

May 2, 2024

Palm Beach County Department of Airports

North Palm Beach County General Aviation Airport (F45)

Proposed Expansion of Runway 14-32

PRESENTED TO:

City of Palm Beach Gardens City Council

PRESENTED BY:

Laura Beebe

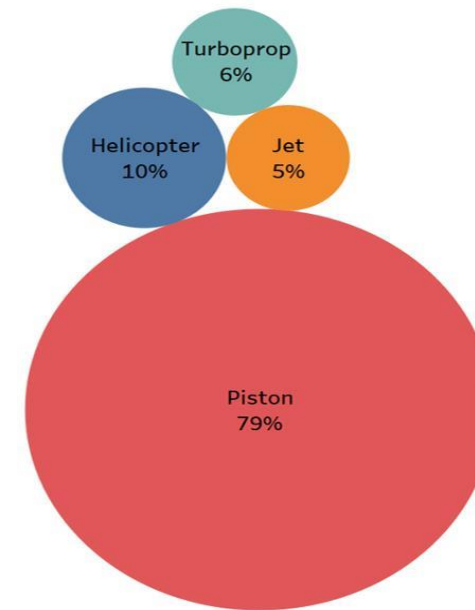
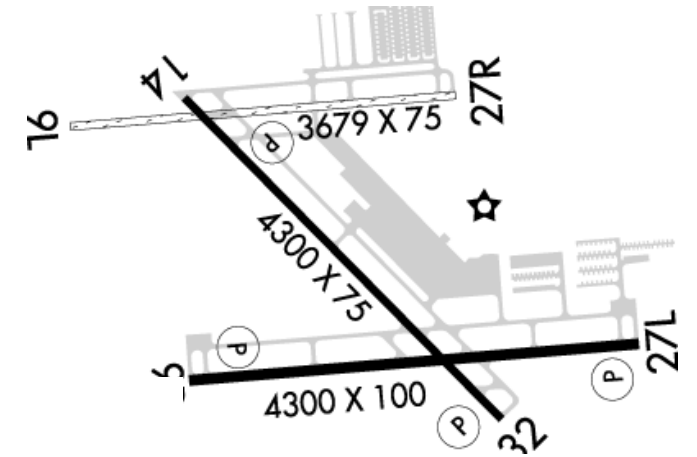
Director of Airports

Palm Beach County Department of Airports



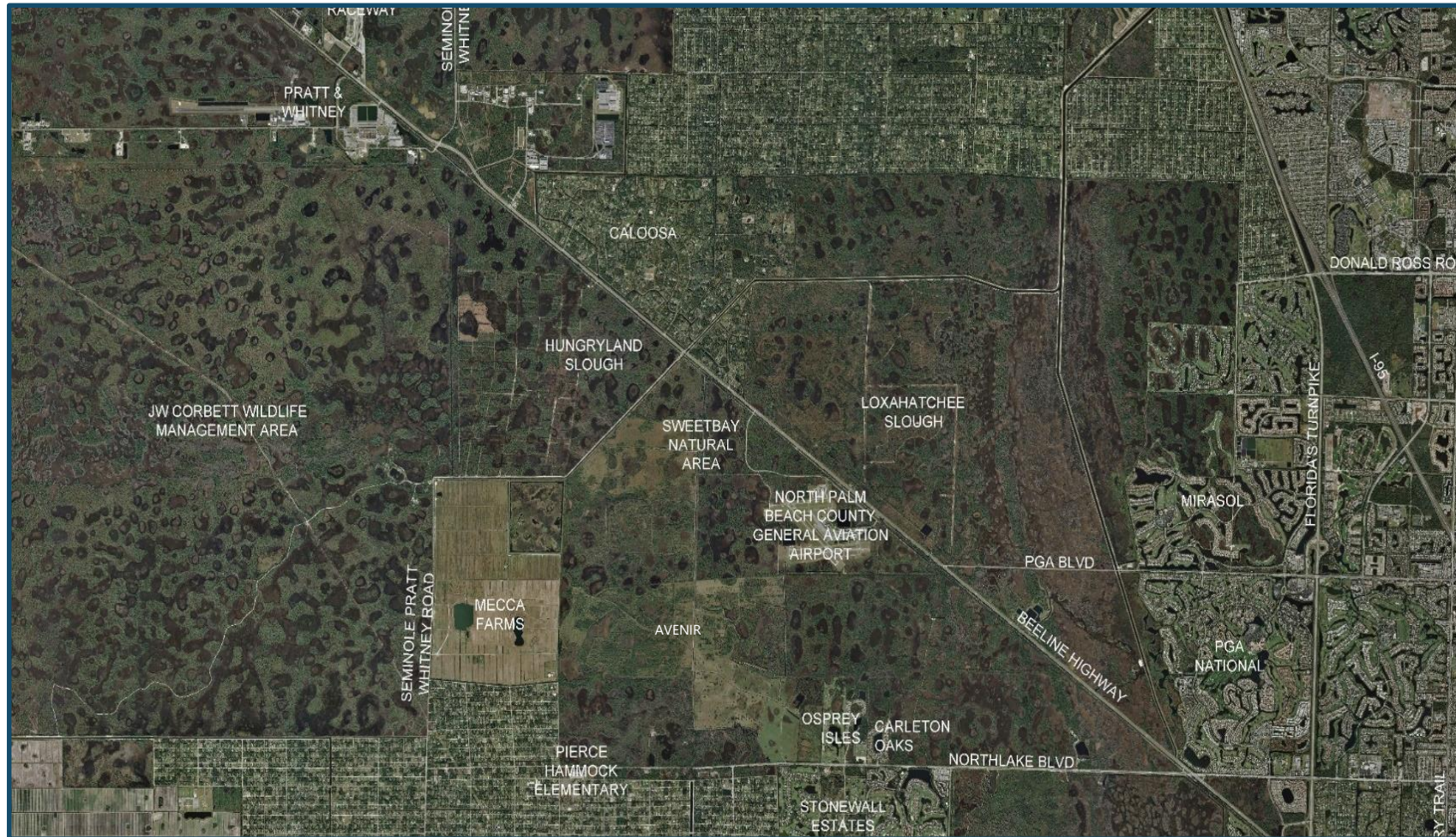
North Palm Beach General Aviation Airport (F45) Overview

