

Program Progress Performance Report for University Transportation Centers

Submitted To: Office of the Assistant Secretary for Research and Technology
U.S. Department of Transportation
1200 New Jersey Avenue, SE
Washington, DC 20590

Federal Grant Number: DTRT13-G-UTC46

Project Title: Tier 1 University Transportation Center
Small Urban and Rural Livability Center (SURLC)

Program Director: David Kack
Email: dkack@montana.edu
Phone: 406-994-7526

Submission Date: October 20, 2017

DUNS Number: 6254479820000

EIN Number: 81-6010045

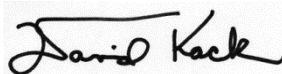
Recipient Organization: Montana State University
Bozeman, MT 59717

Project Grant Period: September 30, 2013 – September 30, 2018

Reporting Period End Date: September 30, 2017

Report Term: PPPR #8

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 8th six-month period (April 2017-September 2017) of the Center:

- Work was completed on the SURLC project: *Incorporating Livability and the Urban Form into Travel Demand Forecasting Models in High Growth Rural and Small Urban Communities* (information on the project can be found on the SURLC website).
- Work was completed on the SURLC project: *Evaluation Study of Bike Share Program in Fargo, North Dakota*, which is investigating what happens when a small urban community provides more transportation choices. This project followed the bike share program in Fargo for three years. More information on this project, including the final report, can be found at <http://www.ugpti.org/resources/reports/details.php?id=875&program=surtc>
- Work was completed on a project titled *Intercity Bus Stop Analysis* that examines the number of cities and towns in each of the 48 contiguous states that have intercity bus service. The final report can be found at http://surlc.org/wp-content/uploads/2017/06/Intercity-Bus-Stop-Analysis_Final.pdf.
- Work continued on a project entitled *A Systematic Pedestrian Safety Planning Tool for Small Urban and Rural Areas* that will create a tool to help determine safety countermeasures for high pedestrian/vehicle crash areas.
- 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 continued on the *Dynamic Warning System to Alert Motorists to Cyclists* project. 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 should occur in April or May 2018
- Work continued on a project named the *Bozeman Area Transportation Demand Management (TDM) Initiative*. Through this project, SURLC will work 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 remains a livable community. In fact, the City of Bozeman calls itself “The Most Livable Place” (see www.bozeman.net).

- Work was nearly completed on the 2017 edition of the *Rural Transit Fact Book*. This will be the 7th edition of the Fact Book. Previous editions can be found at <http://www.surtc.org/transitfactbook/>
- Work continued on *the Rural Livability Phase 3 Study* being conducted by North Dakota State University in partnership with the Texas Transportation Institute at Texas A & M. This study is a national survey to evaluate the nexus of transit and livability in rural communities. More information can be found at <http://www.ugpti.org/research/projects.php?view=259&program=surtc>
- Work began on *Automated Transit Technologies: Identifying Challenges and Potential Markets for Applications* at North Dakota State University. This study will seek to understand the transit automation technologies in the context of a transit agency's need for implementing these technologies. It will also seek 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 can be found at <http://www.ugpti.org/research/projects.php?view=262&program=surtc>
- A study was started to better understand 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. More information can be found at <http://www.ugpti.org/research/projects.php?view=261&program=surtc>
- Work was completed on a project named *Aging in Place in Small Urban and Rural Communities*. This project investigated the current state of aging in place in small urban and rural settings throughout the country and quantified the costs for residents to live at home and ride public transportation versus moving to an assisted living facility. More information on the project and the final report can be found at <http://www.ugpti.org/resources/reports/details.php?id=881&program=surtc>
- Work continued on the *Last Mile Commercial Package Delivery as a Revenue Generation Tool for Rural Public Transportation Systems in Wyoming* project. This project will research how rural transit systems may be able to generate revenue by acting as a package delivery system. The final report should be completed by November 2017.
- Work was completed on a project entitled *Innovative Approach to Estimating Demand for Intercity Bus Services in a Rural Environment*. This project was completed by NDSU through a partnership with the University of South Florida, and its National Center for Transit Research. The final report for this project can be found at <http://www.ugpti.org/resources/reports/details.php?id=878&program=surtc>

- Work began on the *Ridesharing in a Rural Environment* project. The purpose of this project is to examine what components of ridesharing business models may be challenged in a rural application, and to explore opportunities in rural areas.
- Work began 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.

