The Florida Senate BILL ANALYSIS AND FISCAL IMPACT STATEMENT

(This document is based on the provisions contained in the legislation as of the latest date listed below.)

. Toparoa Dy	: The Profession	onal Staff of the Appropriati Deve	ions Committee on elopment	Transportation,	Tourism, and Economic
BILL:	CS/SB 136	2			
INTRODUCER:	Transportation Committee and Senator Harrell				
SUBJECT: Aviation					
DATE:	February 7,	, 2024 REVISED:			
ANALYST		STAFF DIRECTOR	REFERENCE		ACTION
Johnson		Vickers	TR	Fav/CS	
Nortelus		Jerrett	ATD	Pre-meetin	g
•			FP	•	

Please see Section IX. for Additional Information:

COMMITTEE SUBSTITUTE - Technical Changes

I. Summary:

CS/SB 1362 addresses issues relating to aviation and advanced air mobility. The bill:

- Incorporates vertiports and equipment needed for aircraft charging into the definition of "airport or aviation development project."
- Defines the terms "powered-lift aircraft" and "vertiport."
- Requires the statewide aviation system plan to address the needs of vertiports, electric aviation charging, and other advances in aviation technology.
- Requires the Florida Department of Transportation (FDOT) to take specified steps regarding vertiport and electric aviation planning, including:
 - Addressing certain needs in the FDOT's statewide aviation system plan and, as appropriate, in the FDOT's work program.
 - O Designating a subject matter expert on advanced air mobility (AAM) to serve as a resource to local jurisdictions,
 - o Providing a guidebook and technical resources to local jurisdictions.
 - Conducting a review of airport hazard zone regulations and making recommendations to the Legislature.
- Makes technical and conforming changes.

The bill has an indeterminate, negative fiscal impact to the FDOT. See Section V., Fiscal Impact Statement.

The bill takes effect July 1, 2024.

II. Present Situation:

Advanced Air Mobility

The National Aeronautics and Space Administration (NASA) defines the term "Advanced Air Mobility" (AAM) to mean "an air transportation system that moves people and cargo between places previously not served or underserved by aviation – local, regional, intraregional, urban – using revolutionary new aircraft that are only just now becoming possible."

AAM is a derivative of Urban Air Mobility (UAM), which focuses on transporting cargo and passengers at low altitudes within urban and suburban areas. AAM builds upon UAM by expanding its range and potential use cases.²

Numerous uses for AAM are being explored, including air taxi, air cargo, and public services. Air taxi uses feature passenger transportation within and around urban and regional areas, including routes connecting city centers to airports or to neighboring city centers. Air cargo uses feature cargo transportation supporting the middle-mile of logistics, generally seen as from the cargo port to the distribution center. Public service uses, such as search and rescue, disaster relief, and air ambulance operations are all likely early use cases for electric vertical take-off and landing (eVTOL) aircraft.³

Federal Guidance

In 2022, the Federal Aviation Administration (FAA) issued Engineering Brief 105, providing interim, but limited, guidance on vertiport design until the FAA publishes full Advisory Circular on the topic. Use of this design guidance is required for federally obligated airports and recommended for all other vertiport development. The engineering brief provides guidance for landing dimensions, visual aids, approach surfaces, and electric charging infrastructure, among other details, but is limited to aircraft no longer or wider than 50 feet with a pilot-on-board operating in visual meteorological conditions. The FAA's vertiport guidance is expected to evolve into a performance-based design standard as it moves forward with a full Advisory Circular, which expected in the mid-2020s.

Title 14 CFR Part 77, relating to the safe, efficient use, and preservation of navigable airspace, establishes standards and notification requirements for objects affecting navigable airspace. This notification serves as the basis for:

- Evaluating the effect of the construction or alteration on operating procedures;
- Determining the potential hazardous effect of the proposed construction on air navigation;
- Identifying mitigating measures to enhance safe air navigation; and
- Charting of new objects.

¹ Florida Department of Transportation (FDOT), *Advanced Air Mobility*, https://www.fdot.gov/aviation/advanced-airmobility (last visited January 8, 2024).

