



MPOAC STAFF DIRECTORS' COMMITTEE MEETING

August 02, 2018
Orlando Airport Marriot Lakeside
7499 Augusta National Drive, Orlando, FL





Call to Order
&
Pledge of Allegiance



Approval of Minutes June 07, 2018



Public Comments (non-agenda items)



Executive Directors Report

UPWP Report
MPOAC Weekend Institute Overview

UPWP Report

A decorative graphic consisting of several overlapping, wavy, light blue and teal lines that curve from the top right towards the bottom right, partially overlapping the text 'UPWP Report'.

Accomplishments are in the meeting packet

MPOAC finished SFY 2018 under budget



MPOAC Weekend Institute

Overall Summary

32 members attended

Participant surveys scored very well

54% of past attendees still on MPO
Boards

The graphic features a green background with abstract yellow and blue circular patterns and lines. The text is centered and reads: MPOAC Weekend Institute for Elected Officials. The letters 'MPO' are white with a black outline, 'AC' is red with a black outline, and the remaining words are white with a black outline. A blue horizontal bar is at the bottom.

MPOAC

**Weekend Institute
for
Elected
Officials**

MPOAC Weekend Institute Overview

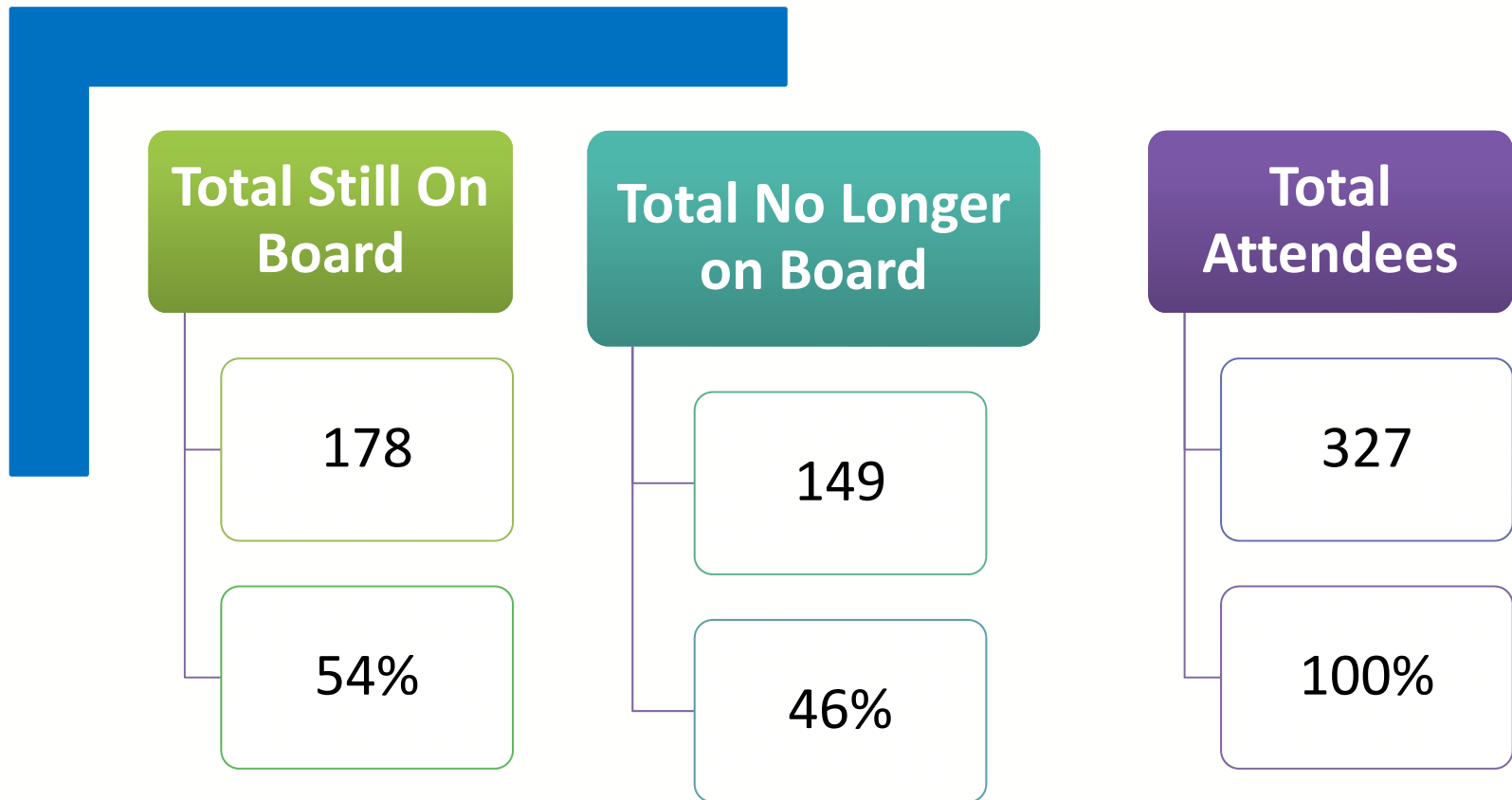
- The Institute provides MPO Board members with an opportunity to enhance their leadership skills and their understanding of transportation decision-making
- The Institute topics include:
 - Basic Concepts in Transportation Planning
 - Sources of Transportation Funding
 - Laws and Regulations Affecting MPOs
 - MPO Board Responsibilities and Authority
 - MPO Products and Processes
 - Critical Funding Issues
 - Origins of MPOs
 - Transportation Jargon & Acronyms



Institute Trainers



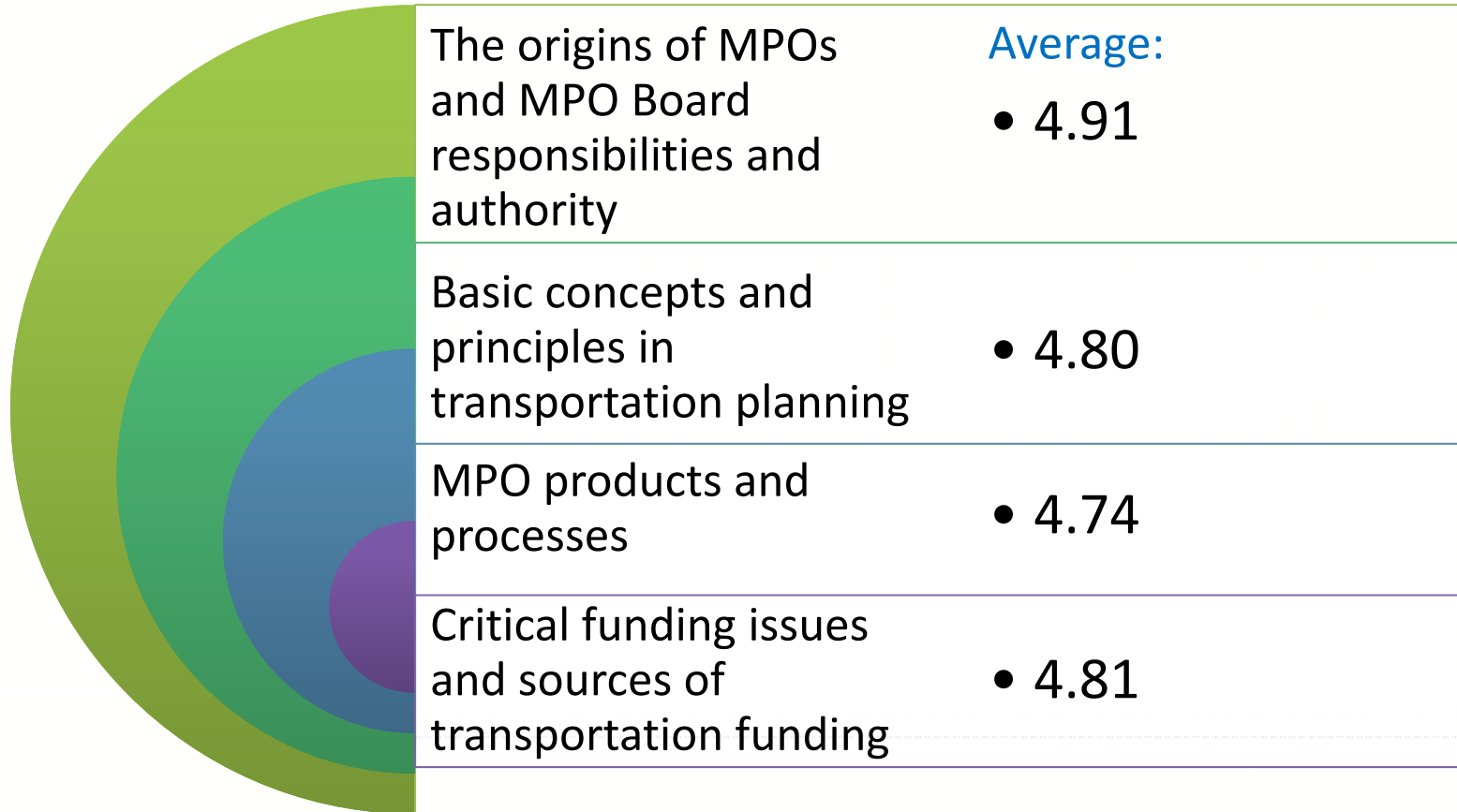
MPO Board Members Attending MPOAC Institute Training



*As of 2018, there are **391** MPO board members across the state of Florida.

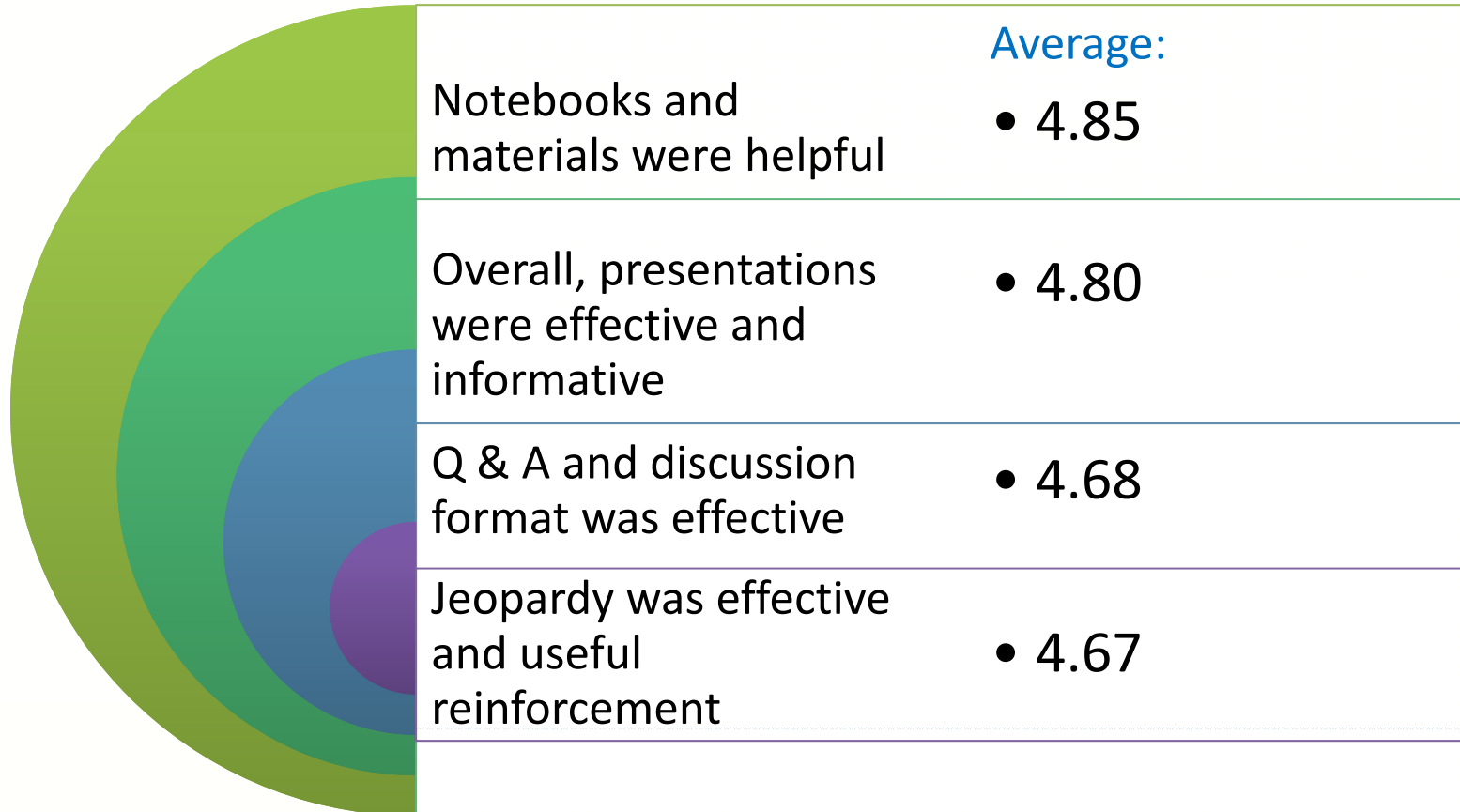
MPOAC Weekend Institute Evaluation Results from 2007 to 2018

Did the Institute effectively inform you on the following topics?

