



Program Progress Performance Report for University Transportation Center at Portland State University

Submitted to: U.S. Department of Transportation
Research and Innovative Technology Administration (RITA)

Grant Number: DTRT12-G-UTC15

Project Title: University Transportation Center
National Institute for Transportation and Communities (NITC)

Consortia members: Portland State University (PSU), University of Oregon (UO), Oregon Institute of Technology (OIT), University of Utah (UU)

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Submitting Official: same as above

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Recipient Organization: Portland State University
PO Box 751
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Grant Period: January 2, 2012 – January 31, 2016

Reporting Period End Date: June 30, 2014

Report Term: Semi-annual

Signature:

A handwritten signature in black ink, appearing to read "J. Dill".

1. ACCOMPLISHMENTS: What was done? What was learned?

The information provided in this section allows the RITA grants official to assess whether satisfactory progress has been made during the reporting period.

What are the major goals of the program?

The major goals for NITC as described in our application fall into five categories:

Research

- **Competitive, peer-review project selection process.** NITC projects are to be selected through an open RFP process. All faculty at the member campuses, as well as approved Faculty Associates, will be eligible to submit research, education and technology transfer project proposals responsive to our theme. The proposal evaluation process will emphasize external peer review and draw on the expertise of practitioners and researchers nationally.
- **Transportation for Livable Communities Pooled-fund research.** To help maximize implementation of U.S. DOT's commitment to livable communities, NITC's Transportation for Livable Communities Pooled-Fund Research program will provide regional and local agencies, such as metropolitan planning organizations and municipalities, more opportunity to be invested in research
- **Transportation Data for Livable Communities.** This initiative aims to create a model for data collection, management and dissemination that will foster the wider, national use of data resources collected on a local level.
- **Engaging Citizen Leaders.** This initiative will expand NITC's scope of work to reach a wide range of current and future transportation leaders. We will accomplish this in two ways. First, our competitive RFP process will include a score for community engagement; this will result in projects that achieve the first two goals. Second, we will set aside \$70,000 for projects that specifically target creating community leaders among the general public (not university students) and where community leadership is the *primary* objective, not a secondary or complementary objective to a larger research project.

Leadership

- **Shape national & international conversations on transportation research and education.** NITC faculty are well regarded nationally and internationally as leaders in their fields. They will continue to demonstrate this leadership through publishing in the top journals and presenting their work at conferences. NITC will take the concept of leadership far beyond academic circles, as evidenced by the wide

dissemination of research results in professional, technical and general publications and other media.

- **Serve on national committees and panels.** NITC faculty help address national transportation problems through volunteer leadership on TRB committees and in other positions, including journal editorial boards, national and international conference organizing committees, NSF panels, and other advisory boards. To continue and reinforce this practice, NITC will mentor our new, junior faculty to apply for committee and panel membership and recognize the activities of all faculty members.
- **Respond to needs of practitioners and policymakers.** NITC researchers have a long history of conducting research that is useful in solving the problems practitioners and decision-makers face every day. Our theme and project selection process will ensure that our research continues to address our nation's transportation problems. NITC's Director and staff will serve as points of contact for agency leaders and policymakers both regionally, statewide and nationally. When we identify needs that match the expertise of our researchers, we will make a connection. We will work with key staff at the DOT administrations (FHWA, FTA, etc.), both in Washington, D.C., and within the region, whose work relates to our theme to determine the most effective way for our researchers to learn from and inform agency activities.

Education and Workforce

- **Offer degrees and courses in multiple disciplines.** NITC will continue to offer a rich array of degrees that serve the transportation profession.
- **Provide experiential learning.** A key component of our education strategy is experiential learning, which will help attract and retain students. Our campuses will continue to provide these opportunities, and NITC will seek ways to expand them.
- **Attract and support undergraduate students.** NITC will build upon existing and effective mechanisms to expose K-12 students to transportation, attract and retain new undergraduate students to our degree programs, and involve undergraduates in our research.
- **Attract and support graduate students.** NITC will support graduate students directly through the following: Research assistantships working on projects; Dissertation fellowships for students to carry out research on surface transportation topics that fit under the NITC theme; Funds for scholarships at each campus to recruit new and retain existing high-performing students; and Funds for transportation student group activities.

