Mission Statement

The UF Transportation Institute (UFTI) aims to advance the transportation state-of-the-art, disseminate research results, and provide educational opportunities related to transportation across the lifespan. UFTI brings together faculty, staff and students from many diverse backgrounds to provide solutions to a variety of transportation problems.

Overview

The Institute was created in 2013 as an umbrella organization housing several transportation-related centers within the University of Florida. It houses the Transportation Research Center (TRC), established by the Florida Board of Regents in 1972. It also houses the McTrans center, which develops, distributes and supports software for traffic engineering and transportation planning applications, and the Florida Transportation Technology Transfer Center, which provides training and technical assistance to professionals around the country and internationally. UFTI is home to the Southeastern Transportation Research, Innovation, Development and Education (STRIDE) Center, a Regional University Transportation Center (UTC), funded by the US Department of Transportation (USDOT).

Director’s Message

Dear Colleagues,

As many of you know, the University of Florida Transportation Institute (UFTI) was officially launched on October 4, 2013, with an event at the University of Florida campus in Gainesville, Fla. The UFTI brings together several centers and faculty working on transportation problems, and our vision is that increased collaboration within and outside UF will lead to better transportation solutions, faster. In this, our first annual report, we highlight a few representative research projects and provide examples of the impact transportation research at UF has made through the years (see page 3). Our aim is to continue to make an impact and be at the forefront of transportation research, education, and technology transfer.

This past year we hired Chris LeDew as the new director for the UFTI’s Transportation Technology Transfer Center (T2). Mr. LeDew comes to us after serving more than 27 years at the Florida Department of Transportation (FDOT). Read on to find out more about our Technology Transfer activities and learn about the various centers under the umbrella of UFTI.

Our UFTI by the Numbers section gives a snapshot of our financial and operational status, and it is my pleasure to also introduce to you the UFTI’s Internal Steering Committee (see page 10), consisting of faculty and staff representatives. A big thank you to the first members of our External Advisory Board, listed on page 11, who have provided significant guidance as we begin our operations as an institute.

We are most proud of our graduates and their accomplishments, and we are providing in this report some information on their whereabouts. If you have graduated from one of UF’s transportation programs and would like to keep in touch please contact us and we will add you to our distribution list.

For up to-date information on our projects, activities, and events, please visit www.transportation.institute.ufl.edu. As always, we welcome your suggestions and feedback.

Sincerely,

Lily Elefteriadou, Ph.D.
Professor & UFTI Director
Our Impact

Years of Collaborative Research Leads to Better Pavements in Florida

Florida roads were recently recognized for having superior quality asphalt pavements, and that’s thanks to over a decade of research from 1994 to 2005, led by Dr. Reynaldo Roque at UF and engineers from the Florida Department of Transportation (FDOT). The team was tasked with mitigating cracks in asphalt pavements. Earlier studies by Dr. Roque revealed that almost all cracking in Florida’s pavements begins at the surface as opposed to from the bottom up thereby indicating that cracking could be mitigated by making asphalt mixtures near the surface tougher, more resistant to cracking. A tool called the Fractured Energy (FE) test was developed by the UF researchers during that time to accurately measure toughness of asphalt mixture. Furthermore, extensive field studies showed the FE test was a reliable predictor of cracking performance of real pavements. FE tests were subsequently conducted on different kinds of asphalt binder, and it was discovered that asphalt with polymers substantially enhanced mixture cracking resistance. Asphalt mixtures produced with polymers are known as Polymer Modified Asphalt (PMA). The results of this research gave policymakers in the State of Florida in 2004 the confidence to replace conventional asphalt mixture with the newer PMA, especially on high truck volume roads. Implementation of this policy has resulted in a reduction of deficient roads by cracking, from 18 percent in 2004 down to 6 percent in 2014. This translates into huge savings to Florida taxpayers and allows FDOT to use funds saved by not having to repave cracked roads for other transportation infrastructure needs in the State of Florida. Florida also continues to effectively reuse recycled tire rubber in asphalt (asphalt rubber) in friction course mixtures. In addition, researchers at UF led by Dr. Roque, along with FDOT engineers have been working on improving cracking resistance of asphalt rubber mixtures, which would allow expansion of the beneficial environmental impact of recycling tire rubber.

