



Lantana Airport Part 150 Study

Palm Beach County Department of Airports

Advisory Committee Meeting #4

Location: West Boynton Park & Recreation Center

May 3, 2023



Agenda

- Intro/Opening Remarks
- Airport Update
- Jet Litigation Update
- Part 150 Overview
- NOMS Update
- Forecast
- Draft DNL Contours
- Case Studies of Noise Compatibility Program Measures
- Schedule
- Wrap-up and Committee Member Questions
- Public comment

Meeting Guidelines

- Respectful discussion
- Committee members provide discussion during presentation
- Opportunity for public discussion at the end of the presentation
- Public questions will be called in order
- Limited time to speak – 3 minutes
- The presentation will be posted on the project website

Introductions

- Department of Airports
- Study Team
- Committee Members



Airport Update

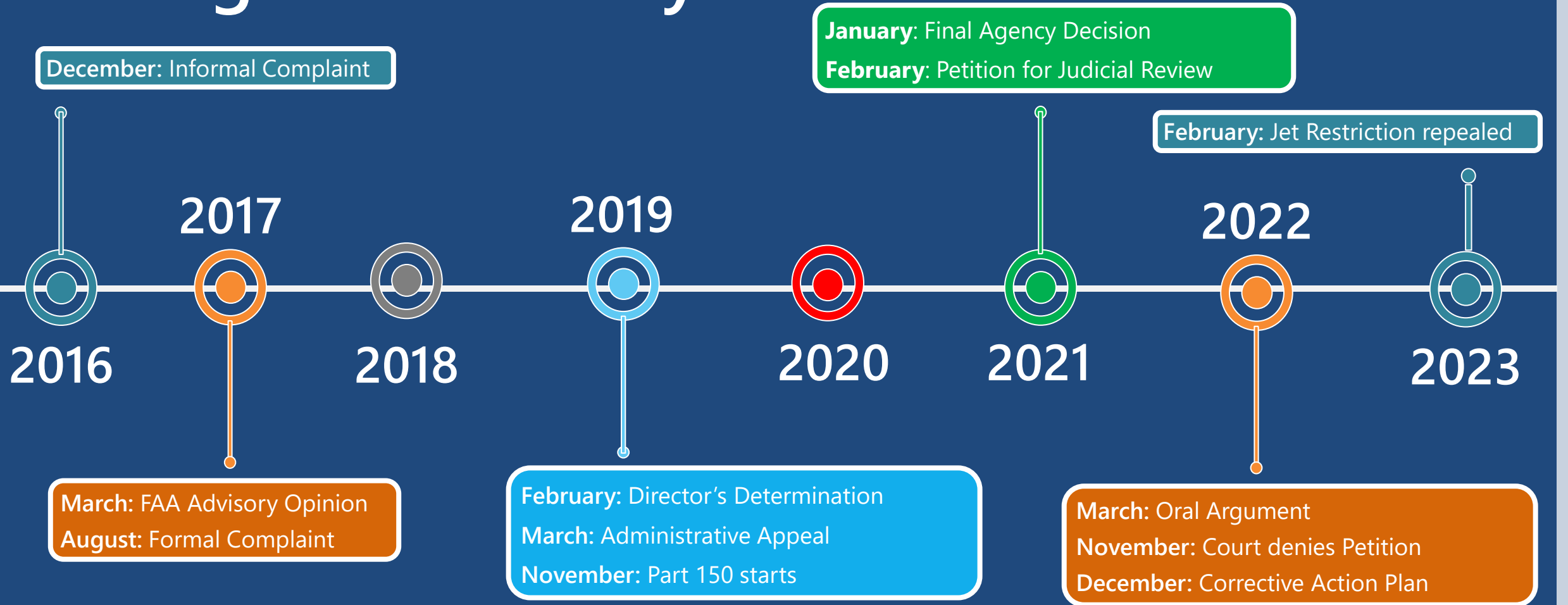
Jet Litigation Update

The Jet Restriction

Since 1973, LNA has been closed to jet aircraft. The most recent codification of this restriction was Section 12-6(a) of the Airport Regulations:

Pure turbo-jet aircraft and aircraft in excess of 12,500 pounds engaging in air cargo operations are prohibited.