- **Sponsor a student conference.** NITC will host a national student conference focusing on our theme.
- **Educate professionals.** NITC will maintain a vibrant program of seminars, workshops, professional courses and other training opportunities that provide transportation practitioners with the latest tools and techniques.

Technology Transfer

- **Move research into practice.** Moving research into practice first requires research findings that are relevant to practice. Our competitive project selection process will help ensure that we select projects that have direct implications for practitioners in the short- or long-term. In addition, we will use practitioners to help inform projects after selection and review final products. Additional efforts will include short workshops to share research results, one-page research briefs, presenting work at conferences aimed at practitioners, holding one-day conferences, funding technology transfer projects, and encouraging the commercial application of research results when possible.
- **Inform researchers.** The quality of scientific inquiry depends upon researchers sharing their findings with other researchers through the peer-review publication processes. Fellow researchers are important targets for our technology transfer program. We will accomplish this through two primary activities. First, NITC's faculty will continue to publish extensively in peer-reviewed journals. Second, OUTREC will support our faculty in presenting their work at nationally recognized academic conferences by including travel funds for each project.
- **Use innovative technologies to communicate research results.** NITC will embark on an ambitious program of sharing information through traditional and new media.

Collaboration

- **Collaborating within our consortium.** NITC's governance structure is cooperative and leadership is distributed. The Executive Committee includes one faculty member from each campus. The Executive Committee provides overall direction for the Center, makes project funding decisions, and selects Center award recipients, including student of the year. They will meet in person at least twice a year, rotating the location between campuses, and hold regular conference calls. Each Executive Committee member will be responsible for representing and supporting their respective campus

- **External collaboration.** In addition to the partnerships that occur through individual projects and the pooled-fund program, NITC will foster collaboration with a range of “end-users” of our work through an External Advisory Board.

What was accomplished under these goals?

Research

- **Competitive, peer-review project selection process.**

The first round of NITC funds were awarded in the fall of 2012. Nineteen projects were selected through the competitive, peer-review process each of which is between 12 and 18 months in duration. One of those projects is behind schedule because the principal investigator left the university. As of June 30th, 2014, the 19 projects are on average, 90% complete.

The second round of NITC funds were selected in the fall of 2013 and awarded in the winter of 2014. Ten projects were selected through a competitive, peer review process. Each project from the second round is also between 12 and 18 months in duration. As of June 30th, 2014, the 10 projects are on average, 35% complete.

We awarded a second round of NITC small starts funds in the fall of 2013. These project awards are for preliminary research and to help PIs further develop their research idea so they can be more competitive in the future NITC RFPs. The six projects selected for funding are, on average 95% complete as of June 30th, 2014.

A third round of NITC projects were selected in the summer of 2014. A total of 20 proposals were submitted by the April 15, 2014 deadline, requesting \$2,028,000. Of those, 18 proposals were for research and two for technology transfer. Each proposal was reviewed by at least three external reviewers, two academic researchers and one practitioner. The external review criteria mirror the NSF process, including intellectual merit, broad impacts, and budget. Each proposal was also reviewed and scored by NITC staff for the following programmatic criteria: fit with the NITC theme; transportation focus; student support/mentoring; support for untenured, tenure-track faculty; leveraging of matching funds; substantive and meaningful external collaboration; multi-disciplinary and/or multi-campus collaboration; national relevance; and equity/diversity. External and programmatic review scores were then combined (weighted 70/30) and proposals were ranked. The Executive Committee met on June 17, 2014 at the Oregon Institute of Technology Campus in Klamath Falls, Oregon and selected 8 projects, totaling \$800,000. The projects are listed below, with the principal investigator, co-principal investigator and university noted:

