



**TRANSPORTATION SYSTEMS MANAGEMENT & OPERATIONS  
MASTER PLAN STEERING COMMITTEE  
MEETING #2**

**DATE & TIME:** Tuesday, October 4, 2022 at 1:30 PM

**LOCATION:** MetroPlan Orlando Board Room – David L. Grovdahl Board Room  
250 South Orange Avenue, Suite 200, Orlando, FL 32801

**PUBLIC ACCESS:** To join the meeting from your computer, tablet or smartphone, please use this link:

<https://us02web.zoom.us/j/83673432842?pwd=SDFNU2hpRFFqYW1qNXRUWXpNdGZRZz09>

Passcode: 671597

To dial in, please see the calendar item for this meeting:

<https://metroplanorlando.org/meetings/tsmo-master-plan-steering-committee-meeting-2-10-04-22/>

**AGENDA**

**I. Introductions**

**II. Public Comments**

General comments from the public will be heard. Public comments submitted in advance of the meeting, by email to [Comment@MetroPlanOrlando.org](mailto:Comment@MetroPlanOrlando.org) or phone to 407-906-2347, will be read into the record by a meeting moderator. People wishing to speak during the virtual meeting should use the Raise Hand feature on the Zoom platform, and a meeting host will unmute your microphone to speak. Each speaker should state name and address for the record and is limited to two minutes.

**III. Review of Steering Committee Meeting #1**

**IV. Master Plan and Steering Committee Schedule**

**V. Existing Conditions Update**

- Results of Request for Information (RFI)

## VI. Input on TSM&O Needs

- Facilitated discussion

## VII. Looking Ahead

- Regional Intelligent Transportation Systems Architecture (RITSA)

## VIII. Steering Committee Member Comments/Updates

- As desired

## IX. Next Steps and Action Items

- Future meeting dates

## X. Adjournment

*Public participation is conducted without regard to race, color, national origin, sex, age, disability, religion, or family status. Persons wishing to express concerns, who require special assistance under the Americans with Disabilities Act, or who require language services (free of charge) should contact MetroPlan Orlando by phone at (407) 481- 5672 or by email at [info@metroplanorlando.org](mailto:info@metroplanorlando.org) at least three business days prior to the event.*

*La participación pública se lleva a cabo sin distinción de raza, color, origen nacional, sexo, edad, discapacidad, religión o estado familiar. Las personas que deseen expresar inquietudes, que requieran asistencia especial bajo la Ley de Americanos con Discapacidad (ADA) o que requieran servicios de traducción (sin cargo) deben ponerse en contacto con MetroPlan Orlando por teléfono (407) 481-5672 (marcar 0) o por correo electrónico [info@metroplanorlando.org](mailto:info@metroplanorlando.org) por lo menos tres días antes del evento.*

# TSM&O Master Plan Steering Committee Meeting #2

*October 4, 2022*



# Meeting #2



## Agenda

- Introductions
- Public Comments
- Review of Meeting #1
- Schedule
- Existing Conditions
- TSM&O Needs
- Looking Ahead
- Member Comments
- Next Steps

# Introductions



# Steering Committee Members



MetroPlan Orlando (Convening Agency)	Eric Hill
Central Florida Expressway Authority	Bryan Homayouni
City of Orlando	Akil Toussaint
Florida Department of Transportation	Jeremy Dilmore
Florida's Turnpike Enterprise	Eric Gordin
LYNX	Doug Jamison
Orange County	Hazem El-Assar
Osceola County	Lindsey Giovinazzo
Seminole County	Charlie Wetzel

# How to Make a Public Comment



- Use “Raise Hand” feature at appropriate time (Look under Participants tab for the raise hand button or dial \*9 if on the phone)
- Wait to be recognized by chairperson, provide name and address when called
- You have 2 minutes to make your comment

Visit [MetroPlanOrlando.org/VirtualMeetings](https://MetroPlanOrlando.org/VirtualMeetings) to learn how to send in comments before the meetings.

# Public Comment (General)



- Commenting Virtually: Use “Raise Hand” feature on Zoom toolbar (Dial \*9 if on the phone)
- Commenting In-Person: Fill out electronic speaker card ([MetroPlanOrlando.org/speakercard](https://MetroPlanOrlando.org/speakercard))
- Wait to be recognized by chairperson, provide name and address when called
- You have 2 minutes to make your comment

*Virtual comments will be taken first, followed by in-person*



# Review of Steering Committee Meeting #1



# Steering Committee Meeting #1



- Meeting Summary
  - For review and comments
- Vision Goals and Objectives
  - Final
- Documentation Review
  - Revised draft incorporating your input – will update as appropriate



**TRANSPORTATION SYSTEMS MANAGEMENT & OPERATIONS  
(TSM&O)  
MASTER PLAN STEERING COMMITTEE  
MEETING #1: VISION, GOALS, AND OBJECTIVES**

**DATE & TIME:** Wednesday, June 29, 2022 (2:30 PM – 4:00 PM)

**LOCATION:** MetroPlan Orlando Board Room – David L. Grovdahl Board Room  
250 South Orange Avenue, Suite 200, Orlando, FL 32801

**MEETING SUMMARY:**

**AGENDA**

- I. Welcome and Introductions**
- II. Public Comments**
- III. Master Plan Schedule**
  - Proposed Steering Committee Schedule
- IV. Steering Committee Roles & Responsibilities**
- V. Scope of Work Overview**
  - Task 1 – Goals and Objectives
  - Task 2 – Existing Conditions/Infrastructure/Inventory
  - Task 3 – TSM&O Needs
  - Task 4 – Applicable Strategies and Funding Sources
  - Task 5 – Regional Architecture (RITSA)
  - Task 6 – Prioritization Support Matrix
  - Task 7 – Agency and Public Participation
  - Task 8 – Project Meetings and Board/Committee Presentations
  - Task 9 – TSM&O Master Plan
  - Task 10 – Project Administration
- VI. Summary of Key Documents**
- VII. Draft Vision, Goals, and Objectives**
  - Interactive Discussion
- VIII. Next Steps and Action Items**
  - Future Meeting Dates
- IX. Adjournment**

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## MEETING ATTENDEES

<b>Steering Committee Members in Attendance</b>	
Mr. Eric Hill	MetroPlan Orlando
Mr. Bryan Homayouni (Virtual)	Central Florida Expressway Authority (CFX)
Mr. Akil Toussaint	City of Orlando
Ms. Katie King (for Jeremy Dilmore)	Florida Department of Transportation (FDOT)
Mr. Eric Gordin (Virtual)	Florida's Turnpike Enterprise (FTE)
Mr. Doug Jamison	LYNX
Mr. Hazem El-Assar	Orange County
Mr. Steven Kane	Osceola County
Mr. Charlie Wetzal	Seminole County
<b>Others in Attendance</b>	
Ms. Virginia Whittington	MetroPlan Orlando
Ms. Lara Bouck (Virtual)	MetroPlan Orlando
Mr. Alex Trauger	MetroPlan Orlando
Mr. Jim Wood	Kimley-Horn
Mr. Jonathan Ford (Virtual)	Kimley-Horn
Ms. Nicole Heck	Kimley-Horn
Ms. Maile Spang	Kimley-Horn
Ms. Simone Burns	Kimley-Horn

## WELCOME AND INTRODUCTIONS

- Mr. Eric Hill provided introductory remarks and welcomed attendees.
- Those in attendance introduced themselves.
  - It was noted by Mr. Steven Kane that Ms. Lindsey Giovinazzo will be serving on the Steering Committee for Osceola County in the future.
- Mr. Jim Wood provided an outline of the meeting agenda.

## PUBLIC COMMENTS

- Mr. Wood provided the opportunity for attendees to provide comments or questions.
- There were no public comments.

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## **MASTER PLAN SCHEDULE**

- Mr. Wood provided an overview of the project, reviewed the General Schedule, and the schedule for Steering Committee meetings.
- The schedule was displayed on the screen.
- There were no questions regarding schedule.

