# WELCOME

### PUBLIC INFORMATION WORKSHOP

South-Central Florida Metroplex

FEDERAL AVIATION ADMINISTRATION

### Welcome

Welcome to the FAA's Workshop on the South-Central Florida Metroplex.

The designs you will see tonight are preliminary.

We welcome your input.

You may provide your comments tonight in writing, or you may leave your comments at this website:

https://www.faa.gov/nextgen/nextgen\_near\_you/community\_involvement/florida/

# Environmental Study Process

#### Consideration of a **Proposed Action under** the National Environmental Policy Act (NEPA)

NEPA requires that the FAA evaluate the environmental and related social and economic effects of a proposed action.

#### **Preliminary Technical Review**

FAA conducts an internal technical review before deciding to consider moving forward with an environmental review.

#### Preliminary Environmental Review

FAA conducts an internal environmental review to evaluate any potential environmental concerns.

#### Internal Review and choice of appropriate level of NEPA review

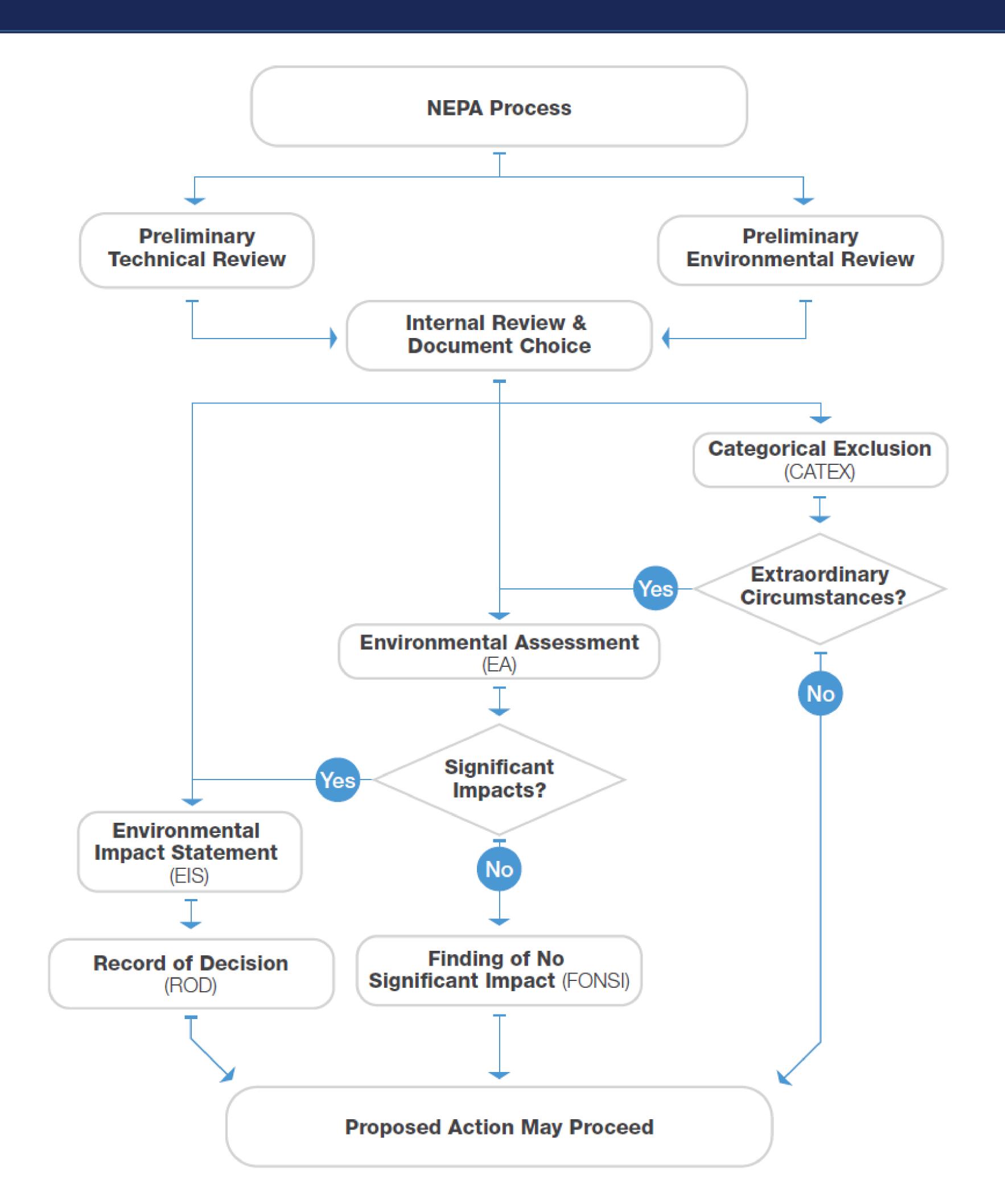
Internal analysis such as the noise screening reports as well as input from the public are used to assist the FAA in determining the appropriate level of NEPA review to conduct.

#### **Extraordinary Circumstances**

Paragraph 5-2 of FAA Order 1050.1F identifies the range of factors which define Extraordinary Circumstances.

#### Significant Impacts

The FAA uses thresholds that serve as specific indicators of significant impact for some environmental impact categories. FAA proposed actions that would result in impacts at or above these thresholds require the preparation of an EIS, unless impacts can be reduced below threshold levels.



# Project Goals

#### WHAT DOES THIS PROJECT HOPE TO ACHIEVE?

Take advantage of Performance Based Navigation by implementing procedures that will help enhance the safety and efficiency of the airspace.

Provide deconfliction of arrivals and departures for airports in close proximity to one another, allowing for independent operations at each airport.

Reduce conflicts in routes between Florida airports, and in routes connecting Florida to other national and international destinations.

Improve air traffic flow and efficiency, in order to keep pace with the growth in aviation and tourism in Florida.

#### WHY ARE WE DOING THIS PROJECT?

The existing departure and arrival procedures do not take full advantage of modern technology. The project will replace outdated systems with satellite-based technology.

Improve the predictability of air traffic flows to enhance safety and efficiency while reducing the workload for air traffic controllers and pilots.

Reduce airspace constraints associated with restricted military airspace, general aviation operations, space vehicle launches, and drones.

Provide environmental benefits by reducing carbon emissions and aircraft fuel consumption.