Litigation Activity

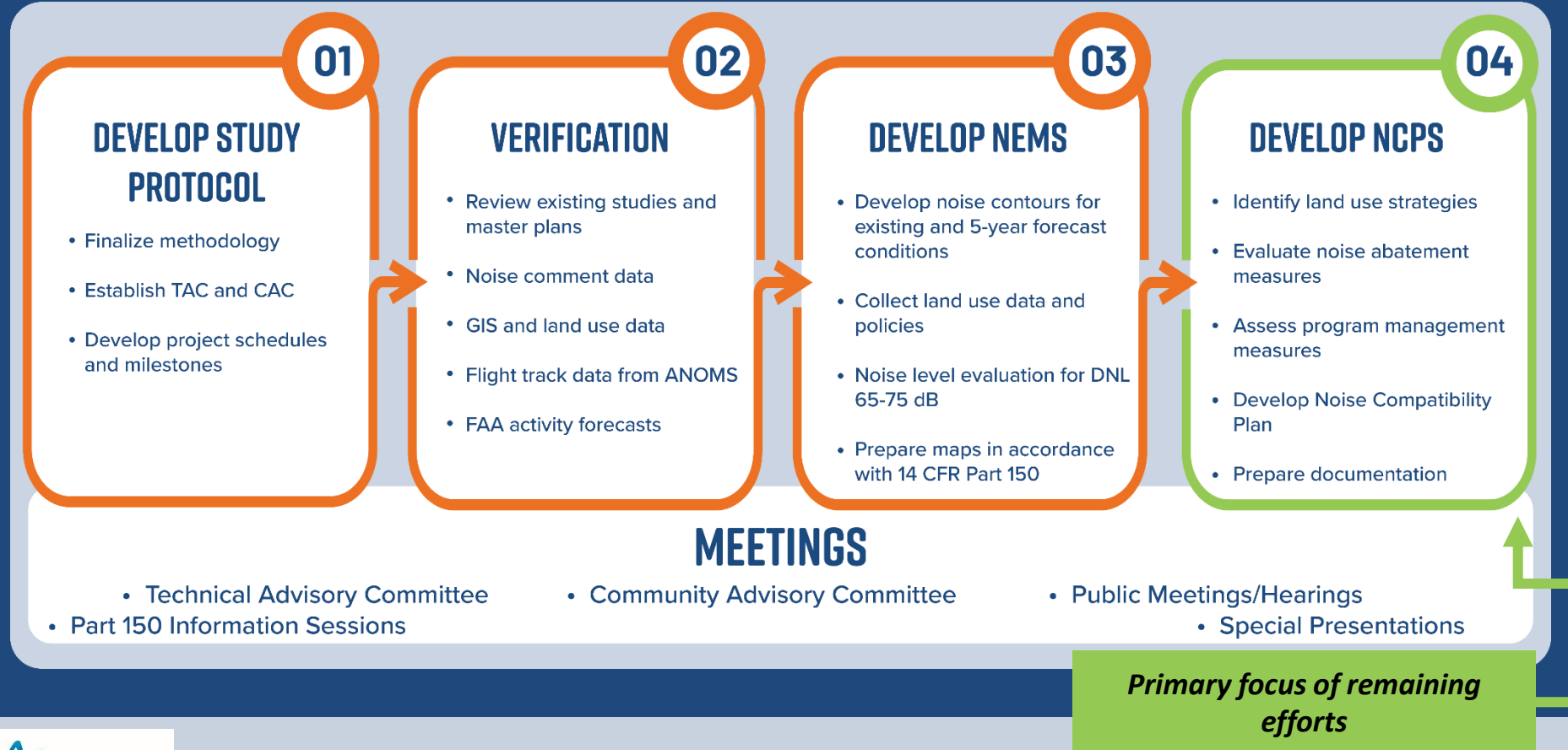


Corrective Action Plan

- Rescind the Jet Restriction
- Remove notations from FAA, FDOT, PBC publications
- Notification to the City of Atlantis pursuant to the Interlocal
- Update Part 150 Forecast
- Host public meeting to explain the Forecast
- Complete the Part 150 study

Part 150 Overview

Generalized Part 150 Study Process



NOMS Update

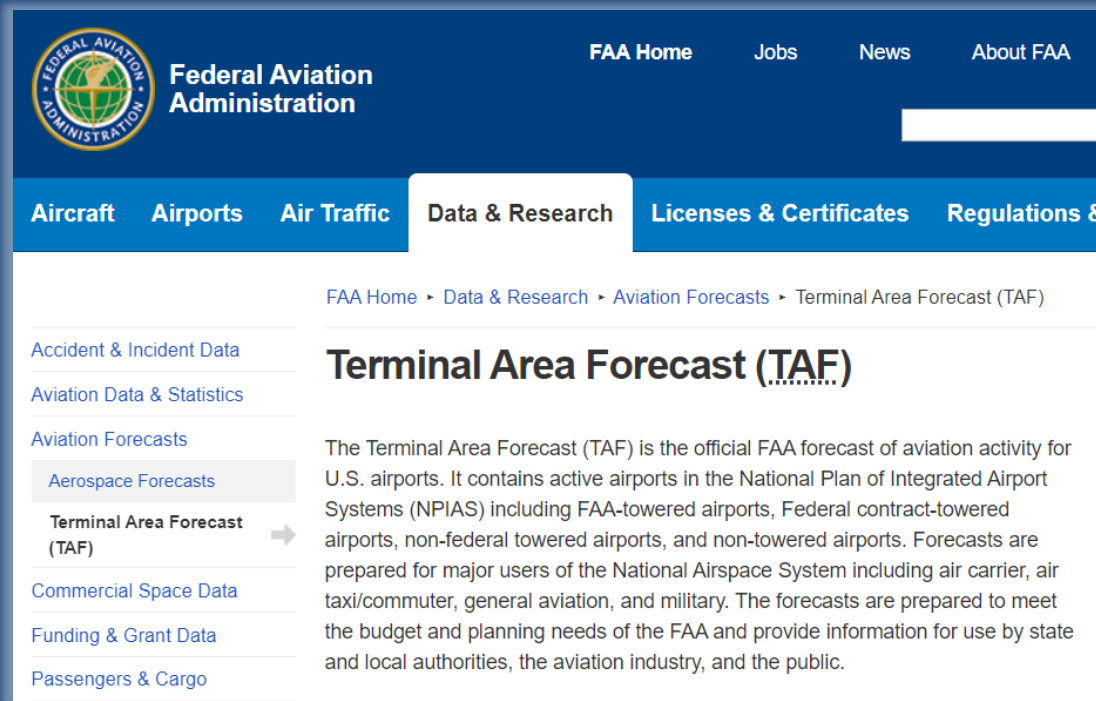
NOMS Update

The DOA held a Vendor Presentation meeting in November 2022

- Several vendors presented and answered questions
- The DOA has developed a draft Scope of Services
- The Scope of Services is currently under review:
 - Full replacement of the system for all airports
 - Integrated noise comment system
 - Enhanced flight tracking data
 - Enhanced data reporting
 - Option for additional noise monitors

Forecast

Forecast Data Sources



The screenshot shows the FAA website's navigation menu with 'Data & Research' selected. The breadcrumb trail is 'FAA Home > Data & Research > Aviation Forecasts > Terminal Area Forecast (TAF)'. The main heading is 'Terminal Area Forecast (TAF)'. The text below explains that the TAF is the official FAA forecast of aviation activity for U.S. airports, covering active airports in the National Plan of Integrated Airport Systems (NPIAS), including FAA-towered, Federal contract-towered, non-federal towered, and non-towered airports. It notes that forecasts are prepared for major users of the National Airspace System, including air carriers, air taxi/commuter, general aviation, and military, and are used for budget and planning purposes.

- 12 months of operational data (CY 2022) collected by the PBCDOA Airport Noise and Operations Monitoring System (ANOMS)
- FAA Traffic Flow Management System Counts data (TFMSC) for CY 2022
- FAA's 2022 Terminal Area Forecast (TAF), published in February 2023

Aircraft Operations Forecast

The FAA approves all aviation forecasts for use in any planning study

- 2023 NEM Forecast is 0.8% more than the FAA TAF
- 2028 NEM Forecast is the same as the FAA TAF
- The forecast was submitted to the FAA and was approved

Forecast Element	CY2023 TAF	2023 NEM	Change	CY2028 TAF	2028 NEM	Change
Air Taxi	2,000	505	-74.8%	2,000	560	-72.0%
General Aviation/Mil	30,192	20,852	-30.9%	32,899	22,212	-32.5%
Local General Aviation	74,788	86,773	16.0%	81,498	93,624	14.9%
Total Operations	106,980	107,860	0.8%	116,396	116,396	0.0%

Note: TAF numbers are reported for the FY and were used to compute the CY totals.
FY = Fiscal year, CY = Calendar year

Approved Jet Operations Forecast

	AEDT Aircraft Type	2022 Departures	2022 Arrivals	2022 Total Operations	2028 Departures	2028 Arrivals	2028 Total Operations
Cessna Citation 1	CNA500	22	22	44	459	459	918
Cessna CitationJet / M2	CNA525	3	3	6	63	63	126
Cessna Citation 550 Bravo	CNA55B	4	4	8	83	83	166
Lear 31	LEAR35	3	3	6	62	62	124
Cirrus Vision SF50	ECLIPSE500	3	3	6	63	63	126
Total Annual Operations		35	35	70	730	730	1,460

