



# Orange County Advanced Air Mobility Feasibility Study

Transportation Mobility Advisory Commission

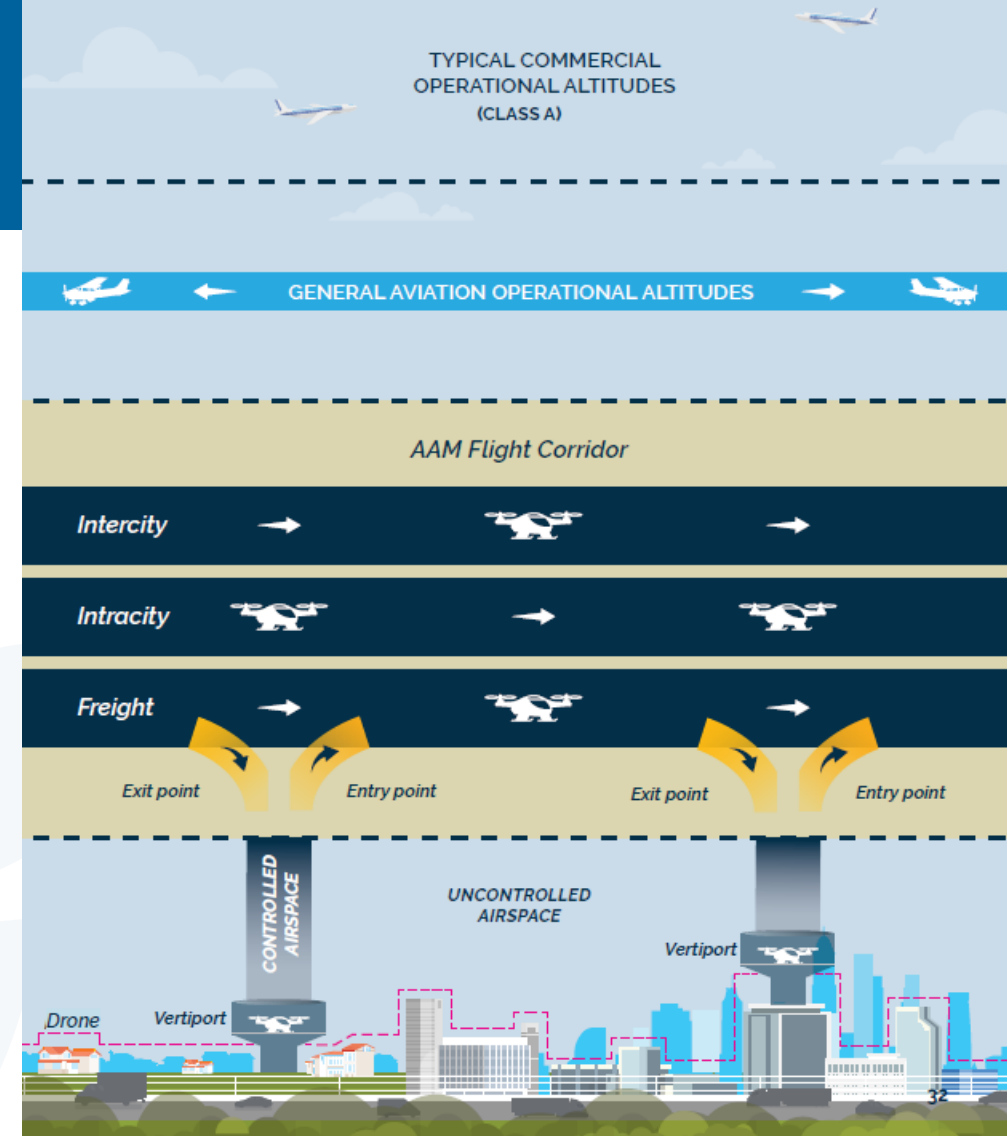
May 14, 2026

# AGENDA

- Advanced Air Mobility Overview
- Orange County AAM Planning
- Orange County Advanced Air Mobility Feasibility Study
- Next Steps

# ADVANCED AIR MOBILITY

- Aviation based on new technologies and business models
- Small, low-altitude aircraft currently being certified for commercial operations
  - Electric Vertical Take-off and Landing (eVTOL)
  - 4-6 passenger “air taxis”
  - Cargo, logistics, medical, and emergency service use cases
  - Flights less than 200 miles at 1,000 - 3,000 feet
- Most take-offs/landings at “vertiports”



Quadcopters



Powered Lift



Multi-tilt Rotor Aircraft

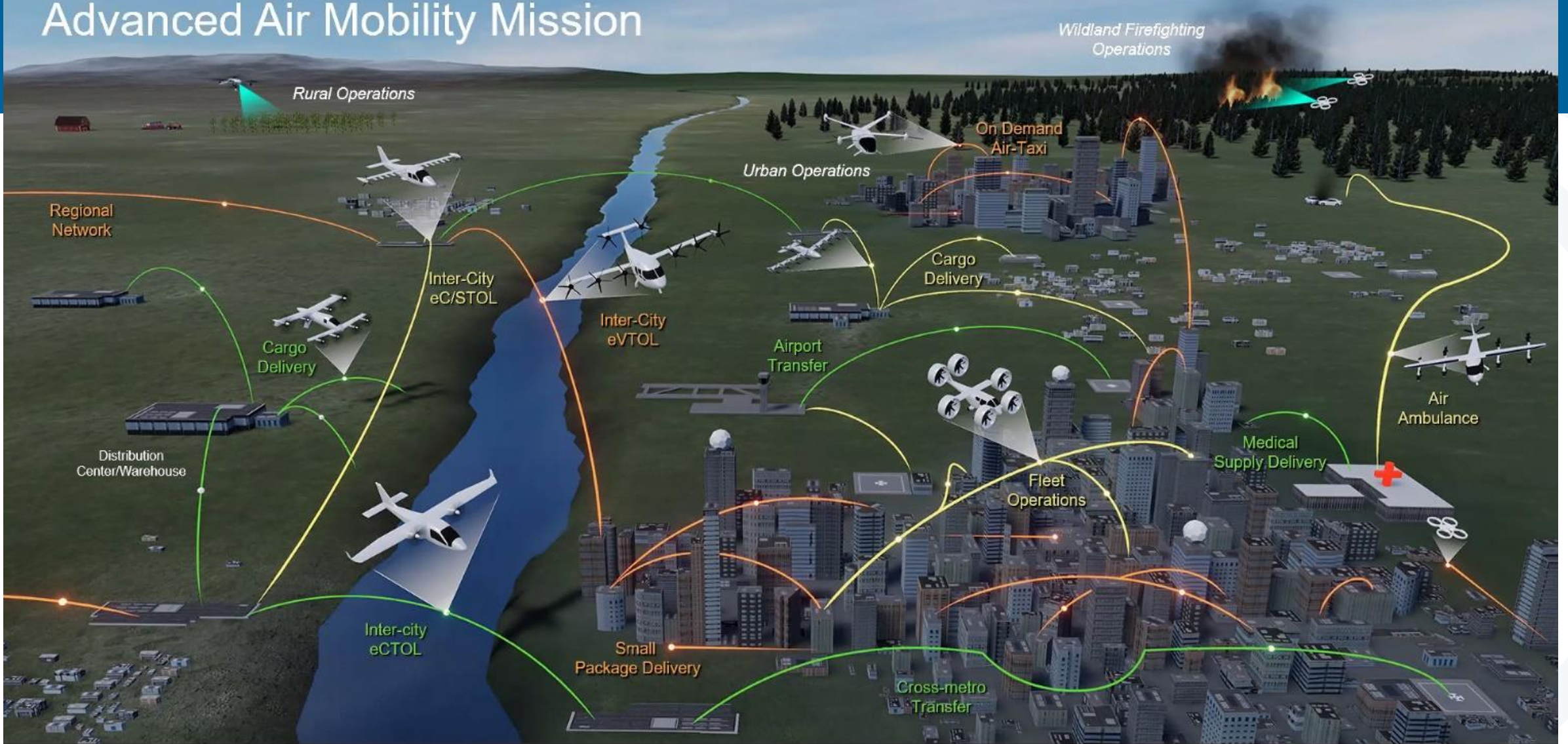


Fix-winged Vectored Thrust



Fix-winged Blown Lift

# Advanced Air Mobility Mission



Safe, sustainable, affordable, and accessible aviation for transformational local and intraregional missions

