

May 2024

Palm Beach County Department of Airports

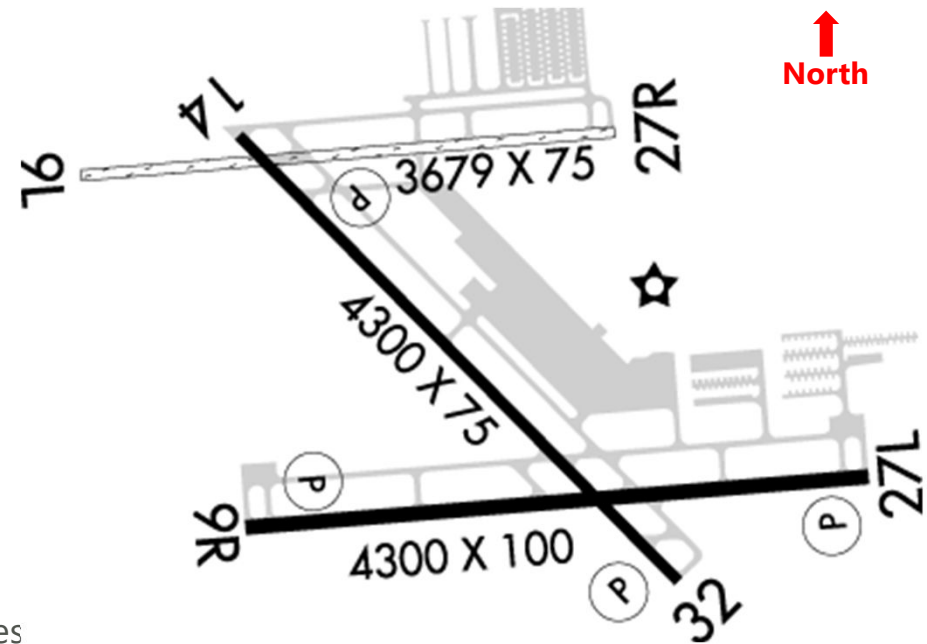
North Palm Beach County General Aviation Airport (F45)

Proposed Expansion of Runway 14-32 - Project Overview

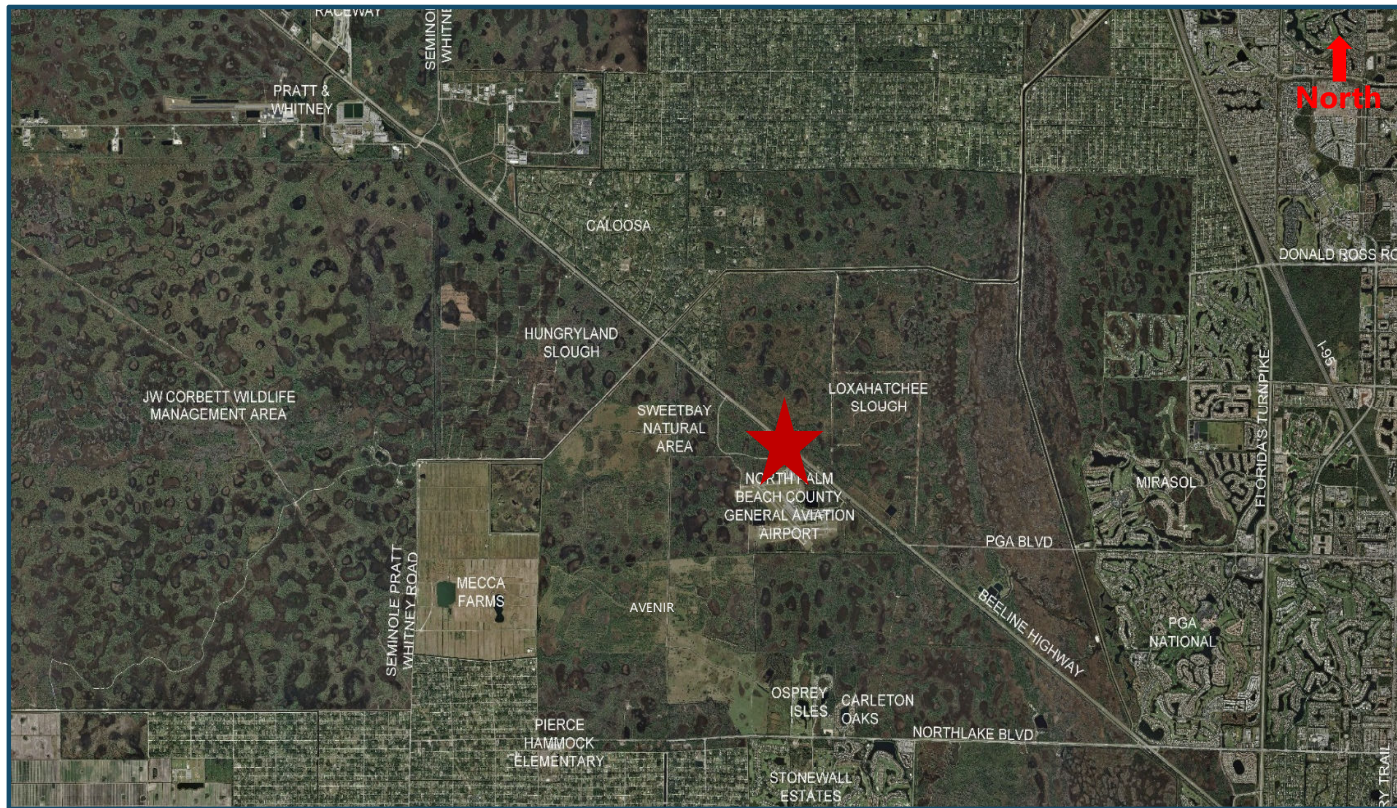


North Palm Beach County General Aviation Airport Overview of Existing Operations/Infrastructure