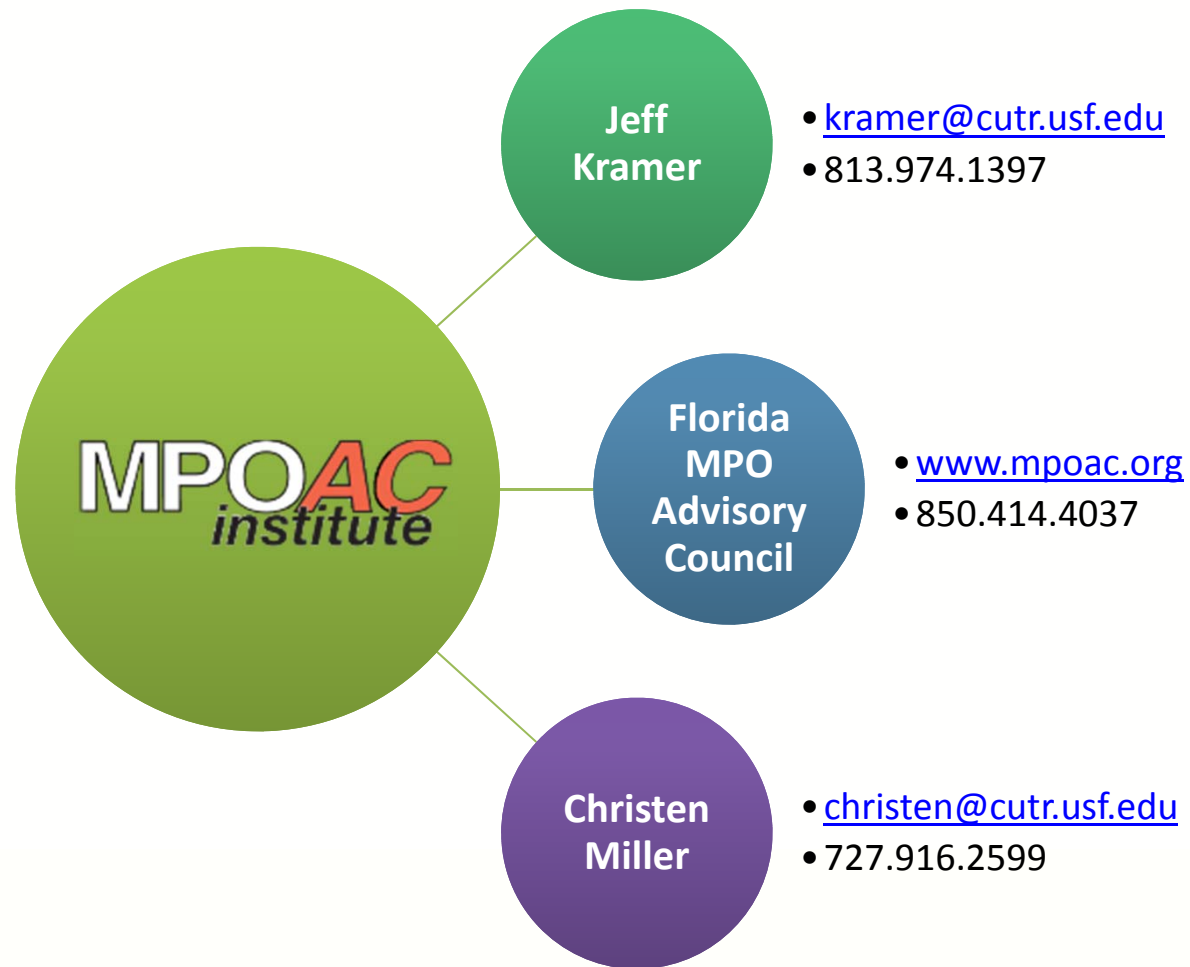


MPOAC Weekend Institute Evaluation Results from 2007 to 2018

Was the Institute format effective?



Contact Information



Florida DOT Presentation

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- Agency Status Update
- TRAC-N-Rides Update
- Call for FMPP Topics
- LRTP Revenue Follow-up
- State Annual Assessment, Federal Planning Finding

A decorative graphic consisting of several overlapping, curved, light blue and white shapes that resemble a stylized wave or a ribbon, positioned in the upper right quadrant of the slide.

FHWA Florida Division Presentation

- Announcements
- Funding Opportunities
- Transportation Performance Measures Updates

Transportation Performance Measurement

Updates

August 2018



U.S. Department of Transportation
Federal Highway Administration

Recent Milestones



- Planning Rule Effective: May 27
 - All LRTP & S/TIP Amendments Address Safety TPM
 - Underlying Planning Requirements Addressed
- June 15:
 - FDOT HPMS Submittal for new PM3 travel time metrics



What's New for FL?

- Reviewing TIP TPM Documentation when STIP Amendments Received
- Reviewing MPO Consensus Document
- Reviewing draft TIP Templates for PM2 and PM3
- Reviewing draft System Performance Report Framework



What's New in Guidance?

- Implementation of Bridge Penalty – June 2018
 - For States that do not meet or make significant progress towards their safety performance targets
- TPM Truck Freight Bottleneck Reporting Guidebook – July 2018

<https://www.fhwa.dot.gov/tpm/guidance/>



On the Horizon



- Aug 31: FDOT Sets Safety 2019 Target
- Oct 1:
 - S/TIP with Safety Targets Addressed
 - FDOT request for Using FDOT/MPO equivalent data sources (PM3)
 - FDOT to Report BR/Pvmt/Sys Perf Targets to FHWA
 - Baseline Reports for BR/Pvmt/Sys Perf (Interstate only)
- ~~Nov 16~~ **Nov 14**: MPO Sets Bridge, Pavement and System Performance Targets



For Additional Information



- Danielle Blackshear – Districts 1, 3 – danielle.blackshear@dot.gov
- Teresa Parker – Districts 2, 5, 7 - teresa.parker@dot.gov
- Stacie Blizzard – Districts 4, 6 – stacie.blizzard@dot.gov
- FHWA FL Division Website: www.fhwa.dot.gov/fldiv/tpm.cfm





MPOAC STAFF DIRECTORS' BUSINESS ITEMS & PRESENTATIONS





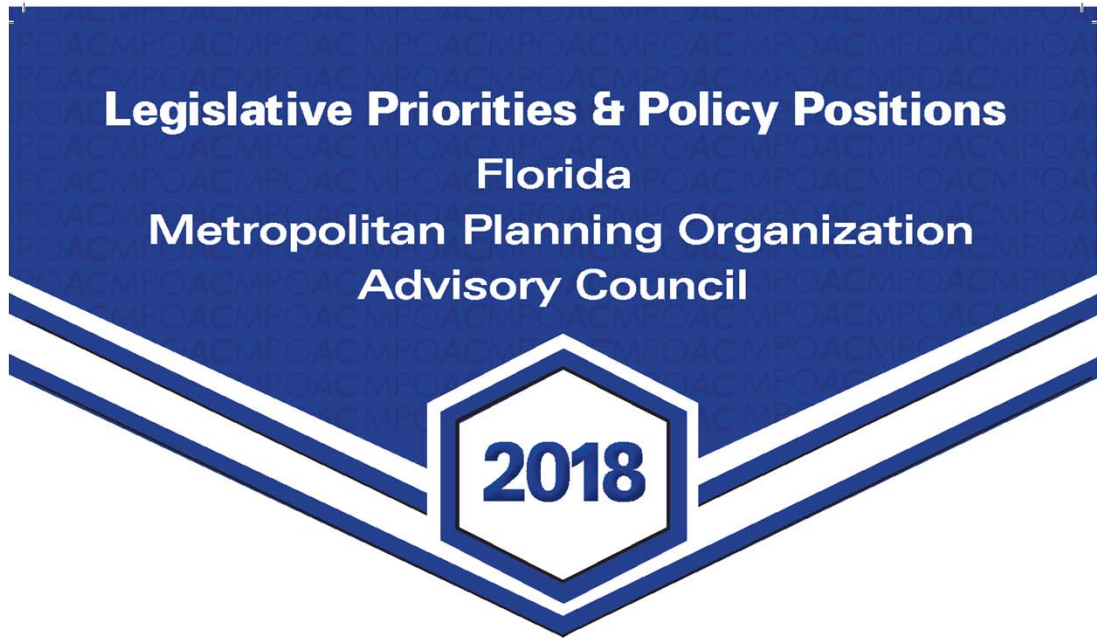
MPOAC Legislative Policy Positions and Outreach

The 2019 legislative session will start March 5th

Committee meetings will start in January

Need to distribute our policy positions

Explain the role and value of MPOs



Implements the recommendations from the MPOAC transportation revenue study and other options for expanding transportation revenue sources.

Regulates distracted driving as a primary offense by prohibiting the use of two-way electronic wireless communication devices and other similar distracting devices while operating a motor vehicle, except when the device is part of, or physically docked in, the motor vehicle.

Restores funding to 2007 levels for the Transportation Regional Incentive Program (TRIP).

Allows Strategic Intermodal System (SIS) funds to be used on roads and other transportation facilities not designated on the SIS if the improvement will enhance mobility or support freight transportation on the SIS.

Establishes flexible and predictable funding for transit projects (capital and operating) identified through the metropolitan transportation planning process by removing various funding limitations for the State Transportation Trust Fund (STTF).

Recognizes that federal metropolitan transportation planning funds shall not be regarded as state funds for purposes of expenditure.



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(850) 414-4037 | (850) 414-4895 fax
www.mpoac.org

Implements the recommendations from the MPOAC transportation revenue study and other options for expanding transportation revenue sources.

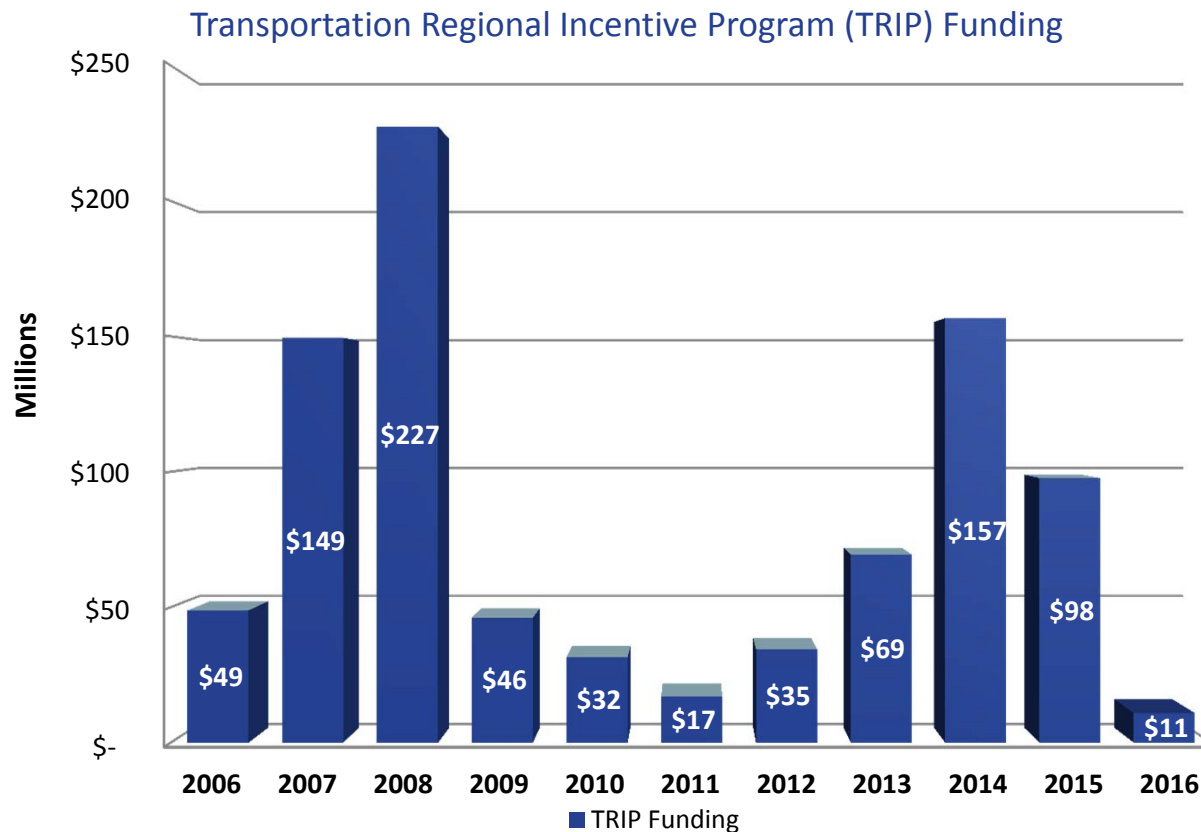
Key Recommendations:

- Expand the Charter County and Regional Transportation System Surtax to allow municipalities over 150,000 in population (or the largest municipality in a county) and all counties located in MPO areas to enact up to a one cent local option surtax by referendum.
- Index local option fuel taxes to the consumer price index in a manner similar to the current indexing of state fuel taxes.
- Identify potential revenue replacement sources for the current motor fuels tax which is no longer able to fully support the current or future needs of the transportation system.
- Charge alternatively fueled vehicles a fee equal to the fuel tax paid by gasoline or diesel fueled vehicles.
- Ban legislative appropriations for individual transportation projects (commonly referred to as earmarks). As an alternative, create a competitive grant program that benefits local projects.

