Date of Hearing: April 28, 2025

ASSEMBLY COMMITTEE ON TRANSPORTATION Lori D. Wilson, Chair AB 431 (Wilson) – As Introduced February 5, 2025

SUBJECT: Advanced Air Mobility Infrastructure Act

SUMMARY: Requires the Department of Transportation (Caltrans) to develop a statewide plan to include vertiports, designate a subject matter expert for advanced air mobility (AAM) within Caltrans, and prohibits a local entity from enacting a law, ordinance, or rule relating to AAM. Specifically, **this bill**:

- 1) Requires Caltrans to:
 - a) Develop a statewide plan, or update the statewide aviation plan, to include vertiports, electric aviation charging, and the infrastructure needs of other advances in aviation technology in the statewide aviation plan;
 - b) Designate a subject matter expert for advanced air mobility within Caltrans as a resource for local and regional jurisdictions navigating advances in aviation technology, including electric powered-lift aircraft and electric aviation;
 - c) Lead a statewide education campaign for local and regional decision makers to educate them on the benefits of electric powered-lift aircraft and advancements in aviation technology; and,
 - d) Provide local and regional 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.
- 2) Prohibits a political subdivision of the state, or an entity within a political subdivision of the state, from enacting a law, ordinance, or rule relating to advanced air mobility, the ownership of an advanced air mobility aircraft, or the aerial operation of an advanced air mobility aircraft.
- 3) Allows an airport operator to enact a law, rule, or ordinance to govern either of the following:
 - a) The operation of an advanced air mobility aircraft within the geographic boundaries of the airport over which the airport operator has authority; and,
 - b) The takeoff or landing of an advanced air mobility aircraft at the airport over which the airport operator has authority.
- 4) Defines the following:
 - a) "Advanced air mobility" as an air transportation system primarily using electric aircraft, including eVTOL and eCTOL aircraft, to carry passengers, cargo, or provide services in an urban or regional setting, with a gross takeoff weight of 300 pounds or more;
 - b) "eCTOL" as an electric conventional takeoff and landing aircraft;
 - c) "eVTOL" as an electric vertical takeoff and landing aircraft;
 - d) "Powered-lift aircraft" as a heavier-than-air aircraft capable of vertical takeoff, vertical landing, and low-speed flight that depends principally on engine-driven lift devices or

engine thrust for lift during these flight regimes and on nonrotating airfoils for lift during horizontal flight; and,

- e) "Vertiport" as an area of land, water, or a structure used or intended to be used for the landing or takeoff of powered-lift aircraft and includes associated buildings and facilities.
- 5) Specifies the provisions of this bill only apply to electric aircrafts, including eVTOL and eCTOL aircraft, and powered-lift aircraft that satisfy either of the following criteria:
 - a) Have a gross takeoff weight of 300 pounds or more; and,
 - b) Are capable of carrying humans or an equivalent amount of cargo.
- 6) Specifies that this chapter supersedes any law, ordinance, or rule enacted by a political subdivision of the state before July 1, 2025.

EXISTING LAW:

- 1) Establishes the State Aeronautics Act with the purposes of, among other things, encouraging the development of private flying and general use of air transportation, fostering and promoting safety in aeronautics, effecting uniformity of laws and regulations consistent with federal laws and regulations, providing for cooperation with federal authorities, and protecting people living in proximity of airports from noise. (Public Utilities Code (PUC) 21001 and 21002)
- 2) Defines "aeronautics" as the science and art of flight, including transportation by aircraft; the operation, construction, repair, or maintenance of aircraft and aircraft power plants and accessories; or the design, establishment, construction, extension, operation, improvement, repair, or maintenance of airports or other air navigation facilities. (PUC 21011)
- 3) Grants the state power to regulate the intrastate rates of common carriers by air, but otherwise recognizes the authority of the federal government to regulate the operation of aircraft and to control the use of the airways. (PUC 21240)
- 4) Requires Caltrans to encourage, foster, and assist in the development of aeronautics in the state and encourage the establishment of airports and air navigation facilities. (PUC 21241)
- 5) Authorizes Caltrans to draft and recommend necessary legislation to advance the interest of the state in aeronautics and to make and amend general or special rules, regulation, and procedures and establish minimum standards for aeronautics. (PUC 21242 & 21243)
- 6) Requires Caltrans to establish an advisory panel, known as the Advance Air Mobility, Zero Emission, and Electrification Advisory Panel, to assess all of the following:
 - a) The feasibility and readiness of existing infrastructure to support a vertiport network to facilitate the development of advanced air mobility services;
 - b) The development of a three-year prioritized workplan that maps out medium-term state activities necessary to advance air mobility services for Californians; and,
 - c) Pathways for promoting equity of access to advanced air mobility infrastructure to ensure open access and prohibit the monopolization of advanced air mobility infrastructure ownership and operations.