- Three runways
 - 9R/27L – 4300' long; 100' wide
 - 14/32 – 4300' long; 75' wide – preferred runway for noise abatement
 - 9L/27R – turf runway – 3679' long; 75' wide
- Classified as a regional general aviation airport
- Serves as a designated reliever airport for PBI
- Supports business and recreational general aviation, including flight training
- More than 250 based aircraft
- 176 aircraft storage hangars
- Approximately 100,000 annual operations



Operation Distribution at F45 by Category of Aircraft (2019)

North Palm Beach County General Aviation Airport (F45) Location Map



North Palm Beach County General Aviation (F45) Economic Impacts



Jobs

467
Employed



Payroll

\$22.4
Million



Value
Added

\$36.5
Million



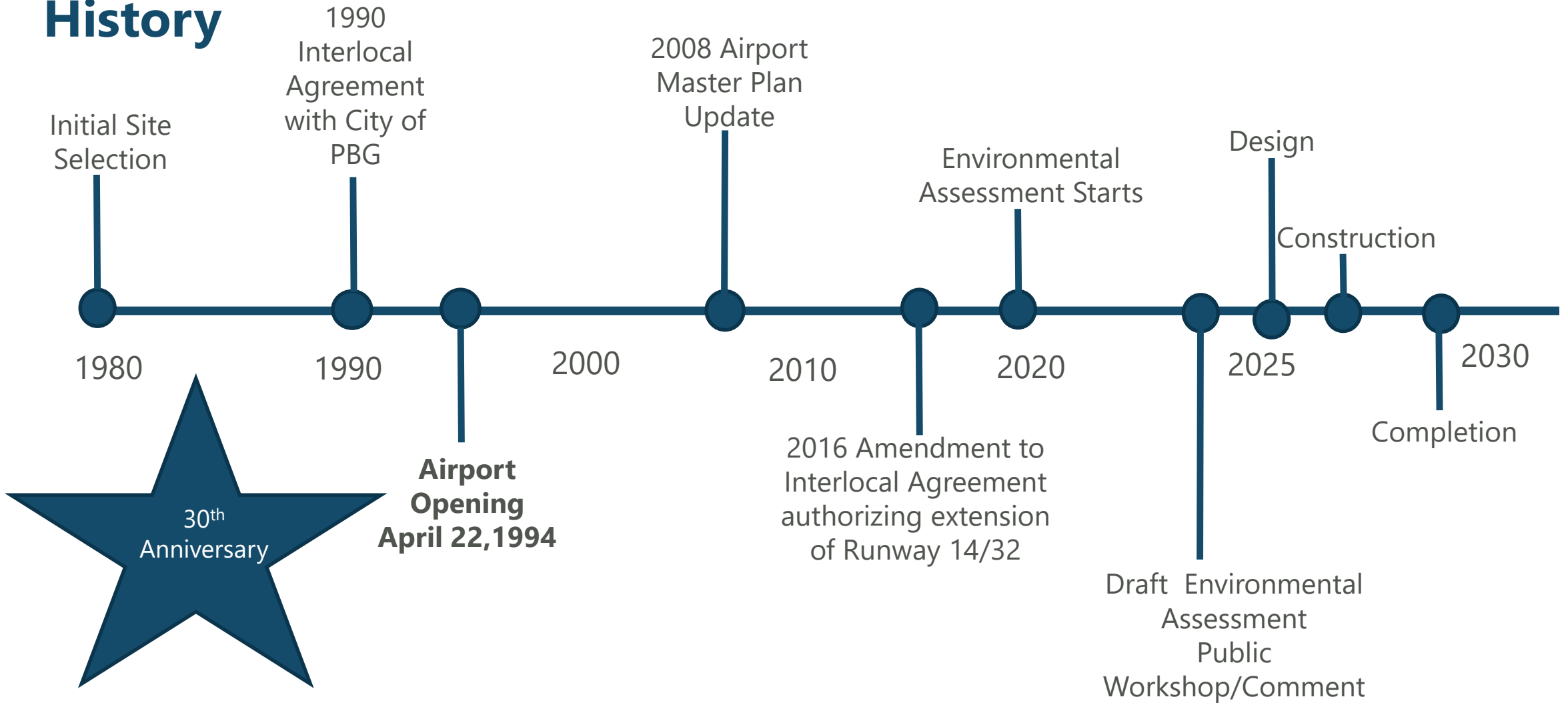
Economic
Impact (*Output*)