# ADVANCED AIR MOBILITY

## Florida's Aerial Highway Network

-  AAM Hubs
-  AAM Initial Operating Corridor
-  AAM Initial Operating Corridor Entry/Exit Point
-  Other AAM Corridor
-  Other AAM Entry/Exit Points
-  Major Airports
-  AAM HQ, Vertiport Hub, Maintenance, Research & Development



Orange County

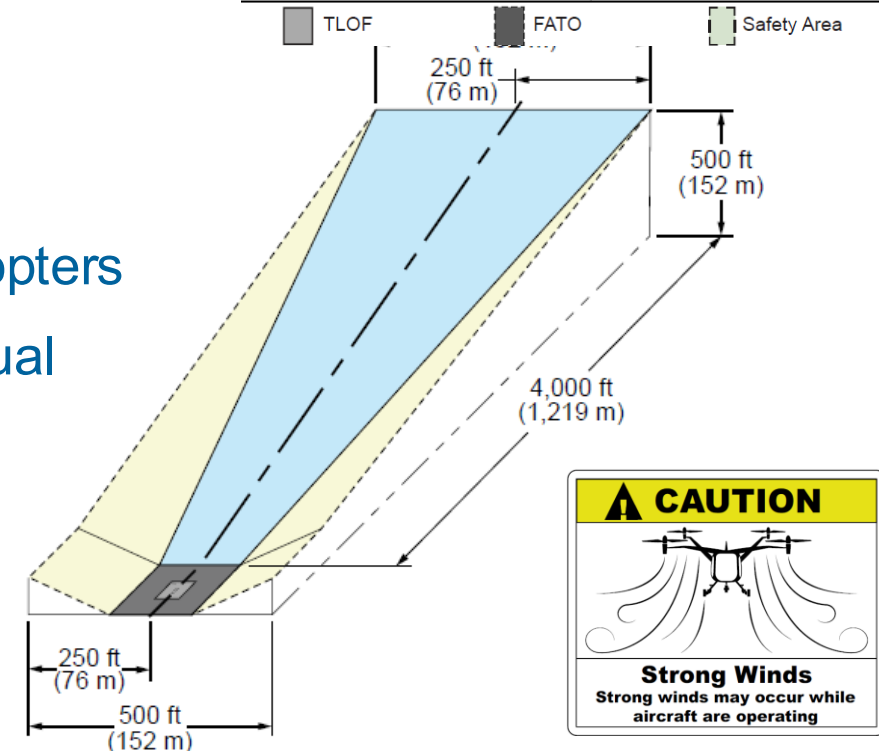
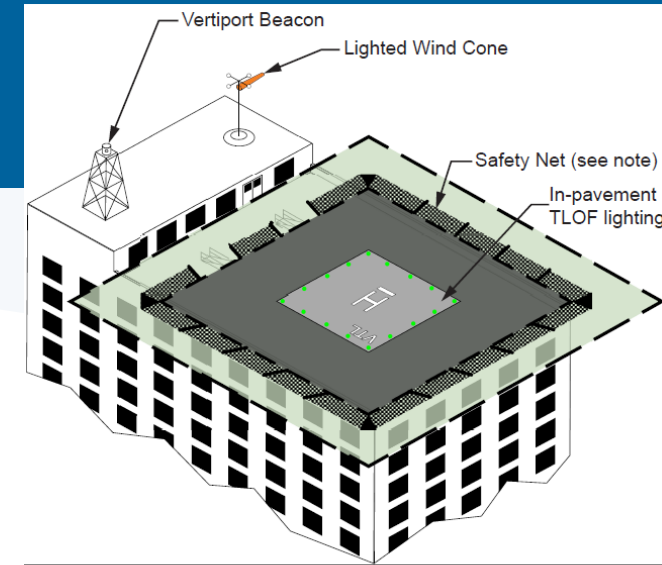
# ADVANCED AIR MOBILITY

AAM COMPONENTS	FEDERAL GOVERNMENT	STATE GOVERNMENT	LOCAL GOVERNMENT	INFRASTRUCTURE DEVELOPERS	SERVICE PROVIDERS
AIRSPACE	X				
FLIGHT SCHEDULING					X
VERTIPORT INSPECTIONS		X			
LAND USE COMPATIBILITY PLANNING			X		
PILOT / OPERATOR REGULATIONS	X				
COMMUNITY ENGAGEMENT			X	X	X
STATEWIDE AAM COORDINATION		X			
UTILITY COORDINATION			X	X	
VERTIPORT STANDARDS	X	X			
VERTIPORTS DEVELOPMENT				X	
ZONING PROTECTION			X		
AIRCRAFT CERTIFICATION	X				

# ADVANCED AIR MOBILITY

- Integration into urban areas and near all types of development raises issues

- Not sufficient data to understand privacy, noise, safety, land use, mobility, and environmental impacts (USDOT, Dec. 2025)
- Integration with transportation and utility infrastructure
- Land use compatibility and property rights
- Aircraft noise, although anticipated to be quieter than helicopters
- Potential resident concerns about traffic, noise, privacy, visual impacts, equitable access, and autonomous flights
- Permitting by local government staff unfamiliar with AAM, including building code and fire protection



