



Advanced Air Mobility  
Business Plan:

# FLORIDA'S AERIAL HIGHWAY NETWORK

November 2025



Governor DeSantis signing SB 1662 at the Florida Activation Event in Paris

Florida is poised to be a global leader in

# ADVANCED AIR MOBILITY

“Governor DeSantis' leadership and continued support allows FDOT to focus on delivering a world-class transportation network and, by signing this bill today, the Governor is enabling the Department to implement innovative ideas to enhance safety, increase efficiency and better serve our communities,” said Florida Department of Transportation Secretary Jared W. Perdue, P.E. “FDOT is especially proud of this legislation as it sets Florida up to create the path forward and conquer the complex concepts to finally bring highways in the sky with Advanced Air Mobility. With the Governor's support and industry collaboration, we are turning bold ideas into action and positioning Florida as the go-to state.”

## CONTENTS

A BOLD VISION

FLORIDA IS READY

FLORIDA'S AERIAL HIGHWAY NETWORK

FLORIDA'S AAM HEADQUARTERS

AAM SYSTEM ELEMENTS

STAKEHOLDER ENGAGEMENT

BUSINESS CASE

SPEED TO MARKET IMPLEMENTATION

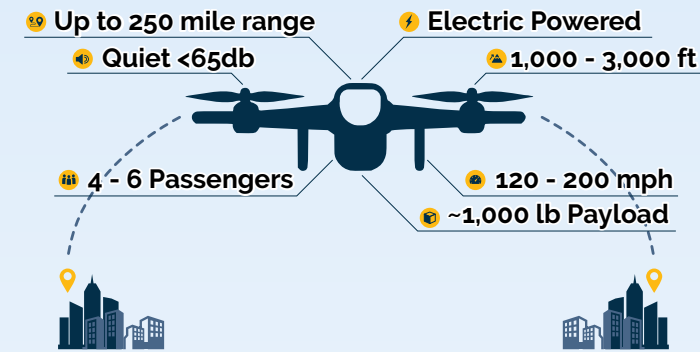
FLORIDA WELCOMES YOU

# A BOLD VISION

## What is AAM?

Advanced Air Mobility (AAM) represents the cutting edge of aviation technology. These aircraft come in a range of shapes and sizes that are **suitable for new and faster transportation options and enhanced logistic solutions for cargo and emergency services**. AAM operations are supported by a network of vertiports, which are full-service facilities that provide passenger or cargo pick-up, recharging, maintenance, hangar space, and often connect to different modes of travel. The typical characteristics of electric vertical take-off and landing (eVTOL), as shown in the eVOTL Diagram, make these aircraft viable in many different use cases.

eVOTL Diagram



## Aerial Highway Network

As AAM becomes a viable solution for modern travel, Florida is building an intercity "Aerial Highway Network" focused on **filling in the gaps** to connect major metropolitan areas across the state. This next-generation travel corridor will leverage AAM technology, including eVTOL aircraft, low-altitude flight routes, and strategically placed vertiports. By creating seamless aerial links between economic and population centers, this network will offer both business and leisure travelers, **faster and more flexible alternatives** to traditional ground transportation.

For business travelers, this means cutting

down hours of commute time into a quick flight above traffic, making same-day meetings and regional collaboration more accessible than ever. For leisure travelers, it opens up spontaneous weekend getaways, family visits, or excursions that were once too time-consuming to consider.

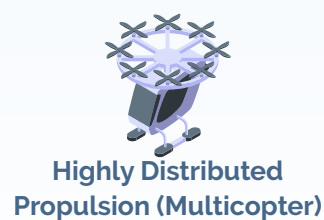
For freight, AAMs are best suited for transporting high-value, time-sensitive goods over relatively short distances with direct point-to-point service. Some of the suitable commodities are medical, high value-small volume goods, time sensitive materials and high value perishable products.

Beyond just convenience, this effort is about building a modern transportation backbone that's more efficient. And this aerial highway isn't just a public investment; it's also a platform for private industry to launch services and grow, using the planning and infrastructure being developed by the state.

Intercity Travel is a Catalyst for developing the AAM Market



AAM Vehicle Types



# FLORIDA IS READY

## Statewide Leadership and Coordination

Florida is actively shaping the future of aviation through its commitment to AAM. Since 2021, FDOT has led statewide efforts to accelerate AAM integration, engaging with federal regulators, private industry, local governments, and academic institutions to position Florida as a national leader in this emerging sector.

FDOT has conducted AAM Working Groups and an Advisory Committee to guide policy, infrastructure planning, and public outreach. These efforts have resulted in:

- Early advocacy at the federal level to accelerate regulatory frameworks.
- Development of statewide AAM implementation plans and readiness assessments.
- Strategic partnerships with nine Florida universities conducting AAM research.

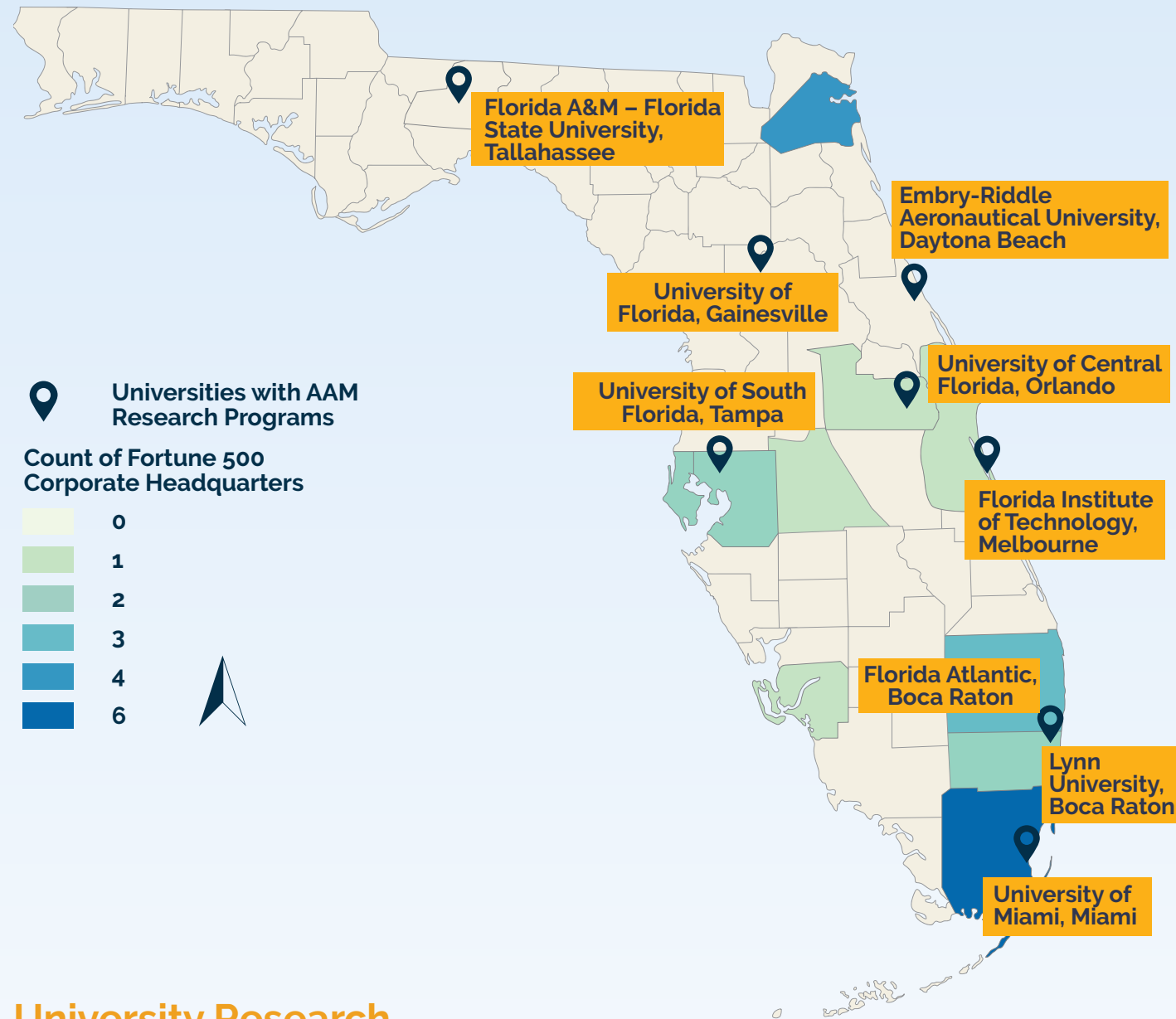


## Airport Partnerships

Early stages of AAM will rely heavily on existing airport infrastructure, but new requirements are emerging. These include charging stations for electric aircraft, maintenance and repair facilities, battery recycling systems, Airport Rescue & Fire Fighting (ARFF) capabilities, and high-speed data networks for real-time operations.

Airports that have publicly expressed plans of adding AAM are listed below:

- |  |   |
|--|---|
| <ul style="list-style-type: none"> <li>• Boca Raton Airport (BCT)</li> <li>• Daytona Beach International Airport (DAB)</li> <li>• Fort Lauderdale/Hollywood International Airport (FLL)</li> <li>• Lakeland Linder International Airport (LAL)</li> <li>• Miami Executive Airport (TMB)</li> <li>• Miami International Airport (MIA)</li> <li>• Miami-Opa Locka Executive Airport (OPF)</li> </ul> | <ul style="list-style-type: none"> <li>• Orlando Executive Airport (ORL)</li> <li>• Orlando International Airport (MCO)</li> <li>• Palm Beach International Airport (PBI)</li> <li>• Peter O Knight Airport (TPF)</li> <li>• Sebring Regional Airport (SEF)</li> <li>• Tallahassee International Airport (TLH)</li> <li>• Tampa International Airport (TPA)</li> <li>• Vero Beach Regional Airport (VRB)</li> </ul> |
|--|---|



## University Research

Florida's universities are playing a pivotal role in shaping the future of AAM. A few highlights include:

- Florida Institute of Technology College of Aeronautics conducts AAM-related research through its ATLAS Lab
- Embry-Riddle Aeronautical University's (ERAU) Advanced Air Mobility Research and Innovation Lab in Daytona Beach is a national leader in AAM systems integration.

Through interdisciplinary research, public-private partnerships, and real-world experimentation, these institutions are helping to build a safer, more efficient, and sustainable air transportation network.

# FLORIDA'S AERIAL HIGHWAY NETWORK

FDOT is investing in capital improvements to set the stage for a brand-new way to connect cities. Florida's AAM aerial network will connect key metropolitan areas and offer **faster and more flexible travel** between places. A system of "highways in the sky" with dedicated travel lanes and strategically placed aerial on-ramps and off-ramps located at key destinations will provide new business and leisure travel options.

Located off the **I-4 corridor**, an expansion to the SunTrax campus will serve as a Florida's **Headquarters for AAM** to test and refine air and ground transportation technologies. The facility will feature AAM systems, including eVTOL maintenance, and research and development.

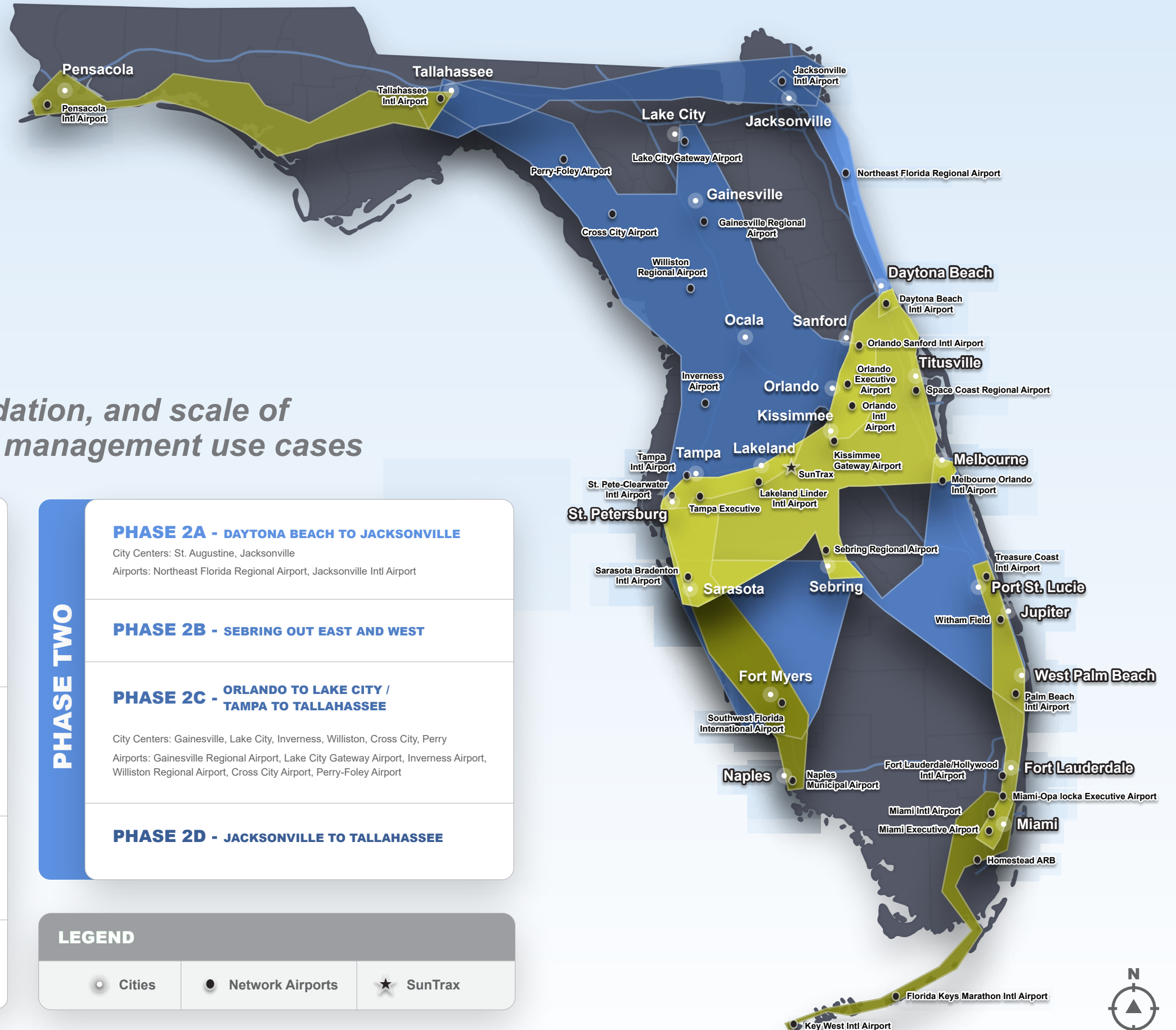
The I-4 corridor represents the first phase of AAM deployment in the state, driven by high travel demand between the major cities, making it an ideal target for early implementation. Initial planned routes include Orlando to Tampa, Orlando to Space Coast, Orlando to SunTrax, and Tampa to SunTrax. **This intercity travel along the I-4 corridor will serve as a catalyst for the emerging AAM market.** As the market matures and attracts increased public and private investments, additional corridors along the east and west coasts are expected to follow.





