Tampa International Airport

TAMPA BAY SMART CITIES ALLIANCE

Advanced Air Mobility: An Airport Planning Perspective

Brett Fay
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Hillsborough County Aviation Authority

AAM – An Airport Planning Perspective

Tampa Bay Smart Cities Alliance

Tampa International Airport

Tampa International Airport

Who we are

TAMPA INTERNATIONAL AIRPORT

Annual Passengers

23,448,336

(Projected for FY23)

Daily Average **64,242**

Highest Traffic Month

March

2,252,769

Lowest Traffic Month

September

1,336,353

4 Airsides / 58 Gates

66

Shops and Restaurants

23,000

Approx. Parking Spaces

485,892,347

Pounds of Cargo

Calendar Year 2022

3 General Aviation Airports

Peter O. Knight, Plant City, Tampa Executive

Annual Operations

144K

Hangars

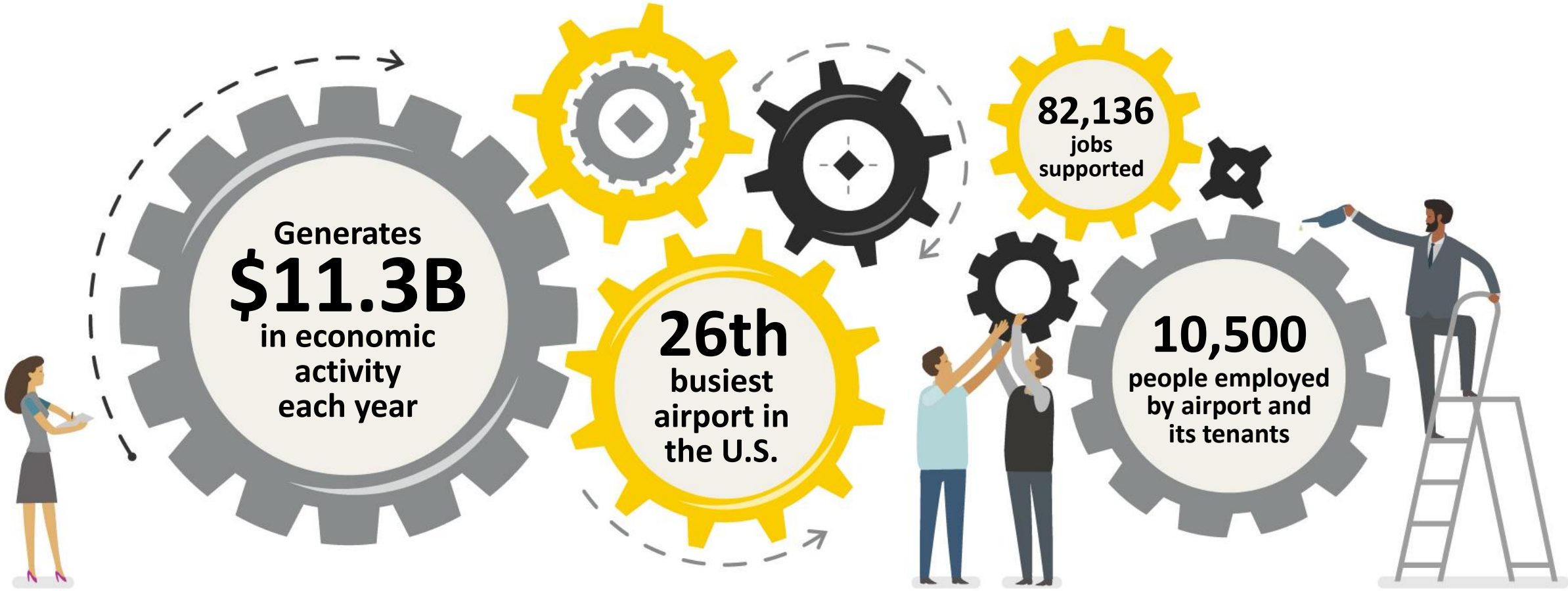
335

Based Aircraft

357

Economic Impact

$563.4M



*Sources: FDOT Aviation Economic Impact Study 2022; FAA CY22 Enplanement Data

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Advanced Air Mobility Efforts

Advanced Aviation Technology Committee

- **General Aviation** – Brett Fay, Chair
- **Govt. Relations** – Gina Evans Dew, Vice Chair
- **Operations** – Adam Bouchard
- **ARFF** – Chief Michael Pelaez
- **Real Estate** – Randy Forister
- **Legal Affairs** – Michael Kamprath
- **P & D** – Jeff Siddle
- **IT-** Christine Labutay