- **The Airport has 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
- **General information about the Airport:**
 - Classified as a reliever general aviation airport
 - Supports business and recreational general aviation, including flight training, with a variety of aircraft types including piston aircraft, turboprops, helicopters and jet aircraft
 - More than 250 based aircraft
 - 176 aircraft storage hangars
 - Approximately 100,000 annual aircraft operations, which includes aircraft landings and takeoffs



Where is the North Palm Beach County General Aviation Airport (F45)?



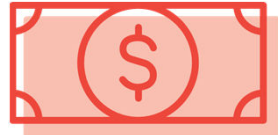
What is the Economic Impact of the Airport?



Jobs

467

Employed



Payroll

\$22.4

Million



Value
Added

\$36.5

Million



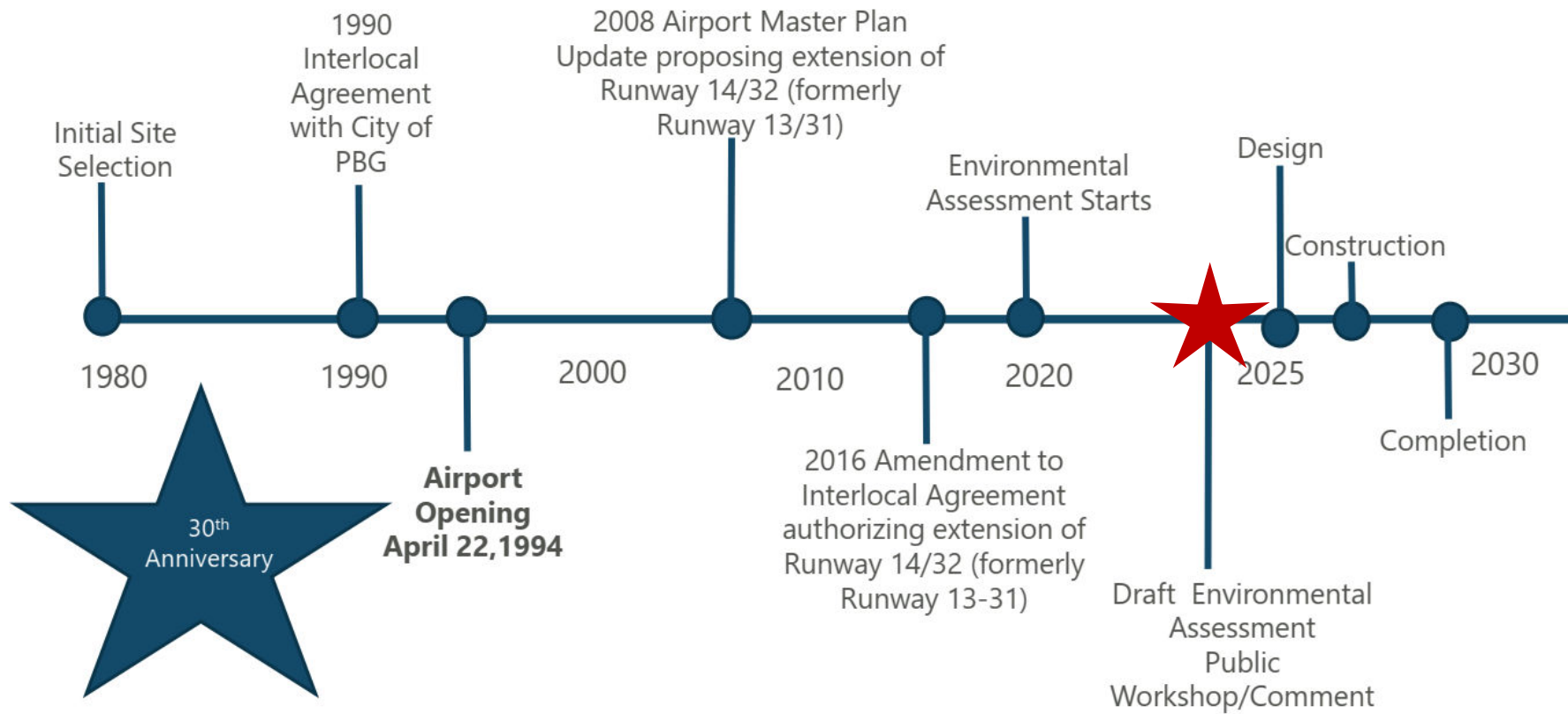
Economic
Impact *(Output)*

\$77.3

Million



Airport History & Estimated Project Timeline



What does the Interlocal Agreement say?

