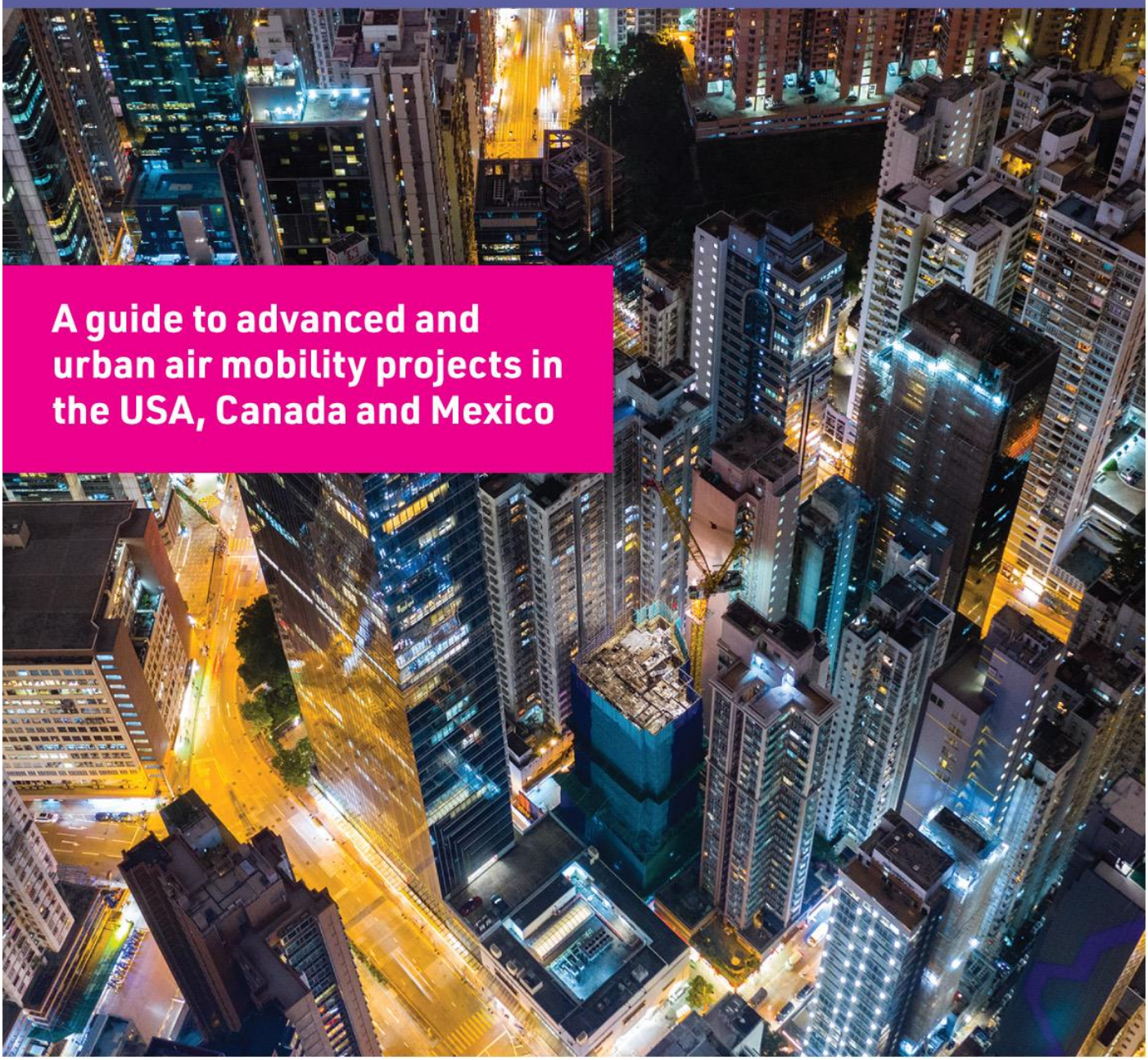
The Global AAM/UAM Market Map

North America

AAM/UAM Routes and Programmes

Sample pages



A guide to advanced and urban air mobility projects in the USA, Canada and Mexico

*Thank you for downloading these sample pages of the **North America AAM-UAM Routes and Programmes** report. If you have any queries, please get in touch with us – contact details are below.*

Introduction

The **North America AAM-UAM Routes and Programmes** report is aimed at advanced air mobility/urban air mobility (AAM/UAM) industry OEMs and supply chain partners, transport planners, finance companies, consultants and local authorities who need a detailed understanding of what programmes are underway around the world and the market opportunities that exist within these programmes. It provides a unique guide to competitive industry information, global/regional market size and trend analysis, with a specific focus on routes, route lengths - where known, host cities/regions and eco-system suppliers.