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

- One staff member from MSU attended the Montana Transit Association Spring Conference in Missoula, MT (May 17-19, 2017).
- One staff member from NDSU conducted the John Maxwell Mastermind *Intentional Living* course to NDSU staff, faculty and graduate students (May-October 2017).
- One staff member from MSU traveled to Kalamazoo, MI for Western Michigan University’s 4th Annual Summer Conference on Livable Communities (June 1-2, 2017).
- Four SURLC members (one from MSU and three from NDSU) attended the UTC summer meeting in Buffalo, NY (June 19-22, 2017).
- Five SURLC members (four from MSU and one from NDSU) met with members from OST-R during the July 26, 2017 site visit to SURLC/WTI in Bozeman, MT.
- One staff member from MSU participated in the Montana Transit Association Fall Business Meeting and Bus Rodeo (September 8-9, 2017).
- One staff member from MSU and one staff member from NDSU participated in the Montana Department of Transportation Transit Managers Workshop, September 27-28, 2017.
- Two staff members from NDSU conducted a full day of training on Ethics in the Workplace and Beyond June 11 at the Community Transportation Association of America Expo (annual meeting). NDSU also had a booth at the CTAA event June 11-15 in Detroit, MI to hand out materials on completed studies.
- One NDSU staff member developed and planned to provide training at the UTTC Tribal Leaders Summit in Bismarck, ND September 7; however, due to low turnout the presentation did not occur. The materials are ready for another tribal event.
- One member of the NDSU staff attended the UTC Spotlight Conference September 26-27 in Washington, DC.

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

- Results have been disseminated through project reports (on the SURLC and SURTC websites), and through presentations at conferences (see Section 2. Products).
- Results from the various conferences have been shared in-house, and concepts are being incorporated into possible project ideas.
- Reports from completed projects will be put on the Livability Center's website, and presentations will be made at applicable conferences.

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

- It is anticipated that additional projects will begin during the next reporting period, and work will continue on projects already initiated, but not completed.
- Communications will continue with the Advisory Board in regard to project updates, and input on any new project ideas.

2. Products

Publications, conference papers and presentations

April 24-27, 2017, Ames, Iowa. One NDSU staff person conducted the two-day training course *Transit I*, which is part of the Advanced Transit Professional Certificate.

May 7-11 two NDSU staff members participated in the American Public Transportation Association Bus and Paratransit Conference as exhibitors to display their research work, promote training opportunities, and talk about educational programs.

May 15-19, 2017, Fort Collins, CO. One NDSU staff member conducted the two-day course, *Transit II*, at the CASTA Spring Conference.

May 16-18, 2017, Building Active Communities Institute in Butte, MT. People from several small communities across Montana attended this workshop to learn methods to improve bike, pedestrian and transit systems in their communities. Three staff members from MSU participated: one gave a presentation on *Rethinking Transportation (Transportation Options)*, and two facilitated community teams to develop an active transportation vision and create plans to move forward with their vision.

June 1-2, 2017, 4th Annual Summer Conference on Livable Communities, Western Michigan University, Kalamazoo, MI. One staff member from MSU attended the conference and gave two presentations: *Livability in State Departments of Transportation*; and *Results of the Wyoming Intercity Bus Service Study*.

June 11-15, two staff members from NDSU conducted a full day of training on Ethics in the Workplace and Beyond at the Community Transportation Association of America Expo. NDSU also had a booth at the CTAA event June 11-15 in Detroit, MI to hand out materials on completed studies.

June 12, 2017, Manhattan, MT. One MSU staff member gave a presentation on Bicycle and Pedestrian Safety to a Driver's education class.

June 17-18, 2017, Building Active Communities Institute, Miles City, MT. People from several communities in eastern Montana attended this workshop to learn methods to improve bike, pedestrian and transit systems. Four MSU staff members helped with the set-up, and participated in the workshop. Two staff members facilitated round table discussions and presented on the *Small Town and Rural Multimodal Networks* project.

June 20-23, 2017, Scottsbluff, Nebraska, NATP Annual Conference. One NDSU staff member conducted three training sessions: (1) Ethics, (2) Working with Local Government, and (3) Strategic Planning.

July 12-15, 2017, Pierre, South Dakota. One NDSU staff member conducted two days of training on (1) Strategic Planning, (2) Environmental Justice, (3) Public Participation, and (4) Financial Management.

July 21, 2017, WTI Summer Transportation Institute, Bozeman, MT. High school students learned about various transportation topics. Two MSU staff members presented on Sustainable Transportation, and led a walking audit to engage students in observing features that contribute to good and bad walking/biking conditions on city and MSU streets.

July 25-27, 2017, Boise, Idaho for the ITD PT Summit. One NDSU staff member conducted three training sessions including, (1) Financial Management, (2) Performance Management, and (3) FTA 101.

