FLL Master Plan Update
Policy Advisory Committee (PAC)
Briefing #1

September 22, 2016
PAC Committee

Provides:
- Input on macro-level policy issues
- Comments relative to the near-term and long-term aviation goals of Broward County
- Guidance on FLL’s role in the region
- Community and Regulatory Perspectives
Briefing Agenda

- Background
- Master Planning Team
- Study Overview
- Master Planning Process and Schedule
- FLL – The Airport in Context
- Internal Visioning Charrette – Key Themes
- Landside Analyses and Integration with Regional Transportation Modes and Initiatives
<table>
<thead>
<tr>
<th>Date</th>
<th>Event Description</th>
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<tbody>
<tr>
<td>October 2014</td>
<td>County Commission Board approved RFP No. R1277707P1 for Airport Master Plan Update Consultant Services</td>
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<tr>
<td>January 2015</td>
<td>Final Evaluations and Rankings Completed</td>
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<td>March 2015</td>
<td>County Commission Board Approved Ranking and Negotiations Commenced</td>
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<tr>
<td>October 2015</td>
<td>County Commission Board Approves Agreement with Ricondo &amp; Associates, Inc. for Airport Master Plan Update Consultant Services</td>
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<td>November 2015</td>
<td>Notice to Proceed Issued</td>
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Master Planning Team
Changes in the overall aviation market and the global economy warrant master plan updates.

Federal Aviation Administration (FAA) and the Florida Department of Transportation (FDOT) will partly fund the master plans.

Two sequential phases were identified to correlate with federal and state funding.
FLL Master Planning Process and Schedule

**PHASE 1** (within 12 months)
- AIRPORT GIS
- AIRSPACE ANALYSIS TOOL (IALP)
- MARKET ASSESSMENTS
- VISIONING / STAKEHOLDER ENGAGEMENT STRATEGY
- INVENTORY OF EXISTING CONDITIONS
- ACTIVITY FORECASTS
- IMMEDIATE NEEDS

**PHASE 2** (within 24 months)
- ENVIRONMENTAL OVERVIEW
- DEMAND CAPACITY / FACILITY REQUIREMENTS
- IDENTIFICATION AND EVALUATION OF ALTERNATIVES
- PREFERRED AIRPORT ALTERNATIVE REFINEMENT
- FINANCIAL FEASIBILITY ANALYSIS & IMPLEMENTATION PLAN
- FORMULATE CAPITAL IMPROVEMENT PROGRAM (CIP)
- AIRPORT LAYOUT PLANS PACKAGE / iALP
- AIRPORT PROPERTY MAP
- AIRPORT MASTER PLAN UPDATE REPORT

Stakeholder engagement throughout the Study to occur through Master Plan Committee Meetings, Stakeholder briefings, and Public meetings.
The Airport in Context

A. FLL Historical Perspective
B. FLL’s Role Today
FLL Historical Perspective: 1996-2006

Note: Passenger Enplanements from FY1996 to FY2004 do not include Non-Revenue Passengers.

Sources: Airport Passenger Enplanements Data (FY2005-FY2015), Broward County Aviation Department; Airport Passenger Enplanements Data (FY1996-FY2004), Terminal Area Forecast (TAF).
Note: Partial opening of Concourse G at FLL includes the west portion of the concourse only. The opening of the eastern portion of Concourse G is scheduled to occur in 2017.