UFTI Helping Small Transportation Agencies in Florida Train Staff to Develop Road Safety Studies to Reduce Serious and Fatal Crashes

UFTI research, led by Dr. Siva Srinivasan, in collaboration with the UF Transportation Technology Transfer Center (T2), have helped transportation agencies in small, rural communities by creating a process and templates for use in conducting road safety studies, including documentation required to support the application for Federal Highway Safety Improvement Plan (HSIP) funding. The work is presented as a manual that contains a funding guide, a process for developing safety projects, a template for developing field studies and B/C analysis, and a tutorial on how to perform crash data analysis using Signal Four Analytics, a statewide crash data system funded by the State of Florida, developed by UF researcher Dr. Ilir Bejleri, a faculty member in the Department of Urban & Regional Planning. The goal of this project is to focus on locally owned rural roads that historically receive a smaller proportion of HSIP funding than state highways, yet have a higher serious crash rate. Small, rural communities in Florida with populations of 50,000 or less are now beginning to use these training modules. Phase 2 of this project is currently underway replicating the same work but focusing on other counties. As this project continues, researchers and the T2 Center will increase outreach efforts to the 26 small rural counties in Florida through personal visits and a new website. They also plan to utilize both traditional “spot” safety analysis and the newer “systemic” analysis to help solve crash problems. With appropriate funding and local involvement, each of Florida’s 26 small counties will have a detailed safety analysis performed every five years. As a result of this project, a new transportation safety center is being created to further assist local agencies with safety-related projects.

Dr. Ruth Steiner, Professor of Urban & Regional Planning, Quoted in Washington Post

In July 2014, Dr. Ruth Steiner, professor of Urban and Regional Planning at UF, who is also an affiliate of the UFTI, and a member of its Internal Steering Committee, was quoted in an opinion piece in the Washington Post titled “What’s the best state in America? Florida, for its roads and bridges.” The article points to Florida as having one of the best kept transportation infrastructures in the nation because of its system of tolls, user fees and taxes, which ensures the viability of the infrastructure.
Lloyd’s Register Foundation (LRF) Awards Grant to UFTI for Emissions Study

Yafeng Yin, Ph.D., an associate professor in the Department of Civil and Coastal Engineering, joined an international consortium to find more efficient and effective ways to reduce traffic emissions and improve air quality. Funded by Lloyd’s Register Foundation (LRF) of the UK, the consortium consists of Dalian University of Technology, China; University College London, UK; Cornell University, New York, and the University of Florida in Gainesville. The primary goal is to develop, analyze, test and demonstrate a tractable within-day dynamic framework for optimizing multi-modal transportation operations and management for environmental improvement.

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

Researchers at UF collaborated with North Carolina State University and the University of Alabama at Birmingham to develop new models for unsignalized mid-block pedestrian crossings. Dr. Lily Elefteriadou and her team at UF, focused on the development of microsimulation techniques for replicating the movement of pedestrians and vehicles. Data were collected at the University of Florida campus as well as at other locations in North Carolina and Alabama. UF researchers also used the UFTI instrumented vehicle to collect data on driver behavior in a campus environment and to better understand the interactions between vehicles and pedestrians.

UFTI Examines Policy Implications of Automated Vehicle Technology

An interdisciplinary group of researchers at the UFTI have been awarded a research project to provide the Florida Department of Transportation (FDOT) with the necessary information and guidance on drafting and implementing policies associated with Automated Vehicles (AV) technology. The team is led by Dr. Siva Srinivasan in Civil Engineering with participation from Dr. Carl Crane of Mechanical Engineering, Dr. Yafeng Yin and Dr. Lily Elefteriadou of Civil Engineering, and Dr. Ruth Steiner from Urban and Regional Planning.

The project will develop recommendations on how FDOT should address the potential challenges and opportunities of the presence of automated vehicles using a scenario-based approach. The study will facilitate incorporating the planning for AV infrastructure into Long Range Transportation Plans (LRTPs) and to integrate statewide transportation investments with these plans.
Here is a snapshot of some of our graduates who have kept in touch with us and where they are currently employed. If you are a graduate of any of the UF transportation programs, please contact us at iaviles@ce.ufl.edu so we can add you to our database.

Avinash Geda, M.S. (2014)  
Ph.D. Student  
Warrington Business School, UF

Ruoying Xu, M.S./MAURP (2014)  
Ph.D. Student  
University of California Berkeley

Muhammad Ali, M.S. (2013)  
Civil Engineer  
AI Engineers, Inc.

Jack Halsburg, M.S. (2013)  
Transportation Analyst  
Kimley-Horn and Associates, Inc.