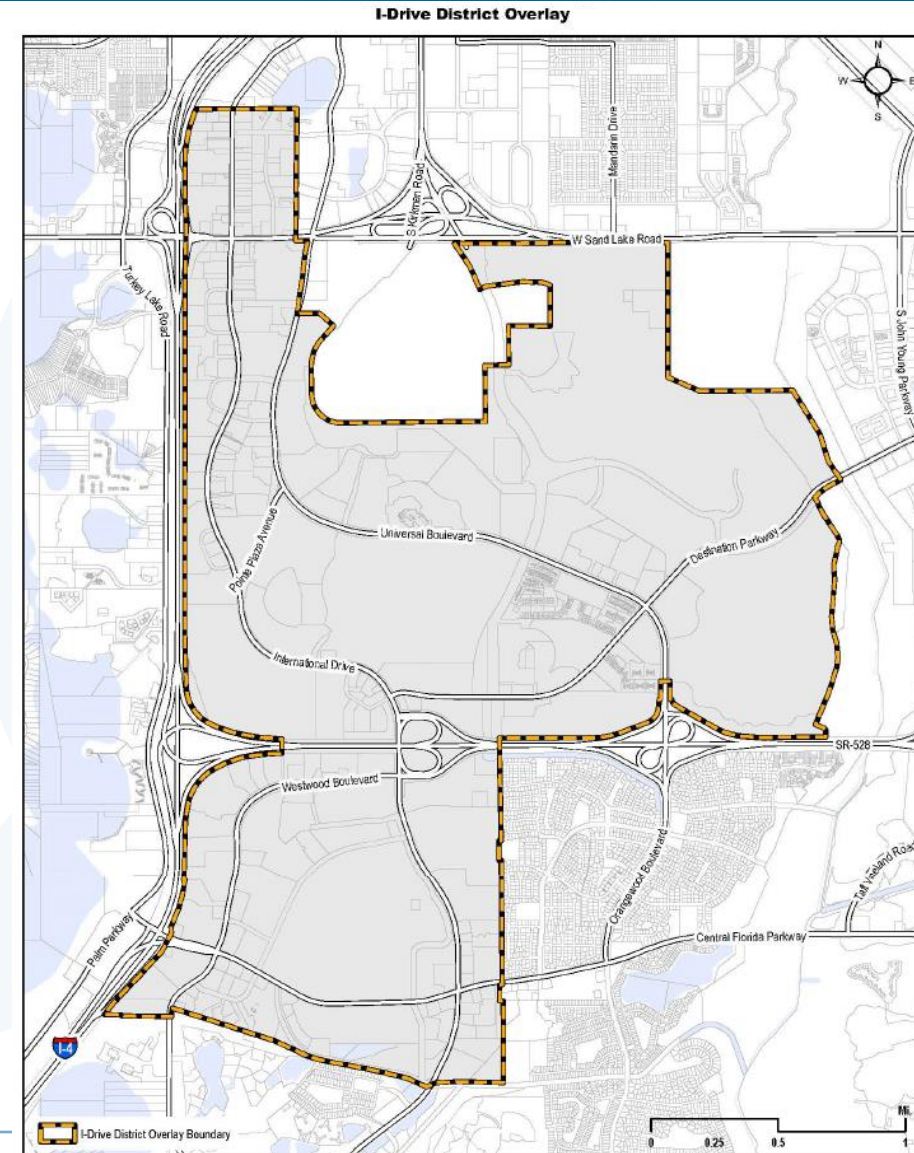
# AAM PLANNING



- 1.5M residents in Orange County (2025)
  - 1.7 million by 2035
- Market interest in I-Drive/ Orange County Convention Center (OCCC) for AAM
  - 75.3M annual visitors to region (2024)
  - OCCC is 7M square feet - second-largest in U.S.
  - 172 events with 1.7M attendees (2024)
  - \$560M Phase 5A expansion underway
  - OCCC leadership has not taken a position on AAM to date but is engaged

# AAM PLANNING

- County internal tabletop exercise with 17 Divisions/Offices
- Review of vertiport standards
  - Current Code allows in industrial districts by right
  - Code allows in agricultural, rural, and commercial districts by special exception
  - I-Drive District Overlay zoning has limitations
  - New Orange Code has more provisions – not approved by state due to SB 180 (2025)
  - Coordinated with GOAA



# AAM PLANNING

Table 4-1.1(1): Permitted Uses By Zone

	T2 Rural			T3 Sub-Urban			T4 General			T5 Center			T6 Urban Core			CZ Civic		SZ Special Zones						
	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	CF	OS	LI	HI	EN	MH	ED		
<b>Transportation &amp; Infrastructure</b> (see "4-5.8 Transportation and Infrastructure" for Additional Standards)																								
Airport	S																	S	S					
Communication Tower	P*/S			P*/S			P*/S			P*/S			P*/S			P*/S		P*	P*	S*	S*	S*		
Public Parking (Principal Use)										P*			P*			P*	P*	P	P	P				
Transit Facility	P*			P*			P*			P			P			A	A	P	P	P	P*	A		
Truck Stop																		P	P					
Renewable Energy	A			A*			A*			A*			A*			S*	S*	P	P	A*	A*	A*		
- Large scale installations	P																	P	P					
Utilities	P*/S			P*/S			P*/S			P*/S			P*/S			P*/S		P*	P*	P*/S	P*/S	P*/S		
Vertiports, Heliports, and Sea Plane Bases	S									S			S					P	P	S				
<b>Open Space</b> (see Article 5 "Division 4: Civic and Open Space" for Additional Standards)																								
Open Space	P*			P*			P*			P*			P*			P*	P*	P*						

P Permitted Use      P\* Permitted Use, with Additional Standards      A Permitted as an Accessory Use only  
S Special Exception      S\* Special Exception, with Additional Standards      A\* Accessory Use, with Additional Standards  
\* Refer to "Division 7: Public School Siting Regulations"      <sup>1</sup> Uses may be further limited by Place Type  
Boxes with no designation signify prohibited use.

## Vertiports.

- (1) Prior to submittal of any application or permit for a vertiport, a prospective applicant shall request a pre-application conference with the Zoning Division.
- (2) Vertiports shall be common use and public facilities per Federal Aviation Administration (FAA) guidelines and meet all requirements of the FAA's vertiport site development standards.
- (3) Vertiport applications shall document the specific aircraft that would be hosted at the facility, the utility infrastructure needed to charge the aircraft, and location and type of all fire safety equipment in a plan that is consistent with National Fire Protection Association standards for vertiports and energy storage and that shall be reviewed by the Orange County Fire Rescue Department.
- (4) Pursuant to [Section 125.022, Florida Statutes](#), issuance of this development permit by the County does not in any way create any rights on the part of the applicant to obtain a permit from a state or federal agency and does not create any liability on the part of the County for issuance of the permit if the applicant fails to obtain requisite approvals or fulfill the obligations imposed by a state or federal agency or undertakes actions that result in a violation of state or federal law. Pursuant to Section 125.022, the applicant shall obtain all other applicable state or federal permits before commencement of development.

# AAM PLANNING

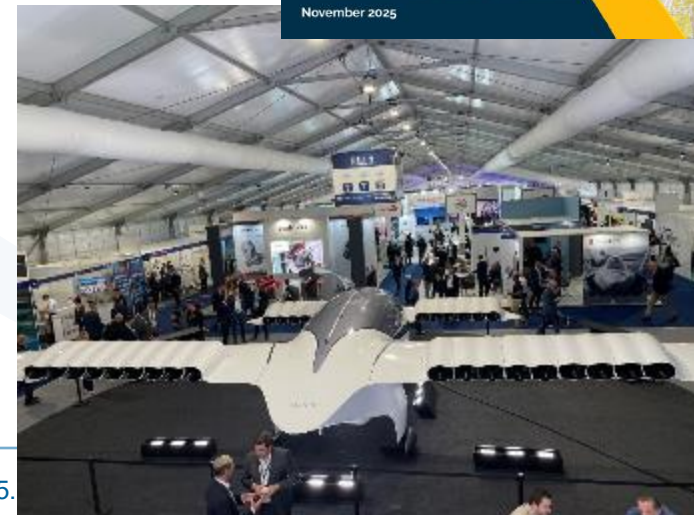
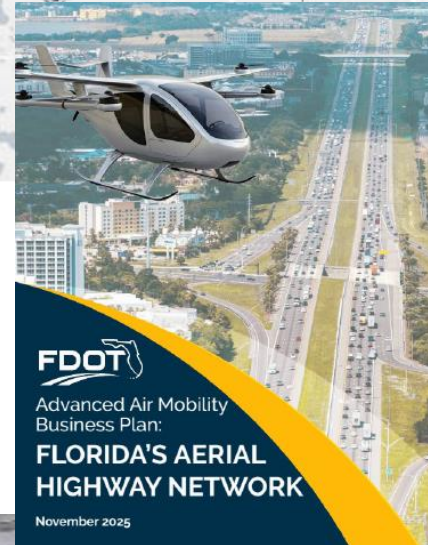
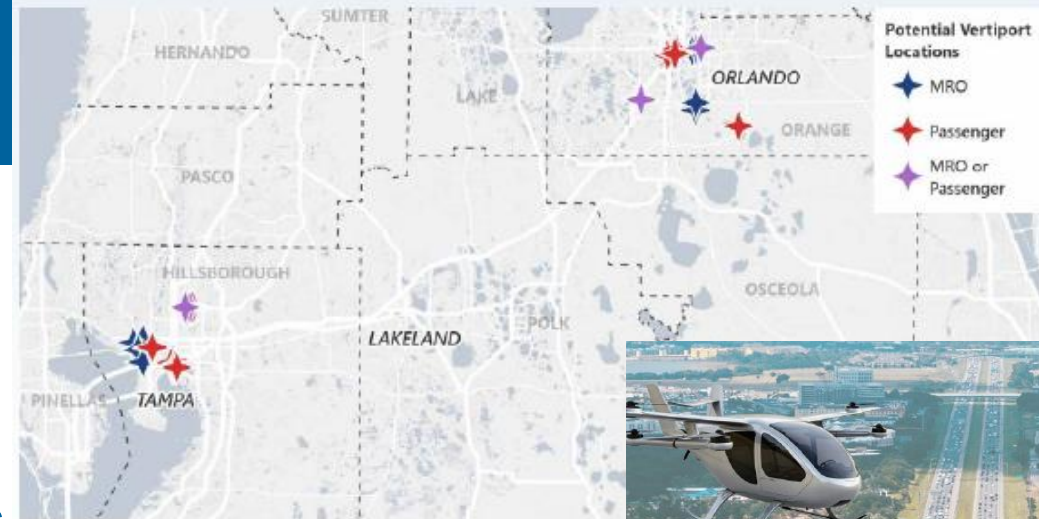
- Agency engagement

