



Master Plan Update Craig Municipal Airport

Craig Airport Citizens Advisory Committee

August 21, 2007





Goals and Objectives

- ✈️ Community leaders providing input into long-range planning for aviation authority consideration.**
- ✈️ Intended as a forum to freely present issues, ideas, and provide guidance in planning for future aviation facilities.**
- ✈️ Provide diverse representation of community interests and opinions relative to airport development to address all issues of concern to the community and region.**
- ✈️ Provide input related to aviation, community, political, planning & legal issues.**
- ✈️ Provide a linkage to various groups that committee members have been drawn from and to the larger community as a whole.**



What is a Master Plan?

- ✈ **Projection of the Airport's ultimate growth over a 20-year timeframe.**
- ✈ **Plan for the ultimate development of physical facilities.**
- ✈ **Development guide, including timing and costs, that considers adjacent land uses and environmental issues.**
- ✈ **Step-by-step description of the logic used in formulating the plan.**
- ✈ **Display of the plan in graphical and written form.**
- ✈ **Positions the Airport to compete for FAA and FDOT funding (up to 95%).**



Master Plan Process

- ✓ **Inventory**
- ✓ **Aviation Activity Forecasts**
- ✓ **Airfield Capacity Analysis**
- ✓ **Facility Requirements Analysis**
- ✓ **Airport Alternatives Analysis**
- ✈ **Refine Alternatives Analysis**
- ✈ **Airport Layout Plans**
- ✈ **Financial Plan/Capital Improvement Program**
- ✈ **Public Involvement**
 - **Advisory Committee Meetings**
 - **Airport Authority Meetings**
 - **Public Meeting**
 - **Coordination Meetings**
 - **Briefings to JAA**



Airfield Inventory

FACILITIES

- ✈ Two Fixed Based Operators
- ✈ 327 Based Aircraft
- ✈ 107 T-Hangars
- ✈ 13 Conventional/Corporate Hangars
- ✈ Four Flight Schools
- ✈ Air Traffic Control Tower (Hours of Operation: 0600 to 2300)

RUNWAYS

✈ Runway 14-32

- ✈ Primary runway: 3,998 ft x 100 ft
- ✈ ARC B-II design designation
- ✈ Good condition
- ✈ Precision approach Runway 32

✈ Runway 5-23

- ✈ Crosswind Runway 4,004 x 100 ft
- ✈ ARC B-II design designation
- ✈ Visual approach only
- ✈ Good condition



Development Issues

- ✈ Runway Length limits operating conditions for aircraft currently and forecast to use the Airport**
- ✈ Total Aircraft Operations limited by Airfield Configuration.**
- ✈ Dense, overlapping airspace
 - ➔ Military airspace, overlapping JAX Class C veil****
- ✈ Aircraft noise, environmentally sensitive areas
 - ➔ Aircraft approach/departure patterns**
 - ➔ Residential encroachment****
- ✈ Airside and Perimeter Security
 - ➔ New GA Security Requirements****



Purpose of Forecasting

- ✈ **To develop a realistic assessment of market conditions and market performance.**
- ✈ **To address unique local conditions not fully considered in national, macro level forecast efforts.**
- ✈ **To provide a benchmark for comparing current facilities against a reasonable estimate of future demand to define potential future facility needs.**
- ✈ **Consider the recession and growth coupled with the terrorist attacks of September 11, 2001 and their impacts well into the future.**

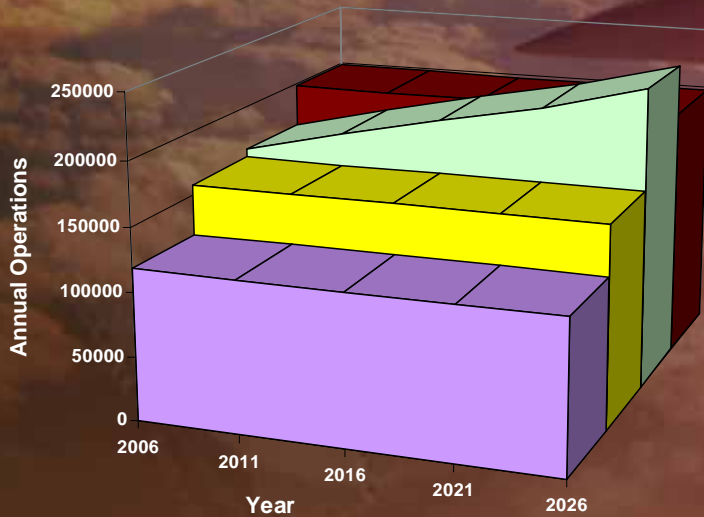


Approved Aviation Forecast

	2006	2011	2016	2021	2026	Average Annual Growth Rate
Based Aircraft	327	367	416	475	543	2.57%
OPERATIONS						
Local GA	67,052	75,616	88,688	101,673	118,525	2.89%
Itinerant GA	77,330	82,272	85,403	90,332	93,383	0.95%
Air Taxi	7,636	8,895	9,234	9,767	10,097	1.41%
Military	11,970	13,255	13,759	14,553	15,045	1.15%
TOTAL OPERATIONS	163,988	183,325	200,790	216,325	237,049	1.86%



