

Program Progress Performance Report for University Transportation Centers

U.S. Department of Transportation
Research and Innovative Technology Administration
Federal Grant No. DTRT12 G UTC04

Project Title: Southeastern Transportation, Research, Innovation Development and Education Center
(STRIDE)

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Submission Date: August 25, 2015

DUNS #: 019361885
EIN #: 59-6002052

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Project Grant Period: 1/1/2012 - 1/31/2016

Reporting Period End Date: July 31, 2015

Reporting Term, Quarterly: PPPR #7



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Accomplishments

What are the major goals of the program?

The STRIDE Center is devoting its energies to three major areas that are deemed critical in Region 4: safety, livable communities and economic competitiveness. More specifically, the major goals of the Center are:

- a) To develop, implement and maintain a comprehensive research program that addresses critical needs related to safety, livable communities and economic competitiveness
- b) To serve as the focal point for transportation research, education and outreach in the region
- c) To strengthen the collaboration between the partner universities as well as between the consortium and federal, state, and local agencies
- d) To develop ties with other University Transportation Centers (UTCs) and USDOT's research clusters to create opportunities for collaborative activities across centers
- e) To disseminate research results to government, academia and private sectors through publication in peer-reviewed journals, conference papers and presentations at transportation-related industry events
- f) To establish additional communication mechanisms, including the use of social media, by which important research findings are made available to researchers and others with an interest in transportation matters
- g) To utilize research activities to promote transportation-related education as well as careers and employment opportunities
- h) To support and encourage the identification, development, and implementation of inventions and discoveries with the potential to address challenges in the core focus areas.

What was accomplished under these goals?

Accomplishments are listed below under each of the program's major goals:

- a) To develop, implement and maintain a comprehensive research program that addresses critical needs related to safety, livable communities and economic competitiveness**

Accomplishments:

In Year 1 (2012) of the STRIDE Center, a total of 19 research projects were competitively awarded, including five K-12 Workforce Development (WD) projects. In Year 2 (2013) of the STRIDE Center, a total of 11 research projects were competitively awarded, including four K-12 WD projects. A set of tables beginning on page 3 summarizes the status of each project. Reports for all completed projects are posted on the STRIDE website at:

<http://www.stride.ce.ufl.edu/completed-projects>.

All selected projects have a technology transfer component, and we continue to monitor those activities as described in progress reports. We have reached out to the lead researchers of each

project to discuss additional technology transfer opportunities such as webinars or workshops. So far, two webinars and a workshop have been offered and two more are under development (details are provided beginning on page 5 under “STRIDE Technology Transfer Program.”)

YEAR 1 PROJECTS (2012)		
No.	Research Project Title	STATUS
1	Emissions Modeling and Integration into Traffic Micro-simulation	Draft report peer-reviewed. Awaiting delivery of final report
2	A Regional Land-use Transportation Decision Support Tool for Mississippi	Draft report peer-reviewed. Awaiting delivery of final report
3	Engineering: It’s for Girls Too!	COMPLETED
4	Empirically-Based Performance Assessment and Simulation of Pedestrian Behavior at Unsignalized Crossings	COMPLETED
5	Quantifying the Costs of School Transportation	COMPLETED
6	Towards a Holistic Understanding of Quality of Life: An Analysis of Activity-Travel Patterns on Non- Mid-week Days	In progress
7	Development of Pedestrian and Bicycle Transportation Course Modules	COMPLETED
8	Consequence Based Route Selection for Hazardous Material Cargo: GIS-Based Time Progression of Environmental Impact Radius of Accidental Spills	In progress
9	Comparative Analysis of Dynamic Pricing Strategies for Managed Lanes	COMPLETED
10	Investigation of ATDM Strategies to Reduce the Probability of Breakdown	Draft report peer-reviewed. Awaiting delivery of final report
11	Development of Graduate Level Course on Sustainable Pavements	COMPLETED
12	Automated Sidewalk Quality and Safety Assessment System	Draft report peer-reviewed. Awaiting delivery of final report
13	Engaging Engineering Students with Transportation Safety: an Educational Module	COMPLETED
14	Comparative Analysis of Dynamic Pricing Strategies for Managed Lanes	Draft report peer-reviewed. Awaiting delivery of final report
15	A Naturalistic Driving Study Across the Lifespan	COMPLETED
16	Development of Educational and Professional Training Modules on Green/Sustainability Design and Rating Systems for Neighborhood Development and Transportation	Draft report peer-reviewed. Awaiting delivery of final report

17	Analyzing the Impact of Carbon Regulatory Mechanisms on Supply Chain Management	COMPLETED
18	Developing a New Course for Public Transportation Education	Draft report peer-reviewed. Awaiting delivery of final report
19	Signalized Intersection Simulation Program for Education	In progress

YEAR 1 WORKFORCE DEVELOPMENT PROJECTS (2012)

No.	Project Title	STATUS
1	LEGO Robot Vehicle Afterschool Workshops: Transportation Engineering Problem Solving (Modules 1-5)	COMPLETED
2	K-12 Workforce Development in Transportation Engineering at FIU	In progress
3	Transportation Workforce Development at UAB	COMPLETED
4	Family Engineering Night STRIDE Proposal for K-12 Workforce Transportation Workforce Development (at MSU)	COMPLETED
5	K-12 Workforce Development in Transportation Engineering at UF	COMPLETED

YEAR 2 PROJECTS (2013)

No.	Research Project Title	STATUS
1	Teaching Schoolchildren Pedestrian Safety: A Pragmatic Trial Using Virtual Reality	COMPLETED
2	Dynamic Traffic Control Interventions for Enhanced Mobility and Economic Competitiveness	In progress
3	Livability Performance Measures to Transportation Plans and Projects	COMPLETED
4	Signal Timing Optimization with Consideration of Environmental and Safety Impacts	In progress
5	Engineers Change the World: A Hands-on Workshop for 13- to 18-Year-Old Girls	COMPLETED
6	GIS-Based Instructional Tool for Crash Prediction Methods	In progress
7	School Transportation: Development of an Education Module	In progress
8	On-Board-Diagnostics (OBD) Data Integration into Traffic Microsimulation for Vehicle-Specific Fuel Use and Emissions Modeling and In-Vehicle App Testing	In progress
9	Investigating the Effect of Drivers' Body Motion on Traffic Safety	Draft report peer-reviewed. Awaiting delivery of final report
10	Distracted Driving - It Is Not Always a Choice	In progress
11	Using Crowdsourcing to Prioritize Bicycle Route Network Improvements	In progress