# FLORIDA'S AERIAL NETWORK

*Network supports testing, validation, and scale of air-taxi, cargo, and emergency management use cases*



**PHASE ONE**

**PHASE 1A - CENTRAL FLORIDA I-4 CORRIDOR**

City Centers: Sarasota, St. Petersburg/Clearwater, Tampa, Lakeland, Auburndale, Sebring, Kissimmee, Orlando, Cocoa/Melbourne, Daytona Beach

Airports: Sarasota Bradenton Intl Airport, St. Pete–Clearwater Intl Airport, Tampa Intl Airport, Tampa Executive Airport, Lakeland Linder Intl Airport, SunTrax, Sebring Regional Airport, Kissimmee Gateway Airport, Orlando Intl Airport, Orlando Executive Airport, Orlando Sanford Intl Airport, Space Coast Regional Airport, Melbourne Orlando Intl Airport, Daytona Beach Intl Airport

**PHASE 1B - PORT ST. LUCIE TO MIAMI**

City Centers: Port St. Lucie, Stuart, West Palm Beach, Fort Lauderdale, Miami-Opalocka, Miami

Airports: Treasure Coast Intl Airport, Witham Field Airport, Palm Beach Intl Airport, Fort Lauderdale–Hollywood Intl Airport, Miami–Opa locka Executive Airport, Miami Intl Airport, Miami Executive Airport

**PHASE 1C - TAMPA TO NAPLES / MIAMI TO KEY WEST**

City Centers: Fort Myers, Naples, Homestead, Marathon, Key West

Airports: Southwest Florida Intl Airport, Naples Municipal Airport, Homestead ARB, Florida Keys Marathon Intl Airport, Key West Intl Airport

**PHASE 1D - PENSACOLA TO TALLAHASSEE**

City Centers: Pensacola, Tallahassee

Airports: Pensacola Intl Airport, Tallahassee Intl Airport

**PHASE TWO**

**PHASE 2A - DAYTONA BEACH TO JACKSONVILLE**

City Centers: St. Augustine, Jacksonville

Airports: Northeast Florida Regional Airport, Jacksonville Intl Airport

**PHASE 2B - SEBRING OUT EAST AND WEST**

**PHASE 2C - ORLANDO TO LAKE CITY / TAMPA TO TALLAHASSEE**

City Centers: Gainesville, Lake City, Inverness, Williston, Cross City, Perry

Airports: Gainesville Regional Airport, Lake City Gateway Airport, Inverness Airport, Williston Regional Airport, Cross City Airport, Perry-Foley Airport

**PHASE 2D - JACKSONVILLE TO TALLAHASSEE**

**LEGEND**

- Cities
- Network Airports
- ★ SunTrax



## FLORIDA'S AAM HEADQUARTERS

The SunTrax campus is a leading hub for modern transportation innovation, dedicated to the extensive testing of advanced transportation solutions. This state-of-the-art center boasts the latest advancements in intelligent transportation systems (ITS), tolling, and connected vehicles, providing an optimal environment for testing and development.



Strategically located just off the I-4 corridor and outside the airspace of both Tampa and Orlando International Airports, SunTrax is now expanding to **integrate air transportation research into its impressive portfolio**. This expansion includes a **landing facility and the use of dedicated air space above the campus** to support AAM initiatives.

Priority areas for AAM Research & Testing include, but not limited to:

- Airspace Integration
- Air Traffic Control (ATC) Integration
- Cyber Security
- Equipment and Technology Testing – Accelerating the Design and Certification of eVTOLs
- Training and Workforce Development – Pilot and Maintainer

Additionally, within the campus **dedicated spaces are being created to support the growth and development of the first generation of the AAM and the Florida Aerial Network workforce**.

With SunTrax as a catalyst for innovation, Florida is uniquely positioned to lead the future development of safe, efficient, and reliable air mobility solutions for urban and rural environments.

## SunTrax Expansion Phasing

The phasing of the SunTrax expansion will be broken down in the following strategic phases as follows:

### Phase 1A

Consists of a single at-grade vertiport and ancillary support facilities, including an entry driveway and parking lot. This facility is intended to support both daytime and nighttime operations under visual flight rules with a future opportunity to provide charging for eVTOL on the vertiport. It is designed, as are all vertiports associated with the SunTrax facility, to accommodate a UH-60 Blackhawk as the design aircraft for maximum operational flexibility.

### Phase 1B

With the construction of a second vertiport, establishes an aerial test track over the western edge of the SunTrax campus. Also included in this phase are a dedicated charging/parking position, an approximately 20,000 square foot maintenance hangar, and ancillary support features such as taxiways, taxilanes, and utility infrastructure. The access roadway constructed as part of this phase will also support the Department's disaster response efforts by providing an emergency vehicle staging area.

### Phase 2A

Impacts no wetlands and further bolsters the research potential of the site by introducing a third vertiport, six additional charging/parking positions, and three additional maintenance hangars. Taxiways, aprons, utilities, and other ancillary features will be provided, as well.

### Phase 2B

Further expands the site and its capabilities by introducing a 3000-foot-long runway, two additional vertiports, six additional charging/parking positions, and six more 20,000 square foot maintenance hangars.

### Phase 3

Introduces commercial operations at or near the SunTrax facility with a new four-story research and development and classroom building with a rooftop vertiport. A passenger lounge with a view of the vertiport is planned along with rooftop parking/charging positions. The phase will include ancillary work such as parking facilities, utilities, and an access roadway.



**VISIT OUR WEBSITE: [suntraxfl.com/suntrax-air/](https://suntraxfl.com/suntrax-air/)**

# SUNTRAX EXPANSION



## Phasing Legend

### PHASE 1A

- 1 At-Grade Vertiport (1)

### PHASE 1B

- 2 South Roundabout
- 3 Access Road with Vehicle Staging
- 4 North Roundabout
- 5 Pump House
- 6 eVTOL Parking Position and Charging Station (1)
- 7 At-Grade Vertiport (1)
- 8 Maintenance Hangar (1)

### PHASE 2A

- 9 Maintenance Hangars (3)
- 10 eVTOL Parking Positions and Charging Stations (7)
- 11 At-Grade Vertiport (1)

### PHASE 2B

- 12 At-Grade Vertiport (1)
- 13 Landing Strip, 3,000 Feet
- 14 Maintenance Hangars (6)
- 15 eVTOL Parking Positions and Charging Stations (7)
- 16 At-Grade Vertiport (1)



**SunTrax Air Illustration**



**SunTrax Air Phase 1A Under Construction - Complete week of November 3, 2025**

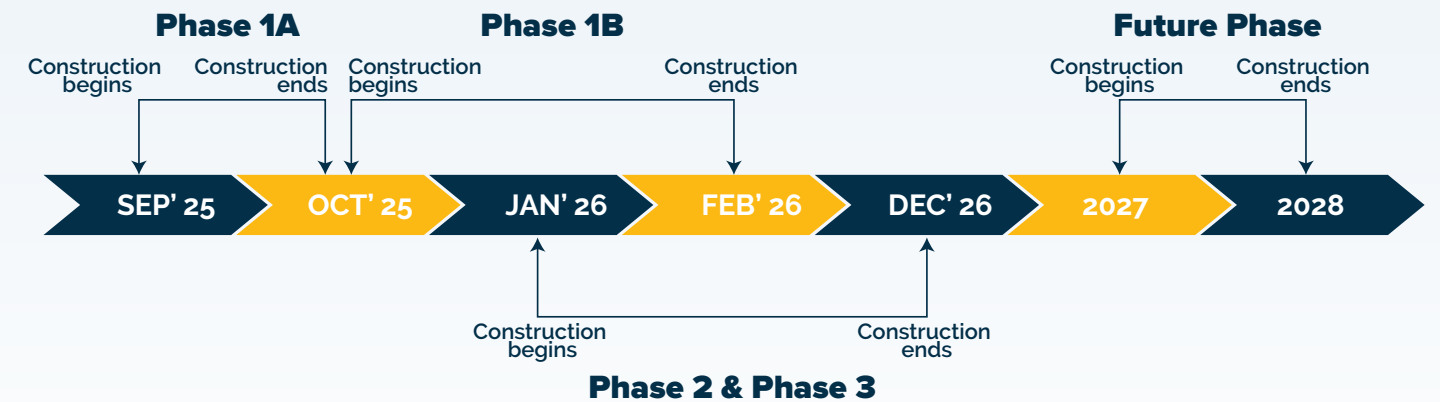


**Potential Phase 3 Building Illustration**



**Construction Timeline**

Construction for Phase 1 began in September 2025. The first three phases of the project are scheduled for completion by December 2026, allowing commercial operations to begin.



# AAM SYSTEM ELEMENTS

## Vertiport Suitability Analysis

A vertiport site-suitability analysis has been conducted using a multi-criteria evaluation framework to identify optimal vertiport locations within the I-4 Tampa-Orlando corridor. This framework examines both airspace and land use, offering comprehensive understanding of the spatial and regulatory landscape. emergency access and firefighting as well as space for roads, access, and terminal facilities.

### Airspace Suitability

The airspace suitability analysis considers regulatory and operational constraints, including airspace classifications and runway approach paths. Specific criteria include the following:

- Airspace classification
- Regulatory constraints
- Proximity to controlled airspace (Class B, D, E)
- Presence of runway protection zones and instrument approach paths

- Obstacle identification surfaces
- Terminal instrument procedures
- Operational complexity and coordination requirements
- Conflicts with commercial traffic
- Military and restricted airspace boundaries

These factors are critical in determining whether a location can safely and efficiently support vertiport operations without interfering with existing aviation infrastructure. The map below shows suitability of areas solely based on airspace considerations:

- **Green Zones (Preferred Zones):** Highly suitable areas with minimal regulatory or operational constraints.
- **Yellow Zones (Class D and E Airspace):** Moderately constrained areas that may be suitable with prior planning and coordination.
- **Orange Zones (Class B Airspace 2,000 to 10,000 ft):** Areas with significant constraints requiring mitigation or special procedures.
- **Pink Zones (Class B Airspace Surface to 1,600 ft):** Highly controlled surface-level Class B airspace near major airports, requiring FAA and airport authority

approval for any vertiport development. These areas fall under airport jurisdiction.

- **Red Zones (Obstruction ID Surface):** High-risk or prohibited areas due to regulatory restrictions, incompatibility, or operational hazards.