- **In 1990, the City of Palm Beach Gardens and Palm Beach County entered into an Interlocal Agreement regarding the Airport, which includes:**
 - Restrictions on runway lengths
 - Operational restrictions, including:
 - Noise abatement procedures related to night operations
 - Prohibition against regularly scheduled commercial air carrier passenger flights
 - Restrictions on flight training operations
- **The Interlocal Agreement was updated in 2016**
 - Allowing for the extension of Runway 14/32 (formerly Runway 13/31) to 6,000 feet
 - Requiring the submission of an application for an air traffic control tower by Palm Beach County.
- **The next two slides include excerpts from the Interlocal Agreement.**

1990 Interlocal Agreement – Use Restrictions

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:

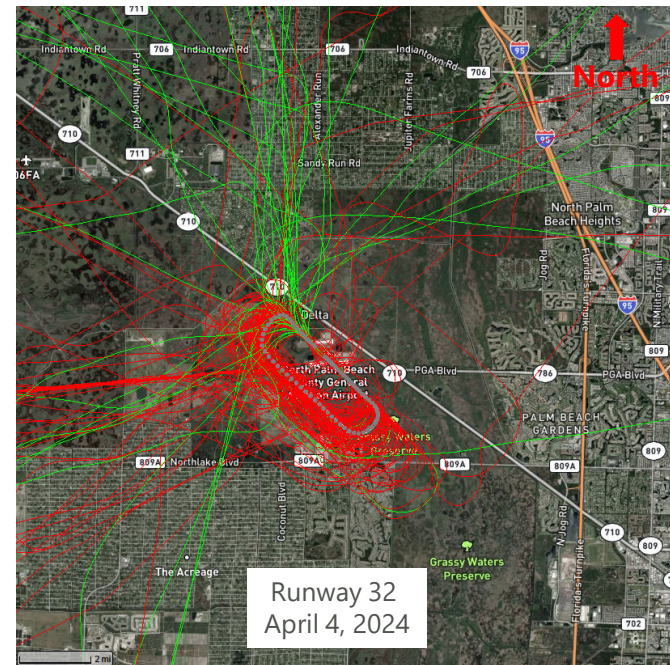
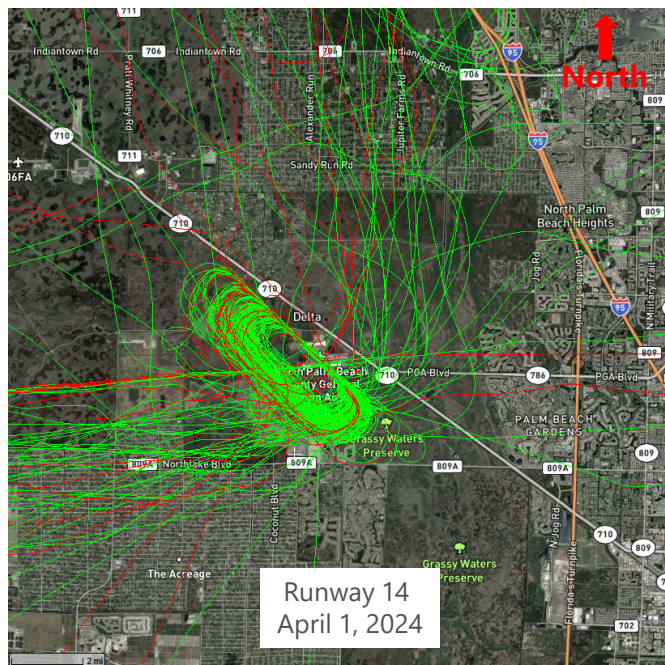
THE CROSSWIND RUNWAY WILL BE LIMITED TO 6,000 FEET IN LENGTH. THE AIRCRAFT APPROACH CATEGORY FOR RUNWAY 13/31 WILL BE A CATEGORY C (APPROACH SPEED 121 KNOTS OR MORE, BUT LESS THAN 141 KNOTS), AND THE AIRPLANE DESIGN GROUP WILL BE GROUP II (WINGSPAN OF 49 FEET OR MORE, BUT LESS THAN 79 FEET).

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.

Where do the aircraft fly on a typical day?

Flight Tracks for Runway 14/32

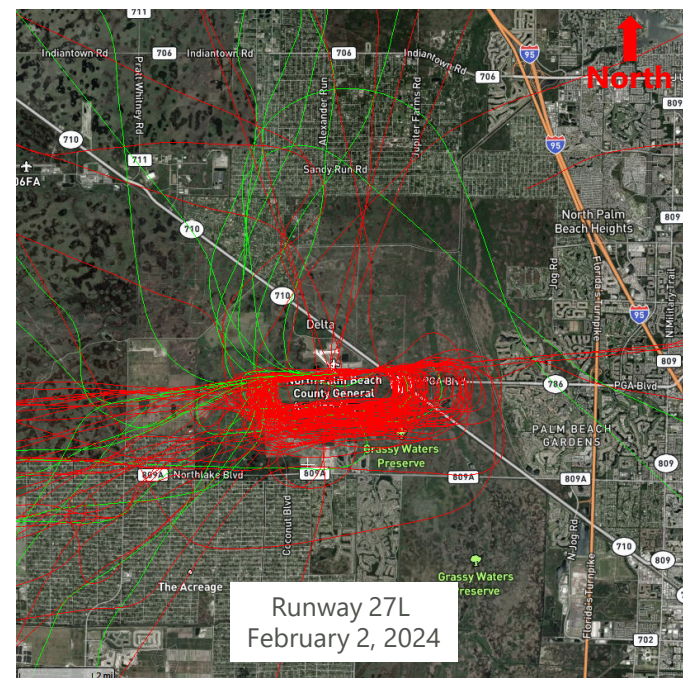
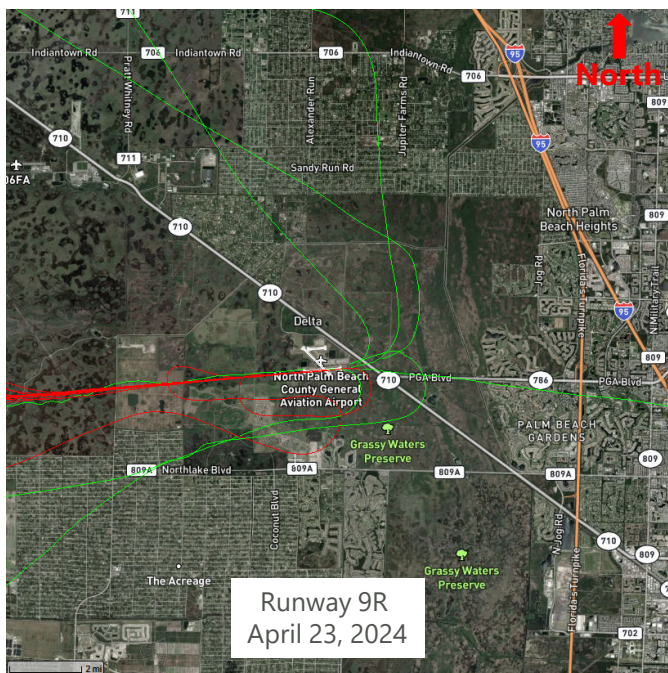
(Runway proposed to be extended by 1700 feet)