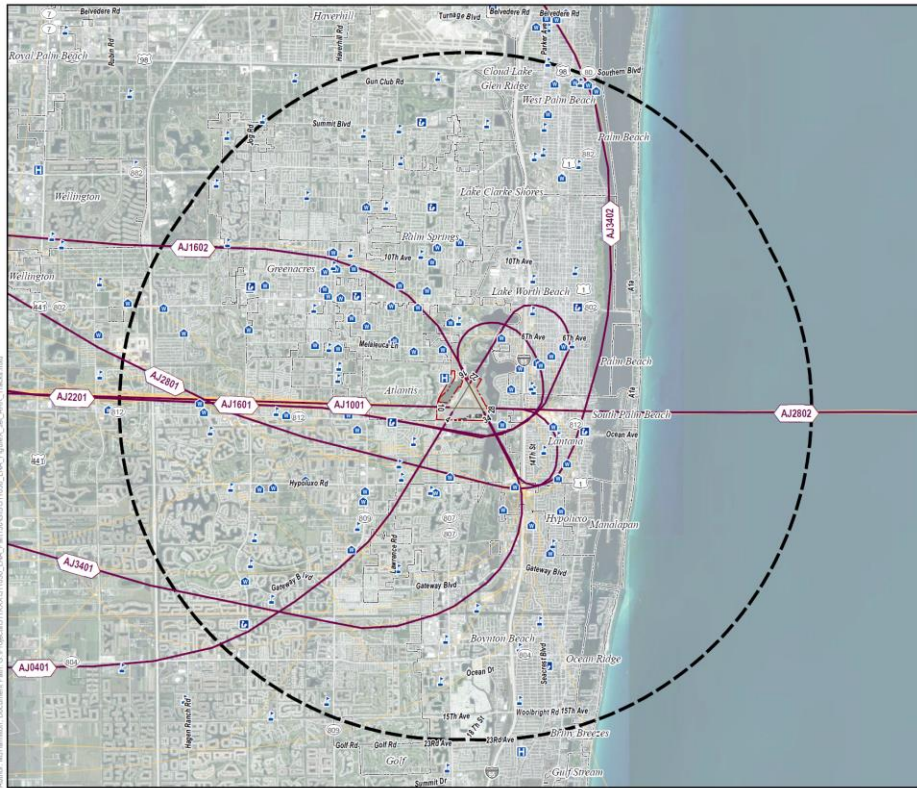
Modeled Runway Use

- Updated Runway Use based on CY2022 ANOMS Data
- Used for both 2023 and 2028

Jet Only Operations	Runway						TOTAL
	4	10	16	22	28	34	
Arrivals	8%	50%	11%	3%	11%	17%	100%
Departures	13%	49%	15%	0%	15%	8%	100%
Touch & Go's	0%	0%	0%	0%	0%	0%	0%

All Operations	Runway						TOTAL
	4	10	16	22	28	34	
Arrivals	12%	43%	24%	3%	7%	12%	100%
Departures	13%	36%	24%	3%	7%	16%	100%
Touch & Go's	9%	46%	22%	2%	8%	13%	100%

Modeled Jet Flight Tracks



Lantana Airport
LNA
PART 150 NOISE STUDY

Figure:
Jet Arrivals

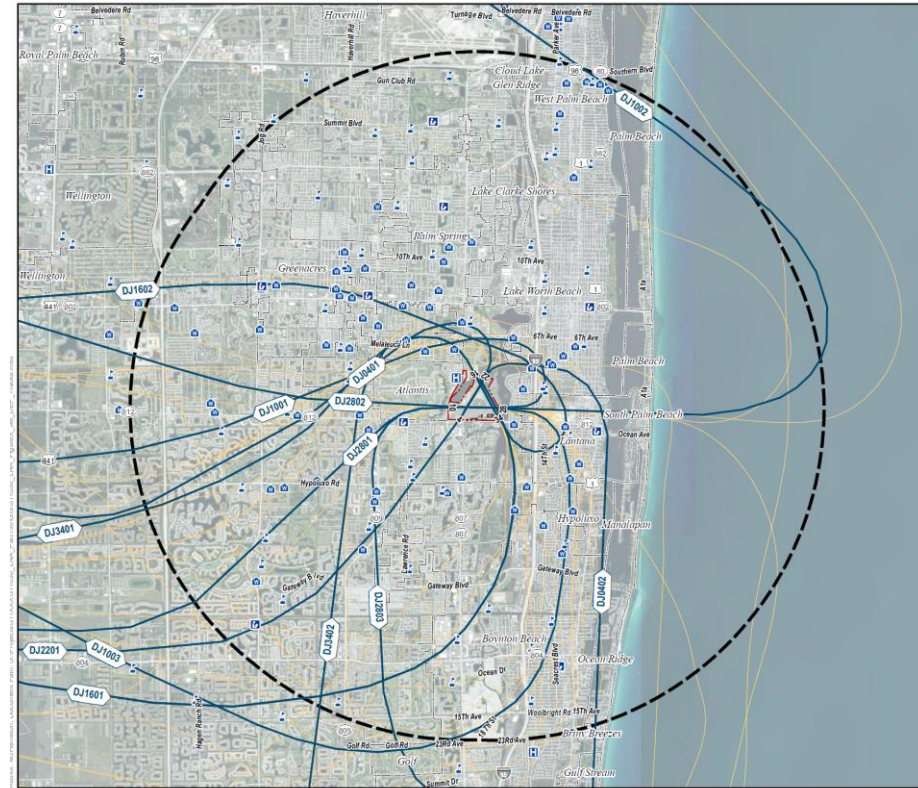
- Modeled Backbone Arrival Track
- Modeled Dispersed Arrival Track
- Radar Arrival Track
- Study Area Boundary
- ▭ LNA Airport Boundary
- Runway / Pavement
- Municipal Boundary
- Highway
- Major Roads
- Minor Roads
- Railroad
- Ⓧ School / College / University
- Ⓧ Place of Worship
- Ⓧ Library
- Ⓧ Hospital

Note: Entire area depicted on the figure is within Palm Beach County.

Data Sources: Palm Beach County; Nearmap USA; ESRI, Inc.

