate committee meetings at the TRB Annual meeting, with an emphasis at the Rural Public and Intercity Bus Committee meeting.

What do you plan to do during the next reporting period to accomplish the goals and objectives?

- Work continues with projects already initiated, but not completed. SURLC received a one-year no-cost extension, thus all projects should complete by September 2019.

2. Products

Publications, conference papers and presentations

Publications:

Project reports as noted in Section 1, Accomplishments.

Presentations:

September 29 -October 3, 2018. At the National Conference on Rural Public & Intercity Bus Transportation in Breckenridge, CO (sponsored by TRB Committee AP055), SURLC Director David Kack moderated sessions *Environmental Justice: Issues, Challenges and Tools for Rural Communities*, and *Innovative Approaches to Funding and Fund Allocation*. In addition, Kack gave two presentations: *Does Your State's Policy Allow for Innovative Intercity Bus Solutions?* and *Transportation Management Plans, Is Transit Included?* At the same conference, Natalie Villwock-Witte (WTI/MSU) presented both: *Feasibility of Transit in Lebanon, Missouri*, and *Deep East Texas Voucher System*. Ranjit Godavarthy (SURTC/NDSU) presented *Automated Transit Technologies: Identifying Challenges and Potential Market for Application*. Del Peterson (SURTC/NDSU) presented the Student Paper Awards and noted that this is the tenth year (5th Conference) in which student papers were recognized. Del also moderated a session *Our Changing Workforce: Recruiting, Retaining and Transitioning Rural Transit Employees*. Jeremy Mattson, SURTC/NDSU) presented *Transit and Livability in Small Communities*. Finally, Rob Lynch (SURTC/NDSU) moderated a session *Strengthening Rural and Intercity Transit Service Delivery through Community Outreach and Marketing*.

October 21-24, 2018. At the National Rural ITS (NRITS) Conference in Fort McDowell, AZ, SURLC Director David Kack presented *The Wyoming Intercity Bus Service Study: Finding and Filling in the Gaps in Rural Areas*. Natalie Villwock-Witte (WTI/MSU) facilitated the *Utilizing ITS for Rural Road Safety* session which was based on the recent Rural ITS Toolkit. Steve Albert (WTI/MSU) facilitated the *Rural ITS Roundtable*.

November 8, 2018. David Kack, SURLC Director, was a guest lecturer for an Energy & Sustainability class at Montana State University and presented *Transportation & Energy*.

January 13-17, 2019. TRB Annual Meeting in Washington, D.C. Natalie Villwock-Witte (WTI/MSU) presented *Characteristics and Reported Bicycle & Pedestrian Infrastructure for Communities of Less Than 10,000 People in Maine, Minnesota and New Hampshire*. Jeremy Mattson and Ranjit Godavarthy (SURTC/NDSU) presented *Transit and Livability: Results from the National Community Livability Survey* project during a poster session. Ranjit's Evaluation Study of the Bike Share Program in Fargo, North Dakota was included in the poster session. Finally, during a lectern session, Ranjit presented the preliminary results of the *Automated Transit Technologies: Identifying Challenges and Potential Market for Application* study.

Technologies or techniques

Nothing to Report

Inventions, patent applications, and/or licenses

Nothing to Report

Other products, such as data or databases, physical collections, audio or video products

Nothing to Report

3. Participants & Collaborating Organizations

What organizations have been involved as partners?

North Dakota State University (Small Urban and Rural Transit Center – Upper Great Plains Transportation Institute) is Montana State University's primary partner in the Small Urban and Rural Livability Center. The City of Bozeman and Montana State University are partners in the *Transportation Demand Management Initiative* project, also known as the Bozeman Commuter Project.

Some of the projects that have been conducted by the Small Urban & Rural Transit Center at North Dakota State University are in collaboration with the Texas A&M Transportation Institute (TTI). NDSU also works with the Center for Urban Transportation Research (CUTR) at the University of South Florida, and with the North Dakota Department of Transportation.

North Dakota State University also partners with the American Public Transportation Association (APTA) and the National Transit Institute (NTI) on projects and trainings.

Have other collaborators or contacts been involved?

Additional collaborators/contacts include members of the Advisory Board, who represent the following organizations: American Association of Retired Persons (AARP); Centers for Disease Control (CDC); Community Transportation Association of America (CTAA); Easter Seals Project Action (ESPA); Environmental Protection Agency (EPA); Federal Transit Administration (FTA); National Association of Development Organizations (NADO); North Dakota Department of

Transportation (NDDOT); Transportation Research Board (TRB); and the U.S. Department of Transportation (USDOT).

Note: Members of the Advisory Board from FTA and USDOT act as technical and policy liaisons between the Center and FTA and USDOT. They provide guidance and recommendations on research projects that link DOT priorities and initiatives with the direction of the Center, including information on the technical merits of the research projects that may be initiated by the Small Urban and Rural Livability Center. Advisory Board members are not involved in any financial decisions and will not be involved in any discussion of future UTC competitions.

4. Impact

The development of the principal discipline(s) of the project

The main goal of SURLC is to show how livability and the livability principles are integrated into our lives. How we design a community, where we site a school, and where we build our parks, all have an impact on livability. Through our research and other activities, we work to show how individuals, families, and communities can benefit from increasing livability.

Other disciplines

SURLC works with WTI's Center for Health and Safety Culture (CHSC). Part of the CHSC focus emphasizes the psychological and sociological aspects of transportation.

The development of human resources

The West Region Surface Transportation Workforce Center (WRTWC) was established by the Federal Highway Administration to bring together transportation organizations, workforce advocates, and educational institutions to develop partnerships that apply knowledge, experience, and resources to strategically build a strong transportation workforce for the future. The WRTWC, housed at the Western Transportation Institute at Montana State University in partnership with the Upper Great Plains Transportation Institute at North Dakota State University, serves a ten-state western region: Nebraska, South Dakota, North Dakota, Montana, Wyoming, Idaho, Washington, Oregon, Alaska, and Hawaii. WRTWC and SURLC are collaborating to identify training opportunities that will focus on topics/issues that include transportation and livability.

The Small Urban and Rural Transit Center (SURTC), a partner in the Small Urban and Rural Livability Center, has launched the Advanced Transit Professional Certificate.

Physical, institutional, and information resources at the university and/or other partner institution

Nothing to Report

Technology transfer (include transfer of results to entities in government or industry, adoption of new practices, or instances where research has led to the initiation of a startup company)

Nothing to Report

Society beyond science and technology

Nothing to Report

5. Changes/Problems

Changes in approach and reasons for change

Nothing to Report

Actual or anticipated problems or delays and actions or plans to resolve them

Nothing to Report

Changes that have a significant impact on expenditures

Nothing to Report

Significant changes in use or care of human subjects, vertebrate animals, and/or biohazards

Nothing to Report

Change of primary performance site location from that originally proposed

Nothing to Report

6. Special Reporting Requirements

Not Applicable