\$77.3
Million



Source: FDOT Aviation Economic Impact Study 2022

North Palm Beach County General Aviation Airport (F45) History



Interlocal Agreement – Use Restrictions (1990)

NORTH COUNTY GENERAL AVIATION FACILITY USE RESTRICTIONS

1. CONSTRUCTED IN ACCORDANCE WITH THE FAA STANDARDS, THE SOUTHERN EAST-WEST RUNWAY WILL BE LIMITED TO 4,300 FEET IN LENGTH WITH A MAXIMUM 12,500 POUND LIMITATION. THE NORTHERN EAST-WEST RUNWAY WILL BE LIMITED TO 3,700 FEET IN LENGTH. THE CROSSWIND RUNWAY WILL BE LIMITED TO 4,300 FEET IN LENGTH.

2. IN ACCORDANCE WITH THE FAA AIRSPACE DETERMINATION, RUNWAY ALIGNMENT FOR THE EAST-WEST RUNWAYS WILL BE 08-26. RUNWAY ALIGNMENT FOR THE CROSSWIND RUNWAY WILL BE 13-31.

3. THE PALM BEACH COUNTY DEPARTMENT OF AIRPORTS, IN THEIR PROPRIETARY CAPACITY OF OPERATING THE NORTH COUNTY AIRPORT, WILL RESTRICT FLIGHT TRAINING ACTIVITIES TO NON-POPULATED AREAS BY INCLUDING IN ITS LEASES WITH EACH RESIDENT FIXED BASE OPERATOR WHO CONDUCTS FLIGHT TRAINING A REQUIREMENT THAT FLIGHT TRAINING PROCEDURES WILL BE DESIGNED TO KEEP THE FLIGHT TRAINING ACTIVITIES AWAY FROM THE POPULATED PORTIONS OF PALM BEACH GARDENS.

4. AIRCRAFT ALLOWED TO USE THE AIRPORT WILL BE THOSE SPECIFICALLY IDENTIFIED IN FAA ADVISORY CIRCULAR 36-3E THAT COMPLY WITH THE FAA COMPUTER MODEL DETERMINATIONS USING A 65 dba NOISE LEVEL UPON DESIGNATED MONITORING SITES IN THE RESIDENTIAL AREA EXISTING AS OF FEBRUARY 1988 IN THE CITY OF PALM BEACH GARDENS AND OTHER RESIDENTIAL COMMUNITIES, INCLUDING P.G.A. NATIONAL RESORT COMMUNITY, WHILE USING NOISE ABATEMENT FLIGHT TRACKS AND NOISE ABATEMENT PROFILES DEVELOPED, IMPLEMENTED, MONITORED AND ENFORCED BY PALM BEACH COUNTY.

5. NIGHTTIME OPERATIONS - NIGHTTIME OPERATIONAL PROCEDURES SHALL BE IN EFFECT BETWEEN 10:00 P.M. AND 6:00 A.M. DURING THOSE HOURS THE NORTHWEST-SOUTHEAST RUNWAY WILL BE THE PREFERRED RUNWAY UTILIZED, EXCEPT WHEN CONDITIONS DO NOT ALLOW A NORTHWEST-SOUTHEAST OPERATION. IN SUCH AN EVENT, WESTERLY DEPARTURES WILL BE THE PREFERRED RUNWAY UTILIZED UNLESS WIND CONDITIONS ARE PROHIBITIVE; AND, IN THAT EVENT ONLY EASTERLY DEPARTURES MAY BE CONDUCTED BY AIRCRAFT IDENTIFIED IN RULE NO. 4 ABOVE.

6. REMOTE NOISE MONITORING STATIONS WILL BE INSTALLED BY THE COUNTY AT THE NORTHWEST CORNER AND SOUTHWEST CORNER OF P.G.A. NATIONAL RESORT COMMUNITY AND AT THE WESTERN EDGE OF EASTPOINT. THESE STATIONS WILL BE INSTALLED, MAINTAINED AND OPERATED BY PALM BEACH COUNTY WITH ADEQUATE REPORTING OF NOISE LEVELS.

7. AIRCRAFT NOISE EMISSION LEVEL OF AIRCRAFT USING THE AIRPORT WILL NOT EXCEED 65 dba MAXIMUM WITHIN THE PRESENT RESIDENTIAL AREAS OF THE CITY OF PAL BEACH GARDENS AS DETERMINED AND IDENTIFIED IN RULE NO. 4 ABOVE.