#### **TERMINOLOGY**

**RNAV** Area Navigation SID Standard Instrument Departure

STAR
Standard Terminal Arrival Route

# Metroplex Project Phases

Study Phase

- Approximately 9 months
- Coordination with airports

Design and Procedure Development

- Approximately 12 months
- Public workshops and comments

We are here

Operational, Environmental, and Safety Review

- Approximately 12 months
- Draft Environmental Assessment (EA)
- Public workshops and comments

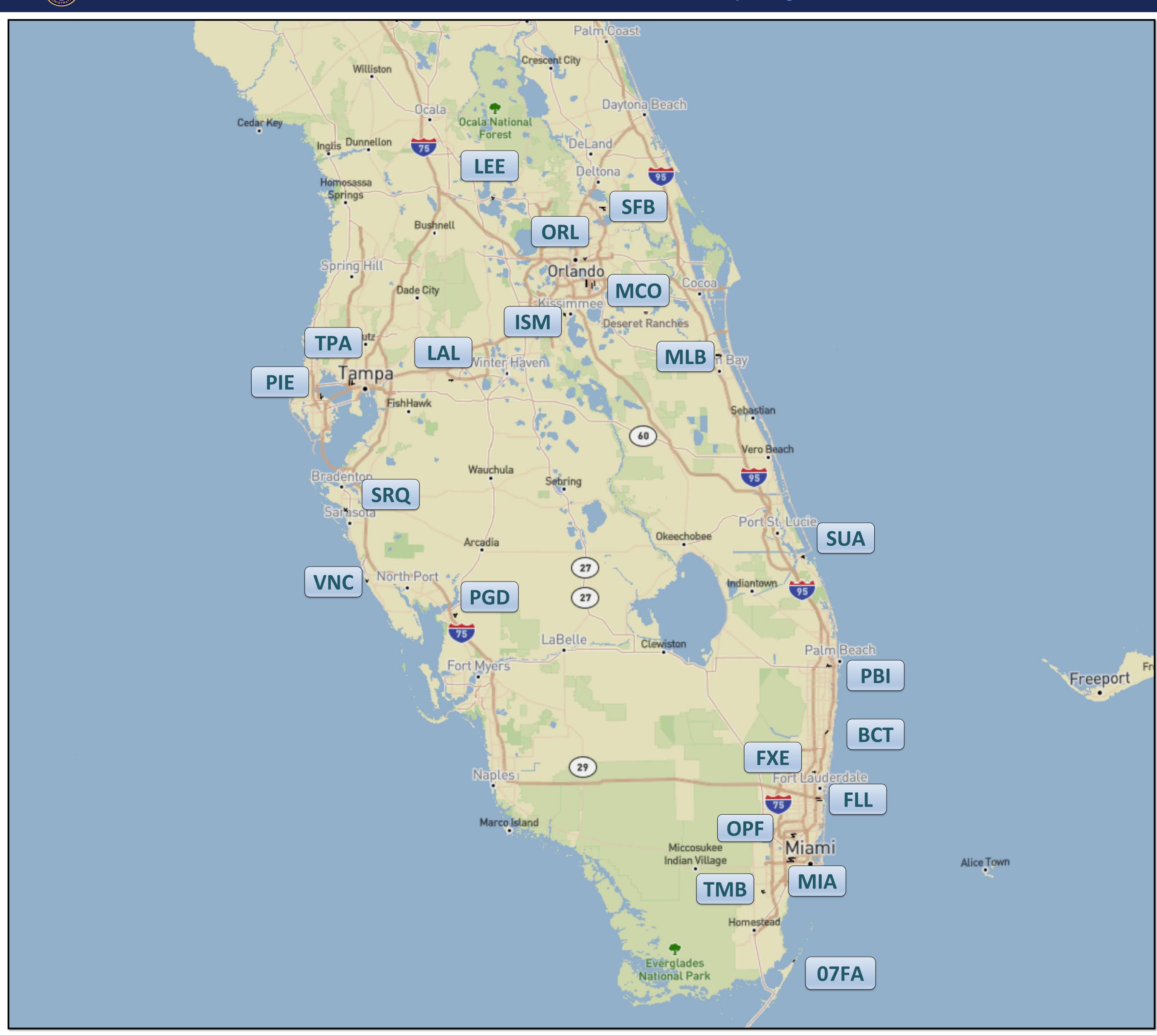
Implementation and Training

- Approximately 12 months
- Final EA/Record of Decision and public notification
- Training, procedure publication and implementation