It is based on many months of research by the worldwide editorial team and the sources of each entry are referenced.

While most AAM/UAM market intelligence studies are focused on the value and forecast for eVTOLs and associated industry suppliers, the **North America AAM-UAM Routes and Programmes** report analyses operational plans and confirmed industry participation broken down into regional areas.

The North America report gives details on plans to develop passenger AAM/UAM services in 29 states, with 84 programmes in the USA – plus all the programmes under active consideration in Canada and Mexico. The report gives timelines and descriptions along with details on industry participation, broken down into the following areas:

- Cities and routes (with route lengths)
- eVTOL manufacturer partner
- Electric fixed wing platform manufacturer
- AAM/UAM aircraft operators
- AAM/UAM training
- AAM/UAM aircraft operator maintenance and support
- AAM/UAM aircraft charging and power supplies
- Vertiport/airport developer/operator
- Vertiport/airport safety and security
- Airspace integration
- Local authority partner/client
- Others

Information is validated and updated regularly – the sources for all information are outlined in the report.

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Canada

Country introduction

Much of the strategic UAM planning in Canada is being driven centrally by the Canadian Advanced Air Mobility Consortium (CAAM), which has developed a Canadian Advanced Air Mobility Master Plan. The plan is being developed by CAAM with the support of NavCanada, Skyports, Unifly, D3 technologies and Supernal.

The plan is split into two phases:
(The following text is taken from the report)

Phase 1 – 20 Year AAM National Roadmap
Phase 1 is designed to organise and deliver a strategic roadmap for AAM focused on the next 20 years. It will address factors such as safety, regulations, scalability, flexibility and resilience. Environmental responsibility and societal acceptance will be considered from end to end. The three goals are:

- Define the unifying national AAM vision for Canada.
- Identify gaps and barriers in accomplishing the vision.
- Create the national AAM implementation Roadmap Harbour Heliport Master Plan.

Phase 2 – Regional Implementation Strategies

Phase 2 will apply the Master Plan to initial AAM operational markets in Canada, specifically Vancouver and Harbour Heliport Toronto. Phase 2 is designed to de-risk AAM operations, coordinate business planning, and expedite technology integration required to activate revenue generating use-cases. In conjunction with the ongoing Vancouver and Toronto AAM projects, the goals for Phase 2 are to:

- Design airspace structure, flight routes, physical infrastructure maps and noise footprints for urban and rural operations.
- Develop Concept of Operations (CONOPS) for specific AAM use-cases and integration with RPAS Traffic Management (RTM).

Sources:

canadianaam.com/projects/canadian-advanced-air-mobility-master-plan

Joliette, Quebec

Timeline:
Planned – *to be launched within two to five years; funds have been committed and key industry partners identified*

Route(s):
Joliette – Atikamekw First Nation of Manawan (183km)

Programme description

Canadian officials and industry players are working on an innovative air mobility project that will turn sustainable aviation into reality by helping communities in remote areas according to autoeveolution.com. According to the report "One of the core principles of AAM (Advanced Air Mobility) is sustainability… In Canada, AAM players want to develop something similar on a wider scale. It will initially take the form of a new corridor between the City of Joliette and the Atikamekw First Nation of Manawan. Thanks to this corridor, members of the Manawan indigenous community will be able to access essential health and emergency services easier and faster.

"Jaunt had a strong partner in Vertiko Mobility, an infrastructure expert with a fresh perspective. Vertiko's main goal is to connect all the regions of Quebec with urban centres. With Quebec being the world leader in renewable energy production, this will also add another layer of sustainability to upcoming eVTOL operations in the area.

"The City of Joliette corridor is part of a wider, more complex project. Vertiko officially announced the project during this year's Volaria aeronautical event. It also relies on support from other big players such as the Drone Niche of Excellence and CRIAQ (the Consortium de Recherche et d'Innovation en Aérospatiale du Québec)."