Regulates distracted driving as a *primary* offense by prohibiting the use of handheld electronic wireless communications devices and other similar distracting devices while operating a moving motor vehicle.

The 2013 Florida legislature enacted the “Florida Ban on Texting While Driving Law.” The law prohibits operation of a moving motor vehicle while manually typing, sending or reading interpersonal communication (texting, e-mailing, instant messaging, etc.) using a wireless communications device, with certain exceptions. The law provides for enforcement of the ban as a secondary offense, meaning a driver would have to be pulled over for some other violation to get a ticket for violating the ban on texting. The 2014, 2015, 2016, 2017, and 2018 Florida Legislatures underscored the severity of distracted driving by considering bills that would have substantially increased the penalty for distracted driving, including making it a primary offense. Additionally, the legislature considered expanding the applicability of the law to include all uses of handheld electronic devices while driving. This legislative proposal would seek to strengthen the enforcement mechanism for the texting while driving ban by making it a primary offense to use handheld electronic wireless devices while driving.

Restores funding to 2007 levels for the Transportation Regional Incentive Program (TRIP). The TRIP leverages state documentary stamp tax proceeds to promote regional planning and project development by providing state matching funds for improvements to regionally significant transportation facilities identified and prioritized by regional partners. This proposal seeks to restore TRIP funding by reducing diversions of documentary stamp proceeds for non-transportation purposes.



Allows Strategic Intermodal System (SIS) funds to be used on roads and other transportation facilities not designated on the SIS if the improvement will enhance mobility or support freight transportation on the SIS.

Current state law does not permit SIS funds to be spent on roads or other transportation facilities that are not part of the SIS, even if proposed improvements would directly benefit users of SIS facilities by enhancing mobility options or supporting freight movement in a SIS corridor. This legislative proposal would broaden the State's ability to improve passenger and freight mobility on SIS corridors by making eligible the expenditure of SIS funds on non-SIS roads and other transportation facilities where the benefit to users of SIS facilities can be demonstrated.

Establishes flexible and predictable funding for transit projects (capital and operating) identified through the metropolitan transportation planning process by removing various funding limitations for the State Transportation Trust Fund (STTF).

Current state law limits the amount of funding that can be made available from the STTF for transit projects for both capital and operating expenses. These limitations, which are not in place for roadway funding, makes transit funding from the STTF less predictable for the purposes of planning and project implementation and artificially limits the ability of MPOs to implement priority transit projects. This proposal recognizes the critical role transit plays in moving people and goods within and between Florida's metropolitan areas by removing the distinction between transit and highway projects for the purpose of spending funds from the STTF.

Recognizes that federal metropolitan transportation planning funds shall not be regarded as state funds for purposes of expenditure.

The United States Department of Transportation (USDOT) provides funding to metropolitan planning organizations (MPOs) to carry out their federally required duties. Those federal funds are given to states who in turn distribute them to MPOs based upon a formula agreed upon by the Florida Department of Transportation (FDOT) and the Florida MPOs and then approved by the Federal Highway Administration (FHWA). The Florida Department of Financial Services (DFS) has determined that the expenditure of federal funds by MPOs shall be subject to all state requirements, laws and regulations even where such laws conflict with federal laws, regulations and requirements. This limits the ability of the Florida MPOs to use federal funds for their intended purpose and impinges on their ability to carry out their responsibilities as outlined in federal rule. This proposal would clarify that federal monies passed through the State of Florida to MPOs and the Florida MPO Advisory Council (MPOAC) shall not be regarded as state funds for purposes of expenditure.

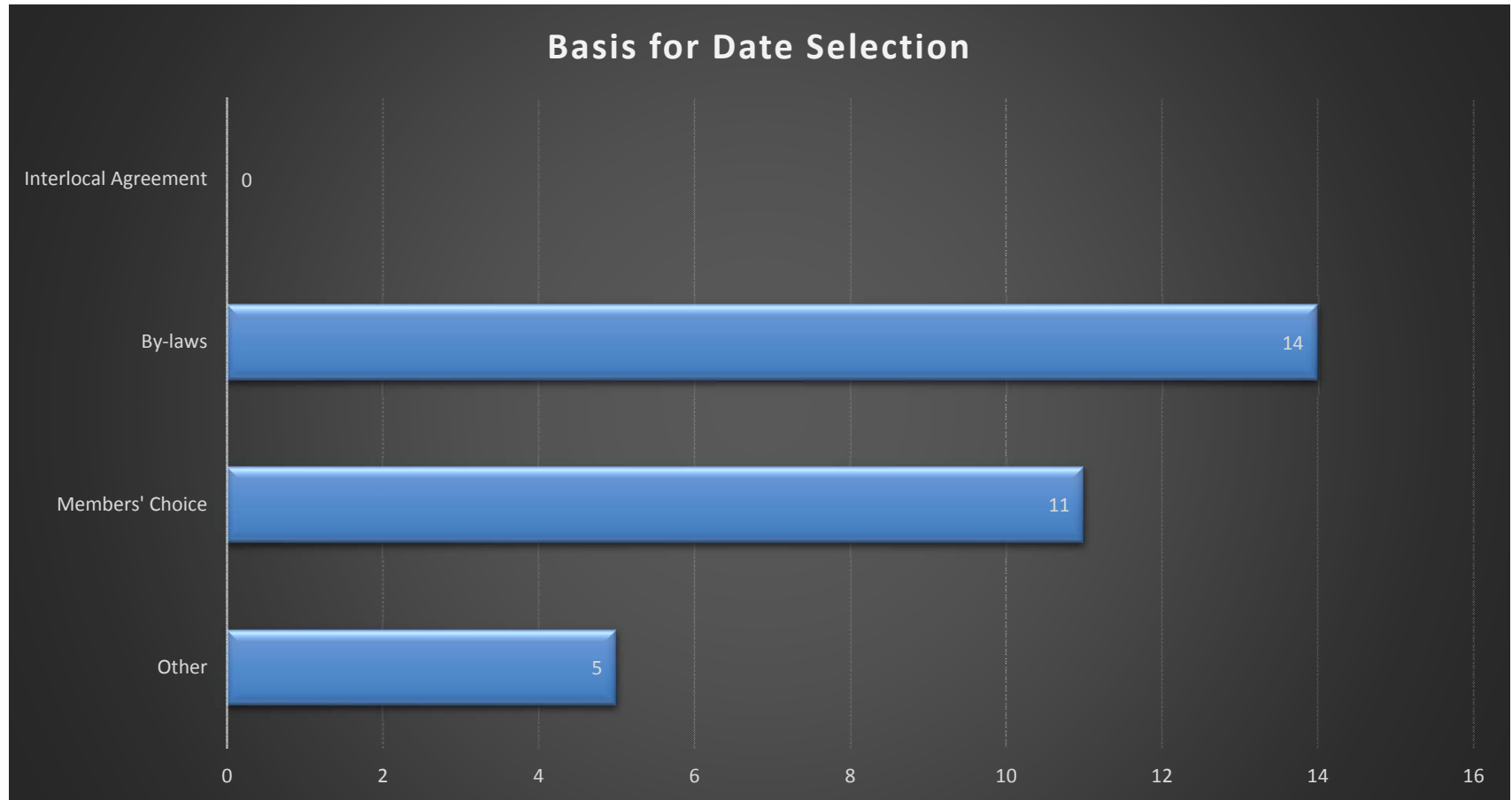
Supports the advancement of innovative transportation mobility solutions and policies that make Florida the national leader in creative approaches to addressing transportation needs, while simultaneously protecting citizens from malicious tampering with such technologies by making tampering a punishable offense.

It is clear that transportation technologies will undergo a revolutionary leap forward over the next several years. A variety of transportation technologies are under development including autonomous vehicles and the hyperloop. It is the responsibility of the Florida legislature to ensure that the states laws and funding mechanisms support the development and implementation of these technological advances in the way people and freight will move in and between our metropolitan areas. At the same time, it is incumbent upon the Florida legislature to ensure that the health and welfare of Florida's citizens and visitors are protected from possible harm presented by these new technologies, including the malicious and intentional interference of the proper functioning of transportation vehicles and systems. This proposal supports legislative efforts to implement innovative mobility solutions and polices while protecting the health and welfare of Florida's citizens and visitors.