Post-Implementation

- Approximately 7 months
- Post-implementation analysis
- Procedure adjustments



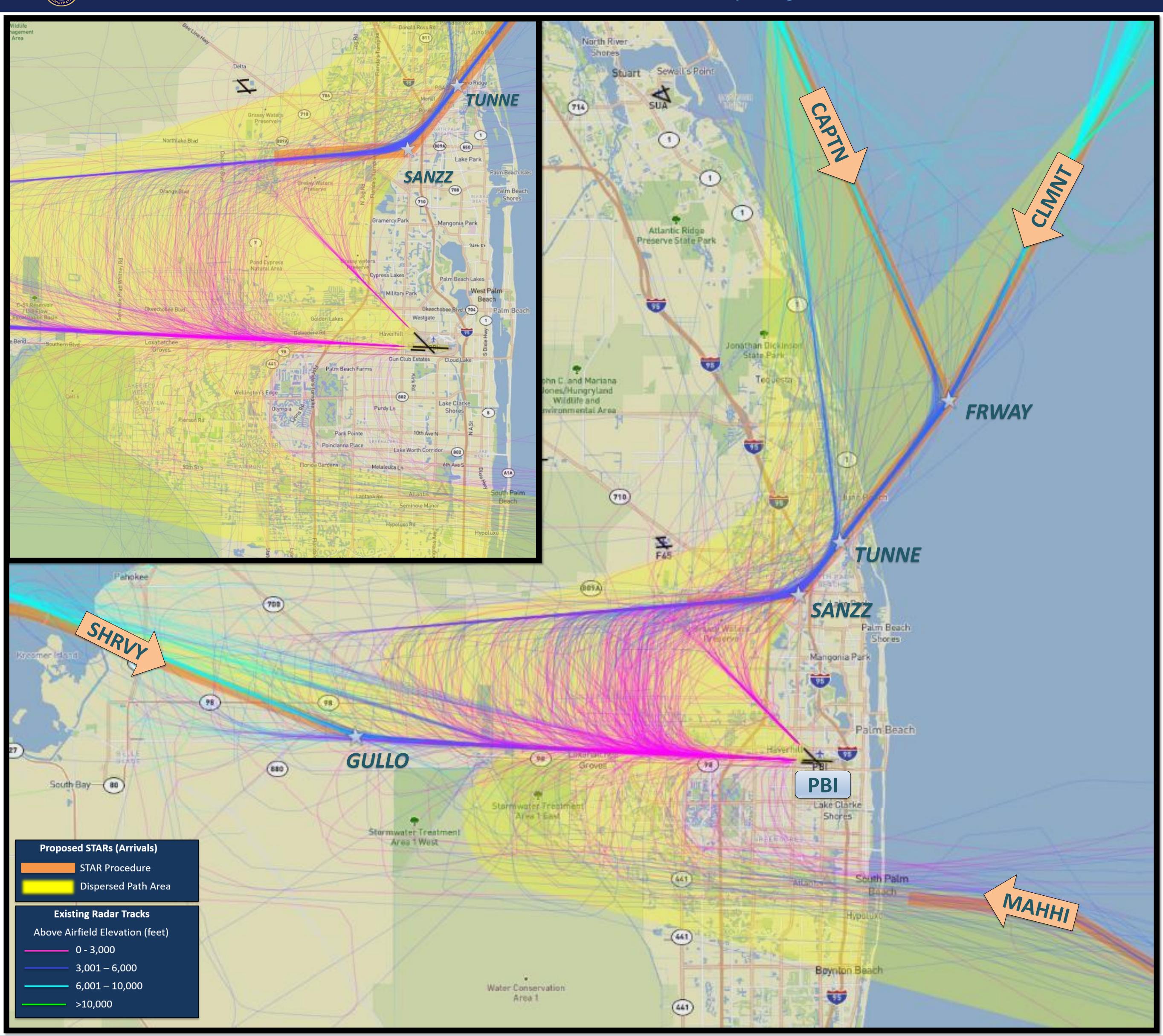


### Metroplex Study Area Overview Map

 Overview of the 21 airports included in the Metroplex







Area Navigation (RNAV)
Standard Terminal Arrivals
(STARs)

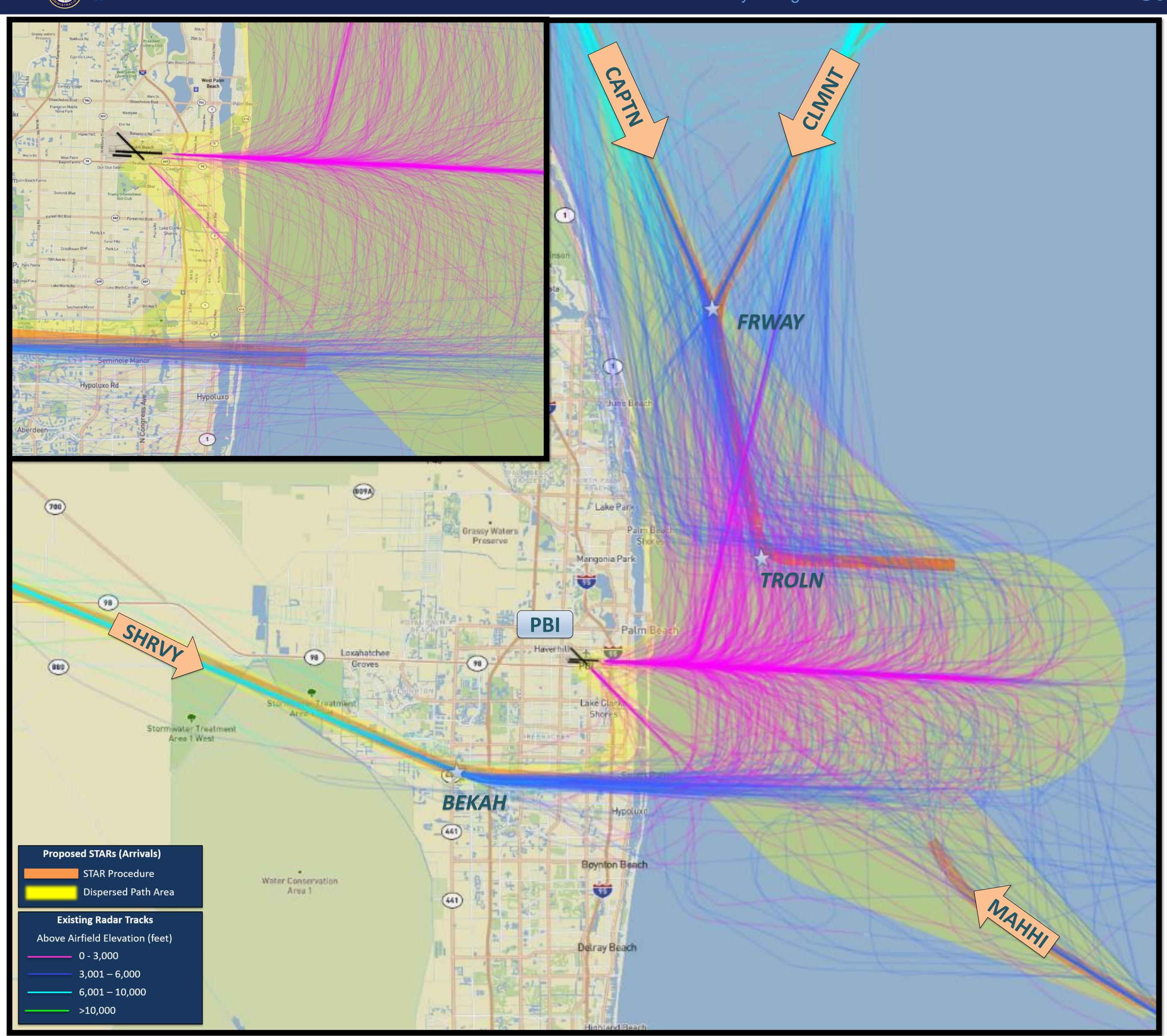
CAPTN ONE
CLMNT ONE
MAHHI ONE
SHRVY ONE

#### **East Flow**

- Standard Terminal Arrivals (STARs) would provide vertical and lateral navigation guidance for jets landing east at PBI
- Jet arrival aircraft typically would fly along the same paths and at similar altitudes as they do today
- Air Traffic Control (ATC) would merge the CAPTN and CLMNT STARs into a single stream in trail for arrival to Runway 10 Left
  - Arrivals that can accept a shorter runway length may be moved to arrive Runway 14 by ATC
- ATC occasionally would direct aircraft away from the procedure to avoid hazardous weather, for operational need, or for safety
- Radar track data are a sample from January to May 2018







Area Navigation (RNAV)
Standard Terminal Arrivals
(STARs)