- Trip and Parking Generation by Transit-Oriented Developments, Reid Ewing, University of Utah
- Exploiting New Data Sources to Quantify Arterial Congestion and Performance Measures, Miguel Figliozzi and Robert Bertini, Portland State University
- Disseminating the Sustainable City Year Program (SCYP) Educational Model to UTC Campuses, Nico Larco and Marc Schlossberg, University of Oregon
- The Effects of Commuter Rail on Population Deconcentration and Commuting: A Salt Lake City Case Study, Joanna Ganning, University of Utah
- Evaluation of an Eco-driving Intervention: Changing Knowledge, Attitudes, and Behavior by Means of Supervisor Support, Donald Truxillo, Leslie Hammer, John MacArthur, Talya Bauer, Portland State University
- Modeling, Analysis and Implementation of Pedestrian Priority at Signalized Intersections, Chris Monsere and Sirisha Kothuri (Portland State University) and Ed Smaglik (Northern Arizona University)
- Assessing State Efforts to Integrate Transportation, Land Use and Climate, Rebecca Lewis and Rob Zako, University of Oregon
- Understanding Cyclist-Vehicle Interaction via Analysis of Ego-centric Video, Feng Liu, Wu-chi Feng, Miguel Figliozzi, Portland State University

NITC and PSU staff worked with each campus to execute task orders to allow for most projects to start August 1st, 2014, including approving budgets and documenting match sources.

- **Transportation for Livable Communities Pooled-fund research.**

One complete proposal was received by the January 31, 2014 deadline for the pooled-fund RFP. The proposal was reviewed by NITC staff and the pooled-fund technical advisory committee composed of agency staff from the Oregon Department of Transportation, FHWA, Metro, Lane Council of Governments, Bend MPO, City of Bend, City of Boulder and City of Austin. The proposal was supported for funding and the award was made in the spring of 2014. The project is named the Online Non-motorized Traffic Count Archive project. Dr. Krista Nordback and Dr. Kristin Tufte are the PI and Co-PI, respectively, and both are from Portland State University.

NITC received the following funding amounts from our partners for this project:

- ODOT \$50,000
- FHWA through ODOT \$15,000
- City of Boulder \$10,000
- Lane Council of Governments \$7,000
- Metro \$5,000
- City of Eugene \$5,000

- City of Austin \$5,000
- City of Bend \$2,000
- Bend MPO \$1,000.

The goal of the project is to create a national non-motorized count archive where agencies can add data, counts are checked for quality, and data can be exported and visualized through mapping and basic graphic functions.

The anticipated impacts include jurisdictions being more easily able to share and access data, data can be exported in a standard format and thus easier to manipulate and data can be incorporated into other national databases. Currently the project is 10% complete. The anticipated completion date is November of 2015.

- **Transportation Data for Livable Communities.**

Five project selected in the third round of NITC funding focus on data:

- Trip and Parking Generation by Transit-Oriented Developments, Reid Ewing, University of Utah
- Exploiting New Data Sources to Quantify Arterial Congestion and Performance Measures, Miguel Figliozzi and Robert Bertini, Portland State University
- Evaluation of an Eco-driving Intervention: Changing Knowledge, Attitudes, and Behavior by Means of Supervisor Support, Donald Truxillo, Leslie Hammer, John MacArthur, Talya Bauer, Portland State University
- Modeling, Analysis and Implementation of Pedestrian Priority at Signalized Intersections, Chris Monsere and Sirisha Kothuri (Portland State University) and Ed Smaglik (Northern Arizona University)
- Understanding Cyclist-Vehicle Interaction via Analysis of Ego-centric Video, Feng Liu, Wu-chi Feng, Miguel Figliozzi, Portland State University