Please note: The above graphics only show the operations on the specific day indicated for the specific runway indicated to illustrate the representative flight tracks; this information does not show all operations for that specific day.

Where do the aircraft fly on a typical day?

Flight Tracks for Runway 9R/27L (No changes proposed for this Runway)

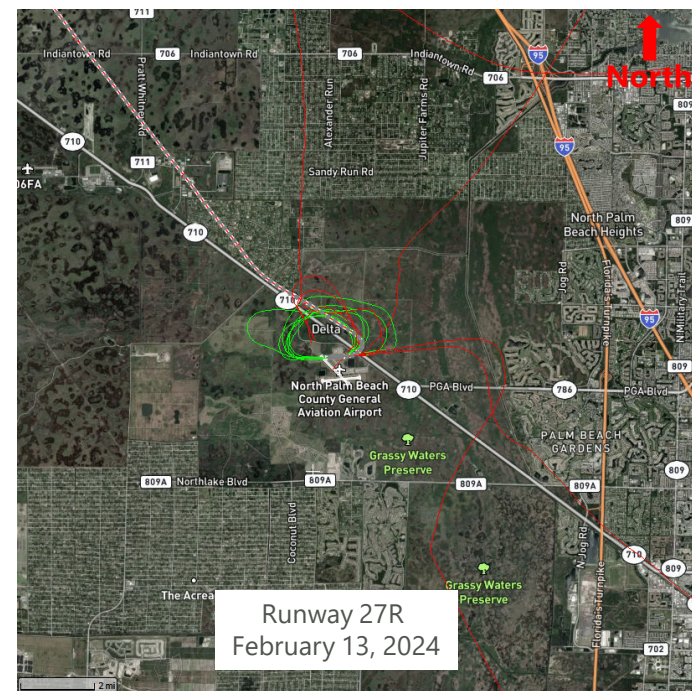
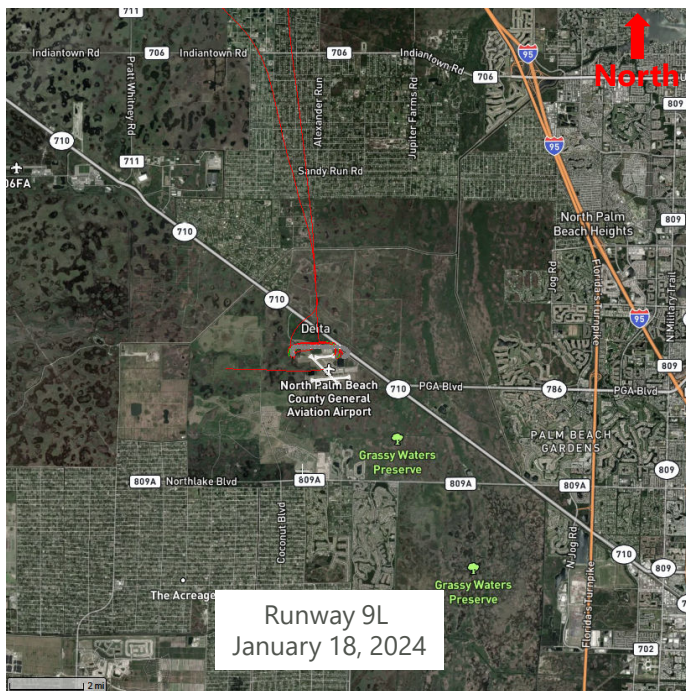


Please note: The above graphics only show the operations on the specific day indicated for the specific runway indicated to illustrate the representative flight tracks; this information does not show all operations for that specific day.

Where do the aircraft fly on a typical day?

Flight Tracks for Runway 9L/27R (*turf runway*)

(No changes proposed for this Runway)



Please note: The above graphics only show the operations on the specific day indicated for the specific runway indicated to illustrate the representative flight tracks; this information does not show all operations for that specific day.

Why is the Runway Extension Project Needed?