## **STEERING COMMITTEE ROLES & RESPONSIBILITIES**

- Mr. Wood introduced the topic of steering committee member roles, responsibilities, and general expectations (document in agenda packet).
- Mr. Jonathan Ford covered the purpose of the RITSA and asked for input from the steering committee regarding updates to the provided RITSA.
- Mr. Eric Gordin asked what the starting point for the RITSA section was because there were a lot of Turnpike projects and elements missing.
- Mr. Ford stated that the list began with the D5 service packages. He noted that the packages specific to Turnpike tolling were not captured in the list and that he would go back and add these.
- Mr. Hill mentioned that MetroPlan Orlando does not have a RITSA and that they rely on D5 to account for them in their list.
- Regarding Orange County, Mr. Hazem El-Assar mentioned that the Orange County ATMS Phase 4 is completed and should be removed, the D5 upgrades project are missing (which includes Orange County), and that the traffic signal mast arm upgrades, traffic signal cabinet upgrades, and International Drive adaptive signal system projects should be added. He also mentioned that they have a white paper available that details sales tax and future projects.
- Ms. Katie King mentioned that she manages the system engineering internally for Mr. Jeremy Dilmore. She asked Mr. El-Assar if the projects that were missing from the list were submitted through the proper forms by the May 13 deadline.
- Mr. El-Assar mentioned that he did submit a form for ATMS Phase 4 but that he didn't submit one for the D5 upgrades because he thought the District would handle it. He just submitted the form for the three new projects.
- Ms. King mentioned that the next cycle for updates ends June 1st and that Iteris (the Department's consultant) would take updates to the list anytime up to the deadline of June 1st.
- Mr. Bryan Homayouni noted that the FDOT BTU segments from CFX's list should be removed and that the PTSU (Part-time Shoulder Use) should be added (which has already been submitted through the proper form).
- Mr. Kane mentioned that the all-electronic toll reconstruction project along Osceola parkway is currently in construction and should be implemented within the next 12 months. He also mentioned that Ms. Tawny Olore was inspired by Altamonte Springs Autonomous Vehicle Project that was presented at MetroPlan TSM&O this past Friday and is interested in moving forward with a similar project in the long term.

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- Mr. Charlie Wetzel asked what the Greater Orlando Signal Priority and Preemption project listed under Seminole County was, to which Ms. King mentioned it is likely TSP Phases 1, 2, and 3. Mr. El-Assar pointed out that that project has been completed and Mr. Hill questioned if it should be removed from the list for this study. Jonathan mentioned that once a project is completed, it should get retired to be represented as an existing system. Once a project is complete the systems implemented by the project will be represented, not the individual project itself.
  - Mr. Doug Jamison mentioned that the LYNX ITS Master Plan was completed this year. Specifically, that “fair payment” was added along with “open payment” to provide for interoperability (besides the use of credit cards). Mr. Jamison mentioned that he provided the updated version of the plan to the team prior to the meeting.
  - Mr. Hill asked why the PedSafe Program is included under LYNX’s list. Mr. Ford mentioned that is how it is currently represented in RITSA and that it also comes up under D5 as well. Ms. King explained that the PedSafe Program is specifically for creating pedestrian safety messages and pushing them out to on-board units (OBU). She mentioned that it is listed under any agency that was considered a stakeholder in the grant application.
  - It was mentioned that there is a transit application currently being tested regarding right turn conflicts with buses where vehicles will get warning messaged.

#### SCOPE OF WORK OVERVIEW

- Mr. Wood noted that Task 1 will be the focus of a later part of the meeting.
- Mr. Ford covered Task 2 through Task 6.
  - *Task 2 - Are there any opportunities to leverage existing infrastructure? If your agency has a specific resource/file that we can utilize, please consider sharing it with the Master Plan team. Mr. Ford added that another piece of information that the Master Plan would like to consider is what data sets are currently available to each stakeholder. Mr. Ford to confirm what data sets can be shared during Task 2.*
  - *Task 3 – Look to the steering committee to confirm the needs of the projects listed in the RITSA and what additional needs you have in the future that you may not have a solution for yet (long term issues).*
  - *Task 4 – Identify available which funding sources and potential partnerships to strengthen going after grants/funding opportunities.*
  - *Task 5 – We’d like to capture any updates you need*
  - *Task 6 – How do we want to define what projects should be prioritized over others? Safety, mobility, transit needs, etc. All based on data that we already have and leveraging existing infrastructure. How are we going to prioritize those projects, per agency basis and/or regionally?*
- Mr. Wood covered Task 7, sharing that in lieu of an open house, a transportation technology event will be held to convey how non-capacity improvements can have a positive impact on the traveling public. He also summarized Task 8.

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- Mr. Ford covered Task 9 which is a culmination of these efforts to develop the Master Plan which is the final deliverable as a resource for project prioritization.
  - Mr. El-Assar mentioned that he believed two of the main goals that we are trying to accomplish through this effort is to fill the gaps in the MTP (as it currently only allows for prioritization of corridor projects and not ITS/intersection projects) and develop criteria to evaluate these types of projects.
  - Mr. Homayouni mentioned that CFX can provide their ITS Master Plan which they recently completed.
  - Mr. Wood reiterated that the intent of this effort is to prioritize projects as we move into the next Metropolitan Transportation Plan (MTP).

### **SUMMARY OF KEY DOCUMENTS**

- Mr. Ford referred the Steering Committee to the document listed in Task 1 of the Scope of Work and discussed how the documents listed are being used in development of the Master Plan. He asked the Steering Committee members to review the list and provide any other documents that might be appropriate for consideration.
- Mr. Jamison asked if these plans capture Brightline and if we are capturing the effects of the tax revenue, to which Mr. El-Assar mentioned that he didn't believe so.

### **DRAFT VISION, GOALS, AND OBJECTIVES**

- Mr. Wood opened by describing how the Vision, Goals, and Objectives were developed and that the intent for today is to collect preliminary comments from the Steering Committee. He stated that the Steering Committee will also have a period of two weeks after the meeting to provide additional feedback.
- Mr. El-Assar asked what the horizon year will be, to which Jim mentioned that we are attempting to align with the future 2050 MTP. Mr. El-Assar asked if cost feasibility would be a consideration as well, to which Mr. Wood mentioned that ultimately, yes.
- Mr. Alex Trauger agreed that MetroPlan intends for this document, once finalized, to amend the 2045 plan and assist in preparing for the 2050 MTP's cost feasible plan. For this exercise, what's most important is to understand the local partners priorities and be more specific.
- Mr. El-Assar mentioned that for planning, the tools they have are not applicable to TSM&O specific projects. Which is why this is a good opportunity to properly define those projects and replace these projects in the plan.
- Mr. Trauger agreed and mentioned that this will allow us to have these projects already identified so that next time we are prepared with our list of projects.
- Mr. El-Assar mentioned that LYNX and SunRail Master Plans should also be incorporated.
- Mr. Homayouni asked what the intended relationship between the ITS Master Plan and the TSM&O Master Plan is to be, to which Mr. Hill responded that the TSM&O Master Plan will encompass and build upon the ITS Master Plan, bringing it forward for the next five years.

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- Mr. Ford mentioned that the TSM&O Master Plan will not just cover ITS systems but other TSM&O strategies as well. With the intent to make sure we can get programmatic funding and not just standalone projects on their own.
  - Mr. El-Assar mentioned that he agreed with this approach and that when we previously worked on the ITS Master Plan, TSM&O was a relatively new term.
  - Mr. Hill elaborated that ITS is more technical while TSM&O is talking approach.
  - Mr. Wood walked the group through the VISION.
    - *Ms. King mentioned that in existing column, the D5 TSM&O implementation plan is an old document and there are newer ones that are more applicable. There are a lot of documents available on the CFL smart roads website. These documents define how we are looking at TSM&O as a whole and offered to provide these. Mr. Jamison mentioned that we should make it clear that “system performance” is not only regarding to vehicle movement. Ms. King mentioned that “mobility” may be a better term. Mr. Homayouni recommended adding a note regarding “equity”.*
  - Mr. Wood walked the group through the GOALS.
    - *Ms. King recommended modifying the statement to something along the lines of “leveraging innovative solutions to optimize multimodal goals and utilize technology to make better data driven decisions through safety and mobility”. To which Mr. Hill agreed we need to make it clear that we are moving people, not vehicles, with a focus on mobility, reliability, and performance.*
    - *Mr. Jamison mentioned providing better access and connectivity to make informed decisions.*
    - *Ms. King stated that this applies to both the vision and the goal.*
    - *Mr. Kane mentioned that under Investment and Economy, it looks like we’re trying to say create economic equality, but we also want to consider if something is cost feasible. Mr. Ford mentioned that in the reliability and performance section we could include representation to maintenance.*
    - *Mr. Jamison questioned where we are capturing preparing for Connected and Automated Vehicles (CAV) to which Mr. Ford mentioned CAV will rely on what Metro Plan put together for their CAV readiness study and will leverage what came out of that. He also mentioned that a technical memorandum will be drafted that includes a summary of each of these documents.*
    - *Mr. Jamison asked where we fit CAV in the goals, maybe under Investment in technology and interoperability. Jonathan mentioned maybe reliability and performance. Mr. Hill asked Mr. Jamison if he’s also speaking to emerging technologies and disruptions from these. Mr. Jamison said yes, disruptions in a coordinated fashion.*
    - *Mr. Homayouni asked if investment and economy could be expanded to include “equity for all users”. Mr. Ford mentioned that access and connectivity may be a good place to add that as well. Mr. Hill mentioned that equity, not only regarding access but also areas of obstacles as well, stating that we*



