ACES Subcommittee Meeting

October 2, 2019
10:00 am to 12:00 p.m. EST
Florida Department of Transportation,
TDA Conference Room, Teleconference
605 Suwannee St, Tallahassee, FL 32399

MEETING OBJECTIVES

The objectives of this meeting include:

- Receive status reports from partners on ACES activities and workforce implications
- Receive additional ACES updates and discuss ACES resources and opportunities
- Discuss potential strategies to achieve the goals of the FTP

For meeting information, please contact Jim Halley at (850) 414-4817, Jim.Halley@dot.state.fl.us.

MEETING ATTENDEES

Subcommittee Members	
Mark Bontrager, *Space Florida*	Ken Bryan, *Rails to Trails Conservancy*
Eric Frey, *Florida Council of 100*	Eric Hill, *MPOAC (MetroPlan Orlando)*
Jennifer Johnson, *Florida Department of Health*	Alix Miller, *Florida Trucking Association*
Doug Wheeler, *Florida Ports Council*	
Alternates	
Casey Grigsby, *Florida Ports Council*	Jennifer Ray, *Florida Department of Health*
Daren Cheatham, *Florida Department of Environmental Protection*	Carl Mikyska, *MPOAC*
Friends	
Anna Quinones, *Tampa Hillsborough Expressway Authority*	Mohammed Hadi, *Florida International University*
Daniel Beaty, *Florida ITE*	Xai Jin, *Florida International University*
Debbie Bass, *Florida Division of Emergency Management*	Rob Schiffer, *FuturePlan Consulting*
Kok Wee Hwang, *SA Aerospace*	Sean White, *FDACS, Office of Energy*
John Brown, *Florida Department of Business and Professional Regulation*	Tony Morgan, *FDACS, Office of Energy*
John Dohm, *Florida Transatlantic*	Julie Christensen, *Tallahassee Leon County Planning Department*

Marco Barbarossa, *Jacobs*	Kyle Cheerangie, *HNTB*
Beth Kigel, *HNTB*	Tanner Martin, *HDR*
Briana Ozor, *HDR*	
FDOT Staff	
Theodore Burdusi, *FDOT District 4*	Brian Watts, *FDOT Forecasting and Trends Office*
Holly Cohen, *FDOT Freight and Multimodal Operations Office*	Ricky Fitzgerald, *FDOT Freight and Multimodal Operations Office*
Chris Edmonston, *FDOT Systems Implementation Office*	Chris Wiglesworth, *FDOT Transit Office*
Ming Gao, *FDOT District 7*	Erika Thompson, *FDOT Office of Policy Planning*
Jennifer King, *FDOT Systems Implementation Offic*e	David Sherman, *FDOT Transit Office*
Gabe Matthews, *FDOT Transit Office*	Mark Reichert, *FDOT Office of Policy Planning*
Scott Phillips, *FDOT Office of Policy Planning*	Samantha Parks, *FDOT Office of Policy Planning*
Romero Dill, *FDOT Office of Policy Planning*	Shi-Chiang Li, *FDOT District 4*
Kelda Senior, *FDOT SunTrax*	
FTP Staff and Consultant Support	
Dana Reiding, *FDOT Office of Policy Planning*	Jim Halley*, FDOT Office of Policy Planning*
Jennifer Carver, *FDOT Office of Policy Planning*	Macy Fricke, *Kimley Horn & Associates*
Steven Gayle, *RSG*	John Kaliski, *Cambridge Systematics*
Nusrat Sharmin*, Cambridge Systematics*	Danny Shopf, *Cambridge Systematics*

MEETING SUMMARY

Welcome and Introductions and Agenda Review

Jim Halley, FDOT Office of Policy Planning, welcomed the participants and asked the participants to introduce themselves. He started the meeting with an overview of the agenda.

Partner Updates

Micromobility Activities in Florida

Julie Christensen, Tallahassee Leon County Planning Department, gave a presentation on the three-month E-Scootershare pilot program in Tallahassee. She said when initially implemented, e-scooters were only allowed on sidewalks, but the recent legislation change in Florida classifying e-scooters as bicycles allows scooters on streets as well as on sidewalks. She said the City of Tallahassee coordinates with stakeholders and with the ridesharing vendors regularly and collects data from the vendors to better understand where

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people are traveling and where to allocate new scooters. On September 25, 2019, the initial three-month pilot period was extended for an additional six months.