DRAFT
For Internal Use Only

0 1 2 Nautical Miles



Lantana Airport
LNA
PART 150 NOISE STUDY

Figure:
Jet Departures

- Modeled Backbone Departure Track
- Modeled Dispersed Departure Track
- Radar Departure Track
- Study Area Boundary
- ▭ LNA Airport Boundary
- Runway / Pavement
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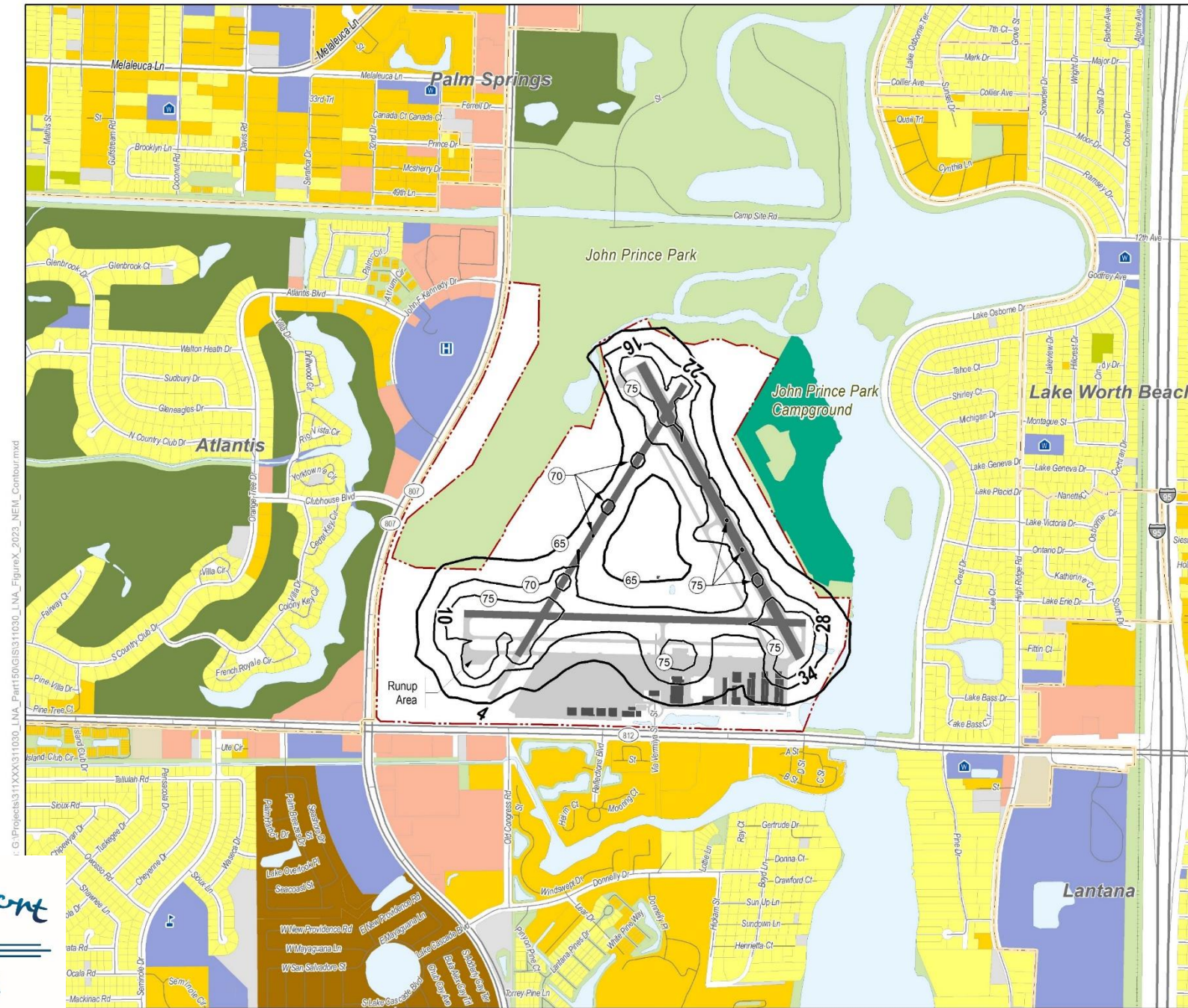
0 1 2 Nautical Miles

Note: Data developed from CY2022 ANOMS data



Preliminary Draft DNL Contours

Figure:
Preliminary Draft 2023 DNL Contours



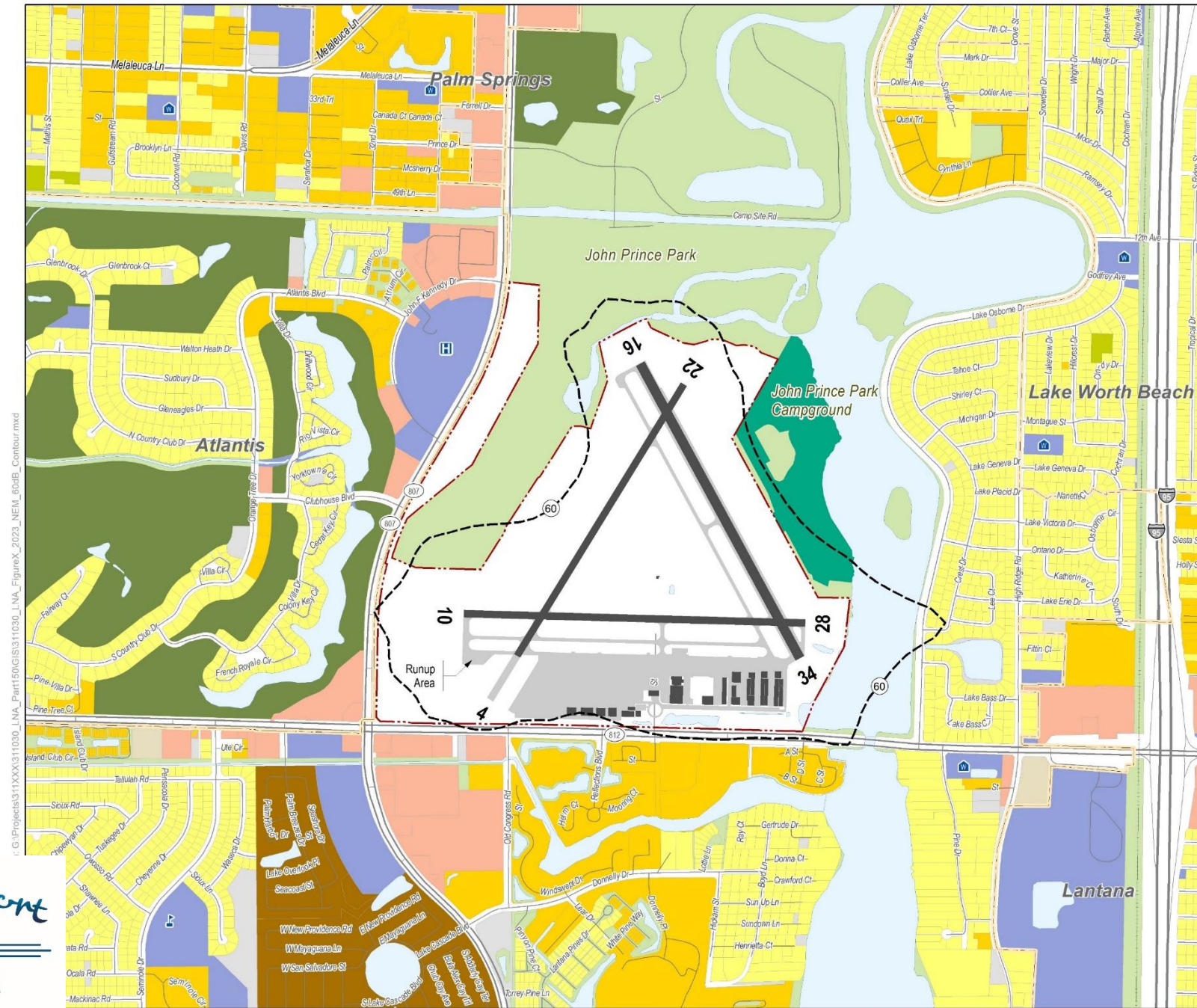
- Preliminary Draft 2023 DNL Contours (65-75 dB)
 - LNA Airport Boundary
 - Runway / Pavement
 - Municipal Boundary
 - Highway
 - Major Roads
 - Minor Roads
 - Railroad
 - School / College / University
 - Place of Worship
 - Library
 - Hospital
- Land Use**
- Residential
 - Multi-Family Residential
 - Mobile Home Park
 - Recreation (Amusements, Parks, Resorts and Camps)
 - Transient Lodging
 - Mixed Use
 - Public Use
 - Recreational / Open Space / Golf
 - Agricultural
 - Commercial Use
 - Manufacturing and Production
 - Vacant / Undefined
 - Water / Stream

Note: Entire area depicted on the figure is within Palm Beach County.