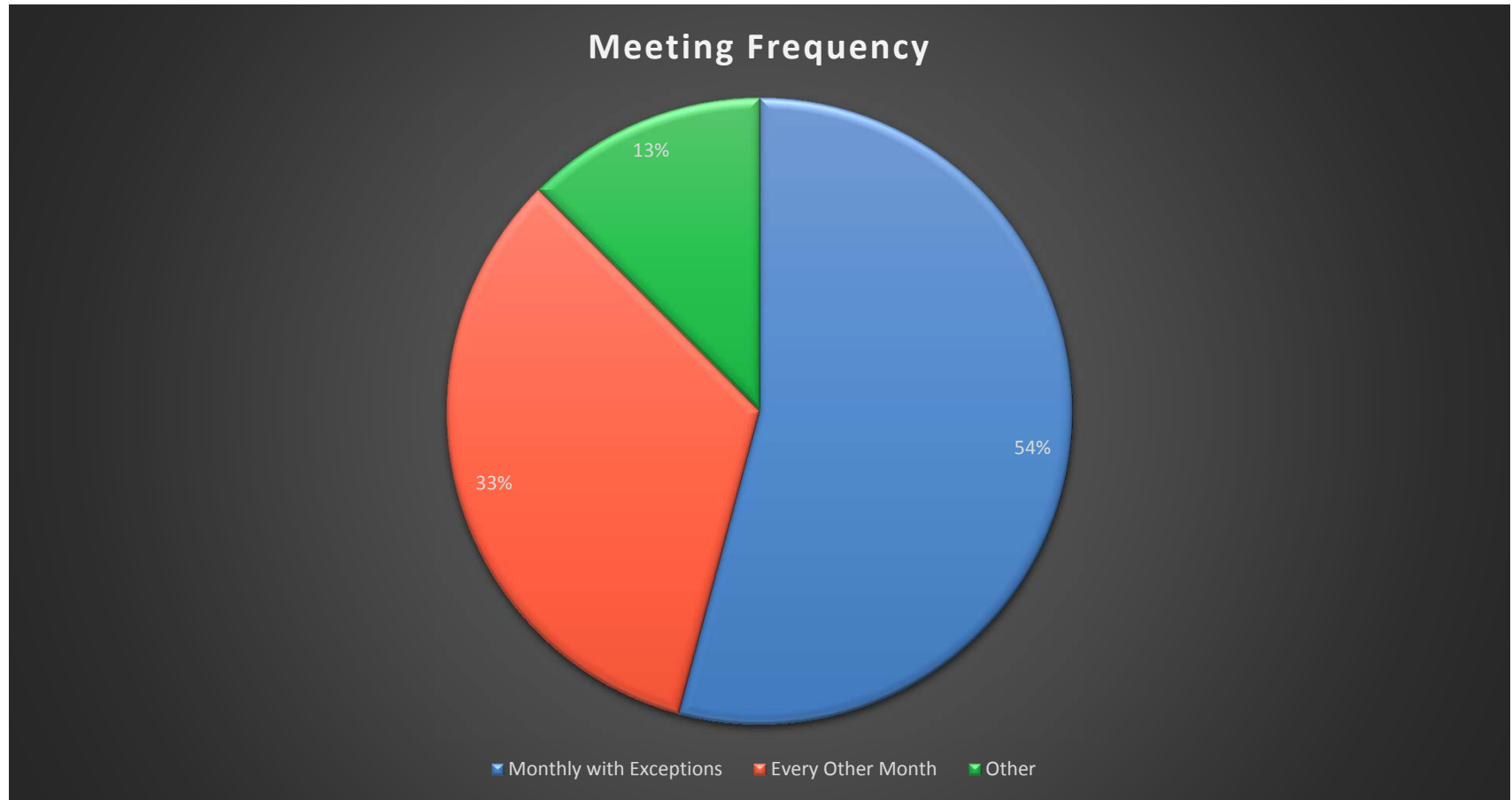


2018 MPOAC Meeting Schedule

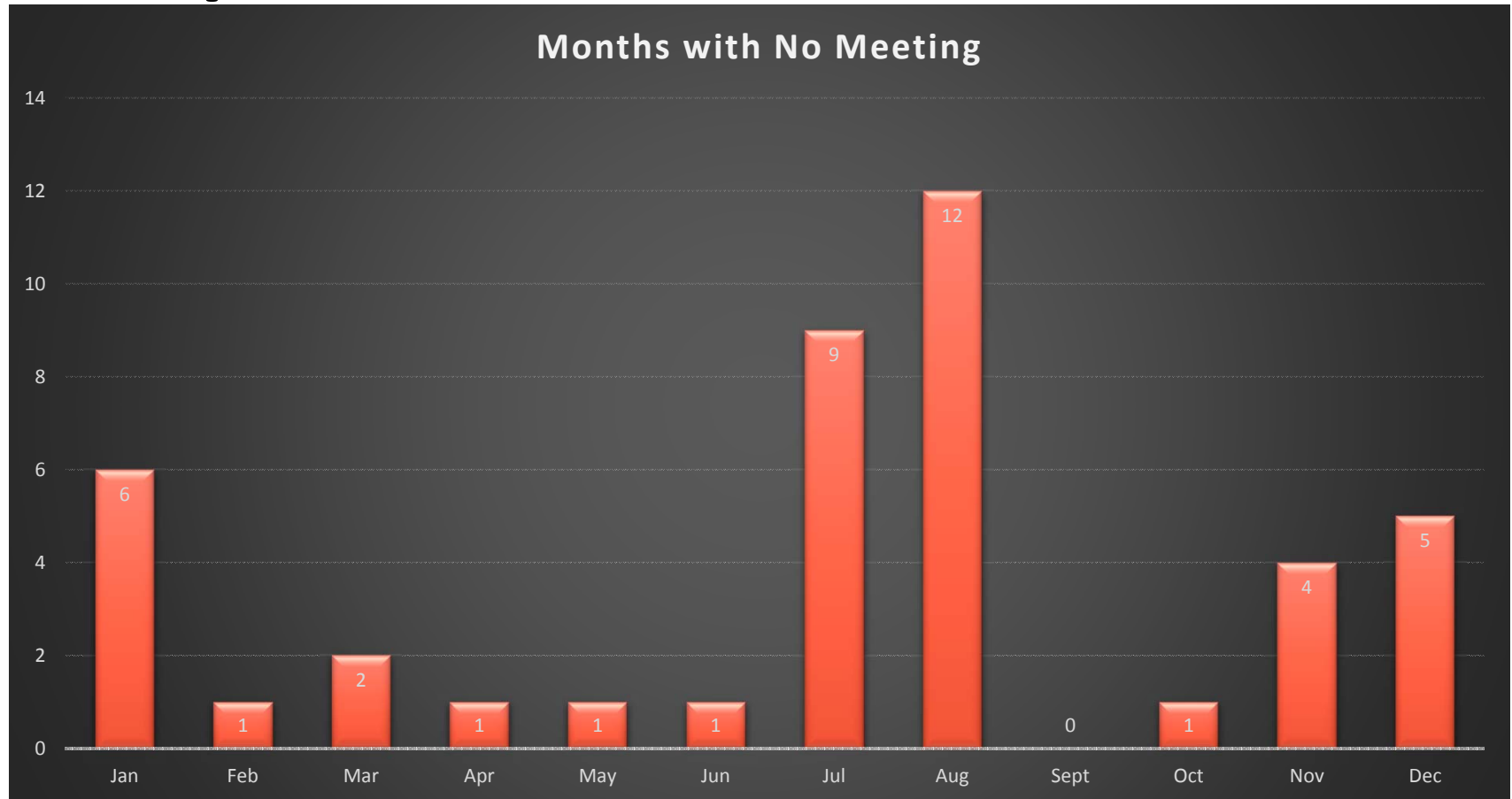
How are your meeting dates determined? Choose all that apply.



How often does your governing board meet?

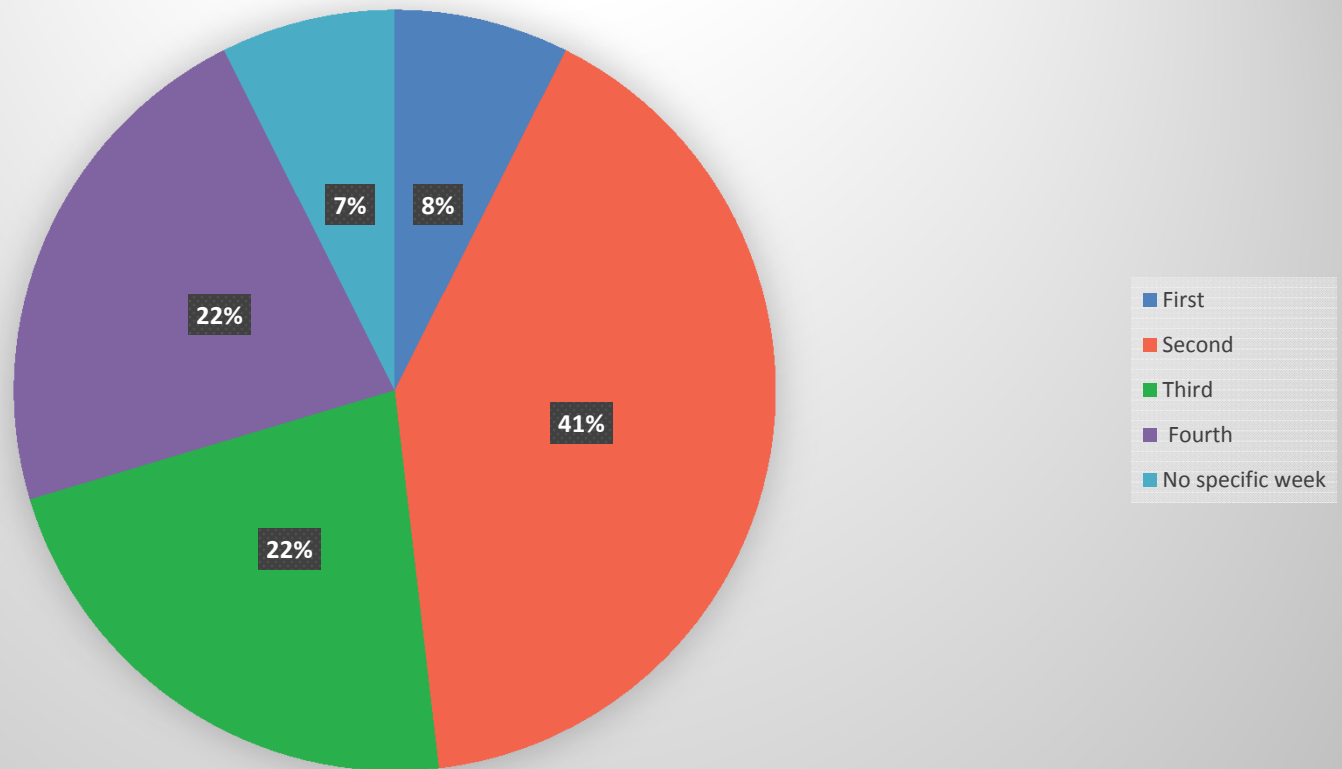


If you selected “Monthly with Exceptions,” which months are the exceptions?



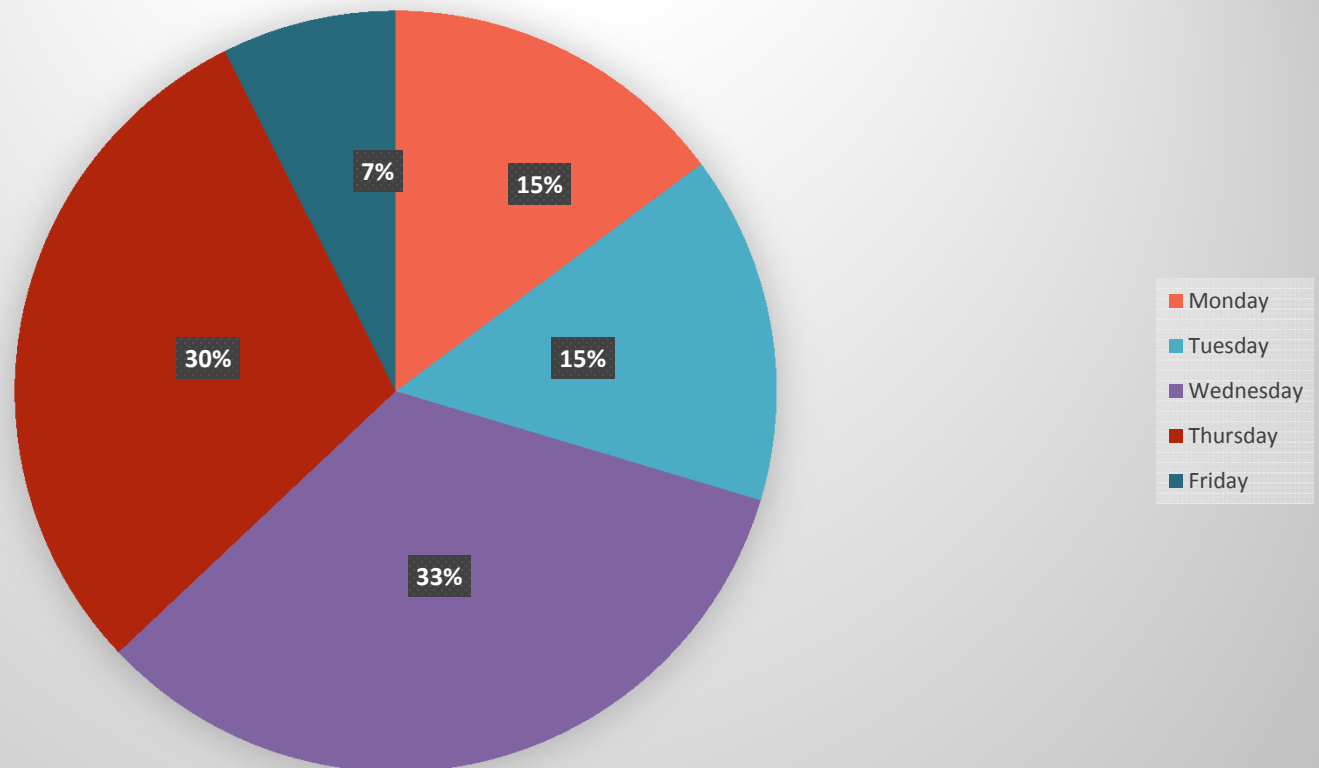
During which week of the month are your meetings held?

Meeting Dates by Week of the Month



On which day of the week do you typically hold meetings?

Meeting Dates by Day of the Week



Meeting Schedule by MPO

Bay County	4 th	Wednesday	Every other Month (EOM) (beginning Feb)
Broward	2 nd	Thursday	
Capital Region	3 rd	Tuesday	Except Jul/Aug/Dec
Charlotte County-Punta Gorda	2 nd	Monday	
Collier	2 nd	Friday	Except Jan/Jul/Aug
Florida-Alabama	2 nd	Wednesday	EOM (beginning Feb)
Forward Pinellas	2 nd	Wednesday	Except Jul/Dec
Gainesville	4 th	Monday	EOM (beginning Jan)
Heartland	3 rd	Wednesday	EOM (beginning Jan), except Jul
Hernando-Citrus	3 rd	Tuesday	EOM (beginning Jan)
Hillsborough	1 st	Tuesday	
Indian River County	2 nd	Wednesday	Except Jan/Jul/Aug
Lake-Sumter	4 th	Wednesday	Except Mar/Jul/Nov
Lee County	3 rd	Friday	Except Jul/Aug/Dec
Martin	No specific	Monday	
MetroPlan Orlando	2 nd	Wednesday	Except Jan/Apr/Aug/Oct
Miami-Dade	No specific	Thursday	
North Florida	2 nd	Thursday	Except Jan/Jul
Ocala-Marion	4 th	Tuesday	
Okaloosa-Walton	3 rd	Thursday	EOM (beginning Feb)
Palm Beach	3 rd	Thursday	Except Jan/Aug/Nov
Pasco County	2 nd	Thursday	Except Feb/Aug
Polk	2 nd	Thursday	EOM (beginning Jan)
River to Sea	4 th	Wednesday	Except Jul/Dec
St. Lucie	1 st	Wednesday	EOM (beginning Feb)
Sarasota/Manatee	4 th	Monday	Except Mar/May/Jul/Aug/Nov
Space Coast	2 nd	Thursday	Except Jan/Jan/Aug



YEAR 2019

MPOAC Meeting Dates

JANUARY

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FEBRUARY

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MARCH

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APRIL

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NOVEMBER

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YEAR 2020

MPOAC Meeting Dates

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Consolidated Planning Grant



CPG Benefits

- Elimination of separate budget detail
- One authorization of work
- Ease in accounting and billing
- One federal oversight agency
- One agency for fund carryover
- Consolidated reporting



Future Mobility Research Synthesis



What Future Mobility Means for Florida's MPOs and the LRTP

August 2, 2018

Synthesis of Current Research

Florida DOT asked us to discover and synthesize research findings about future mobility.