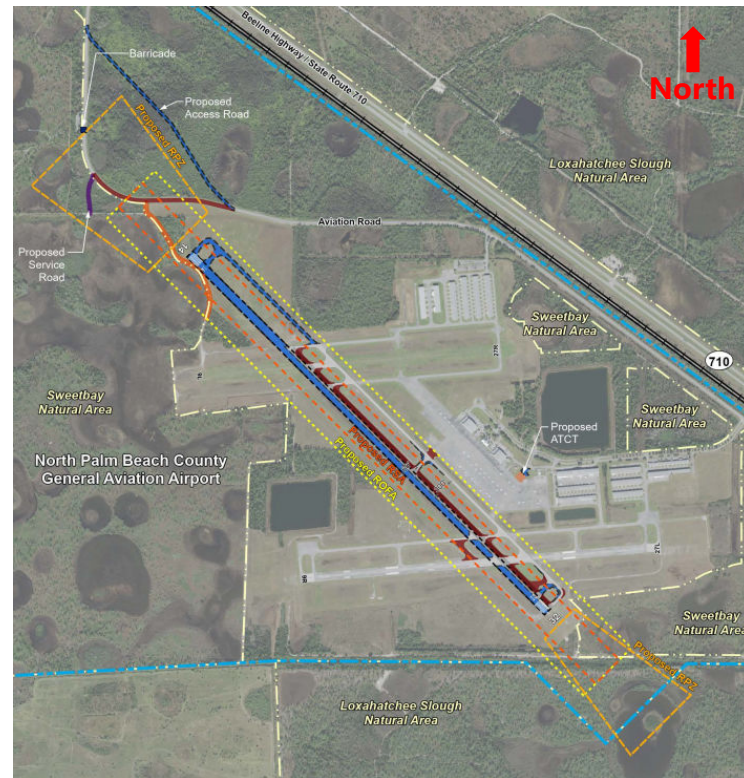
- A number of factors (such as aircraft weight, wind direction, elevation, and temperature) can affect an aircraft's take-off and landing distance
- Due to runway length limitations, certain jet aircraft are required to reduce the number of passengers, the amount of payload, and/or the amount of fuel to operate at F45 based on environmental conditions
- The project will allow small and mid-sized corporate jets currently operating at the airport to operate without restrictions



What will change at the Airport?

- The Project includes the following components:
- **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 & other connected improvements
- **Federal Contract Tower (FCT)**
 - Application submitted
 - Identified as a candidate in FCT Program

Proposed Project



What is the purpose of an Air Traffic Control Tower?

- **An Air Traffic Control Tower is designed to:**

- Provide a safe, orderly and expeditious flow of air traffic
- Prevent collisions, organize and expedite the flow of air traffic, and provide information and other support for pilots

- **How is a Federal Contract Tower (FCT) different?**

- FCTs are operated by private sector companies that contract with the Federal Aviation Administration (FAA) for the operation of FCTs by qualified air traffic controllers who are FAA-certified and meet FAA training and operating standards
- The Airport is responsible for funding the initial construction costs and ongoing capital and maintenance expenses for the facility
- The FAA funds the cost to provide air traffic control services
- FCTs provide the same services as federally-operated Air Traffic Control Towers
- FCTs operate during hours determined by the FAA

What are the anticipated impacts of the changes?

- **No significant impacts are anticipated as a result of the Proposed Project**
 - Potential impacts are analyzed/summarized in detail in the Draft Environmental Assessment
 - Draft Environmental Assessment is available at: <https://www.pbia.org/general-aviation/north-palm-beach-county-airport/>
- **The Proposed Project:**
 - Is **not** anticipated to result in a significant increase in aircraft operations
 - *Within five years of completion of the project approximately 7 additional aircraft operations a day are anticipated based on current forecasts or less than a 3% increase in overall 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 in the surrounding communities
 - Will **NOT** result in scheduled commercial air carrier service
- **F45 will remain a general aviation airport**

Estimated Aircraft Activity with & without the Runway Extension

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.

Estimated 2,500 additional operations a year (or about 7 operations a day) five years after Project completion

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

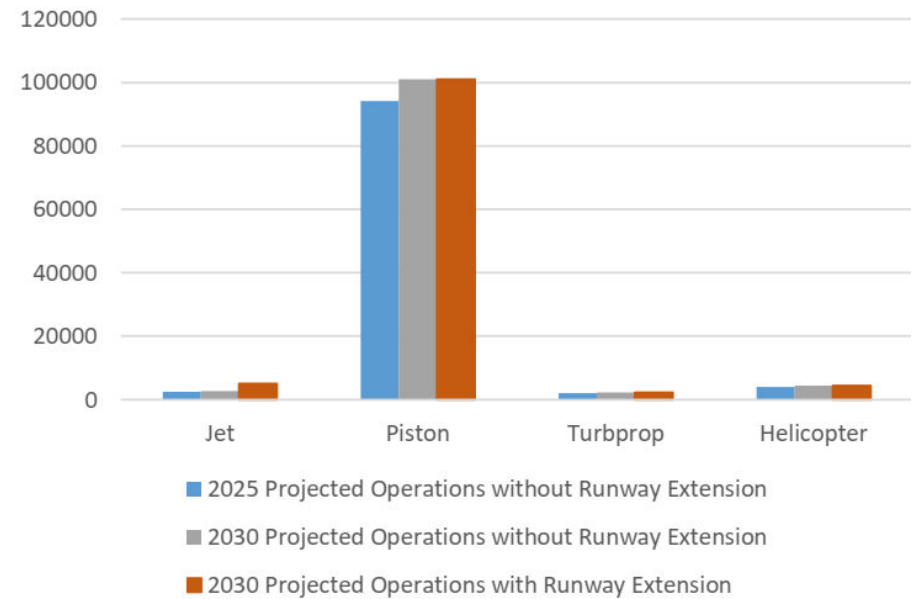
SOURCE: Environmental Science Associates, 2023.