YEAR 2 WORKFORCE DEVELOPMENT PROJECTS (2013)		
No.	Project Title	STATUS
1	LEGO Robot Vehicle Afterschool Workshops: Transportation Engineering Problem Solving (Modules 1-5)	Draft report peer-reviewed. Awaiting delivery of final report
2	K-12 Workforce Development Activities at NCSU	COMPLETED
3	Engaging in Engineering Initiative with Centennial Elementary School at GaTech	Draft report peer-reviewed. Awaiting delivery of final report
4	K-12 Workforce Development Activities at UAB	COMPLETED
5	K-12 Workforce Development Activities at UF	Draft report peer-reviewed. Awaiting delivery of final report

- b) To serve as the focal point for transportation research, education and outreach in the region

Accomplishments:

STRIDE Center Co-Sponsors the 3rd Annual UTC Conference for the Southeastern Region

The 3rd Annual UTC Conference for the Southeastern Region was hosted by the University of Alabama at Birmingham (UAB) with collaboration from Mississippi State University (MSU) on March 26-27, 2015, at the Hyatt Regency – Wynfrey Hotel in Birmingham, Alabama. The STRIDE Center co-sponsored this conference. This series of conferences was initiated by STRIDE in 2013, with the intent to enhance collaboration among the academic community as well as the private and public sector agencies in the Southeastern region. Additional information is provided in the 2015 conference website: <http://www.ncitec.msstate.edu/2015-utc/>.

STRIDE Technology Transfer Program

The STRIDE Center has embarked on a mission to produce webinars and workshops based on center products. STRIDE Director Dr. Lily Elefteriadou, reached out to PIs who had completed or nearly completed projects to gauge interest. Conference calls were held and plans were made to engage in various types of technology transfer platforms. The STRIDE Center expects to produce and host additional webinars and workshops in Fall 2015. Below is a list of the activities related to this effort:

- 1. Webinar on Performance Measures in Transportation, June 11, 2015 via Adobe Connect**

This webinar was developed to showcase the STRIDE - sponsored project titled “Livability Performance Measures to Transportation Plans and Projects” by Leigh Blackmon Lane, Senior Research Associate, North Carolina State University (NCSU). The recording of this webinar is available here:

<https://www.youtube.com/watch?v=P8FI8Kggrx4>

Presenters were:

- a. Jody McCullough, Planning Office, Federal Highway Administration (FHWA)
Model Long Range Transportation Plans: A Guide for Incorporating Performance-Based Planning
- b. Leigh Blackmon Lane, Senior Research Associate, North Carolina State University (NCSU)
Selecting Performance Measures as Part of the Transportation Plan Visioning Process: Lessons Learned from Five Workshops
- c. Doug McLeod, Mobility Performance Measures Manager, Florida Department of Transportation (FDOT)
Florida’s Mobility Performance Measures Program

2. STRIDE Educational Products Showcase, June 18, 2015

This webinar was developed to showcase the STRIDE - sponsored projects related to educational materials developed to support university curricula. The recording of this webinar is available here:

<http://www.transportation.institute.ufl.edu/?p=4026>.

The presenters and a summary of their corresponding course materials is provided below:

Dr. Jeff LaMondia, Assistant Professor, Auburn University

Presentation Title: Public Transportation Education Course Module

(for graduate and undergraduate students in civil engineering)

The project on which this presentation was based developed public transport modules for two unique courses: a week-long series in an upper-level undergraduate course (e.g. Introduction to Transportation) and a complete semester-long graduate course (e.g. Transit Planning and Operations). The modules are designed to be easily applied by instructors with limited experience in the transit industry, and individual modules can be incorporated into existing courses as needed. Important topics covered in the modules were identified through a series of surveys to practitioners (transit agency staff, metropolitan planning organization personnel, city government employees, and transportation consultants, representing a range of organization sizes and geographic regions) and current university-level educators (from across the country). Topics included in the modules are: collecting data to measure transit performance, quantifying changes in capacity and reliability caused by changes in ITS and right-of-way, quantifying route-level transit service characteristics, describing factors

influencing transit ridership and predicting demand for service in a region, scheduling vehicles and crews to maximize transit productivity, and selecting transit routes that meet the needs of the ridership.

Dr. Daniel Rodriguez, Professor, UNC Chapel Hill

Presentation Title: Pedestrian and Bicycle Transportation Course Modules

(for undergraduate students in civil engineering, planning and environmental studies)

This presentation covered the contents and evaluation of three 50-minute teaching modules for undergraduate students (civil engineering, planning, environmental studies) on planning and design for pedestrians and bicyclists (available at http://www.pedbikeinfo.org/training/courses_short.cfm). The modules are: 1) Planning for Pedestrians and Bicycles; 2) Pedestrian and Bicycle Facility Design; and 3) Pedestrian and Bicycle Data and Performance. Each of the educational modules contains presentation slides, speaker notes for instructors, references, and recommended additional readings. The third module also contains a mini assignment or capstone case and a grading key for instructors, bringing together the concepts presented in the three previous modules. Instructors can choose between one, two, or all three modules. Modules were tested and evaluated by students at Auburn University enrolled in a junior-level introductory Transportation Engineering course. Since being made available to the public in August 2013, the materials were downloaded more than 120 times by individuals affiliated with educational and non-educational institutions. Although the main use of the modules is educational and training activities, they have also been used for advocacy and practice.

Dr. Scott Washburn, Professor, University of Florida

Presentation Title: Signalized Intersection Simulation Program for Education

(for undergraduate students)

This presentation focused on the results of a STRIDE-funded project which developed a signalized intersection microscopic simulation program that can lead to more efficient and effective learning of queuing theory and signalized intersection operations and analysis than traditional commercial simulation programs. With a well-designed signalized intersection simulation program that is focused on education and considers pedagogical issues, student interaction with the program through active-learning exercises will allow them to easily visualize the relationship between the various inputs (traffic demand, phase sequence, phase times, etc.) and performance measures (delay, queue length, etc.), which should lead to more efficient and effective student learning.

Dr. Richard Willis, Assistant Research Professor, Auburn University

Presentation Title: Sustainable Pavements

(for graduate students and transportation professionals)

Sustainability is a common interdisciplinary theme being stressed throughout not only academia, but in governmental affairs and community living. The desire of individuals to not only use resources responsibly but to also have a positive economic and social impact on society through choices, has encouraged numerous individuals to become more aware of the direct impact their choices

make on the world-at-large. While sustainability has been defined numerous ways, the most commonly used phrasing of this term means, that we don't compromise the future through our actions today. In the field of pavements, the goal of sustainability is lofty, and one must consider the entire life-cycle of the pavement which includes raw material acquisition, production, construction, use, and end of life. This course teaches the need to emphasize sustainable, energy-efficient designs for construction of roads and streets, particularly in an urban environment. Participants learn to use standard and innovative test procedures to measure the ability of pavements to reduce the community carbon footprint, contribute to noise reduction, improve driver safety, and conserve natural resources and money through recycling.