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Figure:
Preliminary Draft 2023 DNL Contours



- Preliminary Draft 2023 DNL Contour (60 dB)
Shown for Informational Purposes Only
 - LNA Airport Boundary
 - Runway / Pavement
 - Municipal Boundary
 - Highway
 - Major Roads
 - School / College / University
 - Place of Worship
 - Library
 - Hospital
 - Minor Roads
 - Railroad
- Land Use**
- Residential
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Figure:

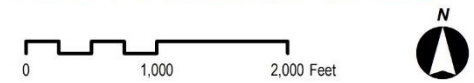
Preliminary Draft 2028 DNL Contours



- Preliminary Draft 2028 DNL Contours (65-75 dB)
 - LNA Airport Boundary
 - Runway / Pavement
 - Municipal Boundary
 - Highway
 - Major Roads
 - Minor Roads
 - Railroad
 - S School / College / University
 - L Library
 - W Place of Worship
 - H Hospital
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- Residential
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 - Public Use
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 - Agricultural
 - Commercial Use
 - Manufacturing and Production
 - Vacant / Undefined
 - Water / Stream

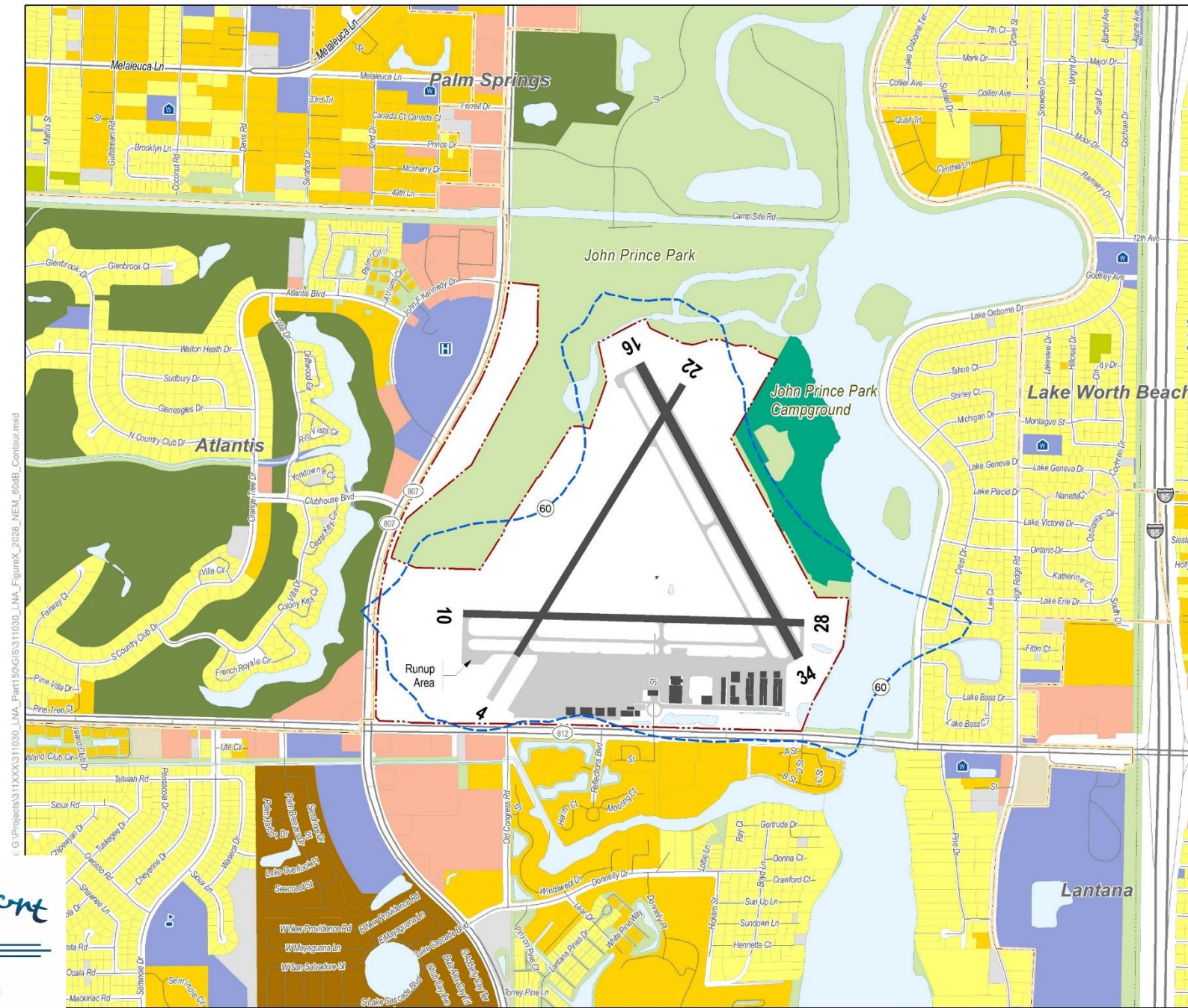
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Figure:
Preliminary Draft 2028 DNL Contours



- Preliminary Draft 2028 DNL Contour (60 dB) Shown for Informational Purposes Only
 - LNA Airport Boundary
 - Runway / Pavement
 - Municipal Boundary
 - Highway
 - Major Roads
 - Minor Roads
 - Railroad
 - School / College / University
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Major NCP Strategy Options within Each Category

POTENTIAL NOISE MEASURES BASED ON PRELIMINARY CONTOURS		
Noise Abatement Strategies	Land use Strategies	Programmatic Strategies
Voluntary procedures such as runway use, arrival/departure procedures, hours of certain operations, etc...	Land use controls	Promotion, education, signage, etc...
Noise barriers	Zoning	Monitoring & reporting tools
Runup enclosures	Building codes	NEM updates
Other airport improvements	Comprehensive plans	NCP revision
Other actions proposed by stakeholders	Real estate disclosures	Other actions proposed by stakeholders
	Other actions proposed by stakeholders	

Case Studies of Completed Noise Compatibility Program Measures

Case Study – Vero Beach Regional Airport, FL (VRB)