### Landside Suitability

Landside suitability screening was conducted to identify high-readiness sites that can serve either Maintenance, Repair, and Overhaul (MRO) functions or passenger operations, using a standardized, GIS-enabled evaluation framework. Specific criteria used in the analysis include the following:

- Land Use and Zoning
- Utility Infrastructure Assessment
- Noise and Environmental Constraints
- Emergency Response and Safety
- Parcel Size
- Logistics and Supplies

The objective of this screening is to inform early-stage planning, investment prioritization,

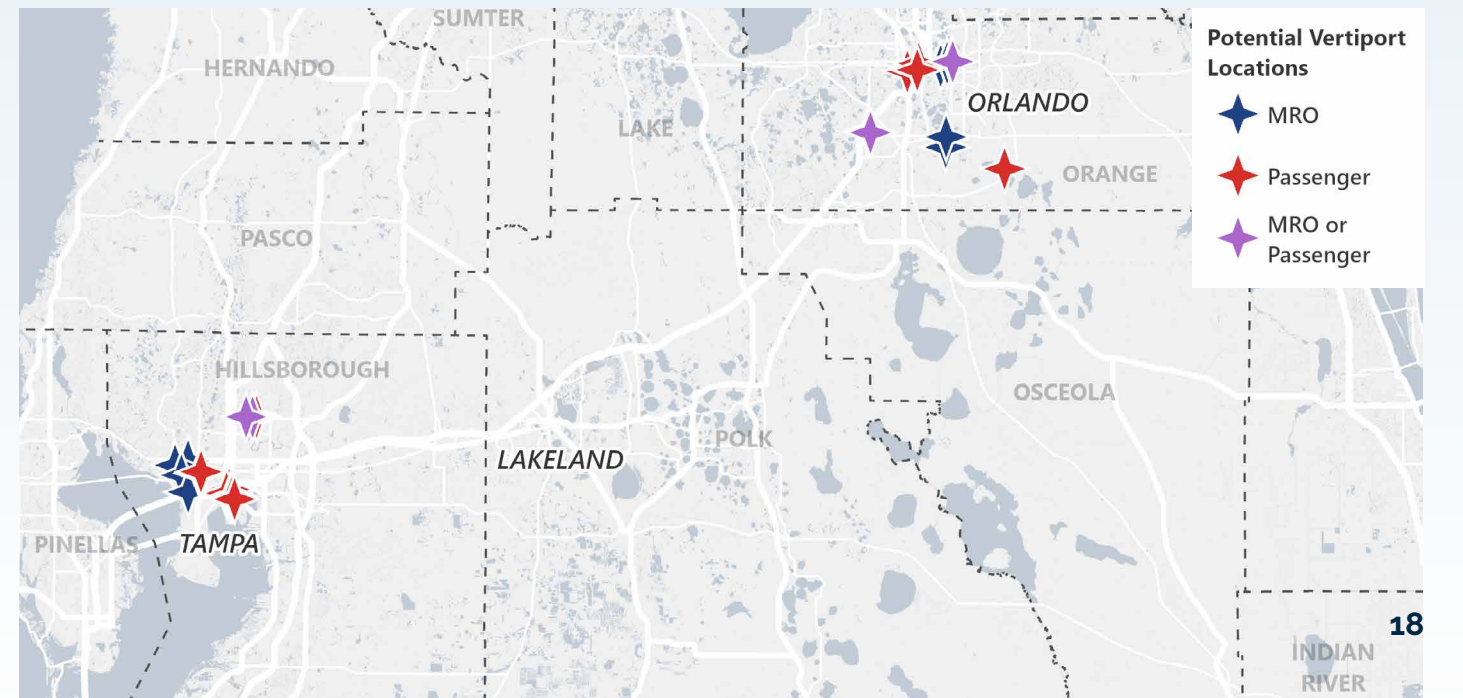
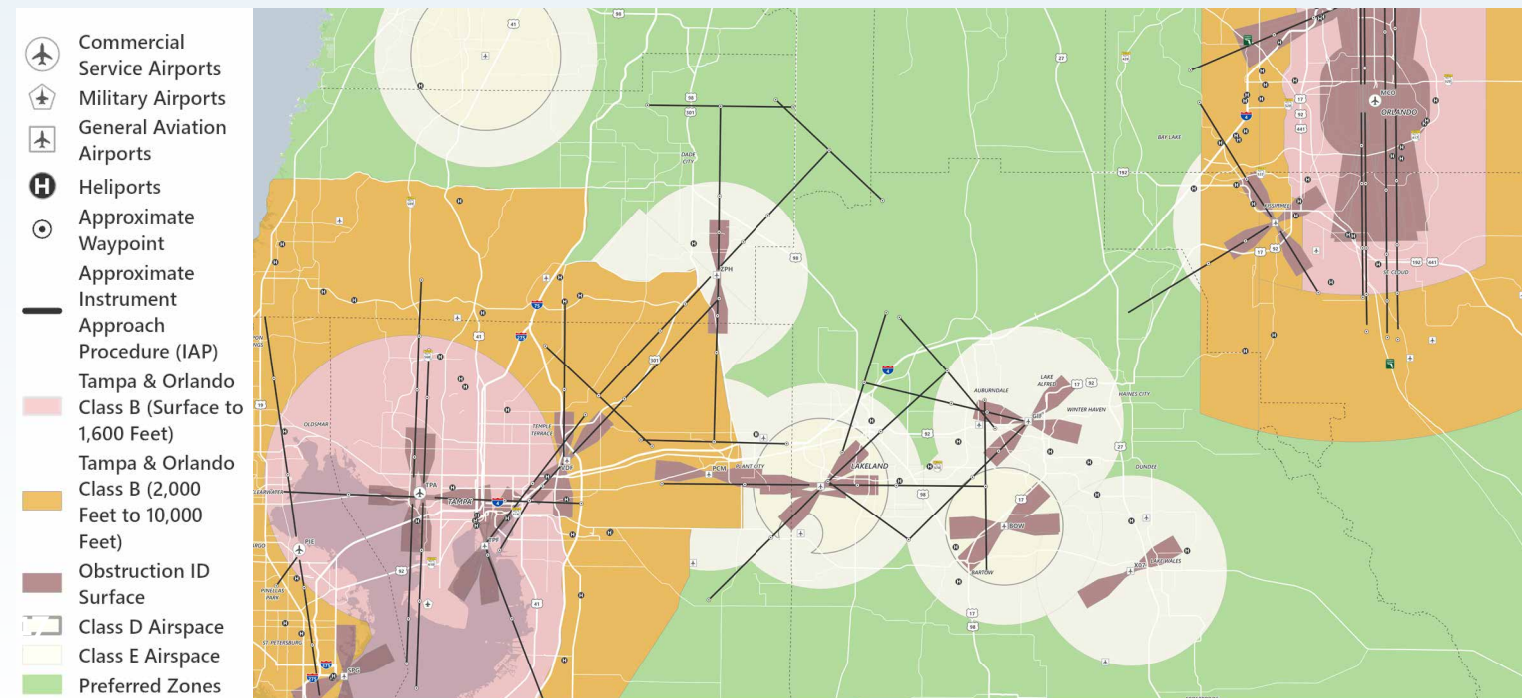
### Potential Site Locations

and stakeholder engagement by identifying sites that meet a baseline of feasibility using publicly available data and desktop analysis. While MRO sites emphasize operational and logistical support for electric vertical takeoff and landing (eVTOL) vehicles, passenger-serving sites prioritize proximity, user convenience, and multimodal access. Each type of site is evaluated independently, guided by unique criteria and assumptions aligned with its operational purpose.

Using more than 239,000 parcels as a starting point, the screening process identified 15 potential sites in Tampa and 15 potential sites in Orlando. From this pool, a subset of nine (9) MRO sites, 16 passenger sites, and five (5) sites that could be either MRO or passenger were shortlisted for further evaluation, based on suitability scoring and spatial distribution.

MRO facilities are non-public-facing and serve as the operational core for vehicle support functions including fueling, charging, storage, and maintenance.

### Airspace Suitability Map



Site selection for MRO facilities was guided by:

- Industrial zoning compatibility
- Proximity to logistics hubs
- Access to existing aviation infrastructure

Passenger-facing facilities are positioned to optimize:

- Multimodal connectivity
- Access to high-demand corridors
- User experience and emergency response readiness

Some parcels exhibit characteristics suitable for either MRO or passenger-serving functions. These sites offer:

- High accessibility
- Adequate space for scalable development
- Operational adaptability

Current land uses range from open land to underutilized parking areas, indicating strong potential for redevelopment or integration into existing aviation and commercial zones.

While both airspace and landside screening provide independent value, their integration allows planners and decision makers to weigh trade-offs and make informed decisions based on identified challenges or opportunities. This will be accomplished through a Level 2 screening and subsequent site feasibility assessments.

### Vertiport Specifications & Readiness

Vertiports serve as specialized takeoff and landing hubs for AAM systems, including eVTOL aircraft, playing a critical role in enabling the safe and efficient integration of these emerging technologies. To support the strategic deployment of vertiports, FDOT is developing comprehensive planning guidance that addresses essential factors such as land use and zoning regulations, nearby airspace classifications, charging site safety and fire mitigation measures, accessibility to emergency services, and seamless connectivity with existing transportation networks.

Meeting the technical demands of vertiport infrastructure requires careful attention to spatial capacity, rigorous compliance with safety standards, and ensuring adequate power supply to support eVTOL operations. SunTrax's dedicated AAM facility and Research & Development division will spearhead data collection efforts on eVTOL aircraft performance, vertiport design and site safety parameters, marking, lighting, and visual aids, as well as advanced stability systems, particularly those that enable controlled hover out of ground effect. Additionally, environmental factors, such as wind and turbulence, weather conditions, winter operations, and electromagnetic effects from nearby devices will be studied. The research will also account for infrastructure requirements tailored to the diverse and unique configurations of eVTOL aircraft, ensuring that vertiport designs evolve in step with technological advancements.

can identify potential airspace, safety, and operational issues before major investments are made. This helps stakeholders, including state and local agencies, transportation departments, and nearby aviation facilities, collaborate effectively and develop consistent standards.

Site selection is also highly dependent on airspace congestion, vertical structure clearances, and compliance with all applicable FAA regulations regarding airspace management. For vertiport sites on the ground level or on the top of existing buildings, parking garages, or other such buildings, the primary governing factors would be the space needed for the touchdown and liftoff area (TLOF), final approach and takeoff area (FATO), obstacle clearance areas, apron and parking clear of the takeoff and landing areas, airspace protection zones, charging infrastructure, emergency access and firefighting as well as space for roads, access, and terminal facilities.

Early and ongoing stakeholder engagement during all stages of vertiport development

- Vertiport infrastructure:**
- |  |                               |
|--|-------------------------------|
| 1. High Powered Charging Stations      | 5. Aircraft Parking Positions |
| 2. Passenger Facilities                | 6. Maintenance Hangar         |
| 3. Integrated Weather And Data Systems | 7. Traveler Parking/Access    |
| 4. Takeoff And Landing Area            |                               |

Vertiport Rendering



### Space Requirements

Airside Items	
Take-off and Landing Area	0.35 acres
eVTOL Parking	0.4 acres per space
Hangar/Maintenance Facility	0.5 acres
Support Equipment (Weather station, communications, lighting, fire safety, chargers, etc.)	0.5 acres
Landside Items	
Passenger Facilities	0.1 acres
Vehicle Parking	0.25 acres
<b>Total (4 eVTOL Spaces)</b>	<b>3.3 acres</b>

Initial surveys have been completed for Orlando and Tampa city centers. The Department considered a number of landside and airside criteria to identify potential vertiport locations.

## Vertiport Power Infrastructure

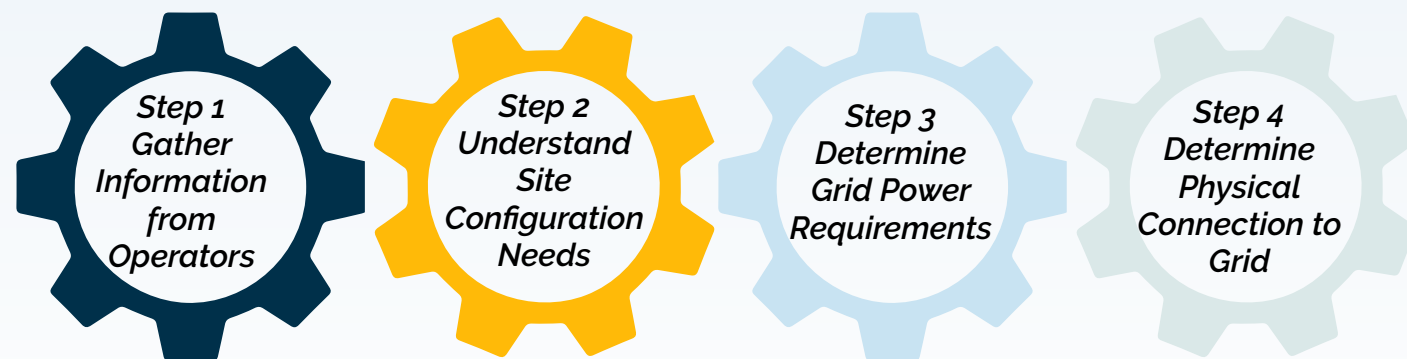
As eVTOL aircraft are powered by electric batteries, electricity availability at dedicated AAM vertiports is essential. Coordination with electric utility providers is required to ensure not only that the necessary electric infrastructure is installed, but that capacity is sufficient for safe and efficient operations.

Vertiport power infrastructure requirements include an electric distribution system dedicated to charging (such as a distribution-level transformer), conductors, on-site battery energy storage systems (BESS), protection systems (e.g., relays, circuit breakers, fuses), and charging cables and connectors. Certain components of electric aircraft charging infrastructure and charging standards are expected to be similar to that of existing EV charging infrastructure, except for the increased power capacities and size of BESS required. Charging or connection requirements and standards at vertiport sites can vary based on the number of chargers, aircraft duty cycle, charging speed, battery chemistry, charging system, and power demand from other electrical components of the infrastructure.