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*don't want technology to be a burden. To which Mr. Ford mentioned that under the access goal we could add "disparity".*

- *Mr. Wood walked the group through the OBJECTIVES.*
  - *Mr. Homayouni asked if we should consider adding mention to target zero/vision zero under the safety objective. Ms. King shared that target zero is "how" to achieve goals while vision zero is the goal.*
  - *Mr. Jamison mentioned under health and environment that we mention fuel consumption but maybe the use of other words would be better.*
  - *Mr. Hill noted that the EV Master Plan will run in parallel to the TSM&O Master Plan.*
  - *Ms. King asked if under S&S, have cybersecurity risks been considered? Mr. Wood mentioned that it's implied but not specifically stated. It could also be listed as a strategy under this objective or its own objective. Ms. King mentioned that it's a big topic that we may want to consider adding but Mr. Hill reminded the group that we are operating at a higher level, where cybersecurity is more of an owner/operator concern. The MPO may not get down to this level of detail.*
  - *Mr. Gordin asked if under A&C, do we solely want to focus on tourists or make it broader to regular users as well? Mr. Wood mentioned that we could expand but that there is also a certain dimension that visitors experience this travel differently. Mr. Gordin noted that he understands the need to assist tourists but that we may want to consider a more inclusive statement. Mr. Ford mentioned that Integrated Corridor Management (ICM) is a great example of how something can be intended to specifically help tourists but that all users benefit.*
  - *Mr. Homayouni mentioned that under H&E, it is often the underserved & marginalized communities that are impacted. That it may be worth making specific reference to underserved communities, the concept of equity, within this objective. Which applies to both. That understanding that more work needs to be done and putting emphasis on it.*

### **NEXT STEPS AND ACTION ITEMS**

- *Steering Committee # 2 will be held sometime between August 29<sup>th</sup> to September 23<sup>rd</sup>. Mr. Wood will send a follow-up email to discuss availability for potential meeting dates. If you are unable to attend, please have an alternate attend in your place.*

### **ADJOURNMENT**

- *Mr. Wood asked for any final questions from attendees. After no additional comments, Mr. Hill thanked those in attendance for their participation.*

## **MetroPlan Orlando**

### **Transportation Systems Management & Operations (TSM&O) Master Plan**

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#### **Vision, Goals, and Objectives**

Charge: “Develop a TSM&O Vision with Goals and Objectives for the region.”

Key Plans:

- MetroPlan Orlando 2045 Metropolitan Transportation Plan (MTP) Update
- MetroPlan Orlando Intelligent Transportation System (ITS) Master Plan
- FDOT D5 TSM&O Implementation Plan
- FDOT TSM&O Strategic Plan

*(See Task 1 in Scope of Work for list of other related plans)*

Considerations:

- Future strategies to be developed for:
  - Travel demand management (TDM)
  - Connected and automated vehicle (CAV) deployment
  - Special event management
- Interagency, interjurisdictional coordination
  - Steering Committee Member Agencies
  - Other Local Governments
  - Law Enforcement / Fire & Rescue
  - Community Traffic Safety Teams/Traffic Incident Management (TIM) partners
- Public outreach and messaging
- Workforce Development – TSM&O specific
- Key topics like equity and resiliency
- *Setting the stage for programmatic focus and project prioritization*

**VISION – Statement of what we are striving to create**

EXISTING PLAN VISIONS	DRAFT TSM&O Master Plan VISION
<p><u>MetroPlan Orlando 2045 MTP</u> – A regional transportation system that safely and efficiently moves people and goods through a variety of options that supports the region’s vitality.</p> <p><u>MetroPlan Orlando Intelligent Transportation System (ITS) Master Plan</u> – Maximize the transportation system performance by continually improving safety, efficiency, and reliability for all system users through the application of technology.</p> <p><b>Other Visions</b>  <u>FDOT D5 TSM&amp;O Implementation Plan</u> – To operate our transportation system at the highest level of cost-effective performance.</p> <p><u>FDOT TSM&amp;O Strategic Plan</u> – To increase the delivery rate of fatality-free and congestion-free transportation systems supporting the FDOT vision and Florida Transportation Plan goals.</p>	<p>A regional multimodal transportation network that strategically leverages cost-effective technology and operations to maximize system mobility and safety.</p>

**GOALS – Statements of purpose that provide direction for achieving the vision**

EXISTING PLAN GOALS	DRAFT TSM&O MASTER PLAN GOALS
<p>2045 MTP GOAL: SAFETY &amp; SECURITY Provide a safe and secure transportation system for all users.</p> <p><i>ITS Master Plan GOAL C: Enhance the safety and security of the transportation system.</i></p>	<p>SAFETY &amp; SECURITY: Provide a safe and secure transportation system for all users. [same as MTP]</p>
<p>2045 MTP GOAL: RELIABILITY &amp; PERFORMANCE Leverage innovative solutions to optimize system performance.</p> <p><i>ITS Master Plan GOAL A: Maximize the performance, efficiency, and reliability of the multimodal transportation system.</i></p>	<p>RELIABILITY &amp; PERFORMANCE: Leverage innovative solutions to optimize system mobility, efficiency, and reliability. [merged MTP and ITS]</p>
<p>2045 MTP GOAL: INVESTMENT &amp; ECONOMY Support economic prosperity through strategic transportation investment.</p>	<p>INVESTMENT &amp; ECONOMY: Support economic prosperity through strategic cost feasible transportation investments. [same as MTP]</p>
<p>2045 MTP GOAL: ACCESS &amp; CONNECTIVITY Enhance communities and lives through improved access to opportunities.</p> <p><i>ITS Master Plan GOAL B: Integrate information, communication, and technology to empower system users to make informed choices.</i></p>	<p>ACCESS &amp; CONNECTIVITY: Integrate information and advance technology interoperability to improve access to opportunities,empower users to make informed choices, and provide seamless mobility across modes. [merged MTP and ITS]</p>
<p>2045 MTP GOAL: HEALTH &amp; ENVIRONMENT Protect and preserve our region’s public health and environmentally sensitive areas.</p> <p><i>ITS Master Plan GOAL D: Protect the environment and enhance the quality of life.</i></p>	<p>HEALTH &amp; ENVIRONMENT: Protect and preserve our region’s public health, environment, and quality of life. [merged MTP and ITS]</p>

