UFTI Vision
To conduct and foster impactful, cross-cutting, multimodal transportation research; educate the next generation of transportation leaders; and facilitate technology transfer.

UFTI Mission
To lead the profession in shaping a better transportation future by functioning as a preeminent center of multidisciplinary transportation research, students’ top choice for transportation education, and a provider of state-of-the-art analysis and decision-support tools.
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Dear friends and colleagues,

I-STREET, now in its second year of operations, is a real-world transportation technology testbed resulting from our strong partnership with the Florida Department of Transportation (FDOT) and the City of Gainesville. I-STREET aims to develop, implement, test, and refine transportation technologies (such as autonomous and connected vehicles and adaptive signal control) to improve mobility and safety for our region and beyond. This year we assisted FDOT with the development of a proposal, which was awarded a $1 million grant from the Federal Highway Administration (FHWA) to test pedestrian and bicyclist safety applications at signalized intersections and mid-block crosswalks using connected vehicle and connected infrastructure technology. The project is part of FHWA’s AID (Accelerated Innovation Deployment) program, and it builds on the existing I-STREET initiatives to improve safety for pedestrians and bicycles. For additional information on all I-STREET initiatives, visit https://www.transportation.institute.ufl.edu/research-2/istreet-about-us/infrastructure-and-projects/.

While many I-STREET projects are still just getting off the ground, we are very excited about the potential benefits technologies may have on our mobility and safety. Also, we are committed to providing an open data exchange platform to allow other researchers the ability to access data and information generated from the testbed. The end goal is to provide an environment to fuel research and learn more about emerging technologies and their impact on all road users. Impactful research remains one of our main goals, and we continuously strive to improve people’s lives through our research, education, workforce development, and technology transfer efforts.

In this annual report, we describe several projects that have produced a variety of products, used by various communities.

As an example, one of our older University Transportation Center-funded projects (“Validity and Usability of a Safe Driving Behaviors Measure for Older Adults: Strategy for Congestion Mitigation”), has produced a new method for evaluating driving risks for older drivers. The product, Fitness-to-Drive Screening Measure (FTDS) is still used broadly today, 8 years after it was developed, and it can be accessed at http://fitnesstodrive.phhp.ufl.edu/.

This past year, our very generous External Advisory Board Member and former Chair Mr. Milton Carrasco, President and CEO of Transoft Solutions, Inc., sponsored the first annual Transoft Solutions Scholarship for transportation engineering students at the University of Florida. Two undergraduate students received this award (see pg. 9) which aims to attract more students into transportation. Ms. Sophia Semensky, one of the awardees, is now working on I-STREET’s Autonomous Shuttle evaluation project, and has been making significant contributions in understanding traveler perceptions and acceptance of autonomy.

I look forward to hearing from you and working together to improve transportation and make a positive impact on our communities.

Professor & UFTI Director
$8.94M in research dollars awarded to the UFTI (FY 2018)

$6.33M annual research expenditures

108 UFTI affiliated faculty (representing five colleges at UF)

more than 45 active transportation projects (FY 2018)

2398 course participants (McTrans & T2 Center)
**Effects of Mobility, Safety and Emissions on Signal Timing Optimization**

**Sponsor:** USDOT/STRIDE  
**PI:** Mohammed Hadi, Ph.D., Florida International University  
**Co-PI:** Dr. Lily Elefteriadou, Ph.D., Department of Civil & Coastal Engineering/ESSIE

This project set out to develop a new methodology to optimize traffic signal control to account simultaneously for mobility, safety, and emissions. The new methodology was implemented in the Highway Capacity Software (HCS) module STREETs, which is a UF commercially available product. The HCS is used by transportation professionals around the world, and the STREETs module is widely applied by planners, designers, signal control engineers, and traffic analysts interested in designing signalized intersections. This product represents a new generation of methods and tools capable of considering safety and environmental performance as part of traffic signal control and signalized intersection design.