- Coordination with City of Orlando on their AAM plan
- Participation in tabletop exercises
- Staff from various departments at FDOT training
- Comments on FDOT handbook for local governments
- Consultant interview for next FDOT guidebook's case studies
- Seeking information on sites in County identified in FDOT plan

- Stakeholder engagement

- Economic development trip to Farnborough Air Show (2024)
- Economic Summit with Chuck Martin
- Presented with GOAA - industry event, South Korean delegation
- Advanced Air Mobility Association (AAMA) membership
- Ongoing meetings with industry to discuss needs

Potential Site Locations



# ORANGE COUNTY AAM FEASIBILITY STUDY

## Task 1: AAM Framework

- 1.1 Regulatory Review
- 1.2 Methodology
- 1.3 I-Drive CRA Methodology

## Task 2: Existing Conditions

- 2.1 County Characteristics
- 2.2 I-Drive CRA Characteristics

## Task 3: Feasibility Analysis

- 3.1 County Feasibility
- 3.2 I-Drive CRA Feasibility

## Task 4: Project Report and Administration

### Important notes:

- > The County can regulate land use and zoning. The county will identify potentially suitable vertiport subareas (not parcel specific recommendations).
- > Airspace is exclusively regulated by the Federal Aviation Authority (FAA).
- > Orange County is precluded from regulating aviation-related noise, as exempted in 15-185 (d) *Aircraft and airport activity conducted in accordance with federal laws and regulations* of the Orange County Code of Ordinances.
- > 653 parcels allow vertiports **By Right** today.
- > 4,355 parcels allow vertiports as a **Special Exception** today.

## AAM Feasibility Screening Workflow

**Data:** \\vhb.com\gbl\Client\064844.003\05\_Work\03\_Analysis\OCAAM.ppkx

**Goal:** create a heat map of potential vertiport subareas (not parcel specific) based on the criteria below

Criteria		Metric (Points, Y/N)	Scoring Notes
<b>1</b>	<b>Land Use</b>		
	Zoning District - Orange County Code (in effect)		
✓	By right (I-1A, I-1, I-2, I-3, I-4, I-5)	5	
✓	Special exception (A-1, A-2, A-R, RCE-5, RCE-2, RCE, C-1, C-2, C-3)	3	
<b>2</b>	<b>Environmental/Screens</b>		
✓	Solid Waste Facilities	Y/N	Exclude parcels within 10,000' buffer
✓	Wetlands	Y/N	Exclude any parcel that is fully within wetlands
✓	Floodplain	Y/N	Exclude any parcel that is fully within floodplain
	I-Drive Overlay		
✓	Other Zoning District	0	Make filter
<b>3</b>	<b>Connectivity &amp; Access</b>		
	<b>Roads &amp; Transit</b>		
✓	SunRail Stations (Meadow Woods and Sand Lake Road)	2	1/2 mile buffer
✓	Innovation Way Mixed-Mode Transportation Network (MMTN)	1	1/2 mile buffer
	Intercity rail station	2	1/2 mile buffer
✓	Lynx existing/proposed transit centers	2	1/2 mile buffer
✓	Lynx park and ride locations	2	1/2 mile buffer
	Proximity to Minor/principal arterial, expressway	1	1/2 mile buffer
	Future Lynx Transit Routes	1	1/2 mile buffer
	<b>Land Uses</b>		
	Major Transit trip generators (more than 100 trips)	1	1/2 mile buffer
✓	Activity Center	2	1/2 mile buffer
	Warehouse and Distribution Terminal (DOR Code 48)	2	1/2 mile buffer

