

## Program Progress Performance Report for University Transportation Centers

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

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

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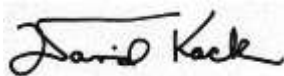
Recipient Organization: Montana State University  
Bozeman, MT 59717

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

Reporting Period End Date: September 30, 2015

Report Term: PPPR #4

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 fourth six month period of the project:

- Research concluded on the first SURLC project: *The North Dakota Oil Boom's Impact on Livability in Western North Dakota*, and the final report can be found at <http://www.ugpti.org/resources/reports/downloads/surlec15-002.pdf>
- Work continued on the second 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 continued on the third SURLC project: *Small Town and Rural (STAR) Guidebook for Cycling and Pedestrian Infrastructure*. This guide will allow planners and other transportation officials in small urban and rural areas to see how various treatments can be applied to allow for safer movement by bicycles and walking.
- Work continued on the fourth 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 is following the bike share program in Fargo for three years. More information on this project can be found at <http://www.ugpti.org/research/projects.php?view=238>
- Work continued on a fifth SURLC project: *Mobility Mindset of Millennials in Small Urban and Rural Areas*, which looks at mode choice preferences by Millennials in small urban and rural areas.
- Work concluded on a sixth SURLC project: the *Rural Transit Fact Book*, which was one of the proposed projects identified in the 2013 UTC SURLC proposal. The 2015 Rural Transit Fact Book can be found at <http://www.surlec.org/transitfactbook/downloads/2015-rural-transit-fact-book.pdf> It is anticipated that 2016, 2017 and 2018 editions of the Fact Book will also be published.
- Work began on a project entitled the Wyoming Intercity Bus Services Study. This project will investigate intercity bus services in that state.
- Work began on a project titled *Analysis of the Intercity Travel Network for Creating Livable Small Urban and Rural Communities* that examines the number of cities and towns in each of the 48 contiguous states that have intercity bus service.

- Work began 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 began on a project entitled *Rural Livability and Transit: Case Studies*. This project, conducted by SURLC partner NDSU, is in cooperation with the Texas A&M Transportation Institute (TTI), and follows on work undertaken by TTI and the University of South Florida in examining transit's role in effecting livability in rural communities. This project will develop case studies that highlight transit's impact on a community's livability.
- 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.
- Yiyi Wang, SURLC staff, presented *The Effects of Socio-Economic and Transportation Accessibility on Area-Level Diabetes Counts: A Latent-Variable Structural Equation Model Approach*, at the *Moving Active Transportation to Higher Ground: Opportunities for Accelerating the Assessment of Health Impacts* conference (April 2015).
- Rebecca Gleason, SURLC staff, and a colleague developed and led the second annual Active Transportation Study Abroad Class (Germany and the Netherlands). This 400 level Civil Engineering Independent Studies course introduces bicycle, pedestrian and transit transportation as complementary modes to automobiles. This cross-disciplinary class is designed for future engineers, urban planners and public policy makers. A total of four undergraduate students and one staff member from Montana State University took the class (May 2015).
- Natalie Villwock-Witte, SURLC staff, presented *Active Transportation in Netherlands and Germany* at the American Society for Engineering Education (ASEE) Conference and Exposition, June 2015.
- Rebecca Gleason, SURLC staff, presented *Small Town and Rural Bicycling and Walking Design Guidance* at the International Symposium on Systematic Approaches to Environmental Sustainability in Transportation, August 2015.
- David Kack, SURLC Director, conducted a webinar (September 2015) entitled *Livability and the Connection between Housing and Transportation* through the Community Builders Webinar Series. A total of 141 people participated in the webinar. An archive of the webinar can be found at <http://communitybuilders.org/webinars/housing-and-transportation/>
- Rebecca Gleason, SURLC staff, presented *A Campus Bicycle Master Plan for a Bike Friendly Campus* at the Rocky Mountain Chapter of the Association of Physical Plant Administrators Conference, September 2015.

- David Kack, SURLC Director, participated with people from Gallatin County and eight other communities from Montana in the *Community Mobility Institute*, a program of New Mobility West. The Institute provided training related to most of the six livability principles.