Khajonsak Jermprapai, M.S. (2013)  
Bureau of Traffic Safety  
Department of Rural Roads, Thailand

Ben Reibach, M.S. (2013)  
Transportation Planner  
CDM Smith, Inc.

Maninder Singh, M.S. (2013)  
Consulting Engineer  
Spirotech Heat Exchangers  
Private, Ltd.  
New Delhi, India

Grady Carrick, Ph.D. (2012)  
President  
Enforcement Engineering, Inc.

Nagendra Dhakar, Ph.D. (2012)  
Transportation Analyst  
Resource Systems Group, Inc.

Corey Hill, M.E. (2012)  
Project Engineer  
Wantman Group, Inc.

Ryan Hormel, M.E. (2012)  
Traffic Associate  
RS&H

Jing Li, Ph.D. (2012)  
Post-Doctoral Researcher  
The University of Alabama

Associate Professor  
Ahsanullah University of Science & Technology, Dhaka, Bangladesh

Dimitra Michalaka, Ph.D. (2012)  
Assistant Professor  
The Citadel

Robin Osborne, M.S. (2012)  
Traffic Analyst  
Kimley Horn & Associates, Inc.

Brett Fuller, M.S. (2011)  
Wantman Group, Inc.

Ali Hanes, M.S. (2011)  
Kimley-Horn and Associates, Inc.

Ashish Kulshrestha, Ph.D. (2011)  
Transportation Modeler  
Parsons Brinckerhoff

Kwangkyun Lim, Ph.D. (2011)  
Research Fellow/Inspector of Railway  
Railroad Safety Inspectorate  
KoTSA (Korea Transportation Safety Authority)

Lu Ma, Ph.D. (2011)  
Assistant Professor  
MOE Key Laboratory for Urban Transportation Complex Systems Theory and Technology, School of Traffic and Transportation, Beijing Jiaotong University, Beijing, P.R., China

Ziqi Song, Ph.D. (2011)  
Research Assistant Professor  
Utah State University

Jorge Uy, M.E. (2011)  
Engineer  
Department of Public Works  
City of Tampa
Di Wu, Ph.D. (2011)
Senior Operations Research Scientist
Amazon.com, Inc.

Jessica Alvarez, M.S. (2010)
Transit Service Planner/Transportation Planner
Foursquare Integrated Transportation Planning

Civil Engineering E.I.
R.E. Cabrera & Associates

Hungarian Transport Administration
Division of Bicycle Infrastructure Development
Budapest, Hungary

George Debra, M.S. (2010)
Civil Engineer
Ghana Ministry of Transportation
Division of Policy and Planning

Heather E. Hammontree, M.S. (2010)
Transportation Engineer
HDR

Vishal Khanapure, M.S. (2010)
Research Software Engineer
McTrans

Barbara Martin, M.S. (2010)
Traffic Analyst
CCR Group
São Paulo, Brazil

Associate

Nelson/Nygaard Consulting Associates

Irene Soria, M.S. (2010)
Transportation Engineer
HNTB Corporation

Lihui Zhang, Ph.D. (2010)
Assistant Professor, Dalian University of Technology, China

Ashwin Arulselvan, Ph.D. (2009)
Lecturer in Management Sciences
University of Strathclyde, UK

Aaron Elias, M.S. (2009)
Associate Transportation Engineer
Kittelton & Associates

Alexandra Kondyli, Ph.D. (2009)
Assistant Professor
Kansas State University

Ana Lai, M.S. (2009)
Traffic Engineer

Seokjoo Lee, Ph.D. (2009)
Research Associate
Korea Transport Institute

Vipul Modi, M.S. (2009)
Transportation Engineer
Citilabs, Inc.

Abigail Osei-Asamoah, M.S.
Doctoral student
University of Connecticut

Benito Perez, M.S./MAURP (2009)
Transportation Policy Specialist
D.C. Department of Transportation

Jian (Daniel) Sun, Ph.D. (2009)
Assistant Professor
Tong-Ji University, China

Matt Weisman, M.E. (2009)
Principal
Hoffman, Weisman & Associates

Yingyan Lou, Ph.D. (2008)
Assistant Professor
Arizona State University
Transportation Research Internship Program (TRIP)

The UFTI supports the transportation internship program through partial funding from the Southeastern Transportation, Research, Innovation, Development and Education Center (STRIDE). Student interns learn about transportation engineering and participate in cutting-edge research projects at UF and the STRIDE partner institutions. The experience is very useful for students interested in pursuing advanced studies or a career in the field of transportation engineering.

