

DOORWAY BRIEF: I NEED TO UNDERSTAND AAM

Why You Might Be Here

You may be an elected official, planner, airport sponsor, board member, economic development professional, emergency manager, or public agency staff member who has heard about Advanced Air Mobility (AAM) and wants a basic understanding of what it is and why communities are discussing it.

You do not need a technical aviation background to use this toolkit. This doorway provides a starting point and directs you to the sections most relevant to your interests.

What Is Advanced Air Mobility?

Advanced Air Mobility (AAM) is a broad term used to describe emerging aircraft, technologies, and operational concepts that expand how aviation may be used to move people, cargo, medical supplies, information, and services.

Examples include electric conventional takeoff and landing aircraft (eCTOL), electric short takeoff and landing aircraft (eSTOL), electric helicopters, powered-lift aircraft, small uncrewed aircraft systems (UAS), and large UAS cargo systems.

Many AAM concepts rely on existing aviation infrastructure such as airports and heliports. Others may require new facilities such as vertiports, drone facilities, charging infrastructure, or supporting communications systems.

Aircraft and Infrastructure

Advanced Air Mobility is often discussed as if it were a single technology. In reality, it includes a wide range of aircraft and infrastructure concepts.

Aircraft may include electric conventional takeoff and landing aircraft (eCTOL), electric short takeoff and landing aircraft (eSTOL), electric helicopters, electric vertical takeoff and landing aircraft (eVTOL), also referred to as powered-lift aircraft, and uncrewed aircraft systems (UAS). These aircraft vary significantly in their performance, range, payload, operating environment, infrastructure needs, and certification pathways.

Infrastructure may include airports, heliports, vertiports, drone facilities, charging systems, communications networks, weather sensing systems, and supporting utility infrastructure. Some communities may encounter AAM through the modernization of an existing airport or heliport. Others may first encounter AAM through a drone logistics operation, medical transport service, or a proposal to construct a new vertiport.

Understanding the differences between aircraft and infrastructure helps communities focus on the specific opportunities and challenges most relevant to their local situation.

Understanding the AAM Ecosystem

The organizations involved in AAM are not all performing the same role.

Some companies are aircraft manufacturers, often referred to as Original Equipment Manufacturers (OEMs). These organizations design and build aircraft but may not operate them. This model is similar to traditional aviation, where manufacturers sell aircraft to airlines, charter companies, government agencies, or private owners.

Other companies may operate aircraft services directly. These operators may provide passenger transportation, cargo delivery, medical logistics, infrastructure inspection, or other aviation services.

Because the industry is still emerging, some companies currently serve both roles. For example, several manufacturers are pursuing aircraft certification while also planning to operate transportation services. Other manufacturers intend to sell aircraft to independent operators rather than provide transportation services themselves.

For communities, the distinction is important. A manufacturer may be focused on aircraft certification, production, and technology development, while an operator may be focused on routes, customers, facilities, workforce, and day-to-day operations. Communities evaluating a proposal should understand which role an organization is performing and whether the discussion involves aircraft development, service delivery, infrastructure investment, or a combination of all three.

What AAM Is Not

AAM is not a single aircraft type. It is not limited to passenger air taxis. It is not a replacement for roads, transit, freight systems, or existing aviation infrastructure. It is not regulated by a single agency.

Instead, AAM represents a collection of emerging aviation technologies and services that may be integrated into existing transportation, logistics, emergency response, and economic development systems.

Why Communities Are Discussing AAM

Communities are exploring AAM for many different reasons, including emergency medical transportation, medical logistics, cargo delivery, infrastructure inspection, wildfire response, utility support, business travel, regional air mobility, economic development, and workforce development.

Not every use case will be relevant in every community. The most important question is not whether AAM exists. The more important question is whether aviation can help address a specific local need or opportunity.

What Role Do Local Governments Play?

Local governments do not regulate aircraft certification, pilot certification, or airspace operations. Those responsibilities generally belong to the Federal Aviation Administration (FAA).

Local governments do, however, play important roles in land use planning, zoning, infrastructure planning, emergency preparedness, utility coordination, economic development, community engagement, environmental review, and facility permitting.

Communities often have more influence over where aviation infrastructure is located than how aircraft operate once they are airborne.

Recommended Next Steps

If you want a deeper understanding of AAM, read the AAM 101 Guide, Aircraft and Operations, Use Cases, and Roles and Responsibilities sections.

If you are evaluating whether AAM is relevant to your community, read Transportation and Accessibility, Economic Development and Readiness, and Use Cases.

If you have an airport, heliport, or other aviation facility, read Infrastructure, Land Use, and Place; Governance, Roles, Authority, and Coordination; and the Public Safety and Emergency Preparedness Guide.

If you are considering new aviation infrastructure, read the Airport Development Brief, Heliport Development Brief, Vertiport Development Brief, and Drone Facility Development Brief.

If you have concerns about compatibility, noise, or community impacts, read Environmental and Noise Mitigation Strategies, Land Use and Zoning Best Practices, and Governance, Roles, Authority, and Coordination.

Questions to Consider

- Why is AAM being discussed in my community?
- What problem are we trying to solve?
- What aviation assets already exist?
- What role does local government play?
- What decisions may need to be made in the future?
- Which sections of this toolkit are most relevant to our situation?