- **Engaging Citizen Leaders.**

- We funded one proposal in the first round of NITC funding called Transportation Leadership Education . This is the project is behind schedule due to the PI leaving the university. A new PI started on the project in winter of 2014. This project will develop a case study and national model of the Portland Bureau of Transportation's Traffic and Transportation Class. Over 1,000 citizens have taken this 10-week course to learn how to engage in transportation issues in their community. Congressman Blumenauer has expressed interest in implementing the national model once it has been completed.
- We selected the project Disseminating the Sustainable City Year Program (SCYP) Educational Model to UTC Campuses in the third round of NITC funding. This project

intends to expand upon the success of the SCYP by supporting universities across the country to implement the program. The SCYP educates local politicians, citizens and agency staff on the components and benefits of livable communities. The expansion of the program will support the development of citizen leaders in communities across the United States.

- Our programmatic scoring criteria gave higher points to projects that actively engage external partners and addressed equity and diversity issues. Partly as a result, one project from our second round focus on equity: Is HUD Affordable Housing Really Affordable?
- Three of our round one funded projects focus on equity: (1) Understanding the Transit-Dependent Population; (2) Assessing Transit Fare Equity in Utah Using a Geographic Information System; and (3) Latino Immigrant Communities and Equity in Transit Oriented Development.

Leadership

- **Shape national & international conversations on transportation research and education.**
 - NITC staff is helping to shape a new TRB training initiative headed by the recently-formed Task Force ABG05T, Ahead of the Curve: Mastering the Management of Transportation Research. The mission of the Task Force is to develop a TRB training program that enhances the knowledge, skills, and abilities of those who manage transportation research programs and innovation activities.
 - NITC staff are active in the AASHTO-RAC liaison group.
 - Two NITC staff attended the annual CUTC meeting in Lincoln, NE in June of 2014.
 - NITC staff met with Assistant Secretary Greg Winfree in June 2014 to discuss innovation implementation of bicycle and pedestrian infrastructure and related research. As a result, NITC is now preparing a white paper on pedestrian and bicycle safety research, to be used by OST-R.
- **Serve on national committees and panels.**

Faculty members and students at the four NITC member campuses currently serve on 32 TRB committees/task forces and nine NCHRP/SHRP2/NCFRP/TRB panels.
- **Respond to needs of practitioners and policymakers.**

NITC was involved with and sponsored the Oregon Active Transportation Summit on April 21st and 22nd, 2014. The Summit was two days, the first being a conference and the second being trainings and tours. NITC staff hosted a training in partnership with the National Association of City Transportation Officials (NATCO). The NACTO trainings

were the Urban Bikeway Design and the Urban Street Design. Eighty-three practitioners attended the trainings and NITC provided 6 AICP and ITE credits for each training.

Education and Workforce

- **Offer degrees and courses in multiple disciplines.**

The four NITC campuses continue to offer 18 degrees in transportation and closely related fields.

- **Provide experiential learning.**

Our campuses continue to incorporate access to community partners and employment opportunities in a number of ways. Examples during this reporting period include the following:

The University of Utah student group, Point B, in partnership with the local Women's Transportation Seminar (WTS) chapter, delivered transportation curriculum to a dozen middle school girls at the Salt Lake Science and Technology Academy. During the spring semester, the university and middle school students attended an all-day seminar focusing on the planning, engineering and construction of Salt Lake City's first streetcar.

The University of Oregon student group, LiveMove, designed and supported funding for a downtown corridor project known as the 13th Avenue Downtown Corridor Plan. The plan received press in local and regional news sources and won an award from the Oregon chapter of the American Planning Association.

The Oregon Institute of Technology has seen an increase in the number of students in the computer systems engineering technology program focusing on transportation for their junior project. Three students have been working on an unmanned aerial drone to collect traffic data via aerial photography. Students at Oregon Tech have also been training for the ITE Traffic Bowl with staff from Kittelson & Associates. In the spring of 2014, students spent an afternoon in the Kittelson office in Bend, Oregon to study with the staff engineers.

