FTP/SIS ACES Subcommittee Kick Off Meeting

January 29, 2019
9:00 to 11:00 a.m. EST
Florida Department of Transportation
Executive Conference Room, Teleconference
605 Suwannee St, Tallahassee, FL 32399

Meeting Objectives

The FTP/SIS ACES Subcommittee will meet regularly to focus automated, connected, electric, and shared vehicle technologies, trends, and policies and support the update of the FTP and SIS Policy Plan. The objectives of this meeting include:

- Review the upcoming FTP and SIS Policy Plan update cycle
- Discuss FDOT priorities and cross-cutting topics
- Review and approve FTP/SIS ACES Subcommittee charge and work plan

For meeting information, please contact Dana Reiding at (850) 414-4719, Dana.Reiding@dot.state.fl.us.

Meeting Attendees

Attendees
Dan Beaty, *Florida ITE*
Bryan Caletka, *MPOAC*
Chris Emmanuel, *Florida Chamber of Commerce*
Casey Grigsby, *Florida Ports Council*
Ananth Prasad, *Florida Transportation Builders Association*
Dennis Smith, *FSU Department of Urban and Regional Planning*
Brad Thoburn, *Michael Baker International*

Call-in Attendees
Marco Barbarossa, *JACOBS*
Denise Bunnewith, *North Florida TPO*
Ken Bryan, *Rails-to-Trails Conservancy*
John Dohm, *Real Estate Consultant at Florida Transatlantic*
Lily Elefteriadou, *University of Florida*
Guy Fraker, *Insurance Group*
Bob Frey, *Tampa Hillsborough Expressway Authority*
Stewart Gibbons, *ULI Florida*
Muhammed Hadi, *Florida International University*

Eric Hill, *MetroPlan Orlando*
Dennis Hinebaugh, *University of South Florida*
Beth Kigel, *Palm Beach North Chamber of Commerce*
Jesus Martinez, *ITS Florida*
Alix Miller, *Florida Trucking Association*
Cindy Price, *The Florida Senate*
Cheryl Seinfeld
Laura Smidt
Pat Steed, *Florida Regional Councils Association*
Alex Trauger, *MetroPlan Orlando*
Eric Thorn

FDOT Staff
Tom Byron, *FDOT Assistant Secretary*
Jennifer Carver, *Office of Policy Planning*
Holly Cohen, *Freight and Multimodal Operations Office*
Frank Collins, *Trends and Forecasting Office*
Regina Colson, *Office of Chief Planner*
Ed Coven, *Transit Office*
Romero Dill, *Office of Policy Planning*

Chris Edmonston, *Systems Implementation Office*
Rusty Ennemoser, *Office of Policy Planning*
Jim Halley, *Aviation and Spaceports Office*
Jennifer King, *Systems Implementation Office*
Shi-Chiang Li, *FDOT District 4*
Martin Markovich, *Office of Policy Planning*
Gabe Matthews, *Transit Office*
Carmen Monroy, *Office of Policy Planning*
Raj Ponnaluri, *Traffic Engineering and Operations Office*

Huiwei Shen, *Systems Implementation Office*
Mark Reichert, *Office of Policy Planning*
Dana Reiding, *Office of Policy Planning*
Erika Thompson, *Office of Policy Planning*
Santanu Roy, FDOT District 2

Consultants

John Kaliski, *Cambridge Systematics*
Ashley Killough, *Cambridge Systematics*
Tanner Martin, *HDR*
Brianna Ozor, *HDR*
Danny Shopf, *Cambridge Systematics*

Meeting Summary

Welcome and Introductions

Dana Reiding opened the meeting with a welcome and introductions. The meeting objectives for this meeting include:

- Review the upcoming FTP and SIS Policy Plan Update Cycle

- Discuss FDOT Priorities and Cross-Cutting Topics

- Review and Approve FTP/SIS ACES Subcommittee Charge and Work Plan

Dana provided an overview of the Florida Transportation Plan which, although coordinated by the Office of Policy Planning at FDOT is the plan for all of Florida. The FTP has an established Steering Committee of key partners to guide the update and implementation of the FTP.

Tom Bryan, FDOT Assistant Secretary, briefly addressed the group and welcome attendees to the ACES Subcommittee Kick Off meeting.