## Legend

County Boundary



Overlay / Informational Layers

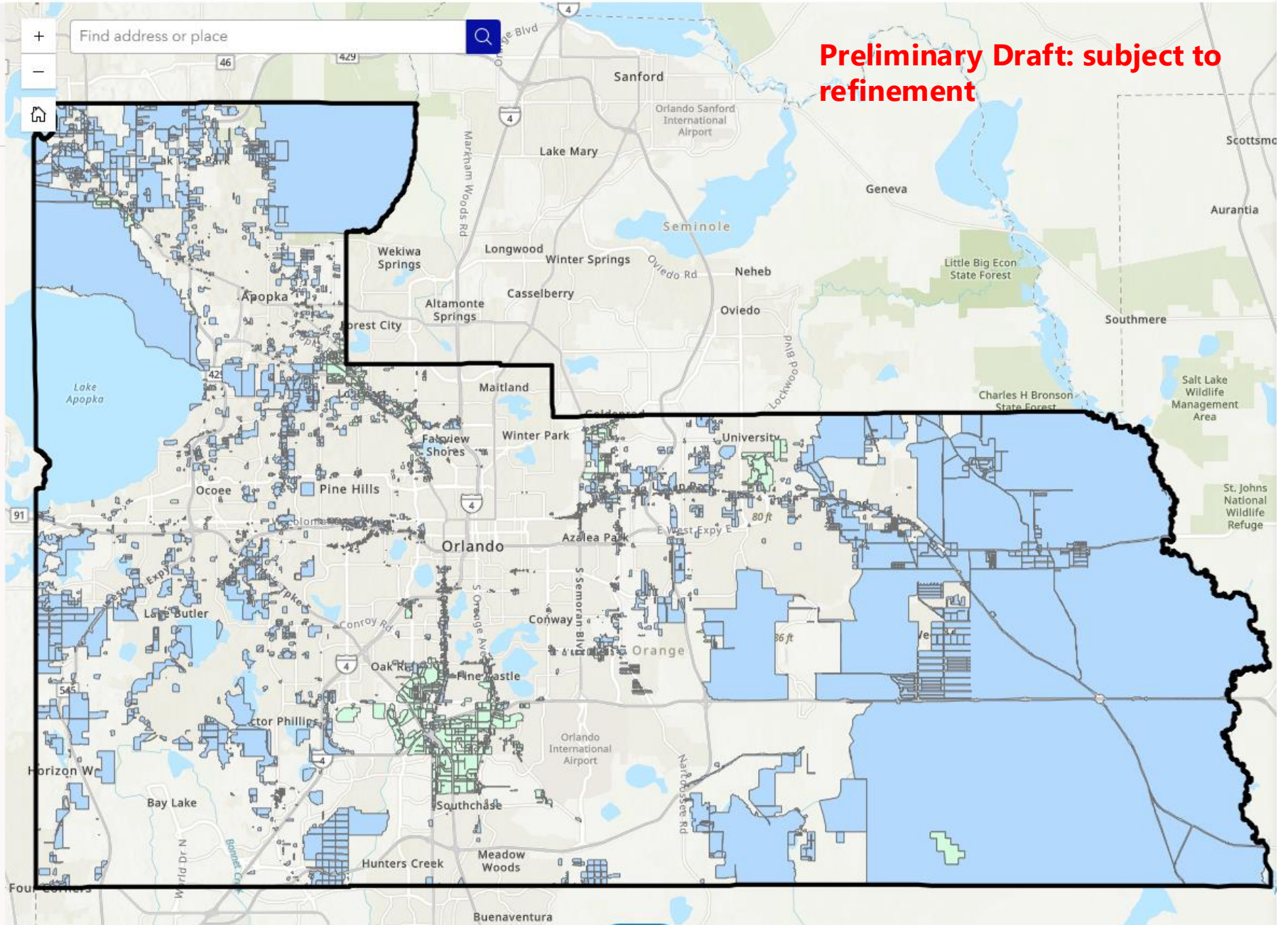
Land Use & Planning Layers

Zoning - Vertiport Permissible Use

Zoning - Vertiports Allowed By-Right



Zoning - Vertiports Allowed by Special Exception



**Preliminary Draft: subject to refinement**

## Legend

### Overlay / Informational Layers

#### Land Use & Planning Layers

Zoning - Vertiport Permissible Use

Zoning - Vertiports Allowed By-Right



Zoning - Vertiports Allowed by Special Exception