**Autonomous Vehicles at Intelligent Intersections and Advanced Networks - AVIAN Project**

**Sponsor:** NSF, FHWA, and FDOT  
**PI:** Dr. Lily Elefteriadou, Ph.D.  
**Department of Civil & Coastal Engineering/ESSIE**  
**Co-PI:** Dr. Sanjay Ranka, Ph.D., Computer & Information Science & Engineering; Dr. Carl Crane, Ph.D., Department of Mechanical & Aerospace Engineering; Shannon Ridgeway, Department of Mechanical & Aerospace Engineering

The AVIAN Project is a multidisciplinary research project that develops and tests the necessary software and hardware for optimizing traffic signal control simultaneously with vehicle trajectories, when the traffic stream includes connected and autonomous vehicles. Two algorithms were developed in this project: (1) A real-time optimization algorithm for signal control and vehicle trajectories, and (2) a novel sensor fusion software to detect and classify vehicles and their movement characteristics. The system was successfully implemented and tested at the FDOT Traffic Engineering Research Lab (TERL) in Tallahassee. The AVIAN team is currently developing software to run the system at a signalized intersection on campus.

**Testbed Initiative Transit Components**

**Sponsor:** FDOT/Gainesville Regional Transit System (RTS)  
**PI:** Dr. Yong-Kyu Yoon, Ph.D.  
**Department of Electrical & Computer Engineering**

The goal of this project is to develop sensor technology that can detect bicycle usage per rack position. Bicyclists and mix-mode commuters will be able to use an app to see whether there is space on the bike rack of an incoming bus. This will allow them to alter their route or simply ride their bike if necessary. Additionally, travelers will indirectly benefit from Regional Transit System’s ability to make data-driven decisions about which routes need additional bike space and any possible follow-up studies. A literature review and development of capacity sensors has already been completed at this time, and the smart phone application is currently under development.
Fitness-to-Drive Screening Measure
Sponsor: USDOT/CMS (2007)
PI: Dr. Sherrilene Classen, PhD, MPH, OTR/L, FAOTA, FGSA, Chair Department of Occupational Therapy

This project was funded by the Center for Multimodal Solutions for Congestion Mitigation (CMS), which was the Tier-I 2007 U.S. Department of Transportation (USDOT) grant-funded University Transportation Center (UTC) at the UF Transportation Research Center (TRC) – now known as the UFTI. Years later, the product is still being used to determine when advanced age may become a risk for older drivers. The product developed is called the Fitness-to-Drive Screening Measure (FTDS), and the user-friendly tool can be accessed at http://fitnesstodrive.phhp.ufl.edu/. Additional development of a FTDS Short Form and Computerized Adaptive Test are currently under way. FTDS works by allowing family members, caregivers or friends who have driven with the driver in question in the last three months to rate the drivers’ difficulties by completing 54 screening questions. After completing the questions, a key form, or rating profile, of each driver is produced which includes a classification of the driver into one of three categories: at-risk driver, routine driver, or accomplished driver. Based on the specific driver category and recommendations, the appropriate next steps for family members, friends, or clinicians are suggested for each driver. These recommendations entail guidelines for continued fitness to drive, seeking interventions, or starting conversations about stopping driving. The FTDS has been translated into Japanese and Korean with demonstrated psychometric support for the Korean version. A shorter version has been developed (32 items) with excellent predictive validity of fitness-to-drive outcomes. Testing the efficacy of the FTDS as a clinical decision-making tool in the community among clinicians (general practitioners, specialty practitioners, nurse practitioners, and occupational therapists) and caregivers, is the next step in this research.

Improved Analysis of Two-Lane Highway Capacity and Operational Performance
NCHRP Project 17-65
Sponsor: National Academies/Transportation Research Board
PI: Scott Washburn, Ph.D., P.E., Department of Civil & Coastal Engineering/ESSIE

This project addressed certain limitations related to the two-lane highway analysis chapter in the Highway Capacity Manual (HCM). The following improvements were made:
• more realistic speed-flow relationship
• new service measure (follower density)
• new headway threshold value to identify follower status
• development of percent followers-flow relationship
• elimination of passenger car equivalent (PCE) values and direct use of percentage of heavy vehicles in the models for performance measure estimation
• inclusion of quantitative adjustment based on posted speed limit for estimation of base free-flow speed (BFFS)
• new performance functions for passing lanes
• new method for combining analysis of multiple contiguous segments into a facility-level analysis

