CITY OF NAPLES AIRPORT AUTHORITY (NAA)
Board of Commissioners and Noise Compatibility Committee
Notice of Workshop Meeting

AGENDA
City Hall Council Chambers
735 Eighth Street South
Naples, FL 34102

Tuesday, April 30, 2019
8:30 a.m.

Commissioner Donna M. Messer – Chair and NCC Liaison
Commissioner Michael Lenhard – Vice Chair and Consultant Selection Committee Chair
Commissioner James Rideoutte – Audit Committee Chair, Consultant Selection Committee Member
Commissioner Ted Brousseau – Legal Liaison
Commissioner Kerry C. Dustin, Audit Committee Member
Executive Director: Christopher A. Rozansky
Authority Attorney: William L. Owens, Esq. of Bond, Schoeneck & King, PLLC

Welcome. If you wish to address the Board of Commissioners and Noise Compatibility Committee regarding an item listed on the Agenda, please complete a Speaker Registration form (available at the rear of the room) and hand it to the Executive Assistant prior to consideration of that item. We ask that speakers limit comments to 5 minutes and that large groups name a spokesperson whenever possible. All written, audio-visual, and other materials distributed to the Board, Committee members or staff during this meeting will become the property of NAA and will be a public record. Thank you for your interest and participation.

NOTICE

Formal action may be taken on any item listed on the Agenda below, or added to the Agenda before or during the meeting, or discussed during the meeting without being added to the Agenda. Also, the sequence of items may be changed as the meeting progresses.

Any person who decides to appeal a decision of this Board with respect to any matter considered at this meeting (or hearing) will need a record of the proceeding and may need to ensure that a verbatim record of the proceedings is made, which record includes the testimony and evidence upon which the appeal is to be heard.

Any person with a disability requiring auxiliary aids or services in order to participate in this proceeding for meetings at the City Council Chamber may call the City Clerk's Office at 213-1015, or for meetings at the Airport Office Building, the NAA Executive Assistant's Office at 643-0733, with requests at least two business days before the meeting.

Information on Action Items and other items which has been provided in advance of this meeting may be inspected at the office of the Executive Assistant, General Aviation Terminal Building, 2nd Floor, 160 Aviation Drive North. Minutes of this meeting will be prepared for Board approval, usually at the next Regular Meeting.
A. ROLL CALL

B. PLEDGE OF ALLEGIANCE

C. AGENDA (Add, delete or re-sequence items)

D. PUBLIC COMMENTS ON GENERAL TOPICS NOT ON THE CURRENT AGENDA

E. DISCUSSION ITEMS (Public comments accepted for each item; 5 minute limit)
   1. Master Plan Update Presentation – Environmental Science Associates (ESA)
      a. Overview of Study Process to Date
      b. Customer and Public Outreach to Date
      c. Facility Assessment and Requirements
      d. Environmental Elements
      e. Concepts for Airport Development
      f. Potential Airfield Improvements
      g. Constraints to Development
      h. Recommended Development Concepts
      i. Project Schedule
      j. Question and Answer Period

F. PUBLIC COMMENTS

G. CORRESPONDENCE/COMMISSIONER COMMENTS AND NCC COMMITTEE COMMENTS & REQUESTS/MEETINGS

H. ADJOURNMENT
To: Honorable Chair, Commissioners and Noise Compatibility Committee Members

From: Christopher A. Rozansky, Executive Director

Meeting Date: April 30, 2019

Re: DISCUSSION ITEM

1. Master Plan Update

**SUMMARY:** Naples Airport Authority (NAA) Board of Commissioners and Noise Compatibility Committee (NCC) review of Master Plan Update, including further exploration and refinement of the initial concepts for airport development. The Master Plan Update presentation is attached.

**BACKGROUND:** On January 30, 2019, a joint NAA Board and NCC Workshop was held. Mr. Doug DiCarlo, Aviation Program Manager, of ESA presented a recap of the airport master planning process and what has been accomplished since the April 2018 Workshop Meeting. At that meeting, Mr. DiCarlo presented Working Paper #2 Facility Assessment and Requirements and initial concepts for airport development.

**COMMUNICATIONS PLAN:** Working Paper #3 Environmental Overview and Alternatives for Airport Development is expected to be published on the website by the end of May 2019.