#### Transportation Features

SunRail Half Mile Buffer



Intermodal Half Mile Buffer



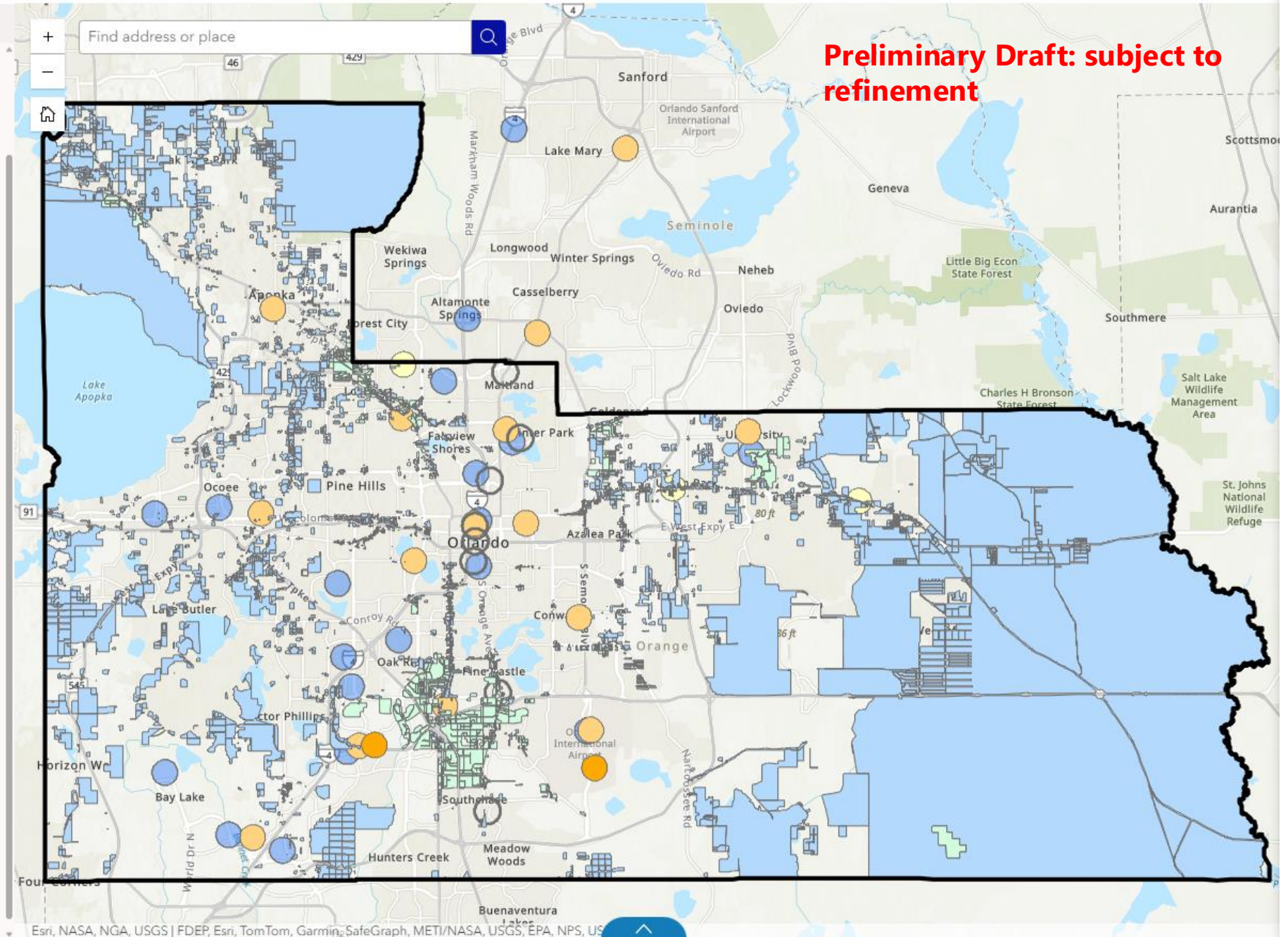
LYNX Super Stops Half Mile Buffer



Park Ride Half Mile Buffer



ActivityCenter halfMiBuffer



**Preliminary Draft: subject to refinement**

## Legend

County Boundary




Overlay / Informational Layers

Environmental

Solid Waste Transfer Stations & Landfill



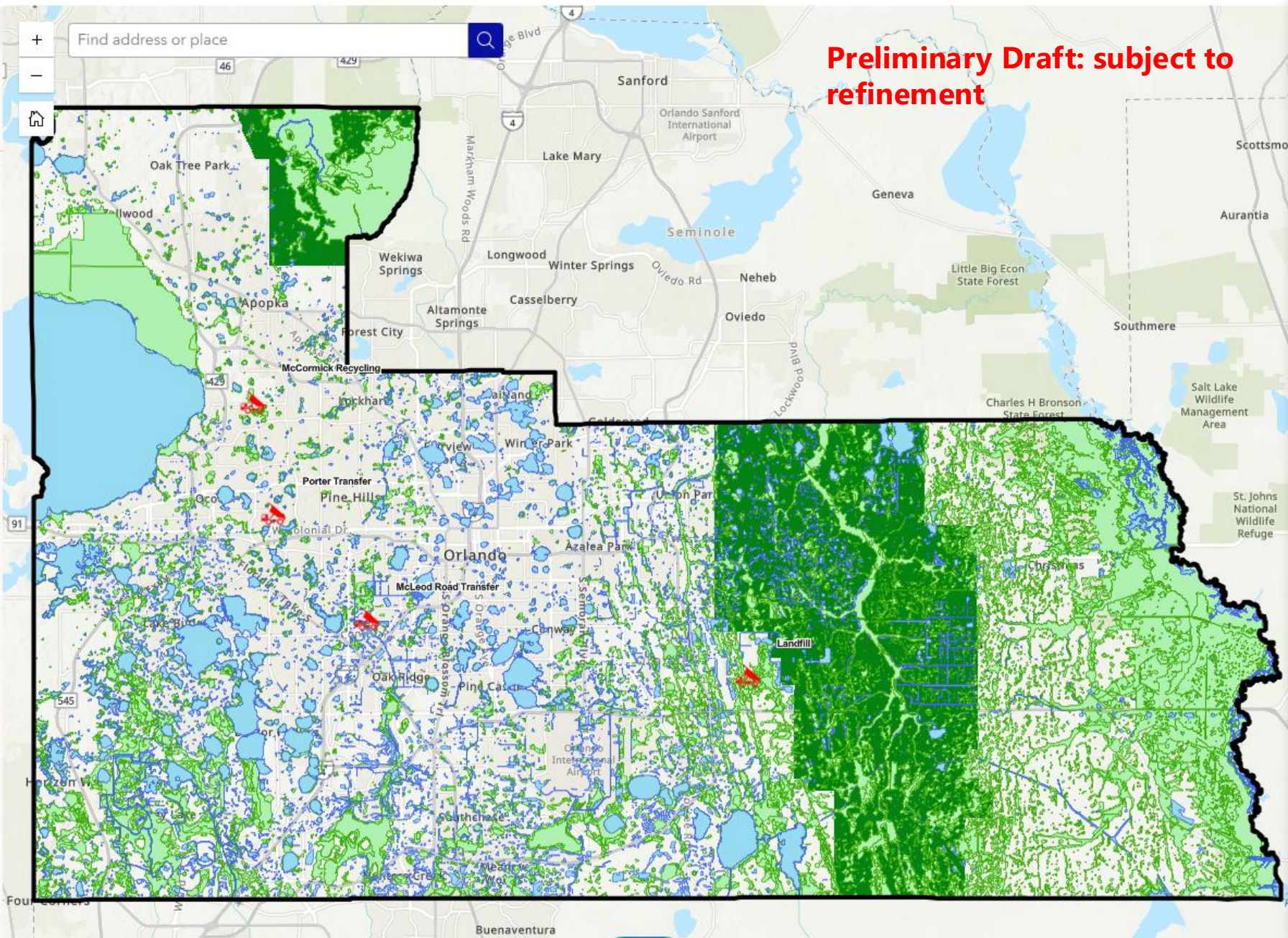
OC Wetlands

-  Water
-  Wetland
-  Wetland
-  Wetland
-  Wetland
-  Wetland
-  Wetland
-  Wetland

