Official Center Name

The name of our center is The University Transportation Center for Alabama.

Center Mission

To advance technology and expertise in the multiple disciplines that comprise transportation through the mechanisms of education, research, and technology transfer while serving as a university-based center of excellence.

Current Director

Jay Lindly, PhD, PE, Professor of Civil, Construction, and Environmental Engineering

Five Top Accomplishments

UTCA is pleased to have been a leading partner in the successful, $16M, FHWA-funded ACTION project to transform traffic operations in West Alabama and provide leading-edge research to address societal transportation needs. UTCA has desired for several years to increase its federal funding, and this project is significant for its funding source. Additionally, the project fulfills one of the goals of ATI, which is to put together consortiums on campus that can successfully compete for large, national projects. This is the type of project and funding source that the university should continue to target.

The hiring of Dr. Jun Liu into the Civil, Construction, and Environmental Engineering Department in August 2018 brings significance because it increases faculty in one of UA’s research thrust areas: Transportation. Since his hiring date in August 2018, Dr. Liu has been associated with almost $475k of new awards (new awards from ALDOT and Georgia DOT; note this value does not include the ACTION project, in which he is co-PI). Dr. Liu adds transportation planning skills to the traffic, safety, pavements, and transportation management skills that already reside in UTCA.

UTCA Associate Director Dr. Steven Jones was awarded a Fulbright Fellowship for the 2019 calendar year. His year-long stay in Namibia furthers his plans to perform transformative research in the area of transportation safety in developing nations. The acknowledgment constitutes an external honorific award of which UTCA and UA can well be proud.

During the Annual Report period, UTCA received roughly $2.6M in new awards, compared to roughly $1.3M in the 2017 Annual Report period and approximately $1.2 in the 2018 Annual Report period. This
increase is significant in that it helps fulfill ORED’s Strategic Plan that desires to “Increase the University’s productivity and innovation in research, scholarship.......”

UTCA is proud of the 10 refereed journal articles generated from its research that were published or accepted for publication during the Annual Report period.

Five Goals

UTCA desires to increase its presence related to rural and underserved communities. To do so, it will build on a recent, internally-funded project performed with ATI and College of Communicative Health Sciences titled Transportation Needs Assessment for Pickens Co. and a proposal recently submitted to ALDOT titled Intercity Bus Study. Combining these studies with water-quality projects from AWI would give UA an increased presence in the underserved areas of Alabama.

UTCA desires to increase the number of engineering faculty teaching and researching in transportation. In particular, a position in the area of connected/automated vehicles would advance transportation research in UA. Such a position would leverage Tuscaloosa’s position as a city with approximately 100 intersections equipped with DSRC radios and data-logging controllers. The strategy includes a large budget request made to ATI for an autonomous vehicle which would support work by UTCA, CAVT, electrical engineering, etc. and make UA unique in the state.

UTCA desires to increase its presence in the area of transportation safety in developing nations. To do so, it will extend the work that Dr. Steven Jones is performing in Africa. Such work can lead to a new major thrust in UA’s transportation initiatives.

UTCA desires to continue to participate in multiple-center proposals such as the FHWA-funded ACTION project. Our strategy is to partner with ATI and other centers at UA to identify and propose on large, national projects. As shown by the ACTION award, the impact in university funding can be significant.

Increase research funding and refereed publications. UTCA desires to help UA retain its status as an “R1” research university. Increases in these areas and in UA’s growing reputation will help us retain that designation.

Honors and Awards

Dr. Steven Jones, Associate Director of UTCA, received a 2018-2019 Fulbright U.S. Scholar award in Namibia.
ORED and UTCA

At present, UTCA sees opportunities for increased intra-campus, state, regional, national, and international collaboration and research awards. At present, its funding situation is secure through research overhead returns and funding help from ATI, which has generously responded to UTCA requests for student travel, equipment, and support for UTCA’s part-time Administrative Secretary. Thus, UTCA envisions its relationship with ORED as one where ORED provides overall program guidance and facilitates increased collaboration between Centers and Institutes and in particular encourages multi-party proposals coordinated through Institutes that can identify and win large, national awards.
## ORED Center/Institute Yearly Review

**Institute:** University Transportation Center for Alabama (UTCA)  
**Director:** Dr. Jay Lindly  
**Reporting Year:** 4/1/18 - 3/31/19

| Number of Active Center/Institute Projects, led by the Center | 16 | 7,719,261 |
| Number of Active Center/Institute Projects, in which the Center is not the lead | 1 | 91,194 |
| Number of Active Center/Institute Projects that collaborate with one or more of the University Institutes: |  |  |
| Alabama Cyber Institute | 0 | 0 |
| Alabama Life Research Institute | 0 | 0 |
| Alabama Transportation Institute | 8 | $2,279,126 |
| Alabama Water Institute | 0 | 0 |
| Number of Active Center/Institute Projects that collaborate with one or more of the Other UA Centers/Institutes | 5 | 4,958,115 |
| Number and Total Amount of Requested Funds of Grants/Contracts Submitted since the last reporting period | 14 | $11,932,626 |
| Number of Grants/Contracts Awarded and Total Amount of Awarded Funds since the last reporting period | 9 | 2,592,928 |
| Number of Grants/Contracts currently in-force and Total Amount of Funds | 8 | 5,217,527 |

**Budget Information:**
- Current Center/Institute Budget
- Prior Year Center/Institute Budget
- Revenue Generated Prior Year
- Revenue Projected for Current Year

| Number of unique publications during the reporting period | 12 |
| Number of unique presentations during the reporting period | 11 |
| Number of unique patents during the reporting period | 0 |

**Participants Affiliated with the Center/Institute during the reporting period:**
- Number of Faculty
- Number of Research Scientists/Post-Docs
- Number of Graduate Students
- Number of Undergraduate Students
- Other Staff

| Number of Different UA Colleges or Schools Affiliated with the Center/Institute | 2 |
| Number of Different UA Departments Affiliated with the Center/Institute | 4 |
| Number of Different non-UA Colleges or Schools Affiliated with the Center/Institute | 6 |
| Number of Different International Colleges and Schools Affiliated with the Center/Institute | 0 |

**During the reporting period, did this Center/Institute Collaborate with:**
- Alabama Life Research Institute
- Alabama Transportation Institute
- Alabama Water Institute
- Other UA Centers/Institutes
- The National Water Center
- Affiliates of UAB
- Affiliates of UAH

**During the reporting period, did the Center/Institute interact with the ORED:**
- Office of Tech Transfer
- Bama Technology Incubator
- MINT
- CAF
- Office of Research Development
- Office for Proposal Development