THE RURAL EQUITABLE AND ACCESSIBLE TRANSPORTATION (REAT) CENTER IMPROVING MOBILITY OF PEOPLE AND GOODS



2024 ANNUAL U.T.C. CONFERENCE

EQUITY, SAFETY, ECONOMIC STRENGTH AND GLOBAL COMPETITIVENESS, AND TRANSFORMATION

THE RESILIENT INFRASTRUCTURE AND DISASTER RESPONSE (RIDER) CENTER

























Conference Overview

While the transportation system goes through a transformation with new technologies like connected and autonomous vehicles, a concerted and focused approach is needed to investigate the efficacy of those solutions with respect to the transportation needs of diverse rural populations comprising the elderly, people of color, and economically disadvantaged persons. This conference will gather academicians, stakeholders, and community leaders to gain a better understanding of the needs of rural populations and the community-specific factors affecting this efficacy. The key insight of this workshop is the transformative discoveries through the co-production of solutions and deep convergence of research, data and practice experiences across disciplines and sectors.

Message from the Center Director



"We are determined to be the solution regarding creating and implementing transformative transportation solutions for rural communities through planning and research."

Our Vision and Mission

Our mission is to establish a record of accomplishments with transformative projects that advance research, inform policy-making, and develop education and outreach programs. It is our hope that these efforts will align with the U.S. DOT Strategic Plan goals of Equity, Safety, Economic Strength, Global Competitiveness and Transformation.

The R.E.A.T. Center

Who We Are

The REAT Center is motivated by strategic thinking and planning of rural transportation in the United States.

The REAT Center is a Tier-1 University Transportation Center Consortium. The lead institution is Florida A&M University with Florida State University, Tallahassee Community College, Cleveland State University, Stony Brook University and University of Washington, Tacoma. We are the go-to resource for researchers and practitioners seeking implementable solutions related to transportation equity and accessibility, particularly in rural areas.

Purpose

The purpose of this conference is to share some of our research, projects, accomplishments, and the various initiatives happening at the consortiums. Through partnering with various policy makers, transportation experts, Universities, local communities near and far with implementable transformative solutions needed to close the transportation gap in rural communities.

Sponsors













FAMU-FSU College of Engineering

Important Locations

FAMU-FSU College of Engineering

2525 Pottsdamer St. Tallahassee, FL. 32304 Free Parking

Railroad Square

620 Railroad Square Tallahassee, FL. 32310 Free Street Parking

FAMU Way

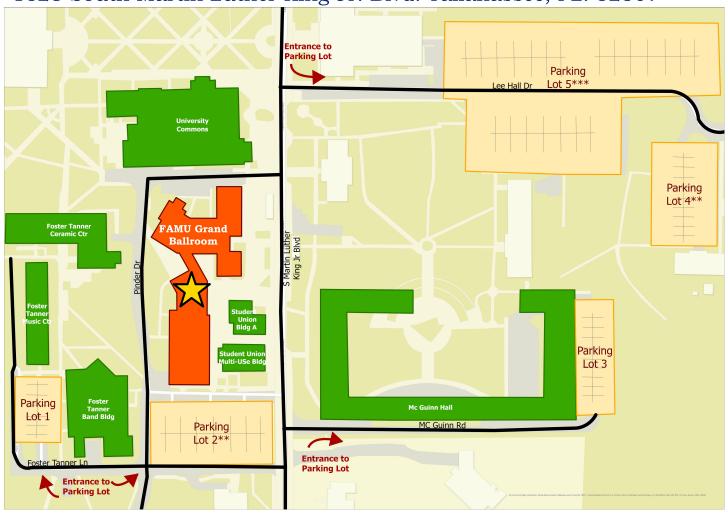
448 FAMU Way Tallahassee, FL. 32301 Free Street Parking

FAMU Grand Ballroom

1628 South Martin Luther King Jr. Blvd. Tallahassee, FL. 32310 Limited Free Parking

FAMU Grand Ballroom

1628 South Martin Luther King Jr. Blvd. Tallahassee, FL. 32307



2000 Levy Ave, Tallahassee, FL. 32310

FSU Research Building

2000 LEVY AVE, TALLAHASSEE, FL 32310



Conference Agenda

Day 1 - April 18, 2024

Location: Florida A&M University Grand Ballroom

8:00AM - Check in & Breakfast

8:15AM - Introductions

8:30AM - Research Videos

8:45AM - Workshop - Bridging Silos: Fostering a Trans-disciplinary Transportation Workforce to Address Rural Transportation Challenges

10:15AM - Round Table Discussions

The Round Table is named after King Arthur's fabled congregation of Knights; given the shape of the table, it has no head - everyone has an equal voice. Round-table discussions are an opportunity for participants to get together in an informal session to examine issues in relation to the thrusts of REAT Center. The composition of each table was selected to ensure that diverse viewpoints (academic, community, industry, etc.) are represented.

