# CENTRAL FLORIDA TSM&O CONSORTIUM MEETING SUMMARY

**Meeting Date**: November 13, 2025 (Thursday) **Time**: 10:00 AM – 12:00 PM

**Subject:** TSM&O Consortium Meeting

**Meeting Location:** FDOT District Five RTMC (4975 Wilson Rd., Sanford, FL 32771) and Teleconference

## I. OVERVIEW

The purpose of this recurring meeting is to provide an opportunity for District Five FDOT staff and local/regional agency partners to collaborate on the state of the TSM&O Program and ongoing efforts in Central Florida. Jeremy Dilmore gave a short introduction and outlined the meeting agenda.

## II. FDOT DISTRICT FIVE ITS MASTER PLAN

Dale Cody (Metric) presented on the District Five ITS Master Plan Update, including Existing Conditions and Arterial & Freeway Predictive Metrics.

- Status of District 5 ITS Master Plan.
  - Recent progress includes delivering Lessons Learned and Existing Conditions documents to stakeholders for review.
  - The team is refining the Arterial and Freeway Predictive Metrics document and planning submittal within the month.
  - Remaining Schedule
    - Lessons Learned & Existing Conditions: Submitted for stakeholder review.
    - Predictive Metrics: Targeting November 2025.
    - Strategies & CV/AI: December 2025.
    - Recommendations: January 2026.
    - Final Master Plan completion expected February 1, 2026.
- Existing Conditions
  - FDOT District 5:
    - Operates a 24/7/365 RTMC; manages freeway ops, AAM, R-ICM; maintains extensive fiber/wireless communications and a wide ITS device inventory.
  - Received updated existing conditions information for nearly all agencies
    - Most agencies reported increases in traffic signals, expanded communications networks, and growth in CCTV, Bluetooth, MVDS, RSU, and adaptive signal deployments.
    - Despite this expansion of infrastructure, the agencies generally had the same staff levels as in 2016

- Increased number of signals with communications is great, but that also means increased locates, increased maintenance responsibilities, etc.
- Leads to improvements in operations, but also requires staffing to keep systems up and running
- Goal is to have the ability to take the existing conditions staffing discussion to leadership, with the aim to get additional staffing funding

- Predictive Metrics Analyses – factors contributing to crashes
  - Evaluation of crash factors for interstate and arterial networks found that frequent crash conditions often align with typical driving conditions (weekday, clear weather, daylight, dry pavement).
  - For arterials, non-peak periods, LOS B/C, and Principal Arterial – Other categories were identified as the most common contributing factor combinations.
  - These results are present during times when the District already has a high level of operational situational awareness, so the factors do not provide significant operational value
  - Crash data alone cannot provide high operational value; this leads us to opportunities to deploy new applications with more granular data (e.g., Data Analytics → Near Miss, etc.)

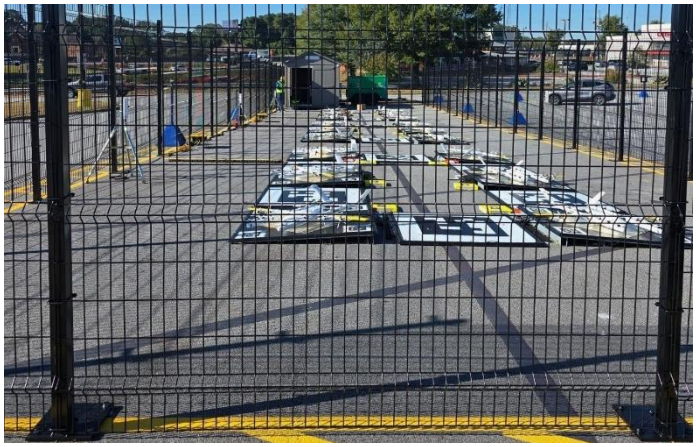
### Q&A Discussion

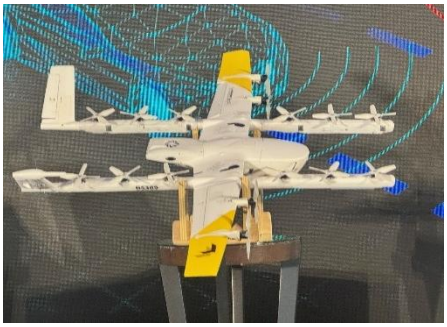
- Do you have an average growth rate of cities within the region? Traffic equipment, etc.?
  - Will develop this at the end

## III. FAV SUMMIT TAKEAWAYS

David Williams and Tushar Patel briefly discussed takeaways from the FAV Summit conference held earlier in November 2025.

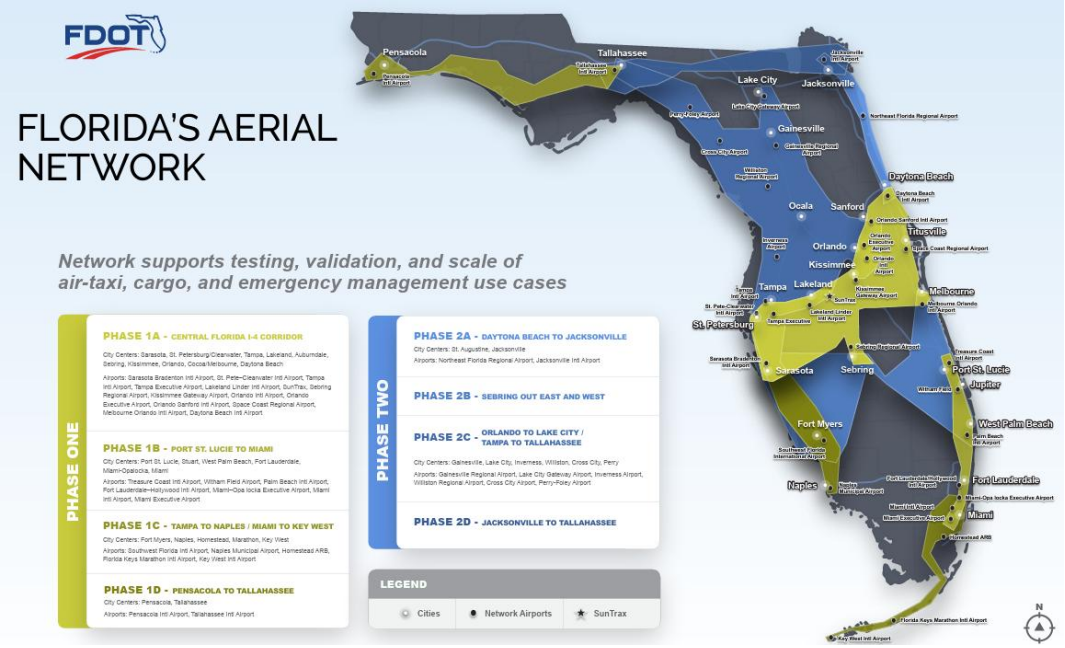
- Robotaxis were a major focus of the conference, attended by vendors like Waymo
- Drone Delivery was also heavily featured
  - Nest Delivery
    - Delivery is 150-200ft high
    - Drone is ~12-15lbs
    - Delivery package up to 2lbs
    - Walmart using the platform





- There was also an interesting presentation on an engineless glider, *Aerocart*, that is tethered to a piloted aircraft to increase cargo capacity

  - How does it work?
    - Load cargo trailer and connect it to the aircraft with a tow cable and connection kit
    - Taxi to runway (cable can retract to shorten distance between vehicles
    - Takeoff (cable expands for takeoff to provide buffer)
    - Cruise (Aerocart surfs the wake of the tow plane for maximum efficiency)
    - Land (Aerocart touches down shortly after tow plane reaches the ground
- Advanced Air Mobility (AAM) was a major focus of the FAV Summit
  - FDOT AAM Timeline
    - Fall 2025 – establish first AAM Aerial Highway Network, including identification of profitable use cases and formation of binding partnerships to develop network stations
    - Early 2026 – the new Florida AAM Headquarters at the SunTrax campus will be operational, serving as a hub within the Aerial Highway Network
    - Late 2026 – AAM supporting infrastructure will be fully activated and ready to deploy profitable commercial services for passenger travel
  - FDOT also highlighted recent AAM-related FDOT publications at the FAV Summit
    - FDOT's Plan of Action for AAM (June 2025)
    - Advanced Air Mobility Business Plan (November 2025)




## IV. FDOT'S PLAN OF ACTION FOR AAM

David Williams provided an overview of *FDOT's Plan of Action for Advanced Air Mobility* (2025).

