



Fort Lauderdale Executive Airport

Master Plan Update

City Commission Briefing

City Project No.: 12070

FDOT FIN Project No.: 431012-1-94-01

Agenda

- Master Plan Definition
- Airport Master Plan Process
- Stakeholder Involvement and Public Outreach
- Existing Conditions
- Facility Requirements and Needs
- Proposed Airport Development Plan
- Funding Sources
- Final Deliverables

Master Plan Definition

What is an Airport Master Plan?

"An airport master plan is a comprehensive study of an airport and usually describes the short-, medium-, and long-term development plans to meet future aviation demand."

– FAA Advisory Circular 150/5070-6B – Airport Master Plans

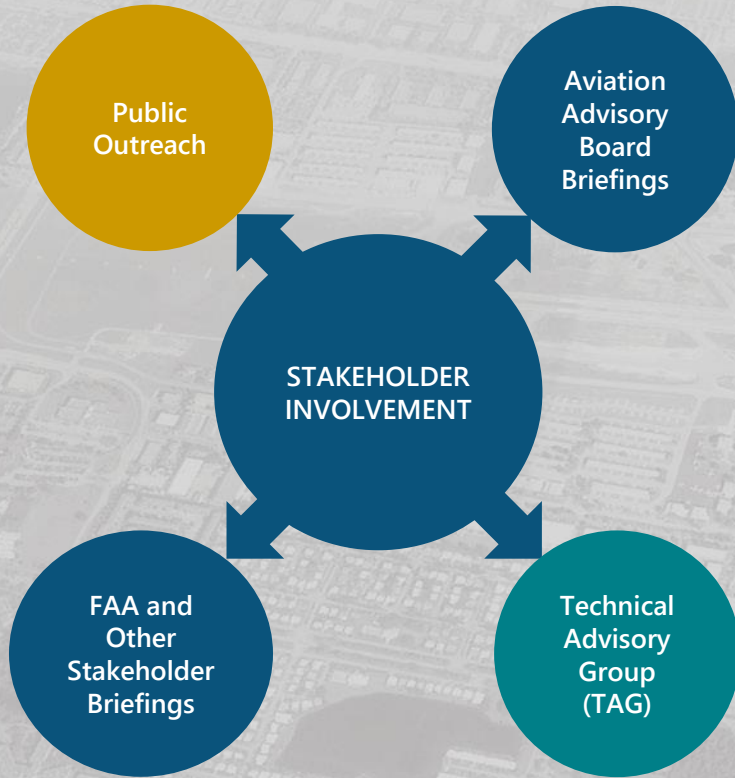
Why Update the Fort Lauderdale Executive Airport Master Plan:

- Previous Master Plan was completed in 2009
- Federal Aviation Administration (FAA) recommends updating master plans every 5 to 10 years
- Ensures that the Airport will be able to accommodate future aviation demand
- Keeps the Airport in compliance with FAA requirements to maintain an up-to-date Airport Layout Plan (ALP)

Airport Master Plan Process



Stakeholder Involvement and Public Outreach



PUBLIC OUTREACH

PUBLIC MEETING #1:

NOVEMBER 1, 2016

Master Plan Process
Aviation Activity Forecasts

PUBLIC MEETING #2:

JANUARY 19, 2018

Facility Requirements
Development Alternatives

PUBLIC MEETING #3:

JUNE 14, 2018

Preferred Development Layout
Implementation Plan and Financial Feasibility

TECHNICAL ADVISORY GROUP (TAG)

TECHNICAL REVIEW COMMITTEE MEETING #1:

JUNE 16, 2016

Inventory
Aviation Activity Forecasts

TECHNICAL REVIEW COMMITTEE MEETING #2:

NOVEMBER 2, 2016

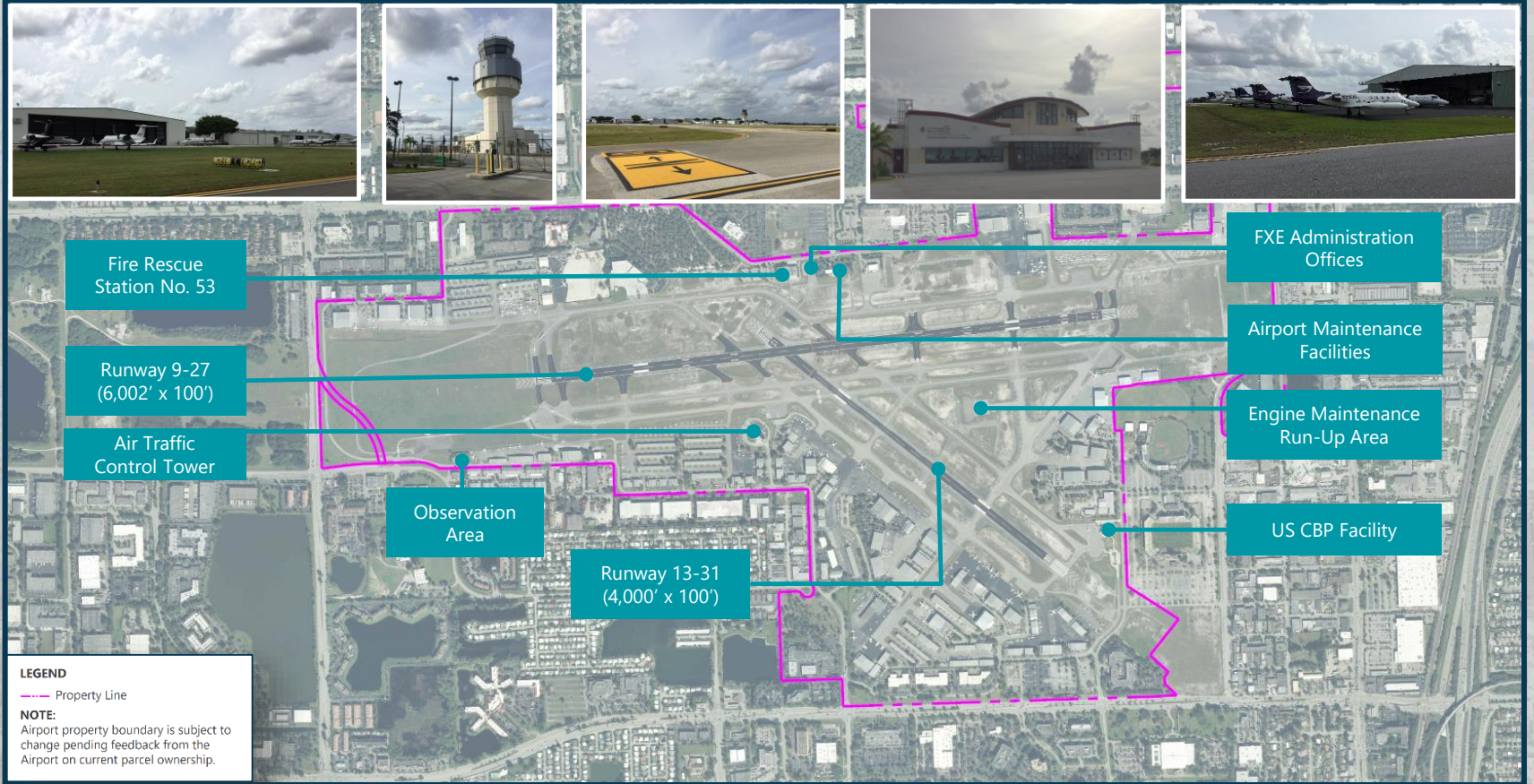
Facility Requirements
Development Alternatives

