



CITY OF

NEWPORT BEACH

City Council Staff Report

June 24, 2025
Agenda Item No. SS2.

TO: HONORABLE MAYOR AND MEMBERS OF THE CITY COUNCIL

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TITLE: Preparing for the Implementation of Advanced Air Mobility

ABSTRACT:

Considered by the Federal Aviation Administration (FAA) to represent “a new era of aviation,” Advanced Air Mobility (AAM) is a rapidly developing transportation system, comprised of new types of aircraft and emerging technologies, that has the potential to provide additional regional and local mobility options for passengers, air cargo and emergency services. It is anticipated that aspects of AAM will be commercially implemented within the next decade.

This report provides an overview of the key aspects of AAM to provide the City Council and community baseline information prior to the June 24 Study Session discussion on what the City of Newport Beach can do to prepare, particularly what regulatory aspects should be considered, for the local implementation of AAM.

DISCUSSION:

Introduction

The concept of AAM is several decades old, but technological advancements and private investment have driven the industry forward in the past 10-15 years. The age of flying air taxis is coming, but there is debate as to how soon it will arrive. Those within the AAM industry assert the arrival of air taxis is imminent, but regulatory, infrastructure and public awareness hurdles remain. A more conservative view is that the early stages of implementation will occur within the next 2-5 years, with further integration into the transportation system occurring within the next decade.

The terminology used to describe AAM continues to develop, and the use of the associated terms and acronyms can vary by source. This report generally uses the definitions and the terminology currently used by the federal government and the City’s aviation consultants.

What is AAM?

The AAM Coordination and Leadership Act of 2022 defined AAM as “a transportation system that transports people and property by air between two points in the United States

using aircraft with advanced technologies, including electric aircraft or electric vertical take-off and landing aircraft, in both controlled and uncontrolled airspace.” The FAA Reauthorization Act of 2024 further defined AAM as including Urban Air Mobility (UAM) and Regional Air Mobility (RAM). UAM focuses on transportation within cities, while RAM connects urban centers with regional areas and remote locations. Both UAM and RAM will provide services such as air taxis, cargo delivery and medical transport.

AAM System Components

AAM is considered a system, comprised of aircraft, infrastructure and regulations.

Aircraft

The most salient aspect of AAM is the introduction of new types of aircraft and technologies, specifically, small Unmanned Aircraft Systems (UAS) and larger electric Vertical Take-Off and Landing (eVTOL) aircraft.

UAS, or drones, are already commonly used for recreational and business purposes due to their aerial photography/videography capabilities. However, their use is rapidly expanding to include law enforcement (the Newport Beach Police Department’s drone program will be fully operational later this summer), wildlife monitoring, search and rescue operations, package delivery and more. Drones are typically electric, weigh less than 55 pounds, and operate autonomously or with a remote pilot.

eVTOLs, which include air taxis, are currently in the planning, development and certification stages. Though vertical take-off and landing aircraft, like helicopters, have existed for years, eVTOLs are different due to the advanced propulsion technologies utilized.

Air taxis are currently planned to hold four to six passengers, be electric-powered, and have a range of about 100 miles. The range is expected to expand as battery technology evolves and different fuel types are tested. In the early stages of implementation, air taxis will be piloted and fly specific routes. It is anticipated that air taxis will initially fly the same routes as helicopters. In later stages, air taxis could fly on demand and autonomously. In addition to carrying passengers, eVTOLs are also expected to carry cargo and supplies.

At least two dozen manufacturers have eVTOLs in the design and/or the FAA-certification process. Once the FAA certifies an aircraft, its manufacturer will move to the next stage of certification – gaining approval to operate the aircraft commercially.

Drones will operate in low-altitude airspace, below 400 feet. eVTOLs are generally expected to operate at cruising altitudes between 500 and 3,000 feet. They will be expected to comply with the FAA’s standards for Minimum Safe Altitudes which are 500 feet over sparsely populated areas and 1,000 feet over populated areas.