Additionally, two microsimulation tools were identified that are capable of modeling two-lane highways: SwashSim and TransModeler. This new analysis methodology allows roadway design and traffic engineers to identify ways to address operational performance issues of a two-lane highway without resorting to a full multilane configuration.
UF SURF
The University of Florida launched the Summer Undergraduate Research at Florida (SURF) in summer 2017. SURF is a 10-week program that provides students who excel in their studies at their home institutions with the opportunity to work with premier faculty at UF on active research projects. The following students participated in the UF SURF program during the summer 2018.

Iva and Norman Tuckett Fellowship for the UFTI
The UFTI offered four fellowships through the Herbert Wertheim College of Engineering. Students from any department in the College were eligible. The following students were recipients of the Iva and Norman Tuckett Fellowship for the UFTI:

- **Asean Davis** – Civil & Coastal Engineering/ESSIE
- **Ebony Johnson** – Industrial & Systems Engineering
- **Collin Ortals** – Civil & Coastal Engineering/ESSIE
- **Brian Ortiz-Salcedo** – Civil & Coastal Engineering/ESSIE
- **Thomas Smallwood** – Environmental Engineering Sciences/ESSIE

**UF SURF**
The University of Florida launched the Summer Undergraduate Research at Florida (SURF) in summer 2017. SURF is a 10-week program that provides students who excel in their studies at their home institutions with the opportunity to work with premier faculty at UF on active research projects. The following students participated in the UF SURF program during the summer 2018.

**RECENT GRADUATES**

- **Les Brown, MURP, 2018**
  Urban and Regional Planning

- **Pruthvi Manjunatha, Ph.D., 2018**
  Postdoctoral Researcher
  Professor/UFTI

- **Ethan Stoop, M.E., 2017**
  Engineer Intern/Scalar Consulting Group, Inc.

- **Tyler Valila, M.E., 2017**
  Transit/Roadway/HDR

- **Don Watson, Ph.D., 2018**
  Traffic Specialist/FDOT
  District Five

- **Matt Dean**
  Faculty Advisor: Dr. Siva Srinivasan
  Topic: Autonomous Vehicles: The Future of Transit with JTA and the Gainesville Autobus

- **Parfait Masungi**
  Faculty Advisor: Dr. Lily Elefteriadou
  Topic: Autonomous Vehicles and the Gainesville Autobus
STUDENT AWARDS

Les Brown  
STRIDE 2017  
Student of the Year

Yantong Chen  
WTS Scholarship

Deja Jackson  
ESSIE Poster Symposium  
3rd Place  
ENO Fellow and Traffic  
Safety Scholar  
WTS Scholarship

Aschkan Omidvar  
ESSIE Poster Symposium  
2nd Place

Tyler Valila  
ITE Scholarship  
2017-2018

Kelly Ward  
WTS Scholarship

Liteng Zha  
2018 COTA Best  
Dissertation Award

Sophia Semensky  
Transoft Scholarship, Fall 2018

Chayma Tika  
Transoft Scholarship, Fall 2018

Transoft Solutions Scholarship for Undergraduate Students in Transportation

The Transoft Solutions Scholarship was generously created by the UFTI’s external advisory board member Milton Carrasco. This scholarship is for junior or senior civil engineering undergraduate students specializing in transportation.
Women's Transportation Seminar Florida Gator Student Chapter
This year, the WTS Florida Gator Student Chapter co-sponsored events with GatorITE and held a resume-writing workshop before the Annual Fall Engineering School of Sustainable Infrastructure & Environment Evening with Industry event. The WTS chapter participated in the Alachua County Habitat for Humanity Women Build as part of their community service and in international WTS events such as the Annual TRB Reception and the Annual WTS Conference. Most excitingly, the chapter hosted their annual WTS Symposium on SMART Cities. The event brought together students, researchers, engineers, and planners to discuss the state of practice as it relates to SMART Cities.