TECHNICAL REVIEW COMMITTEE MEETING #3:

MAY 23, 2017

Preferred Development Layout
Environmental Overview
Preferred Development Plan

Existing Conditions



Facility Requirements and Needs

- **Airfield:**
 - Extend Runway 9-27 by 1,000 feet
 - Widen and extend Runway 13-31 RSA and ROFA
 - Grade Runway 13-31 RSA as needed
 - Airfield signage improvements
 - Airfield geometry improvements for compliance with FAA AC 150/5300-13A, Airport Design, Change 1
- **Fixed Base Operators and General Aviation:**
 - 60 acres of additional FBO/GA development
- **Airport Support:**
 - Airfield Equipment Service (AES) Building expansion (planned)

Proposed Airfield Improvements

Key Airfield Projects

- Runway Length:

Runway 9/27

6,002'



7,002'

(landing threshold remains in place)

Runway 13/31

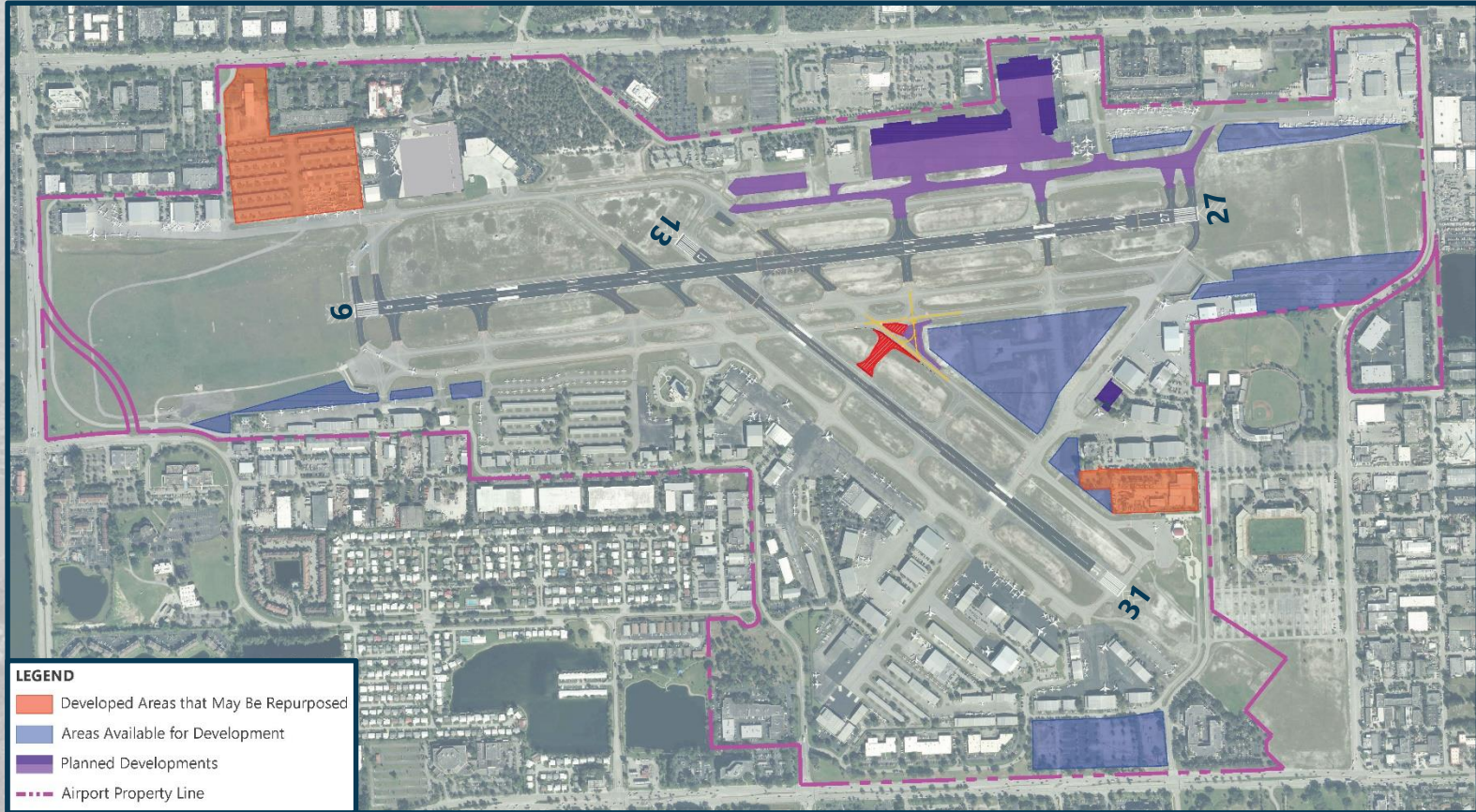
4,000' - No Change

- Taxiway System:

- Improvements to meet the current Federal Aviation Administration (FAA) design standards and provide access to new airfield facilities
- Run-up area improvements
- Rename taxiways as part of overall airfield signage plan upgrade