Julie shared some key takeaways from the initial pilot period. She noted there were approximately 70,000 rides with an average duration of 18 minutes, suggesting that some users are relying on the e-scooters for commuting purposes. She said there have been very few scooter crashes and citations during the three-month pilot period. Julie also noted the common ridership areas and number of unique riders. She shared some issues observed during the pilot period, such as scooters blocking sidewalks, high speed of scooters in parks and heavy pedestrian locations, lack of connectivity in the community, and challenges with geofencing boundaries. Julie noted the City of Tallahassee is working on resolving the issues identified in the pilot period.

Participants had the following questions and comments:

- How was the 6 MPH speed limit implemented?

  o The vendors implemented the speed limit depending on their ability to adjust the limit based on location. The vendors that could not implement the permitted speed geofenced the area out, while others were able to make the adjustment so the scooter could not go faster than 6 MPH in designated areas.

- How did you decide on 6 MPH as the safe limit for pedestrians?

  o 6 MPH was identified as the average jogging speed. At 6 MPH, scooters are going fast enough to comfortably control but not so fast that operators cannot easily adjust to pedestrians.

- The bike-share program in Tallahassee was not quite as successful as expected. How do we get the scooters to be a sustainable mode?

  o Vendors could not provide the required facilities or equipment in the bike-share program to make it financially feasible. The e-scooters are more financially feasible for vendors. Depending on the effectiveness of e-scooters throughout the extended pilot period and availability of adequate sponsorship, it can be considered as a permanent ride-sharing program in Tallahassee.

- What is the fare difference between bike-share and e-scooter?

  o For the Pace bikes, the fare is $1 per half an hour. For Bird e-scooters, it costs $1 to unlock with additional charges per minute, making them more profitable for the vendors but still easily accessible and affordable for riders.

- Do you expect the universities to become interested? Why did they not participate?

  o The universities were clear that they did not want to participate when the pilot program was initially suggested but would consider allowing e-scooters on campus in the future. They did not provide specific reasons for choosing not to participate.

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- Were there any lessons learned from others that you sought to help your pilot project?

  o Lessons learned from other e-scooters programs of different municipalities were reviewed prior to implementing the pilot program in Tallahassee. The information provided by other communities using e-scooters helped Tallahassee identify best practices to incorporate such as fee structure, requiring 1-hour response time to resolve issues, and nightly rebalancing of scooter locations based on ridership.

Florida Department of Agriculture and Consumer Services, Office of Energy Update

Sean White, Florida DACS Office of Energy, shared an update on the Drive Electric Orlando project adopted by the Florida Office of Energy. He said the Drive Electric Orlando program offers electric vehicles (EV) as a part of rental fleets in the region and supports a variety of incentives associated with renting/driving an electric vehicle (including free valet, preferred parking, etc.). He provided an overview of the EV Roadmap that is currently under development. The EV Roadmap goals identify EV charging infrastructure and the impact on the electric grid. He said the Office of Energy is working on an Alternative Fuel Resilience Plan that catalogs alternative fuel infrastructure and provides best practices regarding resiliency for location alternative fuel infrastructures.

Participants had the following questions and comments:

- The Florida Ports Council and the Florida National Gas Association are wrapping up an alternative fuel study and will coordinate with the Office of Energy offline to discuss those efforts.

Additional ACES Resources

Jim highlighted some key resources available to ACES Subcommittee members. He gave an overview of the FTP website and indicated a survey is available on the website to capture information about how ACES may impact Florida's future transportation system. He highlighted the initial results of the survey and reported that working remotely is currently the most cited implication of new technology on Florida's transportation future. Other common responses were related to automated and connected vehicles, big data, electric vehicles, and high-speed rail. He said the survey is still open and encouraged members to take the survey to provide their input.

Discussion: Potential ACES Strategies to Achieve the FTP Goals

Jim said the Steering Committee is in the process of finalizing minor revisions to FTP goals and shared them with the Subcommittee. Proposed FTP goals are:

- Safety and Security for Residents, Visitors and Businesses

- Agile, Resilient, and Quality Transportation Infrastructure

- Connected, Efficient, and Reliable Mobility for People and Freight

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- Transportation Choices that Improve Accessibility and Equity

- Transportation Solutions that Strengthen Florida's Economy

- Transportation Systems that Enhance Florida's Communities

- Transportation Solutions that Enhance Florida's Environment

Jim reviewed the guidance from the FTP Steering Committee to the ACES subcommittee, which was discussed in detail in prior meetings:

- Broaden definition of infrastructure (including technology/broadband, utilities, charging stations, sensors, etc.)