- FDOT's Plan of Action for Advanced Air Mobility (AAM) is a statewide, near-term strategy to build an "aerial highway network" in Florida and make the state the first in the U.S. with profitable, statewide AAM services. The focus is on speed to market, strategic infrastructure investment, and public-private collaboration.
- AAM is a new mode of air transportation that uses advanced aircraft, including vertical takeoff and landing (VTOL/eVTOL) aircraft, to move people and goods efficiently across urban, suburban, and rural areas, integrated with existing ground transport.
- Florida is uniquely suited for AAM:
    - Florida is the only state with 4 large hub airports
    - 95% of Florida's population is within a 30-minute drive of a public-use airport
    - Florida is the first state to establish an AAM Working Group (AAM Advisory Committee) which has built the framework to further implement AAM
    - Virtually every major aviation and aerospace company in the world has significant operations in Florida
    - Aviation in Florida generates $336 billion in annual economic impact and two million jobs
    - A detailed historical timeline (2021–2025) shows steady groundwork: roadmaps and standards, airport compatibility reports, working group meetings, public outreach plans, tabletop exercises, and multiple flight demonstrations (BETA, Volocopter, LIFT, Joby), culminating in 2024 legislation incorporating AAM into the state's regulatory framework and directing FDOT to invest in vertiports.
- Florida's AAM Pre-Flight Checklist identifies five focus areas
    - Infrastructure – Building Aviation for the Future of Florida
        - Identify and build priority AAM infrastructure, especially vertiports as passenger

stations.
        - Create a robust AAM network (stations, routes, and supporting facilities).
    - Integration – Reinforcing Florida's Technological Ingenuity in the AAM space
        - Formalize an aerial network with digital infrastructure and advanced technology.
        - Expand SunTrax into the premier national test bed for AAM research, training, and safety.
    - Workforce Development & Economic Impact – Preparing Florida's Workforce for Clear Sky Future
        - Expand FDOT's Research Institute and Transportation Academy with AAM-specific curricula.
        - Partner with universities and trade programs to develop a skilled AAM workforce and support aviation/aerospace clusters.
    - Community Engagement – Sharing the Multifaceted AAM Opportunity
        - Execute public outreach and local government training.
        - Provide guidance tools such as the AAM Land Use Compatibility and Site Approval Guidebook and AAM Toolkit for Local Governments.
    - Policy – Ensure that Florida remains the Global Leader in AAM
        - Ensure Florida remains pro-business and predictable for AAM.
        - Use state legislation and regulatory updates to support investment and deployment.
- The Plan of Action for AAM establishes an action-oriented approach focused on the near future:
    - Building the first Aerial Highway Network
        - FDOT will engage industry to formalize an Aerial Highway Network with profitable business cases
        - Invest in key infrastructure, identifying, developing, and building AAM sites (vertiports and related facilities) to create a statewide network.
    - Accelerating Operational Implementation
        - FDOT will pave the way for quick market entry:
            - Within 2 months,
                - Work with industry to establish the first AAM Aerial Highway Network
                - Identify best use cases for profitability and secure binding partnerships to build stations
            - Within 6 months,
                - Establish the Florida AAM Headquarters at an expanded SunTrax campus, to connect aviation and aerospace clusters, create a robust ecosystem for AAM growth, and serve as a key node in the aerial highway network
            - Within 18 months,
                - Passenger operations are live and supporting infrastructure is ready
    - Cultivating a Skilled AAM Workforce
        - FDOT will expand FDOT's Research Institute and the Transportation Academy to include custom AAM curriculum

        - FDOT will support with facilities and with partnerships with FDOT's university consortium and existing trade programs
    - Preparing for Market Implementation
        - FDOT is ready to conduct research and development, implement comprehensive plans, and make AAM profitable on the first commercial flight in the Aerial Highway Network in Florida
- FDOT will establish the Florida AAM Headquarters at SunTrax
    - SunTrax is a 475-acre advanced transportation test facility in Central Florida, located outside the airspace of both Orlando International Airport and Tampa International Airport
    - Planned expansions will offer the following testing opportunities:
        - Vehicle-to-everything (V2X) technology testing
        - Dedicated airspace for R&D
        - Low altitude weather phenomena testing
        - Expanded campus with specialized space for AAM workforce development and aerial highway operations
- The FDOT Plan of Action for AAM identifies Roles and Expectations for the Federal Aviation Administration (FAA), FDOT, and Industry
    - FAA
        - Primary regulator for aircraft and vertiport certification and safe integration into the National Airspace System.
    - FDOT
        - Invest in key infrastructure.
        - Establish Aerial Highway Network.
        - Lead collaboration with industry.
        - Support R&D, workforce development, and market implementation so AAM becomes profitable statewide.
    - Industry
        - Certify aircraft and vertiports under FAA rules.
        - Enter aircraft production, build and manage supply chains, and advance certified aircraft.
        - Launch commercial operations, hire and train workforce.
        - Ensure financial stability by accessing capital markets and choosing viable investment models.
        - Execute branding and marketing plans, educate consumers, create demand, and launch services on defined routes.

## V. UPCOMING EVENTS AND IMPORTANT DATES

David Williams briefly discussed upcoming events and deadlines, including the Annual Maintenance Meeting, Workforce Development Training, and Regional ITS Architecture deadlines.

- Annual Maintenance Meeting
    - Previously held the Annual Maintenance Meeting to discuss ITS maintenance activities, lessons learned, and best practices

    - The next Annual Maintenance Meeting is planned for November 18, 2025 from 8:00am to 12:00pm at the FDOT District 5 RTMC
    - Intended audience includes maintaining agency staff:
        - senior traffic signal technicians, traffic signal technician managers, traffic engineering staff, and traffic operations staff
- Workforce Development Training Series – Fall 2025
    - There are still two workforce development trainings scheduled for the Fall 2025 series:
        - ATMS Monitoring and Programming – November 17th
        - SIIA and NOEMI – December 1st
    - Feel free to reach out to Manny Rodriguez for any questions or suggestions you may have
        - Manny.Rodriguez@dot.state.fl.us
    - FDOT District 5 will also be hosting the Workforce Development Training Series in Spring 2026
- ITS Architecture Change Requests
    - 23 Code of Federal Regulations (CFR) Section 940 establishes the ITS Architecture Framework for planning and implementing ITS projects
        - The National ITS Architecture, commonly known as the Architecture Reference for Cooperative and Intelligent Transportation (ARC-IT), is the common framework for ITS interoperability. It is maintained by the USDOT.
        - The State ITS Architecture (SITSA) is maintained by FDOT and governs the planning, design, development, integration, implementation, maintenance, and operation of Florida's ITS projects. The SITSA must comply with ARC-IT.
        - The Regional ITS Architecture (RITSA) is maintained by FDOT and governs the planning, design, development, integration, implementation, maintenance, and operation of each District's ITS projects. The RITSA must comply with the SITSA and ARC-IT.
        - The SITSA and RITSA provide an integrated framework to ensure that various transportation technologies can work together smoothly and effectively on Florida's highways.
        - 23 CFR 940 establishes the use of a systems engineering approach to carry out ITS projects
    - FDOT conducts periodic RITSA maintenance update cycles. If a project requires a change to the RITSA, an ITS Architecture Change Request form (750-040-04) must be submitted to FDOT.
        - What could trigger a change to the RITSA?
            - New stakeholders, changes in services, changes due to ITS Project definitions or implementation, changes due to ITS project completion or additions/deletions, changes in stakeholder/element names, changes in ITS project priority, or updated Long Range Transportation Plans (LRTP)
        - FDOT is always accepting change request forms
        - To be included in the current maintenance cycle, ITS Change Request Forms must be submitted to FDOT by December 5, 2025
            - sysandarch@dot.state.fl.us
        - To view the current FDOT SITSA and RITSA, visit:

- https://teo.fdot.gov/architecture/architectures/d5/index.html

## VI. DISTRICT FIVE PROJECT UPDATES

Katie King (Metric) gave a brief status update of District 5 projects.

- Whelen Lightbar
  - If agency has the Whelen Lightbar, they can reduce costs for GPS. We have gotten this fully tested from an API side.
  - It is not quite as good as a Pepwave / Samsara, so there is probably a few seconds of delay.
- HEIDI User Group Meetings
  - These are recurring meetings to help folks utilizing HEIDI; it is not required and may ebb and flow as people attend
- ITS Traffic Signal AI Assist
  - Do agencies want us to have them present at a future meeting? FDOT hasn't used it, but have heard a couple agencies use them.

## VII. TSM&O CONSORTIUM – SURVEY OF FUTURE TOPICS

David Williams led attendees through a brief survey to identify potential topics of interest for the group moving into 2026.