Proposed Airport Development Plan

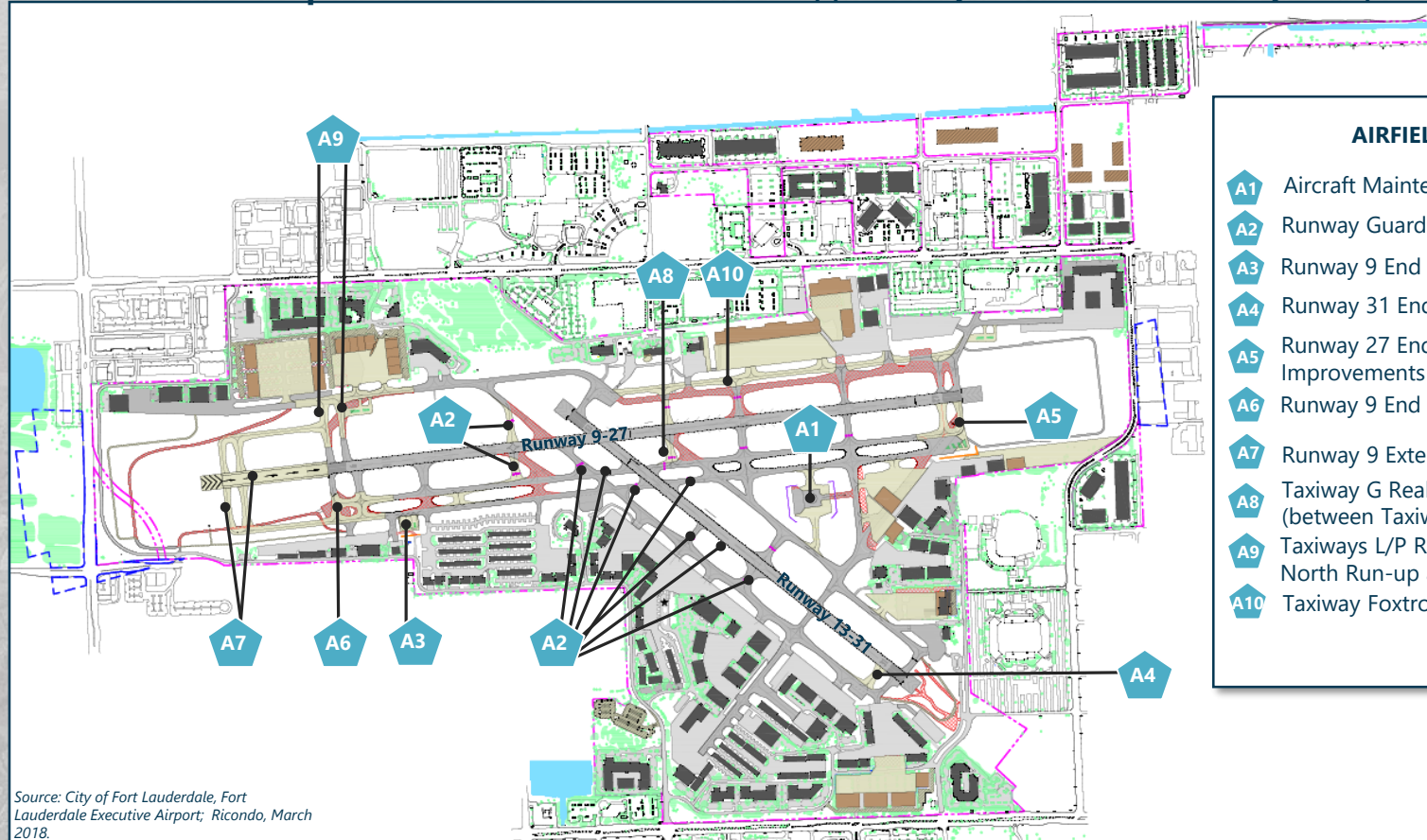
Areas Available for Development



Source: City of Fort Lauderdale, Fort Lauderdale Executive Airport; Ricondo, October 2017.

Proposed Airport Development Plan

Overall Development Plan (As reviewed and approved by the Technical Advisory Group)