Partners

eVTOL manufacturer:
Jaunt

Vertiport/airport developer/operator:
Vertiko

Sources:

www.autoevolution.com/news/canada-to-launch-a-new-air-taxi-corridor-with-a-focus-on-indigenous-communities-220833.html#

Monterrey Airport

Timeline
Imminent – *to be launched within the next three years*

Programme description

In early 2023 Eviation Aircraft announced that Aerus, an emerging regional airline in Mexico, has signed a Letter of Intent (LOI) for 30 commuter Alice aircraft. Aerus says that it intends to utilise Alice for middle-mile travel across regions including Nuevo León, Tamaulipas, Coahuila and Veracruz, providing historically underserved communities in northern areas of the country with access to carbon-free, cost-effective and convenient air travel.

The company adds that it plans to launch commercial operations in 2023 using Monterrey Airport (MTY) as its regional hub and offering an expanded flight schedule, covering routes that no other airlines currently operate and using electric aircraft.

Partners

Electric fixed-wing platform manufacturer
Eviation

AAM/UAM aircraft operator
Aerus

Sources:

www.eviation.com

flyaerus.com/index.html

Battle Creek, Michigan

Timeline
Imminent – *to be launched within the next three years*

Programme description

In August 2023 Battle Creek Unlimited (BCU) a private, non-profit corporation which serves as the economic development arm for the City of Battle Creek and manages the Fort Custer Industrial Park announced that it has secured a USD7 million appropriation in the 2024 state budget to support the development of an advanced air mobility park at the Battle Creek Executive Airport (BTL).

BCU says the park, which is to be called MICH-AIR, has been in the works since 2019 when BCU received a grant from the Michigan Defense Center to determine if Battle Creek would be an attractive location for drone companies looking to establish operations. "The Battle Creek Executive Airport (BTL) is one of the busiest airports in the state. Its main runway measures 10,004 feet and is complemented by a parallel runway and a crosswind runway. The airport has approximately 200 acres of land available for development, ideal for drone operations" according to the press release.

BCU says it will market the facility as a site for drone manufacture, operations, maintenance & repair, and drone training, as well as for urban air mobility. The USD7 million the company says will be used to upgrade the airspace surveillance system at BTL, in preparation for increased traffic from autonomous and remotely piloted aircraft. BCU has already invested approximately USD3 million in the MICH-AIR project, which according to the company includes site preparation, land acquisition for a new entrance, engineering plans, and environmental analysis.

While MICH-AIR is informally referred to as a drone park, BCU President & CEO Joe Sobieralski noted that it is important to make the distinction between the small drones flown for personal recreation use and the large autonomous and remotely piloted aircraft that are currently being developed. "At MICH-AIR, we will be targeting large aviation and defence manufacturers, which are developing next generation aircraft. These could be used for transportation, cargo delivery, border surveillance, spraying crops, or firefighting. There are all kinds of applications, for both civilian and military use. Our goal is for MICH-AIR to be a leader in the emerging sector" he said.

Partners

Vertiport/airport developer/operator
Volatus
Bellefonte Airport

Sources:

bcunlimited.org

Chicago, Illinois

Timeline:
Imminent – *to be launched within the next three years*

Route(s):
Downtown Chicago – O'Hare (32 km) (Archer and United)
Chicago – Schaumburg (51km) (EVE and Blade)
Chicago – Tinley Park (33km) (EVE and Blade)

Programme description

eVertiSKY and Volatus Infrastructure & Energy Solutions (VI&E Solutions) in June 2024 reported they are progressing their efforts as part of the Chicago UAM Living Labs initiative, which began January 2024, establishing Chicago's first UAM vertiport. In the third quarter of 2024, the project will transition into the next stage with Federal, State, and Local engagement. "This strategic partnership also incorporates VI&E Solutions' multimodal EV charging solutions into eVertiSKY's CityAPI Dashboard which provides a transparent, real-time view of Vertiport ground assets, including the specifications of Volatus EV units, and accessible to operators via the NASA UTM, ensuring seamless coordination and management of both air and ground operations," said the companies in a press release.

"The UAM Living Labs plays a critical role by providing a real-world testing ground for UAM technologies, collaboration, and operational strategies. Through extensive data collection and stakeholder engagement, each UAM Living Labs identifies optimal vertiport locations, efficient operational protocols, and the economic and environmental impacts of UAM integration.

In March 2023, Archer Aviation and United Airlines announced plans to launch the first air taxi route in Chicago, between O'Hare International Airport (ORD) and Vertiport Chicago.