TRIP 2013 Interns

Cory Dorman (UF)
Adviser: Dr. Siva Srinivasan, Transportation Program, Civil Engineering, UF
Project: Crash Prediction Methods for Freeway Facilities with Managed Lanes

Andrew Fell (UF)
Adviser: Dr. Yafeng Yin, Transportation Program, Civil Engineering, UF
Project: Deployment Strategies of Managed Lanes on Arterials

Britton Hammit (University of Wyoming)
Adviser: Dr. Daniel Findley, North Carolina State University
Project: Retaining Wall Assessment Management

Sara Huestis (UF)
Adviser: Dr. Siriphong Lawphongpanich, Industrial & Systems Engineering, UF
Project: Deployment Strategies of Managed Lanes on Arterials

TRIP 2014 Interns

Kory Harb (UF)
Adviser: Dr. Yafeng Yin, Transportation Program, Civil Engineering, UF
Project: Developing Agent-based Simulation Models to Learn About the Impact and Implementation of Real-time Parking Services Via Smartphone Applications

Megan McGinley (UF)
Adviser: Dr. Scott Washburn, Transportation Program, Civil Engineering, UF
Project: Analyzing a New Active Traffic Demand Management (ATDM) Software

Brian Pitman (UF)
Adviser: Dr. Scott Washburn, Transportation Program, Civil Engineering, UF
Project: Impact of Modeling Parameters on the HCM-based Procedure to Estimate Reliability of Freeway Corridors

Amarius Ramirez (University of Delaware)
Adviser: Dr. Mohammed Hadi, Florida International University
Project: Working on Research to Identify Changes in Visual Search Patterns of Drivers as Environments Become More Complex

William Woolery (Georgia Tech)
Adviser: Dr. Mike Hunter, School of Civil and Environmental Engineering, Georgia Tech
Project: Creating Software to Simulate Emissions Given Off by Cars using CORSIM
Student Organizations

ITE UF Student Chapter

This past year, the ITE UF student chapter participated in various transportation-related competitions, hosted technical and education seminars, inviting engineers across the state, and worked with K-12 students to teach them about transportation engineering. The student chapter was the winner of the ITE District competition in early summer 2013, qualifying them to compete in the International Traffic Bowl. Members of the 2013 team were: Thomas Chase, Miguel Lugo, Ben Reibach and Don Watson. UF competed in the 2013 International Traffic Bowl Grand Championship, which was held at the ITE Annual Meeting and Exhibit in Boston, Mass., against several other colleges from around the world winning first place and $2000 for the student chapter.

WTS Florida Gator Student Chapter

The student chapter is home to female and male graduate and undergraduate students, and its main goal is to recruit and retain female students in transportation engineering. A major accomplishment for the chapter this year was its official ratification by WTS International, making it an officially recognized chapter. Chapter members hosted and participated in several events including the annual WTS Transportation Symposium, the fourth cleanup of a street they adopted in Gainesville, Fla., in spring 2012 through the City of Gainesville’s Adopt-A-Street Program, and participation in Transportation YOU activities such as volunteering at the engineering table at the P.K. Yonge Carnival and the Fall Transportation Career Day. The student chapter also participated in an education fair at Monteocha New Life Church, in a northern rural area of Gainesville and they hosted a workshop featuring Marsha Anderson-Bomar of Stantec titled “The Language of Leadership.” During the spring 2014 semester, through the financial support of Stantec, the student chapter was able to purchase polo shirts for the executive board for the first time. The student chapter also attended the 2014 University Transportation Center ( UTC) Conference for the Southeastern Region, which was hosted by Georgia Tech in March and held in Atlanta, Ga.