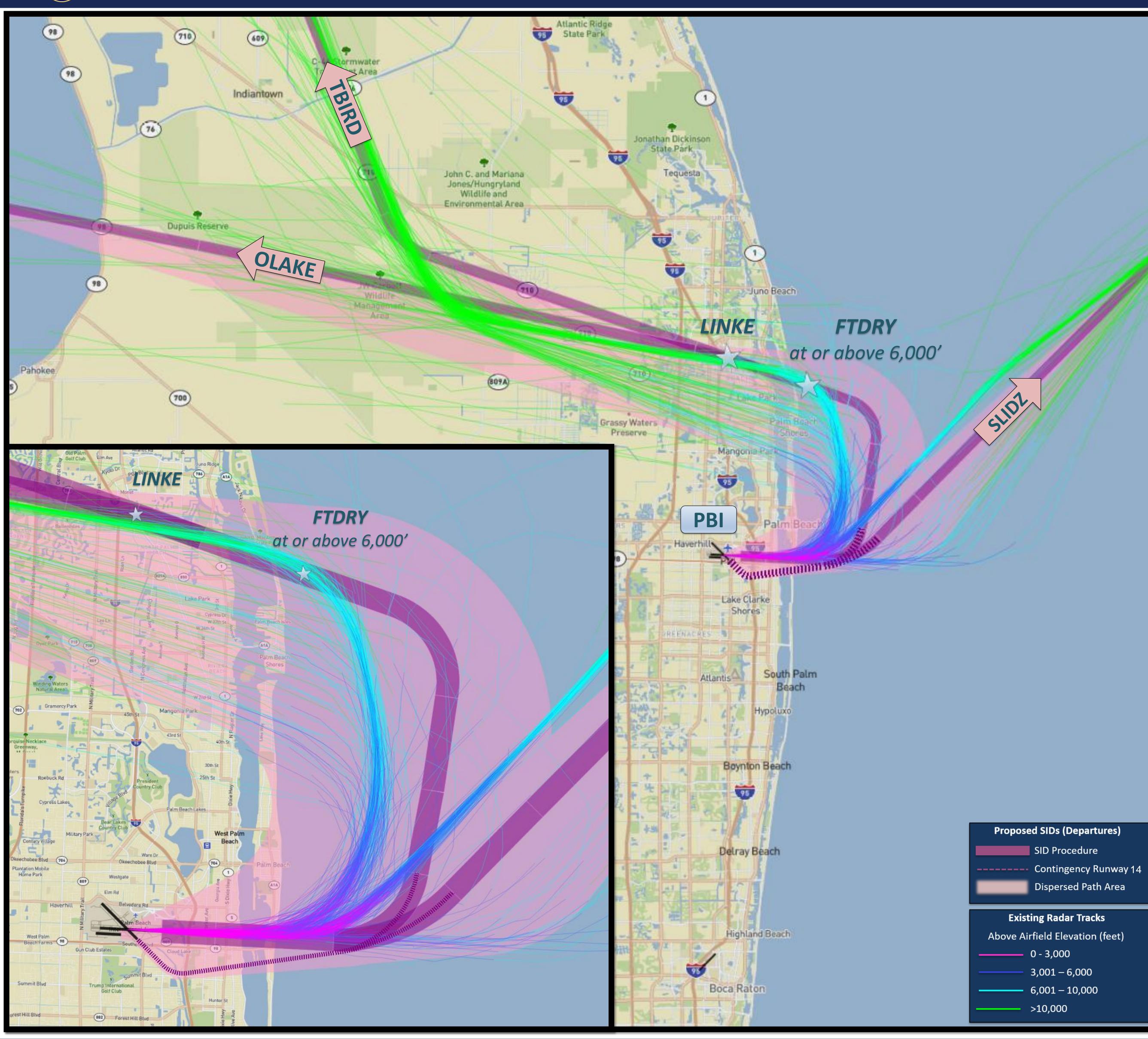
CAPTN ONE
CLMNT ONE
MAHHI ONE
SHRVY ONE

#### **West Flow**

- Standard Terminal Arrivals (STARs) would provide vertical and lateral navigation guidance for jets landing west at PBI
- Jet arrival aircraft typically would fly along the same paths and at similar altitudes as they do today
- Air Traffic Control (ATC) would merge the CAPTN and CLMNT STARs into a single stream in trail for arrival to Runway 28 Right
  - Arrivals that can accept a shorter runway length may be moved to arrive Runway 32 by ATC
- ATC occasionally would direct aircraft away from the procedure to avoid hazardous weather, for operational need, or for safety
- Radar track data are a sample from January to May 2018







Area Navigation (RNAV)
Standard Instrument Departures
(SIDs)