**FINANCIAL IMPACT:** None.
Naples Airport Master Plan

Joint NAA / NCC Joint Workshop – April 30, 2019

Douglas DiCarlo, Project Manager    Michael Arnold, Project Director
Airport Master Planning Process

**Project Initiation**
- Customer and Public Outreach
- Airport Mapping and AGIS

**Existing Conditions**
- Facilities, Operational, and Environmental Data
- Conduct Tenant and Customer Interviews

**Aviation Forecast**
- Passengers, Operations, and Based Aircraft
- FAA and FDOT Approval

**Facility Requirements**
- Capacity Assessment and Design Standards
- Airside, Terminal, and Landside Needs
Airport Master Planning Process (cont.)

Environmental
- Natural Resources, Noise Analyses, and Waste Audit
- Sustainability, Resiliency, and Stormwater

Alternatives Analysis
- Develop Concepts and Evaluate Options
- Recommended Alternatives

Airport Layout Plan (ALP)
- ALP Drawing Set and Exhibit “A” Property Map
- FAA and FDOT Approval

Development Program
- Financial Analyses, Costs Estimating, and Funding Options
- Capital Improvement Program

Key Deliverables
- AGIS Database
- 20-Year Aviation Forecasts (including passenger service analysis)
- Capital Improvement Program
- Master Plan Document
- ALP Drawing Set
- Exhibit “A” Property Map
- General Aviation Terminal Building Assessment
- Solar Feasibility Study
Based Aircraft Forecasts

Aviation Forecasts based on unconstrained conditions (i.e. projected demand with no facility limitations)
FAA Approval – May 9, 2018
Aviation Forecasts based on unconstrained conditions (i.e. projected demand with no facility limitations)

FAA Approval – May 9, 2018
Customer and Public Outreach to Date

- Project Website: [www.flynaples.com/masterplan](http://www.flynaples.com/masterplan)
- Tenant and Customer Interviews
- Public and Customer Kickoff Meetings – January 31, 2018
  (held at Commercial Airline Terminal)
- Comment Form and Survey Forms
- Public and Customer Open Houses – April 30 and May 1, 2018
  (held at Naples Regional Library and Commercial Airline Terminal)
- City Council Presentation – January 14, 2019
- Public and Customer Open Houses – January 29, 2019
  (held at Commercial Airline Terminal and Naples Regional Library)
## Summary of Customer and Public Input to Date

### Responses
- 28 Tenant and Customer Interviews
- 40 Comment Forms
- 6 Emails / Handwritten Letters
- 4 General Public Surveys
- 5 Tenant and Customer Surveys

### Common Issues

#### Aircraft Operations
- Noise over residential areas
- Study does not include a comprehensive noise study
- Need to address safety concerns of overflights
- Potential extension of Runway 14-32
- Inquiries about Bombardier Global 7500 (Certified by FAA November 2018)

#### Facilities
- More small general aviation aircraft hangar space and maintenance/avionics services
- Some customers would like to see Mogas as an aircraft fuel option

#### Commercial Passenger Service
- Desire both for and against commercial passenger operations at Naples Airport

#### Other
- Gordon River Greenway access by neighbors to the north
- Restaurant and more concessions at airport
FACILITY ASSESSMENT AND REQUIREMENTS
Facility Assessment and Requirements

- Design Aircraft
- Airport Capacity
- Runway and Taxiway System
- Instrument Procedures
- Airfield Environment
- General Aviation Facilities
- Landside Facilities
- Support and Service Facilities
Representative Critical Aircraft

Runway 14-32

Gulfstream G450

- Wingspan: 77.83’
- Length: 89.33’
- Tail Height: 25.17’
- MTOW: 74,600 lbs.

Runway 5-23

Gulfstream G650

- Wingspan: 99.58’
- Length: 99.75’
- Tail Height: 25.67’
- MTOW: 99,600 lbs. (see note)

Note: Gulfstream G650 (and all other heavy aircraft) limited to 75,000 lbs. at APF.
Recommended 20-Year Facility Requirements

**Runways**
- Extend Runway 5-23 Blast Pads
- Add Paved Blast Pads to Runway 14-32
- Rehabilitate Runway 5-23 and Runway 14-32

**Taxiways**
- Update Taxiway Geometry
- Improve Taxiway A “Hot-spot”
- Rehabilitate T-hangar and shade hangar taxilanes
- Potential to Extend Taxiway D to Runway 5 end
- Aircraft Run-up Areas or Bypass Taxiways to each Runway end

*Note: Order of improvements does not have any relation to the priority or phasing of proposed projects.*
Recommended 20-Year Facility Requirements (cont.)