8. INSTRUMENT LANDING SYSTEM (ILS), IF INSTALLED, WILL PERTAIN TO LANDINGS FROM THE WEST ONLY.

9. PALM BEACH COUNTY WILL PROHIBIT ALL REGULARLY SCHEDULED COMMERCIAL AIR CARRIER PASSENGER FLIGHTS.

10. A FINE SYSTEM FOR AIRCRAFT USING THE AIRPORT IN VIOLATION OF THESE RULES OF PALM BEACH COUNTY DEPARTMENT OF AIRPORTS SHALL BE AS FOLLOWS:

FIRST OFFENSE: WARNING

SECOND OFFENSE: \$100 FOR EACH SUCH SECOND OFFENSE AND \$100.00 FOR EACH DECIBEL OVER THAT DETERMINED UNDER RULE NO. 4 ABOVE.

THIRD OFFENSE: SUSPEND USE OF AIRPORT FACILITIES

11. PALM BEACH COUNTY AND THE COMMUNITY OF PALM BEACH GARDENS WILL ACT TO KEEP THOSE AREAS BETWEEN THE P.G.A. NATIONAL RESORT COMMUNITY AND THE PROPOSED AVIATION FACILITY IN A LAND USE CATEGORY COMPATIBLE WITH AIRCRAFT OPERATIONS.

12. AN AIRPORT MANAGER WILL BE EMPLOYED TO ASSIST IN ENFORCEMENT OF RESTRICTIONS.

2016 Amendment to Interlocal Agreement

SECTION 1: Exhibit “B” to the Agreement is hereby amended to strike the last sentence of Paragraph 1 in its entirety and replace it with the following:

THE CROSSWIND RUNWAY WILL BE LIMITED TO 6,000 FEET IN LENGTH. THE AIRCRAFT APPROACH CATEGORY FOR RUNWAY 13/31 WILL BE A CATEGORY C (APPROACH SPEED 121 KNOTS OR MORE, BUT LESS THAN 141 KNOTS), AND THE AIRPLANE DESIGN GROUP WILL BE GROUP II (WINGSPAN OF 49 FEET OR MORE, BUT LESS THAN 79 FEET).

SECTION 2: Upon completion of an extension of the crosswind runway to 6,000 feet, the COUNTY, by and through its Department of Airports, shall submit all necessary and appropriate applications to the Federal Aviation Administration (FAA) for the construction and funding of an air traffic control tower at the North County Airport pursuant to 49 U.S.C. §47124 (“ATC Contract Program”) and diligently pursue FAA approval through completion. Upon receipt of the aforementioned approval and funding, the COUNTY will cause an air traffic control tower to be constructed in accordance with the ATC Contract Program and applicable federal regulations. The CITY agrees that the COUNTY’s obligations under this SECTION 2 shall be subject to and contingent upon the FAA’s agreement to provide for the operation of the air traffic control tower at no cost to the COUNTY. The COUNTY specifically acknowledges that the CITY is expressly relying upon the terms, conditions, and covenants set forth in this SECTION 2, and the COUNTY’s compliance herewith as the consideration for which the CITY grants its consent to allow the COUNTY to increase the length of the crosswind runway to 6,000 feet.

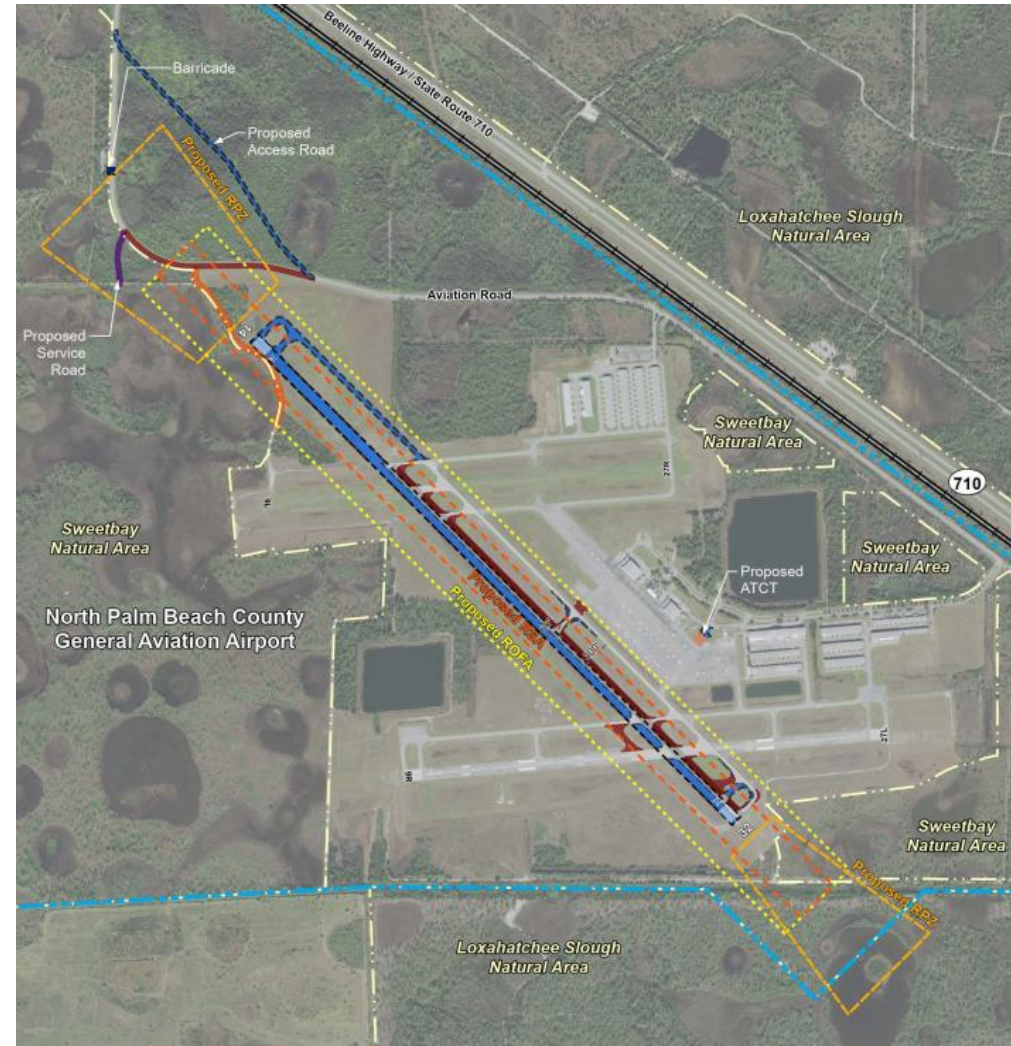
North County General Aviation Airport (F45) Operational Limitations