Airport Capacity and Delay

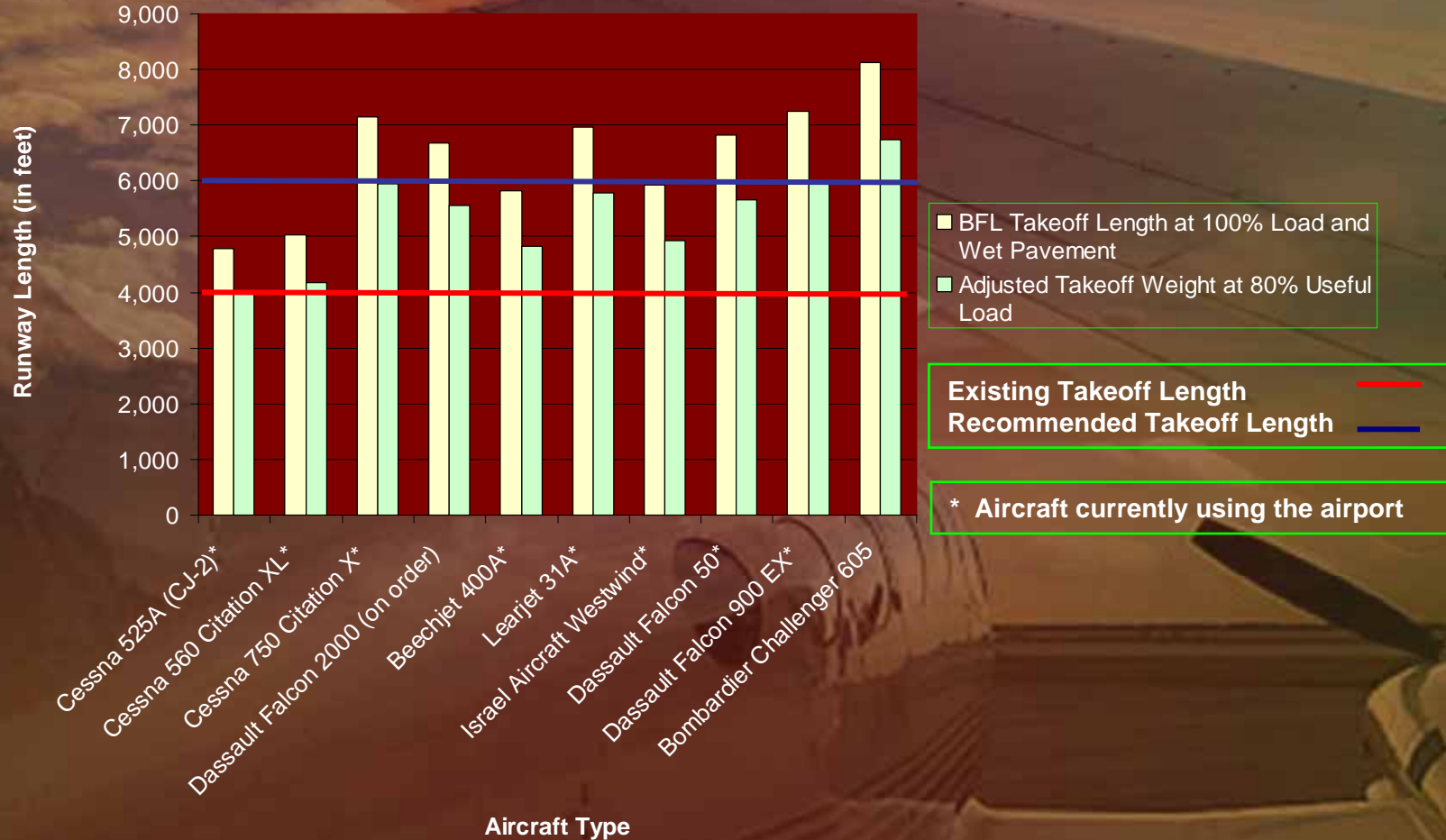


■ 60% ASV ■ 80% ASV ■ Forecast Operations ■ ASV

Year	2006	2011	2016	2021	2026
Annual Operations	163,988	183,325	200,790	216,325	237,049
Annual Service Volume	197,449	197,449	197,449	197,449	197,449
Capacity Level	83.05%	92.85%	101.69%	109.56%	120.06%
Average Delay per Aircraft (in Minutes)	0.85	0.86	0.94	1.03	1.19