Overview

Dana began the meeting with a discussion of the FTP and how the ACES Subcommittee fits into the process. The ACES Subcommittee brings partnerships and technology discussions together to inform the FTP. The FTP is a statewide five year long range transportation plan which was last updated in 2015. The next FTP update will launch in May 2019 with publication by December 2020. The seven goal areas from the last update will remain in the next version. However, there will be greater emphasis on cross cutting themes across the goal areas. This is appropriate for a plan which is a state level plan, that does not have specific projects outlined. Currently, staff have identified two cross cutting themes, with the possibility of a few additional: ACES and Resilience. These cross cutting themes are the foundation for the two FTP subcommittees. The subcommittees will replace the goal area working groups formed during the last update. The following table depicts ACES cross cutting themes with the FTP goal areas and SIS Policy Plan objectives.

Plans		ACES Themes
FTP Goal Areas	Safety and Security	Continue to support research, testing, policy, and deployment activities to realize the anticipated safety benefits of automated and connected vehicle technologies.
	Infrastructure	Incorporate and support emerging technologies such as connected vehicles or alternative fuel sources
	Mobility	Use emerging technologies to reduce delay and improve reliability and customer service, such as: • Intelligent transportation systems; and • Automated, connected, or shared vehicle
	Choices	Support research, development, and testing of automated and connected vehicles and other emerging technologies
	Economic Competitiveness	Encourage private-sector companies involved in research, development, manufacturing, and service activities for transportation equipment and technology to locate and expand in Florida
	Quality Places	Use non-highway transportation modes and new technologies for moving people and goods to reduce the need for road expansions and potential negative impacts on communities
	Environment and Energy	Support more diversity in transportation energy sources, including greater use of renewable or low-emission sources, through research, collaboration, enhanced infrastructure, public-private partnerships, education, and incentives
SIS Policy Plan Objectives	Interregional Connectivity	Using technology and innovative practices to improve the efficiency of interregional travel and related business practices
	Intermodal Connectivity	Encouraging greater integration among modes and systems including infrastructure, services, information, and supporting business processes among SIS facilities, and between SIS and regional facilities to support complete end-to-end trips and provide more choices for customers
	Economic Development	Provide transportation systems to support Florida as a Global hub for trade, tourism, talent, innovation, and investment.

Dana briefly discussed ACES trends such as increasing grocery delivery options/services, the increase in the number of trips taken via Uber, and the rise in electric scooter popularity. Dana wrapped up the Overview with the schedule for the FTP and SIS Policy Plan update:

• FTP Kickoff in May 2019

• 2019 Steering Committee Meetings

   o May 9, Jacksonville, in conjunction with TransPlex

   o July 9-10, Bonita Springs, in conjunction with Floridians for Better Transportation

- o October/November, location TBD

- Vision Element Completed by December 2019

- Policy Element Completed by December 2020

- SIS Policy Plan completed by 2021

Comments and Questions

- Is connectivity included in one of the goal areas or themes? The need for connectivity and whether it should be required is a huge issue that crosses all technologies and plans.
    - o Connectivity does not have a separate goal but it is embedded in each of the goal areas.
    - o Including a new goal area or a policy directive addressing connectivity may help resolve this.
        - ▪ FDOT just adopted the Connected and Automated Vehicles business plan, which touches on infrastructure readiness and community outreach. Connectivity is very much intertwined.
    - o Connectivity should be considered its own issue at the state level and be a standalone subject.

ACES Impacts on Florida's SIS

Huiwei Shen provided a brief overview of the SIS and the upcoming update to the SIS Policy Plan. The next SIS Policy Plan is expected to be published by December 2021 and will consider infrastructure updates to accommodate emerging technologies related to ACES. Staff intend to discuss the SIS update and implications of ACES with the ACES Subcommittee throughout the FTP update process.

Currently, the Systems Implementation Office is looking at previous work done by FDOT and national resources to synthesize existing literature and understand and evaluate the trends. There are four key trends that will impact SIS planning:

- Connected vehicle technology

- E-commerce

- Shared vehicles and ride sharing

- Mobility

A component of this study is a SWOT analysis (Strengths, Weaknesses, Opportunities, and Threats). An invitation will be extended to the ACES Subcommittee and the subcommittee will be updated at key milestones in the process.