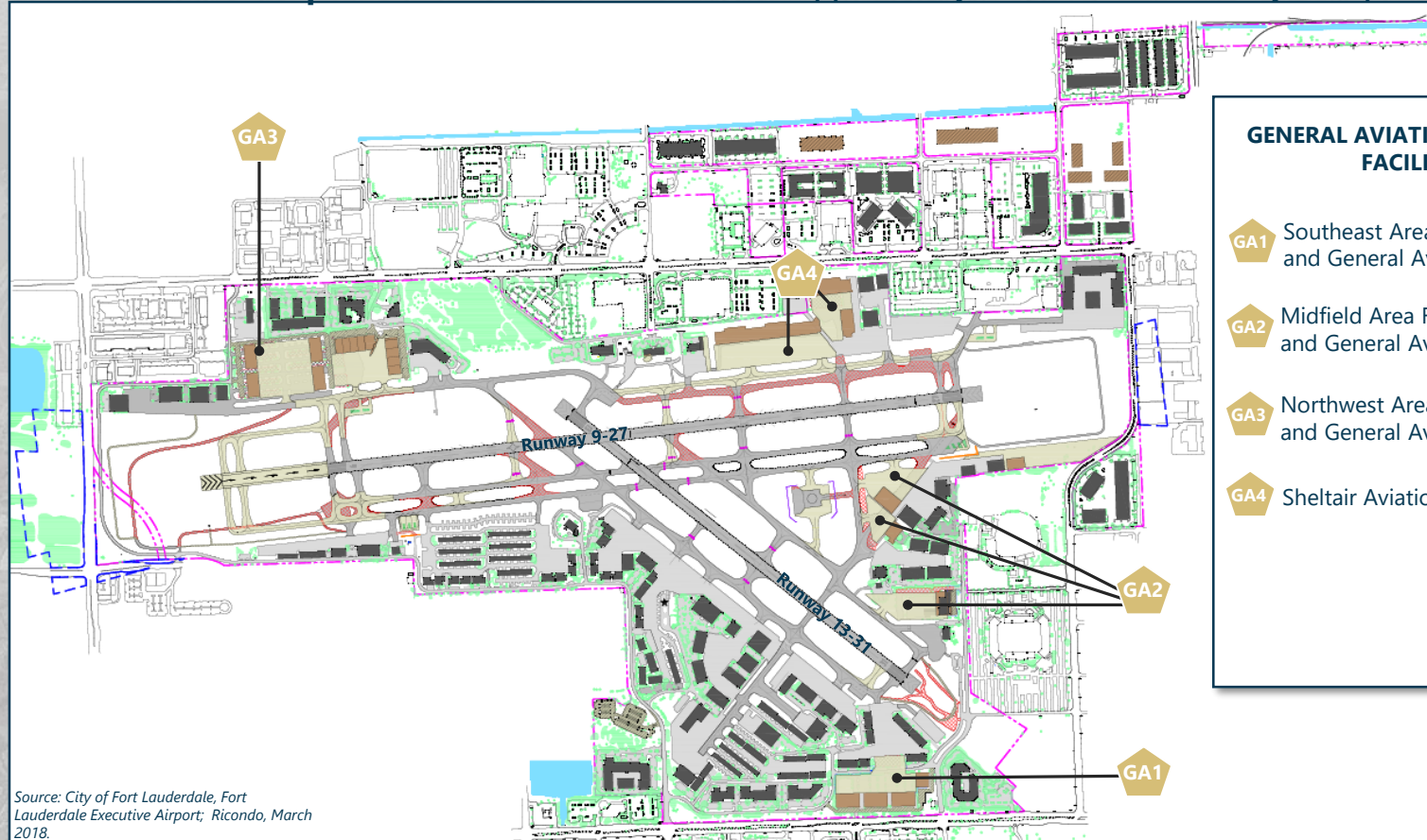
AIRFIELD IMPROVEMENTS

- A1** Aircraft Maintenance Run-up Area Expansion
- A2** Runway Guard Lights Installation
- A3** Runway 9 End South Run-up area relocation
- A4** Runway 31 End Bypass Taxiways Construction
- A5** Runway 27 End Access and South Run-up Area Improvements
- A6** Runway 9 End South Taxiway Improvements
- A7** Runway 9 Extension including Parallel Taxiways
- A8** Taxiway G Realignment (between Taxiways F and A)
- A9** Taxiways L/P Realignment and Runway 9 End North Run-up area Construction
- A10** Taxiway Foxtrot Relocation

Source: City of Fort Lauderdale, Fort Lauderdale Executive Airport; Ricondo, March 2018.

Proposed Airport Development Plan

Overall Development Plan (As reviewed and approved by the Technical Advisory Group)















Source: City of Fort Lauderdale, Fort Lauderdale Executive Airport; Ricondo, March 2018.

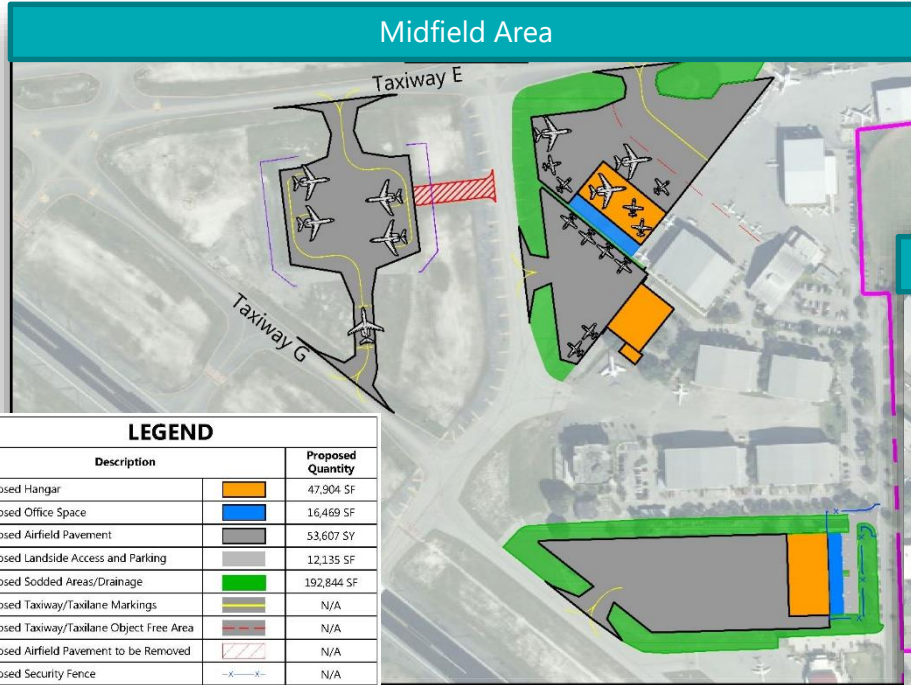
GENERAL AVIATION/FIXED BASED OPERATOR FACILITY DEVELOPMENT

- GA1** Southeast Area Fixed Based Operator (FBO) and General Aviation Facility Development
- GA2** Midfield Area Fixed Based Operator (FBO) and General Aviation Facility Development
- GA3** Northwest Area Fixed Base Operator (FBO) and General Aviation Facility Development
- GA4** Sheltair Aviation Development

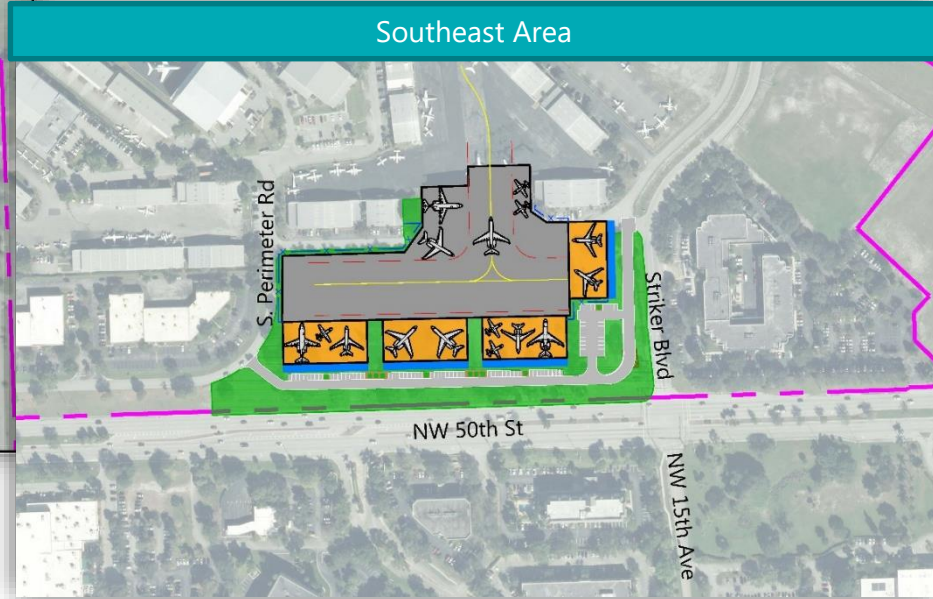
Proposed Airport Development Plan

Conceptual Facility Development

LEGEND		
Description		Proposed Quantity
Proposed Hangar		92,600 SF
Proposed Office Space		17,200 SF
Proposed Airfield Pavement		21,764 SY
Proposed Landside Access and Parking		66,867 SF
Proposed Sodded Areas/Drainage		141,756 SF
Proposed Taxiway/Taxilane Markings		N/A
Proposed Taxiway/Taxilane Object Free Area		N/A
Proposed Security Fence		N/A
Existing Airport Property Boundary		N/A
Gulfstream V (ADG-III)		N/A
Falcon 9X (ADG-III)		N/A
Citation Jet (ADG-II)		N/A