August 24-25, 2017, Catapalooza, Bozeman, MT. Three MSU staff members participated in this outreach event by staffing a table and sharing various information on active and public transportation options with incoming Montana State University students.

August 28-31, 2017, Rural Local Initiatives Support Corporation (LISC) Annual Seminar XXVI, Big Sky, MT. One MSU staff member gave a presentation on *Rural Transportation/Mobility*.

September 1, 2017, Big Sky Owners Association Annual Meeting, Big Sky, MT. One MSU staff member gave a presentation on the local public transportation service, Skyline. The presentation gave information on current ridership trends, as well as strategic planning and fiscal management of the transit system.

September 7, one NDSU staff member had developed training to provide at the UTTC Tribal Leaders Summit in Bismarck, ND; however, due to low turnout the presentation did not occur. The materials are ready for another tribal event.

September 10-13, 2017, one NDSU staff member had a booth at the Dakota Transit Association Conference in Grand Forks, ND.

September 17-23, 2017, Tamarack/Tracy Traffic Calming, Bozeman, MT. Three MSU staff members conducted outreach to the City, Senior Center, neighbors and the public by creating and implementing a week-long traffic calming “pop up” project to demonstrate street design to accommodate people of all ages and abilities.

September 18, 2017, "Parklet" on Main Street, Bozeman, MT. A temporary park was installed for one day in coordination with the Montana Department of Transportation, the Downtown Bozeman Partnership, local businesses and SURLC staff (three MSU staff members). The project brought awareness to the many ways that space taken up by parked cars could be used to create a more livable, multimodal downtown.

September 19-21, 2017, Bozeman Bike and Pedestrian Count, Bozeman, MT. Two MSU staff members coordinated bike and pedestrian counts at ten locations across Bozeman with help from over 20 volunteers. Data will inform decisions regarding bike/pedestrian infrastructure.

September 27, 2017, one person from NDSU presented for three-hours at the National Tribal Transportation Conference in Tucson, AZ. The presentation was on Rural Transit Planning, Demand Estimation, and Cost-Benefit Analysis.

September 27, 2017, AARP Livable Community Presentation, Bozeman, MT. Two MSU staff members presented *Transportation Options – Freedom to move for all ages and abilities* at the Public Library as part of Active Aging Week events in Bozeman.

September 27, 2017, Issues in Sustainability Class, Montana State University, Bozeman, MT. Two MSU staff members presented a guest lecture entitled *Sustainable Transportation*.

September 27-28, 2017, Montana Department of Transportation Transit Managers Workshop, Helena, MT. Two SURLC staff members (one MSU, one NDSU) participated in the workshop, and gave presentations, including: *Coordination & Other Tidbits* (MSU); *Strategic Planning, Transit Coordination*, and *Customer Service* (three separate presentations, NDSU).

September 27-29 one staff person from NDSU participated on the *Rural and Intercity Bus Conference Planning Committee* in Breckenridge, CO to plan for the 2018 conference.

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 the main partner to Montana State University in the Small Urban and Rural Livability Center. Alta Planning + Design was the lead partner on the *Small Town and Rural Multimodal Networks* document, also known as the Small Town and Rural (STAR) Guidebook project. The City of Bozeman (MT) is a partner for the *Incorporating Livability and the Urban Form into Travel Demand Forecasting Models in High Growth Rural and Small Urban Communities* project. The City of Bozeman and Montana State University are partners in the *Transportation Demand Management Initiative* project, also known as the Bozeman Commuter Project.

SURLC (MSU) is working with the Wyoming Department of Transportation for the *Last Mile Commercial Package Delivery as a Revenue Generation Tool for Rural Public Transportation Systems in Wyoming* 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.

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.

One staff member from NDSU participated on the University Transportation Center for Underground Transportation Infrastructure (UTC-UTI) Advisory Board Meeting on September 22, 2017

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, 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

Nothing to Report

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, is launching the Advanced Transit Professional Certificate.

As noted earlier, the report *Workforce Development and Succession Planning to Prepare the Rural Transit Industry for the Future* was completed, which highlights the fact that as America's transportation workforce continues to age, there is an increased need to invest in workforce development to combat the impending retirement tsunami. This is especially true within the small urban and rural transit industry. A national survey of rural transit managers was conducted to determine current workforce development practices as well as succession planning procedures.

SURTC is finalizing a draft of the proceedings from the Federal Transit Administration (FTA) Workforce Development Summit. The purpose of the Summit was to discuss the recruitment and training necessary to ensure that FTA can carry out its mission for the foreseeable future.

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