NCP Measure - The City of Vero Beach will continue the following current touch and go procedures:

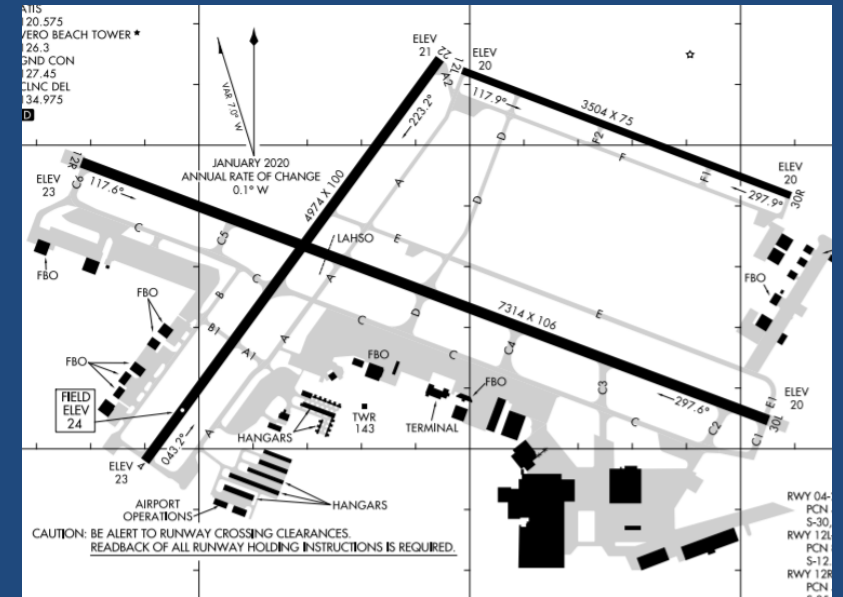
- Runway 11L/29R and 4/22 will be closed to touch and go traffic when the tower is closed (currently 9:00 PM to 7:00 AM)
- Runway 11R will use left traffic pattern when the tower is closed
- Runway 29L will use a right traffic pattern when the tower is closed
- The Traffic Pattern Altitude (TPA) for propeller aircraft will be 1,000 feet above ground level and turboprop and jet aircraft will use 1,500 feet above ground level
- Touch and go operations are strongly discouraged during the hours of 10:00PM to 7:00 AM (local) Monday – Saturday, and 10:00 PM to 12:00 noon (local) on Sunday
- Intersection departures are discouraged

FAA Response – Approved in part Measures to set the traffic pattern altitude and hours of touch and go operations are **approved as voluntary**.

Disapproved in part The measure to close the crosswind runway is disapproved. For purposes of aviation safety, the crosswind runway should be made available for use during high crosswind conditions regardless of the time of day.

The measure to have converging traffic patterns (Runway 11R left traffic pattern with Runway 29L right traffic pattern when the tower is closed) is disapproved. The FAA considers this procedure to have the potential to cause an unsafe situation.

Vero Beach Regional Airport (VRB)



Case Study – Treasure Coast International Airport, FL (FPR)

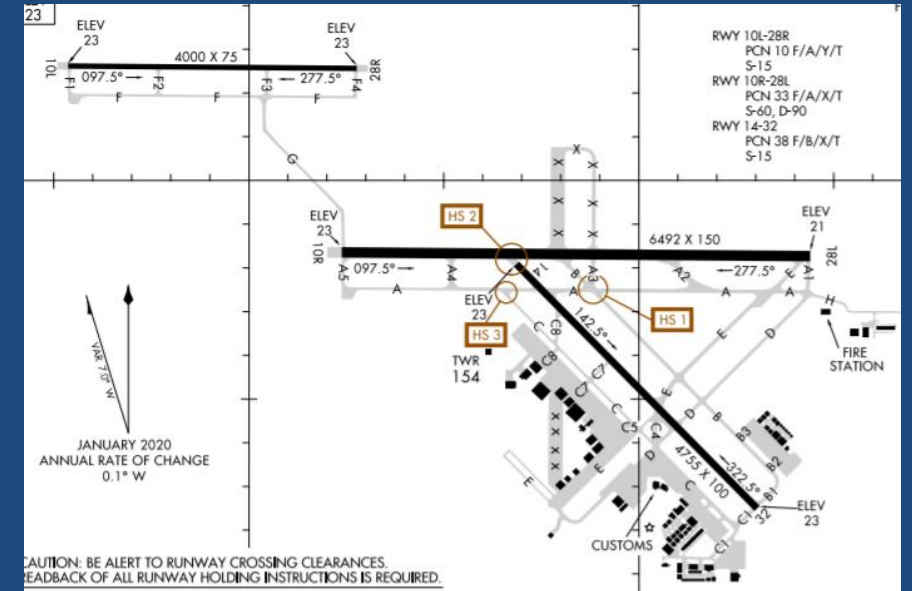
NCP Measure - Runway 14 is preferred for calm wind operation

FAA Response – Approved on a voluntary basis during calm winds as traffic, weather, and airspace safety and efficiency permit.

NCP Measure - Runway 10L/28R is preferred for flight training to the extent possible. This runway is designed to accommodate flight-training aircraft, which are prevalent at FPR.

FAA Response – Approved on a voluntary basis during calm winds as traffic, weather, and airspace safety and efficiency permit. This measure must not be construed as a mandatory procedure for noise abatement purposes. The FAA is not responsible for monitoring or regulating the number/volume of operations other than for safety and efficiency, nor is it responsible for “enforcing” noise abatement/voluntary actions. The FPR ATCT will select runways and procedures that maximize the efficiency of air traffic flow at all times; noise abatement procedures are voluntary and may be used when operating conditions permit.

Treasure Coast International Airport (FPR)



Case Study – Treasure Coast International Airport, FL (FPR)

NCP Measure – Update County Airport Zoning Regulations

Updated county regulations would include: Add 4 NM airport notification; add school construction zones per Florida State Chapter 333; publish noise zones at least three times a year; require noise easements and/or sound insulation for new residential construction within the DNL 60 dB noise contour.

FAA Response – Approved The Federal government has no authority to control local land use; the local government has the authority to implement this measure. Approval of this measure does not commit the FAA to Federal funding assistance.

NCP Measure - Pilot Education Program

St. Lucie County would publish noise abatement information to enhance pilot participation. This is a continuation of an existing measure. FPR has an established voluntary noise abatement program that has been developed in close coordination with airport neighbors and users. This program is published on the airport's website and distributed to all tenants on the airport. In addition, publications are distributed to all flight schools at other area airports to familiarize them with FPR's noise abatement policies.

FAA Response – Approved Inserts or other information must not be construed as mandatory air traffic procedures; the content of the inserts are subject to specific approval by appropriate FAA officials outside of the FAR Part 150 process and are not approved in advance by this determination.