According to a press release "Vertiport Chicago, North America's largest vertical aircraft take off and landing facility, is located in the Illinois Medical District near the Chicago Loop. This site was selected as the takeoff and landing site for this airport to city centre route because of its convenience, access and service. From there, passengers will be able to travel to and from ORD via Archer's Midnight aircraft in approximately 10 minutes. A similar trip by car can take upwards of an hour or more during rush hour traffic.

"United and Archer's goal for its UAM network is to provide residents and visitors in the Chicago Metropolitan Area with a safe, sustainable, low noise, and cost-competitive alternative to ground transportation beginning in 2025. Chicago is the third most populous city in the United States, and home to United's headquarters. This makes it a unique city for Archer and United to build out. The early launch routes will focus in on airport to city centre transportation service, which are referred to as "trunk" routes. Once the trunk routes have been established, the next step will be to build out "branch" routes to connect to surrounding communities.

"ComEd, the Midwest's largest utility company, will work with United and Archer to establish the power infrastructure necessary to support eVTOL aircraft operations in and around the Chicago Metropolitan Area."

In another early trial of UAM procedures and technical requirements for the Chicago area, EVE and Blade Air Mobility announced in August 2022 they would organise a series of ground procedures and airborne flights using Blade helicopters.

EVE "aims to study operations, ground services, passenger journeys and eVTOL operator needs, creating more accessible and faster connections to Downtown Chicago. EVE will conduct its Chicago, Ill., UAM simulation over three weeks, starting with ground tests on September 12 and passenger flights on the 14th. Following the simulation, the city of Chicago will gain knowledge about the infrastructure and ecosystem needed to enable the launch and expected long-term growth of UAM in the area," according to an EVE Press release.

"Simulating the eVTOL operation in Chicago allows us to study how people will experience this service and understand the entire ecosystem requirements for our product and services, while showcasing the benefit of urban air mobility in one of North America's most prominent and populated cities," said André Stein, co-CEO of EVE.

EVE will perform the ground tests at Vertiport Chicago, an existing downtown heliport facility, simulating services, infrastructure and equipment requirements for the eVTOL. In the UAM infrastructure, a vertiport is an area of land or a structure used for the landing, take-off, charging and operation of eVTOL vehicles.

For this simulation, EVE has formed a consortium of partners, including Blade, Republic Airways, Halo Aviation, Vertiport Chicago, Village of Tinley Park, Village of Schaumburg, ACCIONA, SkyWest, Inc. and Speedbird Aero. A helicopter replicating EVE's future eVTOL will transport passengers from the Vertiport Chicago facility to two helistops located north-west and south-west of Chicago. The first route will connect Vertiport Chicago to Schaumburg Municipal Helistop, and the second route will connect Vertiport Chicago to Tinley Park Helistop in Illinois.

In August 2022 United Airlines (based at Chicago O'Hare) announced an order for 200 eVTOL air taxis from Eve Air Mobility by 2026, with another 200 on option. In July 2022 United paid a USD10 million pre-delivery deposit for 100 eVTOL air taxis being developed by Archer Aviation. One of the initial key eVTOL routes for the airline will be to transfer passengers from downtown Chicago to O'Hare.

Sources:

www.blade.com

eveairmobility.com

www.urbanairmobilitynews.com/aam-uam-route-and-programme-news/united-airlines-and-archer-announce-first-commercial-electric-air-taxi-route-in-chicago

vie.solutions

Jackson-Medgar Wiley Evers Airport, Mississippi

Timeline
Planned – *to be launched within two to five years; funds have been committed and key industry partners identified*

Programme description

In January 2024 Atlantic Aviation, a fixed-base operator (FBO) and BETA Technologies (BETA) announced they were collaborating to install BETA's electric charging stations at several of Atlantic's airport locations across the East and Gulf Coasts.

"BETA's chargers are designed to be multimodal and interoperable," said the companies in a press release. "They utilize a standard that is compatible with BETA's own all-electric ALIA aircraft and other top original equipment manufacturers (OEMs) across the industry, as well as electric ground vehicles, offering a single solution for ground- and air-based electric transportation alike. As airports and the broader transportation sector continue to transition to electric and sustainable alternatives, this technology provides an important foundation for integrated operations.