**OBJECTIVES – Statements of attainable or measurable actions to implement goals**

<p><b>SAFETY &amp; SECURITY:</b>  <b>Provide a safe and secure transportation system for all users.</b></p>	
<p><b>RELATED OBJECTIVES</b></p>	<p><b>DRAFT TSM&amp;O MASTER PLAN OBJECTIVES</b></p>
<p>MTP Objective – Eliminate the rate and occurrence of transportation system fatalities, injuries, and crashes with emphasis on the most vulnerable users.</p> <p>MTP Objective – Provide infrastructure and services to help prepare for, respond to, and recover from emergencies.</p> <p>MTP Objective – Improve emergency response and incident clearance times.</p> <p>MTP Objective – Prevent and mitigate transportation-related security risks.</p> <p>MTP Objective – Increase the resiliency of infrastructure to risks, including extreme weather and environmental conditions.</p> <p>ITS MP Objective – Improve safety and security of the transportation system through ITS strategies and investments.</p> <p>ITS MP Objective – Support data sharing between transit agencies and law enforcement to ensure passenger safety and security.</p> <p>ITS MP Objective – Monitor crash records as it relates to infrastructure improvements to quantify benefits.</p>	<p>In support of Vision Zero, eliminate the rate and occurrence of transportation system fatalities, injuries, and crashes with emphasis on the most vulnerable users.</p> <p>Increase transportation system resiliency through TSM&amp;O solutions that improve emergency response and help prepare for, respond to, and recover from emergencies.</p> <p>Increase the resiliency of infrastructure to risks, including extreme weather and environmental conditions.</p> <p>Prevent and mitigate cybersecurity and transportation-related security risks.</p>

**OBJECTIVES – Statements of attainable or measurable actions to implement goals**

<p><b>RELIABILITY &amp; PERFORMANCE:</b>  <b>Leverage innovative solutions to optimize system performance, efficiency, and reliability.</b></p>	
<p><b>RELATED OBJECTIVES</b></p>	<p><b>DRAFT TSM&amp;O MASTER PLAN OBJECTIVES</b></p>
<p>MTP Objective – Improve travel time reliability on the transportation system.</p> <p>MTP Objective – Enhance and expand the region’s ITS, adaptive and actively managed traffic systems.</p> <p>MTP Objective – Reduce travel time per capita (peak and off-peak travel times).</p> <p>MTP Objective – Adapt transportation infrastructure and technologies to meet changing traveler needs and desires.</p> <p>ITS MP Objective – Reduce delay and travel time on selected corridors for automobiles, commercial vehicles, transit, and bicycle/pedestrian facilities using TSM&amp;O.</p> <p>ITS MP Objective – Improve the reliability and predictability of travel by monitoring the use of the transportation system and through the collection of pertinent data.</p>	<p>Collaborate to enhance and expand the region’s ITS, adaptive, and actively managed traffic systems to improve reliability and support effective corridor management.</p> <p>Improve the reliability and predictability of travel by monitoring the use of the transportation system and through the collection of pertinent data.</p> <p>Implement TSM&amp;O solutions on priority corridors to reduce delay and travel time for automobiles, commercial vehicles, transit, and bicyclists/pedestrians.</p> <p>Adapt transportation infrastructure and technologies to enhance system performance to address evolving traveler needs and preferences.</p>

**OBJECTIVES – Statements of attainable or measurable actions to implement goals**

<p><b>INVESTMENT &amp; ECONOMY:</b>  <b>Support economic prosperity through strategic transportation investment.</b></p>	
<p><b>RELATED OBJECTIVES</b></p>	<p><b>DRAFT TSM&amp;O MASTER PLAN OBJECTIVES</b></p>
<p>MTP Objective – Reduce per capita delay for residents, visitors, and businesses.</p> <p>MTP Objective – Improve transportation experience for visitors and supportive-industry workers.</p> <p>MTP Objective – Promote transportation system projects that expand and enhance economic prosperity.</p> <p>ITS MP Objective – Enhance safe and efficient freight delivery and transport.</p> <p>ITS MP Objective – Develop a business model to demonstrate to transportation officials and elected agency leadership the benefits of continued use of ITS.</p>	<p>Promote collaborative regional TSM&amp;O projects that are cost feasible and support, expand and enhance economic prosperity.</p> <p>Improve regional transportation efficiency and economic performance through the reduction of per capita delay for residents, visitors, and businesses.</p> <p>Utilize data and information to promote the business case for TSM&amp;O to elected officials, the public, and industry groups such as freight and tourism.</p> <p>Implement TSM&amp;O solutions to address identified freight movement needs and enhance efficient transport and delivery of goods.</p>

**OBJECTIVES – Statements of attainable or measurable actions to implement goals**

ACCESS & CONNECTIVITY: Integrate information, communication, and technology to improve access and empower users to make informed choices.	
RELATED OBJECTIVES	DRAFT TSM&O MASTER PLAN OBJECTIVES
<p>MTP Objective – Reduce per capita vehicle miles traveled (VMT).</p> <p>MTP Objective – Reduce the reliance on single-occupant vehicle travel.</p> <p>MTP Objective – Improve housing and employment access to high-frequency transit.</p> <p>MTP Objective – Improve access to essential services across all modes of transportation.</p> <p>ITS MP Objective – Provide real-time dynamic travel time and delay information to users.</p> <p>ITS MP Objective – Improve tourist access and mobility through the use of specialized traveler information systems.</p> <p>ITS MP Objective – Improve service for special traveler needs through the use of ITS applications.</p>	<p>Collaborate regionally to improve access for all users to essential services across all modes of transportation.</p> <p>Implement TSM&amp;O strategies that reduce reliance on single-occupant vehicle travel through improved convenience of and access to all modes.</p> <p>Improve service to underserved populations through TSM&amp;O solutions that facilitate access to multimodal transportation options and information to empower choices.</p> <p>Strive to eliminate transportation-related obstacles and improve equitable outcomes for individuals in historically marginalized communities, especially communities of color.</p> <p>Improve access, mobility, and trip decision-making for all users through specialized traveler information systems.</p>



**OBJECTIVES – Statements of attainable or measurable actions to implement goals**

<p><b>HEALTH &amp; ENVIRONMENT:</b>  <b>Protect and preserve our region’s public health, environment, and quality of life.</b></p>	
<p><b>RELATED OBJECTIVES</b></p>	<p><b>DRAFT TSM&amp;O MASTER PLAN OBJECTIVES</b></p>
<p>MTP Objective – Reduce per capita related air quality pollutants and greenhouse gas emissions.</p> <p>MTP Objective – Reduce per capita vehicle miles traveled (VMT).</p> <p>ITS MP Objective – Improve air quality and reduce greenhouse gas emissions.</p> <p>ITS MP Objective – Reduce fuel consumption by balancing traffic volumes across the transportation network.</p> <p>ITS MP Objective – Increase in estimated number of passengers per vehicle mile mode.</p>	<p>Pursue regional collaborative efforts to improve air quality and reduce greenhouse gas emissions.</p> <p>Reduce fuel consumption through TSM&amp;O strategies that support electric mobility alternatives and efficient management of traffic volumes across the transportation network.</p> <p>Encourage transit use and increase the number of passengers per vehicle mile through implementation of TSM&amp;O solutions such as real-time dynamic travel information.</p> <p>Ensure that active transportation modes are meaningfully considered and incorporated in TSM&amp;O planning and implementation.</p> <p>Leverage TSM&amp;O projects to minimize the physical capacity expansion of transportation infrastructure which can lead to environmental and socioeconomic impacts, particularly to individuals in historically marginalized communities.</p>

# **MetroPlan Orlando**

## **Transportation Systems Management and Operations (TSM&O) Master Plan**

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### **DOCUMENTATION REVIEW** (Task 1: Develop TSM&O Vision, Goals, and Objectives)

Below is an overview and inventory of key documents and resources that will be considered and used during development of the MetroPlan Orlando TSM&O Master Plan. These documents range from regional plans like MetroPlan Orlando's Intelligent Transportation System (ITS) Master Plan to statewide plans like the Florida Department of Transportation's (FDOT) TSM&O Strategic Plan.

Key Documents are summarized, followed by a list of additional Supporting Reference Documents that will be consulted as needed.

### **KEY DOCUMENTS**

#### *MetroPlan Orlando 2045 Metropolitan Transportation Plan Update*

The Metropolitan Transportation Plan (MTP) is the long-range transportation plan for MetroPlan Orlando's planning area which consists of Orange, Osceola, and Seminole counties. The MTP defines \$27.9 billion of long-term transportation investment through the year 2045 that aligns with regional goals to protect the safety, health, environment, and economic well-being. Future projects within the MetroPlan Orlando area must be included in the plan to receive federal and state funding. Long-range transportation plans like the MTP are updated every five years to reflect evolving regional goals and priorities, and current Federal and State emphasis areas.