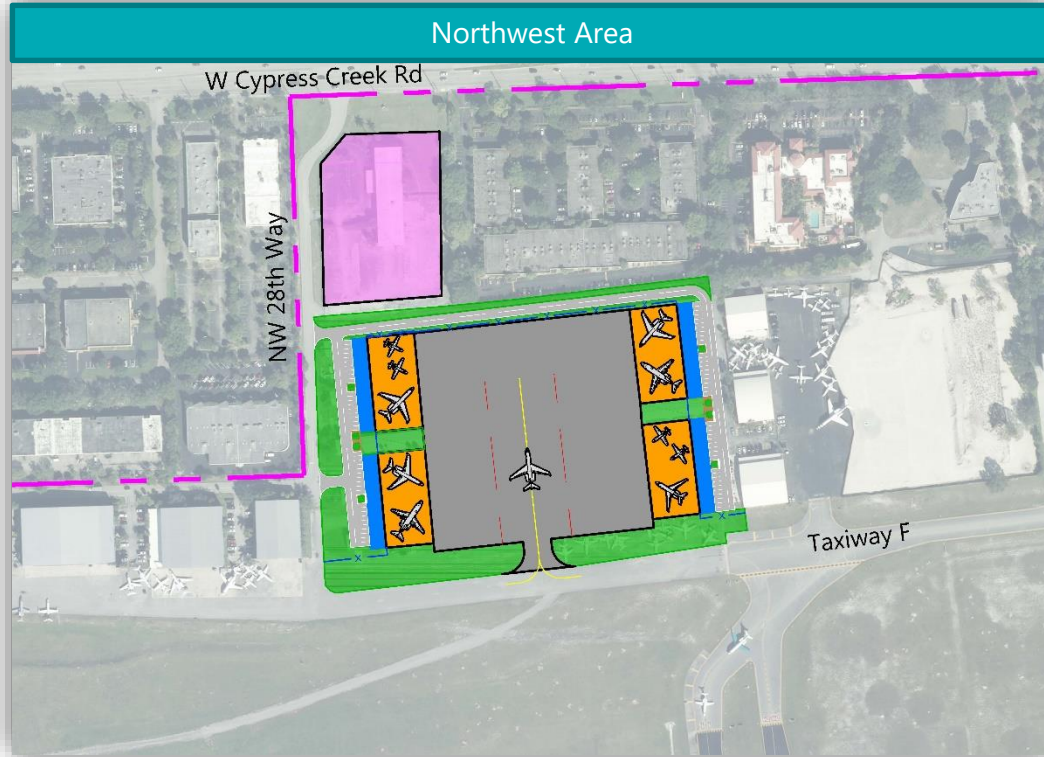


LEGEND		
Description		Proposed Quantity
Proposed Hangar		47,904 SF
Proposed Office Space		16,469 SF
Proposed Airfield Pavement		53,607 SY
Proposed Landside Access and Parking		12,135 SF
Proposed Sodded Areas/Drainage		192,844 SF
Proposed Taxiway/Taxilane Markings		N/A
Proposed Taxiway/Taxilane Object Free Area		N/A
Proposed Airfield Pavement to be Removed		N/A
Proposed Security Fence		N/A
Proposed Prop Wash Wall/Jet Blast Fence		N/A
Existing Airport Property Boundary		N/A
Gulfstream V (ADG-III)		N/A
Falcon 9X (ADG-III)		N/A
Citation Jet (ADG-II)		N/A