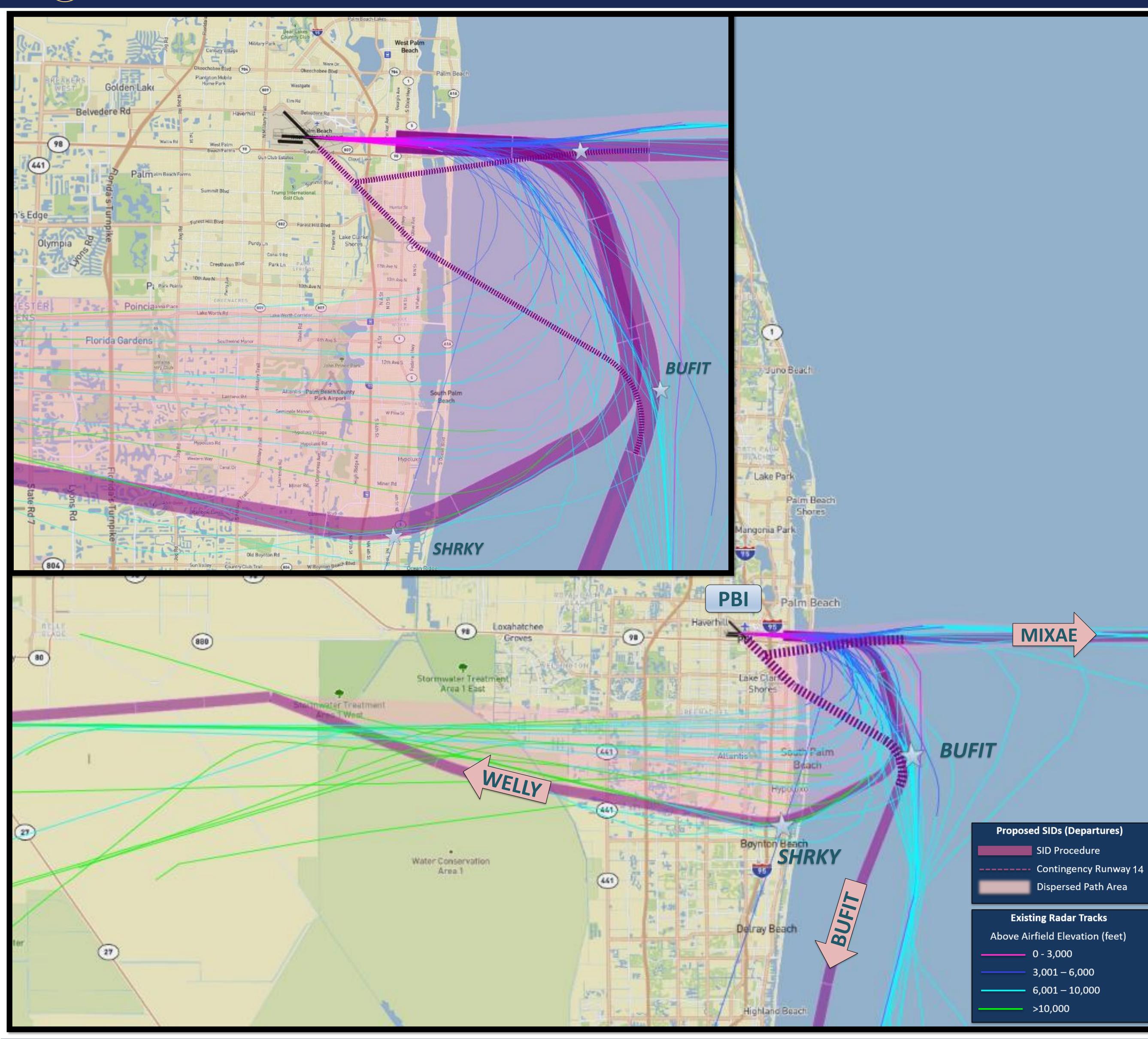
OLAKE ONE
TBIRD ONE
SLIDZ ONE

#### **East Flow North Procedures**

- This board shows PBI east flow traffic departing to the north of the PBI airport
- Jet departures typically would fly along the same paths and at similar altitudes as they do today
- The Standard Instrument Departures (SIDs) would provide vertical and lateral navigation guidance for jets departing east at PBI
  - Jet departures that can accept a shorter runway length may depart Runway 14
- Departures would use the vertical and lateral guidance of the procedure on initial departure from the runway
- ATC occasionally would direct aircraft away from the procedure to avoid hazardous weather, for operational need, or for safety
- Radar track data are a sample from January to May 2018







Area Navigation (RNAV)
Standard Instrument Departures
(SIDs)

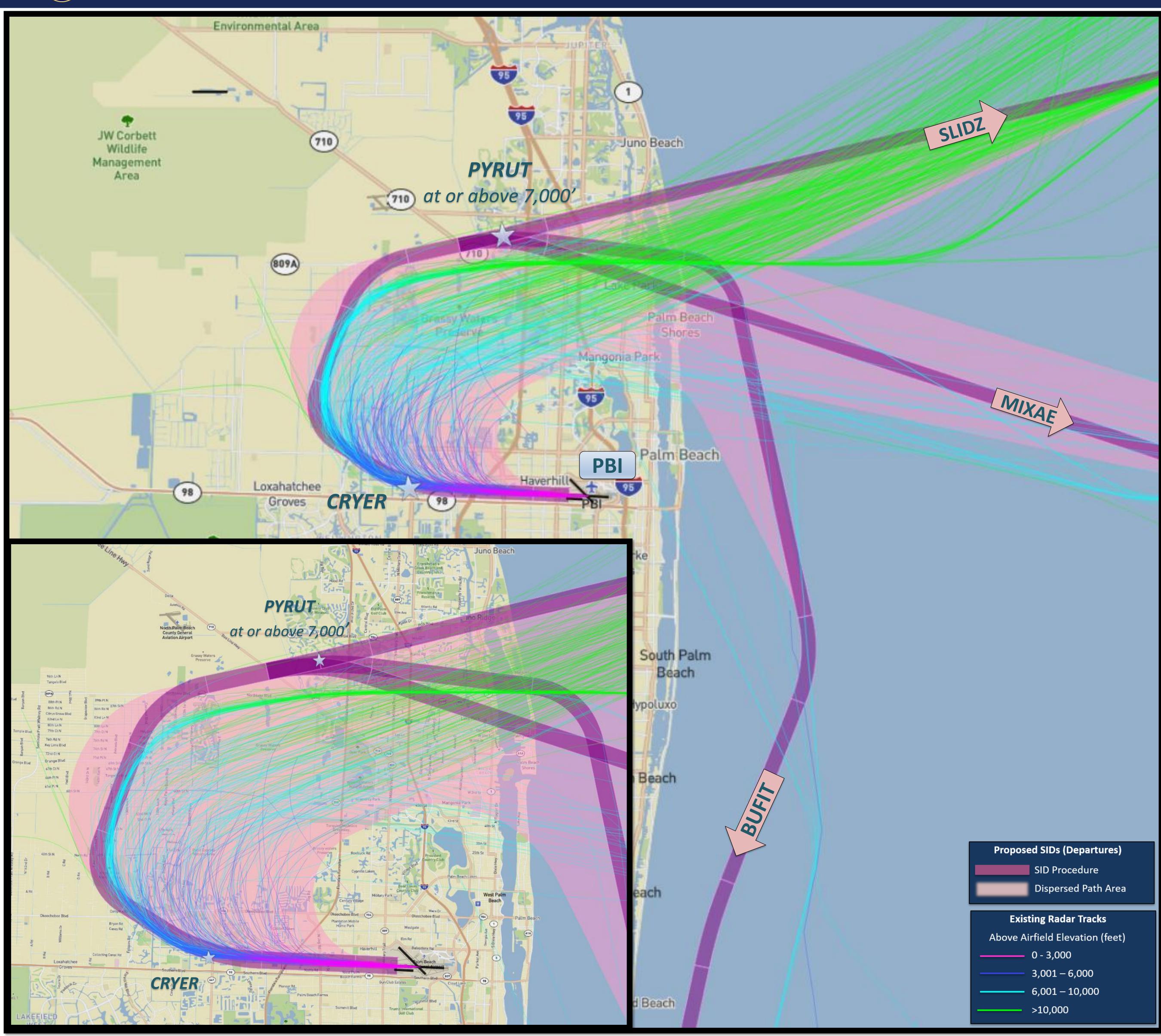
BUFIT ONE MIXAE ONE WELLY ONE

#### **East Flow South Procedures**

- This board shows PBI east flow traffic departing to the west, south and east of the PBI airport
- Jet departures typically would fly along the same paths and at similar altitudes as they do today
- The Standard Instrument Departures (SIDs) would provide vertical and lateral navigation guidance for jets departing east at PBI
  - Jet departures that can accept a shorter runway length may depart Runway 14
- Departures will use the vertical and lateral guidance of the procedure on initial departure from the runway
- ATC occasionally would direct aircraft away from the procedure to avoid hazardous weather, for operational need, or for safety
- Radar track data are a sample from January to May 2018