- Meeting attendees were given a broad list of potential TSM&O-related topics from which they could select three that they would like to hear more about at a future meeting
  - Planning for TSM&O (10), Deep-dive into an ITS Project (8), O&M Best Practices (8), Connected and Automated Vehicles (7), Advanced Air Mobility (6), and Other Emerging Technologies (6) had the most selections
- Attendees were asked to select the two Capability Maturity Model dimensions they would like to hear more about at a future meeting
  - Performance Measurement (12) and Systems & Technology (10) scored the highest among the six dimensions
    - Other dimensions include Business Processes, Collaboration, Culture, and Organization & Staffing
- Attendees were asked to write in any other topics or technologies of interest to them.
  - Other potential topics or technologies identified by attendees included crowd-sourced data, AI Traffic Studies and Signal Timing, Probe Data Software, Micromobility, Quantum Computing, and Sample Strategy Evaluation.

## VIII. NEXT MEETING

- January 29, 2026

## IX. ATTACHMENTS

- A – Presentation Slides
- B – Meeting agenda

END OF SUMMARY

*This summary was prepared by David Williams and is provided as a summary (not verbatim) for use by the Consortium Members. The comments do not reflect FDOT's concurrence. Please review and send comments via e-mail to david.williams2@dot.state.fl.us so the meeting summary can be finalized.*

# Welcome to the TSM&O Consortium Meeting

## November 13, 2025

CENTRAL FLORIDA TSM&O CONSORTIUM

FDOT TSM&O Transportation Systems Management & Operations

# Meeting Agenda

1. FDOT District 5 ITS Master Plan
2. ITS Florida and FAV Summit – Takeaways (Open Discussion)
3. FDOT's Plan of Action for AAM
4. Meetings, Trainings, and Deadlines
5. District Five Project Updates
6. TSM&O Consortium Topics – Survey
7. Current Initiatives

# ITS Master Plan Update

## FDOT District 5

Presented by
**Dale Cody, PE, PTOE**
*Metric Engineering Inc.*

# Progress to Date

- Submitted Lessons Learned and Existing Conditions to Stakeholders for review
- Arterial and Freeway Predictive Metrics Document
  - Updating per internal QC
  - Will submit to FDOT this month
- Reorganized remaining tasks based on recent FDOT feedback

# Tech Memo Schedule

I. Review of Previous Master Plan/Lessons Learned – Submitted to Stakeholders for review

II. Existing Conditions – Submitted to Stakeholders for review

III. Arterial and Freeway Predictive Metrics – November 2025

IV. Strategies and CV/AI – December 2025

V. Recommendations – January 2026

VI. Overall Master Plan Complete – 2/1/26

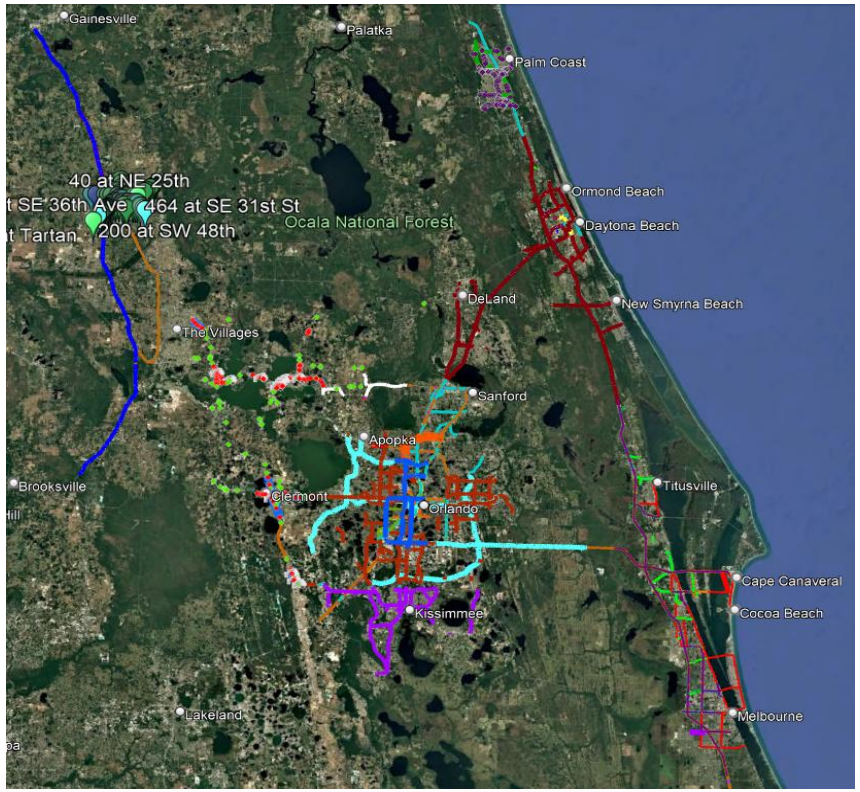
# Existing Conditions

# Existing Conditions Tech Memo

- Received updated existing conditions info for nearly all agencies
- Memo documents existing conditions and capabilities at a high level
- All agencies reported an increase in infrastructure/responsibilities with generally the same staff levels as in 2016

# Existing Conditions Tech Memo

- FDOT District 5
  - 24/7/365 RTMC in Sanford
  - Freeway operations including FMS and managed lanes
  - AAM and R-ICM
  - Substantial communications with fiber and wireless
  - Several ITS devices including but not limited to CCTVs, MVDS, Bluetooth, WWVDS, DMS, and RSUs
  - Network support for several municipalities
  - Advanced data processing and management practices



# Existing Conditions Tech Memo

- Lake County
  - Unofficial TMC at the Lake County Division of Transportation Administration Building
  - 238 traffic signals – Increase of 40
    - 210 with communications – Increase of 136
  - 106 coordinated signals
  - 14 CCTVs

- Sumter County
  - Small TMC
  - 69 traffic signals – Increase of 20
  - 10 interconnected signals

# Existing Conditions Tech Memo

- Orange County
  - TMC at Public Works complex
  - 661 traffic signals – Increase of 70
    - 642 with communications – Increase of 185
  - 457 coordinated signals and 18 adaptive signals
  - 294 CCTVs – Increase of 187
  - 8 DMS – Decrease of 5
  - 376 MVDS – Increase of 218
  - 87 RSUs
  - 54 Bluetooth – Increase of 26
  - Remote monitoring of 31 signals for CFX

# Existing Conditions Tech Memo

- Osceola County
  - TMC at EOC
  - 259 traffic signals – Increase of 109
    - 232 with communications – Increase of 124
  - 198 coordinated signals
  - 197 CCTVs – Increase of 127
  - 10 DMS – Increase of 4
  - 35 Bluetooth – Increase of 30

# Existing Conditions Tech Memo

- Seminole County
  - TMC at Five Points complex
  - 413 traffic signals – Increase of 30
    - All 413 with communications – Increase of 31
  - 288 coordinated signals and 62 adaptive signals
  - 246 CCTVs – Increase of 54
  - 29 DMS
  - 239 UPS
  - 123 Bluetooth – Increase of 41
  - 132 RSUs
  - 139 IMC cameras

# Existing Conditions Tech Memo

- City of Orlando
  - TMC at Orlando Operations Center
  - 557 traffic signals – Increase of 20
    - 525 with communications – Increase of 65
  - 339 coordinated signals
  - 204 CCTVs – Increase of 103
  - 12 DMS
  - 123 Bluetooth – Increase of 41
  - 57 pedestrian/school flashers

# Existing Conditions Tech Memo

- Marion County
  - Waiting on feedback from County

- City of Ocala
  - TMC at the City of Ocala municipal complex
  - 115 traffic signals with 4 more under construction
    - All 115 with communications
  - 87 coordinated signals
  - 62 CCTVs – Increase of 25
  - 7 DMS

# Existing Conditions Tech Memo

- Volusia County
  - TMC at the Daytona Beach Signal Division
  - 355 traffic signals – Increase of 29
    - 310 with communications – Increase of 123
  - 179 coordinated signals and 14 adaptive signals
  - 104 CCTVs – Increase of 69

- City of Daytona Beach
  - TMC at 950 Bellevue Avenue
  - 125 traffic signals
    - 114 with communications – Increase of 15
  - 60 CCTVs

# Existing Conditions Tech Memo

- City of Palm Coast
  - 64 traffic signals – Increase of 14 with 5 more under construction
    - Fiber network for communications
  - 22 coordinated signals
  - 48 CCTVs – Increase of 41