Proposed Airport Development Plan

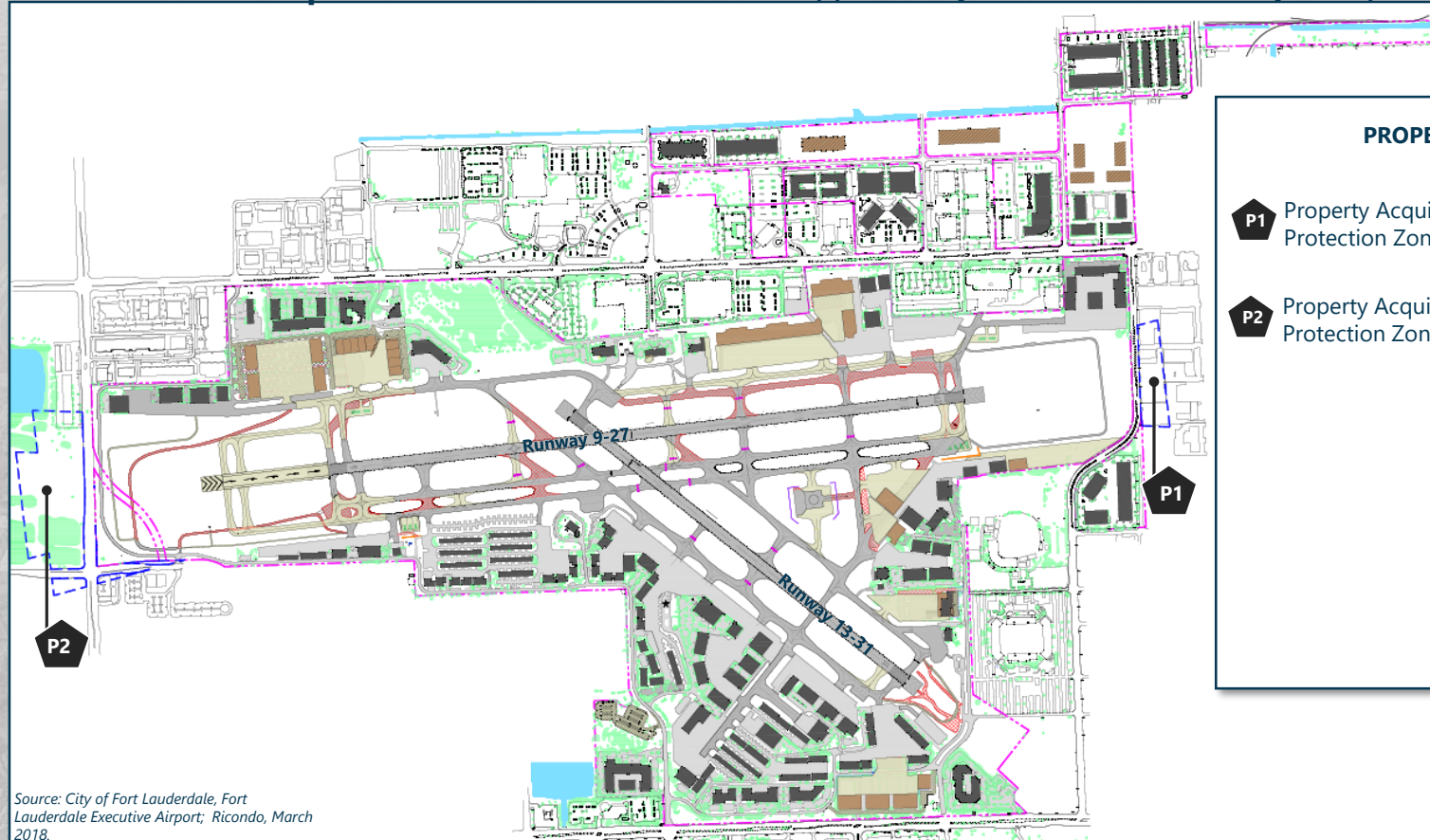
Conceptual Facility Development



LEGEND		
Description		Proposed Quantity
Proposed Hangar		96,800 SF
Proposed Office Space		32,987 SF
Proposed Airfield Pavement		29,398 SY
Proposed Landside Access and Parking		64,224 SF
Proposed Sodded Areas/Drainage		127,746 SF
Proposed Non-Aeronautical Development		105,184 SF
Proposed Taxiway/Taxilane Markings		N/A
Proposed Taxiway/Taxilane Object Free Area		N/A
Proposed Security Fence		N/A
Existing Airport Property Boundary		N/A
Gulfstream V (ADG-III)		N/A
Falcon 9X (ADG-III)		N/A
Citation Jet (ADG-II)		N/A

Proposed Airport Development Plan

Overall Development Plan (As reviewed and approved by the Technical Advisory Group)



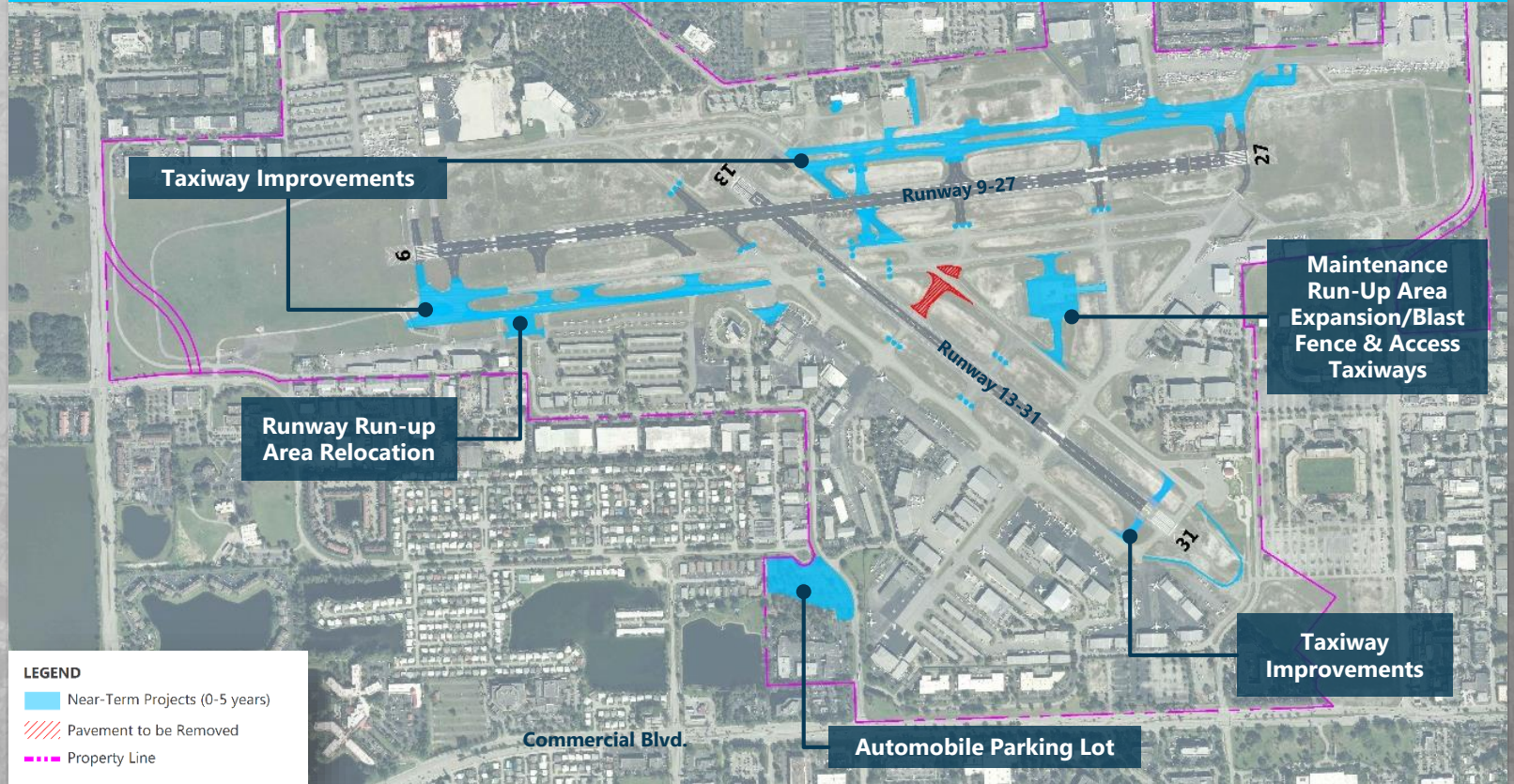
Source: City of Fort Lauderdale, Fort Lauderdale Executive Airport; Ricondo, March 2018.