² FDOT Advanced Air Mobility Working Group, *Report and Recommendations*, August 2023, p.2. https://www.fdot.gov/aviation/advanced-air-mobility (last visited January 12, 2024).

³ *Id.* at 2.

⁴ Available at https://www.faa.gov/sites/faa.gov/files/eb-105-vertiports.pdf (last visited January 12, 2024).

⁵ *Id*.

Notification allows the FAA to identify potential aeronautical hazards in advance thus preventing or minimizing the adverse impacts to the safe and efficient use of navigable airspace.⁶

Florida Department of Transportation's AAM Working Group

In 2022, the Florida Department of Transportation (FDOT) established an AAM Working Group consisting of representatives of from the FAA, original equipment manufacturers, airports, local governments, the FDOT, and other industry stakeholders. The working group developed various recommendations regarding AAM, included in those recommendations are:

- Designate an AAM subject matter expert within the FDOT.
- Review airport hazard regulations and update those regulations as appropriate.
- Incorporate AAM into state transportation planning documents.
- Lead a statewide education campaign for local decision makers and a public awareness campaign for the general public.

Florida Airport Development and Assistance Act

Sections 332.003 through 332.007, F.S., contains the Florida Airport Development and Assistance Act.⁸ That act provides FDOT's duties and responsibilities regarding airports,⁹ and for the administration and financing of aviation and airport programs and projects.¹⁰

Definition of Airport or Aviation Development Project

Section 332.004(4), F.S., defines the term "airport or aviation development project" to mean any activity associated with the design, construction, purchase, improvement, or repair of a publicuse airport or portion thereof, including, but not limited to: the purchase of equipment; the acquisition of land, including land required as a condition of a federal, state, or local permit or agreement for environmental mitigation; off-airport noise mitigation projects; the removal, lowering, relocation, marking, and lighting of airport hazards; the installation of navigation aids used by aircraft in landing at or taking off from a public airport; the installation of safety equipment required by rule or regulation for certification of the airport under s. 612 of the Federal Aviation Act of 1958, 11 and amendments thereto; and the improvement of access to the airport by road or rail system which is on airport property and which is consistent, to the maximum extent feasible, with the approved local government comprehensive plan of the units of local government in which the airport is located.

⁶ Federal Aviation Administration (FAA), Notification of Proposed Construction or Alteration on Airport Part 77, available at

https://www.faa.gov/airports/central/engineering/part77#:~:text=Federal%20Regulation%20Title%2014%20Part%2077%20e stablishes%20standards,effect%20of%20the%20proposed%20construction%20on%20air%20navigation (last visited January 12, 2024).

⁷ Supra note 2 at 1.

⁸ Section 332.003, F.S.

⁹ Section 322.006, F.S.

¹⁰ Section 322.007, F. S.

¹¹ Pub. L, 85-726, 72 Stat. 731.

FDOT Aviation System Plan

Among the FDOT's aviation duties and responsibilities, it is required to provide coordination and assistance for the development of a viable aviation system in Florida. To support the system, the FDOT must develop and periodically update a statewide aviation system plan summarizing 5-year, 10-year, and 20-year airport and aviation needs. The statewide aviation system plan must be consistent with the goals of the Florida Transportation Plan. The statewide aviation system plan does not preempt local airport master plans adopted in compliance with federal and state requirements. The statewide aviation system plan does not preempt local airport master plans adopted in compliance with federal and state requirements.

Currently, Florida law does not address vertiports or electric aviation.

III. Effect of Proposed Changes:

The bill incorporates vertiports and other advances in aviation technology into the Florida Airport Development and Assistance Act.

The bill amends s. 332.003, F.S., incorporating s. 332.0071, F.S., (created in the bill) into the Florida Airport Development and Assistance Act's short title provision.

Definitions

The bill amends the term "airport or aviation development project" to include the design, construction, purchase, or improvement of a vertiport, and the design, construction, or purchase of equipment needed for aircraft charging.