Review of ACES Charge and Work Plan

Dana reviewed the ACES Subcommittee's charge and work plan. The ACES Subcommittee includes members from the FTP-SIS Steering Committee as well as additional "friends" of the subcommittee who are interested stakeholders and subject matter experts. The four charge statements are:

- Discuss themes, trends, and planning implications of ACES for transportation in Florida

- Identify policy-level objectives or strategies to address and/or maximize emerging technologies to support the FTP goals and the SIS objectives

- Review and provide input, as requested, on related plans and processes, including those from FDOT and other partners

- Serve as ACES subject matter experts for the FTP-SIS Steering Committee and provide updates to the committee as needed

The ACES Subcommittee Work Plan includes the following dates and meetings:

- January 2019 – ACES Subcommittee Kickoff Meeting

- April 2019 – ACES Workshop and Subcommittee Meeting

- Participate in workshop focused on how ACES impact the SIS

- May 2019 – TransPlex 2019 and FTP/SIS Steering Committee Meeting (Optional Attendance)

- June 2019 – ACES Subcommittee Web Conference (2 hours)

- July 2019 – FTP/SIS Steering Committee Meeting (Optional Attendance)

- August 2019 – December 2019 – Support development of long-range policy recommendations for the update of the FTP

- January 2020 – December 2021 – Support Development of long-range policy recommendations for the update of the SIS Policy Plan and the Strategic Highway Safety Plan (SHSP)

Discussion

Following a review of the charge statements, Dana led an in-depth discussion of each statement. Discussion comments were captured via on screen notes and the GoTo Meeting Chat function.

Discuss themes, trends, and planning implications of ACES for transportation in Florida.

- Safety, especially as it relates to bicycle and pedestrians is a very important planning implication.

- It is vital to differentiate between the different modes of transportation. Each mode will have different needs and requirements, especially when it comes to freight versus passenger transport.

  - Connection points for ACES vehicles between modes must also be considered. For example, Amazon launching drones from trucks to make deliveries.

- Risk is an important factor. During planning, both external risks and the risks technology could pose to our existing system should be reviewed.

- Incorporating the MPO's Long Range Transportation Plans into planning for ACES is important for planning at the more local and regional level, rather than the statewide Florida Transportation Plan.

- How will ACES affect land use changes or modifications based on behavioral changes.

- Must plan for incorporating ACES into the project development process.

- Social and Environmental Justice should be considered an implication of ACES technology and planning for it.

- There is a growing importance of the curb and managing it. Must plan for clear signage, pickup and drop off lanes, etc.

- The roles of partners and involved organizations should be clearly defined.

- Design is integral to how we view our transportation network and how design must change to incorporate ACES.

- Economic development shapes how we transport goods and services.

- Need to consider the framework for technology, rather the specific technology as it is ever changing.

- Must consider medically at risk and disabled citizens, especially in regard to accessibility of ACES technology.

- There needs to be a plan for shared vehicle use during hurricane evacuation.

- Technology changes so rapidly that our plans are not adapting quickly enough. A more compressed planning horizon should be considered.
    - There are different tools available for planning which can support a shorter horizon.
    - Much more rapid rate of adoption than before is required for success.

- Must address security for SIS facilities, such as automated trucks accessing secured port facilities.

- How ACES efforts would effect workforce development.

- Need to pay close attention to updates of the Federal transportation bill

- Ensure each element of ACES are differentiated including benefits, implications, conflict, etc. Must be aware that the different elements can conflict or compound one another.

- Consider how projects will be funded such as public or user funding.

- Work with partners to support modal and SIS projects as airports are heavily effected by ACES because so much airport revenue comes from parking fees.

- Supporting goods movement to get supplies to affected areas during hurricanes and extreme weather events.

- We are not just moving people but also moving their possessions. How do we quickly move goods through various modes throughout the state.

- o Need more agility in public funding to accommodate the rapid pace of the private sector to continue moving people and goods quickly.

- There has been an exponential growth in the amount of data and how we can actually summarize and use this data.

- How do we scale different projects/types of projects to work in multiple diverse areas of the state?

- We have global cities in our state. We have a focus internally but we also need to consider the national and global connection to and from these cities.

- Are there any resources you need and how would you like to receive them?

  - o ULI research library is a good resource. Resilience was a theme for the research a few years back and could have some good information.

  - o Consider a SharePoint or central repository with documents and links. Meetings will be more productive if attendees can read and prepare beforehand.

Identify policy-level objectives or strategies to address and/or maximize emerging technologies to support the FTP goals and the SIS objectives

- Procurement and the public procurement rules will need to be updated.

  - o Need to engage in Public-Private Partnerships more easily.

  - o Build a case in the FTP for some statutory/regulatory changes that allow us to be more agile in the future.

  - o Procurement for experimental projects should be considered.

- Public sector has the responsibility of the safety of the public. While we need to be more agile, we must prioritize the safety of our users.

- Is there anything related to how we construct our projects?