Examples of delivery drone and air taxi prototypes are included in Attachment A.

Infrastructure – Technological and Physical

The FAA's Air Traffic Control (ATC) system manages the national airspace system, but existing ATC technologies may not detect and monitor drones due to their size, speeds and low-altitude operations. The FAA is developing a system called Unmanned Aircraft System Traffic Management (UTM) to manage drone traffic. Private industry is also developing specialized drone detection systems and technologies for use around airports and within other controlled airspace.

The FAA, NASA and other organizations are continuing to research and evaluate how eVTOL operations will be integrated into the national airspace system.

In addition to technological infrastructure, physical infrastructure will be needed to support AAM, particularly air taxi operations. During the early stages of implementation, air taxis are expected to utilize existing facilities including airports and modified heliports. However, since the longer-term goal of AAM is to integrate into communities, specialized areas for vertical takeoff and landing, known as vertiports and vertistops, will be developed and utilized.

Regulations

The FAA is responsible for safely integrating AAM aircraft and infrastructure into the national airspace system. The agency is overseeing AAM aircraft certification, developing rules for AAM pilot and mechanic certification and training, managing airspace access for and integrating AAM operations into air traffic control procedures, and establishing safety standards for AAM aircraft and operations. The agency also published guidance for vertiport design.

Planning for the Local Integration of AAM

Legislative Advocacy

Councilmember Noah Blom and Mayor Pro Tem Lauren Kleiman, in their roles as chair and vice chair of the City's Aviation Committee, and staff from the City Manager's Office and the City Attorney's Office, began to closely follow the development of AAM just over two years ago. The Council and staff members have participated in meetings with other jurisdictions, including the City of Los Angeles, regional planning meetings, and educational seminars, and the City's aviation consultants have imparted their knowledge of the subject and helped to gather, track and share information with staff and the Aviation Committee.

Industry leaders and federal regulators have largely focused on developing and approving, respectively, AAM-related technologies and identifying the associated infrastructure needs, but little has been done to inform the public or to address key policy issues, particularly those related to noise, routing, safety and privacy. Thus, the City's AAM-related work has, to date, involved advocating to federal legislators and agencies for more community outreach in planning for the implementation of AAM. The City and its federal lobbyists successfully advocated for the inclusion of language in last year's House of Representatives' appropriations bill and the FAA Reauthorization Act of 2024 that called for greater community involvement in the AAM planning process.

Local Policy Considerations

There's been significant private and public investment into AAM and the federal government, through the Department of Transportation, FAA and NASA, has committed considerable resources toward the research and integration of UAS and eVTOLs into the national airspace system. Some states, including Florida and Ohio, are developing statewide strategies for AAM integration, as are cities such as Orlando and Detroit. In 2021, the City of Los Angeles completed an interdepartmental study of the benefits and challenges associated with the local integration of UAM and developed a policy framework to help guide its related transportation and land use policy decisions. (The document can be found on the City website at newportbeachca.gov/aam.)

Recently, City of Newport Beach staff met with Peter Kirsch, a recognized aviation and transportation attorney, to discuss what Newport Beach could be doing now to prepare for the future arrival of air taxis and the potential siting of vertiports in Newport Beach. Mr. Kirsch explained what aspects of AAM cities could legally regulate and suggested the City evaluate and determine what level of local regulation may be needed. He also suggested staff review the City's zoning code and definitions, and consider what policies and permitting processes may be needed to address future vertiport siting. Mr. Kirsch agreed to work with the City on this project and will participate in the June 24 Study Session discussion.

While staff recommends the City move forward now with considering policy changes and zoning code updates, future updates will very likely be needed as the City and the community gain a better understanding of AAM and its benefits and challenges.

Additional Information

This report contains a high-level overview of AAM. More detailed information can be found on the City website at newportbeachca.gov/AAM.

NOTICING:

The agenda item has been noticed according to the Brown Act (72 hours in advance of the meeting at which the City Council considers the item).

ATTACHMENT:

Attachment A – Examples of AAM Aircraft