Advanced Air Mobility



Agenda Item 8 Attachment 2 TAC Meeting 5/22/2025

Polk County TPO - Technical Advisory Committee

May 22, 2025 / FDOT District One / Congestion Management Multimodal Planning (C3MP)



What is Advanced Air Mobility (AAM)?

- AAM is an air-based transportation system utilizing novel technologies including electric vertical take-off and landing (eVTOL) aircraft to carry passengers, cargo, or provide services in an urban or regional setting
- eVTOL aircraft will purportedly be quieter and less expensive to operate than helicopters
- This will enable use cases like urban air taxis, simplified air cargo operations, and less expensive airbased emergency services



Drone vs eVTOL

	Drone	eVTOL / Powered-Lift		
Characteristics	Small (<55lb) or large (>55lb) aircraft that is controlled remotely by a person or autonomously by onboard computers	Aircraft capable of vertical take-off, vertical landing, and low-speed flight, powered by electric motors		
Pilot	Unmanned	Pilot on board; anticipated to be unmanned in the future		
Uses	Uses include surveillance, delivery and recreational activities	Uses include air taxi, air cargo, public safety, recreational activities		
Operations	Must be flown within visual line of sight and under 400 feet; some exceptions	Expected to cruise between 1,000 and 3,000 feet		

eVTOL aircraft will operate under the same airspace regulations as existing conventional aircraft, including communication with air traffic control when required.

AAM Infrastructure

- Initially, these aircraft may rely on existing airports and heliports, but as eVTOL operations increase, a new form of aviation infrastructure, vertiports, will likely be needed
- Some airports and heliports that exist today may be able to accommodate AAM with minor infrastructure changes, while others will need significant modifications to adapt

Florida and AAM

- Florida continues to be a nationally recognized leader in the AAM space
- FDOT developed and is implementing a comprehensive program setting the foundation for robust AAM development in Florida
- The FAA recently published new vertiport infrastructure design guidance and pilot certification/operating rules
- Earliest operators now anticipate entryinto-service in 2027

AAM Across Florida

EXAMPLE AAM NETWORK

Advanced Air Mobility will bring additional transportation options to Florida. This map shows a hypothetical network of sample routes, ranging from short, urban flights, to longer, regional connections.

Pensacola

Destin

Panama Beach City

Implementation Plan

<u>Phase 2</u>

Summer 2024 - Summer 2025 To engage the community in a public awareness campaign, collaborate with early entrants, and revisit state law regarding airport hazard areas zoning.

Phase 3

Beyond 2025 Fully integrate AAM into the state transportation system once AAM operations have commenced.

Fall 2023 - Summer 2024 To develop, test, and educate on guidance for local decisionmakers surrounding impacts, community engagement, and zoning/land use for AAM.

AAM Components & Roles

AAM COMPONENTS	FEDERAL GOVERNMENT	STATE GOVERNMENT	LOCAL GOVERNMENT	INFRASTRCTURE DEVELOPERS	SERVICE PROVIDERS
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				

AAM Components & Roles

AAM Land Use Compatibility & Site Approval Guidebook

FLORIDA DEPARTMENT OF TRANSPORTATION AVIATION OFFICE

ADVANCED AIR MOBILITY LAND USE COMPATIBILITY AND SITE APPROVAL GUIDEBOOK

SEPTEMBER 2024

FDOT has issued guidance for local governments on AAM

Includes:

- Introduction to AAM
- Long-Range and Proactive Planning for AAM
- Vertiport Site Approval Process for On and Off-Airport

This guidebook is the foundation of the local government training

For more information, please can the QR code.

Upcoming Workshops

Date	Location	Time	Available Slot
07/08/2025 Tuesday	Bartow - FDOT District 1 HQ Conference Center Breakout Room 102 801 N Broadway Ave a Bartow, FL 33830 •	9:00am- 12:00pm	Planning Staff 28 slots filled Sign Up
		1:30pm- 4:00pm	Elected / Appointed Officials Sign Up 8 slots filled
07/10/2025 Thursday	Ft. Myers - Lee County Mosquito Control District 15191 Homestead Rd Lehigh Acres, FL 33971 9	9:00am- 12:00pm	Planning Staff 20 slots filled Sign Up
		1:30pm- 4:00pm	Elected / Appointed Officials Sign Up 11 slots filled

STATE TROOPER

22

Source: https://www.flhsmv.gov/safety-center/driving-safety/move-over/

Thank You!

FDOT

Source: Archer Aviation