Adjusted Takeoff Length Required

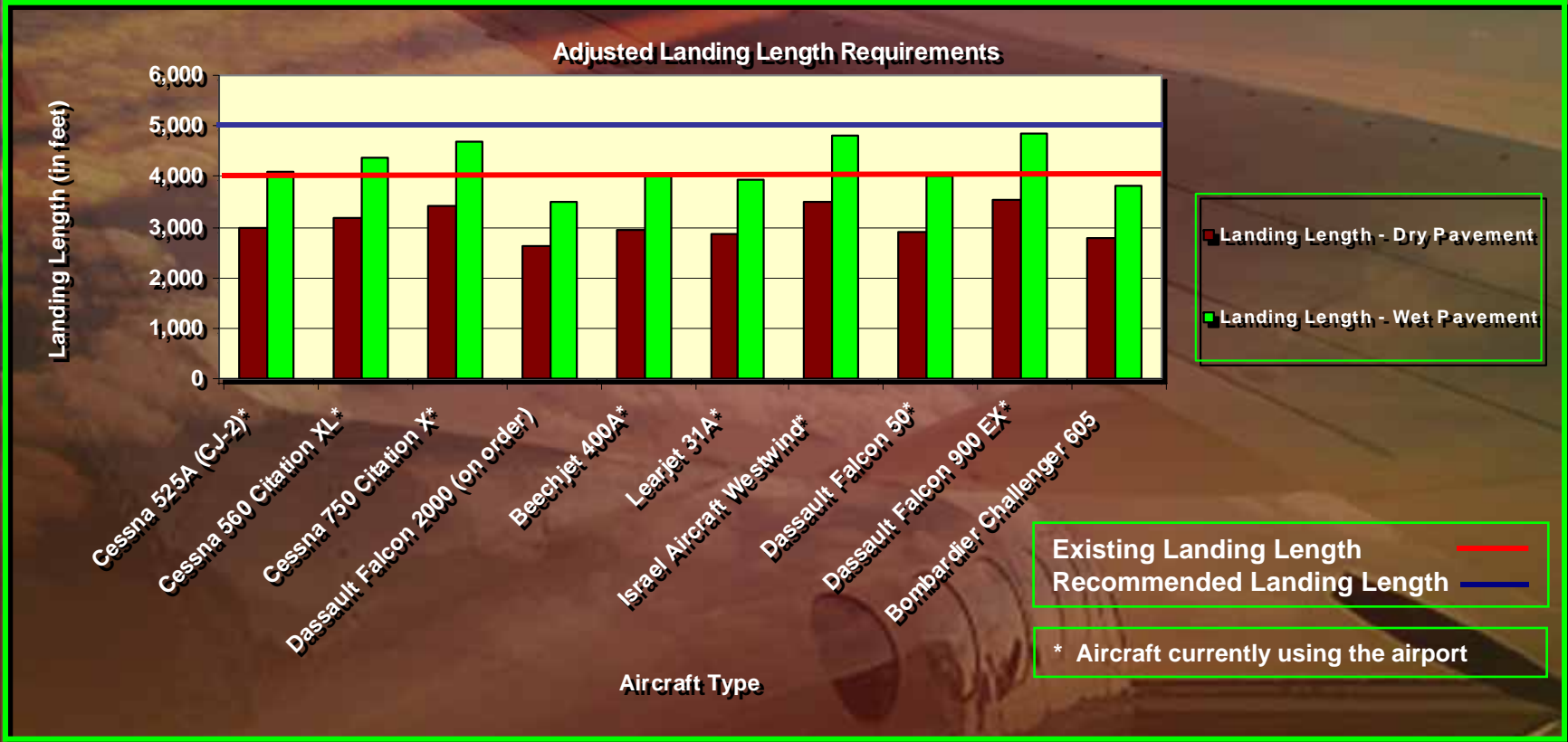
Adjusted Takeoff Length Requirements



Current Critical Aircraft Takeoff Length at 100% Useful Load = 7,258 ft

Current Critical Aircraft Takeoff Length at 80% Useful Load = 5,922 ft

Landing Length Requirements



Existing Critical Aircraft Landing Length - Wet Pavement = 4,834



Airfield Facility Requirements

Runway Improvements

- Extend Runway 14-32 to 6,000 feet

Long-Term Capacity Improvements

- Shift Runway 5-23 501 feet to the southeast

Taxiway Improvements

- Extend Taxiways A and B
- Construct high speed taxiways along Runway 14-32
- Construct new parallel taxiway south and east of Runway 5-23
- Rehabilitate Taxiway Pavement (Taxiways A, B and C)
- Add Medium Intensity Taxiway Lights