*How it Will Be Used:* The 2045 MTP is a principal resource to guide development of the TSM&O Master Plan's vision, goals and objectives. The MTP will also be used to identify opportunities for new TSM&O projects and the approach to categorizing them. Currently planned projects will be considered for enhancing, expanding, or extending current ITS projects and TSM&O strategies. Importantly, there is a reciprocal relationship between the TSM&O Plan and MTP. While the TSM&O Master Plan will reflect the 2045 MTP, it will also help support development of the 2050 MTP.

#### *MetroPlan Orlando 2045 MTP Update Technical Report: Managing Mobility – A Congestion Management Process*

Developed as part of the 2045 MTP, the Congestion Management Process (CMP) technical report provides the information needed to make informed decisions regarding the allocation of financial resources to manage current and future congestion. Existing congestion-related impacts are evaluated and improvement strategies for both people and goods are included. The CMP provides a way to evaluate both recurring and nonrecurring congestion. Additionally, a monitoring program that will periodically assess the effectiveness of the strategies over time is established and utilized by the CMP. The CMP uses performance measures to evaluate how effective a project is as it relates to the 2045 MTP goals. The 2045 MTP goals and objectives outline provisions for:

- Safety and Security
- Reliability and Performance
- Access and connectivity
- Health and Environment
- Investment and Economy

*How It Will Be Used:* This plan will be used to assess current conditions based on performance measures to identify the need for new systems and strategies. Additionally, the CMP will provide details regarding ways to establish goals and performance measures that are meaningful for all modes of travel for the entire region.

## **MetroPlan Orlando Transportation Systems Management and Operations (TSM&O) Master Plan**

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### *MetroPlan Orlando Transportation Improvement Program*

The Transportation Improvement Program (TIP) is updated annually to set the schedule for improvements of the region's transportation system for the next five years. This short-term plan assigns available funding to specific projects that provide improvements within all modes of transportation. The draft plan is evaluated by MetroPlan Orlando's advisory committees to obtain feedback. Currently, the plan shows details for nearly \$7 billion in projects over the next five years. These projects are focused on the near-term priorities and needs coming of the 2045 MTP. Currently within the TIP, \$64.9 million dollars in TSM&O projects are programmed by both Federal and State dollars over the next five years.

*How It Will Be Used:* The TIP will be used to identify opportunities for new TSM&O projects and will inform the approach for categorizing future projects. Currently planned projects will be considered for enhancing, expanding, or extending current ITS efforts and TSM&O strategies.

### *MetroPlan Orlando ITS Master Plan (adopted 2017)*

The *ITS Master Plan* evaluated current systems in the MetroPlan Orlando planning area. It established future needs and outlined ITS projects that could be implemented to assist in the management traffic flow. The *ITS Master Plan* proposed a system that focused on improving efficiency, reliability and safety of the region's multi-modal transportation system. The tasks were completed with input from Stakeholders to include their goals, objectives, needs, and desired strategies.

During plan development, the Regional ITS Architecture (RITSA) was evaluated, and a Concept of Operations (ConOps) was prepared. The plan included sections related to:

- ITS Vision, Goals and Objectives
- Existing Conditions/Infrastructure/Inventory
- Needs Assessment
- Applicable ITS Strategies
- RITSA
- Concept of Operations (ConOps)
- Prioritized ITS Projects

*How It Will Be Used:* The ITS Master Plan is a foundational document to the TSM&O Master Plan, and will be used as a reference for: vision, goals, and objectives development; existing conditions comparison; progress of programmed projects; and how ITS strategies can become part of the broader TSM&O approach.

### *MetroPlan Orlando Connected and Automated Vehicle Readiness Study (2019)*

The purpose of the MetroPlan Orlando Connected and Automated Vehicle (CAV) Readiness Study is to provide area stakeholders with an evaluation of the current preparedness of local counties and cities for the emergence of CAVs. Additionally, this plan recommends next steps to proactively enhance local government preparation. The information and concepts included in this report were based on the characteristics and constraints of MetroPlan Orlando's planning area which encompasses Seminole, Orange, and Osceola counties, and the incorporated jurisdictions within.

*How It Will Be Used:* The CAV Readiness Study will be useful for identifying locations that are suited for CAV demonstration projects and related activities, based on the documented readiness of agencies to support these technologies.

## **MetroPlan Orlando**

### **Transportation Systems Management and Operations (TSM&O) Master Plan**

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#### *FDOT, Transportation System Management and Operations Strategic Plan (2017)*

The FDOT TSM&O Strategic Plan considers program resource needs and defines recommendations. The plan reviews topics as they relate to a district's TSM&O staffing structure and positions, funding for TSM&O implementation, operations & maintenance, TSM&O program capacity, and workforce development.

The document outlines funding mechanisms for TSM&O program implementation and Operations & Management funding, such as the Ten-Year TSM&O Cost Feasible Plan (formerly known as the ITS Cost Feasible Plan), DITS (Statewide Intelligent Transportation System) funds, and maintenance funding. The Statewide TSM&O Excellence Program (STEP) was conceived to meet the needs of TSM&O capacity and workforce development. The section examines STEP needs and target audiences. The Strategic Plan identifies districts as the agents to work with internal and external stakeholders to support local and regional transportation goals and objectives.

*How It Will Be Used:* This document will serve as a supporting document to provide insight to best practices and lessons learned based on FDOT's statewide assessments and individual district feedback. The document will also assist with the programmatic development of an individual agency's TSM&O and/or traffic signal operations program.

#### *FDOT District Five TSM&O Implementation Plan (2017)*

The FDOT District Five TSM&O Implementation Plan was developed to identify an implementation plan which promotes program development and sets the foundation for an effective TSM&O practice. The document is based on six dimensions of a successful TSM&O program:

- Business Process
- Organization & Workforce
- Culture
- Collaboration
- Systems & Technology
- Performance Measures

Goals and objectives were developed for each subsection based on the feedback provided by stakeholders. The objectives were developed to be Specific, Measurable, Achievable, Realistic, and Timely (SMART). The existing approach for each section of the plan is considered, and the proposed implementation actions are also discussed. This effort resulted in a task action matrix which notes specific action items to be completed based on each goal or objective identified in the plan.

*How It Will Be Used:* This document will be used to consider the goals, objectives, and approach of FDOT District Five regarding TSM&O project implementation.

#### *FDOT Strategic Intermodal System Policy Plan (2022)*

The FDOT Strategic Intermodal System (SIS) Policy Plan establishes a policy framework for FDOT to plan and manage the SIS network. This roadway and infrastructure network defines the highest priority network to manage the movement of goods and people. The transportation facilities most important to the state's economic competitiveness are featured in the network. The plan describes objectives, cross-cutting policy areas, focus areas, and strategies to guide FDOT and transportation partners statewide in accomplishing the vision and goals of the SIS. The SIS policy changes within the plan include expanding SIS funding eligibility for operational and technology solutions such as TSM&O.

## **MetroPlan Orlando**

### **Transportation Systems Management and Operations (TSM&O) Master Plan**

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*How It Will Be Used:* This document will serve as a reference to FDOT's current emphasis areas and approach for prioritizing the needs for SIS corridors, connectors, and hubs. The potentially expanded funding eligibility for TSM&O will also be considered for SIS related projects.

#### *FDOT Statewide and District Five ITS Architecture (2020)*

The FDOT District Five Regional ITS Architecture (RITSA) is a roadmap for transportation systems integration for District Five services over a 10-year time horizon. The District Five RITSA has been developed and maintained through a cooperative effort of the state's transportation agencies. The District Five RITSA complies with FHWA Rule 940 requirements, as well as FTA policy directives, for ITS Architectures. The District Five RITSA was converted to be compatible with the latest version of the Architecture Reference for Cooperative and Intelligent Transportation (ARC-IT) Version 9.0 which makes available all of the ARC-IT content for use in updates to the District Five RITSA.

The Statewide and Regional ITS Architectures represent a shared vision of how each agency's systems will work together in the future, sharing information and resources to provide a safer, more efficient, and more effective transportation system for travelers in the State of Florida.

The District Five RITSA functionally defines the interactions and information exchanges between the intelligent transportation systems operated and maintained by the various public and private sector organizations in the region. The RITSA includes existing systems as well as planned systems and services that are needed to deliver the transportation services to improve safety, mobility and efficiency across the region.