- A number of factors (such as aircraft weight, wind direction, elevation, and temperature) can affect an aircraft's take-off and landing distance
- Pilots may be required to reduce the number of passengers, the amount of payload, and/or the amount of fuel to depart from F45 based on environmental conditions
- Larger aircraft operators may elect to use alternative airports due to runway length
- Operational limitations reduce the usefulness of F45 as a reliever airport
- Population and business growth in northern Palm Beach County support the need for improvements to accommodate general aviation demand



North Palm Beach County General Aviation Airport (F45) Project Summary

- **Extension of Runway 14/32**
 - Existing – 75' wide; 4,300' long
 - Existing Airport Reference Code - **B-II**
(Approach speed 91 knots or more but less than 121 knots and wingspan of 49 feet up to but not including 79 feet.)
 - Future – 100' wide; 6,000' long
 - Future Airport Reference Code - **C-II**
(Approach speed 121 knots or more but less than 141 knots and wingspan of 49 feet up to but not including 79 feet.)
 - Extension of parallel taxiway
- **Federal Contract Tower (FCT)**
 - Application submitted
 - Identified as a candidate in FCT Program
- **Draft Environmental Assessment Completed**



North Palm Beach County General Aviation Airport (F45) Runway 14-32 Expansion Key Points

- No significant impacts are anticipated as a result of the Proposed Project
 - Potential impacts are analyzed/summarized in detail in the Draft Environmental Assessment
- The Proposed Project:
 - Is not anticipated to result in a significant increase in aircraft operations
 - Is not anticipated to change airspace or flight tracks/routes into, and out, of F45
 - Is not anticipated to result in a significant change in noise levels
 - Will **NOT** result in scheduled commercial air service
- F45 will remain a general aviation airport

Comparison of Aircraft Operations

**TABLE 1-2
ESTIMATED ADDITIONAL AIRCRAFT ACTIVITY**

Fiscal Year	No Action – Baseline Operations ¹	Estimated Additional Operations with Proposed Project ²	Change (%)
2025	102,939	750	0.7
2030	110,346	2,500	2.3

SOURCE: FAA, 2022 Terminal Area Forecast, Issued February 2023. ESA, 2023.
NOTE:
1 Number of operations is derived from the Terminal Area Forecast
2 Based on estimates produced by ESA.

**TABLE 3-18
ANNUAL OPERATIONS BY AIRCRAFT TYPE
2025 NO ACTION ALTERNATIVE AND PROPOSED PROJECT**

Aircraft Category	2025 No Action Alternative	2025 Proposed Project
Jet	2,498	3,233
Piston	94,180	94,180
Turboprop	2,155	2,170
Helicopter	4,105	4,105
Total	102,939	103,689

SOURCE: Environmental Science Associates, 2023.

**TABLE 3-20
ANNUAL OPERATIONS BY AIRCRAFT TYPE
2030 NO ACTION ALTERNATIVE AND PROPOSED PROJECT**

Aircraft Category	2030 No Action Alternative	2030 Proposed Project
Jet	2,657	5,107
Piston	101,030	101,030
Turboprop	2,292	2,342
Helicopter	4,366	4,366
Total	110,346	112,846

SOURCE: Environmental Science Associates, 2023.

