

LNA Airport Master Plan: Technical Advisory Committee



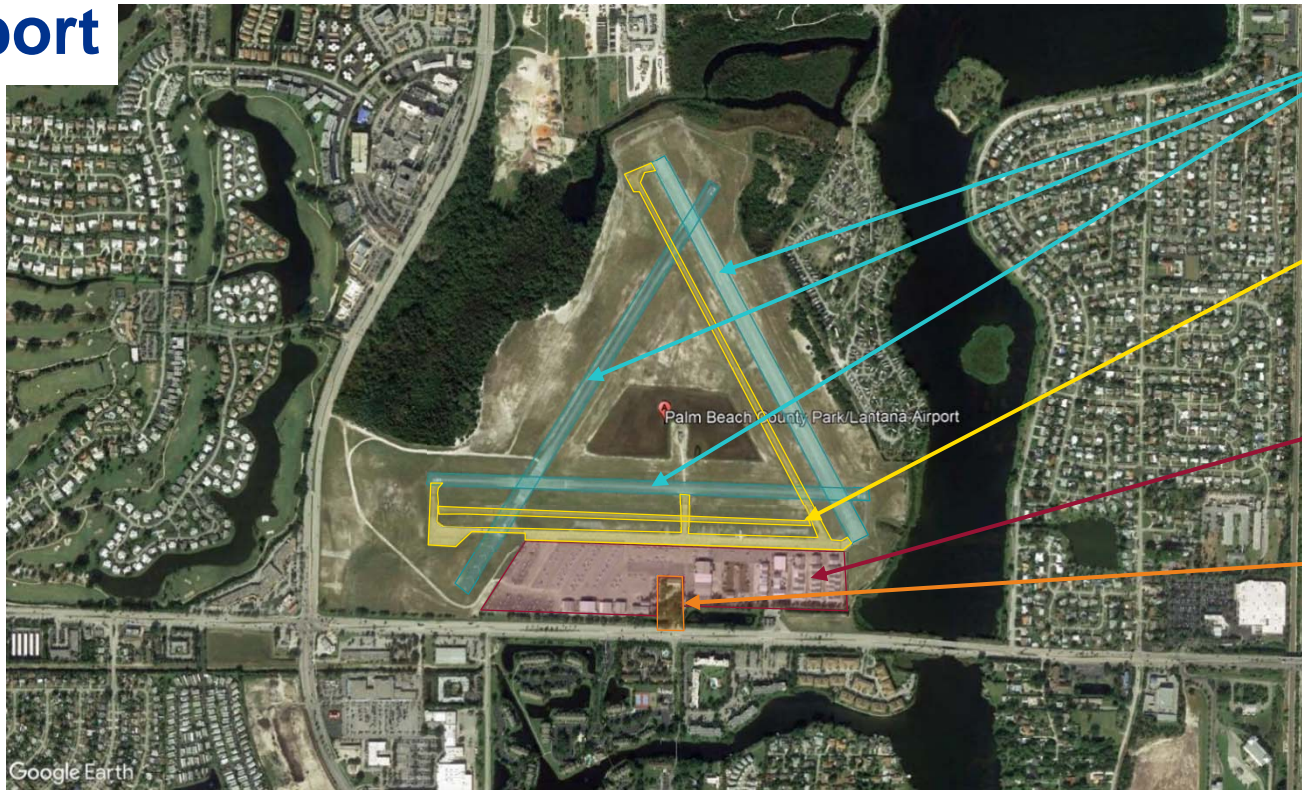
May 16th, 2019

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Agenda

1. Airport Master Plan Process and Update
2. Forecasts of Aviation Demand
3. Facility Requirements
4. Preliminary Alternatives
5. Next Steps