WTS Transportation Symposium

The WTS student chapter at the University of Florida hosted their annual signature event, the WTS Transportation Symposium, on November 12, 2013 at the Arredondo Room located in the Reitz Union on the UF campus. The topic of the 2013 symposium was “Communication between Women and Men in the Workplace”. The panelists were: Jamie Breme of Fluor, an engineering, procurement, construction, maintenance (EPCM), and project management company; Jessica Grant of the Florida Department of Transportation which has the responsibility of coordinating, planning and developing the multimodal transportation system in the state of Florida, one of the nation’s premier transportation companies; Dr. Angela Lindner, UF, associate dean for undergraduate student affairs; and Dan Plonk, director of transportation planning at Norfolk Southern.
Technology Transfer & Service

McTrans

The McTrans Center develops, distributes and supports software for traffic engineering and transportation planning applications. McTrans is the current developer for three major software programs for the transportation engineering and planning profession: the Highway Capacity Software (HCS 2010™), TSIS-CORSIM™, and TRANSYT-7F™. This past year McTrans ushered in a highly-anticipated update to the HCS software, which is one of the most widely used transportation packages in the world. Release 6.60 included updates to Quick Streets, Phasing Wizard, Work Zones, Pre-timed Signals, and Toolbar updates in the Streets Module. The HCS 2010 faithfully implements the procedures defined in the Highway Capacity Manual (HCM 2010) and is used by traffic operations and design engineers, as well as planning and other transportation professionals around the world. Webinars specific to these updates were offered to the public. Software and training information are available at the McTrans website: http://McTrans.ce.ufl.edu/

T2

The Florida Transportation Technology Transfer (T2) Center hired Chris LeDew as the director of the center in February 2014. Mr. LeDew came to the Center after 27 years in transportation management, traffic operations and roadway maintenance with the Florida Department of Transportation. He brought with him a unique customer’s point of view as an engineering practitioner who has worked extensively with local, state, and federal transportation professionals. There are multiple grant-funded projects at T2, which include: the Florida Minority Task Force (MTF) on Occupant Protection, Florida Occupant Protection Resource Center (OPRC), and Florida’s Pedestrian and Bicycling Safety Resource Center (SRC). The Florida Highway Administration (FHWA) tapped the T2 Center to host their “Every Day Counts” Initiatives across the nation. The initiatives are designed to identify and deploy innovation aimed at shortening project delivery, enhance the safety of our roadways, and improve environmental sustainability. T2 is an integral part of Florida’s transportation organizations, providing technology and annual award assistance to Florida Association of County Engineers and Road Superintendents (FACERS), delivering presentations at Florida Institute of Transportation Engineers (ITE) meetings, as well as offering a variety of workshops and resources to Florida transportation professionals. The Florida T2 Center houses the Florida Local Technical Assistance Program (LTAP), which partially funds activities at the center and provides assistance to local public works agencies.

COTA Conference

The 14th COTA International Conference of Transportation Professionals (CICTP2014) was held on July 4-7, 2014, at Longchamp Garden Hotel, Changsha, Hunan Province, China. Dr. Yafeng Yin of the UFTI is very much involved with the CICTP, which was jointly organized by the Chinese Overseas Transportation Association (COTA), Central South University, and Transport Planning and Research Institute at the China Ministry of Transport. In recent years, CICTP has become one of the largest international transportation conferences in China, which attracts more than 1,000 participants from China, Hong Kong, Singapore, Japan, South Korea, India, Australia, North America, and Europe who are related to the academia, research institutes, government, and the private sector.

The Future of Transportation in Florida & Beyond: Autonomous & Connected Vehicles at UF

FDOT Secretary Ananth Prasad spoke about autonomous and connected vehicles at UF on March 13, 2014. The seminar was also offered as a live webcast and hosted by the University of Florida Transportation Institute (UFTI), STRIDE, and the UF College of Engineering. Secretary Prasad addressed an audience of more than 50 students, faculty and staff and others who attended the seminar online. He said Florida legislation now allows for testing of automated vehicles, and it is one of four other states, including California, Michigan and Nevada that will serve as a test bed for connected vehicle infrastructure.

2nd UTC Conference for the Southeastern Region

Georgia Tech hosted the 2014 University Transportation Center (UTC) Conference for the Southeastern Region on March 24 and 25 at the Georgia Tech Global Learning Center in Atlanta, Ga. The conference drew attendees from universities, state DOTs, nonprofits and the private sector. Research from 20 universities was presented at the conference, on a range of topics: Operations and Management, Bike/Ped, Economics and Freight, Transit, Safety, and Infrastructure.
External Advisory Board

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

Ms. Marsha Anderson Bomar, AICP, ENV SP
Senior Principal, Transportation, Executive Director, Netweaving Stantec

Mr. Tom Byron
Chief Engineer
Florida Department of Transportation

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

Mr. Tom Kern
Executive Vice President
ITS America

Mr. Jon S. Meadows, PE
Principal, Vice President, Transportation
DRMP, Inc.