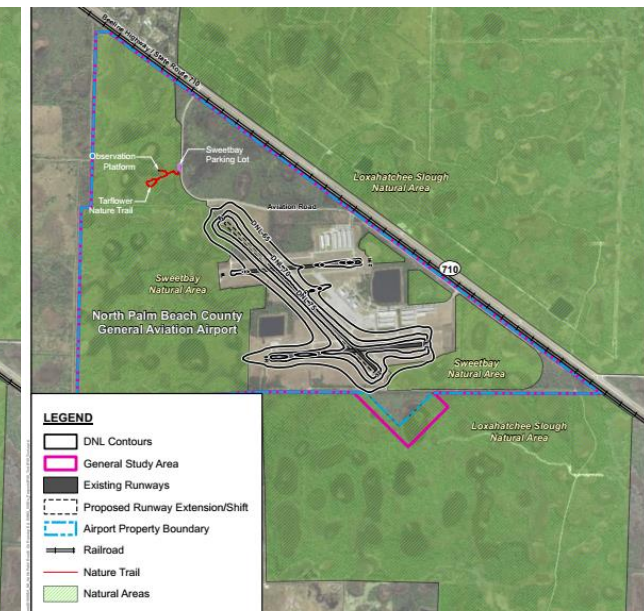
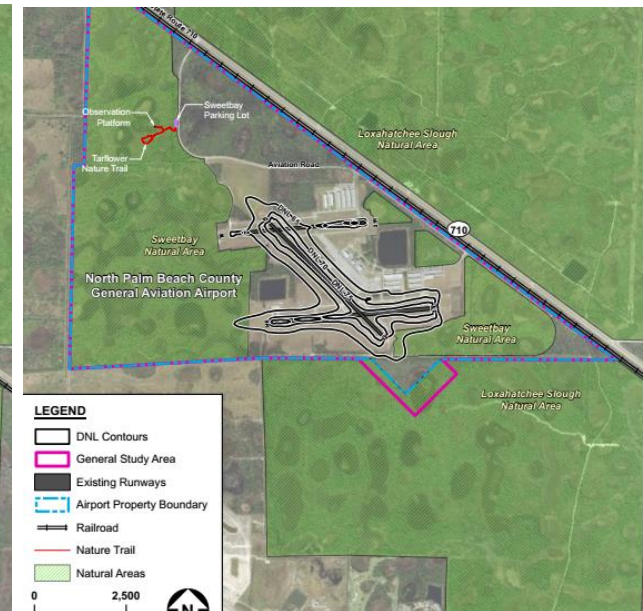
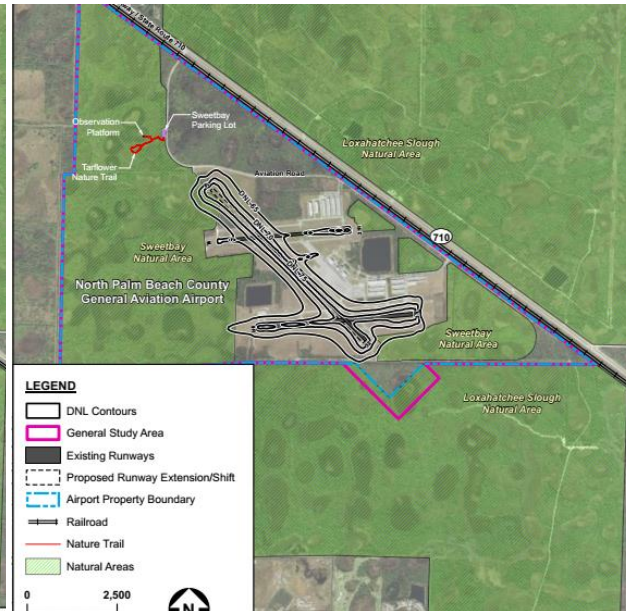
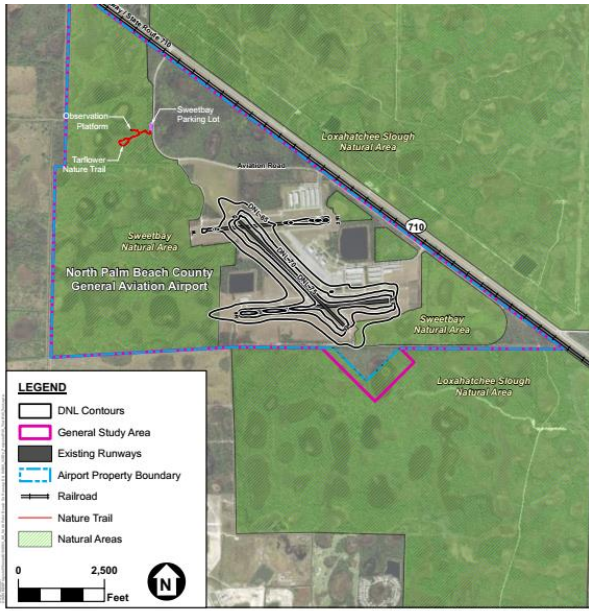
Comparison of Noise Contours