Meeting operational characteristics of higher capacity batteries and novel systems is essential for AAM. OEMs and site operators may implement alternate charging methods, including mobile charging systems, fixed battery storage, cable and/or on-board battery cooling, battery swapping, or other concepts. Considering the site-specific load and equipment capacity, immediate electrical installation and upgrades may be required, depending on conditions.

### Process to Connect Vertiport to Power Grid

Prior to engaging with local utilities to determine what level of effort is needed to connect a vertiport to the power grid, information about the new load is required. Proponents for new vertiports must gather this information in advance to facilitate conversations with the utilities at the site level. Although public information is available on the locations of transmission lines and substations, it does not help with determining the available capacity of the system for a new load, which requires engagement with utility providers. The following figure outlines the steps required for connecting vertiports to the power grid.



## Power Requirements for Vertiports

Vertiport power requirements will be dependent on the OEMs specifications and the operational requirements of the owner/operators. At least 1 megawatt power supply (and potentially higher) should be planned for vertiports to align utility upgrade timelines with the market speed of AAM deployment. However, some general assumptions can be made regarding airside and landside power requirements, as shown in the table below.

### Assumed Power Requirements for 2-Charger Vertiport

Airside Items	
Lighting	3 kw
Support Vehicle Chargers – Level 2	30 kw
Support Vehicle Chargers – DCFC (Direct Current Fast Charge)	132 kw
eVTOL Chargers (2 Simultaneous)	700 kw
Landside Items	
Lighting	5 kw
HVAC	10 kw
Building Load	10 kw
Car Chargers – Level 2	135 kw
Car Chargers – DCFC	198 kw
<b>Total Peak Power</b>	<b>1,223 kw</b>

### Alternative Power Sources

A potential infrastructure challenge and growth area for AAM is the availability of the required power grid capacity and the efficiency of transmission and distribution of electricity within national, regional, and local interconnections in the grid. These are critical to make a successful business case for AAM infrastructure and associated eVTOL aircraft.

Solar is a common energy source in Florida and has been used on industrial projects for additional power. Determining the desired amount of solar power to be used by a vertiport will help in calculating the size of the solar system needed. This is typically the daily energy used divided by the peak sunlight hours. It may be unreasonable to fully power a vertiport on solar generation alone. It could be viable as a backup power source, or be used to charge BESS infrastructure.

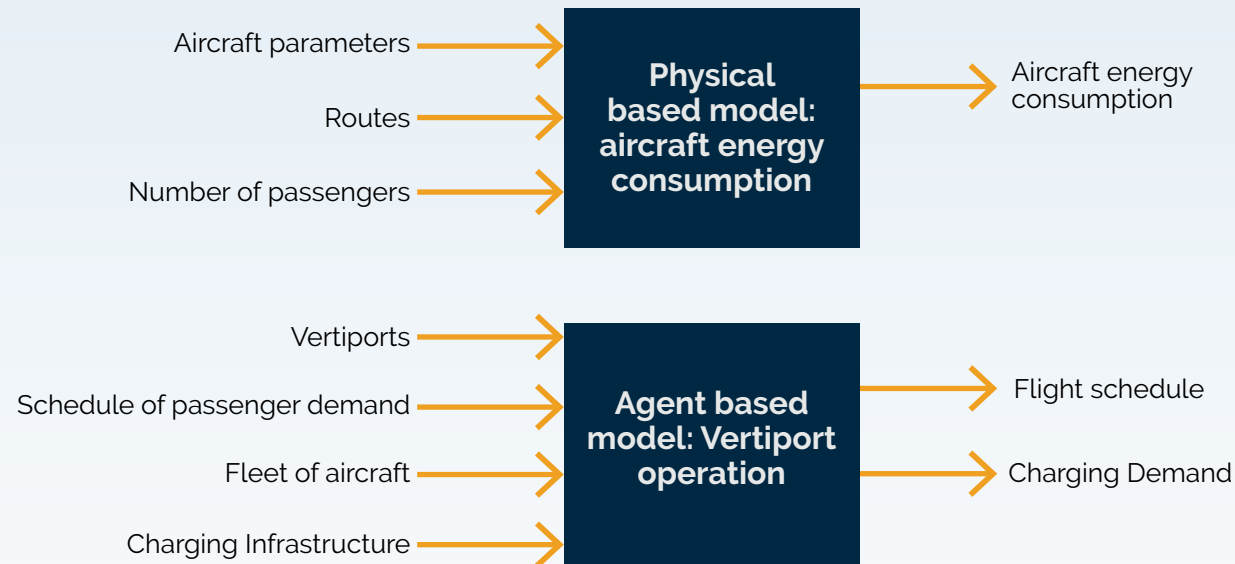
Hydrogen is emerging as an alternative fuel for AAM aircraft that offers potential for longer flight durations, reduces emissions, and supports a more sustainable aviation industry. Hydrogen's higher energy density compared to lithium batteries allows for an extended range, which could aid in diversifying AAM operations. eVTOLs also face limitations in battery weight, cold-weather performance, and grid capacity which may not apply to alternative fuel sources.

### Site Electrical Design for Vertiports

A suitable vertiport site must meet key criteria in three areas - power availability, ground access, and airspace clearance. Power needs, as discussed in earlier sections, should be confirmed with the local utility provider to ensure grid compatibility. The site must also support access for operators, airport/vertiport emergency response, maintenance crews, passengers, and freight, depending on the intended use. Airspace accessibility should be evaluated using geospatial data and As-Built plans to identify any obstructions to FAA-defined surfaces, such as approach paths, transitional zones, and Object Identification Surfaces (OIS). In addition to ascertaining individual site size, cost, and execution plans, regional planning is also required which may affect multiple sites requiring wider involvement from all stakeholders.

Modeling the physics and power requirements behind operating eVTOL aircraft as well as information on flight routes and regional flight demand are necessary to anticipate charging requirements and size of different vertiport sites. The following figure shows an overview of various physical and operational factors that impact charging requirements and the electrical design of vertiports.

#### Physical and Operational Factors Impacting Charging Requirements of a Vertiport Site



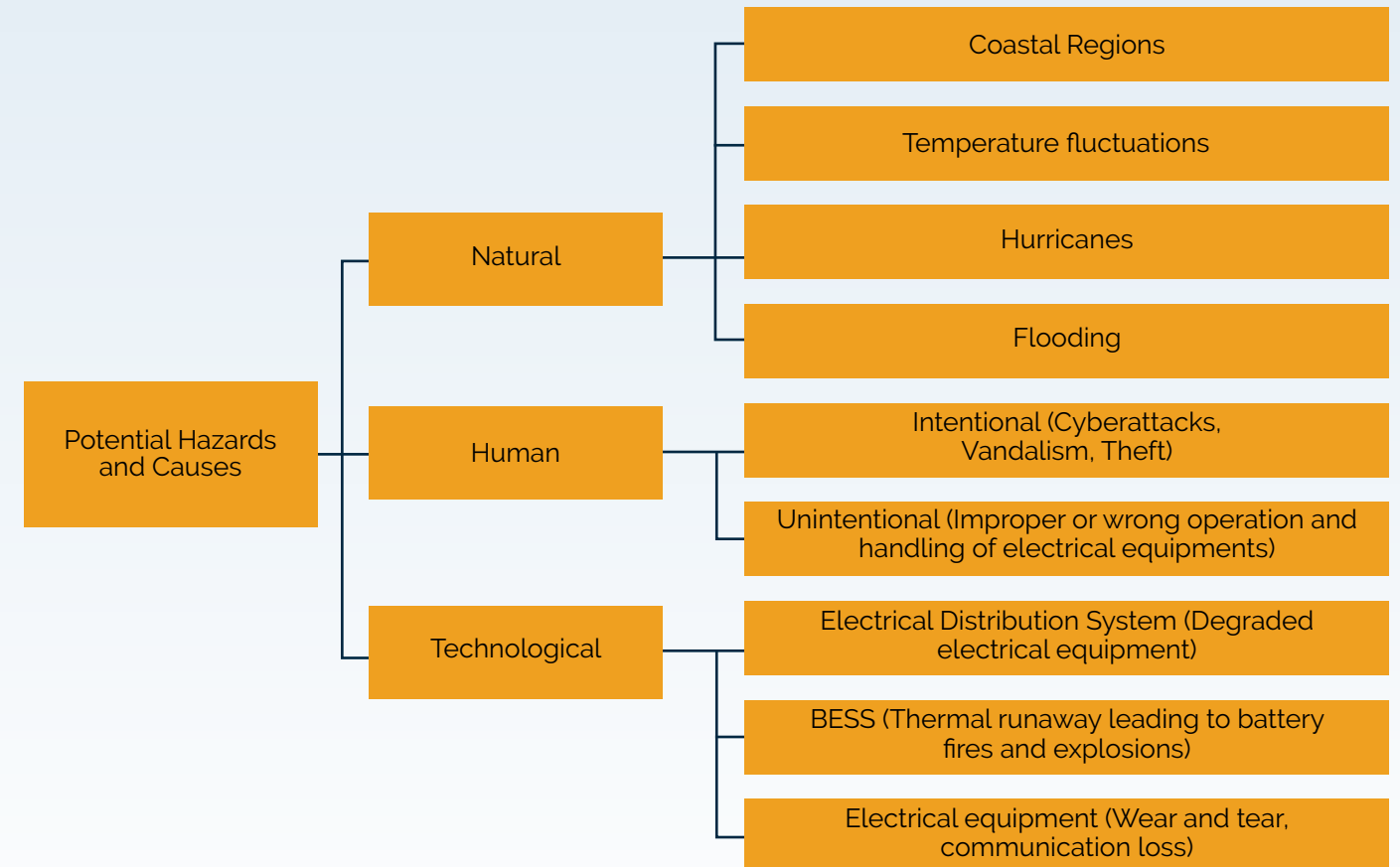
(Source: Solanki et al., 2023)

### Hazard Analysis and Risk Mitigation

It is important to identify and prepare for the new risks and hazards that are anticipated from changes in the existing power infrastructure due to the integration of advanced air mobility assets and the associated charging infrastructure. In addition, the use of hybrid VTOL aircraft or alternative clean energy sources, like hydrogen, creates a mixed-fuel environment at the site and has the potential to introduce additional hazards. Such hazards are site-specific and depend on the scale of deployment, but can be categorized as natural (e.g., geographic location, topography, or climatic conditions), human, and technological which can lead to thermal (fire), physical, electrical, or chemical hazards.

As AAM infrastructure can be deployed at airports, heliports, and vertiports, the related site authorities, managers, and operators must be aware of standards for appropriate site selection, conduct site-specific hazard analysis, develop a hazard management framework, and be trained to mitigate any potential hazards before deployment of charging systems. Isolation of the fault during hazards, periodic maintenance and inspection of protection systems, compliance with OEMs manual for proper equipment operation, and developing guidance and site-specific risk matrix for AAM infrastructure are critical to hazard mitigation.

#### Sources of Hazard for AAM Infrastructure and their Potential Causes



## Airspace Considerations

The National Airspace System (NAS) is the framework that was created to spatially separate and control aircraft where they are more likely to come into conflict with other aircraft. Different aircraft types will operate at a set cruising altitude which generally keeps them out of conflict with other aircraft. These layers of airspace are analogous to an upside-down birthday cake (see below), with aircraft operating in the specific layers of the cake. However, when aircraft are in their approach or departure, they will cross through other layers of airspace, which is essentially where the points of conflict are most likely to occur. The NAS establishes these levels of airspace surrounding airports to divert traffic away from the areas where aircraft approaches are located, and to actively manage the aircraft within that airspace to avoid conflicts with other aircraft.

Florida's vision is to establish AAM-specific flight corridors that connect key destinations throughout the state. These corridors will be established in coordination with the FAA and in conformance with the rules that are being developed nationally to govern AAM. These aircraft typically operate between 1,200 and 4,000 AGL (above ground level), and the corridors will be developed to avoid controlled airspace when possible. Ultimately, the new rules being developed by the FAA may allow the incorporation of AAM vertiports as controlled airspace, further managing aircraft to avoid conflicts.



## Controlled vs. Uncontrolled Airspace

**Controlled Airspace** refers to designations of airspace within the NAS that are under direct control of an Air Traffic Controller (ATC) who controls what aircraft can enter the airspace and how these aircraft may operate within that airspace. This is one of the primary tools of avoiding conflicts between aircraft, where ascent and descent of aircraft may otherwise be in conflict with aircraft operating at a level cruise altitude. Controlled airspace is actively managed, whereas uncontrolled airspace is not actively managed.

**Uncontrolled airspace** allows aircraft to operate according to the pilot's navigation and direction, Visual Flight Rules (VFR), using visual navigation and visual see-and-avoid approaches. These are typically recreational, agricultural, cargo, and low-level General Aviation (GA) flights.

**Airspace Classifications:** Airspace in the United States is divided into several classifications (refer to pages 17-18) each with specific requirements, types of allowable activities, and aircraft operations.

## Flight Rules

Flight operations in the NAS are governed by two primary sets of rules: **VFR** and **Instrument Flight Rules (IFR)**.

**VFR** allows pilots to navigate by visual reference to the horizon, terrain, and other aircraft, and requires Visual Meteorological Conditions (VMC), typically with visibility of at least three statute miles. VFR is primarily used in Class E, D, C, and B airspace below 18,000 feet Mean Sea Level (MSL). Under VFR, pilots are responsible for maintaining separation from terrain and other aircraft. Air Traffic Control (ATC) clearance is not required unless entering controlled Class B or C airspace.