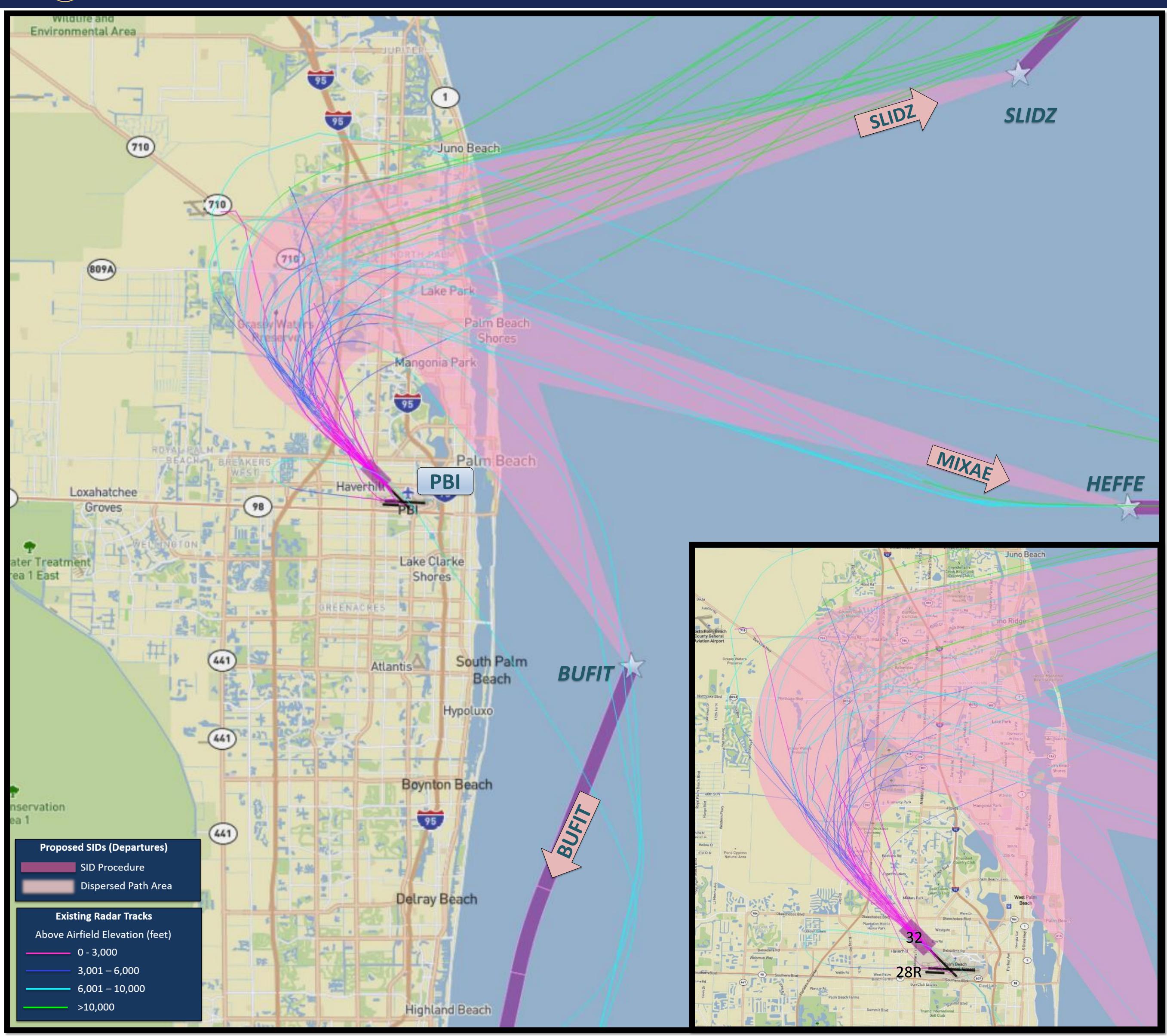
Area Navigation (RNAV)
Standard Instrument Departures
(SIDs)

BUFIT ONE MIXAE ONE SLIDZ ONE

#### Runway 28R West Flow – Eastbound Aircraft

- This board shows PBI west flow jet traffic departing to the northeast, east, and south of the PBI airport
- Jet departures typically would fly along the same paths and at similar altitudes as they do today
- The Standard Instrument Departures (SIDs) would provide vertical and lateral navigation guidance for jets departing west at PBI
- Departures will use the vertical and lateral guidance of the procedure on initial departure from the runway
- ATC occasionally would direct aircraft away from the procedure to avoid hazardous weather, for operational need, or for safety
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**Area Navigation (RNAV) Standard Instrument Departures** (SIDs)