Navigational

- Relocate Glideslope on Runway 14-32

Lighting and Electrical Vault Improvements

- Relocate Taxiway lighting on Taxiways A, B and C
- Update taxiway lighting to LED lights
- Maintain all runway and taxiway lighting, as needed
- Upgrade electrical vault regulators

Signage Improvements

- Add/replace and refurbish airfield signage as necessary
- Install Distance to Go Markers and Upgrade Signage, where necessary

Pavement Marking Improvements

- Periodic remarking of all pavement surfaces
- Add Runway Hold Lines associated with runway extension
- Provide Stop/Hold bars on Taxiway A prior to Runway 32 safety area

Other

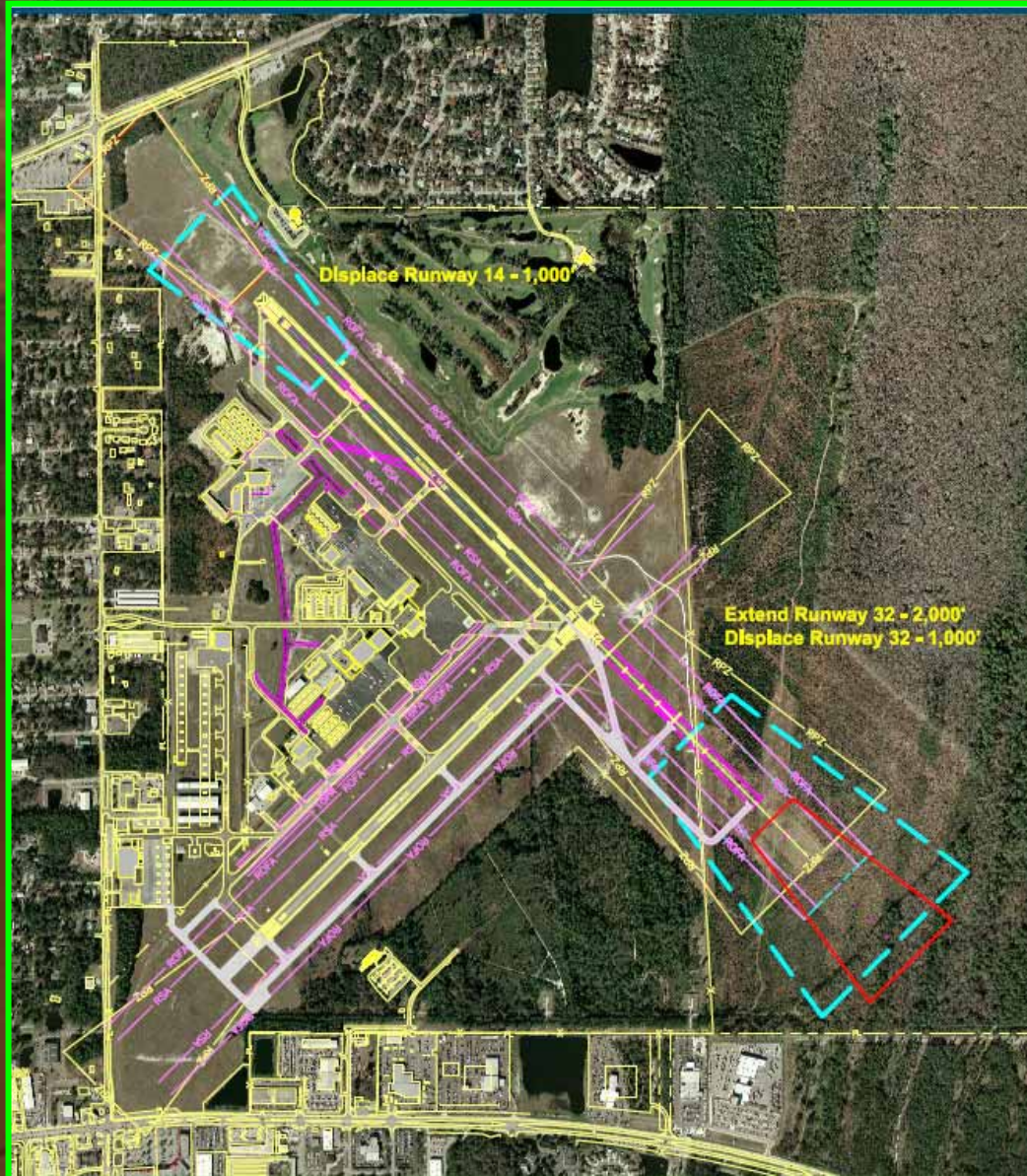
- Upgrade Airport from ARC B-II to C-II



Alternative Evaluation Criteria

- ✈ **Optimize operational efficiency, effectiveness, capability and safety of the airport;**
- ✈ **Enhance the economic and social value of the airport;**
- ✈ **Meet long-range aviation needs of the community;**
- ✈ **Ensure that current and future airport plans are environmentally compatible and in harmony with local and regional plans and objectives; and**