Dr. Michael Meyer, Ph.D.
Senior Advisor
Parsons Brinkerhoff, Inc.

Dr. Christopher Silver, Ph.D.
Dean and Professor
College of Design, Construction, & Planning
University of Florida

Dr. Kumares C. Sinha, Ph.D.
Edgar B. and Hedwig M. Olson Distinguished Professor
Purdue University, West Lafayette, Indiana
UFTI By The Numbers

$5.517 million
Annual Research Expenditures

$3.932 million
Research Projects Awarded

$1.918 million
Auxiliary Revenue (conference/workshop registration and software licenses)

11 Internal Steering Committee Members

9 External Advisory Board Members

3201 Course Participants (continuing education, non-degree)

Centers

CMS
The Center for Multimodal Solutions for Congestion Mitigation (CMS) was a USDOT Tier 1 University Transportation Center (UTC) grantee from 2007 to 2012. The Center's mission was to investigate and develop innovative approaches to solving congestion problems.

Florida Minority Task Force on Occupant Protection
As part of a comprehensive approach to motor vehicle safety, the Florida Minority Task Force on Occupant Protection assists the Florida Department of Transportation and other stakeholder organizations to increase safety belt usage for Florida's African/American as well as Hispanic populations that are over-represented in annual fatality statistics.

Florida PedBike SRC
The Florida Pedestrian and Bicycling Safety Resource Center promotes safe pedestrian and bicycling activities for citizens and visitors, young and old, by providing educational materials and information to advocate groups.

McTrans
The McTrans Center at the University of Florida 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 the highest level of technical support provided for these packages.

STRIDE
The Southeastern Transportation Research, Innovation, Development and Education (STRIDE) Center is a 2012 USDOT grant-funded, regional University Transportation Center (UTC) headquartered at the University of Florida that conducts transportation-related research in the areas of safety, livable communities and economic competitiveness.

T2 Center
The T2 Center provides training, technical assistance, technology transfer services, and safety information to transportation, public works and safety professionals.

TRC
The mission of the Transportation Research Center (TRC) is to find innovative solutions to urban or regional mobility needs. Its research is interdisciplinary in nature, and it involves the planning, design, operations, monitoring or optimization of transportation and other infrastructure systems for achieving safety, sustainability, and economic efficiency.

Affiliated Centers

Center for Health & the Built Environment
The Center for Health and the Built Environment, directed by Dr. Ruth Steiner, is a research center focused on teaching, research, and service to address the relationship of the built environment to health outcomes with special attention to vulnerable populations.

Geo-Facilities Planning & Information Research Center (GeoPlan Center)
The UF GeoPlan Center works to support land use, transportation, and environmental planning in the State of Florida by providing geospatial and planning expertise, data, training, and education to the stakeholders involved in the planning. GeoPlan Center's Director is Dr. Paul Zwick, Co-Director is Peggy Carr and the center is managed by Alexis Thomas.
Selected Projects

Implementing A Transportation Safety Center (TSC) Through Florida Local Technical Assistance Program (LTAP)
Pls: Nina Barker, UF T2 Center; Ilir Bejleri, Associate Professor, Urban & Regional Planning; Siva Srinivasan, Associate Professor, UFTI
Date Awarded: 4/14/2014
Sponsor: FDOT
Amount: $124,465

Investigating The Effect Of Drivers Body In Motion On Traffic Safety
Pls: Angelos Barmpoutis, Associate Professor, Department of Computer & Information Science and Engineering, University of Florida; Alexandra Kondyli, Ph.D., Assistant Professor, University of Kansas
Date Awarded: 11/26/2013
Sponsor: STRIDE/USDOT
Amount: $53,667

Maintenance Agreement For The Geospatial Crash Database For The Space Coast Transportation Planning Organization
Pls: Ilir Bejleri, Associate Professor, Urban & Regional Planning
Date Awarded: 10/25/2013
Sponsor: Space Coast Transportation Planning Organization
Amount: $17,625

The Association Of State Regulations & APRNS Practice In Rural/Underserved Areas
Pls: Ilir Bejleri, Associate Professor, Urban & Regional Planning
Date Awarded: 9/9/2013
Sponsor: Robert Wood Johnson Foundation
Amount: $70,252

Expanding Accessibility, Utilization & Data Integration Of Signal Four Analytics
Pl: Ilir Bejleri, Associate Professor, Urban & Regional Planning
Date Awarded: 11/12/2013
Sponsor: FDOT
Amount: $139,950