**IFR** is used when visual references are insufficient, such as in poor weather or at high altitudes. Pilots rely on cockpit instrumentation to navigate, and ATC provides separation from other aircraft and terrain. IFR operations are managed through the NAS by ATC, Terminal Radar Approach CONTROL (TRACON), and Air Route Traffic Control Centers (ARTCC) systems. Airports that support IFR must have published instrument approach procedures to guide aircraft safely during arrival and departure. IFR is a classification that applies to the aircraft, the pilot, and the airport, all requiring certification for IFR operation. For an airport to be established as IFR, it needs the ability to control airspace and requires the FAA to develop instrument approach procedures that are specific to each airport, a process that can take three (3) or more years for the FAA to complete.

Currently, AAM aircraft operate under VFR; however, IFR will be necessary to support commercial operations and flight in low-visibility conditions. To enable IFR operations, aircraft must be certified along with the pilot (or autonomous system) and the vertiport being accessed. Additional research for VFR operations would focus on enhancing situational awareness through improved weather forecasting, terrain avoidance systems, and pilot decision-making under visual conditions. For IFR operations, research would center on optimizing navigation and communication technologies, refining air traffic control procedures, and advancing automation to ensure safe and reliable flight in instrument meteorological conditions.

# AIRSPACE CLASSES

**CLASS A** airspace is designated for commercial jets and high-performance aircraft, ranging from 18,000 to 60,000 feet MSL. It is strictly controlled and requires an IFR clearance, Mode C transponder, and Automatic Dependent Surveillance- Broadcast (ADS-B) Out; VFR operations are not permitted.

18,000' MSL

14,500' MSL

10,000' MSL

**CLASS B** airspace surrounds major airports such as MIA, TPA, and MCO, extending from the surface up to approximately 10,000 feet above Mean Sea Level (MSL), depending on the airport. It requires ATC clearance, two-way radio communication, a Mode C transponder, and ADS-B Out.

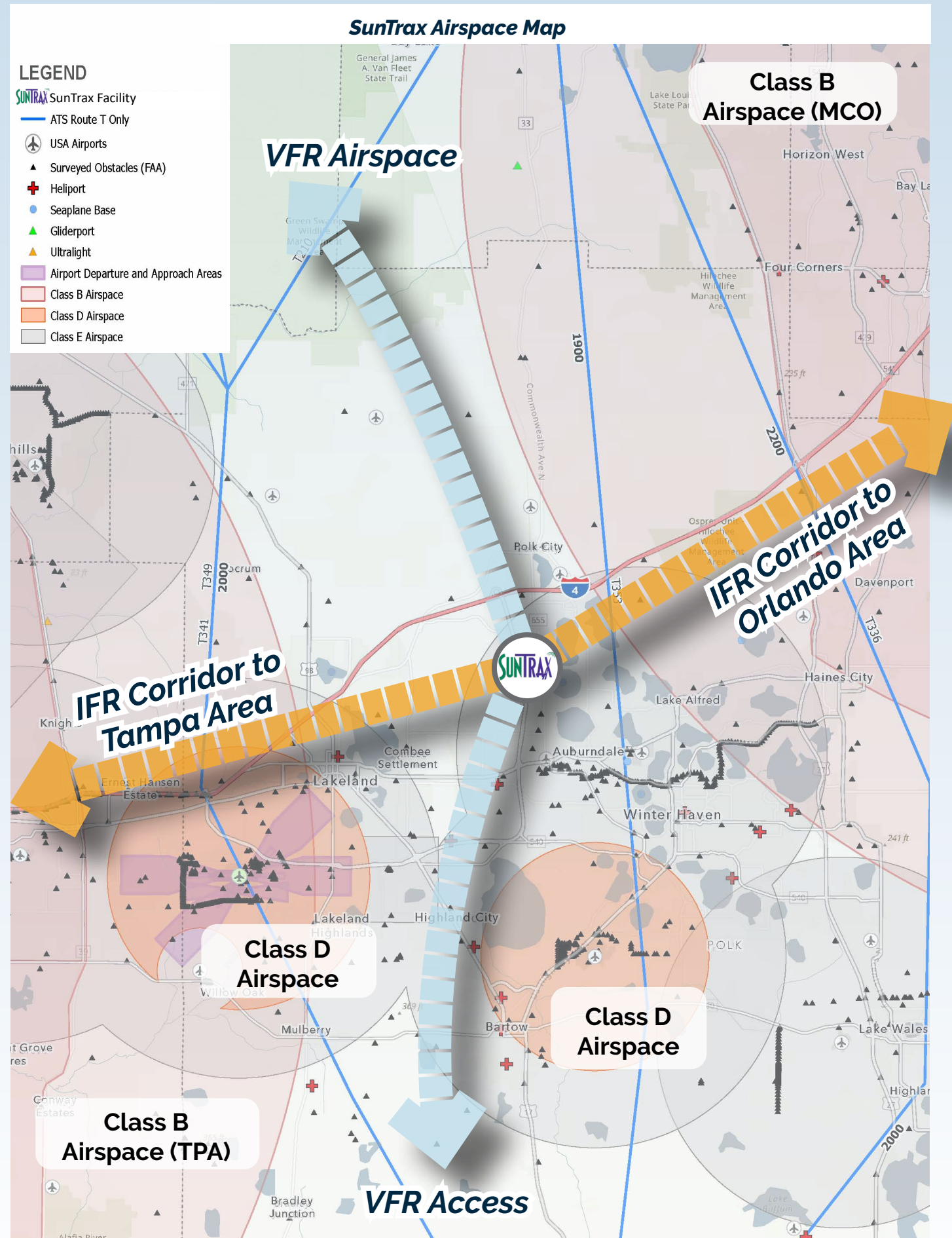
ADS-B Required  
ADS-B Not Required

**CLASS C** airspace encompasses medium-sized airports and extends from the surface to around 4,000 feet Above Ground Level (AGL). Entry requires two-way radio communication, a Mode C transponder, and ADS-B Out.

**CLASS E** airspace fills in the gaps between other controlled airspace classes, typically starting at 700 or 1,200 feet Above Ground Level (AGL) and extending up to 18,000 feet MSL. IFR operations require ATC clearance, while VFR flights do not require communication.

**CLASS G** airspace is uncontrolled and found below Class E, primarily in rural areas. It extends from the surface to either 700 or 1,200 feet AGL and does not require ATC communication.

**CLASS D** airspace covers smaller towered airports and ranges from the surface to about 2,500 feet AGL, requiring only two-way radio communication for entry.



## Enabling Liftoff

At this time, there are no airworthiness standards or operational rules that apply specifically to AAM. This means that AAM must be granted an Experimental Aircraft certification that allows them to operate under certain conditions as determined by the FAA, and these certifications will apply to specific aircraft manufacturers and models. Florida has developed an innovative approach to safely test and deploy AAM while allowing for regulations to catch up.

## Initial VFR Operations

SunTrax presents a strategic opportunity for Florida as it is located between Tampa and Orlando on one of the highest travelled corridors within the state. During initial operations all aircraft would operate under VFR using existing airspace and ATC procedures. The aircraft operate essentially like helicopters and small aircraft such as Cessnas or Pipers.

The SunTrax Airspace Map shows how SunTrax is positioned between the Class B airspace of Tampa and Orlando, in addition to several other Class D airspaces from nearby General Aviation (GA) airports. SunTrax is situated beneath controlled Class E airspace, which begins 700 feet above ground level. Aircraft operating at SunTrax may fly below this 700-foot ceiling without requiring FAA control. As aircraft move north of the controlled airspace, indicated by the wide dashed blue line, they can operate up to 1,200 feet without entering Class E airspace. The region also features T-routes, depicted as straight blue lines, which are low-altitude RNAV (Area Navigation) routes designed for GPS-equipped aircraft typically flying below 18,000 feet in controlled airspace. Unlike traditional airways that rely on ground-based navigation aids, T-routes offer more flexible and efficient routing through satellite navigation.

## IFR Highways in the Sky

Florida is poised to be the first in the nation to establish IFR flight corridors that are specific to AAM. With SunTrax as the hub, IFR flight corridors would be developed in coordination with the FAA, to establish commercial operations of AAM aircraft that connect to two of the biggest metro areas in the state and to the Space Coast (home to NASA's Kennedy Space Center). These IFR corridors will require the establishment of flight procedures specific to the AAM craft and purposed to serve the specific regional vertiports.

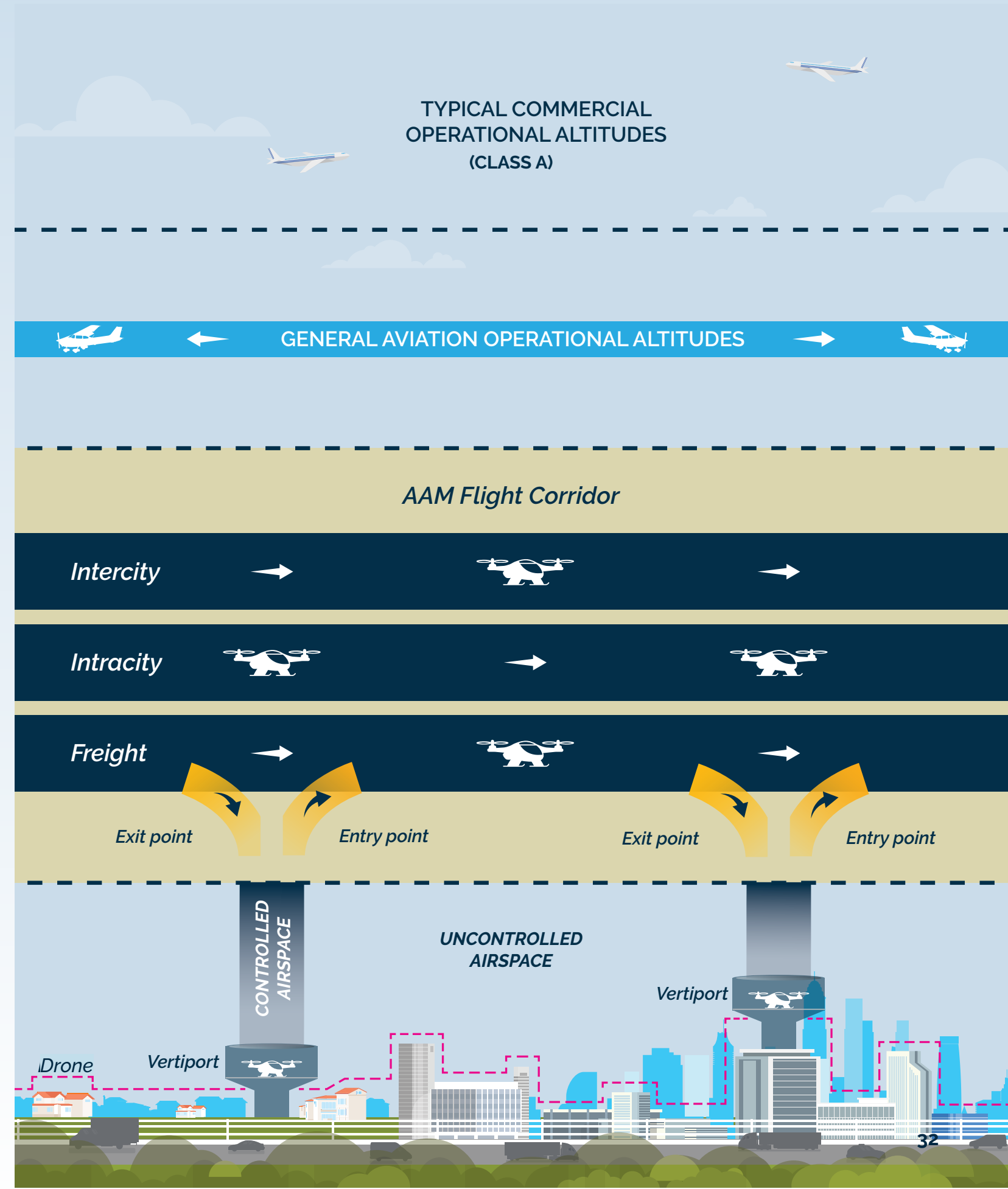
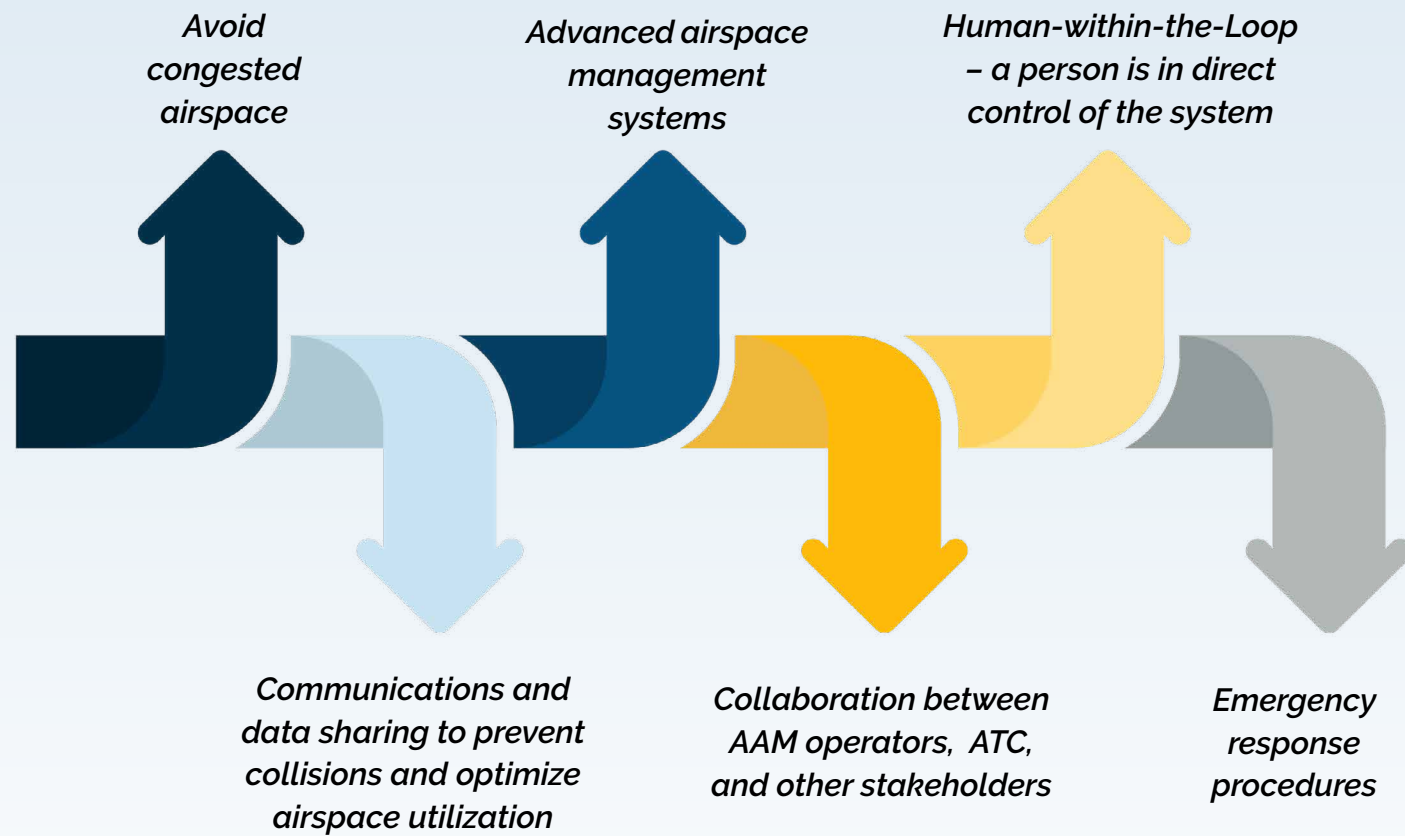
The graphic on the following page shows how the corridors will integrate into existing airspace, and how the different types of AAM travel are intended to be separated within the corridor. Each vertiport will have an entry/exit point into the corridor, allowing for a managed approach in and out of the corridor that will avoid conflicts with other GA aircraft.