PROPERTY ACQUISITION

- P1** Property Acquisition in Runway 27 Approach Protection Zone
- P2** Property Acquisition in Runway 9 Approach Protection Zone

Proposed Short-Term Development

(0 - 5 Year Horizon)



Proposed Intermediate-Term Development

(6 - 10 Year Horizon)



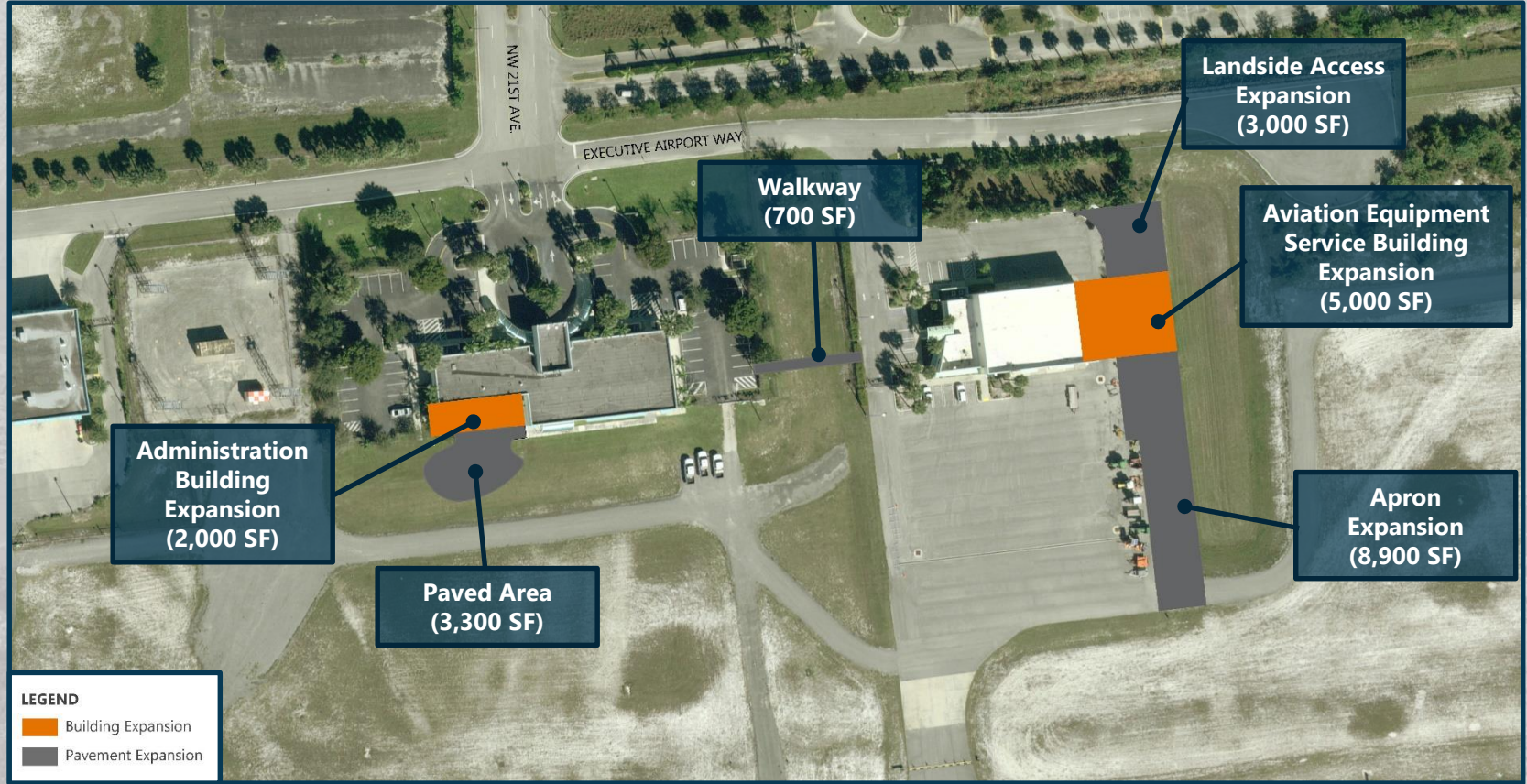
Proposed Long-Term Development

(11 - 20 Year Horizon)