Thrust 1	Access and Equity
Thrust 2	Safety of Vulnerable Users
Thrust 3	Infrastructure and Community Resilience

11:30AM - Lunch

12:45PM - Student Presentations

Presenters

Hojjat Barati, Stony Brook University.	Beyond Technological Optimism: Digital Divide between Older Adults' Mobility Needs vs. Available Technology Solutions at Varying Urban Densities.
Alireza Ershad, Stony Brook University.	ldentification of Workforce Skills Sought in Transportation Industry: What do Job Ads Look For?
Chenguang (Steve) Wang, Stony Brook University.	Reasoning and Mitigating AI Biases in Connected Vehicle-Infrastructure-Pedestrian Systems for Promoting Equitable Pedestrian Safety at Intersections.
Samuel Takyi, FAMU-FSU College of Engineering.	Assessing the Impact of Hurricane Ian on Roadways Using Machine Learning: A Case Study in Lee County, Florida.
Razieh Kayamim, FAMU-FSU College of Engineering.	A Bi-Objective Optimization Approach for Emergency Evacuation Planning under Pandemic Settings.
Grant Lipscomb, University of Washington, Tacoma.	Connecting Rural Communities with Autonomous Ferries in the Salish Sea.
Ibrahim Ibrahim, Cleveland State University.	Analysis of the Relationship between the Manner of Collision and Advanced Driving Assistance System Deployment in Vehicle Crashes Occurring in Rural Ohio.
Abdul Ngereza, Cleveland State University.	Influence of the Factors Associated with Micro-mobility Crashes on the Injury Sustained.

1:45PM - Closing Remarks & Announcements

2:00PM - End of Conference Day 1

Day 2 - April 19, 2024

Location: Florida State University Research Foundation Building A - Seminar Room 120

8:00AM - Breakfast

8:15AM - Introductions

8:30AM - Research Videos

8:45AM - Practitioners and Academic Panel

The aim of this panel is to better understand the transportation-related needs of rural populations and how technology can play a role in meeting those needs.

Panelists (Moderator: Dr. Alican Karaer)

Mark Hallenbeck

Alma Tovar

Dr. Tierra Bills

Simone Burns

Dr. Thobias Sando

10:45AM - Break

11:00AM - Lunch

12:00PM - Project Presentations

Presenters

Dr. Ruwen Qin, Stony Brook University.

Driving Assistance to Elderly Drivers in Rural Areas.

Richard Antwi, FAMU-FSU College of Engineering.

Detecting Turning Lane Features on Public Roadways from Aerial Images using Al.

Dr. Panick Kalambay, University of Washington, Tacoma.

Examining Spatial Equity in Micro-mobility Access from a Mid-sized City Perspective.

Abdul Ngereza, Cleveland State University.

Understanding Body Injury Patterns and Associated Severities of Micro-mobility Users Using Bayesian Networks and Text Mining.

1:45PM - Closing Remarks & Announcements

2:00PM - End of the Conference

Speakers and Panelists



Dr. Eren Erman Ozguven

Associate Director, Associate Professor, FAMU-FSU College of Engineering.

Dr. Emmanuel Kidando

Associate Director of Technology Transfer, Assistant Professor, Cleveland State University.



Dr. Angela Kitali

Associate Director - Education, Assistant Professor, University of Washington, Tacoma.



Dr. Jeff Walters

Assistant Professor and co-founder, Open Water Systems, University of Washington, Tacoma.



Dr. Bret Hammond

Team Leader-Outreach Professor, Tallahassee Community College.



Dr. Thobias Sando

Professor, School of Engineering College of Computing, Engineering, and Construction, University of North Florida.



Dr. Alican Karaer

Associate Data Scientist, Iteris, Inc.

Dr. Ruwen Qin

Assistant Professor, Civil Engineering, Stony Brook University.



Simone Burns

Senior GIS Developer, Seminole County.

Alma Tovar

Outreach Coordinator and Transportation Advocate Organización Latino Americana, Eastern Long Island, Inc.





Richard Antwi

PhD Student, Civil and Environmental Engineering, FAMU-FSU College of Engineering.

Dr. Panick Kalambay

Post Doctoral Associate, University of Washington, Tacoma.





Mark Hallenbeck

Professor and Retired Director, Washington State Transportation Center (TRAC),
University of Washington.

Dr. Tierra Bills

Assistant Professor, Public Policy and Civil and Environmental Engineering, University of California, Los Angeles.





Abdul Ngereza

PhD Student, Cleveland State University.



Thank you for Attending the conference! Contact

For further information, please reach out to us at moses@eng.famu.fsu.edu or abryant@eng.famu.fsu.edu.

The Rural Equitable and Accessible Transportation Center



IMPROVING MOBILITY OF PEOPLE AND GOODS

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