This will act as a catalyst for expanding the system throughout Florida and will stimulate future infrastructure investment at other strategic vertiport locations around the state.



### Airspace Deconflicting Approach

Today's AAM are operating under VFR, which means the pilot is responsible for detecting and avoiding potential conflicts, similar to how most helicopter operations currently work. In the future, AAM will be outfitted with up-to-date technology that allows them to detect and avoid obstacles and other aircraft digitally, and to integrate their flight path and current position within the broader aircraft control system. The aerial highway network utilizing IFR operations will further enhance the conflict avoidance of these aircraft. The location of a vertiport or airfield can also influence conflict avoidance. AAM aircraft operating at vertiports in busy airspace are more likely to encounter a higher number of potential conflicts with other aircraft. Therefore, strategically locating vertiports around the state is vital for conflict avoidance. General guiding principles for airspace conflict resolution would involve:










# STAKEHOLDER ENGAGEMENT

The FDOT recognizes the essential role of stakeholder engagement in planning for the successful integration of the AAM market in Florida. Meaningful outreach with our stakeholders is accomplished through a multi-step process with transportation partners and industry professionals at all levels. Providing multiple, convenient, regional and industry-focused opportunities for two-way communication between FDOT and partner agencies, interested stakeholder groups, and the public is vital.

## Accomplishments

Our stakeholder engagement to date has used a multi-step process to provide forums that bring together key stakeholders from local, state, and federal levels, facilitating the exchange of industry updates among manufacturers, operators, and developers, and promotes the education and training of local governments for effective AAM implementation. The timeline and statistics below summarize the accomplishments to date.

						
<b>Dec 2021:</b> Florida begins initial strategic planning for AAM	<b>Nov 2022-Aug 2023:</b> FDOT hosts AAM Working Group meetings	<b>Sep-Nov 2023:</b> FDOT Establishes AAMAC	<b>Mar-Jun 2024:</b> FDOT hosts AAM Tabletop Exercises	<b>Mar-Sep 2025:</b> FDOT hosts statewide local government training for AAM	<b>Oct 2025:</b> AAM Session during Florida Transportation Plan meeting	<b>Nov 2025:</b> AAM Session during Florida Automated Vehicle Summit
<b>20</b> Workshops Held	<b>300</b> Elected Officials and Planners Engaged	<b>4</b> AAMAC Meetings Hosted	<b>18</b> Local Government AAM Trainings Conducted			

## Actions Moving Forward

The Department will continue to undertake strategic engagement efforts as the AAM network takes shape throughout the state. Guided by key principles, engagement actions are organized into four phases that align with FDOT's AAM implementation plan to complete the necessary actions for operational planning, long-term financial sustainability, and broad market integration.

As part of these efforts, the Department will conduct monthly coordination meetings with the FAA, including regional planning entities, local governments, industry leaders, and other key stakeholders to ensure AAM integration is embedded in the broader transportation planning process. To facilitate these recurring engagements, the Department will establish a centralized Engagement Hub to serve as a collaborative platform for information sharing, stakeholder input, and progress tracking. This hub will help align priorities, address regulatory and infrastructure considerations, and promote inclusive decision-making that supports the successful implementation of AAM throughout the state.



### Phase 1 | Market Consultation (Fall 2025)

**Goal: Build/discuss Concept of Operations (ConOps), network, use cases, locations**

**Actions:**

- Coordinate with stakeholders to build the network backbone and identify vertiport sites, including use cases.
- Share the Department's plans for intercity trips, including travel demand, population, and demographic data to support AAM planning for industry and local governments.
- Promote AAM business opportunities, including SunTrax through targeted industry outreach and forums.
- Complete training on the Local Government AAM Toolkit, emphasizing land use and site approval within the aerial highway network.
- Engage with local communities as they develop and share their plans for AAM, fostering dialogue and ensuring alignment with broader network goals.

### Phase 2 | Establish SunTrax Air (Early 2026)

**Goal: Operationalize AAM R&D at SunTrax**

**Actions:**

- Engage SunTrax partners and stakeholders to deploy advanced AAM technologies.
- Partner with stakeholders to create hands-on AAM workforce training programs.
- Host webinars, meetings, and regional workshops to support vertiport planning.
- Host a statewide AAM stakeholder meeting at SunTrax.

### Phase 3 | System Kickoff (Late 2026)

**Goal: Educate the public to build trust**

**Actions:**

- Conduct tabletop exercises to evaluate airspace conflict
- Launch a public education campaign

### Phase 4 | Full Deployment (beyond 2026)

**Goal: Expand and calibrate program and system**

**Actions:**

- Continue to engage stakeholders and local communities to gain feedback on the initial operating network.

For additional information on FDOT AAM initiative visit [www.fdot.gov/aviation/advanced-air-mobility](http://www.fdot.gov/aviation/advanced-air-mobility) or [suntraxfl.com/suntrax-air/](http://suntraxfl.com/suntrax-air/). Your engagement is critical to understanding the industry needs, aligning the initiative with community visions, and advancing the implementation of this new mode of transportation.

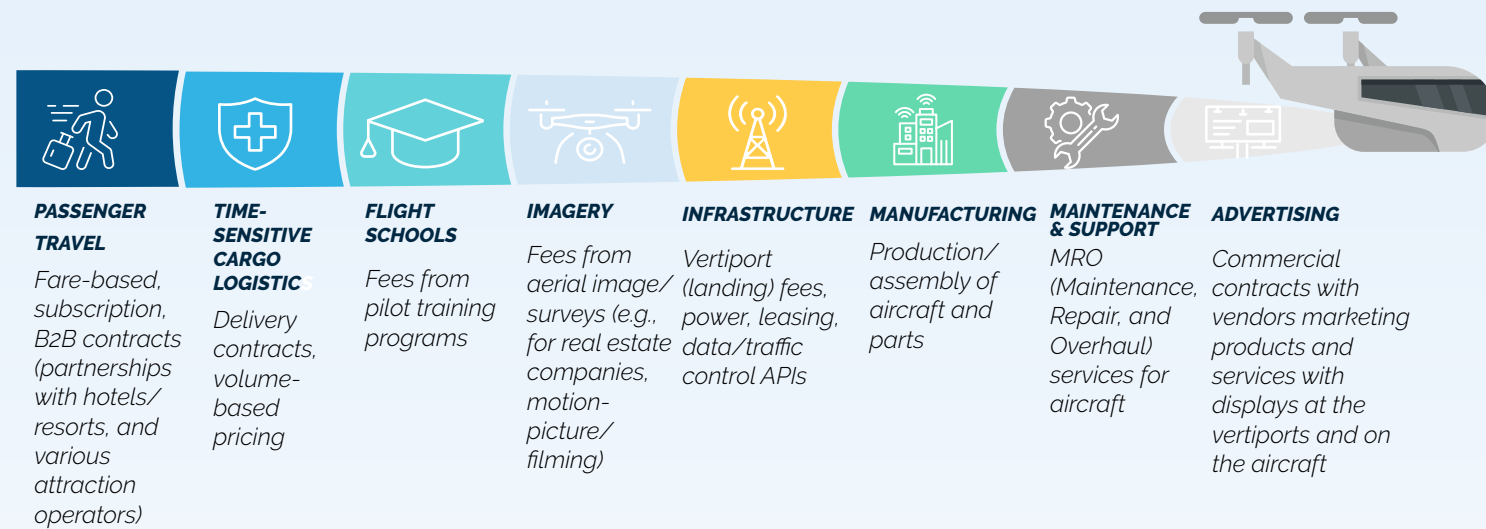
# BUSINESS CASE

## Partnership Approach

Florida is committed to working with the AAM industry and is investing in key infrastructure like vertiports and testing centers to support it. FDOT is developing custom curriculum within the Florida Transportation Academy to support the AAM industry through hands-on training and will expand the focus of the new Florida Research Institute to include in-depth research on AAM technology. **With friendly regulations, a focus on innovation, and development of a strong and ready workforce, Florida is well-positioned to help AAM companies launch and grow profitable business.**

## AAM Opportunities

AAM businesses can capitalize on various types of revenue source opportunities, including:



## Ridership and Tonnage Potential

The overall volume of AAM passenger trips among Florida's key activity centers is forecasted between 220 thousand to 1.4 million in the targeted opening year of 2027, and then rising robustly to between 11 million to 18.7 million annually in 2050. AAM freight tonnage is forecasted in the 97 to 156 tons range in the 2027 opening year, increasing to the 10,500 to 16,800 tons range in 2050.

The details of passenger and freight travel market analysis is included later in the document.

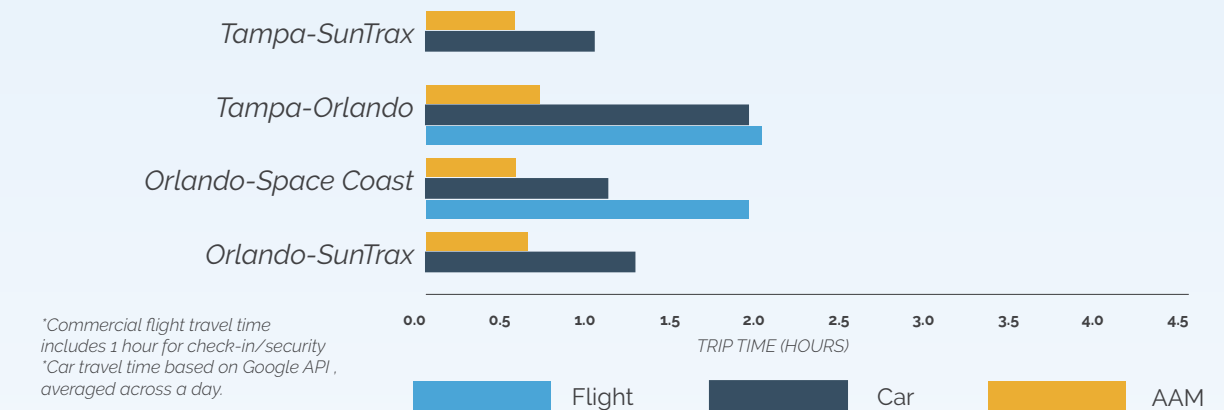
## Modal Attractiveness

Beyond the initial network, travel on some Florida corridors can take more than 4 hours to cross, adding congestion to Florida's roadways. AAM provides a faster, more convenient alternative to ground-based transportation. With speeds higher than cars, travel time is reduced, making same day business trips feasible. The boarding process and flexible reach offer advantages over traditional air travel, with less downtime at airports and the ability to alter routes efficiently to serve client needs.