LNA Airport



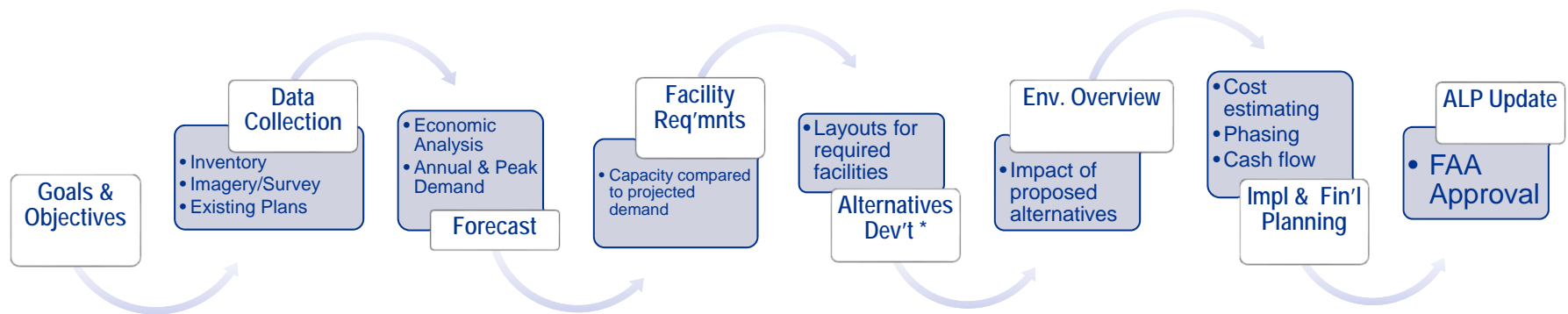
Runways

Taxiways

General
Aviation Area

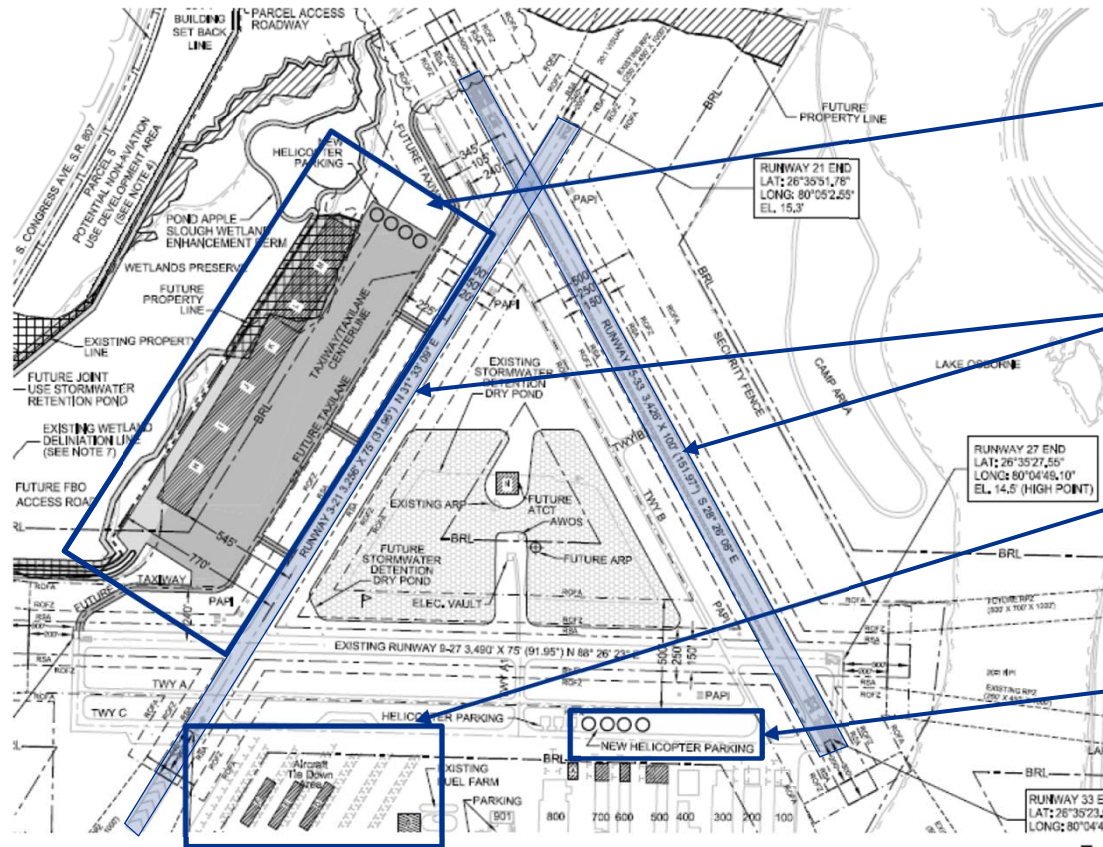
Access Road

Airport Master Plan Process



* Alternatives will be prepared and refined based on input from technical committee and public