RESEARCH NOTES

- Focused on planning context, not vehicle technology
- Includes academic research, not reporting in the popular press
- Includes a review of more than 100 papers



Research Framework

Transportation Technology Issues

- Impact on travel demand
- Impact on VMTs
- Impact on safety
- Public infrastructure requirements
- Impact on mode share

Societal Issues

- Social equity & accessibility
- Impact on land use
 - Residential location
 - Business location
 - Parking
 - Urban streets
- Freight movement



Future Mobility Definitions

VEHICLE MODES

- Connected Vehicles (CV): conventional autos or trucks with on-board technology to permit communication with other vehicles, infrastructure, and internet
- Autonomous Vehicles (AV): Autos and trucks that do not require driver intervention (SAE Level 4-5)

AUTONOMOUS VEHICLE OWNERSHIP

- Personal privately owned vehicles (PAV)
- Shared ownership vehicles (SAV) – a fleet may be owned and operated by a Transportation Network Company (Uber, Lyft), a transit authority, or a new business entity



Future Mobility Definitions

MOBILITY as a SERVICE (MaaS) or MOBILITY on DEMAND (MOD)

- Purchasing individual trips to meet personal travel needs

Examples



Transit



TNC



Bikeshare



Carshare



Scooter

Setting the Planning Stage

1. Question underlying assumptions. Future Mobility is changing the planning landscape
2. Societal issues are ever more important
3. The relationship of Private and Public is shifting
4. MPOs may facilitate a regional regulatory approach
5. Don't let uncertainty paralyze the planning process. Several trends are clear.



A New Idea for the Planning Process

- Future Mobility Process
- Functions to enlighten the LRTP
- May include assessments of:
 - Current technology and services
 - Institutional landscape
 - Policy and regulatory considerations
 - Strategic actions
- Updated frequently

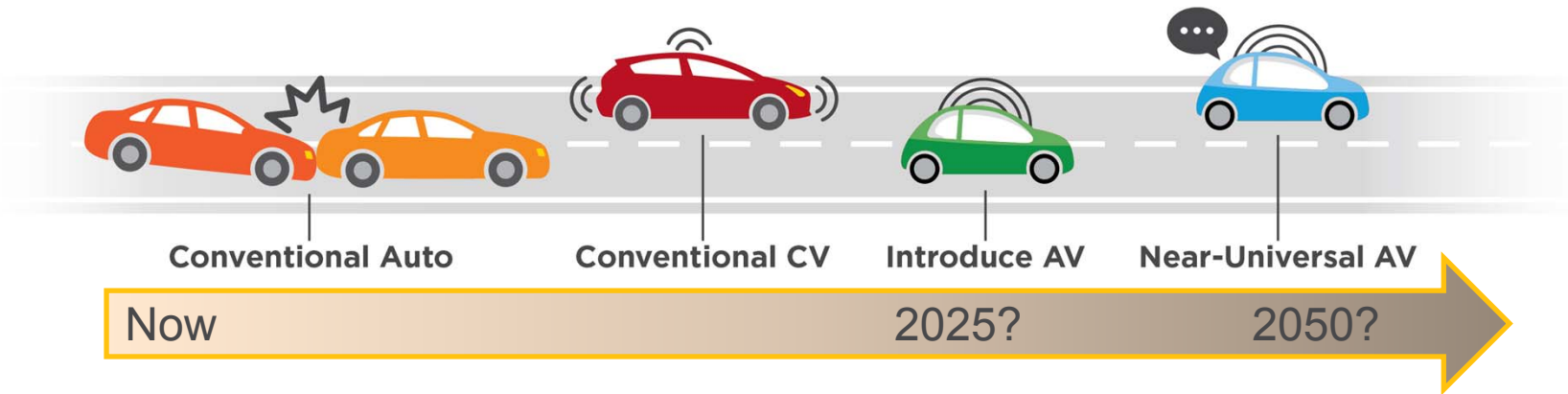




FINDINGS:

Overarching Issues

Overarching Issue: Adoption Timeline



- CV adoption is a near-future opportunity, pending in part on final guidance from NHTSA on communication protocol
- AV may move from testing to use within ten years
- Challenge: Decades of mixed traffic operation



Overarching Issue: AV Ownership

- Personally owned AVs and Shared AVs have very different impacts
- Will this be left to the marketplace, or is there an incentive to regulate?
- Initial deployment most likely to be shared fleets



Overarching Issue: Policy/Regulatory Approach

- Private sector mobility providers are getting in front of local and state governments
- Early focus on regulating AV testing, not future public operation
- Broad range of policy incentives and disincentives can be considered
- Example: NACTO “Guidelines for the Regulation and Management of Shared Active Transportation”



Institutional Landscape of Future Mobility

- Private Sector: Vehicle manufacturers, technology companies, TNCs and other mobility providers
- New Entrants: Electric utilities, healthcare, insurance
- Public Sector roles:
 - Federal: Address national issues – vehicle design, communications, interstate commerce
 - State: Regulate vehicle operations/licensing, state highway system, insurance
 - Local: Regulate use of public rights-of-way, land use
- MPO role: cooperative forum to bring parties together, provide regional uniformity and collaboration with private entities





FINDINGS:

Transportation Technology Issues

Impact on VMTs: Autonomous Vehicles

Factors that may...



Increase VMT

- Access by non-drivers (young, old, disabled)
- PAV ownership model
- Zero-occupant vehicle trips
- Land use decisions that increase trip length
- Lower cost per mile
- Reduced use of traditional transit services

Decrease VMT



- SAV ownership model
- Redefining transit to include more shared-mobility options
- Mode shift to shared active transportation options
- Continued growth of e-commerce and micromanufacturing



Impact on Safety

Research suggests:

- CV may result in a **50%** crash reduction
- AV may result in a **90%** crash reduction

Caveat: Assumes high percentage of fleet penetration



Source: USDOT ITS JPO



Public Infrastructure Requirements

New mobility options impact publicly funded infrastructure.

- CV will require communications infrastructure to support V2I applications
- Traffic control devices (markings, signs, signals)
- AV reduces “safety buffer” may permit redesign of urban streets while still providing for all users
- Designing for EV charging requirements



Impact on Mode Share

Rather than focusing on the potential loss of ridership in traditional service models, [researchers] propose reexamining the role that transit can play in providing mobility in a more automated world.

Transit operators become providers of shared mobility:

- Traditional rail and bus services
- Microtransit replaces inefficient routes, provides first/last mile connections
- App-based paratransit





FINDINGS:

Societal Issues

Equity Concerns

“The innovative mobility options...have the potential to increase the accessibility of transportation for many Americans, including these disadvantaged populations. But they may also leave people who are already transportation-disadvantaged further behind, either because they will not be able to take advantage of these new services (making them relatively worse off) or because the rise of these new services could reduce some existing services (making them absolutely worse off).”

National Research Council's Committee for Review of Innovative Urban Mobility Services. 2016. "Special Report 319: Between Public and Private Mobility: Examining the Rise of Technology-Enabled Transportation Services,"



Equity Concerns

Access to mobility services requires smartphone and bank account.

As many as 36% of low-income households do not have a smartphone (Pew Research Center), and 22% do not use a bank (Brookings Institution).

- Transit operators that do not adapt to new mobility models may have to reduce traditional services
- Persons with disabilities may have reduced access
- Role in evacuation planning and operation



Impact on Land Use: Residential Location

The influence of CAV on where people live is a key question.

- People may choose exurban/rural location to take advantage of lower land/housing costs
 - Time in an AV can be productive
 - Cost of vehicle operation may be less per mile
- People may choose urban locations because of greater access to social and cultural activities and transportation options



Impact on Land Use: Business Location

- Transportation is only one factor in business location decision
 - Access to customers
 - Access to workforce
 - Access for goods movement
- Future manufacturing and distribution technology may change all of those factors
- Zoning codes will need to be responsive to changing business landscape



Impact on Land Use: Parking

- All AVs will increase demand for curb space for pick-up/drop-off
- Privately owned AVs may be sent home or to fringe lots to avoid cost of urban core parking, reducing need for urban spaces at the cost of increased VMT
- SAVs require storage and maintenance facilities, but these may be in remote locations; SAVs will be in operation for many hours/day

Cities will need to monitor dynamic changes in parking demand and modify on-street parking ordinances and off-street parking zoning requirements accordingly.



Impact on Land Use: Rethinking Urban Streets

Using the available public space to accommodate all modes is not new.

- Where are bus lanes needed?
- Will cyclists feel safer with protected bike boulevards?
- Do TNC cars and delivery trucks share loading zones?
- How much space does reducing lane width free up?
- How can dockless bikes, e-bikes, and scooters be accommodated without consuming sidewalk space?



Freight Movement: Long Haul

- Trucks move the majority of freight in the US
- Long-haul trucking has different needs than urban delivery
- CV: Platooning of conventional trucks saves fuel
- AV: Autonomous trucks individually or in platoon increases productivity
 - Likely need drivers for first/last mile connections



Freight Movement: Urban Delivery

Urban goods movement: from tractor-trailers to parcel delivery trucks

- Increased opportunities for off-hours delivery
- Automation of e-commerce: delivery bots to lockers on wheels
- Increasing demand for “immediate” delivery





DISCUSSION:

What Does This Mean for the LRTP?

What Does This Mean for the LRTP?

- More uncertainty about core planning issues of personal mobility and land use
- Need to be very strategic about investment choices
- Consider scenario planning built on a foundation of credible data and strategic models
- Recognize the importance of policy and regulatory approaches



THANK YOU!