*How It Will Be Used:* This document will be used to ensure the systems and needs identified in the TSM&O Master Plan have established architectures for the stakeholders using the system. The RITSA will also serve as a clearinghouse for any potential future projects an agency wishes to support, as well as a repository for future projects yet to be defined.

#### *LYNX ITS Strategic Plan (2022)*

This document, an update to LYNX's 2016 ITS Strategic Plan, is being updated to reflect the current state of LYNX technologies, present LYNX's vision of the ITS systems and technologies that should be implemented in the future and prepare the ITS work program to achieve this vision. The vision should be based upon the needs of LYNX customers as well as the departments and divisions of LYNX, support the regional vision of local jurisdictions, and position LYNX to continue to be recognized as a leader in ITS implementation.

*How It Will Be Used:* This document will be used to identify opportunities for project partnerships as agencies within the region plan for, implement, and operate ITS to support transit mobility. Additionally, this document will be used to identify opportunities to include new services and management strategies that support transit-orientated mobility and operations.

#### *Central Florida Expressway (CFX) 2045 Master Plan (Anticipated release Fall of 2022)*

The Central Florida Expressway (CFX) 2045 Master Plan includes community outreach, stakeholder interaction and technical analysis. The Master Plan serves two critical purposes. It defines the policies that will be followed when evaluating projects for future mobility needs and identifies specific near- and long-term projects which will be reevaluated annually as the Five-Year Work Plan is developed.

*How it Will Be Used:* This document will be useful to identify opportunities for new TSM&O projects and categorizing future projects. Currently planned projects will be considered for enhancing, expanding, or extending current ITS project and TSM&O strategies.

## **MetroPlan Orlando**

### **Transportation Systems Management and Operations (TSM&O) Master Plan**

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#### *CFX ITS Master Plan (2022)*

The CFX ITS Master Plan is a dynamic long-term document to provide a conceptual layout to guide future growth and development. The plan identifies the current state of CFX technologies and provides guidance for CFX's ITS program into the next decade. It is anticipated that the plan will be revisited on a reoccurring basis for updates to keep up with industry trends and the evolution of the technology ecosystem.

*How It Will Be Used:* This document will be used to identify opportunities for project relevant partnerships as agencies within the region plan for, implement, and operate ITS to enhance mobility. Additional consideration to this plan will be given when considering goals that incorporate the facilities managed by CFX. This document will also be used to identify opportunities to include new services and management strategies that support freeway mobility and operations.

#### *Florida's Turnpike Enterprise TSM&O Strategic Plan (2019)*

The purpose of this document is to provide a strategic approach to TSM&O program elements, methods, strategies, and analysis tools. This plan recognizes that TSM&O technology is changing rapidly and will continue to evolve in the coming decades. This document supplies a snapshot of current conditions and trends that will need to be updated frequently.

*How it Will Be Used:* This document will be used when considering goals that incorporate the facilities managed by the Florida Turnpike Enterprise. Additional consideration to this plan will be given when considering projects that interface with the Florida Turnpike directly or have the potential to require operational considerations among partnering agencies.

#### *Orange County Transportation Technology Improvements White Paper (Draft 2022)*

Orange County's recommended transportation technology projects include over \$161 million in construction, systems integration, and services designed to leverage regional, state, and new local projects to build a safer, more efficient, and more connected transportation system. This white paper outlines the transportation technology projects and innovations that may be part of its TSM&O initiative for further analysis and input. The white paper summarizes previously-identified projects, both funded and unfunded, and suggests potential new projects for consideration in light of best practices in transportation technology nationally. To the extent possible, projects include cost estimates and schedules or timeframes for implementation.

*How it Will Be Used:* This document will be used as an important source of information for completed, current, and recommended TSM&O projects within Orange County. The related background on best practices and case examples will also be informative for Master Plan development.

#### *Osceola County TSM&O Strategic Plan (2020)*

The Osceola County TSM&O Strategic Plan was developed to provide a framework to improve the County's roadway network by using TSM&O deployments to manage congestion. The plan first assessed the existing conditions of the County, then determined needs. The plan also identifies applicable TSM&O strategies based on the outcome of a Benefit-Cost analysis. Finally, this plan details the operations and maintenance needs of the County and provides insight as to how TSM&O will impact the existing maintenance.

*How it Will Be Used:* This document will be used to identify opportunities for project relevant partnerships as agencies within the region plan for, implement, and operate ITS to enhance mobility.

## **MetroPlan Orlando**

### **Transportation Systems Management and Operations (TSM&O) Master Plan**

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Additionally, this document will be used to identify opportunities to include new services and management strategies that support all modes of transportation.

#### *FDOT District Five Transportation Systems Management & Operations Strategy Guide (2018)*

The TSM&O Guidebook outlines a programmatic approach to TSM&O from transportation planning through project construction. The guidebook considers how TSM&O must leverage all sections or departments within an agency. The main sections or departments highlighted in the guidebook include budgeting/programming, transportation planning, traffic operations, preliminary and final design, environmental/permitting, right-of-way, construction and operations and maintenance. This document helps an agency to consider how a TSM&O program should consider each section or department of their agency as they relate to the three major areas of TSM&O; planning, implementation, and monitoring.

*How it Will Be Used:* This document will be used as a resource to help identify the best practices for implementing TSM&O projects with FDOT District Five. This resource will help identify the appropriate strategies to consider particular causes of congestion within a specific facility. The TSM&O Guidebook will allow agencies within the MetroPlan region to take a consistent approach to project planning, implementation, and construction.

#### *FDOT Statewide Arterial Management Program (STAMP) Action Plan (2021)*

The STAMP Action Plan provides an outline of actions to be taken based on desired outcomes of an arterial management program. The goal of the outcomes desired will guide the collective arterial management program and document progress to encourage the exchange of ideas among stakeholders, foster collaboration among operational partners, and enhance project coordination. The 2021 update to the STAMP Action Plan identifies six outcome-based objectives including infrastructure upgrades, data management, performance assessment, emerging technologies, and operations & maintenance.

*How it Will Be Used:* This plan will serve as a resource for project implementation within the arterial roadway network. The plan will provide context for the goals and objectives of an individual program and an agency's TSM&O program as a whole.

#### *Florida's Connected and Automated Vehicles Business Plan (2019)*

Florida's Connected and Automated Vehicles (CAV) Business Plan captures the results of FDOT's coordination through internal and external meetings and workshops. This plan helps convey information related to the unknowns in CAV deployment. Additionally, this plan helps in developing an institutionalized framework and timeframes to aggressively move the CAV Program from research and pilot projects into statewide deployments. This CAV Business Plan also outlines preparation efforts for Florida's infrastructure while documenting lessons learned from prior FDOT projects.

*How it Will Be Used:* The plan will serve as a reference document when individual agencies are considering ways to promote and advance CAV technology with the support of MetroPlan and FDOT. This business plan will also serve as a framework for how to ensure the State's best practices and goals are considered with respect to CAV deployment.

## **MetroPlan Orlando**

### **Transportation Systems Management and Operations (TSM&O) Master Plan**

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#### Supporting Reference Documents

The following are additional documents and resources that will be consulted and utilized as appropriate during development of the TSM&O Master Plan. While not as central as the key documents above, they still have relevance that will be considered during plan development.