3. Active Traffic Management – Workshop Sponsored By STRIDE UTC at the i3 Transportation Showcase, Orlando, Fla. (Hosted by ITS/ITE)

This workshop was offered to synthesize STRIDE-sponsored research related to freeway active traffic management strategies. It was hosted by a joint meeting of the ITE, ITS, and IMSA. The title and content of the session are provided below.

Recent Findings in Active Traffic Management on Freeway (By Dr. Mohammed Hadi of FIU and Dr. Lily Elefteriadou of UF)

- Principles of traffic breakdowns
- ATM strategies to address breakdown
- A tool to assess breakdown to support agency decisions
- Approaches to set managed lane pricing.

Educational Projects:

The table below provides a list of the educational products produced by STRIDE-funded projects to-date. STRIDE-funded educational projects will be posted as they are completed at the following website: <http://www.stride.ce.ufl.edu/course-materials-developed-by-stride>.

Project Title	Product
Engaging Engineering Students with Transportation Safety: An Educational Module (STRIDE 2012-085S)	Course Website: http://ergo.research.ise.msstate.edu/stride-classroom-module
Development of Pedestrian and Bicycle Transportation Course Modules (STRIDE Project Number 2012-028s)	Course Website: www.pedbikeinfo.org/training/courses.cfm
Development of Graduate Level Course on Sustainable Asphalt Pavements (STRIDE Project Number 2012-049s)	Course Website: http://eng.auburn.edu/online/professional-development/course-listing/civil-structural.html

Transportation K-12 Workforce Development 2012 at FIU, GaTech, MSU, NCSU, UAB, and UF	K-12 Workforce Development projects at FIU, GaTech, MSU, NCSU, UAB, and UF have yielded lesson plans and information on how to create activities that engage school-age children in engineering and transportation. Information on these activities can be found at: http://stride.ce.ufl.edu/workforce-development LEGO® Robot Vehicle Lesson Plans for Secondary Education; Course website: http://www.t2ctt.ce.ufl.edu/Forms.asp?MODE=NEW&Forms_FormTypeID=-17
Developing a New Course for Public Transportation Education	http://stride.ce.ufl.edu/public-transportation-course-modules

WTS Chapter Development in the Southeast: The STRIDE Center continues to encourage student WTS chapter creation in the Southeast. One of the activities planned and organized by STRIDE to achieve this is to encourage participation at the annual UTC Conference for the Southeastern Region, which was held this year in Birmingham, Ala. The WTS student chapters that participated at this year’s conference were from the University of Florida, Florida International University, and Georgia Tech. ITE chapter representatives from GaTech, NCSU, FIU, USC, USF, UAB were present as well. The STRIDE center also continues to be actively engaged with Ms. Tiffany Jackson, Director of Membership and Chapter Development, at WTS International.

c) To strengthen the collaboration between the partner universities as well as between the consortium and federal, state, and local agencies

Accomplishments:

The invited Keynote Speaker at the 3rd Annual UTC Conference for the Southeastern Region in Birmingham, Ala., in March 2015 was Michael F. Trentacoste, the FHWA Associate Administrator for Research, Development and Training and Director of the Turner Fairbank Highway Research Center. During that session, eight UTC directors in attendance from the region provided updates on center activities: Dr. Lily Elefteriadou, STRIDE/UF; Dr. Stephen Richards, STC/U.Tenn; Dr. Michael Hunter, NCTSPM/GaTech; Dr. John Usher, NCITEC/MSU; Dr. Joel Volinski, NCTR/USF; Mr. Kevin Schleith, EVTC/UFC; Dr. Priyanka Alluri, ABC-UTC/FIU; and Dr. John Olusegun Sobanjo, ASAP/FSU.

This conference also included a state DOT/MPO panel moderated by UFTI Director Dr. Lily Elefteriadou titled “Working Together: State DOT/MPO”. The panel included Ms. Kathy Braden of Tennessee DOT, Mr. David Jared of Georgia DOT, and Mr. Scott Tillman of the Regional Planning Commission of Greater Birmingham. The STRIDE Center will continue to actively engage state and local agencies in discussions and potential collaborations within the region to increase their participation and involvement.

d) To develop ties with other UTCs and USDOT's research clusters to create opportunities for collaborative activities across centers.

Accomplishments:

The 3rd UTC Conference for the Southeastern Region was held in Birmingham, Alabama and brought together faculty, students, staff, and transportation professionals from state DOTs, MPOs and other agencies in the region. This conference creates opportunities for collaboration related to research and other activities.

e) To disseminate research results to government, academia and private sectors through publication in peer-reviewed journals, conference papers and presentations at transportation-related industry events

Accomplishments:

The following list contains selected papers and presentations from STRIDE-affiliated researchers in the past six months:

Barmpoutis, A., Sisiopiku, V.P., Zhao, L., and Kondyli, A. (2015). "Computer Assisted Analysis of Drivers' Body Activity Using a Range Camera", accepted for publication in IEEE Intelligent Transportation Systems Magazine, forthcoming.

Decker, J.S., Stannard, S.J., McManus, B., Wittig, S.M.O., Sisiopiku, V.P., and Stavrinou, D. (2015). "The Impact of Billboards on Drivers' Visual Attention: A Systematic Literature Review", Traffic Injury Prevention, Vol. 16, Issue 3, pp. 234-239.

Godbole, M., Rodríguez, D. A., Combs, T., Sisiopiku, V. P., & Schwebel, D. C. (2015, March). Effect of training in virtual reality on children's self-efficacy regarding pedestrian behavior. Poster presented at the 2015 University Transportation Center (UTC) Conference for the Southeastern Region, Birmingham, AL.

Hunter, E., Salamati, K., Elefteriadou, L., Sisiopiku, V., Roupail, N., Phillips, B., and Schroeder, B. (2015). "Driver Yielding at Unsignalized Midblock Crossings", Proceedings of the 94th Transportation Research Board Annual Meeting, Washington, D.C.

Johnston, A., Sisiopiku, V. P., Rodríguez, D. A., Combs, T., Emeira, M., Severson, J., & Schwebel, D. C. (2015, March). Teaching pedestrian safety in virtual reality: A community-university collaboration. Poster presented at the 2015 University Transportation Center (UTC) Conference for the Southeastern Region, Birmingham, AL.

Kim, S., A. Hajbabaie, B. Williams and N. Roupail (2014), "Development of Near-Real Time Performance Measurements for Closed-Loop Signal Systems Using Historical Traffic Data from Existing Loop Detectors and Signal Timing Data", Final Report, Project NCDOT RP-2012-12, October 2014

Mamidipalli, S., Sisiopiku, V.P., Schroeder, B., Elefteriadou, L., and Salamati, K. (2015). "A Probit-based Pedestrian Gap Acceptance Model for Mid-Block Crossing Locations", accepted for publication to the Journal of the Transportation Research Board, forthcoming.