A Unified & Sustainable Solution To Improve Geo-Location Timeliness & Accuracy
Pl: Ilir Bejleri, Associate Professor, Urban & Regional Planning
Date Awarded: 11/12/2013
Sponsor: FDOT
Amount: $118,932

Update Of The Metrolan Orlando Crash Geospatial Database
Pl: Ilir Bejleri, Associate Professor, Urban & Regional Planning
Date Awarded: 7/22/2013
Sponsor: Metroplan Orlando
Amount: $30,000

Gis-Based Instructional Tool For Crash Prediction Methods
Pls: Ilir Bejleri, Associate Professor, Urban & Regional Planning; Siva Srinivasan, Associate Professor, Civil & Coastal Engineering
Date Awarded: 10/25/2013
Sponsor: STRIDE/USDOT
Amount: $89,961

E-Citation Expansion
Pl: Ilir Bejleri, Associate Professor, Urban & Regional Planning
Date Awarded: 6/26/2014
Sponsor: FDOT
Amount: $117,202

Efficacy Of A Driving Intervention Program On Safe Community Mobility For Combat Veterans
Pl: Sherrilene Classen, Ph.D.; Sandra Winter, Ph.D., Occupational Therapy
Date Awarded: 10/1/2012 (ongoing)
Sponsor: Department of Defense
Amount: $152,583

Ippd 2013-2014: Deployment Mechanism & Structure
Pl: Carl Crane, Professor, Mechanical & Aerospace Engineering
Date Awarded: 12/31/2013
Sponsor: Harris Corp.
Amount: $16,500

Guidance For Alternative Intersections
Pl: Lily Elefteriadou, Professor, Civil & Coastal Engineering
Date Awarded: 9/4/2013
Sponsor: Science Applications International Corp.
Amount: $26,639

Signal Timing Optimization With Consideration Of Environmental & Safety Impacts
Pl: Lily Elefteriadou, Professor, Civil & Coastal Engineering
Date Awarded: 2/21/2014
Sponsor: STRIDE/USDOT
Amount: $56,000

Before & After Implementation Studies Of Advanced Signal Control Technologies In Florida
Pls: Lily Elefteriadou, Professor, Civil & Coastal Engineering; Scott Washburn, Associate Professor, Civil & Coastal Engineering; Yafeng Yin, Associate Professor, Civil & Coastal Engineering
Date Awarded: 5/7/2014
Sponsor: FDOT
Amount: $671,248

Analyzing The Impact Of Carbon Regulatory Mechanisms On Supply Chain Management
Pl: Joseph Geunes, Professor, Industrial & Systems Engineering
Date Awarded: STRIDE/USDOT 07/01/2012 to 09/30/2014
Sponsor: Florida Department of Agriculture & Consumer Services USDOT
Amount: $28,743

Improving Transit Operation for Crowley Maritime
Pl: Joseph Geunes, Professor, Industrial & Systems Engineering
Date Awarded: 08/30/2012 to 12/15/2014
Sponsor: Crowley
Amount: $89,281

Customer Service Time Estimation & First Mile Last Mile Schedule Planning At CSX
Pl: Joseph Geunes, Professor, Industrial & Systems Engineering
Date Awarded: 08/16/2012 to 12/31/2013
Sponsor: CSX
Amount: $70,306

Florida Pedestrian & Bicycling Safety Resource Center 2014
Pls: Chris LeDew, UF T2 Center; Nina Barker, UF T2 Center
Date Awarded: 4/1/2014
Sponsor: FDOT
Amount: $600,000

Florida Occupant Protection Resource Center 2014
Pls: Chris LeDew, UF T2 Center; Nina Barker, UF T2 Center
Date Awarded: 2/3/2014
Sponsor: FDOT
Amount: $720,000

Florida Minority Task Force On Occupant Protection 2014
Pls: Chris LeDew, UF T2 Center; Nina Barker, UF T2 Center
Date Awarded: 10/24/2013
Sponsor: FDOT
Amount: $150,000

Local Technical Assistance Program (LTAP) For Florida Transportation Agencies 2014-2015
Pls: Chris LeDew, UF T2 Center; Nina Barker, UF T2 Center
Date Awarded: 6/3/2014
Sponsor: FDOT
Amount: $300,000

NHTSA Occupant Protection Program Assessment 2014
Pls: Chris LeDew, UF T2 Center; Nina Barker, UF T2 Center
Date Awarded: 6/3/2014
Sponsor: FDOT
Amount: $50,000