At Portland State University, NITC staff was approached by WTS International to help set up a student chapter. The student chapter was formed and hosted a kick-off event with a focus on connecting students with internships with partner practitioners. The formation of the new WTS student chapter was highlighted at the annual WTS International conference held in May in Portland.

- **Attract and support undergraduate and graduate students.**

Since the fall of 2012, we've awarded funding to research projects to support undergraduate students. Each student who receives a NITC scholarship develops a research product (such as a thesis) that fits within the NITC themes. We will again

solicit applications in the fall of 2014 to fund student research but the RFP will include a strong equity focus to increase diversity on research projects.

During the last reporting period we solicited proposals for a dissertation fellowship. We awarded one fellowship to Portland State University PhD. candidate, Alex Bigazzi for his Bicyclists' Uptake of Traffic-Related Air Pollution: Effects of the Urban Transportation research.

Student groups were active on each campus. The students groups continue to grow and host events. Examples during this reporting period include the following:

At Portland State University, STEP (Students in Transportation Engineering and Planning) continued activities involving about 50 graduate and undergraduate students in Civil and Environmental Engineering, Urban Studies and Planning, and Public Health. The STEP group hosted many successful events including a Winter Social, TRB Aftershock, 4th Annual Urban Olympics and a writing workshop. There is also overlap between STEP leadership and the founders of the new PSU WTS chapter.

At University of Oregon, LiveMove members worked to promote active transportation by organizing a weekly "walking school bus" for Adams Elementary in Eugene, Oregon. The LiveMove members are also evaluating the programs efficacy at encouraging more students to walk to school.

University of Utah continues to expand their interdisciplinary group, Point B, formed as a result of the NITC student group funds. They're currently working with the ITE student chapter on combining resources and membership. Many members of the Point B group participated in a student research conference where they presented on their NITC funded research.

Oregon Tech's student group is their ITE chapter. Three member of the student group traveled to South Dakota for the Western/Midwestern ITE Annual Member Meeting and five students attended the Western District ITE Student Leadership Conference. Further, Oregon Tech students help promote their university and attract undergraduate students to study transportation. In February 2014, undergraduate students toured with students from Medford High School through Oregon Tech's traffic simulator and pavement design labs.

NITC worked with Rutgers University and WTS International to develop and implement a Challenge Activity at the WTS TransportationYou Youth Summit in Washington, D.C on from June 24th through 29th, 2014. The Youth Summit is an event aimed at encouraging high school girls to pursue a career in transportation. We worked closely with UTC staff at Rutgers University on a 3-day Challenge Activity focusing on Livable

Communities. Three NITC staff traveled to Washington, DC to implement the curriculum at the Youth Summit. The high school students were exposed to transportation research, livable community ideas and practices and women working in the transportation field.

- **Sponsor a student conference.**

We will plan and host a student focused daylong event in 2015. Also, we will be coordinating with the Region X UTC regarding their student conference in 2014-15.

- **Educate professionals.**

NITC was involved with and sponsored the Oregon Active Transportation Summit on April 21st and 22nd, 2014. NITC staff supported a NACTO training for 86 practitioners on April 22nd. These courses are discussed in detail in the *Leadership: Respond to needs of practitioners and policymakers* section.

NITC kicked off a 2014 professional development schedule with 5 webinars on NITC funded research this spring. Over 500 people attended the webinars. The webinar subjects included the following:

- We are Traffic: Creating Robust Bicycle and Pedestrian Count Programs
- Advances in Estimating the Transportation Impact of Development for Urban Locations
- E-Bikes: Generating the New Wave of Cyclists
- Working to Improve Pedestrian Safety in Oregon
- Health Impact Assessment (HIA) in Transportation Planning

Each Friday during the quarter, Portland State University holds a Friday Transportation Seminar that is open to the public. We do a live webcast of the event. The winter and spring seminar had 325 professionals at either the in-person event or the live webcast.