  - o We will need to retrofit most of the transportation system and will need resources for urban redesign to accommodate changing technologies and business practices.

- Companies are focused on things such as clear signage, drop off lanes, partnerships with landowners, cities, and need certainty in regulation.

  - o These are some of the things we need to focus on to make sure we are attractive to AV/CV companies.

  - o For example, creating strategies and policies that make a consistent drop off lane design, color, and signage throughout the state could be very beneficial to a company trying to implementing AV/CV in the state.

- It is critical that all areas of Florida have high-speed internet access to support this technology.

- How do we accommodate new technologies working simultaneously with old technologies and infrastructure?

- What are the expectations of private sector? What would these partnerships look like?

- Who owns the data and what is FDOT's obligation for data privacy? How can FDOT get the data they need?

- There should be a single source for experimental projects.

- Enable a framework to create partnerships with private companies with capital to shape emerging technologies.

- Public Sector should identify needs, while the private sector provides solutions. However, those solutions have to work within existing systems.

- Focus on user journey (multi-modal integration).

    Will companies be expected to help support infrastructure that is needed? Or will this fall on the public sector?

- How do we accommodate the evolving interaction between old, existing and emerging technology. For example AVs picking up and dropping off with older vehicles?

- What level of cooperation will there be in these partnerships? What is the expectation on the private and public sector? What is realistic?

Review and provide input, as requested, on related plans and processes, including those from FDOT and other partners

- FHWA Certifications every 4 years.

- Provide inputs to needed changes to demand modeling and simulation guidelines and practices

- Consider all of the shared mobility and future technologies as a part of a scenario planning process and incorporate into the LRTPs.

- Identifying the core drivers and possible futures and forecasts is critical. There should be contingencies to account for the potential outcomes that we may not be expecting or hoping for.

- Automated Transit Shared Use network is a good example for learning from demonstrations to actually take them to a sustainable implementation effort.

    o There needs to be a better mechanism for sharing the results of our research and results of our pilot testing and demonstrations.

- The more we can align our plans and efforts, the more effective/successful our implementation will be.

    o Expecting members to take this information and help us get it incorporated in the right plans.

- Changes may be needed to the work program and its process.

- Integration with local government comprehensive plans as local land development regulations, especially related to parking, will likely need to change.

- Need to setup meetings with private sector to determine what the future directions are and get in early on the system requirements.

FDOT

- Provide inputs to teaching and continuous learning to support workforce development.

Serve as ACES subject matter experts for the FTP-SIS steering committee and provide updates to the committee as needed

- Have the FTP champions leading the conversations related to the different types of technologies.

- Districts and MPOs are both doing public outreach. Central Office is coordinating with both Districts and MPOs to get feedback could provide efficiency in getting feedback from already established processes.

- Coordination with RPCs, especially to cover feedback from rural areas.

- Important to reach the public but very hard to do it. Would like to be more targeted in outreach efforts to the underserved. Younger generations are more accessible digitally.

- Including an assessment of the public through workshops and focus groups to find out what users of the transportation are thinking.

- Need to include the Florida Department of Agriculture and Consumer Services and major utility providers for input electrification and solar.

- Include the Florida Department of Health to help use the regional health departments to reach underserved populations.
    - Public and Partner Involvement Plan will be released for public comment. Please provide comments on this during the comment period.
        - The Subcommittee will be notified with the plan is released for public comment.
    - Equity for all populations is critical to include.

- Provide regularly updated findings to related industries and impacted industries. Developers are building structures that will last for 39 years plus, but many will sell their developments in 3 years or less and aren't aware of "progress" being made.

- We have to determine what is possible, reach out to the industries to find these limitations.

- Coordination with modal and expressway partners are also very important.

Next Steps

Dana closed the meeting with an overview of action items and the next steps. Staff will take the feedback from today's meeting and structure upcoming meeting as needed. A meeting summary and the PPI Plan will be sent out to the meeting attendees. OPP will begin scheduling FTP workshops after the kick-off in May.

Dana left attendees with a homework assignment: consider what you and your organization have to offer to the meetings, and resources or information and trends to help frame the conversation. There will be opportunities to present to the subcommittee and other information sharing opportunities.

Adjourn

Action Items

The following table list action items identified during the meeting, those responsible for completion of the action item and the status.

Action Item	Staff Responsible	Status
Complete Meeting Summary	Ashley Killough	Complete
Send Meeting Summary	Dana Reiding	
Send PPI Plan	Dana Reiding	