Mamidipalli, S., Sisiopiku, V.P., Schroeder, B., and Elefteriadou, L. (2015). "A Review of Analysis Techniques and Data Collection Methods for Modeling Pedestrian Crossing Behaviors", Journal of Multidisciplinary Engineering Science and Technology, Vol. 2 Issue 2, pp. 225-232.

Mamidipalli, S., Sisiopiku, V.P., Schroeder, B., Elefteriadou, L., and Salamati, K. (2015). "A Probit-based Pedestrian Gap Acceptance Model for Mid-Block Crossing Locations", Proceedings of the 94th Transportation Research Board Annual Meeting, Washington, D.C.

McManus, B. & Stavrinos, D. (2015, March). Do adolescents prioritize advanced vehicle safety features? Presented at 2015 University Transportation Center Conference for the Southeastern Region, Birmingham, AL.

Parr, M.N., Ross, L.A., McManus, B., Wittig, S.M., & Stavrinos, D. (2015, April). Differential impact of personality traits on distracted driving behaviors in teens and older adults. Poster presented at the 2015 UAB Department of Psychology John W. P. Ost Undergraduate Research Competition, University of Alabama at Birmingham, Birmingham, AL. [First place prize in student poster competition]

Parr, M.N., Ross, L.A., McManus, B., Stavrinos, D. (2015, March). Differential impact of personality traits on distracted driving behaviors in teen and older drivers. Poster presented at the 2015 University Transportation Conference for the Southeastern Region. Birmingham, AL.

Pope, C.N., Ross, L.A., & Stavrinos, D. (2015, March). Am I a good driver? Can self-ratings of global driving experience and quality predict risky driving behavior in teen drivers? Poster presented at 2015 University Transportation Center (UTC) Conference for the Southeastern Region. Birmingham, AL.

Pope, C.N., Ross, L.A., McManus, B., Stavrinos, D. (2015, January). Can self-reported executive dysfunction predict increased crash involvement and traffic citations in teen drivers? Poster presented at the 94th annual meeting of the Transportation Research Board. Washington, DC.

Rouphail, N., B. Aghdashi, K. Ko, M. Hadi, S. Kharzaeian (2015), "Flow Allocation at Congested Freeway Ramp Merges", presented at the 94th Annual Transportation Research Board Conference, Washington, D.C., January 11-15, 2015.

Rouse, J., Smith, R., Sessions, M., Combs, T., Rodríguez, D. A., Sisiopiku, V. P., & Schwebel, D. C. (2015, March). Are safety rules and experience sufficient to make children safe pedestrians? Poster presented at the 2015 University Transportation

Center (UTC) Conference for the Southeastern Region, Birmingham, AL.

Schroeder, B., S. Kim, A. Hajbabaie, B. Aghdashi, N. Rouphail, T.J. Song, K. Tambrizi (2015). "Estimating Saturation Headways at Work Zones on Urban Arterials", presented at the 94th Annual Transportation Research Board Conference, Washington, D.C., January 11-15, 2015.

Schroeder, B., N. Rouphail, B. Williams, A. Hajbabaie, B. Aghdashi, S. Kim, K. Tabrizi, and B. Narron (2014), "Delay and User Cost Estimation for Work Zones on Urban Arterials", Draft Final Report, NCDOT Project 2013-09, December 2014.

Schwebel, D. C., McClure, L. A., & Severson, J. (2015, April). Implementing and disseminating virtual reality to train child pedestrians in street-crossing. Paper presented at the Society of Pediatric Psychology National Conference, San Diego, CA.

Schwebel, D. C., Combs, T., Rodríguez, D. A., Sisiopiku, V. P., & Severson, J. (2015, March). Evaluating virtual reality to teach children pedestrian safety: Initial results from a pragmatic trial. Paper presented at the 2015 University Transportation Center (UTC) Conference for the Southeastern Region, Birmingham, AL.

Shen, J., Sisiopiku, V. P., Rodríguez, D. A., Combs, T., Godbole, M., & Schwebel, D. C. (2015, March). The influence of self-efficacy and perceived safety in neighborhood on children's frequency of walking to/from school. Poster presented at the 2015 University Transportation Center (UTC) Conference for the Southeastern Region, Birmingham, AL.

Sisiopiku, V.P., Peters, R.W., and Ramadan, O. (2015). "Introducing Sustainability Design and Assessment Methods into the Civil Engineering Curriculum", Proceedings of the 122nd Annual Conference & Exposition of the American Society of Engineering Education (ASEE), Seattle, WA.

Stavrinos, D., & Schwebel, D. C. (2015, January). Behavioral strategies to understand and prevent pediatric pedestrian injuries. Paper presented at the Transportation Research Board Annual Meeting, Washington, DC.

Song, T.J., S. Kim, B. Williams, A. Hajbabaie, N. Rouphail, G. List, (2015), "A Novel Collision Classification Methodology Based on Temporal Link Speed Data and Congestion Thresholds", presented at the 94th Annual Transportation Research Board Conference, Washington, D.C., January 11-15, 2015.

Wells, H., Rouse, J., Johnston, A., Sisiopiku, V. P., Rodríguez, D. A., Combs, T., & Schwebel, D. C. (2015, March). Associations between self-efficacy and children's pedestrian safety following training. Poster presented at the 2015 University Transportation Center (UTC) Conference for the Southeastern Region, Birmingham, AL.

Wittig, S., Ross, L.A., Stavrinos, D. (2015, March). Comparisons between mother-daughter and mother-son self-reported driving styles. Poster presented at the 2015 University Transportation Center Conference for the Southeastern Region, Birmingham,

AL.

Zheng, Y., Chase, T., Elefteriadou, L., Schroeder, B., and Sisiopiku, V.P. (2015). "Where Do Pedestrians Jaywalk and How Do Drivers React? -- A Study within a Campus Environment", Proceedings of the 94th Transportation Research Board Annual Meeting, Washington, D.C.

f) To establish additional mechanisms, including the use of social media, by which important research findings are made available to researchers and others with an interest in transportation matters

Accomplishments:

We continue to use our website (stride.ce.ufl.edu), Facebook and Twitter pages to announce events, webinars, conference, completed projects and other important information related to STRIDE and other UTC activities.