- *Central Florida MPO Alliance (CFMPOA) TSM&O Framework (In progress)*
- *MetroPlan Orlando Equity Audit findings and recommendations (In progress)*
- *Central Florida Traffic Incident Management (TIM) Evacuation Plans*
- *Osceola, Orange and Seminole County CTST Meeting Minutes (as available)*
- *FDOT Statewide Systems Engineering Management Plan (SEMP) (Updated in 2019)*
- *FDOT Florida Transportation Plan (2020)*
- *FDOT Freight Mobility and Trade Plan Update (2020)*
- *Relevant legislation such as the Infrastructure Investment and Jobs Act (IIJA) (2021)*



# Master Plan Schedule



	2022										2023									
	Apr	May	June	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	
Task 1 TSM&O Vision, Goals, Objectives																				
Task 2 Existing Conditions, Infra. Inventory																				
Task 3 Identify TSM&O Needs																				
Task 4 Applicable Strategies/Funding Sources																				
Task 5 Regional Architecture (RITSA)																				
Task 6 Prioritization Support Matrix																				
Task 7 Agency & Public Participation			★				★			★		★			★		★			
Task 8 Mtgs & Board/Committee Presentations																				
Task 9 TSM&O Master Plan																				
Task 10 Project Administration																				

★ Steering Committee Meeting

# Steering Committee Schedule



GENERAL STEERING COMMITTEE SCHEDULE		
Meeting	Principal Topic	Date/Anticipated Timeframe
#1	Input on Goals and Objectives	June 29, 2022
#2	Input on TSM&O Needs	October 4, 2022
#3	Input on Regional ITS Architecture (RITSA)	January 2023
#4	Input on Prioritization Support Matrix	March 2023
#5	Input on Proposed Priority Projects & Performance Measures	June 2023
#6	Input on draft TSM&O Master Plan	August 2023

# Existing Conditions Update



# Existing Conditions Update



LEGEND: ✓ = Complete    O = Open    X = Still needed

	FDOT D5	Orange County*	Osceola County*	Seminole County*	City of Orlando	Turnpike	LYNX	CFX
Agency Type	Arterial/ Freeway	Arterial/ Signals	Arterial/ Signals	Arterial/ Signals	Arterial/ Signals	Toll/ Expressway	Transit	Toll/ Expressway
Roadway and Traffic Data	✓	O	O	O	O	✓	N/A	✓
Existing Assets/ Infrastructure	✓	O	✓	✓	✓	✓	✓	✓
Signal System/ ATMS	✓	✓	✓	✓	✓	N/A	O	N/A
Safety Data	✓	✓	✓	✓	✓	✓	N/A	✓
Incident Data	✓	O	O	O	O	✓	X	✓
Agency Data	✓	O	O	X	X	✓	X	✓

\* Indicates an agency that contains other Traffic Signal Maintaining Agencies, where additional information may be needed.

# Existing Conditions Update



## Results of RFI

- All Safety data will be pulled from the CAR system
  - Signal 4 Analytics will be used when CAR data is not available/current
- Infrastructure and device locations will be pulled into a GIS
- Still in need of organizational data, as available

# Input on TSM&O Needs



# Input on TSM&O Needs



- **Definition of Needs**
  - The needs identified through development of the TSM&O Master Plan will provide stakeholders with a mechanism to identify projects, resources, and opportunities to expand and enhance their transportation network
- **Two Points of Emphasis**
  1. TSM&O needs that are identified as of today
  2. What resources we can leverage to identify other needs for the future

# Input on TSM&O Needs



## TSM&O Strategy Guide

FDOT District 5 resource available to all agencies in support of transportation planners, engineers, and operators in identifying appropriate TSM&O strategies.

- [FDOT D5 Strategy Guide Tool](#)
- [FDOT Strategy Guide Manual](#)

A screenshot of a web application interface. At the top left is the FDOT logo. At the top right is the text "Welcome to the FDOT District 5" and the "TSM&O Strategy Guide" title. To the right of the title is a circular logo for the "CENTRAL FLORIDA TSM&O CONSORTIUM". Below the title are four dropdown menus: "What type of Facility is it?" (Arterial), "Where is the issue located?" (Regional Network), "Please select a symptom" (First Mile / Last Mile Issues), and "Is the symptom Recurring or Non-Recurring?" (Recurring). A note below the symptom dropdown says "\*Use the up/down arrow keys to view full list of symptoms". At the bottom is a large grey button with the text "GET TSM&O STRATEGIES".

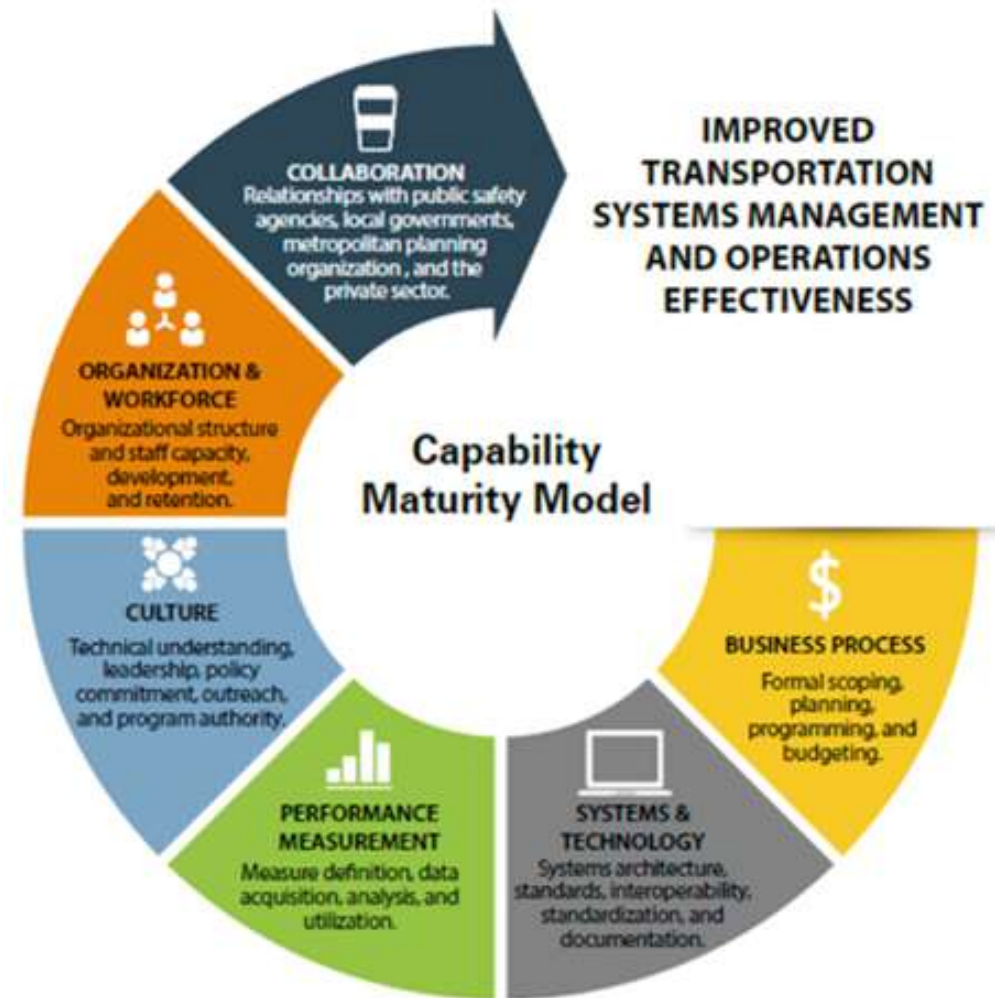


# Input on TSM&O Needs



## Operations Effectiveness

- Systems & Technology
- Performance Measurement
- Collaboration
- Organization & Workforce
- Business Process
- Culture