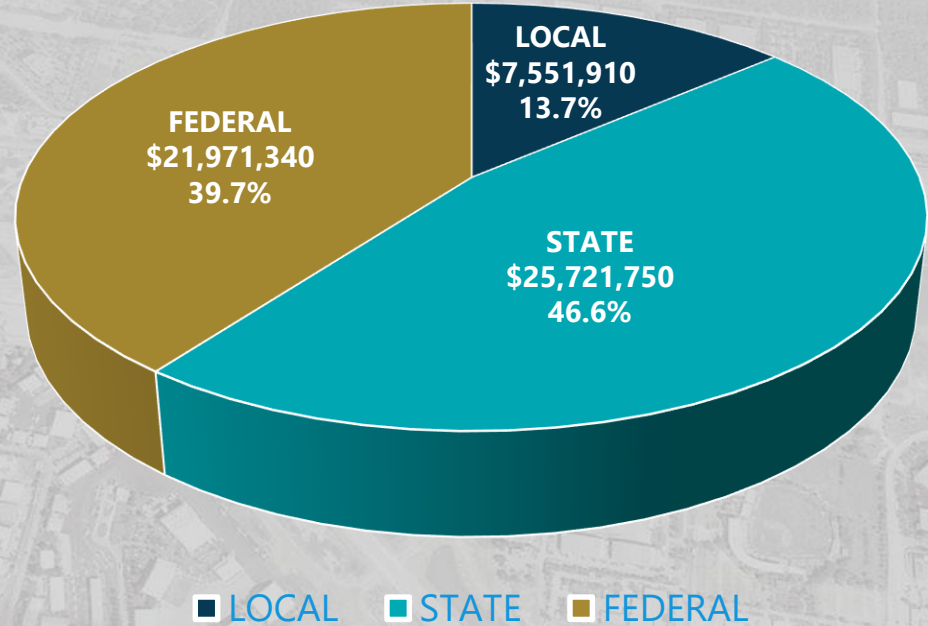
Proposed Airport Development Plan

Support Facilities

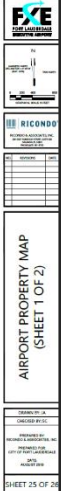


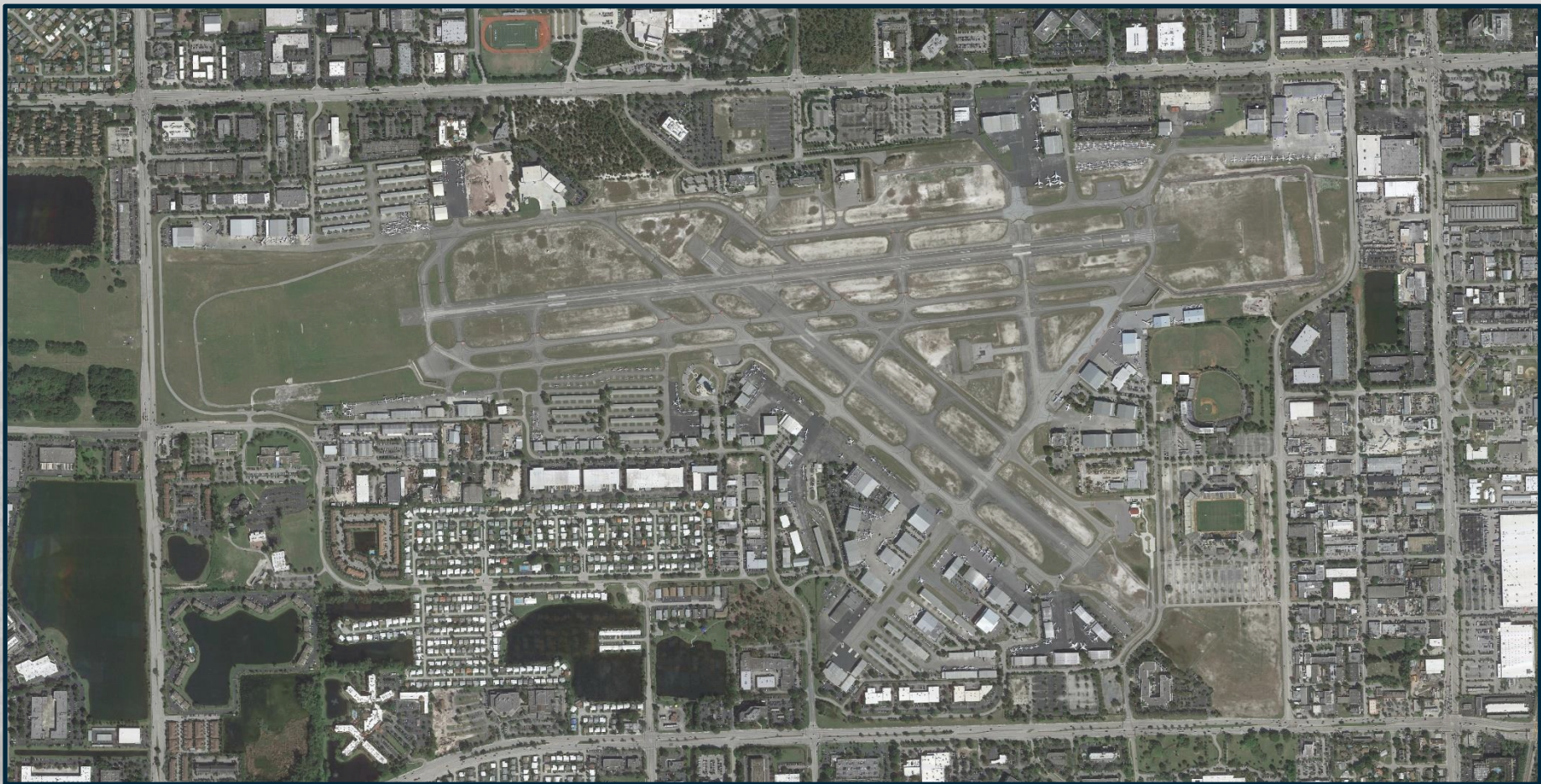
Funding Sources

Total Airport
Development
Program:
\$55,245,000
(Escalated Dollars)



- Master Plan Report
- Master Plan Executive Summary
- Airport Layout Plan
- Airport Property Map





ADDITIONAL SLIDES



Proposed Airfield Improvements

Runway 9-27 Critical Aircraft

The **critical aircraft** is the most demanding aircraft type, or grouping of aircraft with similar characteristics, that make regular use of the airport (500 annual operations), including both itinerant and local operations but excluding touch-and-go operations. An operation is either a takeoff or landing.

AIRCRAFT TYPE	2016 ANNUAL OPERATIONS*	AIRCRAFT APPROACH CATEGORY (AAC)	AIRPLANE DESIGN GROUP (ADG)	TAXIWAY DESIGN GROUP (TDG)
Gulfstream V (500)	494	C	III	2
Boeing Business Jet	66	C/D	III	3
Airbus Corporate Jet	64	C	III	3
Bombardier Global Express	59	C	III	2
Embraer 170/190	43	C	III	3
Total	726			

* Annual operations recorded in ANOMS total 127,110 operations, compared to 158,306 actual aircraft operations for 2016. As a result, actual counts by aircraft types are anticipated to be higher.

Sources: Fort Lauderdale Executive Airport, *Airport Noise and Operations Monitoring System (ANOMS) Database*, December 1, 2015 – November 30, 2016; Federal Aviation Administration, *Aircraft Characteristics Database*, https://www.faa.gov/airports/engineering/aircraft_char_database/, accessed October 19, 2017; Ricondo & Associates, Inc., October 2017.

Gulfstream V



Bombardier Global Express



Runway 9-27



C-III Runway

Proposed Airfield Improvements

Runway 13-31 Critical Aircraft

AIRCRAFT TYPE	2016 ANNUAL OPERATIONS*	AIRCRAFT APPROACH CATEGORY (AAC)	AIRPLANE DESIGN GROUP (ADG)	TAXIWAY DESIGN GROUP (TDG)
Cessna 208	359	B	II	1A
Pilatus PC 12	71	A	II	1A
Beechcraft King Air Series	59	B	II	2
Saab 340	21	B	II	N/A
Total	510			

* Annual operations recorded in ANOMS total 127,110 operations, compared to 158,306 actual aircraft operations for 2016. As a result, actual counts by aircraft types are anticipated to be higher.

Sources: Fort Lauderdale Executive Airport, Airport Noise and Operations Monitoring System (ANOMS) Database, December 1, 2015 – November 30, 2016; Federal Aviation Administration, Aircraft Characteristics Database, https://www.faa.gov/airports/engineering/aircraft_char_database/, accessed October 19, 2017; Ricondo & Associates, Inc., October 2017.



Runway 13-31



B-II Runway

Runway Extension Project

Process Timeline