# Existing Conditions Tech Memo

- Brevard County
  - TOC in Melbourne – New TMC under construction, will be collocated with Space Coast TPO
  - 370 traffic signals – Increase of 38
    - 300 with communications – Increase of 151
    - 50 with wireless communications
    - 200+ with smart video detection
  - 110 adaptive signals
  - 150+ CCTVs – Increase of 70
  - 140+ school flashers, 600+ streetlights, 100+ RRFBs

# Existing Conditions Tech Memo

- City of Melbourne
  - 83 traffic signals – Increase of 16
    - 57 signals with fiber communications – Increase of 47
    - 26 signals with wireless communications
  - 50 CCTVs
  - 10 Bluetooth
  - 2 HAWK locations

# Arterial and Freeway Predictive Metrics

# Top Contributing Factors Leading to Interstate Crashes

- Analysis focused on Off-Road, Rear End, and Sideswipe crashes, as well as Head-On crashes related to wrong-way driving, which historically produce the most severe outcomes
- The analysis determined that while certain trends were observed, none were indicative of an increased crash risk. The most contributing factors, seen in the table below, reflect typical driving conditions rather than elevated risk scenarios.

| Factor #1 | Factor #2 | Factor #3 | # of Crashes | % of Total Crashes |
|---|---|---|---|---|
| **Weekday** | Clear Weather | Dry Road Surface | 6286 | 48.84% |
| **Clear Weather** | Daylight | Dry Road Surface | 5348 | 41.55% |
| **Weekday** | Daylight | Dry Road Surface | 4777 | 37.11% |
| **Non-Peak Period** | Clear Weather | Dry Road Surface | 4611 | 35.82% |
| **Weekday** | Daylight | Clear Weather | 4050 | 31.47% |

# Top Contributing Factors Leading to Arterial Crashes

- Analysis focused on combinations of roadway contributing factors for severe crashes
- The top 2-way contributing factors by crash type are shown in the table below

| Crash Type | Factor #1 | Factor #2 | # of Crashes* | % of Crashes* | Likelihood |
|---|---|---|---|---|---|
| Angle | Non-Peak | LOS: B/C | 288 | 50.4% | 1.02x |
| Bike/Ped | Non-Peak | Principal Arterial – Other | 851 | 59.0% | 1.44x |
| Bike/Ped | Weekday | Non-Peak | 799 | 55.4% | 1.24x |
| Head On | Non-Peak | Principal Arterial – Other | 173 | 56.9% | 1.32x |
| Head On | Weekday | Principal Arterial – Other | 157 | 51.6% | 1.07x |
| Left Turn | Weekday | LOS: B/C | 739 | 50.8% | 1.03x |
| Off Road | Non-Peak | Principal Arterial – Other | 377 | 56.4% | 1.30x |
| Off Road | Non-Peak | LOS: B/C | 364 | 54.5% | 1.20x |
| Rear End | Weekday | Principal Arterial – Other | 800 | 55.6% | 1.25x |
| Rollover | LOS: B/C | Principal Arterial – Other | 139 | 64.4% | 1.81x |
| Rollover | Non-Peak | LOS: B/C | 124 | 57.4% | 1.35x |
| Sideswipe | LOS: B/C | Principal Arterial – Other | 162 | 55.5% | 1.25x |
| Sideswipe | Weekday | Principal Arterial – Other | 160 | 54.8% | 1.21x |

# Conclusions

- At the end of the day these conditions are at times when we have a high level of operational situational awareness, so the factors do not provide significant operational value
- However, this leads us to opportunities to deploy new applications with more granular data (i.e. Data Analytics => Near Miss, etc.)

FDOT TSM&O
Transportation Systems Management & Operations

# Questions

FDOT TSM&O
Transportation Systems Management & Operations

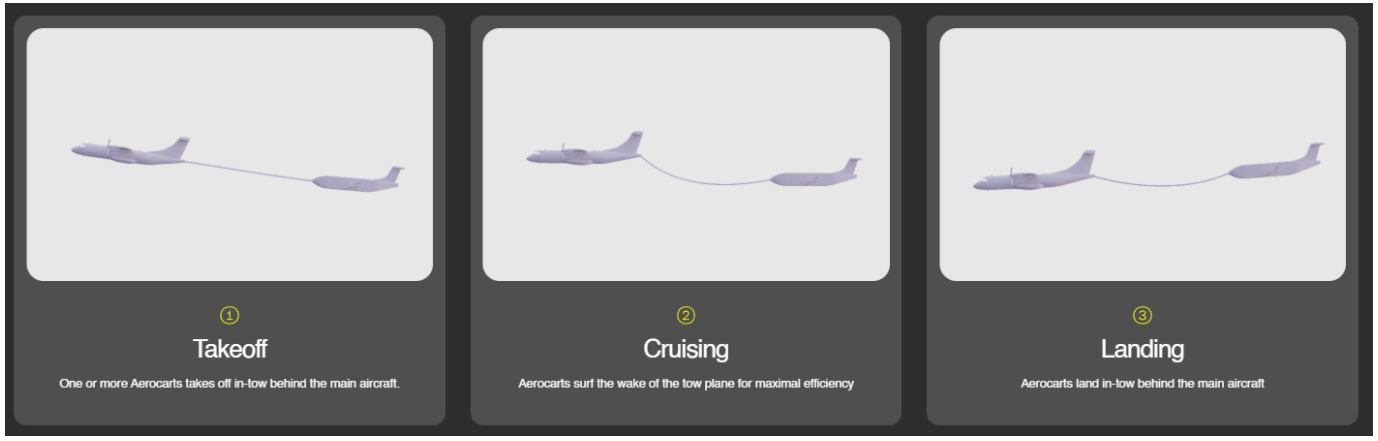
# FAV Summit and ITS Florida Takeaways

## Open Discussion

# FAV Summit – Robotaxis


# FAV Summit – Drone Delivery (NEST)

# FAV Summit – Aerocart Trailer

# FAV Summit – FDOT AAM Timeline

**Fall 2025**

The first AAM Aerial Highway Network will be established, including the identification of profitable use cases and formation of binding partnerships to develop network stations.

**Early 2026**

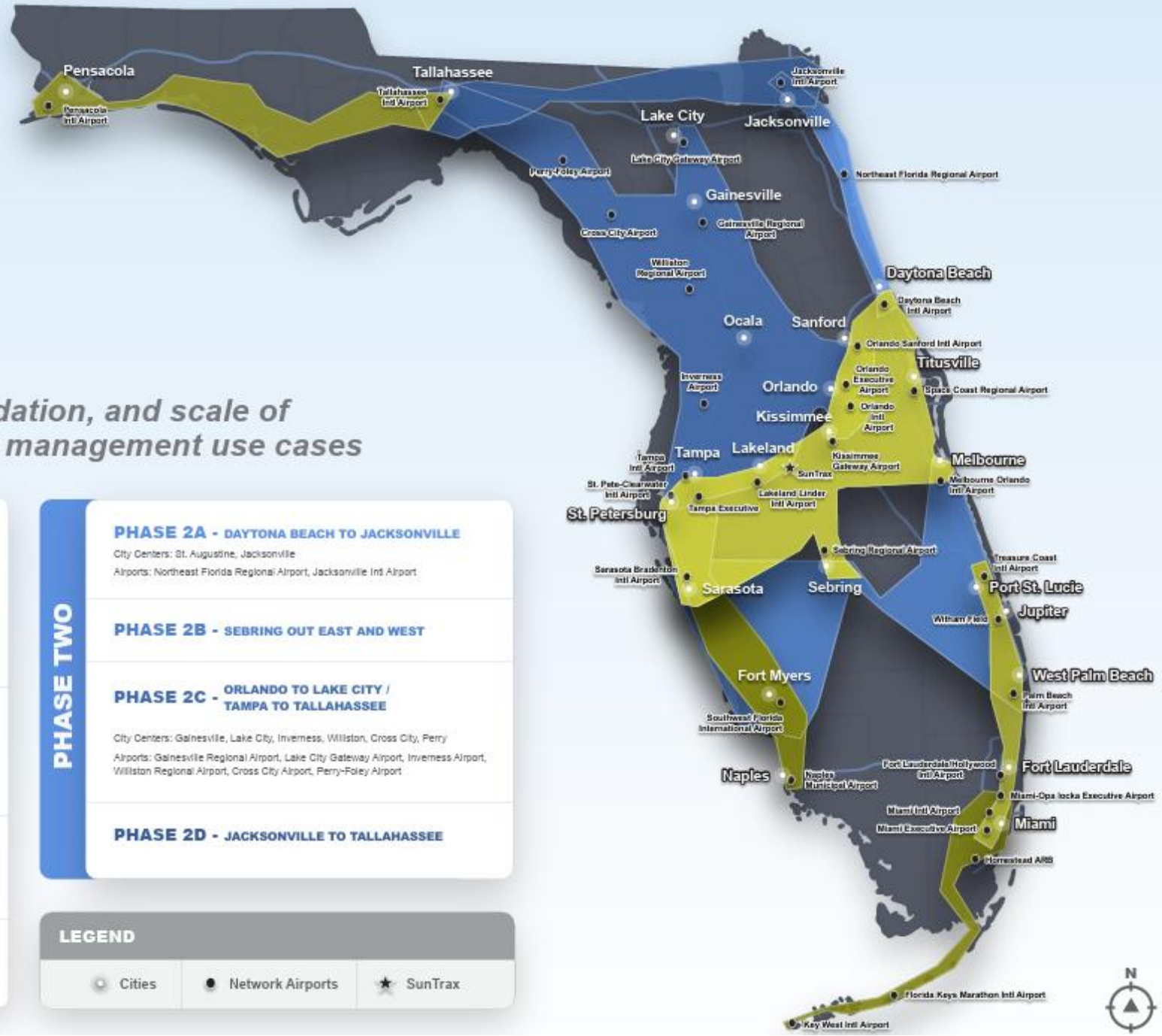
The new Florida AAM Headquarters at the SunTrax Campus will be operational, serving as a hub within the Aerial Highway Network.