Aircraft Activity by Type of Aircraft

The chart below shows the projected aircraft operations by aircraft type with and without the Runway Extension. The term “operation” includes both landings and take offs.

Projected Aircraft Operations by Aircraft Type			
	2025 Projected Operations without Runway Extension	2030 Projected Operations without Runway Extension	2030 Projected Operations with Runway Extension
Jet	2,498	2,657	5,107
Piston	94,180	101,030	101,030
Turbprop	2,155	2,292	2,342
Helicopter	4,105	4,366	4,366

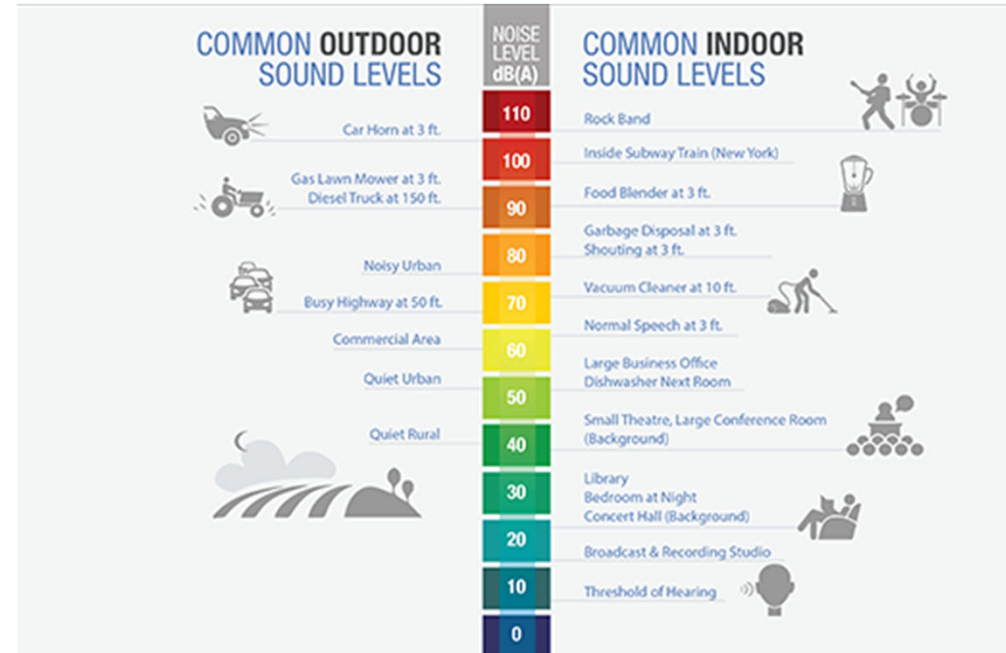
Projected Aircraft Operations by Aircraft Type



Source: Table 3-18 & Table 3-20 Draft Environmental Assessment for Extension of Runway 14-32 and Related Improvements for North Palm Beach County General Aviation Airport

Airport Noise Basics

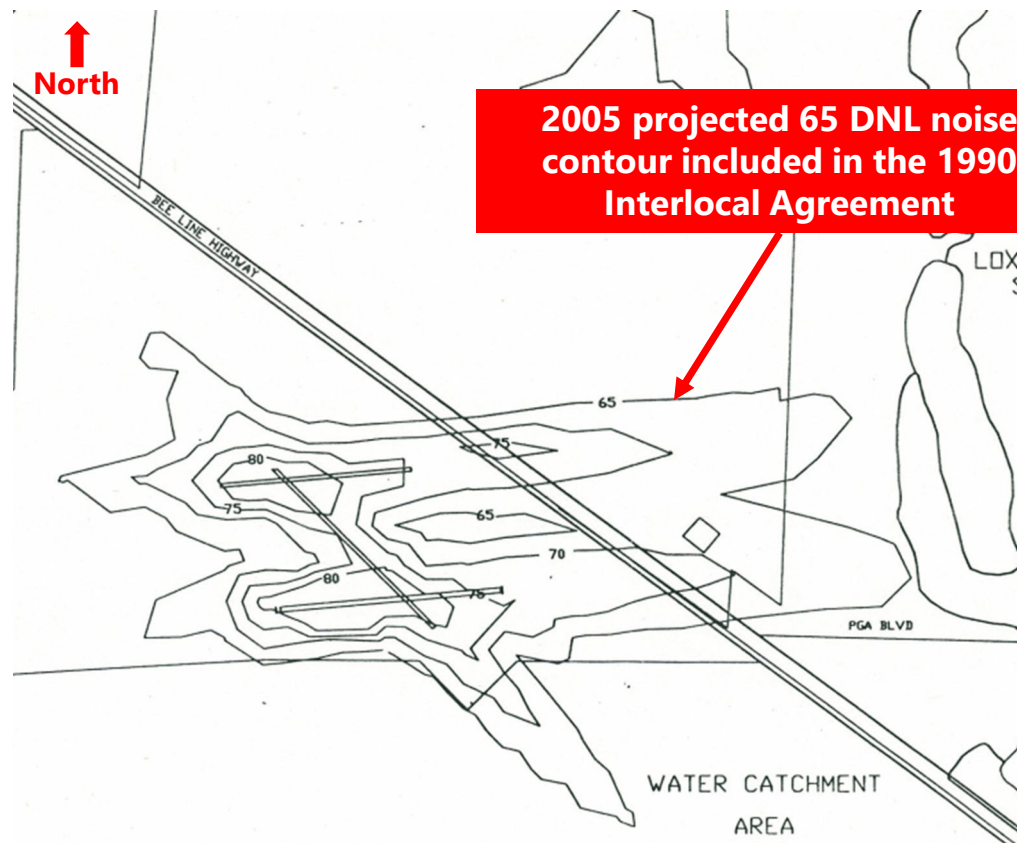
- Noise contours depict levels of aircraft noise surrounding an airport.
- The Federal Aviation Administration (FAA) has determined that the cumulative noise exposure of individuals to noise resulting from aviation activities must be established in terms of the day-night average sound level (DNL) in decibels
- The 65 DNL noise contour is considered the threshold of significant noise
- Aircraft noise is measured on an A-weighted decibel (dBA) scale
- On this scale, normal human speech is about 60 dBA and a typical vacuum cleaner is about 70 dBA.