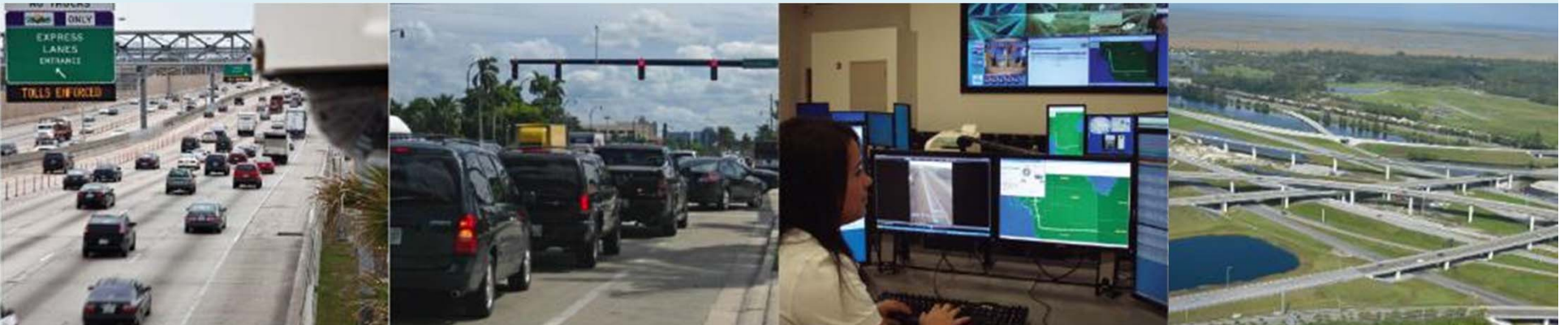




Florida DOT Connected and Automated Vehicle Status Report

FDOT Connected and Automated Vehicle (CAV) Initiative

MPOAC Meeting - August 2, 2018

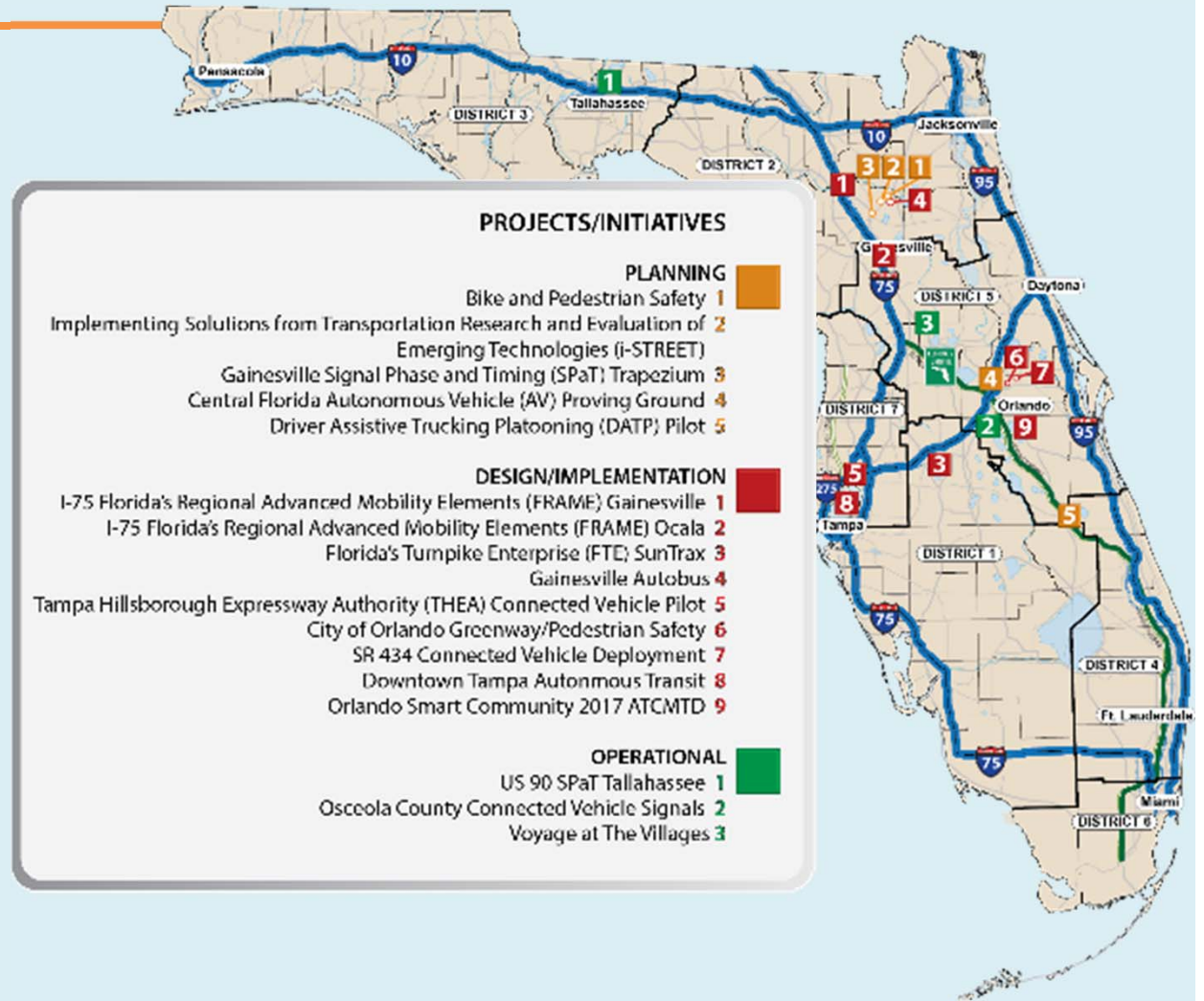


CAV Website

- Connected vehicles (CV) →
- 17 CV projects in development and planned statewide, to date
- Signal Phase and Timing (SPaT),
- Dedicated short-range communication (DSRC)
- Pedestrian safety systems

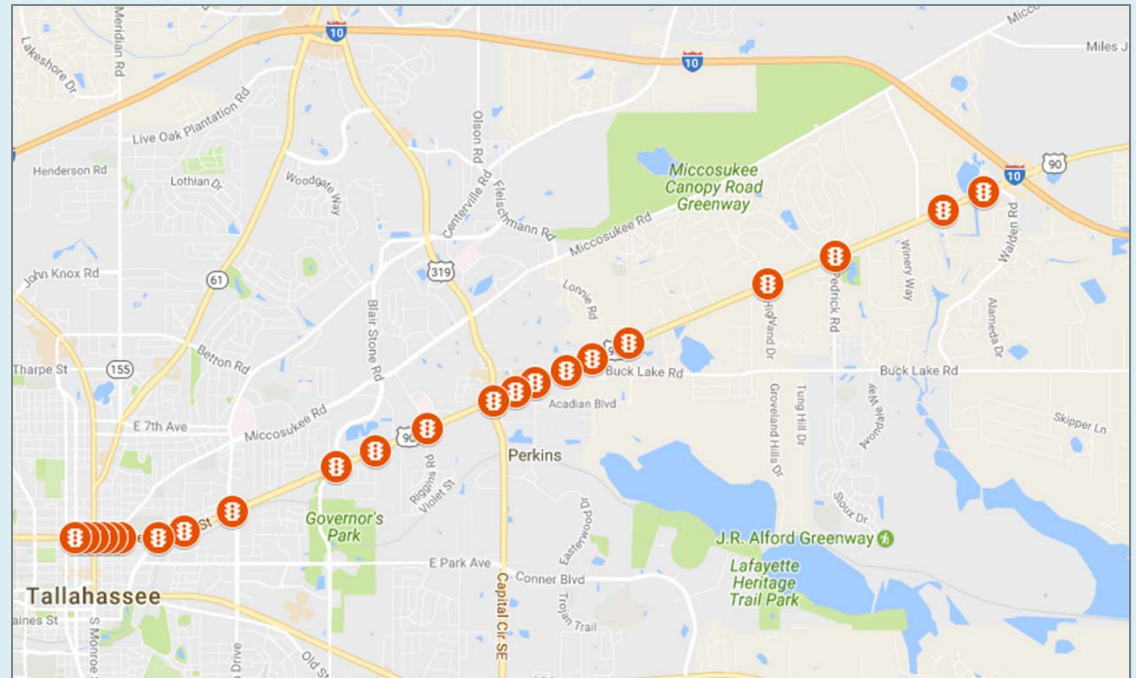
Connected Vehicle Website:

http://www.fdot.gov/traffic/ITS/Projects_Deploy/CV/Connected_Vehicles.shtm



Tallahassee US 90 SPaT Pilot Project

- 21 signalized intersections along US 90 (Mahan Drive) in Tallahassee
- FDOT and City of Tallahassee Partnership
 - City installed equipment
- Pre-deployment testing at the Traffic Engineering Research Laboratory (TERL)
- Project Deployed and Operationalized



I-75 FRAME Update

District 2 Update

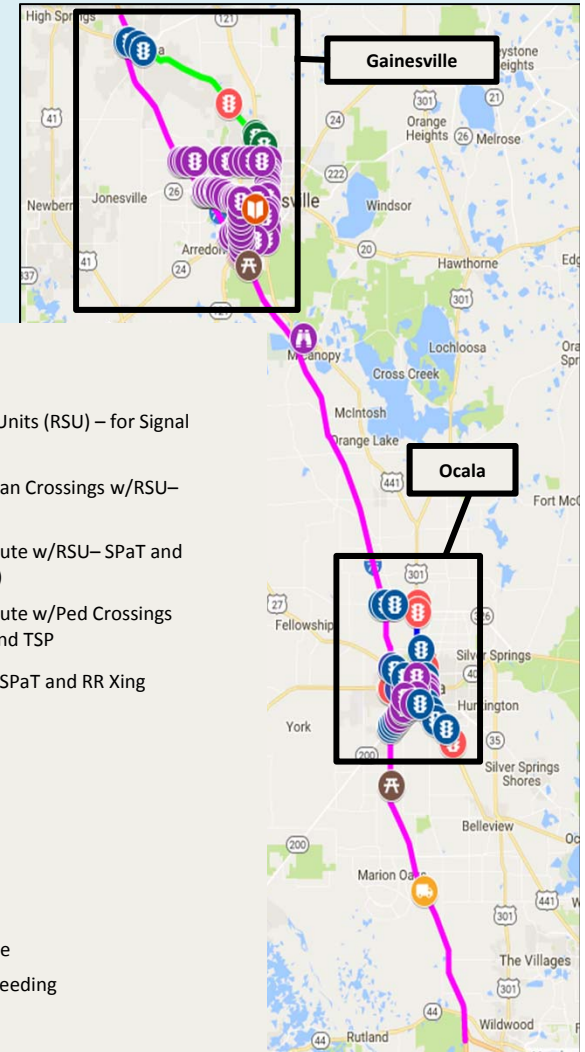
- Systems Manager was selected
- Production planned for 4th Quarter of 2018

District 5 Update

- Systems Manager was selected
- Production planned for 1st Quarter of 2019

Combined Effort

- Concept of Operations – being developed
- Coordination with stakeholders
- Active engagement with industry and vendors



I-STREET

Note: Implementing Solutions from Transportation Research and Evaluation of Emerging Technologies (I-STREET)




Purpose

To provide a real-world Test Bed facility where FDOT can collaborate and assist the industry to demonstrate and evaluate a wide range of connected vehicle solutions.

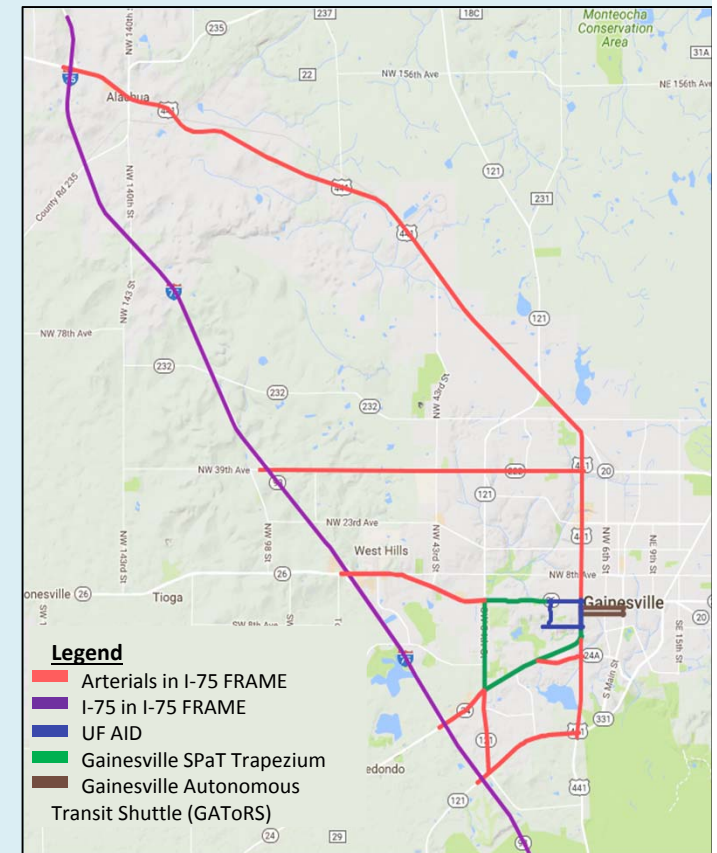
Goal

To test and evaluate different technologies and solutions within the areas of safety, mobility, and data management.