Technology Transfer

- **Move research into practice.**

Over 12 practitioners scored 23 NITC round 3 proposals. When practitioners are engaged in the proposal and final report review stages of the NITC process, a stronger understanding of NITC's work and research priorities is developed among transportation professionals.

The NITC round 1 project, Making Streets into Complete Streets: An Evidence Based Design Manual is a technology transfer project. The design manual, called Rethinking Streets: An Evidence-Based Guide to 25 Complete Street Transformations, has been completed and draws upon research from previous OTREC projects, as well as other research. Over 900 copies of the book have been distributed and NITC staff has shipped

400 copies of the design manual to practitioners across the country. The design manual is available on the NITC website and has been downloaded 330 times.

- **Inform researchers.**

The technology transfer section of each proposal includes ideas from the PI on how they will share results with other researchers. For example, researchers reported 52 presentations on NITC projects at conferences and events over the last year.

- **Use innovative technologies to communicate research results.**

We continue to work on our website architecture and a new content management system for NITC that works with the OTREC site. We have posted the pdf of the Rethinking Streets design guide along with every other product produced for a NITC funded project. We use our social media resources such as Twitter and Facebook to bring awareness to the release of a report or highlighted produce. We continue to edit our new database management system to streamline the process for proposal submission, reviews, awards, progress reports and final report submission. The database system was launched in January of 2014 and was used in our round three proposal and review process. As noted above, we have offered five webinars and several live and archived webcasts of seminars.

Collaboration

- **Collaborating within our consortium.**

The Executive Committee of NITC met monthly via conference calls during the reporting period and in person at the June 17, 2014 Executive Committee meeting in Klamath Falls, OR.

External collaboration.

NITC staff continue to develop a relationship and collaboration with WTS International. The partnership is referenced in the *Education and Workforce* section.

The pooled-fund project referenced in *Research* section demonstrate strong partnerships with a number of agencies in Oregon, Austin, Texas and Boulder, Colorado.

The NITC Executive Committee is currently reviewing the role of the Advisory Board. NITC staff and Executive Committee are evaluating the existing partners and may add additional organizations with a national focus. Currently, the NITC Advisory Board membership is as follows:

Michael Baltes, Federal Transit Administration
Joel Volinski, CUTR, University of South Florida

Robert Burchfield, City of Portland
James Christian, FHWA (ex-officio)
Tyler Deke, Bend MPO
John Frece, US EPA
Matthew Hardy, AASHTO
Susan Herbel, Cambridge Systematics
Michael Hogle, Portland Metro
Craig Honeyman, League of Oregon Cities
Robin Hutcheson, Salt Lake City
Cameron Kergaye, Utah DOT
Wayne Kittelson, Kittelson & Associates
Ted Knowlton, Wasatch Front Regional Council
Alan Lehto, TriMet
Jana Lynott, AARP
Cathy Nelson, Oregon DOT
Leni Oman, Washington State DOT
Sandra Rosenbloom, Urban Institute
Gabe Rousseau, FHWA (ex-officio)
Brian Saelens, Seattle Childrens' Hospital
Tom Schwetz, Lane Transit District
Ted Trepanier, INRIX
Yinhai Wang, PacTrans, University of Washington
Johanna Zmud, RAND

- How have the results been disseminated?

The NITC communications director works with each of the PIs to create a plan on reporting dissemination. As of the end of this reporting period, projects from the first round of funding are 90% complete. Projects that are completed are going through a peer review process. Final reports and associated materials are made available on the PI page and final report page of the OTREC website.

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

Expected highlights for the next 6 month reporting period include:

- Publish and promote all NITC round 1 final reports
- Organize, promote and host the 6th Oregon Transportation Summit
- Plan and host 12 days of professional development for academics and practitioners
- Release an RFP for a second round of Small Starts funds

2. PRODUCTS: What has the program produced?

Publications, conference papers, and presentations

Researchers from the NITC projects reported 52 presentations about those projects at conferences and events over the last year. NITC researchers also reported that nearly 2,700 people were in attendance for these presentations.