- 7) Requires Caltrans to report on the infrastructure feasibility and readiness assessment and the three-year prioritized workplan to the Legislature not later than January 1, 2025.
- 8) Federal law authorizes the Federal Aviation Administration (FAA) to develop plans and policy for airspace use, assign airspace use, and prescribe air traffic regulations. (49 United State Code Section 40103)

FISCAL EFFECT: Unknown

COMMENTS: The Federal Aviation Administration (FAA) defines AAM as a transportation system that transports people and property by air between two points using aircraft with advanced technologies, including electric aircraft or eVTOL aircraft, in both controlled and uncontrolled airspace. A new generation of eVTOL aircraft have the potential to alter urban and regional aviation. Manufacturers, technology companies, and transportation providers envision the use of electric aircraft to provide cost-effective intra-city, inter-city, and regional air travel in the nation's most congested areas. There is significant global activity with many different prototype aircraft under development, some already having begun test flights.

State aeronautics. Caltrans' aeronautics division Caltrans oversees airport environmental and noise, airport heliport permits, airport land use planning, airport maps and resources, Caltrans heliplates and hospital heliports, and AAM. This division develops the California Aviation System Plan (CASP). The CASP is intended to better align aviation planning from the perspectives of both the FAA and Caltrans to positively demonstrate that aviation is an integral part of California's multimodal transportation system.

The CASP 2020 considers aviation's capabilities and specifies airport roles and needs. Though it is several years old, CASP 2020 recognizes AAM. It notes aircraft manufacturers envision the use of electric aircraft to provide cost-effective intra-city, inter-city, and regional air travel in the nation's most congested areas including Los Angeles and San Francisco. It finds that financial and business opportunities exist, but there are significant technological, operational, and regulatory challenges including issues involving public perception and acceptance. Several manufacturers of eVTOL vehicles have completed prototype aircraft to transport passengers within and between large metropolitan areas. The aircraft relies on battery power to reduce greenhouse gas (GHG) emissions, and they are expected to operate more quietly than rotor aircraft.

Some manufacturers expect to complete the FAA's aircraft certification process by 2024 and begin service in 2025. The CASP 2020 report finds that "despite the strides made by aircraft manufactures to develop viable aircraft, (AAM) challenges remain as neither the physical infrastructure (e.g., takeoff and landing infrastructure, power infrastructure, etc.) nor the regulatory and policy framework have been developed to address UAM operation in urban areas."

Current AAM efforts. Many companies developing AAM are based in California (e.g. Archer Aviation, Joby, Wisk, Overair, Kittyhawk). A 2023 report from California State University Long Beach found that a six vertiport network in the Los Angeles-Orange County region could generate 2,133 jobs during construction and 943 jobs annually once operational. The study projects the vertiport network would annually generate \$173.3 million in expenditures and deliver \$90.3 million in labor income.

AAM manufacturers Pyka and Joby were highlighted in Governor Newsom's February 2025 economic blueprint. The report notes that Pyka, an autonomous electric aircraft manufacturer based in Alameda, plans to invest more than \$9 million to expand operations, creating over 130 new jobs, and Joby, an electric aircraft manufacturer, plans to invest more than \$40 million to expand operations in Santa Cruz and Marina, creating over 700 new jobs.

A number of other states and countries have begun to develop a regulatory structure to license and support AAM. Utah recently completed a study of their AAM infrastructure and recommended revisions to state law to support AAM. Arkansas, Michigan, Texas and Ohio have begun state-level efforts to review current law and regulations. The federal government is also actively engaged in supporting AAM through efforts by the FAA, NASA, and the Transportation Research Board. Other countries, including Canada and Japan, as well as the European Union, are similarly focused.

Future guidance. Currently, there is no set of clear, comprehensive, and concrete steps for the deployment and scaling of AAM in California. Although the FAA has the overarching authority over all airspace in the U.S., the California state government has a key role in guiding local municipalities, raising public awareness, and integrating necessary infrastructure.