The STRIDE Center has subscribed to Constant Contact, an online email marketing service to advertise annual reports, completed projects, events, and any other products produced by the Center.

g) To utilize research project activities to promote transportation-related careers and employment opportunities for education and workforce development

Accomplishments:

The STRIDE Center has selected six interns to work with researchers this summer 2015 at STRIDE partner schools as part of the Transportation Research Internship Program (TRIP) funded by the Center. The internship began on May 21, 2015 and ended July 31, 2015. Also this summer, two students funded by the Brazilian Science Mobility Program are interning along with the students at the University of Florida. The students work with STRIDE faculty and graduate students on transportation research projects and are expected to give a presentation at their internship institution at the end of the program. The selected interns are:

- Zoe Becerra, Morehead University/GaTech
Advisers: Dr. Gregory Corso (Morehead University) and Dr. Michael Hunter (GaTech)
- Mario Rojas, Florida International University
Adviser: Dr. Xia Jin, FIU
- Stephen Spana, University of Florida (UF)
Adviser: Dr. Yafeng Yin, UF
- Ethan Stoop, University of Florida (UF)
Adviser: Dr. Scott Washburn, UF
- William Wagner, University of Alabama at Birmingham (UAB)
Adviser: Dr. Despina Stavrinos, UAB

- Tianfa Wu, University of Florida (UF)
Adviser: Dr. Lily Elefteriadou, UF

Interns funded by the Brazilian Mobility Program:

- Bianca Farias de Souza
- Guilherme Moyses Pfeffer

Workforce Development Activities:

The STRIDE Center's K-12 program continues to engage elementary and high school students in five of the eight STRIDE consortium member universities (UF, UAB, FIU, GaTech and NCSU) with activities that teach and engage children in transportation engineering and the general STEM disciplines. Recently, GaTech completed a K-12 STRIDE-funded project where they taught inner city children in the Atlanta, Georgia area how to gather, process and interpret data related to an actual project funded by the Center titled "Automated Sidewalk Quality and Safety Assessment System" (STRIDE 2012-067S).

How have results been disseminated?

1. Information on completed projects is made available to transportation professionals, students and faculty in the public and private sectors via the use of Constant Contact, an email marketing tool.
2. Reports are also posted on the STRIDE website, on the STRIDE newsletter and annual report and in refereed journals.
3. Researchers routinely produce presentations and publications related to STRIDE-funded projects and products.
4. The STRIDE Center continues to showcase ongoing and completed projects at the Annual UTC Conference for the Southeastern Region and at the STRIDE Student Poster Showcase/Competition, which is held at the University of Florida's Reception during the Transportation Research Board's annual meeting in Washington, D.C.
5. Results have been posted on the STRIDE Facebook and Twitter page.

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

1. Continue to create additional technology transfer opportunities such as webinars, workshops and/or short courses based on completed CMS, STRIDE and match research projects.
2. Monitor the remaining ongoing projects from STRIDE 1 and 2 via quarterly reports to ensure they are progressing on schedule, and products and results are disseminated as expected.
3. Monitor the draft final reports from STRIDE 1 and 2 projects, the peer reviews of those reports and the process of receiving and editing the final reports for posting on the STRIDE website, reporting these on the RiP database as completed projects, and providing links to completed PDFs of projects from the TRID/TRIS database.
4. Monitor the K-12 Workforce Development projects via quarterly reports.
5. Continue to publish the STRIDE e-Newsletter twice a year (Spring and Fall), using Constant Contact.

6. Work with the next host of the 2016 UTC Conference for the Southeastern Region (University of Tennessee) and serve as a co-sponsor.
7. Continue to engage in discussions with State DOTs in the region and nationwide for potential collaborations.
8. Continue to engage in discussions with WTS International to create student chapters in the region, and coordinate activities with these chapters as they are created.
9. Continue posting events and products on the STRIDE website, Facebook, and via the use of Constant Contact email marketing tool to advertise the completion of final reports, events, etc.

Products

List any products resulting from the program during the reporting period

- **Webinar on Performance Measures in Transportation Planning, June 11, 2015, via Adobe Connect**
This webinar was designed to provide participants with various resources and tools for practitioners and the community to establish goals and objectives in the transportation planning design process, including monitoring and creating reporting and evaluation methods. The presenters included Jody McCullough of the Federal Highway Administration (FHWA), Leigh Blackmon Lane of North Carolina State University (NCSU) and Doug McLeod, Florida Department of Transportation (FDOT). View the link to the recorded webinar:
<https://www.youtube.com/watch?v=P8FI8Kggrx4>
- **Educational Products Showcase, June 18, 2015, via Adobe Connect**
This webinar focused on graduate and undergraduate course materials developed by STRIDE-funded educational projects. Presenters included Dr. Jeff LaMondia, assistant professor at Auburn University; Dr. Daniel Rodriguez, professor at UNC Chapel Hill; Dr. Scott Washburn, associate professor, University of Florida; and Dr. Richard Willis, assistant research professor, Auburn University. The topics showcased were on bike/pedestrian, sustainable pavements, transportation safety and public transportation. These modules have been designed to be incorporated into undergraduate and graduate courses, and some are suitable for transportation professionals. All materials are posted on the STRIDE website and are free to the public. View the link to the recorded webinar:
<http://www.transportation.institute.ufl.edu/?p=4026>.
- **3rd UTC Conference for the Southeastern Region.** This conference took place on March 26-27, 2015. This year, the conference was hosted by the University of Alabama at Birmingham in collaboration with Mississippi State University. Visit the conference website at
<http://www.ncitec.msstate.edu/2015-utc/>.
- **Public Transportation Course Modules.** Assistant Professors Kari Watkins of Georgia Tech and Jeff LaMondia of Auburn University and Ph.D. student Candace Brakewood have developed public transportation course modules for undergraduate and graduate students. The course website is at: <http://stride.ce.ufl.edu/public-transportation-course-modules>.

Participants and Other Collaborating Organizations

What organizations have been involved as partners?

Organization Name	Location	Contribution
University of Florida	Gainesville, FL	Lead University
Auburn University	Auburn, AL	Partner University
Georgia Institute of Technology	Atlanta, GA	Partner University
Mississippi State University	Mississippi State Univ., MS	Partner University
North Carolina State University	Raleigh, NC	Partner University
University of Alabama at Birmingham	Birmingham, AL	Partner University
University of North Carolina	Chapel Hill, NC	Partner University
Florida Department of Transportation (FDOT)	Tallahassee, FL	Matching funds commitment
Alabama Department of Transportation (ALDOT)	Montgomery, AL	Matching funds commitment
Georgia Department of Transportation (GDOT)	Atlanta, GA	Matching funds commitment
Mississippi Department of Transportation (MDOT)	Jackson, MS	Matching funds commitment
North Carolina Department of Transportation (NCDOT)	Raleigh, NC	Matching funds commitment