- ✈ **Consider recommendations of the Technical Advisory Committee, user groups, and general public.**

Runway Alternative 1



STRENGTHS

- ✈ Provides takeoff length of 6,000 feet
- ✈ Provides landing length of 5,000 feet
- ✈ Improved safety on takeoff and landing
- ✈ Accommodates 75 percent of active GA Fleet
- ✈ Provides access to Southeast Airfield
- ✈ Improved operations, and
- ✈ Decreased noise impacts

WEAKNESSES

- ✈ Cost (~\$18 million)
- ✈ Relocation of perimeter road and NAVAIDS (including Glideslope Antenna and MALSR)

Runway Alternative 2



STRENGTHS

- ✈ Takeoff length of 6,500 feet
- ✈ Provides access to Southeast Airfield
- ✈ Improved operations

WEAKNESSES

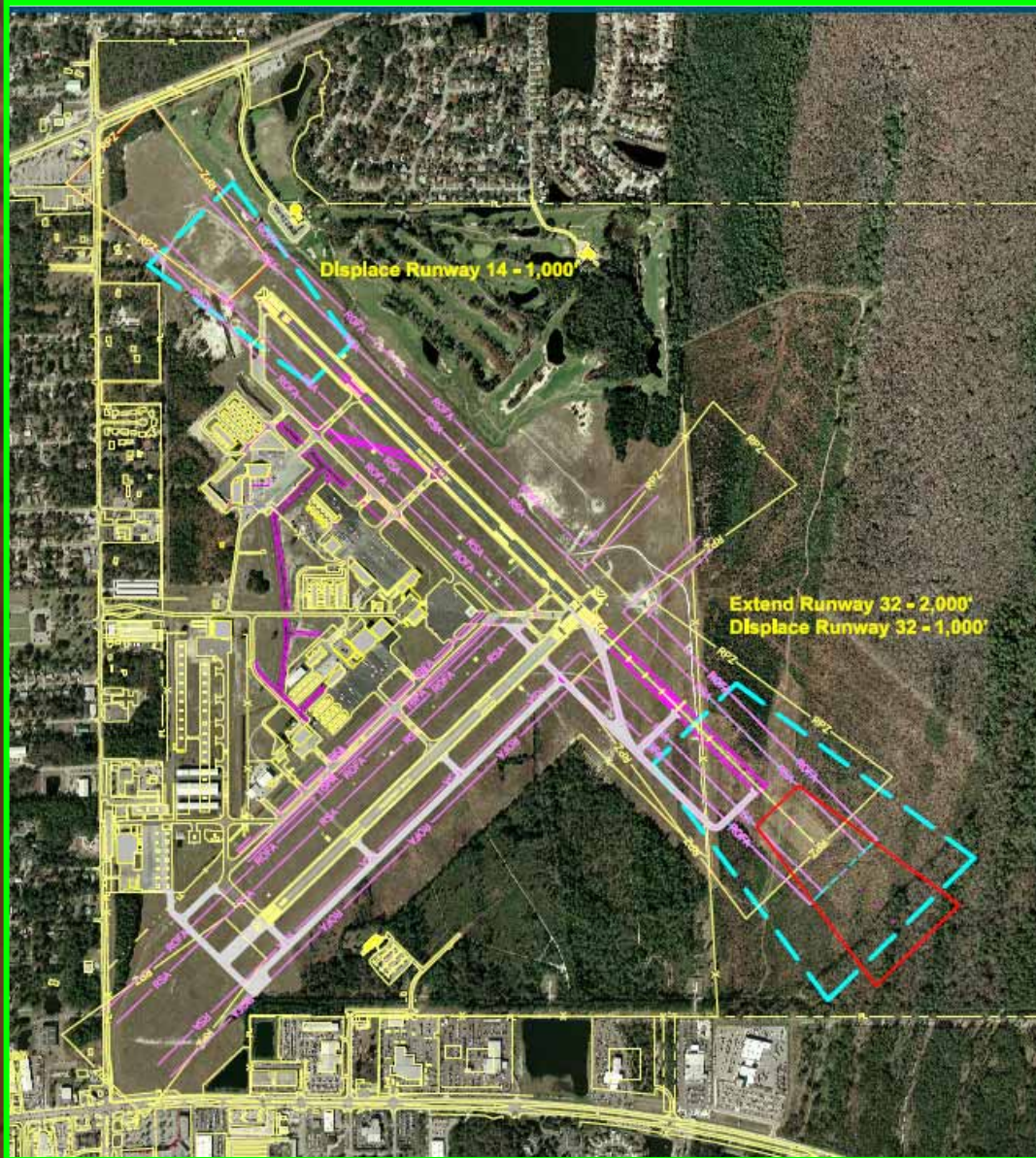
- ✈ Landing length of 4,500 feet
- ✈ Accommodates 60% of GA Fleet
- ✈ Cost (~20 million)
- ✈ Does not decrease noise impact
- ✈ Brings aircraft operations closer to neighboring residential properties, and
- ✈ Requires relocation of perimeter road and NAVAIDs (including glideslope antenna, localizer and MALSRs)