Effect Of Lime On Fracture Performance Of Asphalt Mixture Subjected To Cyclic Pore Pressure (Phase II)
Pl: Reynaldo Roque, Professor, Civil & Coastal Engineering
Date Awarded: 2/21/2014
Sponsor: Lhoist North America
Amount: $20,957
Application Of Imaging Techniques To Evaluate Polishing Characteristics Of Aggregates
PI: Reynaldo Roque, Professor, Civil & Coastal Engineering
Date Awarded: 6/10/2014
Sponsor: FDOT
Amount: $180,000

Production Of A Major Update To The 2013 Highway Capacity Manual
PI: Bill Sampson, McTrans
Date Awarded: 12/20/2013
Sponsor: Kittelson & Associates, Inc.
Amount: $14,000

GIS-Based Instructional Tool For Crash Prediction
PI: Siva Srinivasan, Associate Professor, Civil & Coastal Engineering
Date Awarded: 9/01/2013
Sponsor: STRIDE/FDOT
Amount: $24,910

Policy Implications Of Automated Vehicle Technology
PIs: Siva Srinivasan, Associate Professor, Civil & Coastal Engineering; Randall Crane, Professor, Mechanical & Aerospace Engineering; Ruth Steiner, Professor, Urban & Regional Planning
Date Awarded: 6/9/2014
Sponsor: FDOT
Amount: $234,976

School Transportation: Development Of An Educational Module
PI: Ruth Steiner, Professor, Urban & Regional Planning
Date Awarded: 2/11/2014
Sponsor: STRIDE/USDOT
Amount: $9,394

Roundabouts & Access Management
PIs: Ruth Steiner, Professor, Urban & Regional Planning and Scott Washburn, Associate Professor, Civil & Coastal Engineering
Date Awarded: 9/20/2012 – 12/31/2013
Sponsor: STRIDE/USDOT
Amount: $159,286

Highway Capacity Manual Enhancement Material
PI: Scott Washburn, Associate Professor, Civil & Coastal Engineering
Date Awarded: 11/6/2013
Sponsor: STRIDE/USDOT
Amount: $67,500

On-Board Diagnostics Inntegration Into Traffic Microsimulation For Vehicle-Specific Fuel Use & Emissions
PI: Scott Washburn, Associate Professor, Civil & Coastal Engineering
Date Awarded: 7/01/2012 to 12/31/2013
Sponsor: STRIDE/USDOT
Amount: $101,764

Emissions Modeling & Integration Into Traffic Micro-Simulation STRIDE
PI: Scott Washburn, Associate Professor, Civil & Coastal Engineering
Date Awarded: 7/12/2012 to 12/31/2013
Sponsor: STRIDE/USDOT
Amount: $34,212

Signalized Intersection Simulation Program For Education
PI: Scott Washburn, Associate Professor, Civil & Coastal Engineering
Date Awarded: 7/12/2012 to 12/31/2013
Sponsor: STRIDE/USDOT
Amount: $80,284

Optimising Operations & Management Of Multi-Modal Urban Transport System For Environmental Improvement
PI: Yafeng Yin, Associate Professor, Civil & Coastal Engineering
Date Awarded: 9/9/2013
Sponsor: Lloyd’s Register Educational
Amount: $79,346

From Pricing To Cap & Trade: Analysis & Design Of Quantity-Based Approach To Confrontion Of Environmental Impact
PI: Yafeng Yin, Associate Professor, Civil & Coastal Engineering
Date Awarded: 9/15/2012 (ongoing)
Sponsor: EAGER
Amount: $100,000

A Cyber Physical System For Proactive Traffic Management To Enhance Mobility & Sustainability
PI: Yafeng Yin, Associate Professor, Civil & Coastal Engineering
Date Awarded: 9/9/2013
Sponsor: CPS, Synergy
Amount: $221,119

Deployment Strategies Of Managed Lanes On Arterials
PI: Yafeng Yin, Associate Professor, Civil & Coastal Engineering
Date Awarded: 9/9/2013
Sponsor: FDOT
Amount: $80,284

Selected Publications


Zhang, F. A Novel Permit Scheme for Managing Parking Competition and Bottleneck Congestion.


Liu, W., Yang, H., Yin, Y. and Zhang, F. A Novel Permit Scheme for Managing Parking Competition and Bottleneck Congestion.