Researchers also report 19 conference papers on NITC projects.

Thirty-six projects were funded through NITC round one, two and the small starts program. As of the end of this reporting period, six final reports have been published and seven are currently undergoing review and editing. The five final reports are listed below:

- Assessing Transit Fare Equity in Utah Using a Geographic Information System, Steven Farber, University of Utah
- Effect of Light-Rail Transit on Traffic in a Travel Corridor, Reid Ewing, University of Utah
- Latino Immigrant Communities and Equity in Transit Oriented Development, Gerardo Sandoval, University of Oregon
- Lessons from the Green Lanes: Evaluating Protected Bike Lanes in the U.S., Chris Monsere, Portland State University
- Racial Bias in Driver Yielding Behavior at Crosswalks, Kimberly Kahn, Portland State University
- Rethinking Streets: An Evidence-Based Guide to 25 Complete Street Transformations, Marc Schlossberg, University of Oregon

Website(s) or other Internet site(s)

The NITC website is located here: <http://otrec.us/NITC>.

Technologies or techniques

Students at Oregon Tech created an application to collect travel data at intersection. The app is called "Traffic Count" and available on GooglePlay.

Inventions, patent applications, and/or licenses

Nothing to report for this period.

Other products

Nothing to report for this period.

3. PARTICIPANTS & OTHER COLLABORATING ORGANIZATIONS: Who has been involved?

What organizations have been involved as partners?

The members of the consortium include Portland State University, University of Oregon, Oregon Institute of Technology, and University of Utah. Each NITC funded project is required to have 100% match. The organizations providing match appear in Table 1

Table 1: Partner Organizations

Match Partner	Type	Financial Support	In-Kind Support	Facilities	Collaborative Research	Personnel Exchanges
1000 Friends of Oregon	Non-profit/Foundation		X			
Bend, OR MPO	Regional government	X				
Bike Belong	Non-profit/Foundation	X				
City of Austin, TX	Local government	X				
City of Bend, OR	Local government	X				
City of Boulder, CO	Local government	X				
City of Flagstaff, AZ	Local government		X			
City of Meza, AZ	Local government		X			
City of Portland, OR	Local government		X		X	
City of Salem, OR	Local government	X				
Conscious Commuter	Private industry		X			
Drive Oregon	Non-profit/Foundation	X				
ESRI, Inc	Private industry		X			
Federal Highway Administration	Federal government	X				
Intel	Private industry		X			
KersTech Vehicle Systems	Private industry		X			
King County Metro	Regional government	X				
Lane County MPO	Regional government	X				
Lane Transit District	Transit agency	X				
Metro	Regional government	X	X		X	
Mountainlands Association of Governments	Regional government		X		X	
National Association of Realtors	Non-profit/Foundation	X				
Northern Arizona University	University		X			
Oregon Department of Land Use and Conservation	State government		X			
Oregon Department of Transportation	State DOT	X	X		X	X
Oregon Environmental Council	Non-profit/Foundation		X			

Match Partner	Type	Financial Support	In-Kind Support	Facilities	Collaborative Research	Personnel Exchanges
Oregon Institute of Technology	University		X			
Oregon Leadership in Sustainability (UO)	University	X				
Portland State University	University	X	X			
Provo City	Local government	X				
Regional Transportation Commission of Southern Nevada	Regional government	X				
Regional Transportation Commission of Washoe County	Regional government	X				
Robert Wood Johnson Foundation	Non-profit/Foundation		X			
Transportation for America	Non-profit/Foundation	X				
Rensselaer Polytechnic Institute	University		X			
Rowell Brokaw Architects	Private industry	X	X		X	
Salt Lake County	Local government	X				
SFMTA Municipal Transportation Agency	Local government		X			
Sustainable Cities Initiative (UO)	University	X				
Toole Design	Private industry		X			
TriMet	Transit agency	X	X		X	
University of Minnesota	University	X				
University of North Carolina, Chapel Hill	University		X			
University of Oregon (UO)	University	X	X			
University of Utah	University	X	X			
Utah Transit Authority	Transit agency	X	X		X	
Wasatch Front Regional Council	Regional government	X	X			
Washington Department of Transportation	State DOT	X				
Washington Metropolitan Area Transit Authority	Transit agency	X				

Have other collaborators or contacts been involved?

