

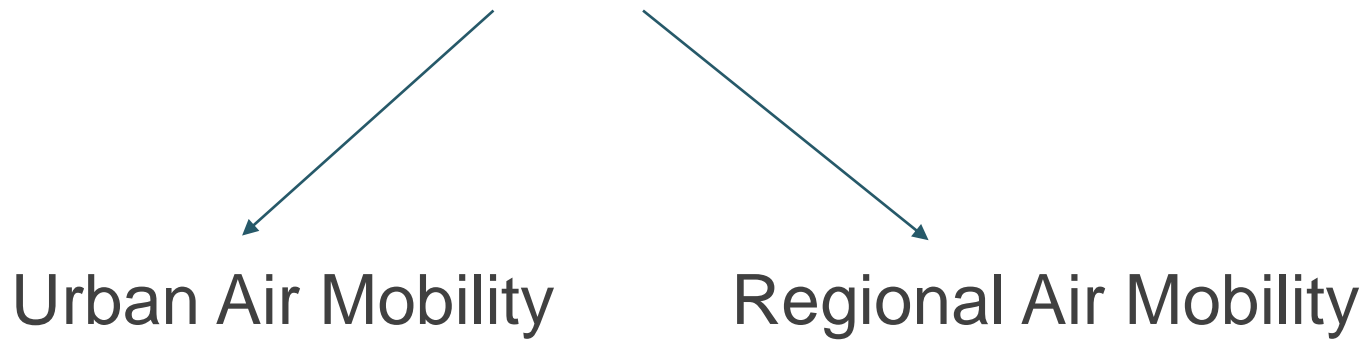
ADVANCED AIR MOBILITY OVERVIEW

Prepared by Kevin Karpe – Diverse Vector Aviation



What is Advanced Air Mobility?

Advanced Air Mobility (AAM)



AAM COORDINATION AND LEADERSHIP ACT

(P.L. 117-203, 136 STAT. 2227, OCTOBER 17, 2022)

“AAM is a transportation system that moves people and property by air between two points in the United States (U.S.) using aircraft with advanced technologies, including electric aircraft, or electric vertical takeoff and landing (eVTOL) aircraft, in both controlled and uncontrolled airspace.”



Electric Vertical Take Off and Landing (eVTOL)



Source: Shutterstock – Aerospace Trek



Advanced Air Mobility Planning

NASA

NASA/TM-2022008917



UAM Airspace Research Roadmap Rev 1.2

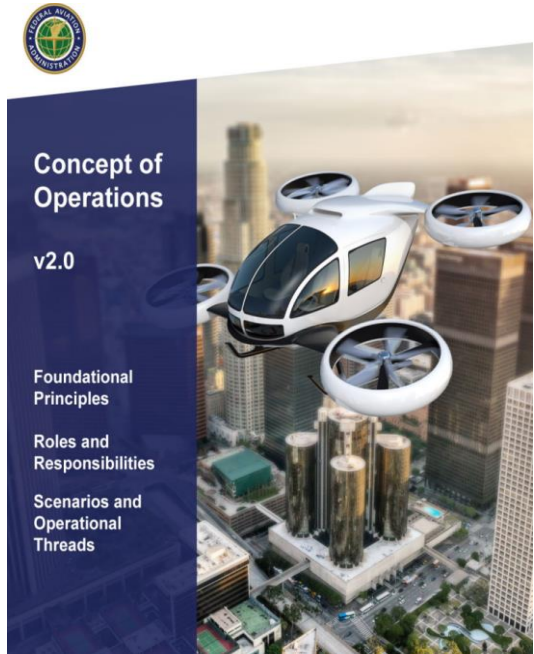
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FAA Office of Next Gen



FAA Air Traffic Org.



Requirements Prior to Beginning Operations / Concurrent FAA Workstreams

- Aircraft Certification
- Pilot Training and Certification
- Noise Certification Basis for AAM
- Airspace and Air Traffic Management Design and Procedures
- Community Engagement



Steps for Near-Term, Mid-Term and Mature Operations

- Near-Term
 - Exploratory operations, type certified aircraft, early FAA procedures development
 - Low-density scheduled commercial operations in urban areas and around airports
- Mid-Term
 - Medium-density scheduled and unscheduled commercial operations using an increased number of vertiports and routes in specific geographical areas
 - Medium-density scheduled and unscheduled commercial operations in an AAM network. Fully remotely-piloted operations are supported.
- Mature Operations
 - Mature AAM ecosystem, characterized by high density scheduled, unscheduled, and on-demand operations