The bill defines the term "powered lift aircraft" to mean a heavier-than-air aircraft capable of vertical takeoff, vertical landing, and low-speed flight which depends principally on engine-driver lift devices or engine thrust for lift during such flight regimes and nonrotating airfoils for lift during horizontal flight.

The bill defines the term "vertiport" to mean an area of land or water or a structure used or intended to be used as a landing facility, similar to an airport or a mass transit facility, with charging stations for aircraft, restrooms, and accessibility in compliance with the Americans with Disabilities Act, for the transport or goods or passenger service and for the landing or takeoff of power-lifted aircraft capable of vertical takeoff and landing.

FDOT's Aviation System Plan

The bill amends s. 332.006(1), F.S., requiring the FDOT's statewide aviation system plan to address the need for vertiports, electric aviation charging, and other advances in aviation technology.

¹² The Florida Transportation Plan is developed pursuant to s. 339.155, F.S.

¹³ Section 332.006(1), F.S.

Vertiports and Electric Aviation Planning

The bill creates s. 332.0071, F.S., relating to vertiports and electric aviation planning. The bill requires the FDOT, within the resources provided pursuant to ch. 216, F.S., relating to planning and budgeting, to:

- Address the needs of vertiports, electric aviation charging, and the needs of other advances in aviation technology in the statewide aviation system plan and, as appropriate, in the FDOT's work program.
- Designate a subject matter expert on AAM within the FDOT to serve as a resource for local
 jurisdictions navigating advances in aviation technology, including electric powered-lift
 aircraft and electric aviation.
- Lead a statewide education campaign for local officials to provide education on the benefits of electric powered-lift aircraft and advances in aviation technology to support the efforts to make the state a leader in aviation technology.
- Provide local jurisdictions with a guidebook and technical resources to support uniform planning and zoning language across the state related to powered-lift aircraft, electric aviation, and other advances in aviation technology.
- Conduct a review of airport hazard¹⁴ regulations and, as needed, make recommendations to the Legislature proposing any changes to regulations as a result of the review.

Conforming Changes

The bill makes conforming changes to ss. 206.46, 334.01, and 339.08, F.S., incorporating s. 332.0071, F.S., created in the bill, into the Florida Airport Development and Assistance Act."

The bill conforms cross-references in ss. 196.012, 212.08, and 334.27, F.S.

Effective Date

The bill takes effect July 1, 2024.

IV. Constitutional Issues:

A. Municipality/County Mandates Restrictions:

None.

B. Public Records/Open Meetings Issues:

None.

C. Trust Funds Restrictions:

None.

¹⁴ Section 332.004(2), F.S., defines the term "airport hazard" to mean any structure or object of natural growth located on or in the vicinity of a public-use airport, or any use of land near such airport, which obstructs or causes an obstruction to the airspace required for the flight of aircraft in landing or taking off at such airport or is otherwise hazardous to landing or taking off at such airport.

D. State Tax or Fee Increases:

None.

E. Other Constitutional Issues:

None.

V. Fiscal Impact Statement:

A. Tax/Fee Issues:

None.

B. Private Sector Impact:

The AAM industry may see a positive fiscal impact associated with including AAM in the state's aviation planning.

C. Government Sector Impact:

There may be an indeterminate negative fiscal impact to the FDOT associated with various planning tasks required by the bill, which can be absorbed with existing resources.

VI. Technical Deficiencies:

None.

VII. Related Issues:

None.

VIII. Statutes Affected:

This bill substantially amends the following sections of the Florida Statutes: 196.012, 206.46, 212.08, 332.003, 332.004, 332.006, 334.01, 334.27, and 339.08.

This bill creates section 332.0071 of the Florida Statutes.

IX. Additional Information:

Committee Substitute – Statement of Changes: (Summarizing differences between the Committee Substitute and the prior version of the bill.)

CS by Transportation on January 23, 2023:

The committee substitute clarifies that vertiports, electric aviation charging, and other advances in aviation technology must be included in the statewide aviation system plan and, as applicable, in the FDOT's work program.

A. Amendments:

None.

This Senate Bill Analysis does not reflect the intent or official position of the bill's introducer or the Florida Senate.