UF ITE Student Chapter
This year, the Gator ITE Student Chapter focused on increasing membership and providing leadership opportunities for the members. Gator ITE’s goal as a chapter was to enhance and develop the professional and leadership skills of Gator engineers by promoting the advancement of the transportation engineering field. Gator ITE hosted seven general body meetings, from transportation engineering firms such as Kittelson & Associates, Inc., and CHW Professional Consultants. Additionally, they hosted a number of transportation seminars by leaders in industry and academia. For service, Gator ITE adopted 1.67 miles of road along University Avenue in Gainesville as part of the Adopt-a-Highway program.

Most notably, in February 2018, Gator ITE hosted Florida’s first annual ITE Student Leadership Summit (SLS), which was held in conjunction with the 2018 Florida Section ITE (FSITE) Winter Workshop. The program featured a variety of leadership-focused sessions and events. Members of the chapter were given the opportunity to attend other ITE meetings, participate in social events, volunteer in the community, and give research presentations.
The University of Florida Transportation Institute and the STRIDE Center hosted the 5th Annual UTC Conference for the Southeastern Region on Nov. 16-17, 2017. Over 230 people registered for the event, with attendees from academia and the public and private sectors. The two-day event featured keynote speakers, various paper and poster presentations, a state DOT panel, a WTS and ITE student session, and an autonomous and connected vehicles (AV/CV) demonstration. “The conference provided a valuable opportunity to promote and facilitate cooperation and collaboration across a broad cross-section of academic expertise,” said keynote speaker Tom Byron, Assistant Secretary on Strategic Development for FDOT.
Transportation Technology Transfer (T2) Center: A Year in Review

This year the T2 Center presented over 150 training courses to nearly 2,000 participants. Additionally, the T2 Center is now offering a number of traffic engineering and transportation planning training courses online for professionals and practitioners. The T2 Center welcomed Alyssa Mercadante as the new network assistant and Roozbeh Rahmani as a new post-doc. The Transportation Safety Center (TSC), led by Dr. Siva Srinivasan and Dr. Nithin Agarwal, received continued funding to provide technical assistance and develop Local Roads Safety Plans for the next two years.

The T2 Center was involved in multiple research activities, including the bike-rack project with the Department of Electrical and Computer Engineering, the Autonomous Bus Survey with the UFTI, and assisting the UF Department of Occupational Therapy to design and develop an online course that aims to reduce distracted driving among teens.

The T2 Center was awarded three Federal Highway Administration (FHWA) Accelerating Safety Activities Program (ASAP) awards, and Dr. Agarwal was nominated to two National Cooperative Highway Research Program panels, NCHRP 03-133 and NCHRP 17-92.

McTrans Center: A Year in Review

The McTrans Center continued to add functionality and features to the Highway Capacity Software (HCS7) that implements the Highway Capacity Manual 6th Edition (HCM6). New tools added to HCS7 include signal timing optimization for safety and emissions, automation of the generalized service volume tables, expansion of the highway safety software to include freeways and ramps with empirical analysis capabilities, and graphical and heat map reports for both urban streets and freeway facilities.

McTrans presented over twenty webinar series and live training courses on the HCM6 procedures and HCS7 applications. The webinar series were attended by national audiences, while the training courses were typically for state DOTs or professional organization regional, state, or local sections or chapters. McTrans participated in, and exhibited at, both the Institute of Transportation Engineers (ITE) and Transportation Research Board (TRB) Annual Meetings. McTrans continues to develop software prototypes in parallel with the research process for the NCHRP 15-57 project.
The UFTI was featured in the following news outlets, publications, and social media:

- The Conversation
- WCJB
- Gainesville Sun
- Florida High Tech Corridor
- Miami Herald
- The Independent Florida Alligator
- Government Technology
- Florida Trend
- WUFT
- Business Wire
- Orlando Weekly
- Mashable
INTERNAL STEERING COMMITTEE

Jennifer Bridge, Ph.D.
Associate Professor
Civil Engineering/ESSIE

Evangelos Christou, Ph.D.
Professor
Department of Applied Physiology & Kinesiology