Wekiwa Protection Area



Econlockhatchee Protection Area



Legend

County Boundary

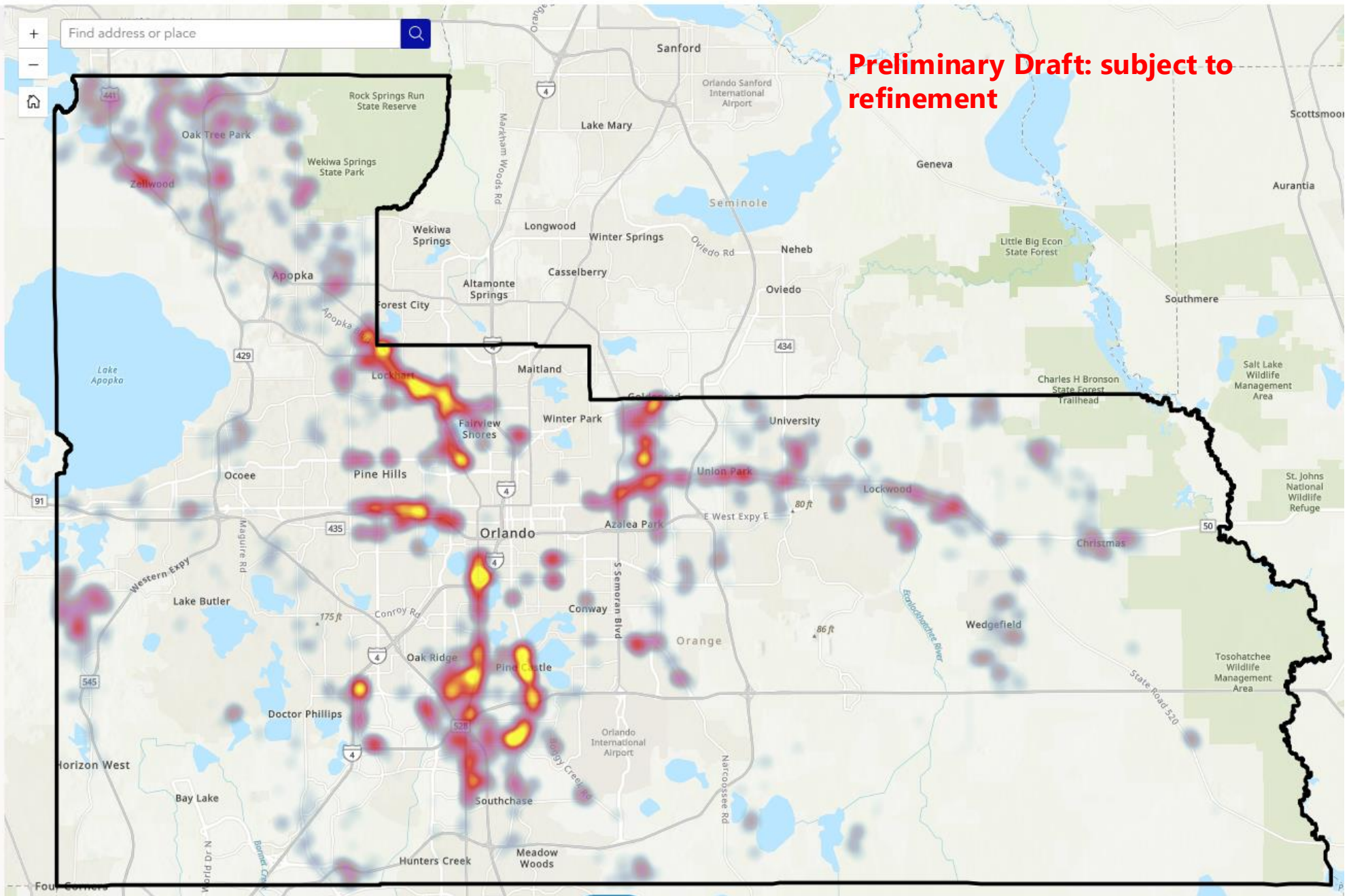
Draft Vertiport Suitability Scores

Parcel\_Points\_v10

Score\_Total

• High

• Low

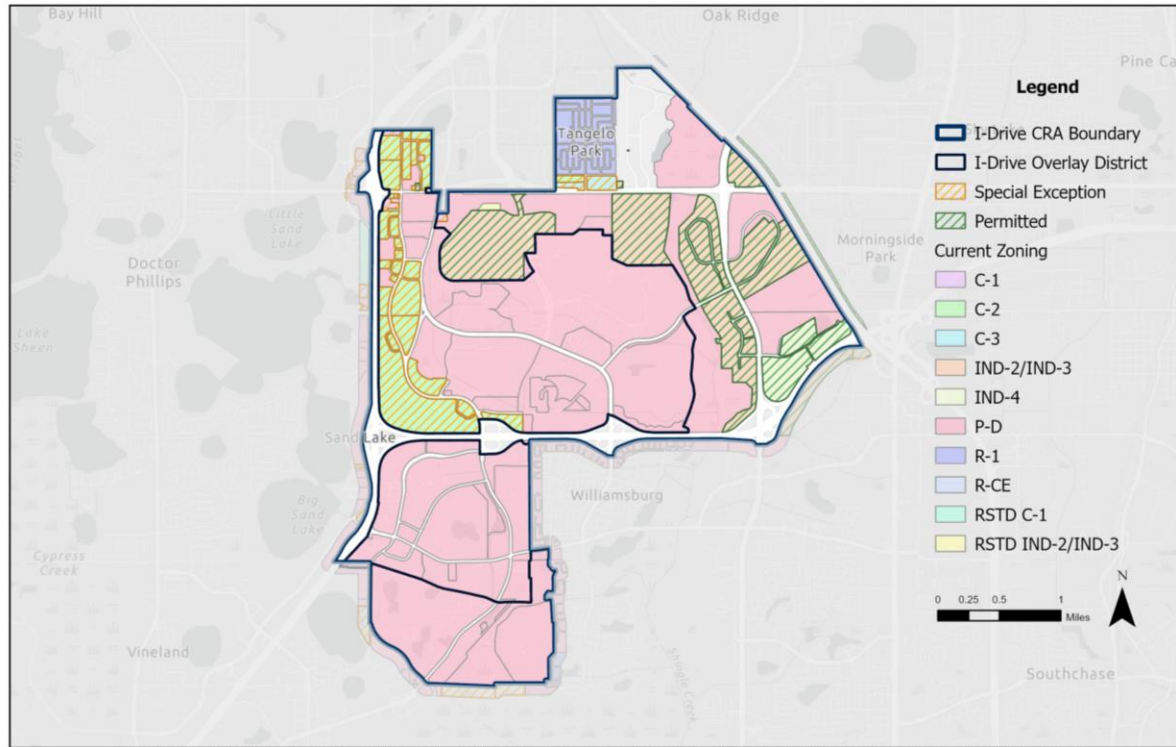


**Preliminary Draft: subject to refinement**

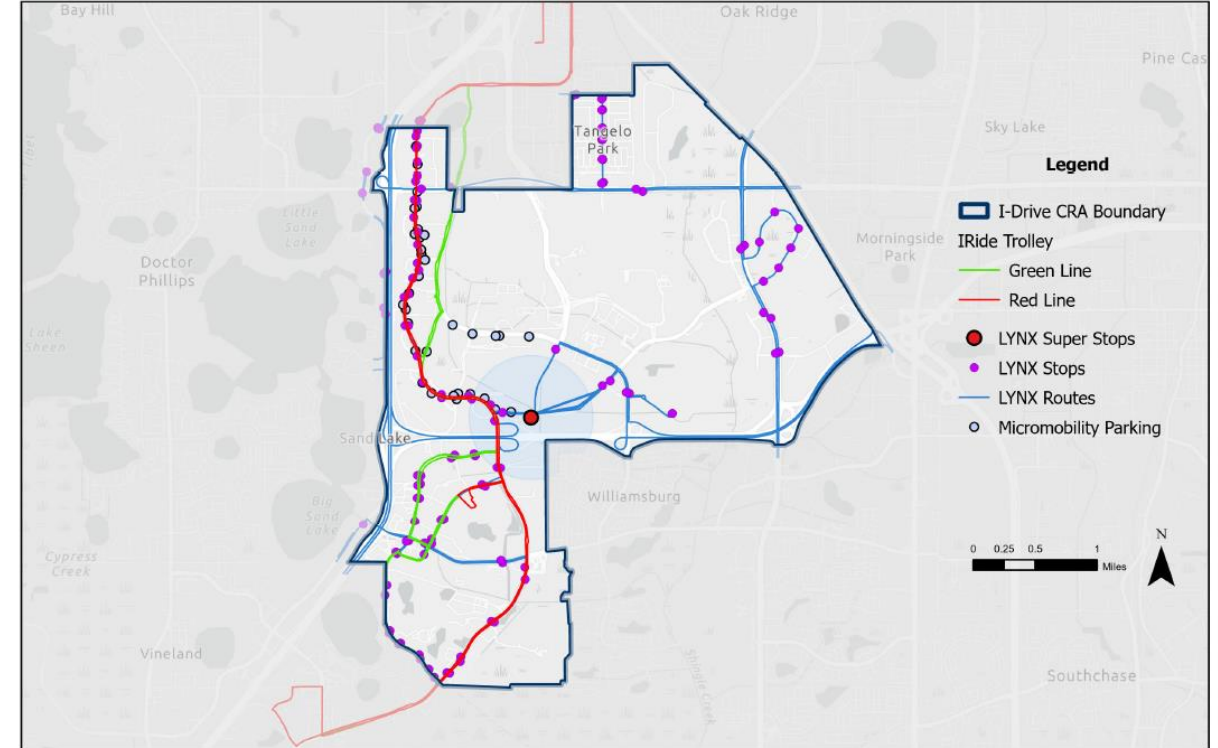
# ORANGE COUNTY AAM FEASIBILITY STUDY

## I-DRIVE CRA ZONING - CURRENT OC CODE

Current Zoning and Vertiport Eligibility



## I-DRIVE CRA TRANSIT NETWORK



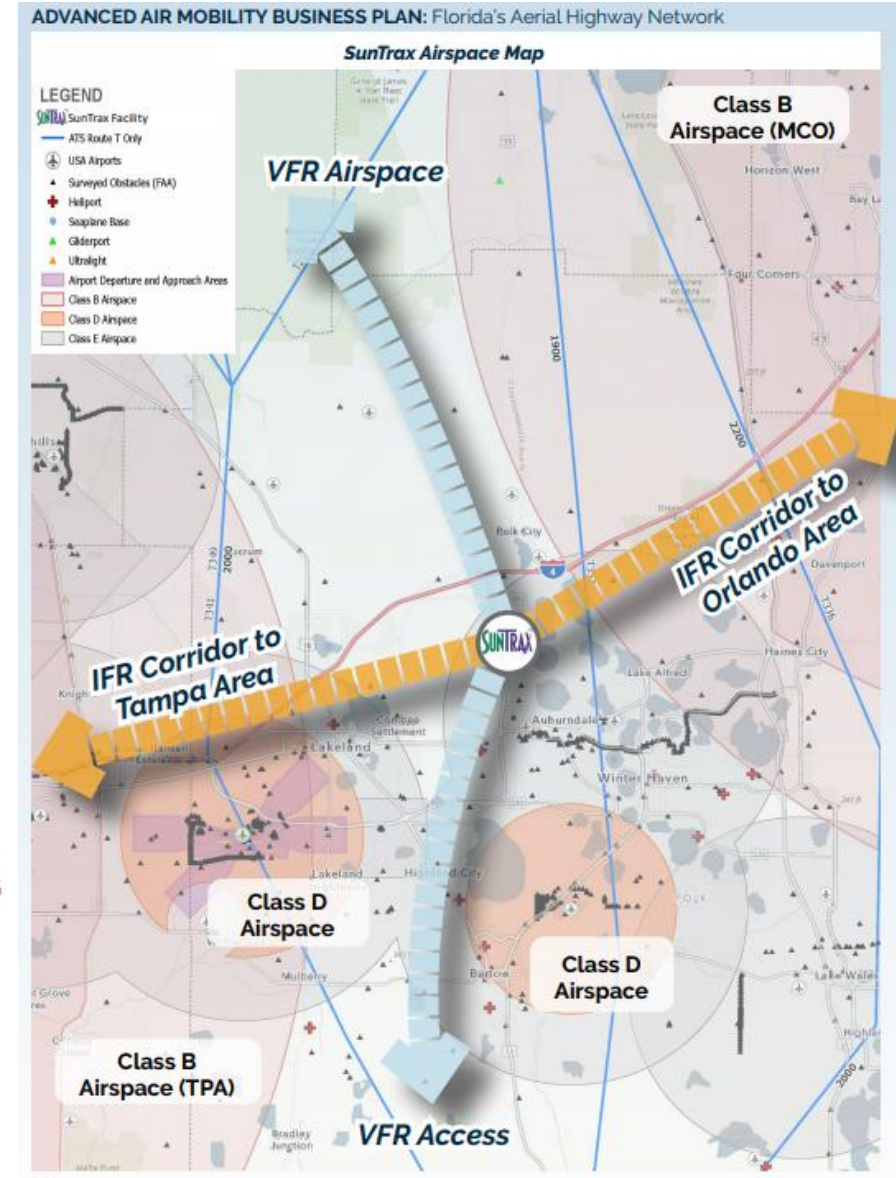
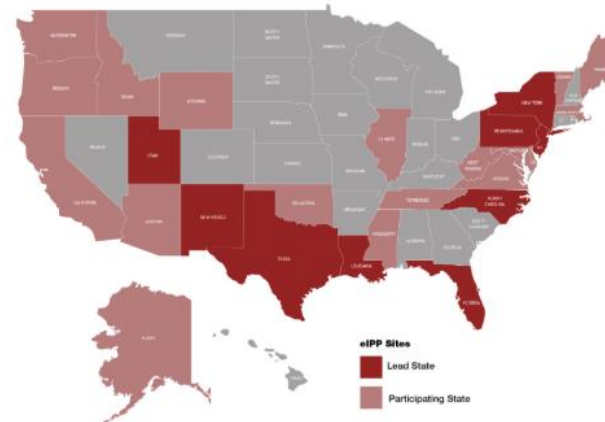
Note: The I-Drive Overlay District prohibits “helicopter commercial enterprises (helitours or similar uses).”

# ORANGE COUNTY AAM FEASIBILITY STUDY

## Vertiport Demand

- **USDOT eVTOL Integration Pilot Program (eIPP)**
  - Florida Department of Transportation selected as Pilot Program for AAM operations on March 9, 2026.
  - Statewide effort with multiple industry partners, three phases of operations focused on cargo delivery, passenger transportation, automation, and medical response.
  - Supported by significant public and private investment.

eVTOL Integration Pilot Program Sites



Source: US Department of Transportation

# ORANGE COUNTY AAM FEASIBILITY STUDY

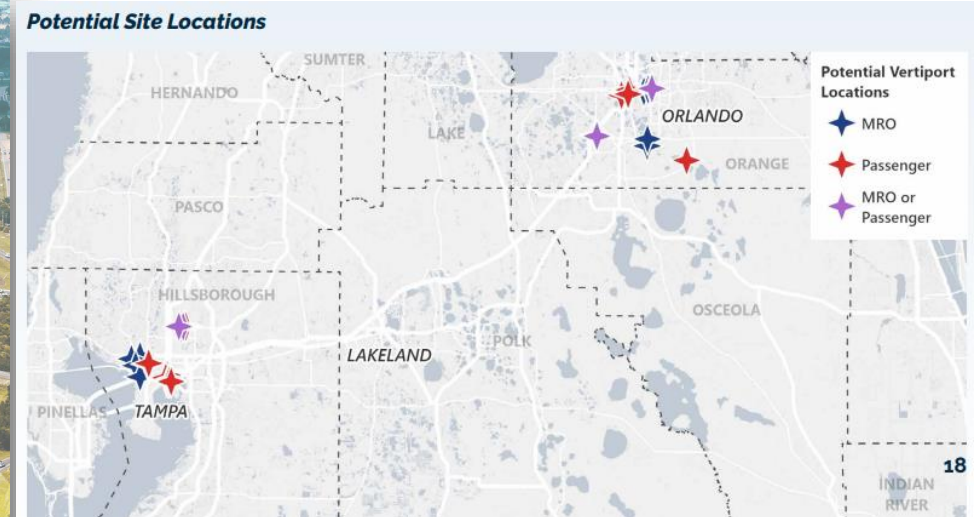
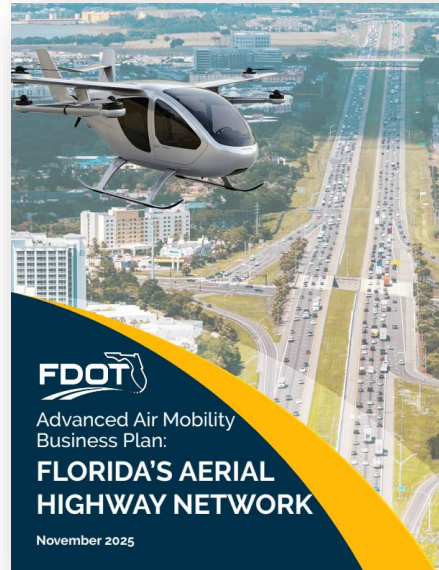
## Vertiport Locations

- › GOAA-proposed vertiport at MCO in 2028
  - › Invitation to Negotiate (ITN) issued 2025
  - › Requests that the vendor propose a related regional network of vertiports
  - › GOAA Board to select a vendor in February 2027

- › FDOT AAM Business Plan (Nov 2025) identifies “15 potential sites in Orlando”