Other collaborators

Organization Name	Location	Contribution	Comments
Town of Carrboro (Jeff Brubaker)	North Carolina	Collaboration	
Town of Chapel Hill (Council member Jim Ward)	North Carolina	Collaboration	
Durham-Chapel Hill-Carrboro MPO (Andrew Henry and other staff)	North Carolina	Collaboration	

University of North Carolina Facilities Planning	North Carolina	Collaboration	
Carrboro Bicycle Coalition (Seth Lajeneusse North Carolina and other staff)	North Carolina	Collaboration	
Triangle J Council of Governments (John Hodges Copple and other staff)	North Carolina	Collaboration	
Federal Highway Administration	Washington, DC	Collaboration	
Federal Transit Administration	Washington, DC	Collaboration	
Woman's Transportation Seminar (WTS) International	Washington, DC	Collaboration in the creation of new chapters in the Southeast	Various K-12 workforce development programs for STRIDE Project Number 2012-009S
WTS NC Triangle Chapter	Raleigh, NC	Collaboration	Various K-12 workforce development programs for STRIDE project Number 2012-009S
University of North Florida	Jacksonville, FL	Facilities, collaboration, personnel exchanges	K-12 workforce development program for STRIDE Project Number 2012-009S
21 st Century Community Learning Center of Alachua County	Gainesville, FL	Facilities, collaboration, personnel exchanges	Various K-12 workforce development programs for STRIDE project Number 2012-009S
North Florida WTS Chapter	Jacksonville, FL	Facilities, collaboration, personnel exchanges	Various K-12 workforce development programs for STRIDE

			Project Number 2012-009S
WTS Central Florida Chapter	Orlando, FL	Facilities, collaboration	Various K-12 workforce development programs for STRIDE Project Number 2012-009S
Center for Transportation and the Environment (CTE) at North Carolina State University	Raleigh, NC	Facilities, Collaborative research Personnel exchanges	Various K-12 workforce development programs for STRIDE Project Number 2012-009S
Highway Safety Research Center at North Carolina State University	Raleigh, NC	Facilities, Collaborative research personnel exchanges	For data extraction of injuries and crashes on STRIDE Project Number 2012-022S
Roybal Center for Translational Research on Aging and Mobility, University of Pennsylvania	Philadelphia, PA	Collaborative research, personnel exchanges	The director of the Roybal Center, Dr. Karlene Ball, is a member of the multidisciplinary Advisory Committee for STRIDE research project 2012-095 . The center has a vast expertise in cognitive research aimed to older adults
Safe Routes to School	Federal program, various states	Personnel exchanges, collaborative research on STRIDE project 2012-067S	Assisted in collecting sidewalk data for STRIDE Project Number 2012-067S
Atlanta Regional Commission	Atlanta, GA	Personnel exchanges, Facilities, collaborative research on STRIDE project 2012-067S	Transportation Division, bicycle and pedestrian planning for STRIDE Project Number 2012-067S
City of Atlanta	Atlanta, GA	Personnel exchanges, facilities, collaborative research on STRIDE project 2012-067S	Department of Public Works, Department of Planning and Community

			Development for STRIDE Project Number 2012-067S
Atlanta City Council Sidewalk Task Force	Atlanta, GA	Personnel exchanges, facilities, collaborative research on STRIDE project 2012-067S	Members of the research team on STRIDE Project Number 2013-067S participate in the Atlanta City Council Sidewalk Task Force, which involves attending general meetings and subcommittee meetings related to policy and funding for pedestrian facility maintenance. The full Sidewalk Task Force includes city staff from the department of Public Works and department of Planning, elected officials, and pedestrian advocates.
Atlanta Pedestrian Organization (PEDS)	Atlanta, GA	Personnel exchanges on STRIDE project 2012- 067S	Staff and volunteers at PEDS participated in initial testing of the sidewalk survey instrument and provided feedback that was then incorporated into the instrument before full scale deployment.
Tulane University	New Orleans, LA	Personnel exchanges, collaborative research, financial support	Collaboration and as partial match for petroleum related releases
Cambridge Systematics	Tallahassee, Florida	Anita Vandervalk participates on the STRIDE External Advisory Board	
National Center for Transportation Systems Productivity and	Atlanta, GA	Financial support	Co-sponsors for the UTC Conference for

Management (NCTSPM), Georgia Institute of Technology			the Southeastern Region
National Center for Intermodal Transportation (NCITEC), Mississippi State University	Miss. State, MS	Financial support	Co-sponsors for the UTC Conference for the Southeastern Region
National Center for Transit Research (NCTR), University of South Florida,	Tampa, FL	Financial support	Co-sponsors for the UTC Conference for the Southeastern Region
Centennial Place Elementary School	Atlanta, GA	Facilitates	For K-12 activities
Girl Scouts of Gateway Council, Camp Kateri	Orange Springs, FL	Facilitates	For K-12 activities
Williams Elementary School	Gainesville, FL	Facilities	For K-12 activities
PK Yonge Research School	Gainesville, FL	Facilities	For K-12 activities
Lincoln Middle School	Gainesville, FL	Facilities	For K-12 activities
Mebane Middle School	Gainesville, FL	Facilities	For K-12 activities
Bishop Middle School	Gainesville, FL	Facilities	For K-12 activities
UF - Lawton Chiles Elementary School	Gainesville, FL	Facilities	For K-12 activities
Boone High School	Orlando, FL	Facilities	For K-12 activities
Arlington Middle School	Jacksonville, FL	Facilities	For K-12 activities
Jordan Glen School	Archer, FL	Facilities	For K-12 activities
21st Century Community Learning Center, Alachua County Public Schools	Gainesville, FL	Facilities and Collaboration	For K-12 activities
MSU – St. Martins Middle School, Arthur Watson Elementary School; Jackson County Schools, Mississippi; St. Martins Elementary, Mississippi	Pascagoula, MS and St. Martins, MS.	Facilities	For K-12 activities at Mississippi State University

Centennial Campus Magnet Middle School	Raleigh, NC	Facilities	For K-12 activities at North Carolina State University
Cade Museum	Gainesville, FL	Facilities	For K-12 activities at UF
UF Center for Pre-collegiate Education and Training	Gainesville, FL	Facilities	For K-12 activities at UF
University of North Florida	Jacksonville, FL	Facilities and collaboration	STRIDE K-12 workforce development activities at UF and on STRIDE project 2012-009S
University of Florida LTAP	University of Florida, Gainesville, FL	Personnel exchanges, facilities, collaborative research on STRIDE project 2012-067S	STRIDE K-12 workforce development activities at UF and on STRIDE project 2012-009S
RPCGB - Darrell Howard, Deputy Director of Planning Franchesca Taylor, Active Transportation Planner	Birmingham, AL	Personnel exchanges	
North Carolina Local Technical Assistance Program (NC LTAP)	Raleigh, NC	Personnel exchanges	STRIDE K-12 workforce development activities at UF and on STRIDE project 2012-009S

Impact

What is the impact of the program? How has it contributed to transportation education, research, and technology transfer? (See below)

- What is the impact on the development of the principal discipline(s) of the program?*
Continued focus and increased emphasis on the safety, livability and economic competitiveness for the Southeast region of the U.S.; increased collaboration between the STRIDE partner universities; increased collaboration with the State DOTs in the region; production of educational materials related to the research focus areas; production and delivery of various educational and workforce development activities and programs.
- What is the impact on other disciplines?*

Interdisciplinary collaboration in research projects, education, workforce development and technology transfer. Collaboration between transportation researchers at the partner universities is likely to increase broader collaboration between the universities involved.