Advanced Air Mobility – AAM

2035 State/Local Market Outlook

- Florida
  - 480+ operating eVTOLS
  - 7800+ flights/day
  - 8.8M passengers/year
- Tampa
  - Approx 100 eVTOLS
  - 2M PAX/year
  - $550M+ revenue

AAM Industry Day

Participants and Approach

- Aircraft manufacturers and developers
- 1-hour virtual meetings
- Dialogue
  - Aircraft certification and operations
  - Business models and leasing considerations
  - Ideal locations and siting considerations
  - Infrastructure and electrical needs

AAM Industry Day

Objectives

- Learn about the future of AAM through discussions with aircraft manufacturers and other stakeholders
- Identify future trends to inform the master planning process
- Understand potential market segments and unique airport operational needs

AAM Industry Day

Key Take-aways

- Integration with Airport
- Infrastructure Requirements
- Use Case
- Vertiport Site Location

Tampa International Airport

Master Plan

Safe and Efficient Integration

- Protect the utility of the airports
  - Ensure the safe and efficient operation of the airport (FAA mandate)

Master Planning

- Updated every 5-10 years
- To identify future needs and development opportunities over a 20-year horizon
- AAM Master Plan Considerations
  - Site selection
  - Airspace and operations
  - Infrastructure and utilities
  - Community/stakeholder engagement

TPA Primary Use Cases

Passenger Transport

- Airport Transfer: Scheduled passenger service between the airport and several vertiports distributed within the west central Florida region
- Air Taxi: On-demand service between an on-airport vertiport and other vertiports within the Tampa urban area and/or Florida

Example: Archer Aviation (Midnight Aircraft)

- To purchase 100 aircraft
- Payload and Range: 1,000 lbs./100+ miles
- Entry into Service: 2025 (250 aircrafts to be delivered)
- Announced first route between Manhattan and EWR in November 2022

Cargo Transfer

- Mid-Range Transfer: Delivery of packages between on-airport cargo facilities and distribution warehouses
- Last Mile Delivery: Delivery of packages from on-airport cargo facilities to designated drop-off vertiports

Example: Beta Technologies (Alia S250c/S250)

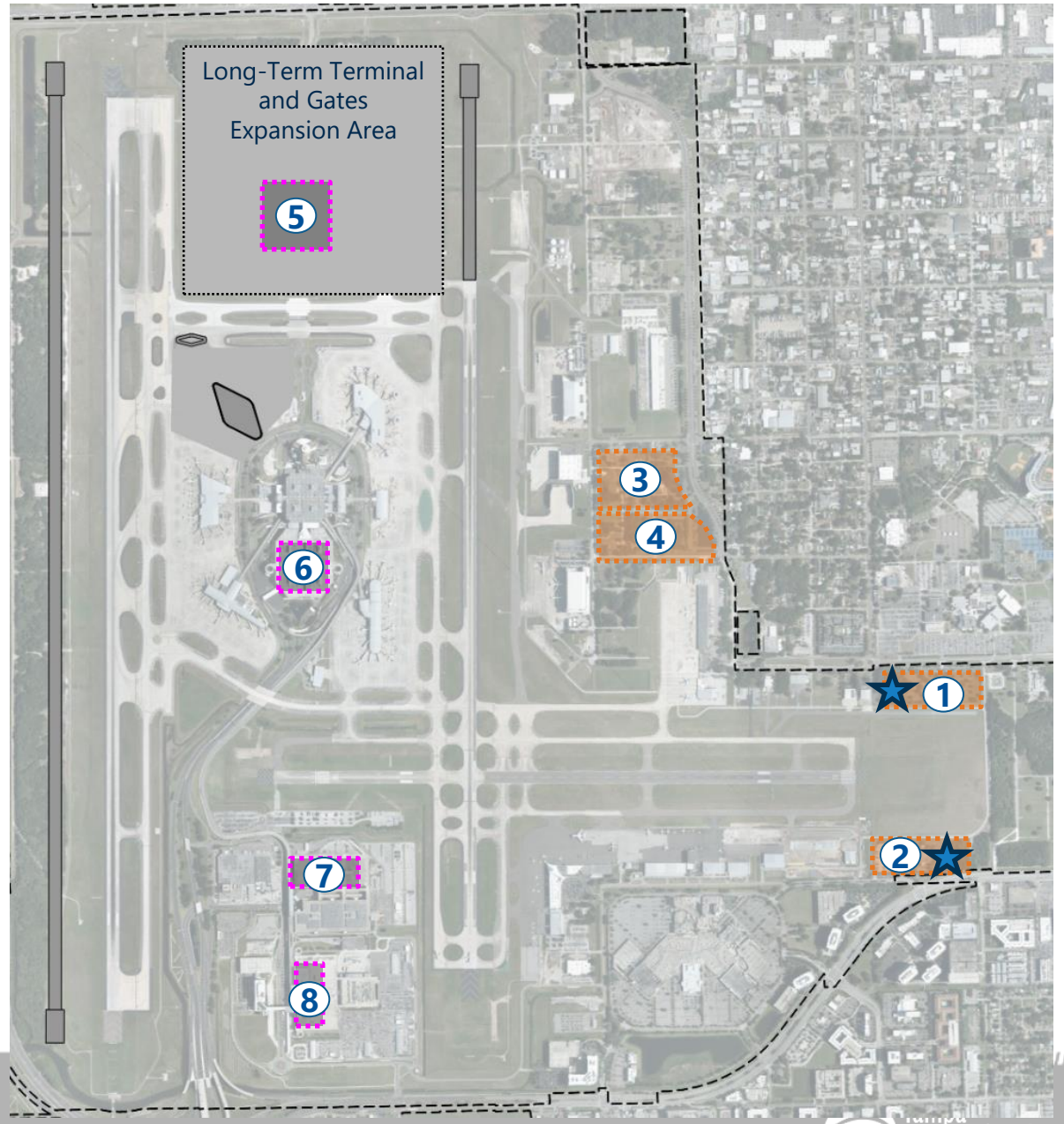
- Partnered with UPS; Option to purchase 150 aircraft
- Payload and Range: 1,400 lbs./250 miles
- Entry into Service: 2024 (10 aircrafts to be delivered)
- Designed to operate autonomously