Noise Contours are smaller than originally anticipated in 1990

- The Airport is located on more than 1,800 acres
- When the Airport was first built in the 1990s, the 65 DNL noise contour was projected to go outside the boundary of the Airport

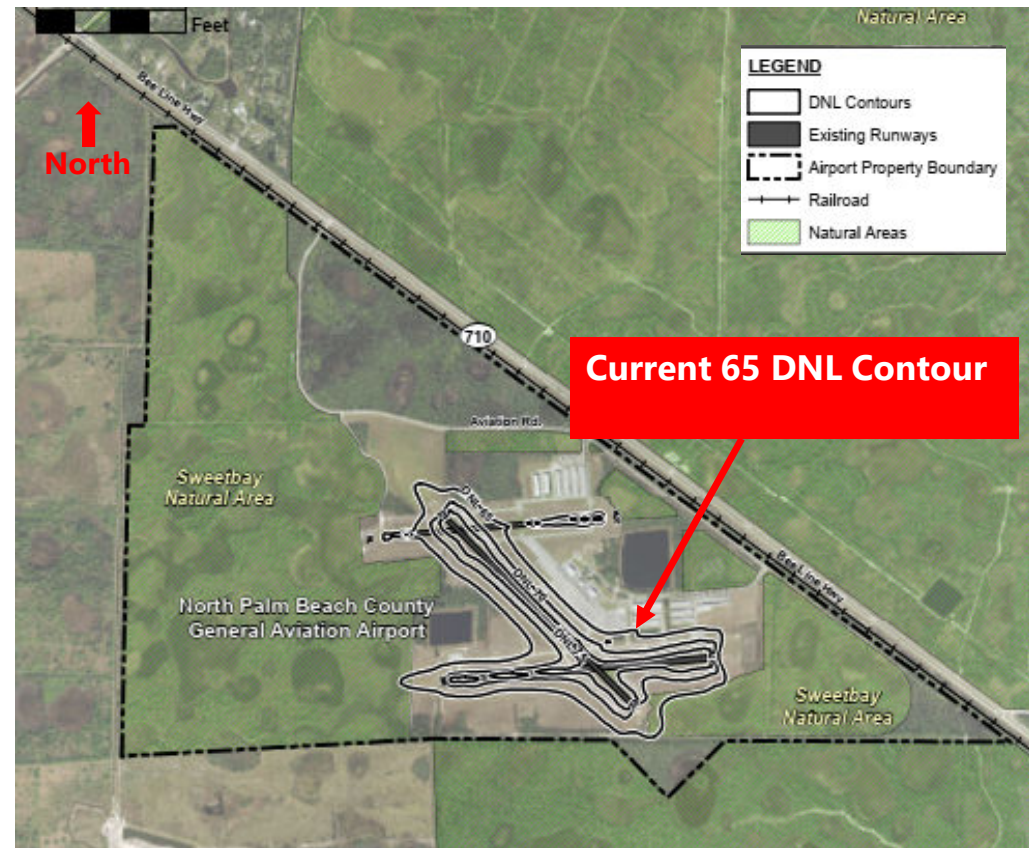
Original Projection of the 65 DNL Noise Contour



Existing Noise Contours

- Today, the 65 DNL noise contour does not leave the boundary of the Airport
- In other words, airport operations create significantly less noise than originally anticipated