By strategically placing vertiports AAM can complement existing modes, providing links between ports, airports, rail, and intracity transit. These connections make the hubs more viable for passengers from outside the metropolitan areas, such as tourists.

**50% Plus Reduction in Intercity Travel Times** **Provides Congestion-Free Travel** **Premium Travel Experience**

### AAM Travel Time Comparison



## Brightline Intercity Rail

Brightline is a private intercity rail service, offering a premium connection between Orlando and Miami/Southeast Florida that opened in Sept. 2023, and generated about \$119 M in ticket revenue in 2024.

The success of Brightline shows there is a demand in Florida for the type of fast and convenient travel services that AAM can provide.

**1.6 M** 2024 Long-Haul (Orlando-Miami) Passengers

**\$119 M** 2024 Ticket Revenue

**3.5 Hours** 2024 Orlando-Miami Travel Time

Source: Brightline, Annual Report, April 30, 2025

## Passenger Travel Market

The Tampa – Orlando – Space Coast corridor is among the most traveled in the state, with congestion causing thousands of hours of delay per year in some sections. This market has a high demand for safe, reliable, and efficient alternatives to ground-based transportation.

The demand for intercity passenger travel was projected using forecasts from the Turnpike Statewide Model (TSM). TSM predicts intercity trips in three categories: business travel, tourism and leisure travel, and commute trips. Of these, business travel is expected to initially be the primary market for AAM travel. The passenger demand summary table shows the projected total annual demand for travel by all modes between the counties containing the AAM hubs.

### Annual Passenger Travel Demand

Passenger Trip Purpose	2027	2050	% Growth
Business	33.6M	128M	281%
Tourism + Leisure	172M	552M	219%
Commute	204M	591M	189%
<b>Total Passenger Demand (Trips)</b>	<b>411M</b>	<b>1,272M</b>	<b>209%</b>

Source: Florida Turnpike Statewide Model

The counties included in Phase 1A of the aerial network exchange 33.6 million business trips and 411 million total trips in 2027. By 2050 the AAM network is projected to allow for direct trips among the remaining phases, with passenger trips expected to about triple.

The business passenger use case is the primary market for early users of the AAM network. These users can absorb the relatively higher costs of the first flights, before economies of scale bring costs down. Business travel demand is projected to almost triple by 2050 across the entire network. The initial I-4 corridor alone is expected to see business travel grow by nearly 25 percent through 2050.

The tourism and leisure, and commuting segments of the transportation market along the I-4 corridor are expected to grow more than 35 percent by 2050. As the scale of the industry increases costs will fall, and consumer confidence in AAM will increase, leading to more of those markets switching modes to AAM.

As shown in the table below, the total demand across all the trip purposes is forecasted to amount to 411 million trips in 2027.

### 2027 Annual Passenger Trips

O\D	Business   All Trips									
	Sarasota	Pinellas	Hillsborough	Polk	Highlands	Osceola	Orange	Volusia	Brevard	Total
Sarasota		290.0K 1,491.0K	438.8K 1,793.7K	280.6K 519.8K	64.7K 145.7K	64.0K 141.5K	309.3K 629.2K	38.6K 70.8K	30.5K 63.6K	<b>1,516.6K</b> <b>4,855.4K</b>
Pinellas	290.0K 1.6M		3,585.9K 59.6M	216.8K 0.5M	10.9K 0.0M	66.1K 0.1M	356.1K 0.8M	69.0K 0.1M	46.1K 0.1M	<b>4,641.0K</b> <b>62.9M</b>
Hillsborough	438.8K 1.9M	3,588.3K 60.4M		958.4K 21.9M	26.1K 0.1M	133.9K 0.4M	759.2K 1.7M	147.4K 0.3M	130.0K 0.2M	<b>6,182.3K</b> <b>86.8M</b>
Polk	280.6K 519.5K	216.8K 513.1K	958.3K 21,500.7K		127.9K 2,231.6K	454.7K 13,927.4K	1,229.7K 16,449.7K	132.9K 264.1K	136.7K 276.8K	<b>3,537.6K</b> <b>55,682.9K</b>
Highlands	64.7K 145.7K	10.9K 25.1K	26.1K 60.0K	127.4K 2,293.8K		29.4K 90.0K	114.1K 268.2K	10.1K 20.7K	8.6K 21.2K	<b>391.3K</b> <b>2,924.9K</b>
Osceola	64.0K 141.5K	66.1K 149.7K	133.9K 354.9K	456.2K 13,908.1K	29.4K 90.3K		3,401.0K 63,400.4K	154.8K 349.4K	154.2K 1,031.3K	<b>4,459.6K</b> <b>79,425.5K</b>
Orange	309.3K 629.2K	356.1K 821.4K	759.2K 1,653.2K	1,230.5K 15,577.6K	114.1K 268.0K	3,422.2K 60,721.1K		776.4K 8,076.6K	1,517.9K 7,441.8K	<b>8,485.8K</b> <b>95,188.9K</b>
Volusia	38.6K 70.8K	69.0K 126.0K	147.4K 259.1K	132.9K 264.1K	10.1K 20.7K	154.8K 353.0K	776.4K 8,402.2K		578.6K 2,065.8K	<b>1,907.8K</b> <b>11,561.7K</b>
Brevard	30.5K 63.6K	46.1K 91.6K	130.0K 241.0K	136.7K 276.8K	8.6K 21.2K	154.2K 1,046.6K	1,517.9K 7,661.3K	578.6K 2,058.2K		<b>2,602.6K</b> <b>11,460.3K</b>
<b>Total</b>	<b>1.5M</b> <b>5.1M</b>	<b>4.6M</b> <b>63.6M</b>	<b>6.2M</b> <b>85.5M</b>	<b>3.5M</b> <b>55.2M</b>	<b>0.4M</b> <b>2.9M</b>	<b>4.5M</b> <b>76.8M</b>	<b>8.5M</b> <b>99.3M</b>	<b>1.9M</b> <b>11.2M</b>	<b>2.6M</b> <b>11.2M</b>	<b>33.7M</b> <b>410.8M</b>

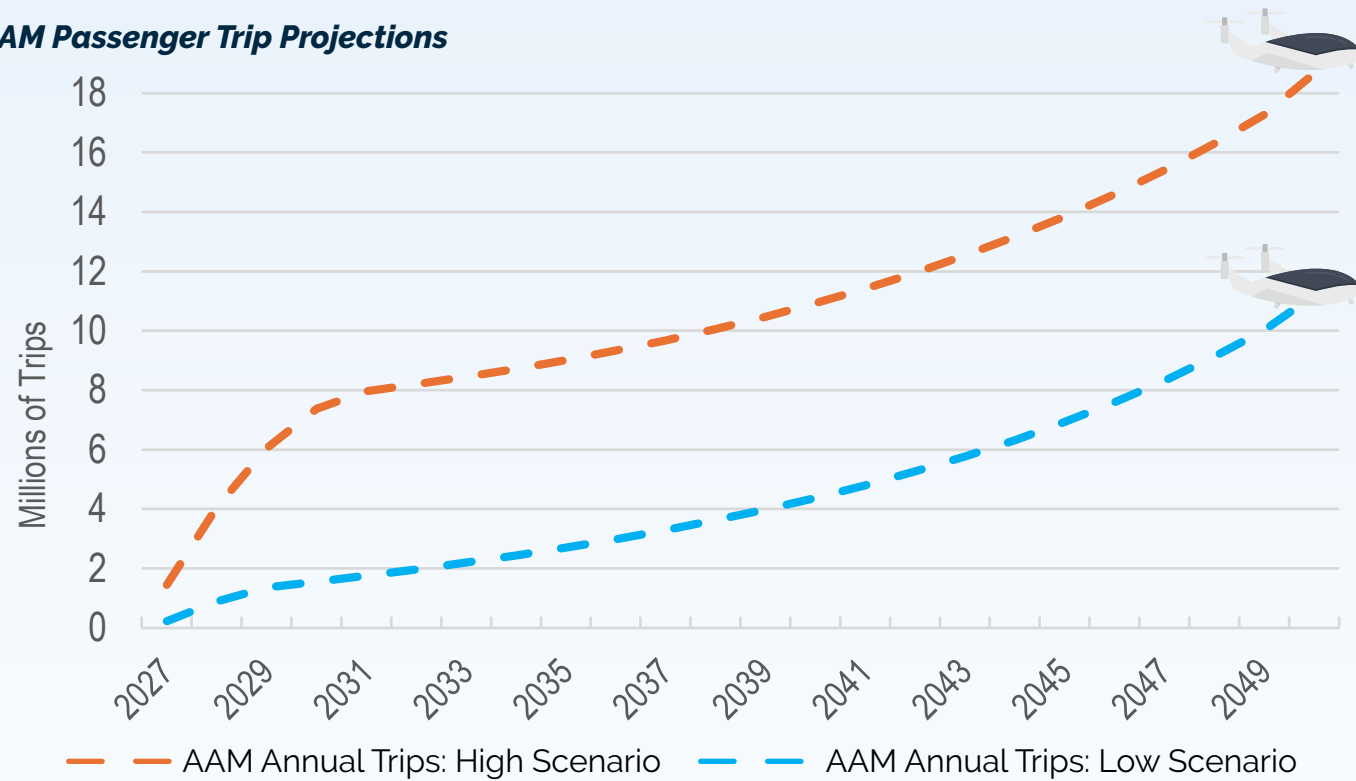
Source: Florida Turnpike Statewide Model

## AAM Ridership Potential

The Phase 1A modeling forecast suggests that AAM passenger trips could reach between 220,000 and 1.4 million trips in the initial operational year of 2027, with numbers climbing to somewhere between 11.2 million and 18.7 million annual trips for all the phases in 2050. This projected growth shows just how quickly this industry could take off, driven by increasing urban congestion, accelerated advancements in AAM technologies, and people looking for faster and more efficient ways to get around. Realizing this potential will rely on a solid network of vertiports, efficient charging systems, and smart air traffic solutions.

As the market matures, collaboration between aircraft makers, infrastructure builders, and service providers will be key to keeping operations smooth and the costs competitive. AAM has the potential not only to transform travel, but to spur new business models and reimagine how we think about short and mid-range travel. The graph below illustrates the low and high projections of AAM passenger trips from 2027 to 2050. As the network expands towards 2050 there is a surge in AAM demand representing not only the increased options and projected growth, but also increases in consumer interest and usage of AAM to complement other modes of travel.

### AAM Passenger Trip Projections



Source: Florida Turnpike Statewide Model

Of interest is the number of trips that could be served by AAM in 2027. The number of business trips and the total trips for all purposes are both shown by origin-destination (O-D) county pairs between the AAM hubs, with the largest volumes potential found in the Orlando-Space Coast, Orlando-Tampa, and Orlando-SunTrax segments.

The table below offers projected ranges of business and total trips by O-D county pairs that could be served by AAM in 2027.

### 2027 Annual AAM Passenger Trips Low/High

O\D	Business   All Trips									
	Sarasota	Pinellas	Hillsborough	Polk	Highlands	Osceola	Orange	Volusia	Brevard	Total
Sarasota		1.1K - 7.3K 3.8K - 25K	1.6K - 10.5K 4.2K - 28K							2.7K - 18K 8.0K - 53K
Pinellas	1.1K - 7.2K 3.9K - 26K			0.8K - 5.3K 1.3K - 9.0K						1.9K - 12K 5.2K - 35K
Hillsborough	1.5K - 10.2K 4.3K - 29K			2.5K - 16.7K 32.2K - 215K		0.4K - 2.9K 0.8K - 5.3K				4.5K - 30K 37.3K - 249K
Polk		0.8K - 5.2K 1.3K - 8.9K	2.5K - 16.7K 31.5K - 210K		0.2K - 1.6K 2.1K - 14K		4.2K - 27.7K 34.4K - 229K			7.7K - 51K 69.3K - 462K
Highlands				0.2K - 1.6K 2.2K - 14K		0.1K - 0.7K 0.2K - 2K				0.4K - 2.4K 2.4K - 16K
Osceola			0.4K - 2.8K 0.8K - 5.0K		0.1K - 0.7K 0.2K - 1.5K			0.5K - 3.5K 0.9K - 5.9K	0.6K - 3.8K 0.6K - 3.8K	1.6K - 11K 2.4K - 16K
Orange				4.2K - 28.3K 33.4K - 223K				3.0K - 20.0K 20.4K - 136K	5.7K - 37.9K 5.7K - 38K	13K - 86K 59.5K - 397K
Volusia						0.5K - 3.6K 0.9K - 6.0K	3.0K - 19.9K 21.1K - 141K		2.0K - 13.5K 2.0K - 14K	5.6K - 37K 24K - 160K
Brevard						0.6K - 3.9K 0.6K - 3.9K	5.7K - 38.0K 5.7K - 38K	2.0K - 13.5K 2.0K - 14K		8.3K - 55K 8.3K - 55K
<b>Total</b>	<b>2.6K - 17K 8.2K - 55K</b>	<b>1.9K - 12K 5.1K - 34K</b>	<b>4.5K - 30K 36.5K - 244K</b>	<b>7.8K - 52K 69.1K - 461K</b>	<b>0.4K - 2.4K 2.3K - 15K</b>	<b>1.7K - 11K 2.5K - 17K</b>	<b>12.9K - 86K 61.2K - 408K</b>	<b>5.6K - 37.1K 23.3K - 156K</b>	<b>8K - 55.3K 8.3K - 55K</b>	<b>45K - 303K 217K - 1.4M</b>

Source: Florida Turnpike Statewide Model

By 2050 all phases of the AAM network are expected to be in operation. The number of business trips potentially served by AAM could be in the range of 3.4M to 5.6M. The total trips potentially served by AAM for all trip purposes could be in the range of 11.2M to 18.6M annually.