No Action Alternative
2025 DNL Contours

Proposed Project
2025 DNL Contours

No Action Alternative
20230 DNL Contours

Proposed Project
2030 DNL Contours



North Palm Beach County General Aviation Airport Runway Extension EA
FIGURE 3-11
NO ACTION ALTERNATIVE: 2025 DNL CONTOURS AT F4

North Palm Beach County General Aviation Airport Runway Extension EA
FIGURE 3-11
PROPOSED PROJECT: 2025 DNL CONTOURS AT F4

North Palm Beach County General Aviation Airport Runway Extension EA
FIGURE 3-12
NO ACTION ALTERNATIVE: 2030 DNL CONTOURS AT F45

North Palm Beach County General Aviation Airport Runway Extension EA
FIGURE 3-13
PROPOSED ACTION: 2030 DNL CONTOURS AT F45

Noise Comparison

TABLE 3-19
LAND USES, POPULATION, AND HOUSING WITHIN THE DNL 60 AND HIGHER CONTOURS
2025 NO ACTION ALTERNATIVES AND PROPOSED PROJECT

Contour Areas	Land Uses exposed to DNL 60 and Higher (acres)					Dwelling Units	Population
	DNL 60-65	DNL 65-70	DNL 70-75	DNL 75+	Total		
2025 No Action Alternative							
<i>On-Airport Property</i>	255.3	105.0	52.7	37.9	450.9	0	0
<i>Off-Airport Property</i>	15.2	0	0	0	15.2	0	0
Residential	0	0	0	0	0	0	0
Mixed-Use	0	0	0	0	0	0	0
Commercial	0	0	0	0	0	0	0
Industrial/Manufacturing	0	0	0	0	0	0	0
Institutional/Public	0	0	0	0	0	0	0
Open Space/Outdoor Recreation/ Agriculture	15.2	0	0	0	15.2	0	0
Transportation/Utility	0	0	0	0	0	0	0
Vacant/Undeveloped	0	0	0	0	0	0	0
Total	270.4	105.0	52.7	37.9	466.0	0	0
2025 Proposed Project							
<i>On-Airport Property</i>	255.1	116.0	64.2	40.0	475.3	0	0
<i>Off-Airport Property</i>	6.6	0	0	0	6.6	0	0
Residential	0	0	0	0	0	0	0
Mixed-Use	0	0	0	0	0	0	0
Commercial	0	0	0	0	0	0	0
Industrial/Manufacturing	0	0	0	0	0	0	0
Institutional/Public	0	0	0	0	0	0	0
Open Space/Outdoor Recreation/ Agriculture	6.6	0	0	0	6.6	0	0
Transportation/Utility	0	0	0	0	0	0	0
Vacant/Undeveloped	0	0	0	0	0	0	0
Total	261.6	116.0	64.2	40.0	481.9	0	0
Change	-8.8	11.0	11.5	2.0	15.8	0	0

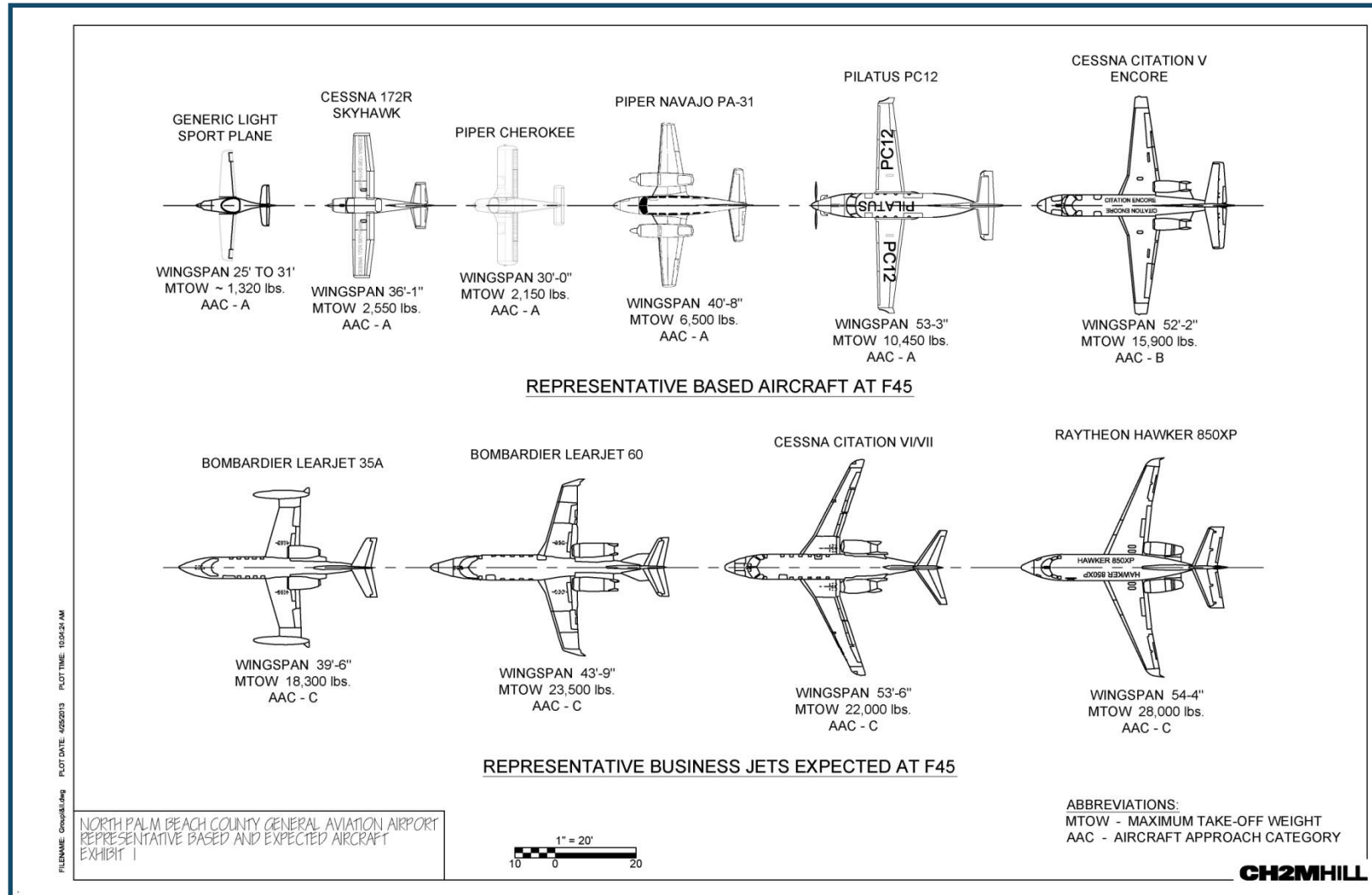
NOTE: Numbers may not add due to rounding.
DNL = Day-Night Average Sound Level
SOURCE: Environmental Science Associates, 2023.