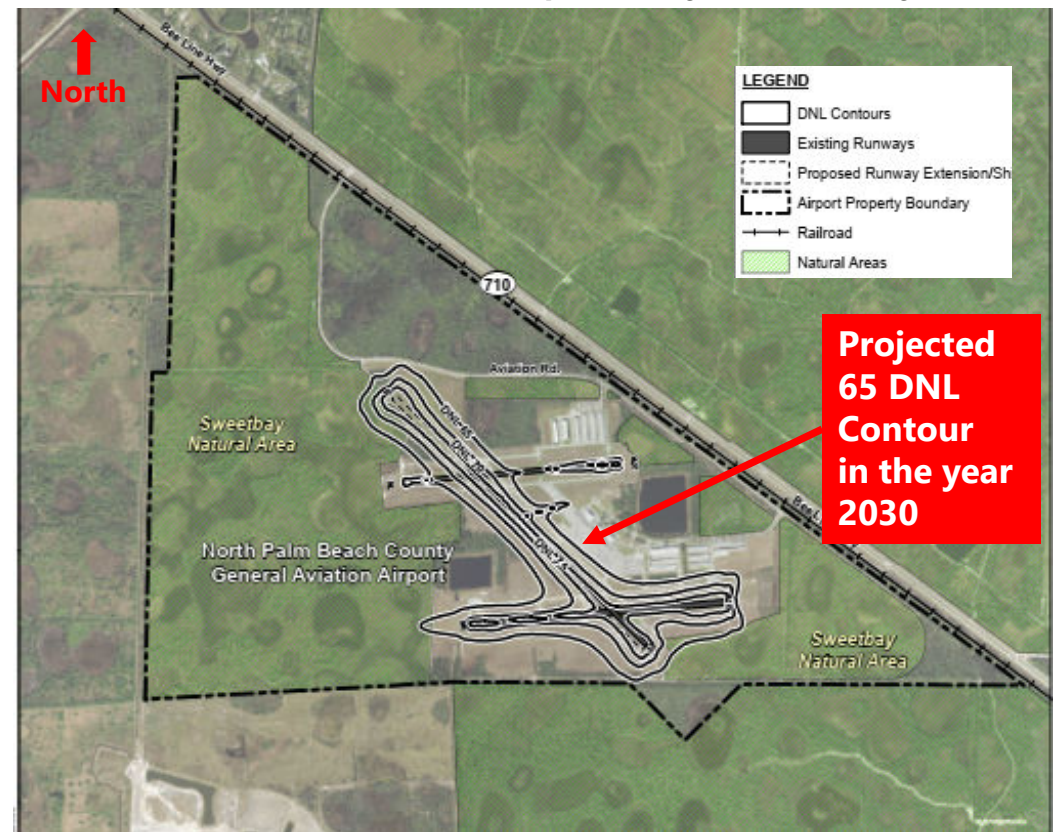
65 DNL Noise Contour – Existing Condition



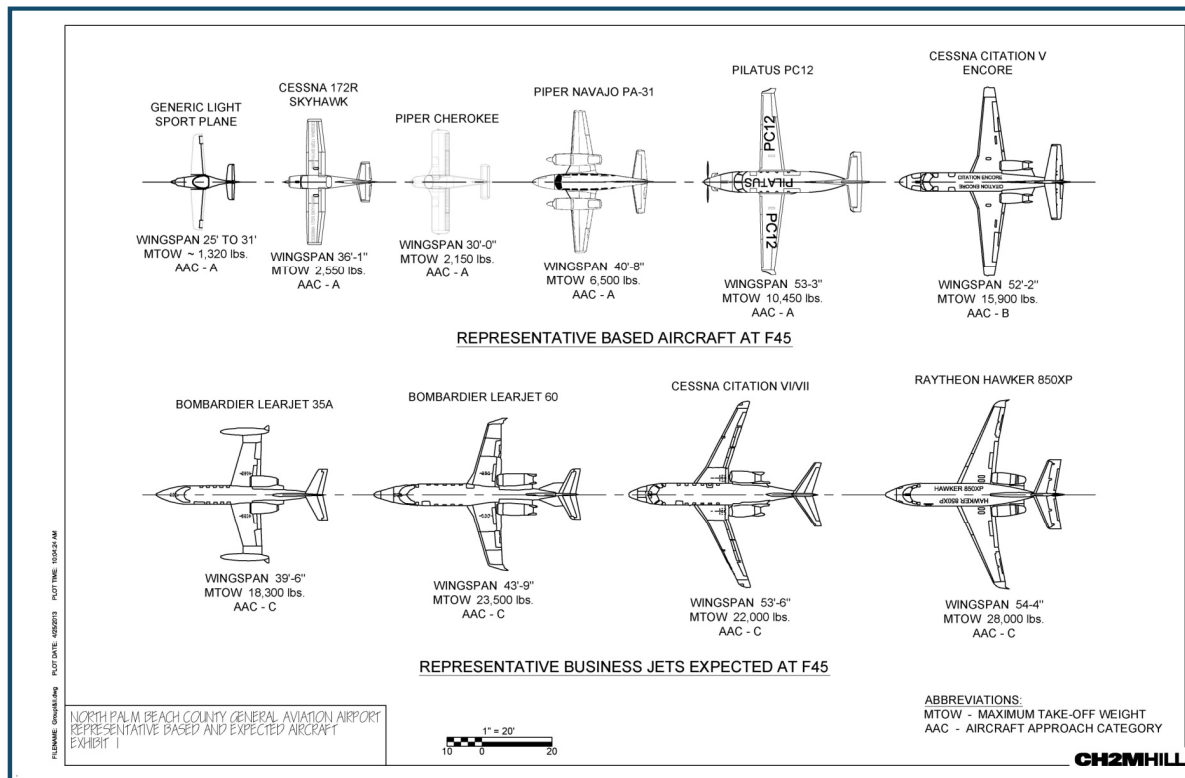
How much noisier will it be when Runway 14/32 is extended?

- With the runway extension, the 65 DNL contour is still not projected to leave the boundary of the Airport
- No significant change in noise is anticipated based on the analysis included in the Environmental Assessment
- Single aircraft events may still exceed 65 dBA (*as they do today*), but the Proposed Project is not anticipated to result in significant cumulative impacts

Noise Contour with the Proposed Project – 2030 Projection



What are the types of jet aircraft that can use the Airport today and in the future?



Existing & Future Aircraft

Existing Aircraft Capable of Using the Airport



Piper Navajo PA-31



Cessna Citation V Encore



Pilatus PC12

Anticipated Future Aircraft



Bombardier Learjet 60



Cessna Citation VII



Raytheon Hawker 850XP

How do I submit comments?

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/>