During the Pooled-Fund process, NITC staff communicated and collaborated with numerous agency representatives across the country regarding data management issues and needs. These agency representatives include the Minnesota and Colorado departments of Transportation, Boulder County, and City of Austin.

4. IMPACT: What is the impact of the program? How has it contributed to transportation education, research, and technology transfer?

What is the impact on the development of the principal discipline(s) of the program?

In the two months following the release of the final report “Lessons from the Green Lanes: Evaluating Protected Bike Lanes in the U.S.” the project's Web page attracted more page views than any other page on our UTC's website, even the home page. More than 1,800 people downloaded the report in one month. More than 20 print and online media outlets devoted articles to the research, including Time, the Chicago Sun-Times and The Oregonian.

The NITC project, Making Streets into Complete Streets: An Evidence Based Design Manual is a technology transfer project. The design manual, called Rethinking Streets: An Evidence-Based Guide to 25 Complete Street Transformations, has been completed and draws upon research from previous OTREC projects, as well as other research. Over 900 copies of the book have been distributed and NITC staff has shipped 400 copies of the design manual to practitioners across the country. The design manual is available on the NITC website and has been downloaded 330 times.

The University of Oregon program, Oregon Leadership in Sustainability (OLIS), developed a Transportation Sustainability Class. A core curriculum on sustainable transportation was created. The course emphasized applied interdisciplinary transportation solutions that future community leaders in the sustainability field will need to know to be successful. The pilot class was taught in the fall of 2013 and continues to be part of the core curriculum of the OLIS program and will be offered yearly.

What is the impact on the development of transportation workforce development?

By supporting students through the funded research projects, scholars program, and the student groups, we are expanding the number of students interested in transportation as a career and exposing them to the interesting and rewarding aspects of how transportation can help create livable communities. Through our reporting process, we are collecting the names and contact information of all students supporting through these programs. Therefore, we will be able to track their experience after graduation.

An example of success includes the informal partnership formed between the Oregon Institute of Technology and Kittelson & Associates. Students at Oregon Tech have trained for the ITE Traffic Bowl with staff from Kittelson & Associates. In the spring of 2014, students spent an afternoon in the Kittelson office in Bend, Oregon to study with the staff engineers. The result of the partnerships includes a hire of the student group president and multiple internships.

Further, at Portland State University, NITC staff assisted students and WTS International to set up a student chapter. Students were connected with internships with partner practitioners.

What is the impact on physical, institutional, and information resources at the university or other partner institutions?

Nothing to Report for this period.

What is the impact on technology transfer?

We have implemented a system on our website to track who downloads our reports and survey those users regarding the usefulness and impacts of the research on their work.

NITC kicked off a 2014 professional development schedule with 5 webinars on NITC funded research this spring. Over 500 people attended the webinars. The webinar subjects included the following:

- We are Traffic: Creating Robust Bicycle and Pedestrian Count Programs
- Advances in Estimating the Transportation Impact of Development for Urban Locations
- E-Bikes: Generating the New Wave of Cyclists
- Working to Improve Pedestrian Safety in Oregon
- Health Impact Assessment (HIA) in Transportation Planning

What is the impact on society beyond science and technology?

Nothing to Report for this period.

5. CHANGES/PROBLEMS

Changes in approach and reasons for change

Nothing to Report for this period.

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

Nothing to Report for this period.

Changes that have a significant impact on expenditures

Nothing to Report for this period.

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

Nothing to Report for this period.

Change of primary performance site location from that originally proposed

Nothing to Report for this period.

Additional information regarding Products and Impacts

Nothing to Report for this period.