**Late 2026**

AAM supporting infrastructure will be fully activated and ready to deploy profitable commercial services for passenger travel.

# FLORIDA'S AERIAL NETWORK

***Network supports testing, validation, and scale of air-taxi, cargo, and emergency management use cases***




## PHASE ONE

### PHASE 1A - CENTRAL FLORIDA I-4 CORRIDOR

City Centers: Sarasota, St. Petersburg/Clearwater, Tampa, Lakeland, Auburndale, Sebring, Kissimmee, Orlando, Cocoa/Melbourne, Daytona Beach

Airports: Sarasota Bradenton Intl Airport, St. Pete–Clearwater Intl Airport, Tampa Intl Airport, Tampa Executive Airport, Lakeland Linder Intl Airport, SunTrax, Sebring Regional Airport, Kissimmee Gateway Airport, Orlando Intl Airport, Orlando Executive Airport, Orlando Sanford Intl Airport, Space Coast Regional Airport, Melbourne Orlando Intl Airport, Daytona Beach Intl Airport

### PHASE 1B - PORT ST. LUCIE TO MIAMI

City Centers: Port St. Lucie, Stuart, West Palm Beach, Fort Lauderdale, Miami-Opalocka, Miami

Airports: Treasure Coast Intl Airport, Witham Field Airport, Palm Beach Intl Airport, Fort Lauderdale–Hollywood Intl Airport, Miami–Opa locka Executive Airport, Miami Intl Airport, Miami Executive Airport

### PHASE 1C - TAMPA TO NAPLES / MIAMI TO KEY WEST

City Centers: Fort Myers, Naples, Homestead, Marathon, Key West

Airports: Southwest Florida Intl Airport, Naples Municipal Airport, Homestead ARB, Florida Keys Marathon Intl Airport, Key West Intl Airport

### PHASE 1D - PENSACOLA TO TALLAHASSEE

City Centers: Pensacola, Tallahassee

Airports: Pensacola Intl Airport, Tallahassee Intl Airport

## PHASE TWO

### PHASE 2A - DAYTONA BEACH TO JACKSONVILLE

City Centers: St. Augustine, Jacksonville

Airports: Northeast Florida Regional Airport, Jacksonville Intl Airport

### PHASE 2B - SEBRING OUT EAST AND WEST

### PHASE 2C - ORLANDO TO LAKE CITY / TAMPA TO TALLAHASSEE

City Centers: Gainesville, Lake City, Inverness, Williston, Cross City, Perry

Airports: Gainesville Regional Airport, Lake City Gateway Airport, Inverness Airport, Williston Regional Airport, Cross City Airport, Perry-Foley Airport

### PHASE 2D - JACKSONVILLE TO TALLAHASSEE

## LEGEND

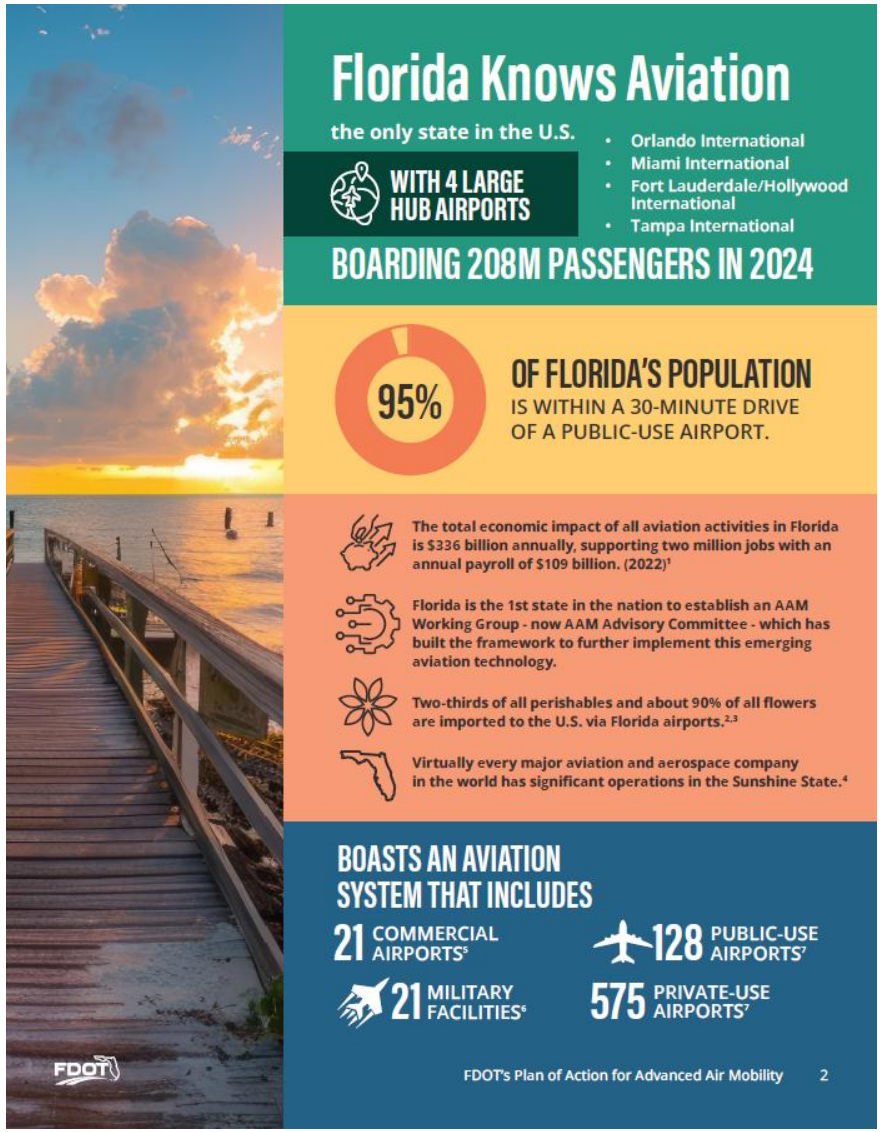
Cities | Network Airports | SunTrax

FDOT TSM&O

Transportation Systems Management & Operations

# FDOT Plan of Action for Advanced Air Mobility

# FDOT's Plan of Action for AAM


CENTRAL FLORIDA TSMO CONSORTIUM

FDOT TSM&O
Transportation Systems Management & Operations

# What is Advanced Air Mobility?


BETA's ALIA eVTOL at Eglin AFB
Photo Source: Air Force Research Laboratory

# FDOT's Plan of Action for AAM

## Historical Timeline

### 2021

**DECEMBER**
Florida begins initial strategic planning for AAM

### 2022

**JUNE**
FDOT publishes AAM Roadmap and Recommended Standards

**SEPTEMBER**
FDOT publishes Airport Compatibility Reports for 32 airports

**NOVEMBER 2022 - AUGUST 2023**
FDOT hosts AAM Working Group meetings

### 2023

**AUGUST**
FDOT publishes Working Group Report and Recommendations

**SEPTEMBER**
FDOT publishes Public Outreach Plan

**OCTOBER**
BETA Technologies' aircraft "ALIA" conducts capabilities demonstration at Eglin Air Force Base

**NOVEMBER**
- Volocopter conducts Florida's first crewed, electric VTOL (eVTOL) demonstration flight with their Volocopter 2X in Tampa
- FDOT establishes AAM Advisory Committee