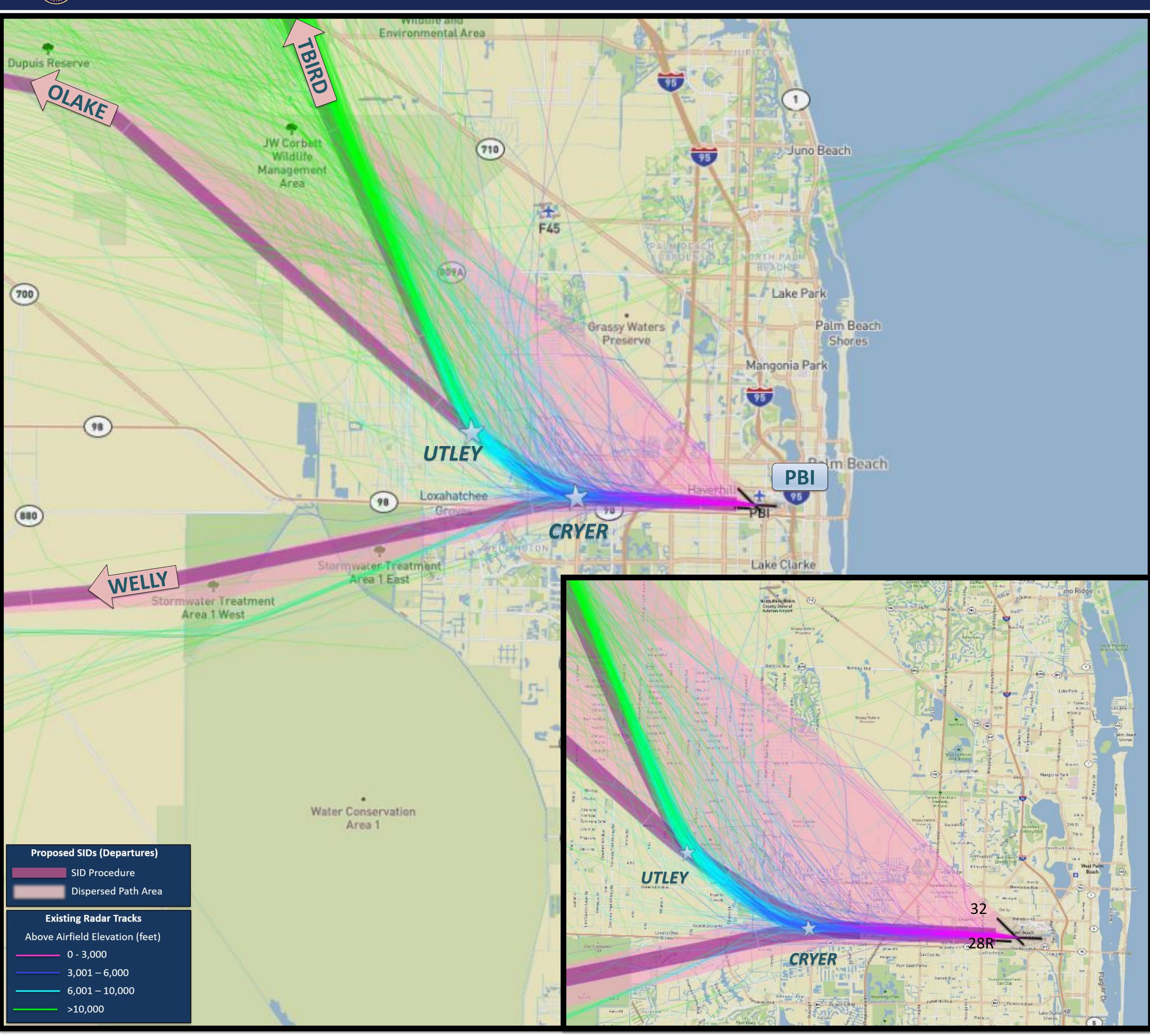
**BUFIT ONE MIXAE ONE SLIDZ ONE** 

#### Runway 32 **West Flow- Eastbound Aircraft**

- This board shows PBI Runway 32 jet traffic departing to the northeast, east, and south of the PBI airport. Jets depart Runway 32 on a straight out heading and get vectored to their route of flight.
- Jet departures typically would fly along the same paths and at similar altitudes as they do today
- Aircraft are vectored by controllers to the waypoints offshore. Runway 32 is used less than Runway 28R
- The Standard Instrument Departures (SIDs) would provide vertical and lateral navigation guidance for jets departing northwest at PBI
- Departures would use the vertical and lateral guidance of the procedure on initial departure from the runway
- ATC occasionally would direct aircraft away from the procedure to avoid hazardous weather, for operational need, or for safety







Area Navigation (RNAV)
Standard Instrument Departures
(SIDs)

