# Florida Department of Transportation Research

## Toward a Florida Automated, Connected, Electric, and Shared (ACES) Transportation System Roadmap: Phase II

*May 2024*

### Current Situation

As the world of automated, connected, electric, and shared (ACES) technologies continues to shape the current and future state of transportation, the Florida Department of Transportation (FDOT) sought a process to coordinate ACES activities across the state and promote public and private collaboration.

The initial effort—BDV25-977-64—partially developed the database of the Florida Transportation System Roadmap. The database created an inventory of past, present, and future ACES projects and initiatives in Florida. It served as a forum and graphical interface to share data, findings, and best practices among public and private transportation organizations and university communities.



*In 2022, the CUTR team participated in the 7th Annual UTC Conference for the Southeastern Region in Boca Raton, Florida. Dr. Pei-Sung Lin, the project PI, chaired a workshop about ACES-related research at the conference and promoted the Florida ACES initiative.*

Based on the Phase I outcomes, FDOT saw an opportunity to complete the roadmap and transfer the database—called the Florida ACES Database and Activity Viewer—from the Center for Urban Transportation Research (CUTR) to FDOT.

### Research Objectives

The objectives of this research project were to transfer the Florida ACES Database and Activity Viewer, and all associated assets, from CUTR and FDOT and use the Florida ACES program to engage with private industries and promote the program to stakeholders.

### Project Activities

The CUTR research team contacted 37 private companies to schedule one-on-one meetings with the goal of promoting the Activity Viewer and the program, as well as gauging their preferences and needs. Fourteen meetings were successfully held. In addition to the one-on-one meetings, the team also engaged with private stakeholders via an email campaign, which garnered 10 new ACES projects; and two conferences—the 2021 Florida Automated Vehicles Summit and the 7th Annual UTC Conference for the Southeastern Region in 2022—where the team distributed informational flyers and discussed the initiative with participants.

To transfer the ACES database and Activity Viewer to FDOT, the research team developed a technical manual that guided the operation for project query on the Activity Viewer, ACES project updates in the ACES database, user management, and a survey form to collect new ACES projects. The team also developed training videos and provided source codes, service accounts for powering the database and viewer, and platform migration procedures.

### Project Conclusions and Benefits

This project resulted in the Florida ACES Database and Activity Viewer being successfully transferred to FDOT, supporting FDOT for the rapid development, implementation, and evaluation of ACES technologies, and the collaboration of ACES research, development, testing, deployment, demonstration, evaluation, and educational initiatives.

*For more information, please see fdot.gov/research.*