Potential AAM Sites

1. Intersection of W. Tampa Bay Blvd. and Airport Service Road ✓
2. Intersection of Jim Walter Blvd. and W. Columbus Dr. ✓
3. South of W. Dr. Martin Luther King Jr. Blvd. ✗
4. North of Ohio Avenue ✗
5. North Terminal Parking Garage ✗
6. Long-Term Parking Garage ✗
7. Economy Parking Garage ✗
8. Rental Car Center ✗

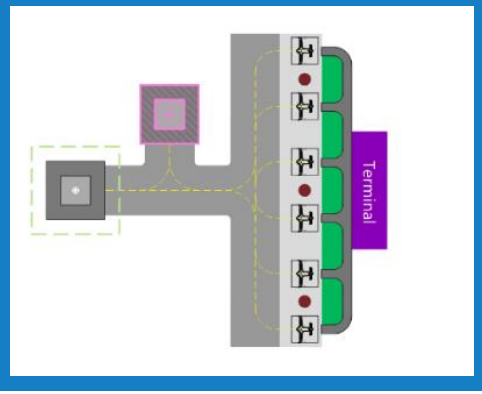
Legend:

- Passenger Transport (Airport Transfer)
- Passenger Transport (Air Taxi) or Air Cargo
- ★ Preferred Site