Initial Operating Requirements

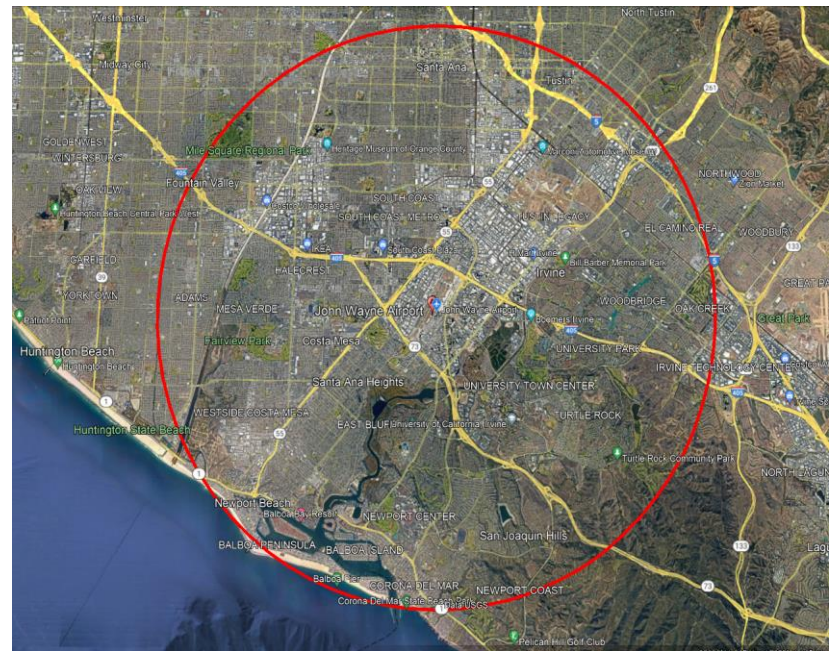
- AAM operators are expected to comply with existing communication, navigation, and surveillance (CNS) requirements for the airspace in which they will operate, and in relatively close proximity to or directly on airports.
 - This means that AAM aircraft will operate predominantly in or around Class B and C airspace.



John Wayne Airport- Class C Airspace



Source: Airnav.com



Source: Google Earth

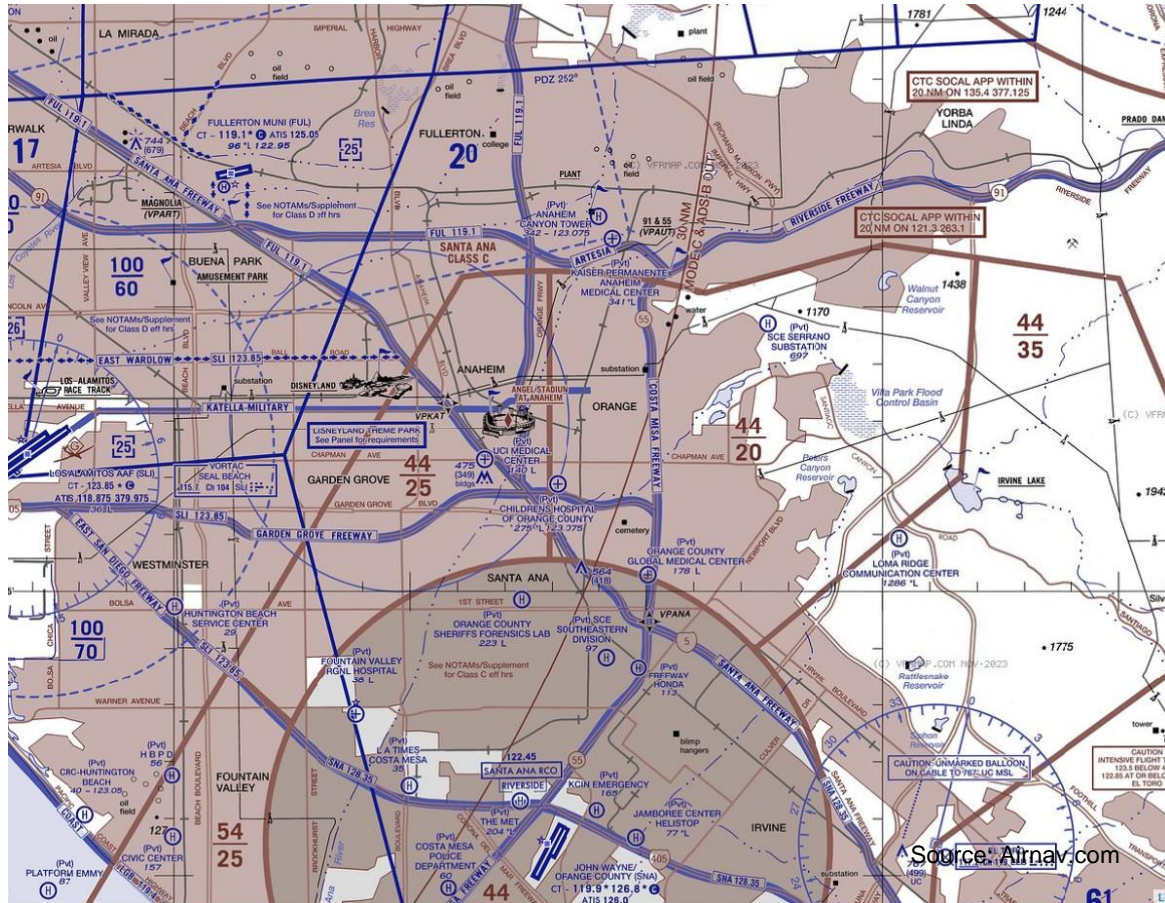


Existing Navigation

- Visual Flight Rules (VFR)
- Use of Current Routes and ATC Procedures
- Existing Communication Methods
- Helicopter Routes



Orange County Helicopter Routes



Infrastructure

- Adequate AAM Aircraft Parking Zones for Loading/Unloading
- Rescue/Fire Fighting Services
- Charging Stations
- Per FAA - Unlikely, but possible, for new Vertiports to built by 2028
 - Existing facilities would be modified to accommodate UAM eVTOL aircraft



FAA Webinar Series

A New Era of Aviation: An AAM Webinar Series -
<https://www.faa.gov/air-taxis/webinars>



MORE INFORMATION NEEDED / MORE WORK TO BE DONE

- Safety & Security
- Certification Process
- Noise
- Environmental Guidelines
- Routing
- Altitudes
- Zoning & Land Use
- Community Engagement



Questions?