Carl Crane, Ph.D.
Professor
Department of Mechanical & Aerospace Engineering

Lily Eleftheriadou, Ph.D.
UFTI Director & Barbara Goldsby Professor of Civil Engineering
ESSIE

Myoseon Jang, Ph.D.
Associate Professor
Department of Environmental Engineering Sciences/ESSIE

Sanjay Ranka, Ph.D.
Professor
Computer & Information Science & Engineering

Bill Sampson, P.E.
Director
T2 Center & McTrans

Siva Srinivasan, Ph.D.
Associate Professor
Civil Engineering/ESSIE

Ruth Steiner, Ph.D.
Professor
Department of Urban & Regional Planning

SUPPORT STAFF

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UFTI/STRIDE Center

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Dona Moss
Grants Administrator
Department of Civil & Coastal Engineering/ESSIE

Amy Fu
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Elaine Khoo, B.S.
Marketing & Communications Assistant
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Jennifer Bridge, Ph.D.
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Civil Engineering/ESSIE

Sanjay Ranka, Ph.D.
Professor
Computer & Information Science & Engineering

Myoseon Jang, Ph.D.
Associate Professor
Department of Environmental Engineering Sciences/ESSIE

Carl Crane, Ph.D.
Professor
Department of Mechanical & Aerospace Engineering

Siva Srinivasan, Ph.D.
Associate Professor
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Ruth Steiner, Ph.D.
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Nuchanart Tuntiserirat
(Feb 2019 to May 2018)
Student Assistant
STRIDE Center
EXTERNAL ADVISORY BOARD

Vassili Alexiadis, Ph.D.
Executive Vice President
Cambridge Systematics, Inc.

Marsha Anderson Bomar, AICP, ENV SP
Executive Director
Gateway86 Gwinnett

Chimay J. Anumba, Ph.D., P.E.
Professor and Dean
UF College of Design, Construction & Planning

Alex Bond
Director
Center for Transportation Leadership, Eno Center for Transportation

Ann Brach, Ph.D., P.E.
Director
Transportation Research Board, Technical Activities Division

Tom Byron, P.E.
Assistant Secretary of Intermodal Systems Development
Florida Department of Transportation

Milton Carrasco, P.Eng., M. Eng.
President and CEO
Transoft Solutions, Inc.

Grady Carrick, Ph.D.
Principal
Enforcement Engineering, Inc.

Laura Kelley
Executive Director
Central Florida Expressway Authority

Michael Meyer, Ph.D.
Senior Advisor
WSP USA

Ananth Prasad, P.E.
President Designate
Florida Transportation Builders Association, Inc.

Debora M. Rivera, P.E.
Public Works Operations Manager
City of Gainesville

Matt Ubben
President
Confianza Consulting, Inc.
STRIDE

The Southeastern Transportation Research, Innovation, Development, and Education (STRIDE) Center is a U.S. Department of Transportation grant-funded, regional (Southeast) University Transportation Center (UTC) headquartered at the University of Florida that conducts research, and offers educational and technology transfer programs related to congestion mitigation. The Center is housed within the UFTI and involves nine other universities: Auburn, The Citadel, Florida International University, Georgia Tech, Jackson State University, North Carolina State University, Tennessee Technological University, University of Alabama at Birmingham, and the University of North Carolina at Chapel Hill.

McTrans

The McTrans Center develops, distributes, and supports software programs for traffic engineering and transportation planning applications, including the Highway Capacity Software™ (HCS 2010™), TSIS-CORSIM™ and TRANSYT-7F™, with training courses and technical support provided for these packages.