Goal Areas

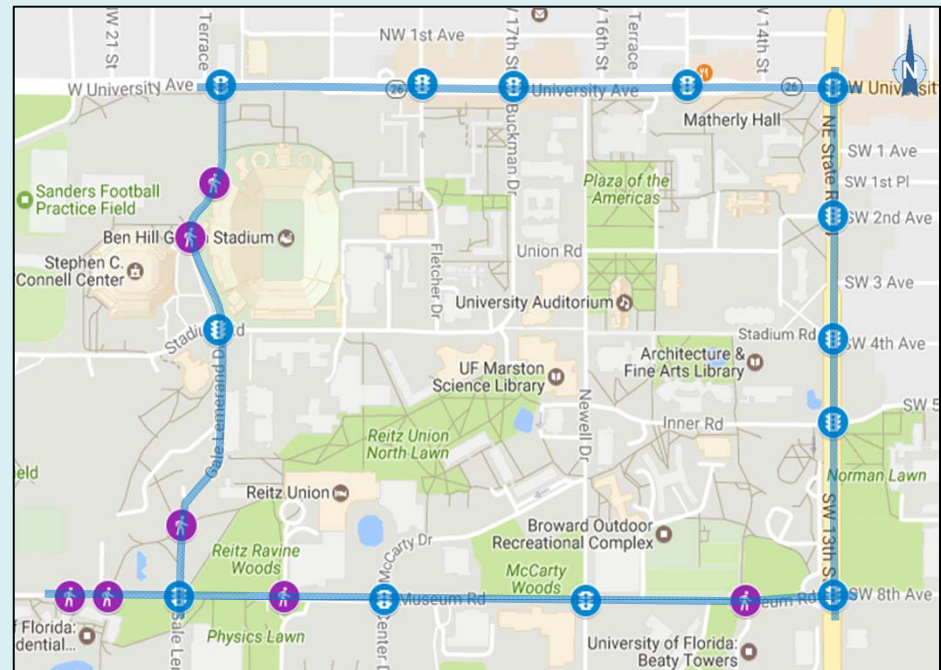
-  Safety
-  Mobility
-  Data Management

Partners






Bike and Pedestrian Safety

- FDOT applied for 2017 Accelerated Innovation Deployment (AID) Demonstration grant application in April
- University of Florida (UF) and City of Gainesville as stakeholders
- AID application is being reviewed by the United States Department of Transportation (USDOT)
- FDOT exploring ways to fund this project to brand as Gainesville's Bike-Ped Emerging Safety Technology (BEST)



Legend

-  Traffic Signals (13)
-  Mid-block Crossings (7)
-  Project Corridor

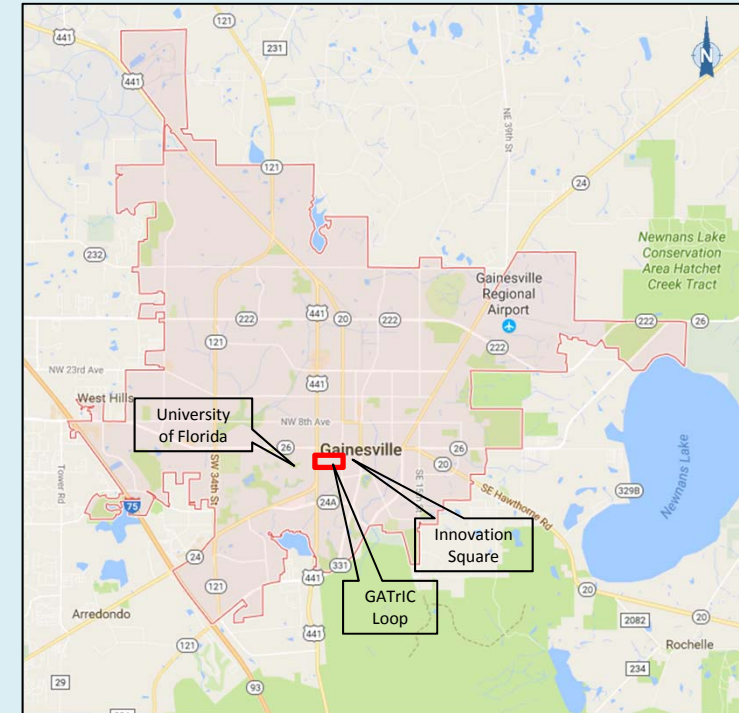
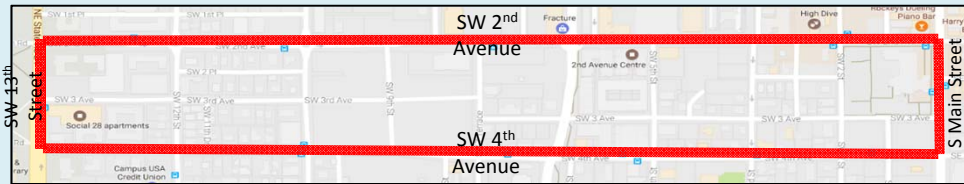
District 5 ATCMTD Grant

- Received the Advanced Transportation and Congestion Management Technologies Deployment (ATCMTD) grant.
- Requested \$11.9 million
- Three program areas:
 - PedSafe
 - GreenWay
 - SmartCommunity



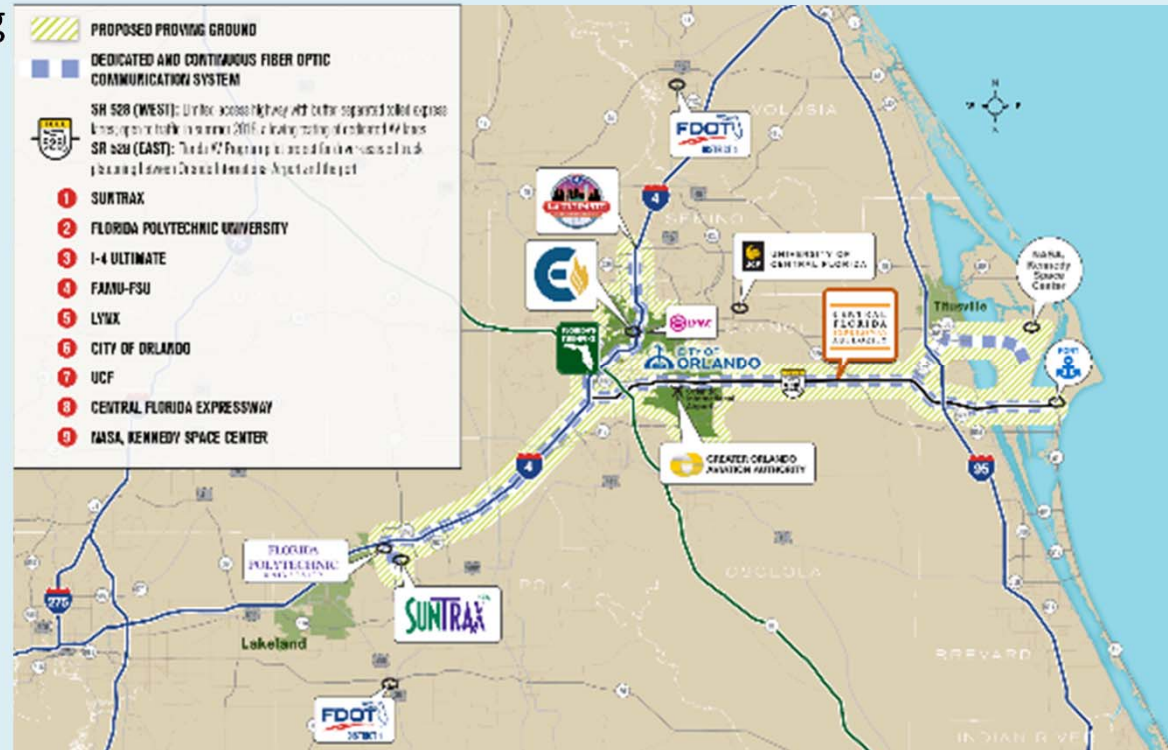
Gainesville Autobus

- Study feasibility of deploying AV shuttle to connect UF to newly built Innovation Square facility
- RFP development underway in partnership with Gainesville Regional Transit System



Central Florida AV Proving Ground

- 2017 USDOT approved AV Proving Ground
- Central Florida AV Partners
 1. Florida's Turnpike Enterprise (SunTrax)
 2. Florida Polytechnic University
 3. I-4 Ultimate (Districts 1 and 5)
 4. Florida Agricultural and Mechanical University (FAMU) and Florida State University (FSU)
 5. LYNX
 6. City of Orlando
 7. University of Central Florida (UCF)
 8. Central Florida Expressway (SR 528)
 9. NASA, Kennedy Space Center



Florida's Turnpike Enterprise (FTE) SunTrax

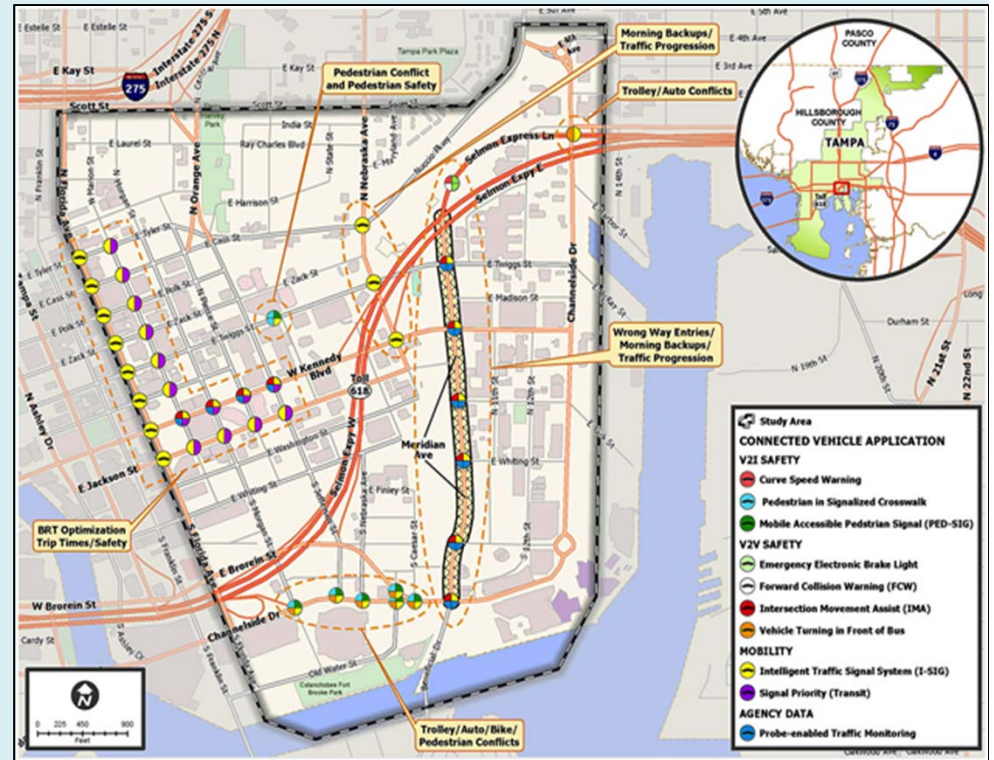
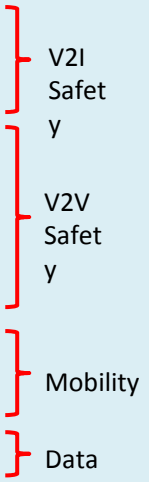
- FDOT is constructing a 2.2 mile oval track on 400 acres near Florida Polytechnic University in Polk County, Florida
- Test toll equipment, CV and AV technologies for V2I, V2V, and V2X communications
- Multiple simulated transportation environment
 - Central business district
 - Large arterial roadways
 - Rural roads
 - Large and complex intersections
 - Various pavements and pavement markings
- Construction began June 2017

- 1 Toll Collections Testing
- 2 Central Business District
- 3 High-Speed Freeway Environment
- 4 Urban Arterial Environment
- 5 Residential, Rural and Freight Testing



FDOT Partners with THEA

- USDOT awarded THEA CV pilot grant on September 1, 2015 to design/build/test CV applications
- THEA CV applications
 - End of Ramp Deceleration Warning
 - Wrong Way Entry Warning
 - Pedestrian in Signalized Crosswalk
 - Intersection Movement Assist
 - Vehicle Right Turn in Front of Bus Warning
 - Forward Collision Warning
 - Emergency Electronic Brake Light Warning
 - Intersection Movement Assist
 - Mobile Accessible Pedestrian Signal
 - Intelligent Traffic Signal System
 - Transit Signal Priority
 - Probe-enabled Traffic Monitoring
- Project design approved; under deployment



Mainstreaming CAV

- FDOT to mainstream Connected and Automated Vehicles (CAV) Initiative
- Workshops are planned to discuss:
 - CAV Opportunities (Safety, Mobility, Economic Development)
 - CAV Challenges (Planning-Deployment)
 - Roles of FDOT Divisions in CAV implementation
- Projected Outcome:
 - Expedited planning to implement CAV for improving safety, enhancing mobility and focusing on technical development

Industry Interaction

- FDOT routinely works with industry partners
- FDOT discussed with automobile company suppliers to test infrastructure-related technologies at:
 - SunTrax – closed test track projected for 2019/2020
 - UF Test Bed/Others – open field conditions
- FDOT leverages the UF I-STREET to collect information on deployment/research ready technologies for testing
- FDOT entered into statewide data user agreement with Traffic Technology Services; others planned

Florida Transportation Plan (2015)

New mobility solutions and business models such as automated, connected, and shared vehicles are emerging

Automated and Connected Vehicles

Florida is on the cusp of a technological revolution in the transportation industry. Automated and connected vehicle technologies hold unprecedented opportunities to help reduce congestion and eliminate transportation related fatalities. FDOT is planning for the deployment of automated and connected vehicle technologies on public roadways with the establishment of the Florida Automated Vehicles initiative. This initiative was created to help build the framework for automated and connected vehicle implementation by engaging stakeholders, developing research and pilot projects, and creating awareness of the technologies.