- *What is the impact on transportation workforce development?*
Partner universities continue to offer various events and K-12 programs. This reporting period GaTech completed a K-12 STRIDE funded project where they taught inner city children in the Atlanta, Georgia area how to gather, process and interpret data related to an actual project funded by the Center titled “Automated Sidewalk Quality and Safety Assessment System”(STRIDE 2012-067S).
- *What is the impact on physical, institutional, and information resources at the university or other partner institutions?*
There is increased emphasis and awareness of the importance and breadth of transportation at all partner institutions, as well as other collaborating institutions in the region and nationwide. Availability of various products and reports on our website and distribution through social media will enhance the flow of information.
- *What is the impact on technology transfer?*
A third UTC Conference for the Southeastern Region was held in March 2015, hosted by the University of Alabama at Birmingham with collaboration from Mississippi State University. A webinar on Performance Measures in Transportation Planning was hosted by the STRIDE Center via Adobe Connect on June 11, 2015 with 98 people registering for this webinar, which was at full capacity. Another webinar showcasing the STRIDE Center’s Educational Products was held via Adobe Connect on June 18, 2015. Also, a workshop titled “Recent Findings in Active Traffic Management on Freeways” was offered by Drs. Elefteriadou, Hadi, and Roupail at the i3 Transportation Showcase hosted by ITE & ITS in Orlando, Fla., on May 28, 2015.
- *What is the impact on society beyond science and technology?*
Increased collaboration between academic institutions; increased collaboration between academia, public and private sectors; development and implementation of the path from research to technology transfer; development and implementation of workforce development activities.

Changes/Problems

- *Changes in approach and reasons for change:* Nothing to report.
- *Actual or anticipated problems or delays and action 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.

Special Reporting Requirements

(Award-specific reporting requirements)

- Federal Financial Report – This report is prepared by the grants specialist at UF responsible for managing all STRIDE related financial duties.
- Federal Financial Accountability and Transparency Act (FFATA) Sub-award and Executive Compensation Reporting Requirement – This report is prepared by the College of Engineering contracts office.

List of Projects and PIs (STRIDE 2013)

Dynamic Traffic Control Interventions for Enhanced Mobility and Economic Competitiveness

PI: Nagui Roupail, Ph.D., North Carolina State University

Co-PI: Mohamed Hadi, Ph.D., Florida International University

\$150,000

Signal Timing Optimization with Consideration of Environmental and Safety Impacts

PI: Mohamed Hadi, Ph.D., Florida International University

Co-PIs: Lily Elefteriadou, Ph.D., University of Florida

\$120,000

On-Board-Diagnostics (OBD) Data Integration into Traffic Microsimulation for Vehicle-Specific Fuel Use and Emissions Modeling and In-Vehicle App Testing

PI: Scott Washburn, Ph.D., University of Florida

Co-PIs: Christopher Frey, Ph.D., North Carolina State University; Nagui Roupail, Ph.D., North Carolina State University

\$150,000

Using Crowdsourcing to Prioritize Bicycle Route Network Improvements

PI: Jeffrey J. LaMondia, Ph.D., Auburn University

Co-PI: Kari Watkins, Ph.D., Georgia Institute of Technology

\$100,000

Distracted Driving – It is not always a choice.

PI: Mike Hunter, Ph.D., Georgia Institute of Technology

Co-PI: Gregory M. Corso, Ph.D., Morehead State University

\$150,000

GIS-Based Instructional Tool for Crash Prediction Methods

PI: Ilir Bejleri, Ph.D., University of Florida

Co-PI: Siva Srinivasan, Ph.D., University of Florida

\$89,961

Investigating the Effect of Drivers' Body Motion on Traffic Safety

PI: Angelos Barmoutis, Ph.D., University of Florida

Co-PIs: Alexandra Kondyli, Ph.D., University of Florida; Virginia Sisiopiku, Ph.D., University of Alabama at Birmingham

\$132,972

Applying Livability Performance Measures to Transportation Plans and Projects

PI: Leigh Blackmon Lane, Ph.D., North Carolina State University

\$53,000

Engineers Change the World: A Hands-on workshop for 13- to 18-Year-Old Girls

PI: James Martin, Ph.D., North Carolina State University

Co-PI: Nina Barker, University of Florida

\$42,452

Teaching Schoolchildren Pedestrian Safety: A Pragmatic Trial Using Virtual Reality

PI: David Schwebel, Ph.D., University of Alabama at Birmingham

Co-PIs: Daniel Rodriguez, Ph.D., University of North Carolina at Chapel Hill; Virginia Sisiopiku, Ph.D., University of Alabama at Birmingham

\$150,000

School Transportation: Development of an Education Module

PI: Noreen McDonald, Ph.D., University of North Carolina at Chapel Hill

Co-PI: Ruth Steiner, Ph.D., University of Florida

\$71,000

List of Projects and PIs (STRIDE 2012)

(The following projects were selected for funding)

Quantifying the Costs of School Transportation

PI: Noreen McDonald, Ph.D., University of North Carolina at Chapel Hill

Co-PIs: Ruth Steiner, Ph.D., University of Florida; Jeff Tsai, Ph.D., North Carolina State University

\$250,313

Empirically-Based Performance Assessment and Simulation of Pedestrian Behavior at Unsignalized Crossings

PI: Bastian Schroeder, Ph.D., North Carolina State University

Co-PIs: Lily Elefteriadou, Ph.D., University of Florida; Virginia Sisiopiku, University of Alabama at Birmingham

\$315,148

Comparative Analysis of Dynamic Pricing Strategies for Managed Lanes

PI: Jorge Laval, Ph.D., Georgia Institute of Technology

Co-PIs: Yafeng Yin, University of Florida; Yingyan Lou, University of Alabama

\$204,526

Signalized Intersection Simulation Program for Education

PI: Scott Washburn, Ph.D., University of Florida

\$34,212

Investigation of ATDM Strategies to Reduce the Probability of Breakdown

PI: Mohammed Hadi, Ph.D., Florida International University

Co-PI: Lily Elefteriadou, Ph.D., University of Florida

\$190,792

Engaging Engineering Students with Transportation Safety: An Educational Module

PI: Lesley Strawderman, Ph.D., Mississippi State University

\$2,610

A Naturalistic Driving Study across the Lifespan

Co-PIs: Despina Stavrinou, Ph.D. and Lesley Ross, Ph.D., University of Alabama at Birmingham