St. Lucie County International Airport Voluntary Noise Abatement Procedures

Unless otherwise directed by ATCT to extend to mid-river, or for safety reasons, the voluntary noise abatement procedures request pilots doing touch-and-go, stop-and-go and full-stop taxi-back operations to avoid the noise sensitive areas by **SAFELY TURNING BEFORE REACHING US 1**.

Voluntary noise abatement for jets: Jet aircraft are to utilize National Business Aircraft Association close-in departure procedures. Also, jet aircraft departures on Runway 10R are to maintain runway heading until 2,000 ft. or reaching the ocean shoreline before initiating any turns. Touch-and-go operations by jet aircraft are to be avoided.

Traffic Pattern

When Air Traffic Control Tower is closed (9:00 p.m. to 7:00 a.m.), preferred pattern is: Right traffic for Runways 14 and 10R, Left traffic for Runways 28L and 32

St. Lucie County International Airport is a noise sensitive airport and we ask your consideration of the people that live in the surrounding area by complying with these Voluntary Noise Abatement Procedures.

BE A GOOD NEIGHBOR AND FLY QUIET!
QUIET FLYING IS GOOD BUSINESS!
Effective 01/01/09

- All aircraft takeoffs should be made utilizing the best rate of climb speed.
- Intersection takeoffs are strongly discouraged except as directed by ATCT.
- Runway 14 is preferred in calm wind as traffic, weather, and airspace safety and efficiency permit

When using training runway 10L/28R, Stay south of Indrio Rd.

Voluntary noise abatement procedures include allowing Touch & Go, Stop & Go, and Full-Stop Taxi-Back Operations during the following times:

- Monday through Friday: 8 a.m. to 10 p.m.
- Saturday: 9 a.m. to 10 p.m.

Additionally, pilots are requested to avoid the above training activities on Sundays and Holidays (New Year's Day, Martin Luther King Jr. Day, Memorial Day, Independence Day, Labor Day, Veteran's Day, Thanksgiving Day, Christmas Day).

AVOID NOISE SENSITIVE AREAS (south and east)



FPR NCP Approved 2006

Case Study – Marana Regional Airport, AZ (AVQ)

- Non-Towered Airport similar to LNA
- The NCP includes one recommended noise abatement element, five land use planning elements, and two program management elements
- No noncompatible land use within the 65 DNL contours
- 2017 Master Plan recommended a Tower and AVQ has been accepted into the FAA Tower program.

NCP Measure - Pilot and Public Education Program

This measure recommends the Town of Marana develop pilot and public education programs for the AVQ. These programs represent a cooperative approach that would include monthly pilot meetings, distribution of brochures describing voluntary noise abatement procedures, signs in pilot lounges, airport open houses, real estate agent seminars and homeowners meetings. This measure includes a recommendation for the Town to consider developing a brochure for pilots to identify noise sensitive land uses near the airport.

FAA Response – Approved Inserts or other information must not be construed as mandatory air traffic procedures; the content of the inserts are subject to specific approval by appropriate FAA officials outside of the FAR Part 150 process and are not approved in advance by this determination.



Marana Airport (AVQ)



AVQ NCP Approved 2008

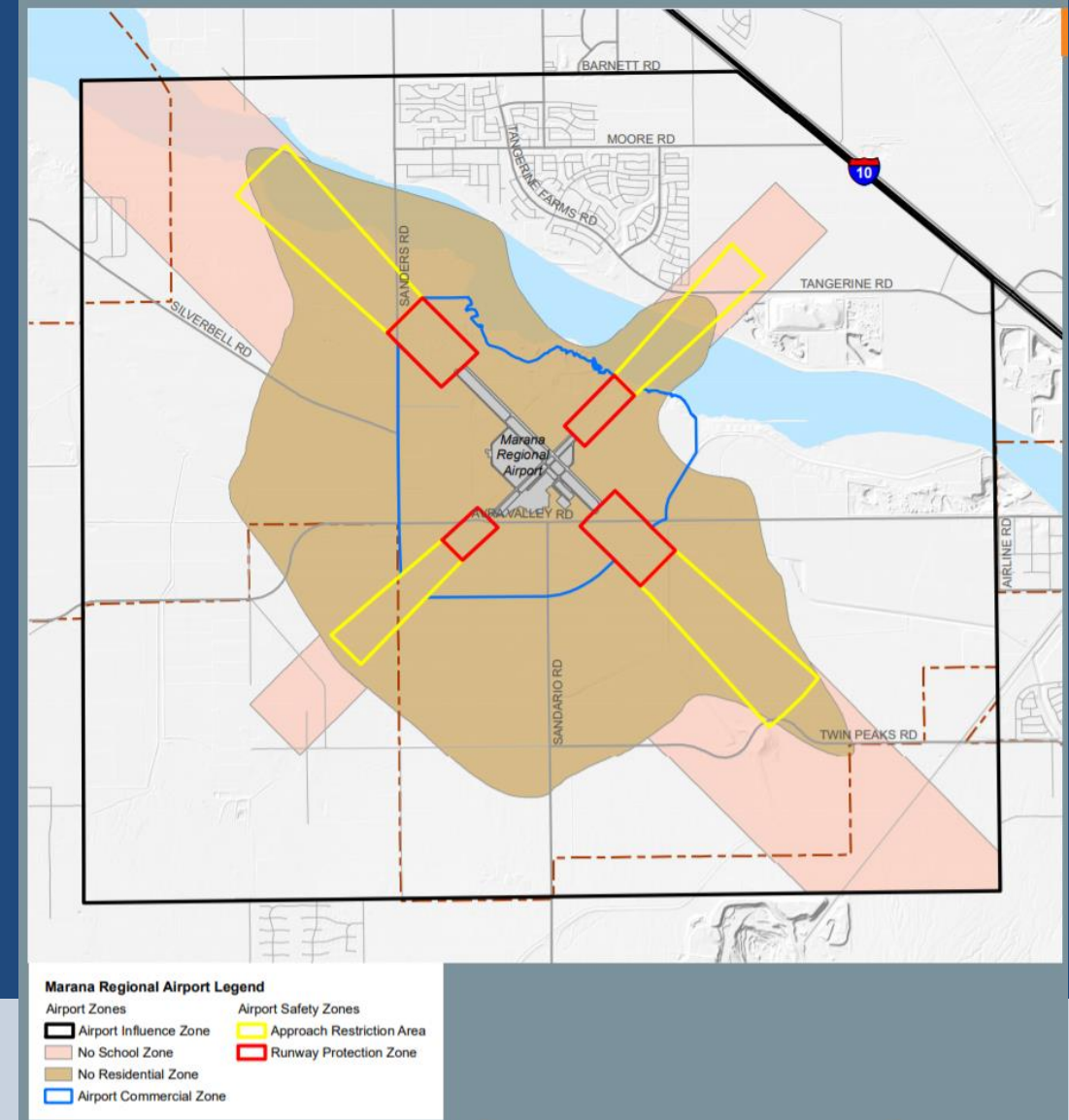
Case Study – Marana Regional Airport, AZ (AVQ)

Non-Towered Airport similar to LNA. No noncompatible land use within the 65 DNL contours.