Airfield Alternative Analysis

Airfield Evaluation Criteria	Runway Alternative 1	Runway Alternative 2
Takeoff Length	6,000 feet	6,500 feet
Landing Length	5,000 feet	4,500 feet
Noise Impacts	Decreases noise impacts to all surrounding neighborhoods	Increases impacts to neighborhoods northwest of airfield
Land Acquisition	None	Approximately 2.0 acres on Runway 14
Safety and Operations	<ul style="list-style-type: none"> • Provides increased safety during landing and takeoff in all configurations • Requires relocation of Glideslope Antenna 	<ul style="list-style-type: none"> • Marginally increase safety on landing to Runway 32 • Requires relocation of localizer and glideslope antenna
Addresses Runway Operational Requirements	Yes	No
Order of Magnitude Cost	\$18 million	\$20 million

Recommended Runway Alternative



- ✈ **Runway 14-32 extended to 6,000 feet**
- ✈ **1,000 ft displaced threshold on Runways 14 and 32**
- ✈ **Extend Taxiways A and B**
- ✈ **Add two high-speed taxiways**



Long-Term Airfield Development



✈ Runway 5-23 shifted 501 feet to the southwest

✈ Improved Airfield Capacity

Existing Land Use

- A.** Mill Cove Golf Course
- B.** Available Aviation Leases
- C.** Available Non-Aviation Leases
- D.** Wetland Mitigation and Conservation





General Aviation Facility Requirements

- ✈ **Rehabilitate existing pavement adjacent to Craig Air Center and Sky Harbor**
- ✈ **Rehabilitate or replace 85 T-Hangars**
- ✈ **Add approximately fifteen 12-unit T-Hangars**
- ✈ **Construct at least 8 Conventional hangars**
- ✈ **Construct at least 28 Corporate hangars**



Required Support Facilities, Access and Infrastructure

✈ Support Facilities

- ➔ Install additional Jet A fuel tanks
- ➔ Relocate fenceline associated with development
- ➔ Install Inner Fence
- ➔ Install additional regulators in electrical vault associated with development

✈ Access and Infrastructure

- ➔ Widen Airport Road, as traffic permits
- ➔ Construct internal access roads
- ➔ Construct access roads from St. Johns Bluff Road and Atlantic Blvd.
- ➔ Provide additional parking where needed to accommodate anticipated demand

Development Zones



High Development (2007-2015)

- ✦ Utility infrastructure in place
- ✦ Available parcels
- ✦ Surface access
- ✦ Airfield access

Mid-Development (2016-2026)