2008 Master Plan



New General Aviation Area

Runway Rehabilitation

Apron Improvements

New Helicopter Parking

Palm Beach County Park Airport Projects

- Recently completed & on-going projects
 - Runway 15-33 (now 16-34) Rehabilitation
 - Taxiway C Reconstruction
 - Demolition of Existing Fuel Farm
 - Demolition of Existing Hangar Rows 600 and 700 (Hurricane Damage)
 - Apron Rehab / Reconstruction (East of new Fuel Farm)
 - Runway Re-Designation (Marking & Signage)
 - FBO Hangar Improvements (Roof replacement, doors, etc.)
 - Southside Redevelopment Program Phase 1 and 2 (East of Main Entrance)
- Future Projects
 - New Fuel Farm & Wash Rack
 - Apron Rehab / Reconstruction (Located West and North of new Fuel Farm)
 - Runway 4-22 Rehabilitation
 - Runway 10-28 Rehabilitation
 - FBO Existing Terminal Improvements/New Terminal
 - LNA Southside Development Program Phases 3 and 4
 - LNA T-Hangars Row 700 Redevelopment
 - LNA Box & T-Hangars Row 600 Redevelopment

Airport Master Plan Update – 2018/2019

- Inventory Chapter:
Chapter reviewed by DOA and the FAA
- Forecasts of Aviation Activity Chapter:
Forecasts approved by the FAA
- Facility Requirements:
Draft chapter with DOA
- Alternative Analysis:
Preliminary Analysis in progress
Alternatives will be prepared and refined based on input from technical committee and public

Aviation Demand Forecasts

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Aviation Demand Forecasts

- Based Aircraft
 - Recommended forecasts for based aircraft utilize similar growth rates to the FAA's Terminal Area Forecasts (TAF) projections

Forecast Element	2017	2022	2027	2037
Total Based Aircraft	214	234	256	306
Single Engine	169	187	206	250
Multi-Engine	31	32	33	36
Jet	0	0	0	0
Helicopter	14	15	17	20

Aviation Demand Forecasts

- Operations
 - Recommended forecasts for based aircraft utilize similar growth rates to the FAA's Terminal Area Forecasts (TAF) projections

Forecast Element	2017	2022	2027	2037
Total Operations	117,050	128,047	140,077	167,635
Local	90,000	98,596	107,860	129,079
Itinerant Air Taxi *	2,000	2,511	2,752	3,303
Itinerant General Aviation	25,000	26,890	29,416	35,203
Itinerant Military	50	50	50	50

* Air taxi operations, often referred to as air charter operations, are those operations conducted by turbine aircraft with greater than six seats operating under FAR Part 135 or Part 91/91K flight rules

Facility Requirements

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Facility Requirements

- **Airfield**
 - Update taxiway fillet design when taxiways are due for rehabilitation
 - Evaluate options to improve Taxiway A and C with Runway 4 threshold and taxiway P with Runway 28 threshold
 - Add Blast pads to all Runways
- **General Aviation**
 - Add additional T-Hangars, shadeports and conventional hangars as demand warrants
 - Increase FBO/Pilot's lounge size as needed when demand warrants and preserve area for additional aviation facilities
 - Evaluate the need for dedicated helicopter parking positions as demand warrants
- **Access and Parking**
 - Evaluate the need for additional public parking and add parking as demand warrants
- **Support**
 - Preserve area for future ATCT

Facility Requirements

- General Aviation Requirements

	PAL 1 (128,047)	PAL 2 (140,077)	PAL 3 (167,635)
	Square Feet (Acres)		
Total Tie-downs and Total Apron Space Requirement	164 (489,800 sq ft)	181 (536,200 sq ft)	217 (640,000 sq ft)
Excess/Deficiency Tie-downs (Total Apron Space)	12 (155,200 sq ft)	5 (108,800 sq ft)	41 (5,000)
Total Hangar Space Requirement	289,500 sq ft	303,000 sq ft	353,000 sq ft
Excess/Deficiency	18,900 sq ft	3,400 sq ft	33,600 sq ft
Total GA Space Requirement	734,300 sq ft	796,200 sq ft	937,000 sq ft
Excess/Deficiency	174,100 sq ft	112,200 sq ft	28,600 sq ft