Source: Airport Passenger Enplanements Data (FY2005-FY2015), Broward County Aviation Department.
FLL Role Today

Physical Constraints of the Airport
FLL Physical Airport Attributes

Sources: Broward County Aviation Department, FLL Airport Layout Plan, August 2013; Broward County Aviation Department, Interlocal Agreement Entered into by and between City of Dania Beach and Broward County, November 2013.
Physical Constraints of the Airport

Comparable Airport Boundaries

- **Denver International Airport** (Ratio 18.5:1)
- **Orlando International Airport** (Ratio 7.3:1)
- **Baltimore/Washington International Airport** (Ratio 2.2:1)
- **Dallas-Fort Worth International Airport** (Ratio 9.5:1)
- **Atlanta-Hartfield International Airport** (Ratio 2.6:1)
- **Miami International Airport** (Ratio 1.8:1)
Physical Constraints of the Airport
FLL Development Opportunities and Constraints
FLL Current Long-term Airport Plan
Internal Visioning Charrette – March 2016

Key Themes
General Themes for the Airport

- Planning process needs to include partners (transit, port, CVB) to ensure synergy; Be creative and innovative with key stakeholder partners, particularly FLL’s three airlines that have emphasized that they want to grow and grow quickly.

- Keep that easy-in/easy-out and hometown feel as best we can at FLL.

- Maintain “balance” among all facilities.
Market Opportunities for the Airport

• Maintain a diverse air carrier base; consideration for potential mergers among FLL’s dominant airlines.

• International Airlines and traffic growth – how much should BCAD be in the forefront of pursuing international activity? Do we want to compete with Miami? What does international growth mean in terms of facility development for FLL?

• Can we expand cargo? Is it truly in our future (why or why not)? Expansion of cargo needs to provide consideration for potential noise impacts.
Operational and Safety Considerations for the Airport

- Roadway system and parking facilities are becoming deficient; Are there things that we can do to increase our accessibility?

- Ensure that users can get in and out safely and efficiently. Focus on both terminal and non-terminal roadways, curbfront/passenger roadway crossings and overall walking distances.

- Leverage multimodal opportunities to Port, convention center, and beyond.

- How will the demographics affect airport facility and regional transportation needs?

- How do we ensure seamless connectivity for all passengers (and their baggage) between transportation modes?
Strategic and Business Considerations for the Airport

• Avoid or minimize building throw-away investments.

• Identify the highest and best value use of scarce airport property including assessing facility needs as tenant leases expire; explore opportunities to optimize real estate holdings.

• How do we make sure that people can safely and quickly get from one end of where you start out to the very end?
Existing Cargo Tenants

Source: Fort Lauderdale Hollywood International Airport 2015 Aerial, Provided By Broward County Aviation Department.
Existing General Aviation Facilities

Source: Fort Lauderdale Hollywood International Airport 2015 Aerial, Provided By Broward County Aviation Department.
Forecasts – Enplaned Passengers
Baseline, Accelerated Baseline, and FAA 2015 TAF

Annual Enplaned Passengers (millions)

- **Historical**
- **Accelerated**
- **Baseline**
- **FAA TAF**

**NOTES:** FAA 2015 TAF excludes non-revenue passengers. CAGR = Compound Annual Growth Rate. CAGR may not match due to rounding of enplaned passenger values.

**SOURCES:** Broward County Aviation Department (Historical); Innovata; JetBlue Airways; Southwest Airlines; Spirit Airlines; FAA Terminal Area Forecasts; US DOT O&D Survey (DB1B); Ricondo & Associates, Inc.
Master Plan Forecasts
Draft Forecasts – Enplaned Passengers (Originating vs. Connecting)

Annual Enplaned Passengers (millions)

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ENPLANED PASSENGERS (MILLIONS)

- **2005**: 13.2m
  - 90% Originating
  - 10% Connecting

- **2035**: 26.2m
  - 80% Originating
  - 20% Connecting

- **2035**: 22.3m
  - 86% Originating
  - 14% Connecting

NOTES: CAGR = Compound Annual Growth Rate. CAGR may not match due to rounding of enplaned passenger values.

SOURCES: Broward County Aviation Department; Innovata; JetBlue Airways; Southwest Airlines; Spirit Airlines; Ricondo & Associates, Inc.
Master Plan Forecasts
Draft Forecasts – Enplaned Passengers (Domestic vs. International)

NOTES: CAGR = Compound Annual Growth Rate. CAGR may not match due to rounding of enplaned passenger values.