- ✦ Available Parcels
- ✦ Limited utilities
- ✦ Limited surface access

GA Alternative 1 High Development

Potential Development Sites

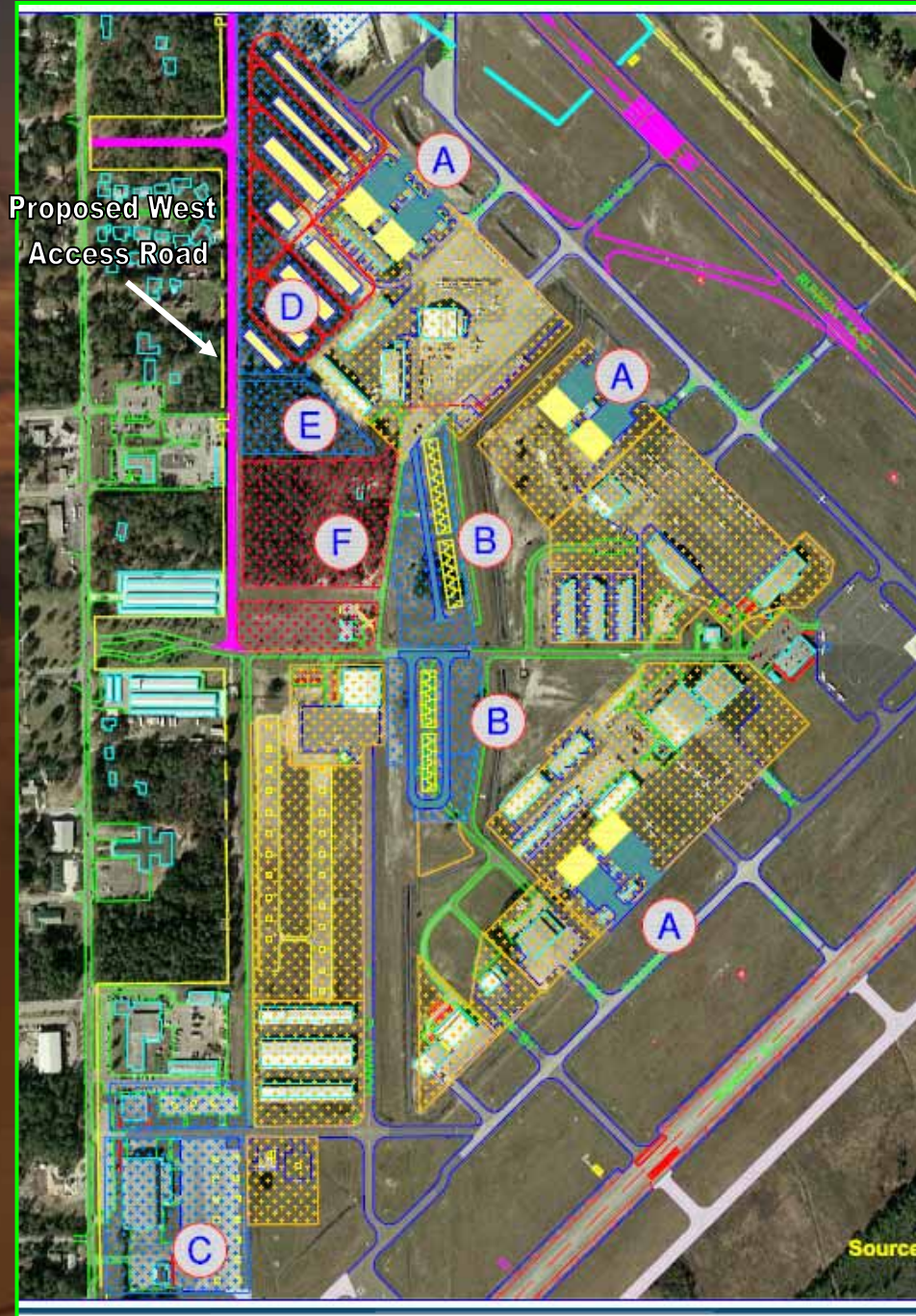
- A.** T-Hangar Development
- B.** FBO and Corporate Aviation Development
- C.** Corporate and Business Aviation Development (i.e. private storage development)
- D.** Aviation and Non-Aviation Business Development (i.e. Restaurant, Avionics Shop, etc.)
- E.** Corporate Hangar Development (80' x 80' and 50' x 50')
- F.** Corporate Hangar Development (120' x 120' and 75' x 75')
- G.** Aviation Business Development (i.e. Maintenance Facility or Aviation School)



GA Alternative 2 High Development

Potential Development Sites

- A.** Corporate Hangar Development (100' x 100')
- B.** T-Hangar Development
- C.** Aviation Maintenance or Avionics Facility
- D.** T-Hangar Development (I and II)
- E.** Aviation Business and Aircraft Storage (Office and Hangar development)
- F.** Non-Aviation Business Development