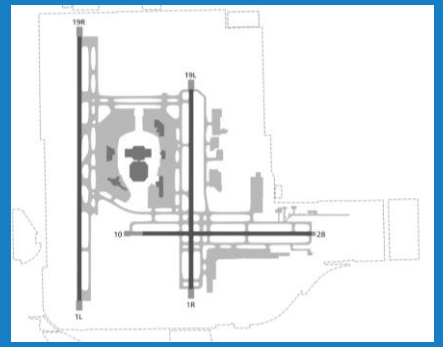


Drivers for Site Selection

Meets Facility Requirements

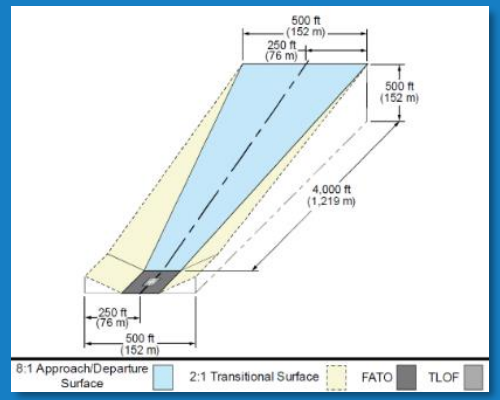


Impacts on Runway Throughput/ Airfield Capacity



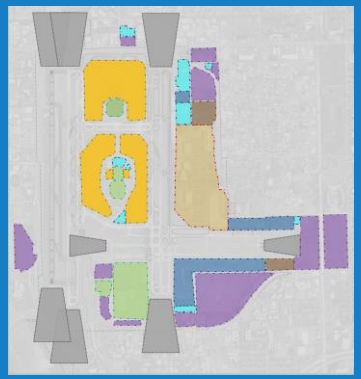
Potential Wake Turbulence Impacts

Potential Obstructions

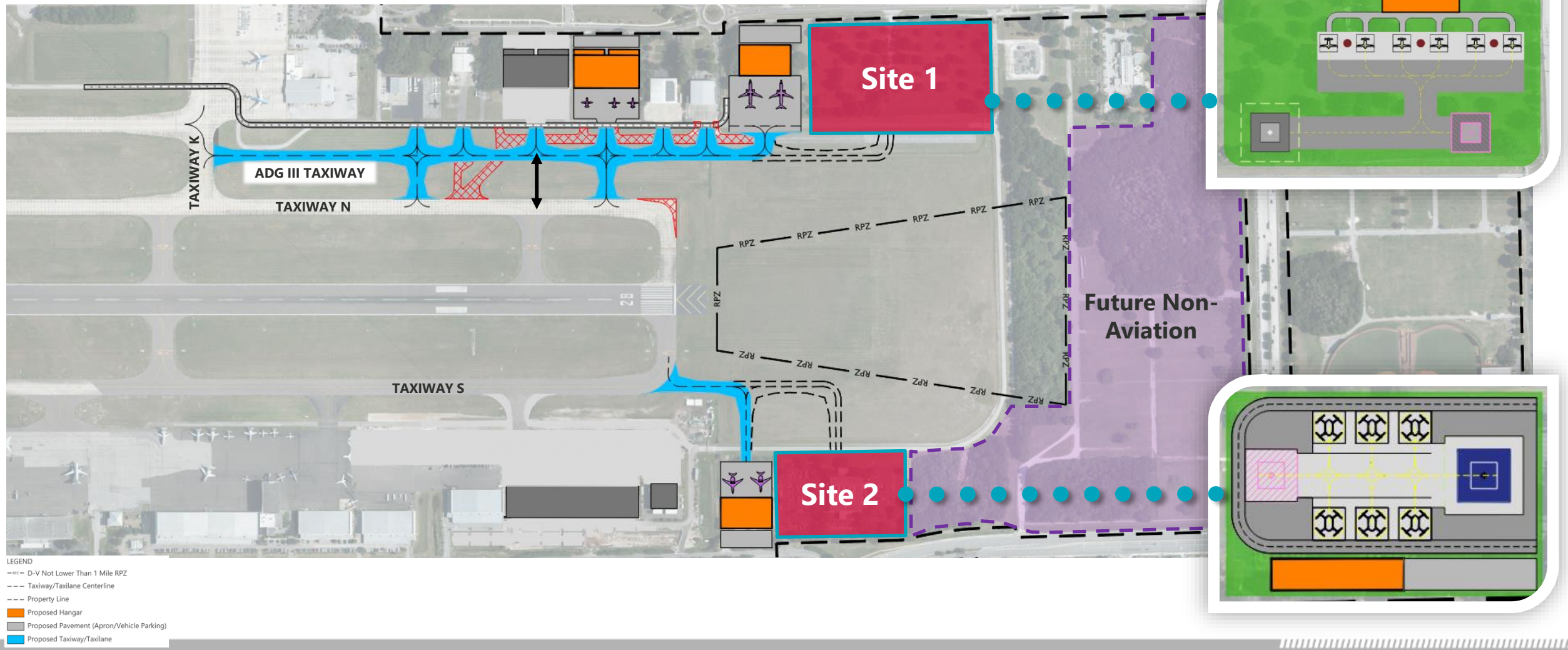


Accessibility

Impacts to Existing and/or Future Land Uses



Preferred Advanced Air Mobility Sites



Unanswered Questions

- Airspace integration
- Performance based design criteria
- Passenger screening/transport
- Noise perception
- Equitable access

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