PAL: Planning Activity Levels

Green: Excess tie-downs or space when comparing existing facility to projected demand

Red: Deficiency when comparing existing facility to projected demand

Preliminary Alternatives

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Preliminary Alternatives

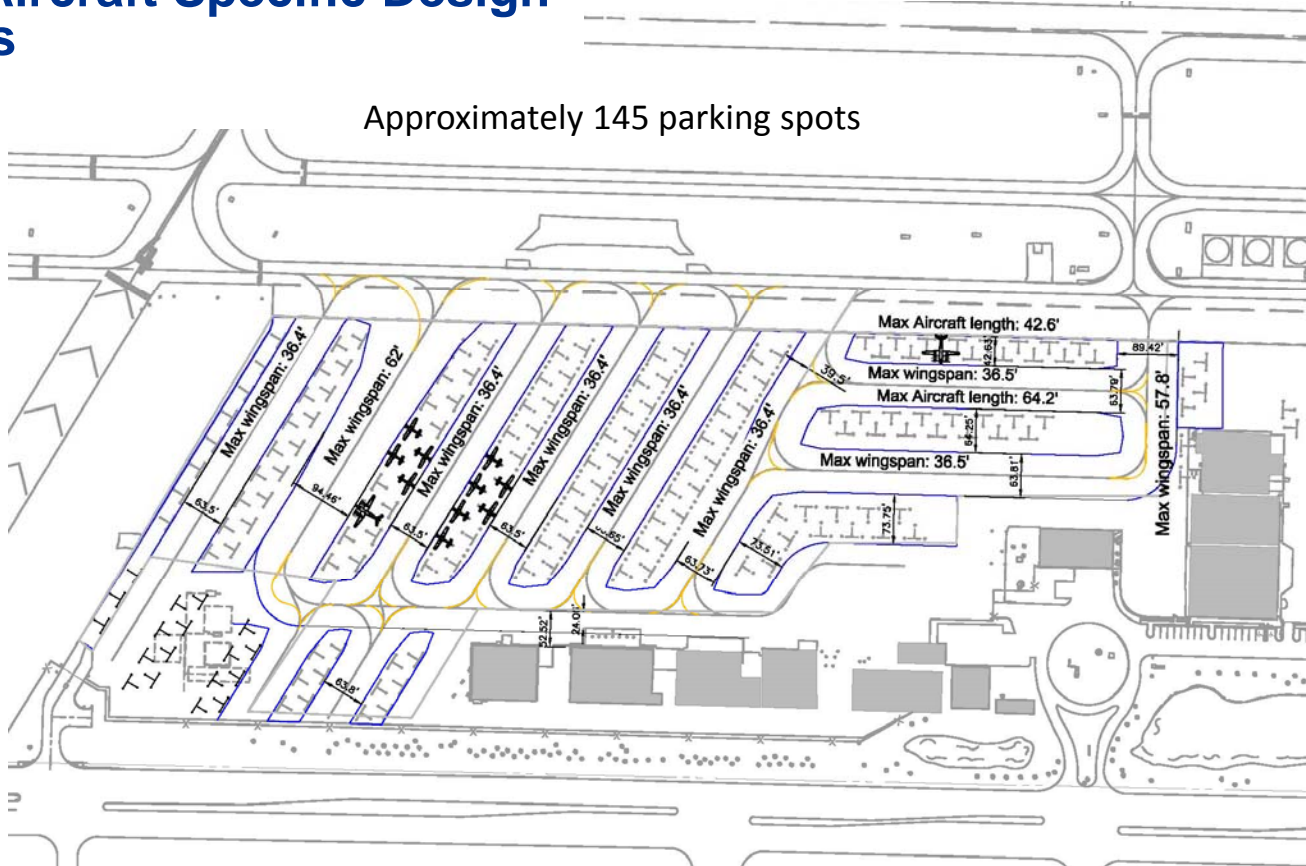
- Analysis of impacts of meeting full design standards versus maintaining aircraft specific standards
- Add additional T-Hangars, shadeports and conventional hangars
- FBO Size Increase