GA Alternative 1 Mid Development

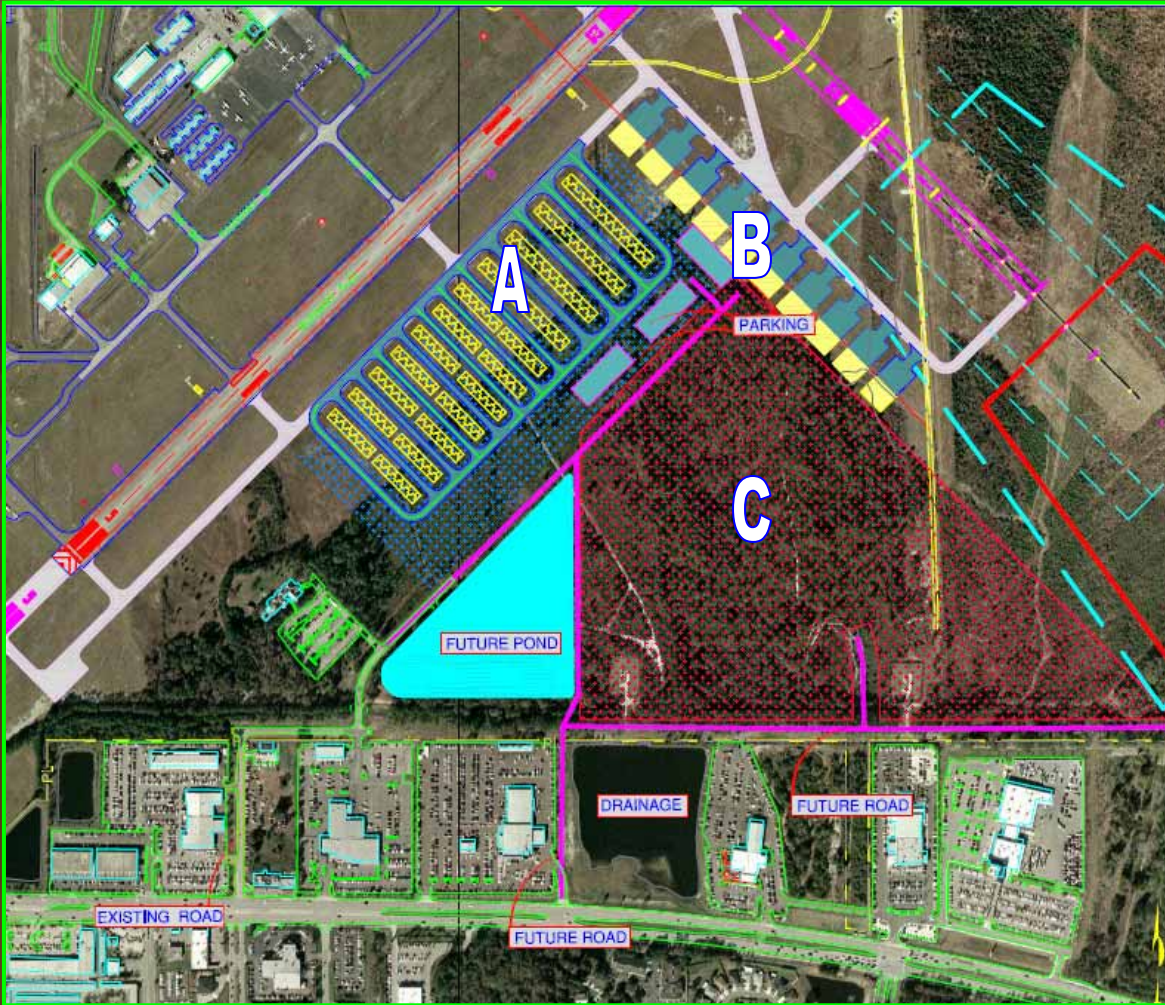


Potential Development Sites

- A.** Box Hangars (75' x 75') with Apron
- B.** Non-Aviation (76.8 acres)
Industrial/Commerce Park



GA Development 2 Mid Development



Potential Development Sites

- A.** T-Hangar Development (ADG I and II)
- B.** Corporate Hangar Development (100' x 125')
- C.** Non-Aviation (76.8 Acres) Industrial/Commerce Park



Next Steps

- ✈ Address Comments on Working Paper 2 (Request comments from TAC by September 3, 2007)**
- ✈ CPAC Presentation**
- ✈ Refine Airport Alternatives**
- ✈ Develop Airport Layout Plan Set**
- ✈ Develop Financial Plan/Capital Improvement Program**
- ✈ Submit Final Master Plan Update:**
 - Review and Approval from FAA**
 - Review and Approval by FDOT Aviation Office**



Question and Answer Forum