TABLE 3-21
LAND USES, POPULATION, AND HOUSING WITHIN THE DNL 60 AND HIGHER CONTOURS
2030 NO ACTION ALTERNATIVES AND PROPOSED PROJECT

Contour Areas	Land Uses exposed to DNL 60 and Higher (acres)					Dwelling Units	Population
	DNL 60-65	DNL 65-70	DNL 70-75	DNL 75+	Total		
2030 No Action Alternative							
<i>On-Airport Property</i>	266.0	110.3	54.5	40.1	470.9	0	0
<i>Off-Airport Property</i>	19.7	0	0	0	19.7	0	0
Residential	0	0	0	0	0	0	0
Mixed-Use	0	0	0	0	0	0	0
Commercial	0	0	0	0	0	0	0
Industrial/Manufacturing	0	0	0	0	0	0	0
Institutional/Public	0	0	0	0	0	0	0
Open Space/Outdoor Recreation/ Agriculture	19.7	0	0	0	19.7	0	0
Transportation/Utility	0	0	0	0	0	0	0
Vacant/Undeveloped	0	0	0	0	0	0	0
Total	285.7	110.3	54.5	40.1	490.6	0	0
2030 Proposed Project							
<i>On-Airport Property</i>	271.5	120.7	68.0	44.6	504.7	0	0
<i>Off-Airport Property</i>	9.3	0	0	0	9.3	0	0
Residential	0	0	0	0	0	0	0
Mixed-Use	0	0	0	0	0	0	0
Commercial	0	0	0	0	0	0	0
Industrial/Manufacturing	0	0	0	0	0	0	0
Institutional/Public	0	0	0	0	0	0	0
Open Space/Outdoor Recreation/ Agriculture	9.3	0	0	0	9.3	0	0
Transportation/Utility	0	0	0	0	0	0	0
Vacant/Undeveloped	0	0	0	0	0	0	0
Total	280.8	120.7	68.0	44.6	514.0	0	0
Change	-4.9	10.3	13.5	4.5	23.4	0	0

NOTE: Numbers may not add due to rounding.
DNL = Day-Night Average Sound Level
SOURCE: Environmental Science Associates, 2023.

Aircraft at F45



Existing & Future Aircraft

Existing Aircraft Capable of Using F45



Piper Navajo PA-31



Cessna Citation V Encore



Pilatus PC12

Anticipated Future Aircraft



Bombardier Learjet 60



Cessna Citation VII



Raytheon Hawker 850XP

Next Steps

Public Workshop & Hearing

May 14, 2024

Public Workshop: 5:30 p.m. - 6:30 pm.

Public Hearing: 6:30 p.m.

Palm Beach State College, Palm Beach Gardens Campus

Multi-Purpose Room SC-127

3160 PGA Boulevard

Palm Beach Gardens, FL 33410

Public Comments

Public Comment Period: April 9, 2024 - May 21, 2024 until 5:00 p.m.

Written comments may be submitted to:

Palm Beach County Department of Airports

846 Palm Beach International Airport

West Palm Beach, FL 33406

or

F45EAComments@esassoc.com

For more information: <https://www.pbia.org/general-aviation/north-palm-beach-county-airport/>