## Freight Travel Market

As Florida's population and economy grows, so too does the amount of freight that moves throughout Florida. By 2050, the amount of freight moved between the major markets is expected to grow by almost 50 percent. As AAM continues to expand in Florida, AAM cargo opportunities will emerge as a viable opportunity particularly for high-value, time-sensitive cargo. Data analysis on freight travel demand shows the AAM market has a robust opportunity to provide cargo movements throughout the AAM network and yield profitability from day one.

Transearch data was used to estimate total annual freight travel demand throughout the I-4 corridor and the Phase 1 Aerial Network. The dataset provided county-to-county commodity flow estimates (in tonnage) for 2018, 2030, and 2045, which served as the basis for projecting demand in 2027 and 2050.

The summary table shows annual freight travel demand (in tonnage) for 2027 forecasted at 35 million tons, and increasing by 48 percent to total 51.7 million tons in 2050. As expected, trucks (including truckload, less-than-truckload, and private trucks) are the primary mode for freight movements between the analyzed hubs, carrying approximately 28 million tons in 2027, and increasing to 37 million tons by 2050.

The annual freight demand is further broken down to highlight which hubs generate and receive the highest freight tonnage. Catchment areas are defined at the county level, which should be considered when interpreting these OD commodity flow statistics.

### Annual Freight Travel Demand

Freight Mode	2027	2050	% Growth
Rail	6.8M	8.3M	23%
Truckload	14.2M	20.2M	42%
Less than truckload	312.2K	497.4K	59%
Private Truck	13.7M	16.2M	18%
Air	-	31.2K	
Water	1.7K	40.9K	2262%
<b>Total Freight Demand (Tons)</b>	<b>35.0M</b>	<b>51.7M</b>	<b>48%</b>

Source: Transearch

The 2027 Annual Freight Tonnage (all modes) table is presented in a standard O-D matrix format, with origins shown as rows and destinations as columns.

### 2027 Annual Freight Tonnage

O\D	Sarasota	Pinellas	Hillsborough	Polk	Highlands	Osceola	Orange	Volusia	Brevard	Total
Sarasota	-	129.0K	190.4K	46.7K	3.9K	36.7K	89.3K	44.2K	27.3K	<b>567.6K</b>
Pinellas	174.3K	-	542.4K	161.7K	6.7K	70.0K	212.8K	94.8K	70.6K	<b>1.3M</b>
Hillsborough	1.4M	3.2M	-	2.1M	121.0K	513.3K	1.9M	470.1K	710.2K	<b>10.5M</b>
Polk	277.9K	752.2K	9067.7K	-	74.8K	414.3K	2.1M	240.4K	1.0M	<b>13.9M</b>
Highlands	20.1K	8.3K	37.9K	67.6K	-	13.7K	50.2K	9.2K	5.8K	<b>212.8K</b>
Osceola	17.4K	45.4K	101.3K	80.4K	6.7K	-	282.5K	88.1K	54.4K	<b>676.4K</b>
Orange	154.3K	275.5K	656.0K	460.6K	35.9K	558.7K	-	1.1M	453.1K	<b>3.7M</b>
Volusia	34.8K	75.0K	213.1K	154.5K	7.0K	76.0K	694.6K	-	141.0K	<b>1.4M</b>
Brevard	56.6K	135.7K	337.2K	273.3K	14.5K	209.9K	1.2M	436.5K	-	<b>2.7M</b>
<b>Total</b>	<b>2.2M</b>	<b>4.6M</b>	<b>11.1M</b>	<b>3.4M</b>	<b>270.5K</b>	<b>1.9M</b>	<b>6.5M</b>	<b>2.4M</b>	<b>2.5M</b>	<b>35.0M</b>

Source: Transearch

## AAM Freight Tonnage Potential

To forecast potential AAM freight tonnage, Bureau of Transportation Statistics (BTS) T-100 market data were used, which provide freight tonnage movements between airports. Such data were then aggregated to develop county-to-county freight flow estimates for the hubs (with counties as catchment areas for the hubs). BTS T-100 market data for 2024 served as the baseline for projecting 2027 and 2050 values, with growth rates derived from Transearch data. AAM freight demand is assumed to account for 25 percent to 40 percent of total air freight tonnage. Using this methodology, AAM freight demand is forecasted to range from 97 to 156 tons in the 2027 opening year (for Phase 1A network only), increasing to between 10,500 and 16,800 tons by 2050 (for all phases). It is important to note that the freight demand figures reflect only hub-to-hub pairs and do not represent the state's total air freight market. The hub-to-hub market is smaller than the overall air freight market, which also includes international and interstate movements.

AAMs are best suited for transporting high-value, time-sensitive goods over relatively short distances with direct point-to-point service. This is mainly due to their higher costs, high speeds, limited range, and lower payload capacities compared to conventional freight modes like delivery trucks and aircrafts.

Some of the most suitable commodities for AAM freight include:

- Medical and Healthcare: pharmaceuticals, drugs, organs for transplant, medical supplies, and critical medical devices
- High-value, small-volume goods: just-in-time manufacturing components, electronics, microchips, and precious metals
- Time-sensitive materials: express parcels, spare parts, Research & Development/Lab equipment, and important documents
- Perishables: premium specialty foods with high value

Other use cases include deliveries to remote areas and emergency relief operations.

The 2027 table provides the hub-hub AAM freight travel demand in tonnages, in a standard OD matrix format. For example, the largest annual AAM freight tonnage potential would be between Orange (as origin) and Hillsborough (as destination) Counties at 45 to 72 tons, which represents the AAM freight tonnage between Orlando and Tampa. It is important to note that these numbers show the potential AAM freight travel demand forecast.

2027 Annual AAM Freight Tonnage Low/High

OD	Sarasota	Pinellas	Hillsborough	Polk	Highlands	Osceola	Orange	Volusia	Brevard	Total
Sarasota	-	-	0.1 - 0.1	-	-	-	0.2 - 0.3	-	-	0.3 - 0.5
Pinellas	-	-	-	-	-	-	-	-	-	-
Hillsborough	0.03 - 0.05	-	-	20 - 32	-	-	32 - 52	-	-	52 - 84
Polk	-	-	-	-	-	-	-	-	-	-
Highlands	-	-	-	-	-	-	-	-	-	-
Osceola	-	-	-	-	-	-	-	-	-	-
Orange	-	-	45 - 72	-	-	-	-	-	-	45 - 72
Volusia	-	-	-	-	-	-	-	-	-	-
Brevard	-	-	-	-	-	-	-	-	-	-
<b>Total</b>	<b>0.03 - 0.05</b>	<b>-</b>	<b>45 - 72</b>	<b>20 - 32</b>	<b>-</b>	<b>-</b>	<b>33 - 52</b>	<b>-</b>	<b>-</b>	<b>97 - 156</b>

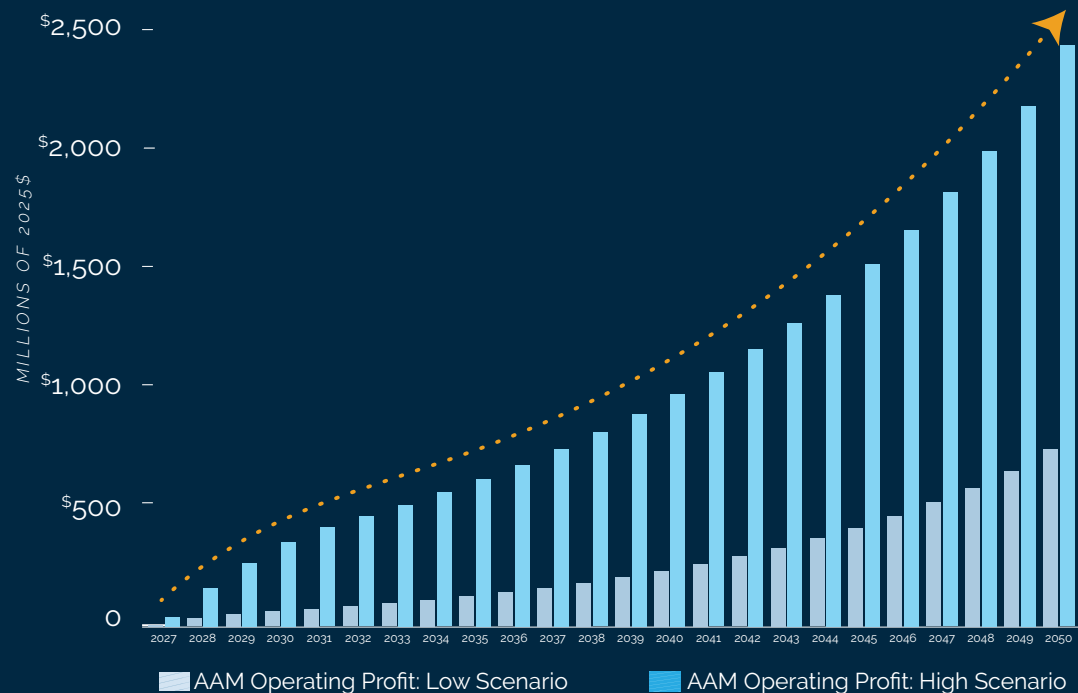


## PROFITABILITY

Florida is well-positioned to support the successful launch of the AAM industry. By investing in vertiport infrastructure along the initial operating corridors, FDOT is actively shaping the future of AAM. These strategic investments alleviate the heavy burden of upfront capital costs, enabling operators to allocate more resources toward operational needs, facilitating larger fleets and increased flight capacity. Although cost structures and pricing models vary across organizations, numerous projections have been developed by government agencies, firms, consultants, and industry trade groups to assess the potential of this emerging market.

Operating profit will largely depend on the individual AAM operators and their operating efficiency. Given the assumed unit revenue of about \$2.5/passenger mile, AAM operators will have a good opportunity for favorable profitability in the early years as long as they can achieve costs efficiencies with per passenger mile operating costs under \$2. These costs would be expected to further decrease with time as the scale of operations increases and technology, such as remote-piloting and automation, progresses, facilitating further operating profitability improvements going forward. AAM industry's gross profit from passenger operations is projected to range between about \$6 million and \$41 million in the 2027 opening year, rising to the \$750 million to \$2.5 billion range in 2050. Given such dynamics, operating AAM services in Florida looks profitable for years to come, providing opportunities for excellent return on investment in this promising new mode.

### Potential Gross Operating Profit Range



**FDOT IS TAKING ACTION TO ENSURE FLORIDA IS THE FIRST TO HAVE PROFITABLE AAM SERVICES.**

## SPEED TO MARKET IMPLEMENTATION



### Fall 2025

The first AAM Aerial Highway Network will be established, including the identification of profitable use cases and formation of binding partnerships to develop network stations.

### Early 2026

The new **Florida AAM Headquarters at the SunTrax Campus** will be operational, serving as a hub within the Aerial Highway Network.

### Late 2026

AAM supporting infrastructure will be fully activated and ready to deploy profitable commercial services for passenger travel.

## FLORIDA WELCOMES YOU

Through strategic investments aimed at accelerating the deployment of AAM, Florida is positioning itself as a national leader in delivering a modern and viable transportation solution. The SunTrax facility, strategically located just off the I-4 corridor and outside the airspace of Tampa and Orlando International Airports, will serve as Florida's Headquarters for AAM, supporting the early implementation of aerial corridors along I-4. The site will also host air and ground research and development, AAM maintenance operations, and a dedicated vertiport location.

Comprehensive data analysis identified the I-4 corridor as an optimal launch point for the first phase of Florida's "aerial network". With high travel demand between the metropolitan areas of Orlando and Tampa, as well as Orlando and the Space Coast, intercity AAM service will reduce congestion along I-4, offering both business and leisure travelers a faster, more efficient mode of travel. Central Florida and the I-4 corridor are especially well suited for this intercity travel and will serve as a critical catalyst in advancing AAM in Florida.

The FDOT's strategic investments in vertiports and other key infrastructure projects, including the development of the AAM Headquarters, will position Florida to be the first state in the nation to have profitable AAM operations. With an emphasis on speed to market and innovation, Florida is committed, invested, and fully prepared to welcome AAM industry leaders to take part in building Florida's "Aerial Highway Network".

**FLORIDA IS OPEN FOR BUSINESS. YOU ARE INVITED TO JOIN OUR JOURNEY AS WE TAKE OFF.**



# SUNTRAX<sup>®</sup> Air Ground

**Florida Department of Transportation**

605 Suwannee Street

Tallahassee, FL 32399

(850) 414-4100; [www.fdot.gov](http://www.fdot.gov)