SOURCES: Broward County Aviation Department; Innovata; JetBlue Airways; Southwest Airlines; Spirit Airlines; Ricondo & Associates, Inc.
Master Plan Forecasts
Resulting Airport Shares of Total O&D Passengers

Sources: Broward County Aviation Department, US DOT O&D Survey (DB1B), Ricondo & Associates, Inc. (Historical O&D estimates and forecasts).
Forecasts – Aircraft Operations
Baseline, Accelerated Baseline, and FAA 2015 TAF

NOTES: CAGR = Compound Annual Growth Rate. CAGR may not match due to rounding of operation values.

SOURCES: Broward County Aviation Department (historical); Innovata; JetBlue Airways; Southwest Airlines; Spirit Airlines; FAA Terminal Area Forecasts; US DOT O&D Survey (DB1B); Ricondo & Associates, Inc.
FLL Immediate Needs

5-Year (2020) Capacity Assessment, Needs and Solutions/Options for:

- Gates
- Hardstands
- Terminal/Passenger Processing Facilities
- Public Parking
- Terminal Access

West Side Land Use Plan and Integrated Facility Layout Plan and Airside Access Plan

North Side Land Use Plan and Integrated Facility Layout and Airside Access Plan
FLL Landside Analyses Study Area
FLL Landside and Access Flows

Legend:
- Entry Flow
- Exit Flow
- Recirculation
Regional Roadway Studies to be Inventoried

- FDOT District 4 Exit Ramp Assessment for FLL, August 2014
- FDOT District 4 US1 and Griffin Road Intersection Study (2015)
- Broward County Intermodal Center and People Mover System – FLL to Port Everglades (June 2009)
- FDOT I-95 Interchange Master Plan Study
- FDOT I-95 Express Lanes Phase 2 Project
- Corridor Traffic Analysis Report for I-95 Express Phase 3C
- I-95/I-595 Interchange Modification Report
Integration with Regional Transportation Modes and Initiatives

• MPO’s Transportation Improvement Program
• Commitment 2040 – MPO’s Long Range Transportation Plan
• SR-7 Multimodal Improvements Corridor Study
• The WAVE
• All Aboard Florida
• Tri-Rail Coastal Link Commuter Rail Service
• Airport/Seaport Connectivity
• State Transportation Improvement Program – FDOT District 4’s Five Year Adopted Work Program
• FLL Connectivity with Freeway Management System
Broward County Transit / WAVE Streetcar Initiatives

Strategic Goal: Improve intra-airport connectivity and, to the extent practical or possible, also improve connectivity to various County and regional multi-modal initiatives planned directly east of the Airport.

Sources: Jacobs, Central Broward Transit Study Phase 1/WAVE Extensions, April 2016.
Regional Transportation Initiatives

Strategic Goal: Improve **intra-airport connectivity** and, to the extent practical or possible, also **improve connectivity to various County and regional multi-modal initiatives** planned directly east of the Airport.

**LEGEND**

- **Broward MPOs Transportation Improvement Programs (TIP):**
  1. Bridge Rehabilitation
  2. Interchange Improvement

- **Broward MPO Commitment 2040:**
  3. Interchange Modification
  4. US 1 Corridor Bus Service Upgrades
  5. SR 7 Multimodal Improvements
  6. Assigned Locations for SIS (Strategic Intermodal System)
  7. All Aboard Florida Station

- **FDOT District 4 Adopted 5 Year Work Program (STIP):**
  8. Addition of lanes, express lanes, arterial traffic management and corridor interchange master plan
  9. PD&E on Griffin Rd and US-1 intersection
  10. Addition of lanes reconstruction 1317

Next Steps

Demand/Capacity – Landside Systems and non-Terminal Area Facilities

Other Immediate Needs – Public Safety Facilities, North and West Side Land Use Plans
THANK YOU