The parties have infrastructure in the ground or HSAs in place for Birmingham International Airport (BHM), Elmira Regional Airport (ELM), Jackson-Medgar Wiley Evers International Airport (JAN), and Westfield-Barnes Regional Airport (BAF), and are actively working with additional airport authorities to continue their collaborative expansion, said the press release. These Atlantic sites will join BETA's growing network of charging stations across the U.S. The company has brought its multimodal and interoperable chargers online at 17 locations, with another 55 sites in the permitting or construction process.

The existing network, which spans from Vermont to Arkansas and Florida, includes the Department of Defense's first-ever electric aircraft charger installed at Duke Field, Eglin Air Force Base, where BETA's ALIA aircraft was deployed for several months. Many of these sites have been tested first-hand by BETA's all-electric ALIA aircraft as it has traveled from Burlington, Vermont to Bentonville, Arkansas, Louisville, Kentucky, and Eglin, Florida, respectively.

Partners

eVTOL manufacturer:
BETA Technologies

AAM/UAM aircraft charging and power supplies:
BETA Technologies

Others:
Atlantic Aviation (FBO)

Sources:

www.atlanticaviation.com/news/atlantic-aviation-and-beta-technologies-collaborate-to-bring-electric-charging-network-online-at-4-atlantic-locations

Springfield, Ohio

Timeline:
Planned – *to be launched within two to five years; funds have been committed and key industry partners identified*

Programme description

Beta Technologies is developing a nationwide network of charging stations for its Alia eVTOL. The current network comprises nine eVTOL charging stations at seven strategically selected regional airports in Vermont, New York, Ohio and Arkansas. "But the company has aggressive expansion plans; it expects to have 15 charging stations online by the end of the year (2022), with 50 more in development," according to press reports. "The near-term goal is to extend the network down the East Coast, loop it back up though the Gulf Coast to the Midwest, and fill in the gaps to allow its electric aircraft to fly anywhere east of the Mississippi River." The aircraft manufacturer's customers are initially cargo transport companies - United Therapeutics, which plans to use the Alia to deliver transplantable organs directly to hospitals, and United Parcel Service. By the end of 2022 there were two prototypes in operation: one in South Burlington, Vermont, outside the Beta's headquarters, the other in Springfield, Ohio.

Sources:

www.sevendaysvt.com/vermont/beta-technologies-plans-a-web-of-charging-stations-across-the-eastern-us-to-power-its-electric-planes/Content?oid=36730885

www.futureflight.aero/news-article/2022-12-19/beta-makes-second-cross-country-evtol-flight-charging-infrastructure?utm_content=232222489&utm_medium=social&utm_source=linkedin&hss_channel=lcp-51713625

Syracuse, New York – Mirabel, Quebec

Timeline:
Planned – *to be launched within two to five years; funds have been committed and key industry partners identified*

Route(s):
Syracuse, New York – Mirabel, Quebec (330 km)

Programme description

In late November 2022, VPorts the creation of an international electric AAM corridor between Syracuse Hancock International Airport (New York, U.S.) and VPorts' vertiport in Mirabel (Québec, Canada). The company says "this corridor will foster the establishment of an AAM ecosystem that will provide a platform for full commercial cargo transport operations using electric vertical take-off and landing (eVTOL) aircraft (large, helicopter-sized "drones") and that the first eVTOL aircraft test flights are planned for 2023."

The company's press release reports "A consortium of international organisations including VPorts, NUAIR, Syracuse Hancock International Airport, Aéro Montréal, Innovitech, the Unmanned Aerial System Centre of Excellence (Alma), and Helijet International, have signed a Memorandum of Understanding (MOU) to establish international electric AAM corridors between Québec (Canada) and the United States."

"The aim of the corridors is to build an AAM ecosystem that will provide a platform for full commercial cargo transport operations using eVTOLs," said Dr. Fethi Chebil, President and Founder of VPorts. "They will allow the consortium's members to explore all aspects of AAM, including goods transportation, charging readiness, stakeholder management, business cases, security and safety protocols, social acceptability and urban integration of infrastructure and operations."

Partners

AAM/UAM aircraft operator:
Helijet International

Vertiport/airport developer/operator:
VPorts
Syracuse Hancock International Airport

Airspace integration:
NUAIR

Others:
Aéro Montréal
Innovitech
The Unmanned Aerial System Centre of Excellence (Alma)

Sources:

vports.com

nuair.org/2022/11/29/vports-to-create-intl-aam-corridor-syracuse-quebec