Existing Aircraft Specific Design Standards

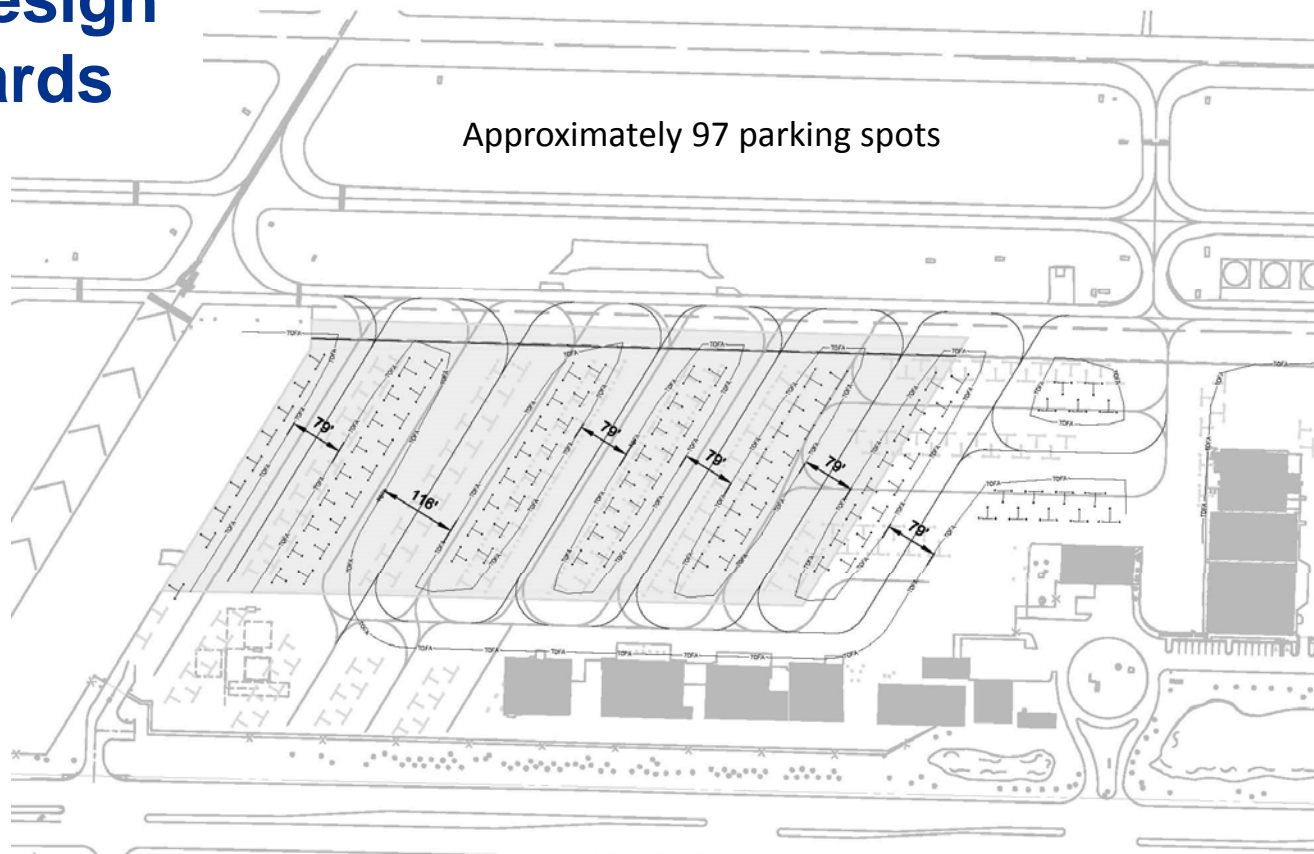


Existing Aircraft Specific Design Standards

Approximately 145 parking spots



FAA Design Standards



Next steps

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Next Steps

- Alternative Analysis
Finalize Draft Alternatives based on input from technical committee and public (Summer)
- Environmental Overview
Brief overview of anticipated environmental impacts from Alternatives (Summer)
- CIP and Phasing Plan
Develop Costs and Implementation and Phasing Plan (Fall)
- Airport Layout Plan
Develop Airport Layout Plan Set (Fall and Winter)

THANK YOU

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