### 2024

**MARCH - JUNE**
FDOT hosts AAM Tabletop Exercises

**APRIL**
LIFT Aircraft's "Hexa" conduct flights at Lakeland Airport during SUN 'n FUN

**SEPTEMBER**
- FDOT publishes AAM Land Use Compatibility and Site Approval Guidebook
- FDOT participates in commissioning of BETA Technologies' electric aircraft charging infrastructure
- BETA installs chargers at Tallahassee, Gainesville, and Bob Sikes airports

### 2025

**FEBRUARY**
FDOT publishes AAM Toolkit for Local Governments

**MARCH - SEPTEMBER**
FDOT hosts statewide local government training for AAM

**APRIL**
Joby conducts proof of concept demonstrations at MacDill Air Force Base

**JUNE**
- Florida Governor signs legislation incorporating AAM into the state's regulatory framework and advancing the industry across the state
- Florida Governor directs FDOT to facilitate additional state investments in AAM including through construction of vertiports

# Florida's 2025 AAM Pre-Flight Checklist Strategic Focus Areas

**INFRASTRUCTURE –** Building Aviation for the Future of Florida

**INTEGRATION –** Reinforce Florida's Technological Ingenuity in the AAM Space

**WORKFORCE DEVELOPMENT & ECONOMIC IMPACT**
Posturing Florida's Workforce for a Clear Sky Future

**COMMUNITY ENGAGEMENT –** Sharing the Multifaceted AAM Opportunity

**POLICY –** Ensure that Florida Remains the Global Leader in Advanced Air Mobility

# Action-oriented approach focused on the near future

- Building the First Aerial Highway Network
- Accelerating Operational Implementation

LIFT's Hexa aircraft at Lakeland Airport, SUN 'n FUN
Photo Source: eVTOLinsights.com

**FDOT is taking action to ensure Florida is the first to have profitable AAM services statewide.**

# Action-oriented approach focused on the near future

- Cultivating a Skilled AAM Workforce
- Preparing for Market Implementation

Joby Aviation's eVTOL air tax prototype
Photo Source: jobyaviation.com

# AAM Research and Development at SunTrax

- SunTrax is the ideal site for AAM air/ground research and development
- Immediate deployment of a landing facility at SunTrax's campus will allow use of the airspace above the 475-acre campus

Concept of SunTrax Air expansion

Photo Source: SunTrax

# Industry Roles and Expectations

- The FAA is the primary regulatory authority overseeing AAM aircraft certification and their safe integration into the National Airspace System
- Industry's main role is to certify AAM aircraft and vertiport(s) under applicable FAA regulations
  - Operational Implementation
  - Financial Stability
  - Market Implementation

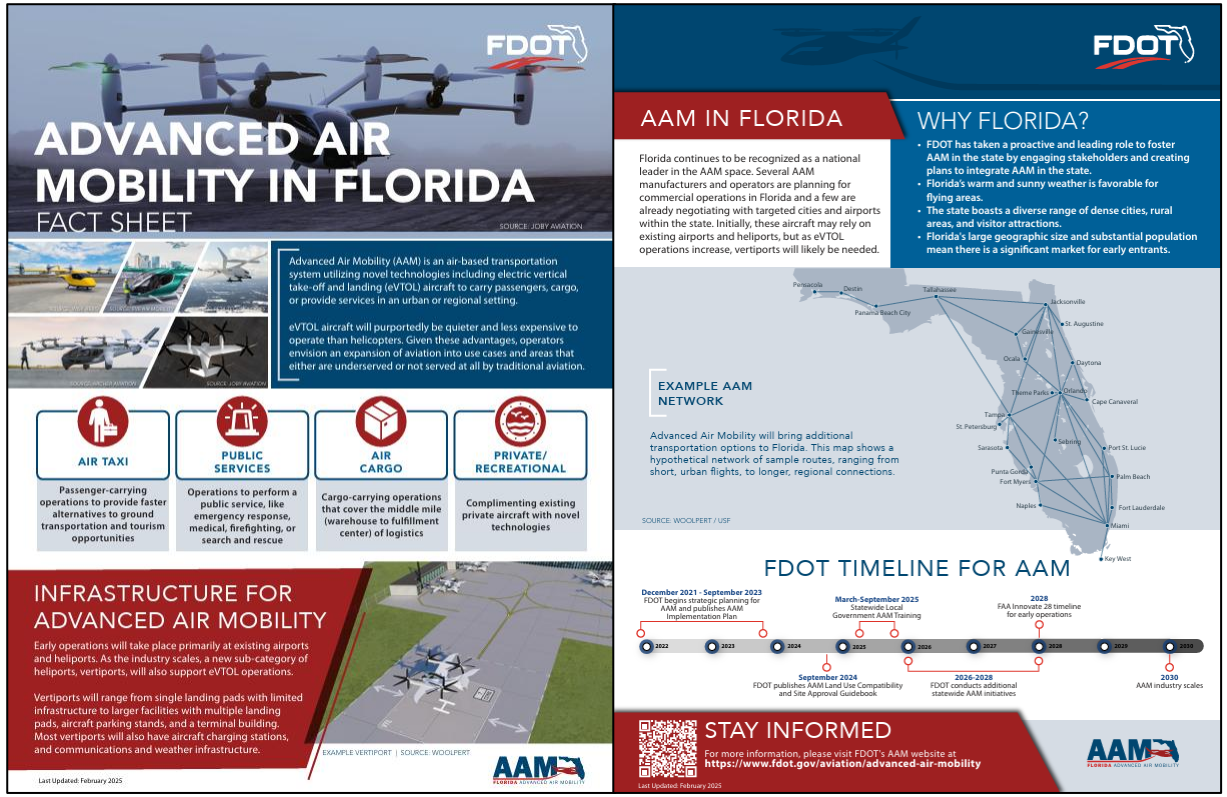
First Air Taxi Test Flight in Florida, Volocopter

Photo Source: Tampa International Airport

# Advanced Air Mobility

- For more information, visit:
  - https://www.fdot.gov/aviation/advanced-air-mobility

  or search “FDOT AAM”





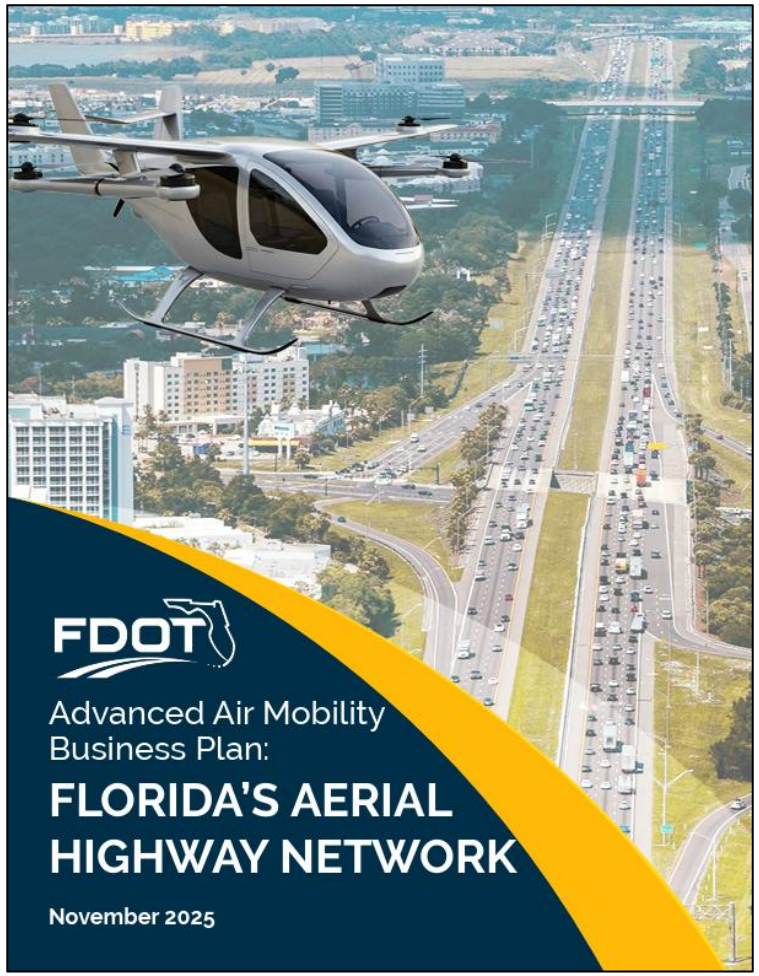
CENTRAL FLORIDA TSMO CONSORTIUM

FDOT TSM&O Transportation Systems Management & Operations

# Advanced Air Mobility

- For more information, visit:
  - https://www.fdot.gov/aviation/advanced-air-mobility

  or search “FDOT AAM”