This bill requires Caltrans to develop a statewide plan, designate a subject matter expert for AAM, lead a statewide education campaign for local and regional decision makers, and provide local and regional 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.

Existing law requires Caltrans to report to the Legislature by January 1, 2025 on the infrastructure feasibility and readiness assessment of AAM across the state. To date, Caltrans has not submitted this report. It is the understanding of the committee that it may be another year before the report is finalized. The author seeks to incorporate the recommendations from that report into this bill.

Local preemption. Concerns have been raised regarding preventing locals from enacting a law, ordinance, or rule related to advanced air mobility. This bill exempts airports from that prohibition. The author may wish to address concerns with local preemption based on recommendations from Caltrans' forthcoming report.

Committee amendments. The committee may wish to propose the following amendments:

- PUC 21721. (d) "Powered-lift aircraft" means a heavier than air aircraft capable of vertical takeoff, vertical landing, and low speed flight that depends principally on engine driven lift devices or engine thrust for lift during these flight regimes and on nonrotating airfoils for lift during horizontal flight. the same as that term is defined in Part 1 (commencing with Section 1.1) of Subchapter A of Chapter I of Title 14 of the Code of Federal Regulations.
- 2) PUC 21723. (d) Provide local and regional jurisdictions with a guidebook, <u>including best</u> <u>practices</u>, 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.

3) PUC 21724. (a) Except as provided in subdivision (b), a political subdivision of the state, or an entity within a political subdivision of the state, shall not enact a law, ordinance, or rule relating to advanced air mobility, the ownership of an advanced air mobility aircraft, or the aerial operation of an advanced air mobility aircraft.

(b) If the political subdivision or entity is an airport operator, may enact a law, rule, or ordinance to govern either of the following:

(1) The operation of an advanced air mobility aircraft within the geographic boundaries of the airport over which the airport operator has authority.

(2) The takeoff or landing of an advanced air mobility aircraft at the airport over which the airport operator has authority.

(c) This chapter supersedes any law, ordinance, or rule enacted by a political subdivision of the state before July 1, 2025.

(a) This chapter shall not be construed to interfere with or suspend either of the following:

(1) The authority of the Federal Aviation Administration, or any other federal department or agency, including, but not limited to, federal authority related to the governance of federal airspace, air traffic control, and aviation safety, or any other federal regulations, laws, or policies governing the operation of airports or air transportation.

(2) State zoning laws or regulations, including, but not limited to, zoning laws or regulations related to land use, development, or the construction of facilities within the jurisdiction of the local zoning authority.

(b) This chapter shall not be construed to limit or interfere with the jurisdiction, authority, rights, or responsibilities of any airport sponsor or airport operator with respect to the operation, maintenance, management, or capital development of any airport within the state.

According to the author, "Advanced Air Mobility (AAM) is a new and innovative mode of transportation that will modernize the future of mobility for passengers and cargo by relying on underutilized aerial transit routes. Referred to by the Federal Aviation Administration (FAA) as a "new era of aviation," AAM utilizes a new type of aircraft known as electric vertical take-off and landing (eVTOL). eVTOL aircraft have a variety of applications including the transport of people, cargo, and medical services. While AAM represents a step toward the future there currently are no guiding principles on the implementation or rollout of AAM across California. AB 431 aims to establish those guiding principles setting California up for success in the future."

In support, the California Chapter of Association of Uncrewed Vehicle Systems International (AUVSI) writes, "AB 431 (Wilson) builds off SB 800 (Caballero, 2023) and establishes the groundwork for the successful introduction of AAM technology into California. Advanced Air Mobility (AAM) is a new and innovative mode of transportation that will modernize the future of mobility for passengers and cargo by relying on underutilized aerial transit routes."

Previous legislation. SB 800 (Caballero) Chapter 416, Statutes of 2024 requires Caltrans to establish an advisory panel (Advanced Air Mobility, Zero-Emission, and Electrification Aviation Advisory Panel) to assess the feasibility and readiness of existing infrastructure, while developing an implementation plan for AAM. The bill also requires the department to provide a report to the legislature no later than Jan 1, 2025.

REGISTERED SUPPORT / OPPOSITION:

Support

Association of California Airports California Airports Council California Chapter of Association of Uncrewed Vehicle Systems International City of Long Beach El Segundo Chamber of Commerce Monterey Bay Economic Partnership Orange County Business Council Valley Industry and Commerce Association Wisk

Opposition

None on file

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