- › Central Florida I-4 corridor designation
- › SunTrax Expansion and testing site



Source: Greater Orlando Aviation Authority (GOAA)



Source: Florida Department of Transportation

# ORANGE COUNTY AAM FEASIBILITY STUDY

## Key Initial Takeaways

- › Initial feasibility found potential suitability in subareas located near Lockhart, Florida Mall, Sand Lake Road SunRail Station area, West Colonial, East Colonial/Union Park, Holden Heights, Aloma/Goldenrod area, Union Park, Pinecastle, and centered on SR 528 and the Turnpike.
- › Traditional land development codes are intended to prevent incompatible buildings next to established airports. County will need to protect developable air rights of properties near proposed vertiports by mapping maximum allowable height.
- › Orange Code (pending resolution) would expand vertiport development potential:
  - › Permitted with Additional Standards: 1,140 parcels
  - › Special Exception: 7,520 parcels

# ORANGE COUNTY AAM FEASIBILITY STUDY

## Next Steps

### › TransMAC Input

- › New transportation systems' interface with land use, roadways, and transit
- › Integration of new trends in mobility with land development requirements

### › Feasibility Analysis

- › Up to three areas of the County and I-Drive CRA to identify optimal locations for AAM development and operations - not parcel specific

### › Recommendations Report

- › Framework of local, state, and federal regulation
- › Land use compatibility and integration strategies
- › Avoidance, minimization and mitigation strategies

### › I-Drive CRA Board Presentation: June 3

### › Board of County Commissioners Presentation: June 30





Q&A