CENTRAL FLORIDA TSMO CONSORTIUM

FDOT TSM&O
Transportation Systems Management & Operations

FDOT TSM&O

Transportation Systems Management & Operations

# Annual Maintenance Meeting

David Williams, VHB

# Annual Maintenance Meeting

- Previously held annual meeting to discuss ITS maintenance activities, lessons learned, best practices
- If you have any topics that you want to discuss at the meeting, please reach out to Tricia or David
- November 18, 2025, from 8:00a to 12:00p at the District 5 RTMC

# Annual Maintenance Meeting

- The intended audience is maintaining agency staff:
  - Senior traffic signal technicians
  - Traffic signal technician managers
  - Traffic Engineering staff
  - Traffic Operations staff


# Workforce Development Training

David Williams, VHB

# Workforce Development Training – Fall 2025

- Basic Cabinet and Field Equipment – October 6th at 9:00am
- Traffic Signal Timing Basics – October 13th at 9:00am
- Traffic Signal Controller Programming – October 20th at 9:00am
- CMS and TSP – October 27th at 9:00am
- Signal Maintenance – November 3rd at 9:00am
- ATMS Monitoring and Programming – November 17th at 9:00am
- SIIA and NOEMI – December 1st at 9:00am*

- Reach out to Manny Rodriguez for more information
  - Manny.Rodriguez@dot.state.fl.us

CENTRAL FLORIDA TSMO CONSORTIUM

FDOT TSM&O Transportation Systems Management & Operations

FDOT TSM&O

Transportation Systems Management & Operations

# ITS Architecture Change Request

David Williams, VHB

# 23 Code of Federal Regulations (CFR) Part 940

- Establishes ITS Architecture framework

## National ITS Architecture (NITSA)

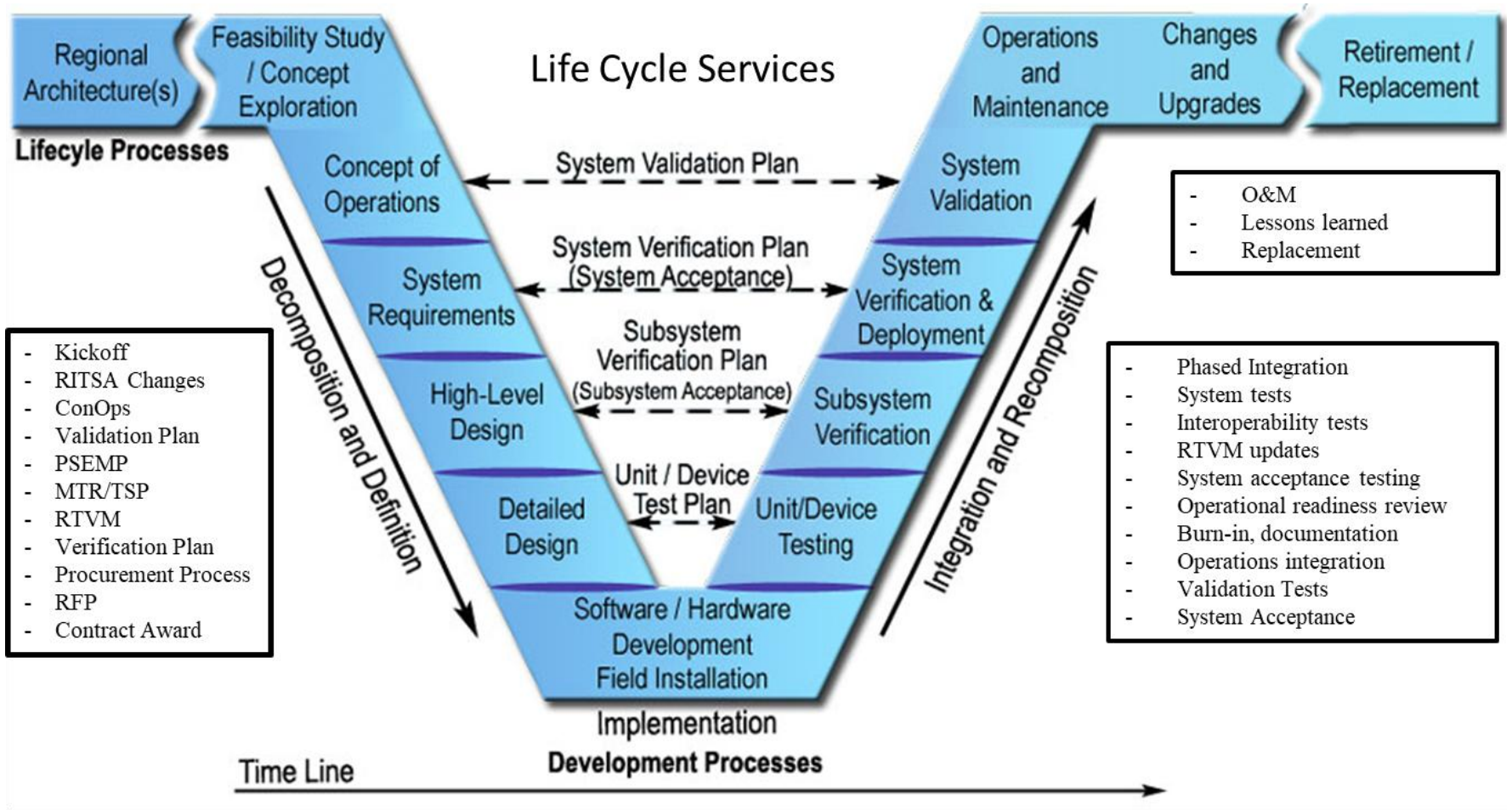
## State ITS Architecture (SITSA)

### Regional ITS Architecture (RITSA)

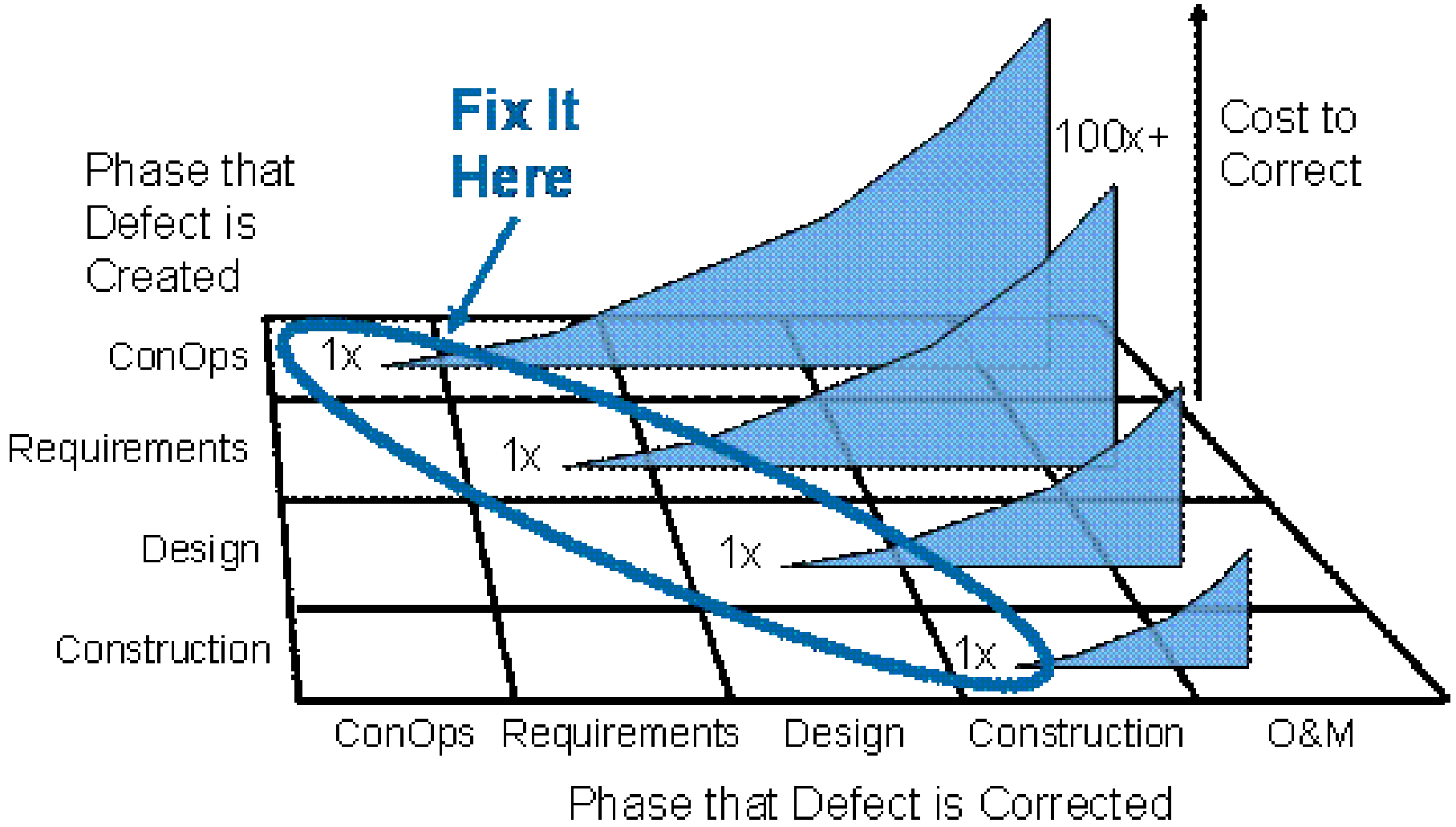
### Project ITS Architecture (PITSA)