- Define public sector role, recognizing most technologies are market-driven

- Consider objective/strategies related to cybersecurity and data privacy

- Address implications of technology on equity

- Address implications of innovation on transportation funding sources and needs

Jim reminded participants of the strategy framework developed at the previous ACES Subcommittee meetings and said the subcommittee would discuss potential FTP strategies based on this framework. He outlined a proposed schedule for discussing strategies within the framework:

- Infrastructure and Design (November Subcommittee Meeting)

- Technology and Data (November Subcommittee Meeting)

- Economic and Workforce Development (today)

- Customers (today)

- Partnerships (January Subcommittee Meeting)

- Planning and Project Development (January Subcommittee Meeting)

- Funding (January Subcommittee Meeting)

Customers

John Kaliski, Cambridge Systematics, provided some background information on customers indicating that Florida has a large, fast-growing population and has a large number of visitors every year. He noted Florida's population is aging, and the diverse population has varying levels of comfort and familiarity with emerging technologies. He reviewed customer survey results, which indicated that more than half of the

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respondents were comfortable riding in a self-driving vehicle, but only 37 percent of respondents were comfortable with a loved one riding in a self-driving vehicle.

John reviewed potential strategies developed by staff based on member discussion at prior meetings, as well as a review of the current FTP and other recent plans and studies:

- Focus on how emerging technologies can enhance safety, mobility, accessibility, and other FTP goals

- Use technology to enhance customer service, such as integrating schedule and payment information across systems

- Plan for how emerging technologies will support customer needs during special events/emergencies

- Adapt technologies to address specific needs of customer groups, such as

    o Seniors, youth, low-income, limited English proficiency, disabled, etc.

    o Visitors

- Develop proactive policies to ensure emerging technologies enhance equity and access to opportunity and avoid unintended consequences

    o Particular attention to residents without smartphones, broadband, or credit cards/bank accounts policies/incentives

- Plan for customer needs during the transition to comprehensive adoption of specific technologies such as automated or connected vehicles

- Continue public awareness and education about the use and impacts of emerging technologies

- Commit to ongoing research on customer acceptance and needs related to transportation technology including customer surveys and pilot tests

- Monitor and prepare for potential changes in travel patterns resulting from emerging technologies, including changes in how, where, and when people travel (particularly shifts across modes or systems)

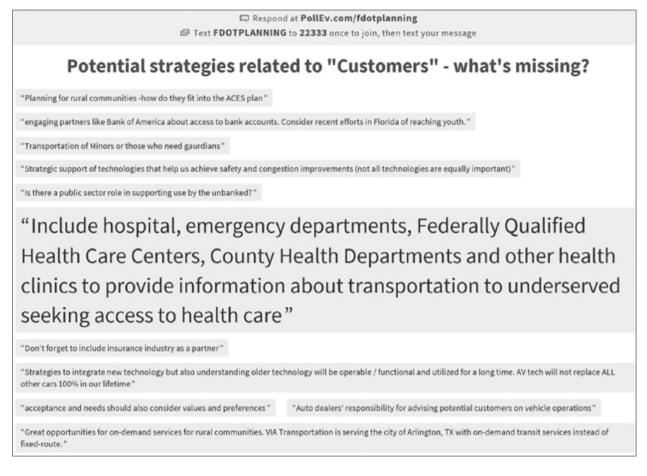*Participants had the following questions and comments:*

- Freight delivery is a key issue in urban or congested areas that need to be considered. Land use is something that influences how, when, and where freight is delivered.

    o *John noted it is important to ensure the customer language includes references to both people and freight.*

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- o Need to understand FDOT's role in guiding locals and industries to make sure they have information available.

- In an emergency evacuation, the issue of EVs needs attention in terms of driving range and time for a rapid charge in contrast to gas filling.

- These strategies should reflect the need for public education and be coordinated with law enforcement, fire and rescue, and towing.

- Potential partners for communicating the change in transportation options are emergency departments, hospitals, the Florida Association of Community Health Centers, county health departments as well as other community clinics who typically provide guidance and help with transportation needs for those receiving or seeking health care.

- Health departments would be an excellent resource for communicating information about new transportation options.

- Use technology to promote or aid the interoperability of transit systems.

- Transition to automated vehicles and electric vehicles is critical and could extend over decades from the initial introduction of these technologies to broad inclusion in the fleet.

  - o *Jim noted the integration of existing technology with new and emerging technology has been the most commonly cited challenge in the FTP survey to date.*

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Jim asked participants to use their mobile devices to respond to the following polling question: What other potential strategies are there related to Customers?