NCP Measure – Adopt and Overlay Zone

This measure recommends the adoption of an overlay zone divided into three distinct areas by the Town of Marana to regulate the development of noise sensitive land uses within the AIA. The most restrictive zone, Zone 1 would be based on the long-range 55 ONL contour that would prohibit noise-sensitive development in this zone. Zone 2 is located outside of Zone 1 and would also prohibit certain noise sensitive land uses such as schools, and places of worship. Residential land uses would be allowed in this zone if a noise and aviation easement was provided to the Town. The last zone, Zone 3 is based on long range traffic patterns for the airport and requires fair disclosure notices and an aviation easement in this area.

FAA Response – Approved The adoption of zoning is a specific local land use control that can prohibit the introduction of new non-compatible land uses. Implementation of this measure is considered to be within the authority of the Town of Marana and Pima County.



Summary of Existing Measures



Lantana Airport (LNA)

Voluntary Noise Abatement
Procedures

Pilot Info: 561-683-0472

LNA is a noise sensitive airport
Runway 4/22 preferred noise
abatement runway

Issued by:
Palm Beach County Department of Airports
Noise & Community Affairs
846 PBIA
West Palm Beach, FL 33406
561-471-7468

Fixed Wing Noise Abatement Procedures

- Runway 4/22 preferred noise abatement runway
- Use UNICOM at all times when in airport area
- No intersection takeoffs
- No touch and go activity on any runway
 - Monday – Friday
10:00 pm – 7:00 am
 - Saturday & Sunday
10:00 pm – 8:00 am
- No touch-and-go activity 10/28 anytime
- Keep pattern within one mile
- Use best rate of climb on takeoffs
- Use FAA AC 91-36

Helicopter Noise Abatement Procedures

- Keep all pattern routes over airport – operate away from residential areas
- Helicopter traffic pattern altitude is (1,000' MSL)
- Please – no activity conducted over populated areas
- Flight training should remain north of Lantana Road, West of Lake Osbourne and East of Congress Avenue, on airport property – when possible
- Use manufactures' recommended noise abatement procedures or FAA AC 91-66

Discussion of Possible NCP Measures

- Committee Discussion



Review of Project Schedule and Contacts

Proposed Schedule

Meeting / Activity	Anticipated Purpose	Date
Kick-Off Meeting with PBCDOA and the Part 150 Team	Define organizational and procedural matters and public outreach, review and refine scope and schedule details.	November 2019
1 st Advisory Committee Meeting	Introduction to Part 150, discuss team roles, identify issues of concern, and to discuss areas for noise monitoring	February 4, 2020
2 nd Advisory Committee Meeting	Noise modeling inputs, noise measurements and introduction to noise compatibility	June 1, 2020
3 rd Advisory Committee Meeting	Review revisions to noise model inputs, discuss NCP purpose, review existing measures	October 28, 2020
4 th Advisory Committee Meeting	Review of approved forecast, discuss NA measures and discussion on Land Use and Programmatic Measures	May 3, 2023
5 th Advisory Committee Meeting	Review NA measures, discuss Land Use and Programmatic Measures.	June 21, 2023
6 th Advisory Committee Meeting	Discuss remaining measures and develop draft program	August 2, 2023
NEM/NCP Public Comment Period	NEM/NCP thirty-day public comment period.	October 25 - November 24, 2023
NEM/NCP Public Workshop & Hearing	Public Workshop and Hearing	November 15, 2023
Submit Final NEM/NCP to FAA	PBCDOA submits final NEM/NCP for approval by FAA.	December 15, 2023

Note: Schedule is subject to change



Project Contacts and Information

- Bob Mentzer, Project Manager - LNA Part 150 Study Team
- Craig Delegato— Manager, Noise Office
- Address emails to: LNAPart150@hmmh.com
- LNA Part 150 Website provides project information www.lnapart150.com/lnapart150
- PCBDOA website provides general airport information www.pbia.org/about/general-aviation/park-airport/



The "Part 150" Airport Noise Study for the Palm Beach County Park Airport (Lantana Airport) is underway.

Lantana Airport Overview

Palm Beach County Park Airport (Lantana Airport) is located in Lantana, Florida and is 6 miles south of Palm Beach International Airport. Lantana Airport (LNA) is operated and maintained by the Palm Beach County Department of Airports (PBCDOA). LNA is a reliever airport focusing on the general aviation reciprocating and turbine driven aircraft.

Lantana is a busy airport with a mix of both fixed wing aircraft and helicopters. There is no air traffic control tower and currently no landing fees at LNA. There are 3 runways which are located in a triangle layout. The longest runway, 10/28 is 3,450' in length and 75' wide.

The airport is supported by one fixed based operator, Stellar Aviation. The field also has several flight schools, aircraft maintenance and a propeller shop.

Part 150 Overview

The PBCDOA has recently begun a noise study at LNA called a "Part 150 Study". Title 14 of the Code of Federal Regulations Part 150 (14 CFR Part 150) sets forth a process for airport proprietors to follow in developing and obtaining FAA approval of programs to reduce or eliminate noncompatible land use. Additional information on this regulation and related FAA guidance can be found on FAA's website here. A formal submission to the FAA under Part 150 includes documentation for two principal elements: (1) the Noise Exposure Map (NEM) and (2) the Noise Compatibility Program.

Part 150 prescribes specific standards and systems for:

- Measuring noise
- Estimating cumulative noise exposure
- Describing noise exposure (including instantaneous, single event, and cumulative levels)
- Identifying noncompatible land uses
- Coordinating Noise Compatibility Program development with airport users, the FAA, land use officials and neighbors
- Documenting the analytical process and development of the Noise Exposure Maps and Noise Compatibility Program
- Submitting documentation to the FAA
- Public consultation
- FAA and public review processes
- FAA approval or disapproval of the submission

The Part 150 Study includes multiple opportunities for community input and engagement. Program documents, upcoming meeting dates/locations and meeting materials will be posted on this website throughout the project as they are prepared.

Frequently asked questions and answers can be found on this website in the "Study Documents" section.

If you have any questions about the LNA Part 150 Study, please contact the LNA Part 150 Study email address.

Additional Part 150 Resources

Information on other airports' Part 150 Studies can be found on FAA's Noise Compatibility Program Status website. This site provides links and status updates on airport NCPs developed through Part 150 studies, and is organized by state.

Background information on airport noise can be found at NoiseQuest. NoiseQuest was developed to provide educational information on aviation noise. The initial site development was supported by the FAA through the PARTNER Center of Excellence under grants to researchers at The Pennsylvania State University and Purdue University.



Next Steps

- Review potential Noise abatement measures
- Develop potential land use and program management measures
- Develop potential list of NCP measures
- NEM/NCP Documentation

Wrap Up

Next TAC/CAC meetings:

- Wednesday June 21, 2021
- Primary topic – Continued evaluation and discussion of NCP measures

Committee questions, comments, and discussion

Public Comments

Thanks for attending!