Technology Transfer Center (T2)

T2 provides training, technical assistance, technology transfer services, and safety information to transportation, public works, and safety professionals as well as the general public.
Center for Health & the Built Environment
Representative: Dr. Ruth Steiner
Professor, Department of Urban & Regional Planning

Center for Intelligent Machines & Robotics (CIMAR)
Representative: Dr. Carl Crane
Professor, Department of Department of Mechanical & Aerospace Engineering

Digital Worlds Institute
Representative: Dr. Angelos Barmpoutis
Associate Professor, Department of Computer & Information Science & Engineering

Geo-Facilities Planning & Information Research Center (GeoPlan Center)
Representative: Dr. Ilir Bejleri
Associate Professor, Department of Urban & Regional Planning

Human-Experience Research Lab (HXRL)
Representative: Dr. Juan Gilbert
Professor & Chair, Computer & Information Science & Engineering Department

Neuromuscular Physiology Lab
Representative: Dr. Evangelos Christou
Professor, Department of Applied Physiology and Kinesiology

Smart Infrastructure Management Laboratory
Representative: Dr. Jennifer Rice
Associate Professor, Civil Engineering/ESSIE

Institute for Mobility, Activity, & Participation (I-MAP)
Representative: Dr. Sherrilene Classen
Professor & Chair, Department of Occupational Therapy

Efficient Transportation Decision Making (ETDM)
Representative: Alexis Thomas
Director

Florida Traffic & Bicycle Safety Education Program (FTBSEP)
Representative: Dr. Dan Connaughton,
Professor, Department of Tourism, Recreation & Sport Management
Florida’s Pedestrian and Bicycling Safety Resource Center
Florida Department of Transportation
PI: Bill Sampson, P.E.

Teen Distracted Driving Education Program
Florida Department of Transportation
PI: Bill Sampson, P.E.
Co-PIs: Dr. Nithin Agarwal, Dr. Sherrilene Classen, Dr. Sandra Winters

Florida Occupant Protection Resource Center (OPRC)
Florida Department of Transportation
PI: Bill Sampson, P.E.

Florida Technology Transfer Support
Florida Department of Transportation
PI: Bill Sampson, P.E.

Accelerating Safety Activities Program in Florida
Federal Highway Administration/ Florida Department of Transportation
PI: Bill Sampson, P.E.
Co-PI: Dr. Nithin Agarwal

Florida Driver Assistive Truck Platooning Analysis
Florida Department of Transportation
PI: Dr. Carl Crane

LiDAR Data Collection to Support Quality Control (QC) Processes and the Florida Shared-Use Non-Motorized SUN Trail System
Florida Department of Transportation
PI: Dr. Carl Crane

University of Florida (UF) Testbed Initiative – Alternative Transportation Safety Systems
Florida Department of Transportation
PI: Dr. Clark Letter
Co-PI: Dr. Nithin Agarwal

CAREER: Integrated Online Coordinated Routing and Decentralized Control for Connected Vehicle Systems
National Science Foundation
PI: Dr. Lili Du

Collaborative Research: Coordinated Real-Time Traffic Management Based on Dynamic Information Propagation and Aggregation under Connected Vehicle Systems
National Science Foundation
PI: Dr. Lili Du

Sustainable Urban Freight Mobility through Optimization of Logistics Facility Locations
Freight Mobility Research Institute/FAU
PI: Dr. Lili Du

Before and After Implementation Studies of Advanced Signal Technologies in Florida
Florida Department of Transportation
PI: Dr. Lily Elefteriadou
Co-PIs: Dr. Scott Washburn and Dr. Siva Srinivasan

Traffic Signal Control with Connected and Autonomous Vehicles in the Traffic Stream
National Science Foundation
PI: Dr. Lily Elefteriadou
Co-PIs: Dr. Sanjay Ranka and Dr. Carl Crane

Development and Testing of Optimized Autonomous and Connected Vehicle Trajectories at Signalized Intersections
Florida Department of Transportation
PI: Dr. Lily Elefteriadou
Co-PIs: Dr. Sanjay Ranka and Dr. Carl Crane

Evaluation of Arterial Corridor Improvements and Traffic Management Plans in Florida
Florida Department of Transportation
PI: Dr. Lily Elefteriadou

Florida DOT Central Office Statistics 2015 – Subconsultant Technical Support Activities
Cambridge Systematics, Inc.
PI: Dr. Lily Elefteriadou
Co-PI: Dr. Siva Srinivasan