# Input on TSM&O Needs



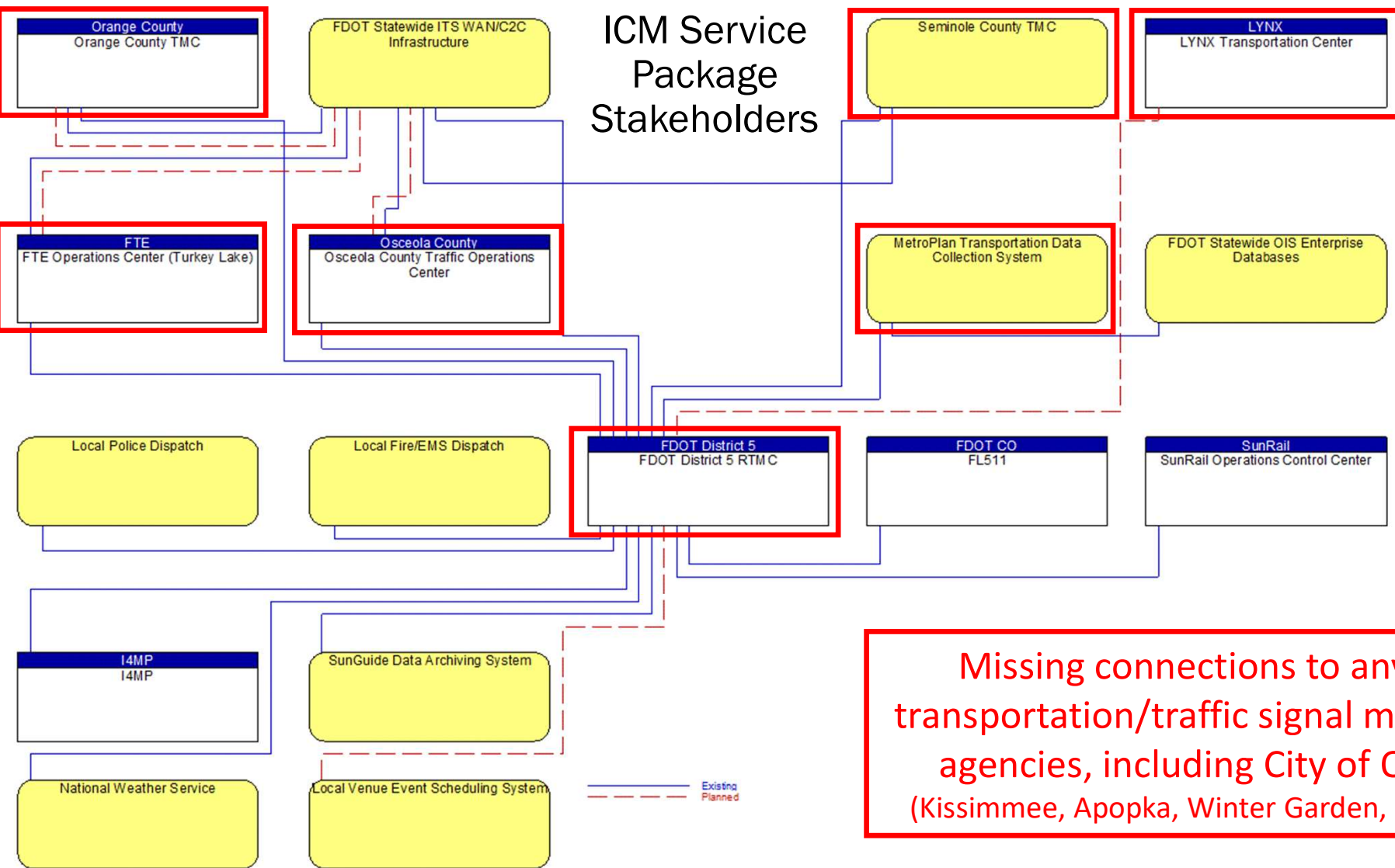
## Operations Effectiveness: Integrated Corridor Management (ICM) Case Study

		Level 1 Silo	Level 2 Centralized	Level 3 Partially Integrated	Level 4 Multi-modal Integrated	Level 5 Multi-modal Optimized
Institutional Integration	Inter-agency Cooperation	Agencies for not coordinate their operations	Some agencies share data but operate their networks independently	Agencies share data, and some cooperative responses are done	Agencies share data, and implement multi-modal incident response plans	Operations are centralized for the corridor, with personnel operating the corridor cooperatively
	Funding	Single Agency	MPO tracks funding	Coordinate funding through MPO	Cooperatively fund deployment projects	Cooperatively fund deployment and operations and maintenance projects
Technical Integration	Traveler Information	Static information on corridor travel modes	Static trip planning with limited real-time alerts	Multi-modal trip planning and account-based alerts	Location-based, on-journey multi-modal information	Location-based, multi-modal proactive routing
	Data Fusion	Limited or Manual	Near real-time data for multiple modes	Integrated multi-modal data (one-way)	Integrated multimodal data (two-way)	Multi-source multi-modal data integrated and fused for operations
Operational Integration	Performance Measures	Some ad hoc performance measure based on historical data	Periodic performance measures based on historical data	High-level performance measures using real-time data	Detailed performance measures in real-time for one or more modes	Multi-modal performance measures in real time
	Decision Support System	Manual coordination of response	Pre-agreed incident response plans	Tool selection of pre-agreed plans	Model-based selection of pre-agreed plans	Model-based creation of incident response plans

# Input on TSM&O Needs



## RITSA ICM Service Package Stakeholders



Missing connections to any local transportation/traffic signal maintaining agencies, including City of Orlando (Kissimmee, Apopka, Winter Garden, and others)

# Looking Ahead: RITSA



# Looking Ahead: RITSA

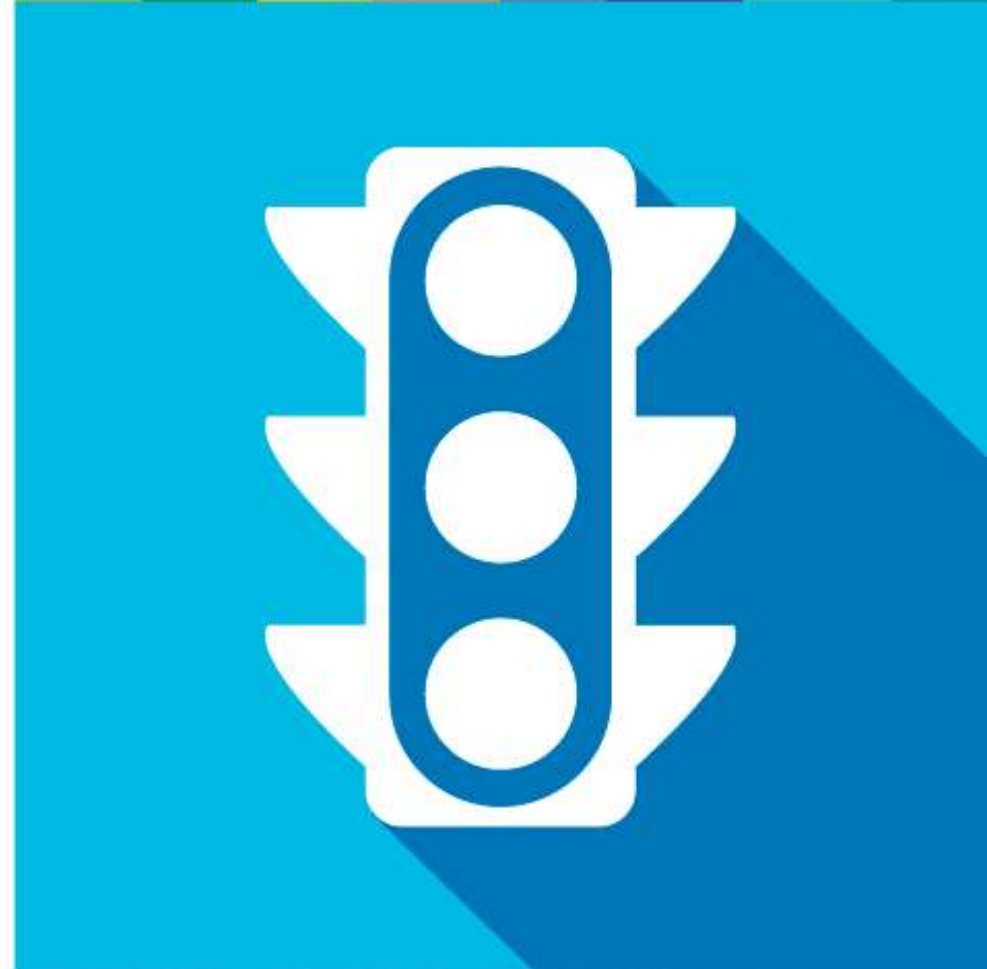


- Project-based vs System-based approach
- Project Inventory
- Additional needs or requests

# Member Comments and Updates



# Next Steps and Action Items



# Future Meeting Dates



REMAINING COMMITTEE MEETINGS		
Meeting	Principal Topic	Date/Anticipated Timeframe
#3	Input on Regional ITS Architecture (RITSA)	January 2023
#4	Input on Prioritization Support Matrix	March 2023
#5	Input on Proposed Priority Projects & Performance Measures	June 2023
#6	Input on draft TSM&O Master Plan	August 2023



# Thank You

MetroPlanOrlando.org | (407) 481-5672  
250 S. Orange Ave., Suite 200, Orlando, FL 32801