- Also requires the systems engineering approach for all ITS projects

# Systems Engineering



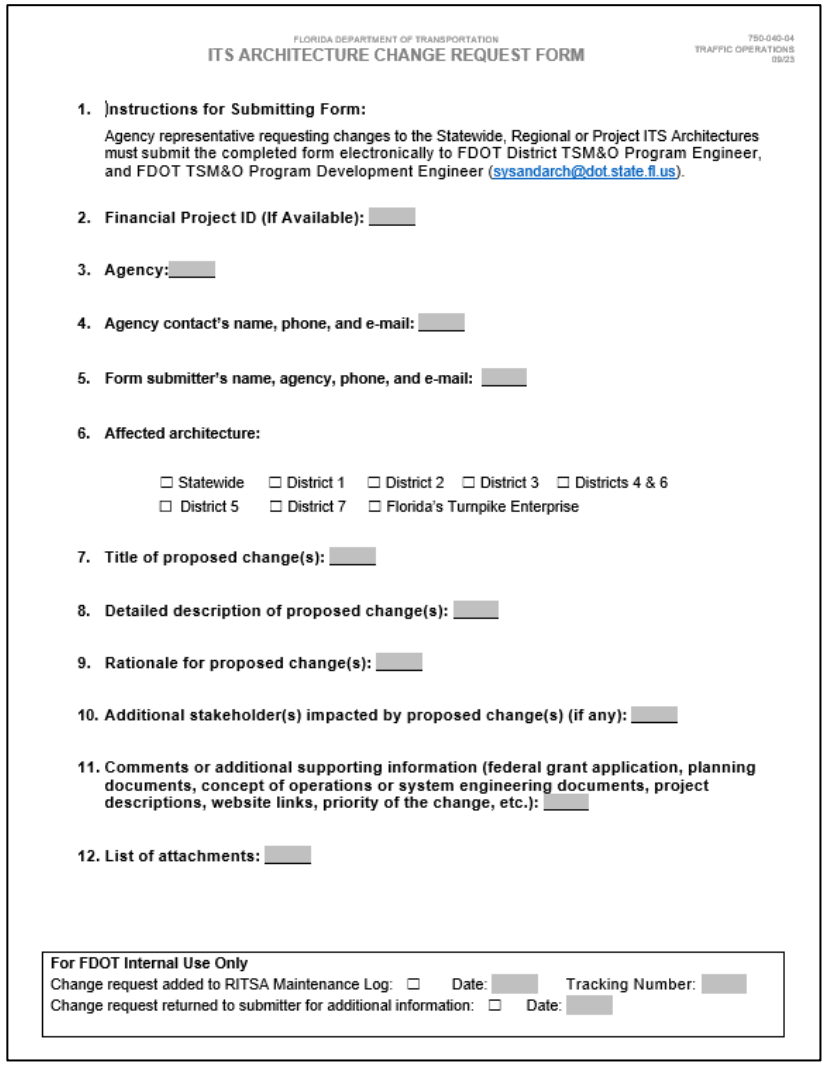
# Systems Engineering Approach




https://ops.fhwa.dot.gov/publications/seitsguide/section3.htm

# Regional ITS Architecture (District 5)

- FDOT conducts periodic RITSA maintenance update cycles
- During SE activities, necessary RITSA changes should be identified
- **ITS Architecture Change Request Form**
  - 750-040-04



FLORIDA DEPARTMENT OF TRANSPORTATION
ITS ARCHITECTURE CHANGE REQUEST FORM
750-040-04
TRAFFIC OPERATIONS
09/23

1. Instructions for Submitting Form:
   Agency representative requesting changes to the Statewide, Regional or Project ITS Architectures must submit the completed form electronically to FDOT District TSM&O Program Engineer, and FDOT TSM&O Program Development Engineer (sysandarch@dot.state.fl.us).
2. Financial Project ID (If Available):
3. Agency:
4. Agency contact's name, phone, and e-mail:
5. Form submitter's name, agency, phone, and e-mail:
6. Affected architecture:
   ☐ Statewide ☐ District 1 ☐ District 2 ☐ District 3 ☐ Districts 4 & 6
   ☐ District 5 ☐ District 7 ☐ Florida's Turnpike Enterprise
7. Title of proposed change(s):
8. Detailed description of proposed change(s):
9. Rationale for proposed change(s):
10. Additional stakeholder(s) impacted by proposed change(s) (if any):
11. Comments or additional supporting information (federal grant application, planning documents, concept of operations or system engineering documents, project descriptions, website links, priority of the change, etc.):
12. List of attachments:

For FDOT Internal Use Only
Change request added to RITSA Maintenance Log: ☐ Date: Tracking Number:
Change request returned to submitter for additional information: ☐ Date:

# Regional ITS Architecture (District 5)

- What could trigger a change?
  - New stakeholders
  - Changes in services
  - Changes due to ITS project definitions/implementation
  - Changes due to ITS project completion/addition/deletion
  - Changes in stakeholder/element names
  - Changes in ITS project priority
  - Updated Long Range Transportation Plan

# Regional ITS Architecture (District 5)

- FDOT is always accepting ITS Change Request Forms
- To be included in current maintenance cycle, the ITS Change Request Form must be ***submitted by December 5, 2025***
  - sysandarch@dot.state.fl.us
  - Coordinate with David
- To review the FDOT SITSA and RITSA, visit
  - https://teo.fdot.gov/architecture/architectures/d5/index.html
  - or search: “FDOT Architecture”

CENTRAL FLORIDA TSMO CONSORTIUM

FDOT TSM&O Transportation Systems Management & Operations

# Regional ITS Architecture (District 5)

Questions?

david.williams2@dot.state.fl.us

katie.king@dot.state.fl.us

FDOT TSM&O

Transportation Systems Management & Operations

# District Five Project Updates

Katie King, Metric Engineering

# Updates with Katie

- Proprietary Product Certification
- Whelen Lightbar
- HEIDI User Group Meetings
- ITS Traffic Signal AI Assist

FDOT TSM&O
Transportation Systems Management & Operations

# TSM&O Consortium Survey

David Williams, VHB

FDOT TSM&O

Transportation Systems Management & Operations

# Current Initiatives

David Williams, VHB

# Current Initiatives

- Moving Florida Forward I-4
- Moving Florida Forward I-75
- OBU Deployment
- I-4 FRAME

# Current Initiatives

- HEIDI (High-Definition Engineering Intersection Data via Integrative Modeling)

- CRISI

FDOT TSM&O

Transportation Systems Management & Operations

# THANK YOU!

Next Consortium – January 8, 2026

# TSM&O Consortium Meeting

**MEETING AGENDA**
Teleconference or
FDOT District 5 RTMC (4975 Wilson Rd, Sanford, FL 32771)

*November 13, 2025*
*10:00 AM-12:00 PM*

1) FDOT DISTRICT FIVE ITS MASTER PLAN UPDATE
    - Dale Cody, Metric Engineering
2) ITS FLORIDA and FAV SUMMIT TAKEAWAYS
    - Open Discussion
3) FDOT'S PLAN OF ACTION FOR AAM
    - David Williams, VHB
4) DISTRICT FIVE PROJECT UPDATES
    - Katie King, Metric Engineering
5) UPCOMING MEETINGS AND DEADLINES
    - David Williams, VHB
6) TSM&O CONSORTIUM TOPICS IN 2026 – SURVEY
    - David Williams, VHB
7) CURRENT INITIATIVES
    - David Williams, VHB