Highway Capacity Manual Methodologies for Corridors Involving Freeways and Surface Streets
NCHRP 15-57
National Academy of Sciences
PI: Dr. Lily Elefteriadou

Improvements to the FDOT Travel Time Reliability Model for Freeway Analysis
Florida Department of Transportation
PI: Dr. Lily Elefteriadou

University of Florida Advanced Technologies Campus Testbed
Florida Department of Transportation
PI: Dr. Lily Elefteriadou

Public Acceptance of Autonomous Vehicle Technology
University of Florida
PI: Dr. Lily Elefteriadou
Co-PI: Dr. Nithin Agarwal
Transportation Safety Center (TSC) 2018
Florida Department of Transportation
PI: Dr. Nithin Agarwal
Co-PIs: Dr. Siva Srinivasan and Dr. Ilir Bejleri

Big Data Management Plot
Florida Department of Transportation
PI: Dr. Sanjay Ranka
Co-PIs: Dr. Lily Elefteriadou and Dr. Siva Srinivasan

Data Management and Analytics for UF Smart Testbed
Florida Department of Transportation
PI: Dr. Sanjay Ranka
Co-PI: Dr. Siva Srinivasan

Dynamic Intersection Learning Machine Optimization Real-Time Engine
Florida Department of Transportation
PI: Dr. Sanjay Ranka
Co-PIs: Dr. Anand Rangarajan, Dr. Siva Srinivasan, and Dr. Nithin Agarwal

Traffic-Event Unification System Highlighting Arterial Roads
Florida Department of Transportation
PI: Dr. Sanjay Ranka
Co-PI: Dr. Siva Srinivasan

Truck Taxonomy & Classification Using Video and Weigh-In Motion (WIM) Technology
Florida Department of Transportation
PI: Dr. Sanjay Ranka

Video-Based Machine Learning for Smart Traffic Analysis and Management
City of Gainesville
PI: Dr. Sanjay Ranka

Application of Travel Time Data and Statistics to Travel Time Reliability Analyses
Leidos
PI: Dr. Scott Washburn

Commercial Heavy Vehicle Impacts on Signalized Arterial Corridor Performance
University of South Florida
PI: Dr. Scott Washburn
Co-PI: Dr. Seckin Ozkul (University of South Florida)

Commercial Truck Parking Detection Technology Evaluation for Columbia County Rest Area
Florida Department of Transportation
PI: Dr. Scott Washburn

Curriculum Development for Highway Freight Transportation
Freight Mobility Research Institute/FAU
PI: Dr. Scott Washburn
Co-PI: Dr. Lili Du

Freight Mobility Research Institute
Florida Atlantic University
PI: Dr. Scott Washburn
Co-PI: Dr. Lily Elefteriadou

Improved Analysis of Two-Lane Highway Capacity and Operational Performance
National Academy of Sciences
PI: Dr. Scott Washburn

Interchange Design to Accommodate Ramp Metering System
Florida Department of Transportation
PI: Dr. Scott Washburn

Enhancement of Transportation Network Analysis Tools for Truck-Related Planning and Operations
Freight Management Research Institute/FAU
PI: Dr. Scott Washburn
Co-PI: Dr. Yafeng Yin (University of Michigan)

AAA-Smart Features for Older Drivers
American Automobile Association
PI: Dr. Sherrilene Classen

Aging Road User Information System 2017-2018
Florida Department of Transportation Safety
PI: Dr. Sherrilene Classen

The Future of Transit, Autonomous/Connected Vehicles, and Shared Mobility: A Scoping Study for the Jacksonville Transportation Authority
Jacksonville Transportation Authority
PI: Dr. Siva Srinivasan
Co-PI: Dr. Ruth Steiner

UF Testbed Initiative – Transit Components
Florida Department of Transportation
PI: Dr. Yong-Kyu Yoon
Co-PI: Dr. Nithin Agarwal


Classen, S. (2018). “Enhancing Team Science via Use of Technology in Scientific Writing.” Presented at the 7th Annual Occupational Therapy Summit of Scholars, June 8-9, 2018, University of Kansas and University of Missouri, Kansas City, MO.


