LNA Airport Master Plan: Public Meeting

May 16th, 2019
Agenda

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

Goals & Objectives
- Inventory
- Imagery/Survey
- Existing Plans

Data Collection
- Economic Analysis
- Annual & Peak Demand

Forecast
- Capacity compared to projected demand

Facility Req’mnts
- Layouts for required facilities

Alternatives
- Impact of proposed alternatives

Impl & Fin’l Planning
- FAA Approval
- Cost estimating
- Phasing
- Cash flow

ALP Update

* 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
Aviation Demand Forecasts

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

<table>
<thead>
<tr>
<th>Forecast Element</th>
<th>2017</th>
<th>2022</th>
<th>2027</th>
<th>2037</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Based Aircraft</td>
<td>214</td>
<td>234</td>
<td>256</td>
<td>306</td>
</tr>
<tr>
<td>Single Engine</td>
<td>169</td>
<td>187</td>
<td>206</td>
<td>250</td>
</tr>
<tr>
<td>Multi-Engine</td>
<td>31</td>
<td>32</td>
<td>33</td>
<td>36</td>
</tr>
<tr>
<td>Jet</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Helicopter</td>
<td>14</td>
<td>15</td>
<td>17</td>
<td>20</td>
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</table>
Aviation Demand Forecasts

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

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

* 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
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**

<table>
<thead>
<tr>
<th></th>
<th>PAL 1 (128,047)</th>
<th>PAL 2 (140,077)</th>
<th>PAL 3 (167,635)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Square Feet (Acres)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total Tie-downs and Total Apron Space Requirement</strong></td>
<td>164 (489,800 sq ft)</td>
<td>181 (536,200 sq ft)</td>
<td>217 (640,000 sq ft)</td>
</tr>
<tr>
<td><strong>Excess/Deficiency Tie-downs (Total Apron Space)</strong></td>
<td>12 (155,200 sq ft)</td>
<td>5 (108,800 sq ft)</td>
<td>41 (5,000)</td>
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<tr>
<td><strong>Total Hangar Space Requirement</strong></td>
<td>289,500 sq ft</td>
<td>303,000 sq ft</td>
<td>353,000 sq ft</td>
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<tr>
<td><strong>Excess/Deficiency</strong></td>
<td>18,900 sq ft</td>
<td>3,400 sq ft</td>
<td>33,600 sq ft</td>
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<tr>
<td><strong>Total GA Space Requirement</strong></td>
<td>734,300 sq ft</td>
<td>796,200 sq ft</td>
<td>937,000 sq ft</td>
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<tr>
<td><strong>Excess/Deficiency</strong></td>
<td>174,100 sq ft</td>
<td>112,200 sq ft</td>
<td>38,600 sq ft</td>
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</tbody>
</table>

**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
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
Next steps
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