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

- One staff member traveled to the *Moving Active Transportation to Higher Ground: Opportunities for Accelerating the Assessment of Health Impacts* conference sponsored by the Transportation Research Board (April 2015).
- Two staff members traveled to the Netherlands and Germany to conduct the Active Transportation Study Abroad Class (May 2015).
- One staff member traveled to the Association of Pedestrian and Bicycle Professionals Professional Development Seminar (September 2015).
- Jill Hough, SURLC Deputy Director, is a recently certified John Maxwell speaker, trainer, and coach and can offer seven Maxwell Leadership Trainings. More information is available at <http://www.surtc.org/training/topics.php?id=34>
- The webinar, *Livability and the Connection between Housing and Transportation*, presented by Director David Kack, allowed participants to receive one AICP Certification Maintenance Credit.

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

- 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.
- Communications will continue with the Advisory Board in regards to project updates, and input on any new project ideas.

## **2. Products**

Publications, conference papers and presentations

*The Impact of North Dakota's Oil Boom on Transit Livability*, available at:  
<http://www.ugpti.org/resources/reports/downloads/surcl15-002.pdf>

*Rural Transit Fact Book | 2015* available at:  
<http://www.surtc.org/transitfactbook/downloads/2015-rural-transit-fact-book.pdf>

*Active Transportation in Netherlands and Germany*, a paper which is a result of the study abroad class by WTI can be found at:

<http://www.asee.org/public/conferences/56/papers/11211/view>

*Active Transportation in Netherlands and Germany*, was presented at the American Society for Engineering Education (ASEE) Conference and Exposition, June 2015.

*Small Town and Rural Bicycling and Walking Design Guidance* was presented at the International Symposium on Systematic Approaches to Environmental Sustainability in Transportation, August 2015

*Livability and the Connection between Housing and Transportation* (a webinar presentation, September 2015) can be found at <http://communitybuilders.org/webinars/housing-and-transportation/>

*A Campus Bicycle Master Plan for a Bike Friendly Campus* was presented at the Rocky Mountain Chapter of the Association of Physical Plant Administrators Conference, September 2015

Website(s) and other Internet site(s)

- SURLC website (<http://www.westerntransportationinstitute.org/centers/small-urban-and-rural-livability-center/default.aspx>)
- Small Urban and Rural Transit Center (SURTC) website ([www.surtc.org](http://www.surtc.org))
- TRB Research in Progress (RiP) (<http://rip.trb.org/view/2014/P/1322855>)

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 is serving as a partner on 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.

WTI is partnering with the Minnesota, Montana, Washington and Wisconsin Departments of Transportation on the *Mobility Mindset of Millennials in Small Urban and Rural Areas* project.

As noted earlier, SURLC partnered with the Sonoran Institute to conduct a webinar through their Community Builders webinar series. Further, SURLC is working with the Wyoming Department of Transportation in regards to the Wyoming Intercity Bus Services Study.

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) and the University of South Florida.

#### Have other collaborators or contacts been involved?

Additional collaborators/contact include members of the Advisory Board, which 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, 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 Study Abroad Class *Active Transportation: Bicycling, transit and walking* had an impact as it showed the five students and three instructors who participated in the class that other towns (countries) have been able to shift from an auto-centric transportation system to more active transportation systems that focus on other modes. This class highlighted the first livability principle of providing more transportation choices.

The Trip Exchange District highlighted different trip generation rates, and how building housing closer to educational opportunities (a University) can lead to people driving less. This project highlighted three of the livability principles including: Expand location efficient housing choices; improve the economic competitiveness of neighborhoods; and, enhance the unique characteristics of all communities.

### 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 will focus on topics/issues that include transportation and livability.

### 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)

As noted in PPPR #3, staff from SURLC conducted a *Trip Exchange District* project which researched location-efficient housing and the possibility to reduce impact fees based on the research. The City of Bozeman (City Commission) voted to reduce the impact fees for developments that occur closer to educational and employment opportunities and other services.

### 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