Economic and Workforce Development

John provided background information on Florida's economic and workforce development context. He noted that job growth is shifting toward knowledge-based and non-routine activities. More than half of jobs today could be automated using existing technologies, and more than half of all jobs by 2030 could be in occupations that do not exist today. John shared an example from the transportation construction industry that indicated there is a growing demand for specialized workforce. He suggested a similar study could be conducted related to the transportation technology workforce. He reviewed potential strategies developed by staff:

- Encourage private sector companies involved in research, development, manufacturing, and services for transportation technology to locate and expand in Florida

    o Continue to provide a favorable environment including forward-looking, predictable laws and regulations

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- o Continue to provide opportunities for industry partners to test equipment and software in Florida

- o Ensure key transportation technology industries are a focus for Department of Economic Opportunity, CareerSource Florida and Enterprise Florida programs and resources

- Develop, attract, and retain a skilled workforce for transportation technology research, development, manufacturing, and services

    - o Work with industry partners to document workforce supply, demand, and gaps

    - o Work with education and workforce development partners to close talent gaps through targeted training and development programs

    - o Encourage lifelong learning opportunities for transportation workers

    - o Maintain centers of excellence in transportation technology research and education

- Focus on automating tasks, not jobs

    - o Support initiatives that automate lower-value, routine activities but retain knowledge-based or non-routine service jobs in Florida

    - o Retrain and assist with transition of existing transportation workers anticipated to be impacted by automation

- Prepare for unique impacts of ACES in urban areas

    - o Create mobility hubs in areas with access to multiple transportation options, jobs, and services

    - o Prepare to repurpose land and structures currently used for parking and other vehicle functions in urban areas to support community and economic development visions

    - o Support continued growth in e-commerce and distribution

- Prepare for unique impacts of ACES in rural areas

    - o Assist with transition of rural workers in industries like truck driving that may be impacted by automation

    - o Assist rural local governments in preparing for economic opportunities related to specialized manufacturing, technology services, and entrepreneurship

    - o Support continued growth in e-commerce and distribution

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Participants had the following questions and comments:

- There is some automation in Florida ports, but due to restrictions by the longshoremen, the amount of port automation on the U.S. east coast is limited, which could potentially hurt the business recruitment efforts in Florida.

- The military is a significant employer in many rural counties. Are we tracking their use of technology and how that interfaces with FTP?

- *Jim noted that staff would coordinate with Florida's economic development partners.*

Jim asked participants to use their mobile devices to respond to the following polling question: What other potential strategies are there related to Economic and Workforce Development?

Participants had the following questions and comments:

- When does the development of the FTP Implementation Element start? How do we plan to identify champions for these strategies?

  - Implementation is a continuous process. As it relates to the FTP, the Vision Element and the Policy Element are now being developed will be completed by 2020. The formal implementation process of the FTP begins in January 2021.

- Do we have a baseline of ACES activity into the state and in the districts to measure against as we move forward? Are there any incentives for first adopter assistance to late adopters opportunities?

  - Currently there is no comprehensive baseline for the ACES activity.

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Topics for Next Meeting

Jim noted the next meeting would include additional partner updates and presentations by subject matter experts to help support the continued discussion on potential FTP goals. He asked participants to provide suggestions via email for additional presentations/speakers to include at future meetings. He said the next ACES Subcommittee meeting would cover discussion on potential strategies related to Infrastructure and Design, and Technology and Data as well as review strategies discussed during today's meeting.

Wrap Up and Next Steps

Mark Reichert, FDOT Office of Policy Planning, shared an update on the study conducted by the Center for Urban Transportation Research (CUTR), University of South Florida. The research evaluates the impact of AV and alternative fuel vehicles on vehicle miles traveled (VMT) and revenue. It is a comprehensive effort that will include nine different reports, addressing components such as VMT, market penetration, policy options, revenue, infrastructure etc. The report will be completed by the end of the month and a summary report will be developed that could be a useful resource for this subcommittee. He offered to share a recent presentation related to this study.

Jim provided an overview of the upcoming events related to the FTP update:

- Resilience Campaign Kickoff Webinar, October 3, 3019, Tallahassee, Florida

- Resilience Subcommittee Meeting, October 29-30, 2019, Ft. Lauderdale, Florida

- FTP SIS Steering Committee Meeting, November 14, 2019, Ocala, Florida

- ACES Subcommittee meeting in conjunction with the Florida AV Summit, November 20-22, 2019, Miami, Florida.

Jim concluded the meeting by notifying the members that staff is working on establishing a new Safety Subcommittee that will focus on the Vision Zero goal in Florida, support the FTP, and support the update of the SHSP. He thanked attendees for their participation.

Adjourn

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