Airport Facilities

- Expand GA Terminal (FBO and Administration Space)
- T-Hangar Facilities (49 additional units)
- Clearspan Hangars (to accommodate new 115 aircraft)
- Aircraft Parking Apron Space (minimum 93,600 SY)
- Rehabilitate Existing GA and Commercial Terminal Aprons
- Airport Traffic Control Tower Improvements
- Additional Facilities for Airport Maintenance
- Expand Fuel Storage Capacity
- Improve Airport Perimeter Fencing

- Replace Remaining Incandescent Airfield Lighting with LED Fixtures
- Potential for Improved Instrument Approaches
- Decommission TVOR (FAA Project)
- Improve Airport Signage and Wayfinding
- Improve Entrance Roads and Landscaping
- More Direct Landside Access
- Increase Automobile Parking for GA Terminal Area
- Improve Interior Airport Perimeter Road

Note: Order of improvements does not have any relation to the priority or phasing of proposed projects.
Airport Traffic Control Tower Improvements

Airport Traffic Control Tower Facility

- Constructed 1992
- 20’ x 20’ footprint
  - 38% smaller than standard (25’ x 25’)
- Stairs/Elevator leave only 108 SF usable space per floor
- Tower Cab only 250 SF for 3 controller positions and manager
  - 40% less than standard cab (350 SF)
- No space available for additional equipment
- Line-of-Sight to Runway 32 end obscured by hangars
  - additional 12 feet needed (one more level)

Short-term Recommendations (±5 years)

- Structural Analysis of Facility
  - renovate and/or replace cab
  - expand or add base building

Long-term Recommendations (5+ years)

- New ATCT (reserve site)
Recommended Improvements for Airfield Efficiency

**Aircraft Operations – Seasonal Peaks**

- Holding Bays for Bypass Capability
- Additional Departure Queuing Areas
- Collaborative Decision Making (CDM)
- Ground Operations Efficiency Practices
- Innovative Technologies (NextGen)
ENVIRONMENTAL ELEMENTS
Environmental Elements

Infrastructure Challenges
- FEMA Elevations
- Stormwater Management

Sustainability Issues
- Define Goals and Objectives
- Waste Audit and Solar Feasibility

Resiliency Planning
- Vulnerability Assessment
- Mitigation of Risk

Master Plan Noise Contours*
- Base Year (2017) Contour
- 5-Year (2023) Contour Projection

* Independent of the Master Plan, the Naples Airport Authority is preparing to update its CFR Part 150 Noise Study.
Master Plan Noise Contours

- 2017 Noise Contours
  - Comparison to Historic 60 DNL Contours
- Comparison of 2017 and 2023 Master Plan Contours

*Independent of the Master Plan, the Naples Airport Authority is preparing to update its CFR Part 150 Noise Study.*
Comparison of 60 Decibel (dB) Day-Night Average Sound Level (DNL) Contours from FAA-Approved Part 150 Noise Exposure Maps or Noise Compatibility Programs for Naples Municipal Airport, 1986 – 2017

- Contour Year
- Submission Year
- Prime Consultant
- Contour Line Source

- 2017 Master Plan 60 dB DNL Contours
- 2015 NEM Forecast Case 60 dB DNL Contour
- 2010 NEM Base Case 60 dB DNL Contour
- 2005 NEM Forecast Case 60 dB DNL Contour
- 2001 NCP Forecast Case 60 dB DNL Contour
- 2000 NEM Base Case 60 dB DNL Contour
CONCEPTS FOR AIRPORT DEVELOPMENT
POTENTIAL
AIRFIELD IMPROVEMENTS
CONSTRAINTS TO DEVELOPMENT
RECOMMENDED DEVELOPMENT CONCEPTS
SOUTH QUAD – AVERAGE ELEVATION RANGES 4–7' AMSL.

BASE FLOODPLAIN ELEVATION (BFE) = 6' AMSL.