\$125,071

Development of Educational and Professional Training Modules on Green/Sustainability Design and Rating Systems for Neighborhood Development and Transportation

PI: Robert W. Peters, Ph.D., University of Alabama at Birmingham

Co-PI: Adjo Amekudzi, Ph.D., Georgia Institute of Technology

\$45,809

Developing a New Course for Public Transportation Education

PI: Kari Edison Watkins, Ph.D., Georgia Institute of Technology

Co-PI: Jeffrey LaMondia, Ph.D., Auburn University

\$70,000

Automated Sidewalk Quality and Safety Assessment System

PI: Randall Guensler, Ph.D., Georgia Institute of Technology

\$196,667

Development of Pedestrian and Bicycle Transportation Course Modules

PI: Daniel Rodriguez, Ph.D., University of North Carolina at Chapel Hill

Co-PI: Rod Turochy, Ph.D., Auburn University

\$25,750

Consequence Based Route Selection for Hazardous Material Cargo: GIS-Based Time Progression of Environmental Impact Radius of Accidental Spills

PI: Berrin Tansel, Ph.D., Florida International University

Co-PIs: Adjo Amekudzi, Ph.D., Georgia Institute of Technology; Nasim Uddin, University of Alabama at Birmingham

\$70,000

Analyzing the Impact of Carbon Regulatory Mechanisms on Supply Chain Management

PI: Sandra Eksioglu, Ph.D., Mississippi State University

Co-PI: Joseph Geunes, Ph.D., University of Florida

\$128,629

Engineering: It's for Girls, Too!

PI: James Martin, PE, North Carolina State University

Co-PI: Lily Elefteriadou, Ph.D., University of Florida

\$38,895

A Regional Land Use Transportation Decision Support Tool for Mississippi

PI: Brian Morton, Ph.D., University of North Carolina at Chapel Hill

Co-PIs: John Poros, Ph.D., Mississippi State University; Joe Huegy, Ph.D., North Carolina State University

\$120,380

Towards a Holistic Understanding of Quality of Life: An Analysis of Activity-Travel Patterns on Non-Mid-week Days

PI: Siva Srinivasan, Ph.D., University of Florida

Co-PI: Xia Jin, Ph.D., Florida International University

\$77,790

Development of Graduate Level Course on Sustainable Asphalt Pavements

PI: James Richard Willis, Ph.D., Auburn University

\$47,837

Emissions Modeling and Integration into Traffic Micro-simulation

PI: Scott Washburn, Ph.D., University of Florida

Co-PIs: Nagui Roupail, Ph.D., North Carolina State University; H. Christopher Frey, Ph.D., North Carolina State University

\$251,764

List of Cost Share Projects

Local Technical Assistance Program (LTAP) 2013 and 2014

PIs: Nina Barker, M.S. and Chris LeDew, PE, UFTI/T2 Center

Safety Project Development Capacity for Small Communities in Coordination with Local Technical Assistance Program Center

PIs: Ilir Bejleri, Ph.D. and Siva Srinivasan, Ph.D., University of Florida

Comparison of Methods for Measuring Travel Time at Florida Freeways and Arterials

PI: Lily Elefteriadou, Ph.D., University of Florida

Estimation of Capacities of Florida Freeways

PI: Lily Elefteriadou, Ph.D., University of Florida

Modeling, Implementation, and Validation of Arterial Travel Time Reliability

PI: Lily Elefteriadou, Ph.D., University of Florida

Before and After Implementation Studies of Advance Signal Technologies in Florida

PI: Lily Elefteriadou, Ph.D., University of Florida

Roundabouts and Access Management

PI: Ruth Steiner, Ph.D., University of Florida

Co-PIs: Scott Washburn, Ph.D., University of Florida; Albert Gan, Ph.D., Florida International University

Planning for Incorporating Ancillary Demands in the Next Generation FSUTMS

PI: Siva Srinivasan, Ph.D., University of Florida

Deployment Strategies of Managed Lanes on Arterials

PIs: Yafeng Yin, Ph.D. and Siriphong Lawphongpanich, Ph.D., University of Florida

Lifting HOV/HOT Lane Eligibility and Shoulder Use Restrictions for Traffic Incident Management

PIs: Yafeng Yin, Ph.D. and Lily Elefteriadou, Ph.D., University of Florida

Estimation of Capacities on Florida Freeways

PI: Lily Elefteriadou, Ph.D., University of Florida

Comparison of Methods for Measuring Travel Time at Florida Freeways and Arterials

PI: Lily Elefteriadou, Ph.D., University of Florida

Deployment Strategies of Managed Lanes on Arterials

PIs: Yafeng Yin, Ph.D. and Siriphong Lawphongpanich, Ph.D. (Team is from University of Florida)

Crash Prediction Methods for Freeway Facilities with High Occupancy Vehicle (HOV) and High Occupancy Toll (HOT) Lanes

PI: Siva Srinivasan, Ph.D., University of Florida

Policy Implications of Automated Vehicle Technology

PIs: Siva Srinivasan, Ph.D., Carl Crane, Ph.D., and Ruth Steiner, Ph.D. (Team is from University of Florida)

K-12 Workforce Development Projects

Florida International University, K-12 Workforce Development Activities, 2012

PI: Berrin Tansel, Ph.D.

Mississippi State University, K-12 Workforce Development Activities, 2012

PI Eric Heiselt, Ph.D.

North Carolina State University, K-12 Workforce Development Activities, 2012

PI: James Martin, P.E.

University of Alabama at Birmingham, K-12 Workforce Development Activities, 2012

PI: Virigina Sisiopiku, Ph.D.

University of Florida, K-12 Workforce Development Activities, 2012

PIs: Nina Barker, T2 Assistant Director and Leslie Washburn, P.E.

Georgia Institute of Technology, Engaging in Engineering Initiative with Centennial Elementary School, 2013

PIs: Yanzhi (Ann) Xu, Ph.D., and Alice Grossman (doctoral student)

North Carolina State University, K-12 Workforce Development Activities, 2013

PI: James Martin, P.E.

University of Alabama at Birmingham, K-12 Workforce Development Activities, 2013

PI: Virginia Sisiopiku, Ph.D.

University of Florida, K-12 Workforce Development Activities, 2013

PIs: Nina Barker, T2 Assistant Director and Leslie Washburn, P.E.