- Continue to support research, testing, policy, and deployment activities to realize the anticipated safety benefits of **automated and connected vehicle** technologies.

Innovation

- Use **emerging technologies** to reduce delay and improve reliability and customer service, such as:
 - » Intelligent transportation systems;
 - » Automated, connected, or shared vehicles;

Over time, our mobility options will expand from traditional choices of highway, rail, and transit to a range of options, including new types of vehicles such as automated, connected, and shared vehicles, as well as newer public transportation services such as local circulators, personal rapid transit, and higher-speed intercity bus and rail services. In some cases, the mobility option will be to substitute technology for travel, with expanded use of telecommuting, distance learning, and similar systems. The emphasis of our transportation agencies may shift from building and operating infrastructure to catalyzing and managing a range of services.

- » Expanding use of new technologies such as automated and connected truck technologies and unmanned aerial vehicles.

- Develop enhanced transportation corridors that:
 - » Incorporate and support **emerging technologies** such as connected vehicles or alternative fuel sources;

CAV consistent with the TSM&O Strategic Plan

Executive Summary

- I. Vision, Mission, and Goals
 - II. Strategic Plan Development and Background
 - III. TSM&O Snapshot – Where We Are Today
 - IV. Challenges and Opportunities
 - V. Roadmap to Achieving TSM&O Goals
 - VI. Mainstreaming
 - VII. TSM&O Resources
 - VIII. Next Steps and Action Plans
- Appendix A. TSM&O Strategy Toolbox
Appendix B. RITIS Performance Measurement Tools
Appendix C. Acronyms
Appendix D. Strategic Plan Development Process

TSM&O Focus Areas

TSM&O Mainstreaming

Arterial Management

Connected Vehicles

Express Lanes

Freeway Management

Information Systems

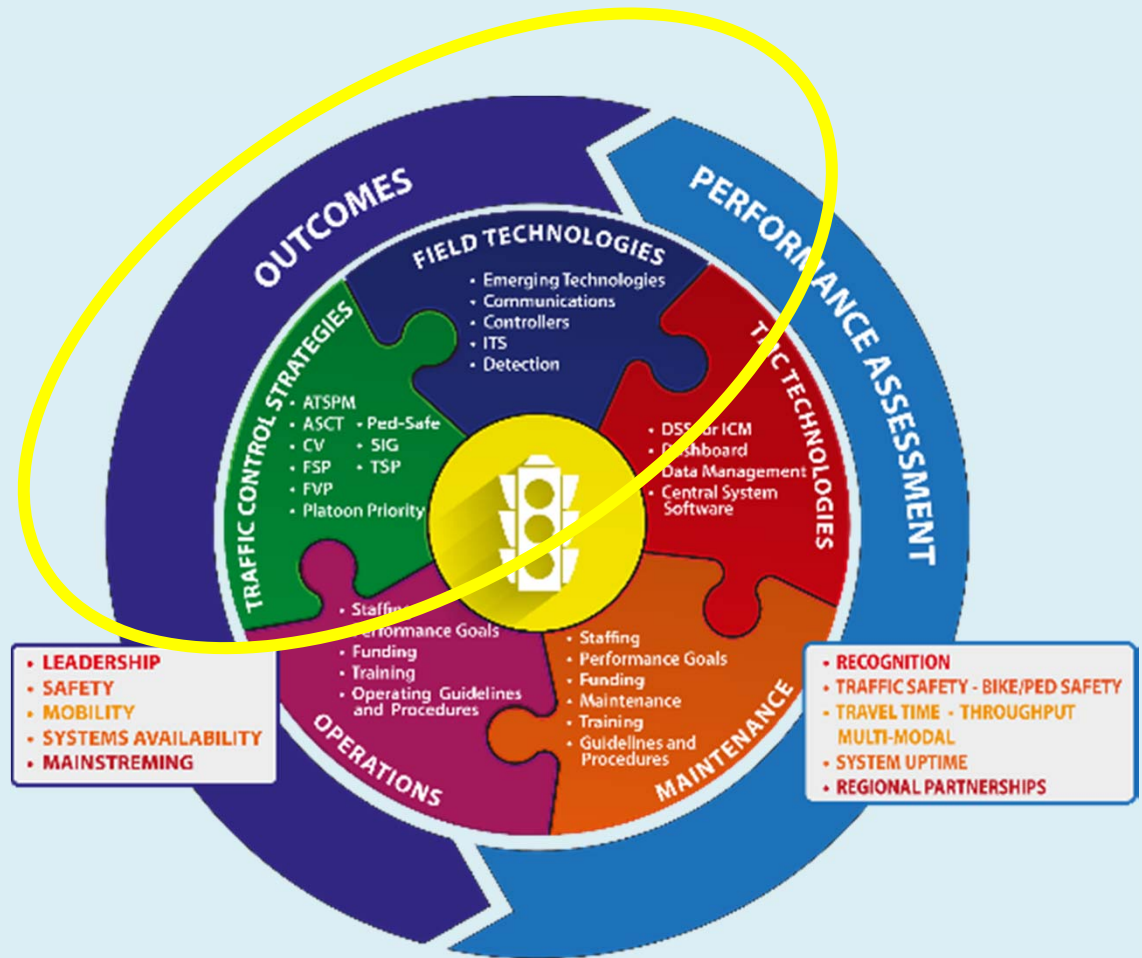


Approved and posted on:

www.fdot.gov/traffic

CAV consistent with the STAMP Action Plan

- Focus on **needle movers** – action items that make a noticeable difference in the program to take it to the next level
- Districts and locals providing input
- STAMP Action Plan will be **time-bound** action with a focus on:
 - Quick results (low-hanging possibilities)
 - Short-term goals (focus on needle movers)
 - Mid-term objectives (focus on needle movers)
 - Long-term vision

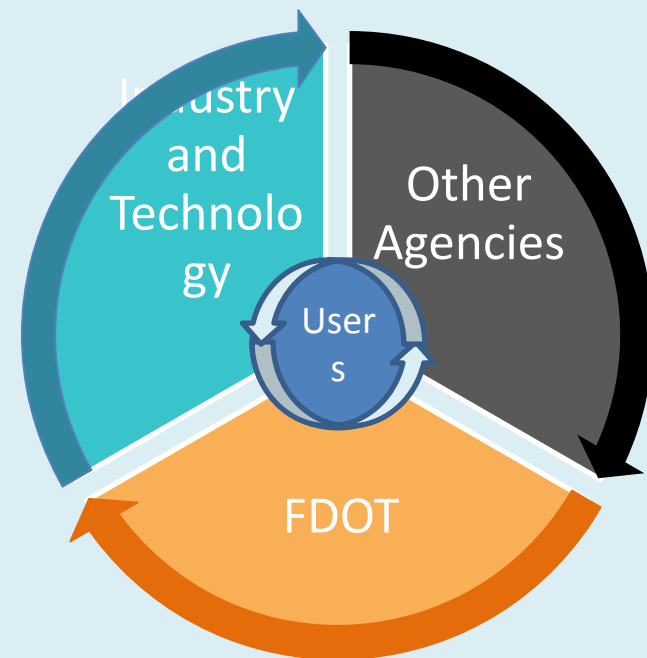


CAV Workshop

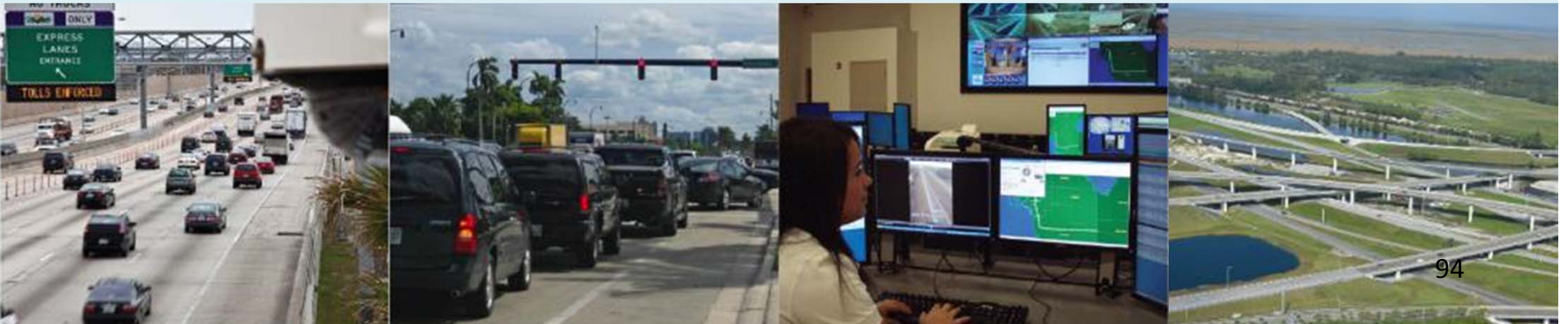


Expectations for the CAV Workshop

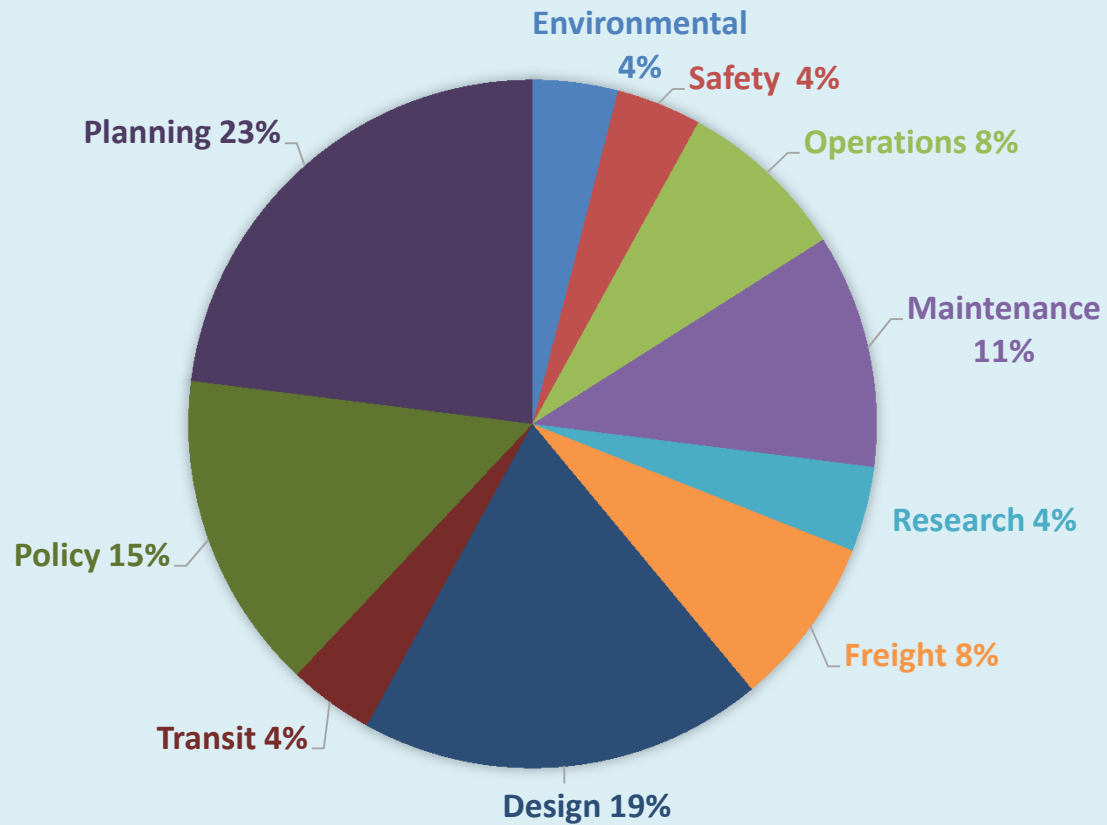
- Focus on Deployment
- ***Framework for collaboration and coordination***
- Understand:
 - Opportunities
 - Challenges
 - Roles
- Statewide workshop ideas
- Action plans



Results: Pre-workshop Survey



CAV Survey Results – Functional Areas



Survey Responses by Grouping

	Workshop Outcome Expectations	Opportunities	Challenges	Roles
Internal/external information, outreach, and education	10	10	18	6
Policy, planning, forecasting, and PD&E	2	2	3	2
Design, construction, and maintenance	1	7	10	0
Management and operations	0	4	1	2
Benefits and impacts	1	27	9	1
Technology and data	0	3	3	2



Communications



Member Comments



Adjournment

Next Meeting – November 01, 2018
Orlando, FL