ALL PROPOSED BUILDINGS SHOWN ASSUME BFE + 1' FOR FINISHED FLOOR ELEVATION (FFE) = 9' AMSL.

POTENTIAL AIRCRAFT FACILITIES

T-HANGARS: 42 SINGLE-ENGINE AND LIGHT MULTI-ENGINE
CLEARSPAN: 29 TO 50 MULTI-ENGINE, JET, AND ROTORCRAFT
PARKING APRON: 8,314,500 SQ = 8,700 SY = 827,700 SY

ABBREVIATIONS

AMS: ABOVE MEAN SEA LEVEL
APT: AIRPORT RESCUE AND FIRE FIGHTING
AT: AIR TRAFFIC CONTROL TOWER
BRL: BUILDING RESTRICTION LINE (207')
CSP: CUSTOMS AND BORDER PROTECTION
GA: GENERAL AVIATION
LDS: LINE OF DEPARTURE
RZ: RUNWAY VISIBILITY ZONE
SF: SQUARE FEET
SY: SQUARE YARDS

LEGEND

FUTURE AIRFIELD IMPROVEMENTS
FUTURE ACCESS IMPROVEMENTS
FUTURE BUILDINGS

Source: ESA, 2019

Naples Airport Master Plan
FIGURE 6-13
SOUTH QUAD DEVELOPMENT - CONCEPT B

FOR PLANNING PURPOSES ONLY
# Recommended Development Concepts

<table>
<thead>
<tr>
<th>Additional Needed by 2038</th>
<th>T-Hangars</th>
<th>Clearspan Hangars</th>
<th>Parking Apron</th>
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<tbody>
<tr>
<td>North Quad Concept A</td>
<td>49 units</td>
<td>115 aircraft</td>
<td>93,600 SY</td>
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<tr>
<td>South Quad Concept B</td>
<td>42</td>
<td>35</td>
<td>27,700 SY</td>
</tr>
<tr>
<td>East Quad Concept B</td>
<td>(71)</td>
<td>10</td>
<td>35,300 SY</td>
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<tr>
<td>West Quad Concept B</td>
<td>78</td>
<td>30</td>
<td>23,000 SY</td>
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<tr>
<td><strong>Totals</strong></td>
<td><strong>49</strong></td>
<td><strong>116</strong></td>
<td><strong>114,300 SY</strong></td>
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SY = Square Yards
# Naples Municipal Airport Master Plan Study Schedule

<table>
<thead>
<tr>
<th>TASK</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
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<tbody>
<tr>
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<td>12</td>
<td>1</td>
<td>2</td>
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<tr>
<td>1 - Project Initiation</td>
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<td>2 - Existing Conditions</td>
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<td>3 - Aviation Forecasts</td>
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<td>4 - Facility Assessment and Requirements</td>
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<td>5 - Environmental Analyses</td>
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<td>6 - Alternatives for Airport Development</td>
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<td>7 - Airport Layout Plan Drawing Set</td>
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<td>8 - Recommended Development Program</td>
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<tr>
<td>9.1 - FAA/ Airport Management Coordination (8 Meetings)</td>
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<td>9.2 - Project Team Working Group (8 Meetings)</td>
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<td>9.3 - Agency Coordination (FAA, ADD, FDOT)</td>
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<td>9.4 - Public Outreach Meetings (8 Meetings)</td>
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<tr>
<td>10 - Report Preparation</td>
<td>WP #1</td>
<td>WP #2</td>
<td>WP #3</td>
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<tr>
<td>11 - Project Administration</td>
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**Legend**

- A: Public Outreach Kick-Off Meetings
- B: Public Outreach Open Houses - 1A & 1B
- C: Public Outreach Open Houses - 2A & 2B
- D: Public Outreach Open Houses - 3A & 3B

Updated: January 2018
Revised Project Schedule
Next Steps:

April 30 and May 1, 2019
Public and Customer Open Houses

Mid October 2019 - TBD
City Council Presentation

Late October 2019 - TBD
NAA / NCC Joint Workshop
Public and Customer Open Houses

Early December 2019 - TBD
NAA / NCC Joint Workshop

January 2020
Project Completion

Questions?

Douglas DiCarlo – ddicarlo@esassoc.com
Michael Arnold – marnold@esassoc.com