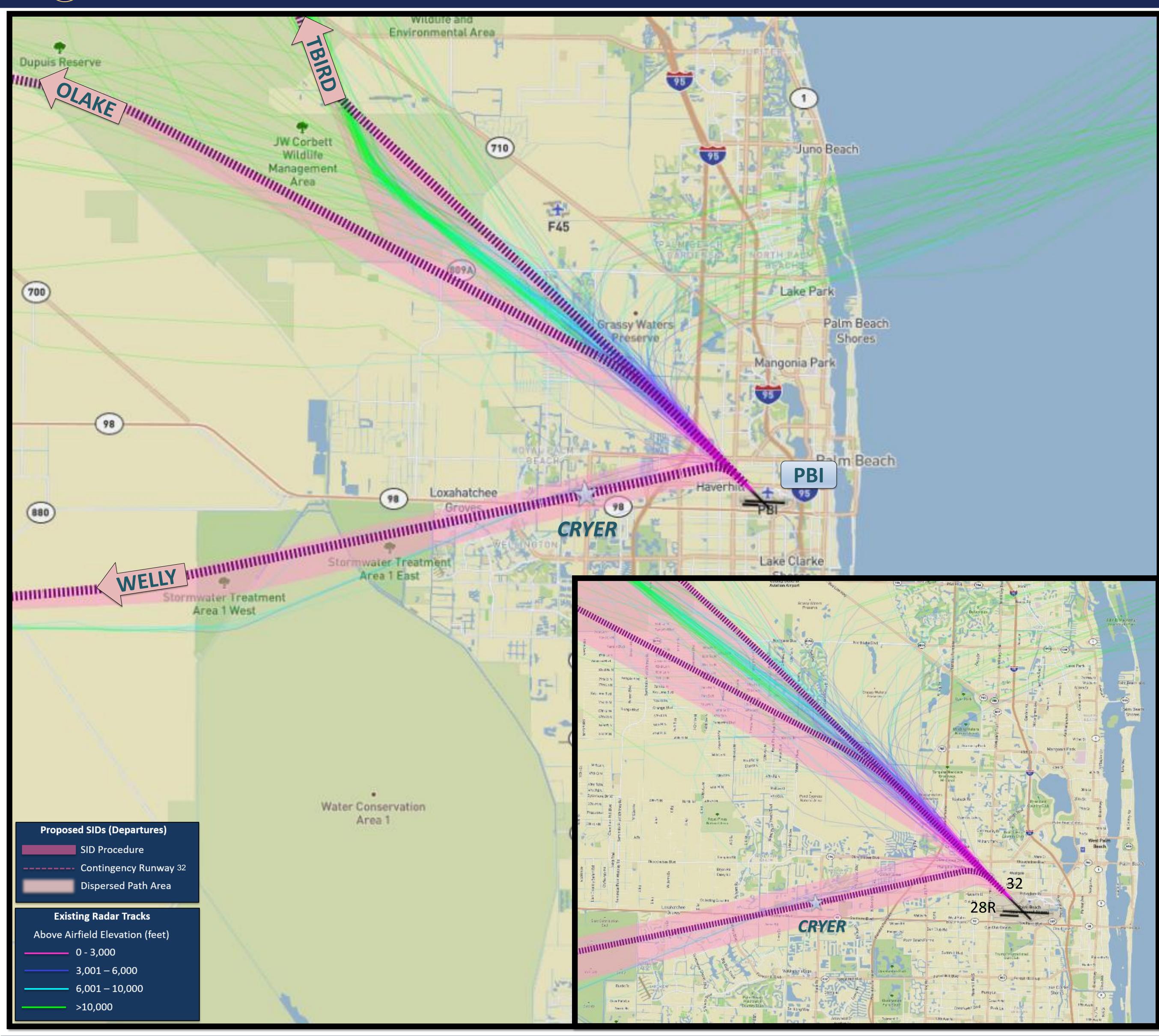
OLAKE ONE TBIRD ONE WELLY ONE

Runway 28R West Flow – Westbound Aircraft

- This board shows PBI Runway 28R traffic departing and flying to west and northwest destinations
- Jet departures typically would fly along the same paths and at similar altitudes as they do today
- Runway 28R is the primary runway in this flow with Runway 32 used less often
- The Standard Instrument Departures (SIDs) would provide vertical and lateral navigation guidance for jets departing west at PBI
- Departures would use the vertical and lateral guidance of the procedure on initial departure from the runway
- ATC occasionally would direct aircraft away from the procedure to avoid hazardous weather, for operational need, or for safety
- Radar track data are a sample from January to May 2018







Area Navigation (RNAV)
Standard Instrument Departures
(SIDs)

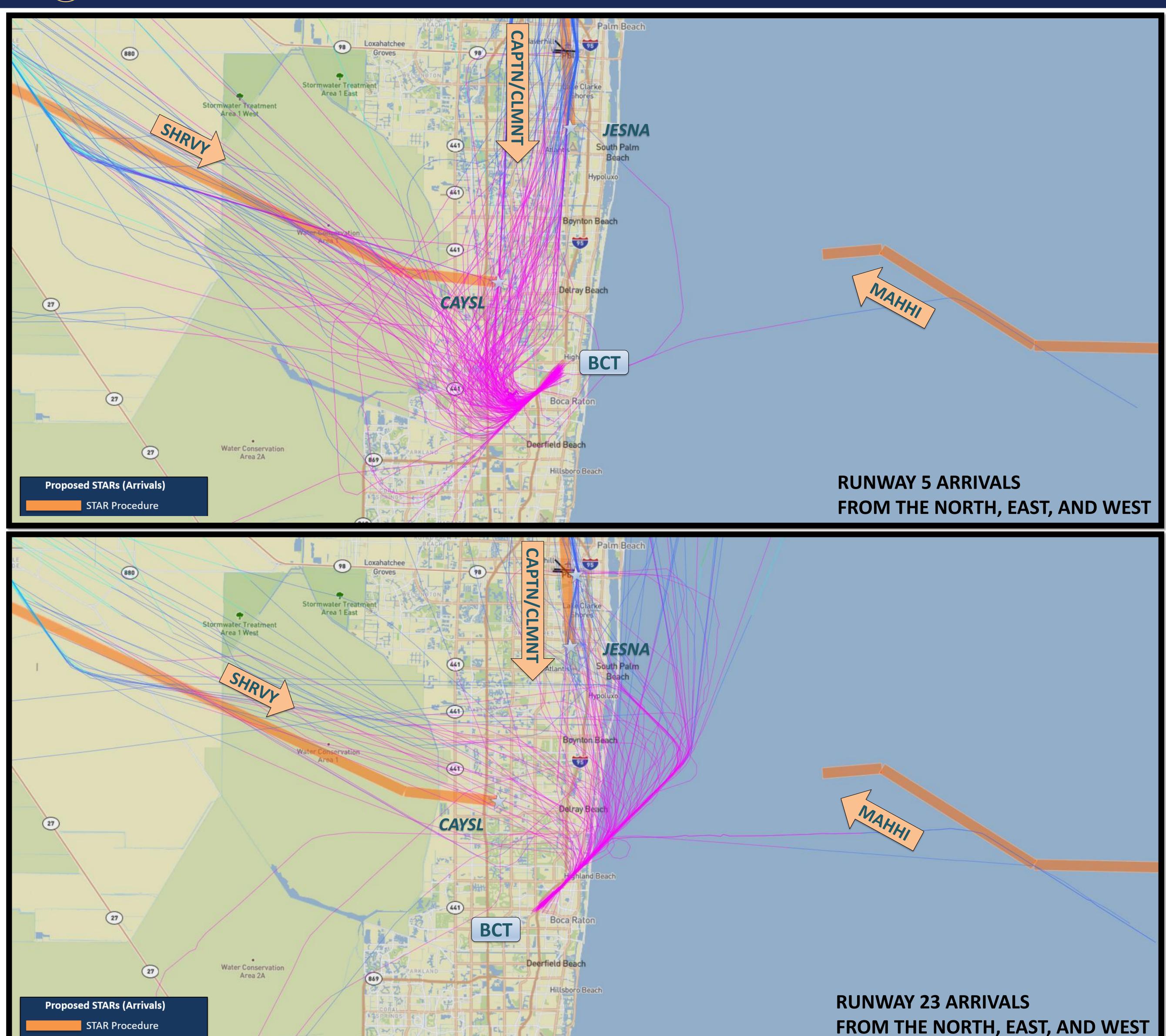
OLAKE ONE TBIRD ONE WELLY ONE

Runway 32 West Flow - Westbound Aircraft

- This board shows PBI Runway 32 traffic departing and flying to west and northwest destinations
- Jet departures typically would fly along the same paths and at similar altitudes as they do today
- Runway 28R is the primary runway in this flow with Runway 32 used less often
- The Standard Instrument Departures (SIDs) would provide vertical and lateral navigation guidance for jets departing west at PBI
- Departures would use the vertical and lateral guidance of the procedure on initial departure from the runway
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BCT Boca Raton Airport

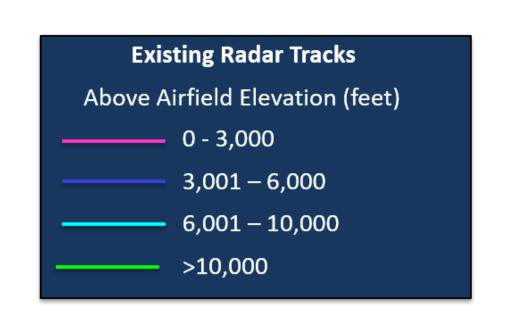
Area Navigation (RNAV)
Standard Terminal Arrivals (STARs)

CAPTN ONE
CLMNT ONE

MAHHI ONE SHRVY ONE

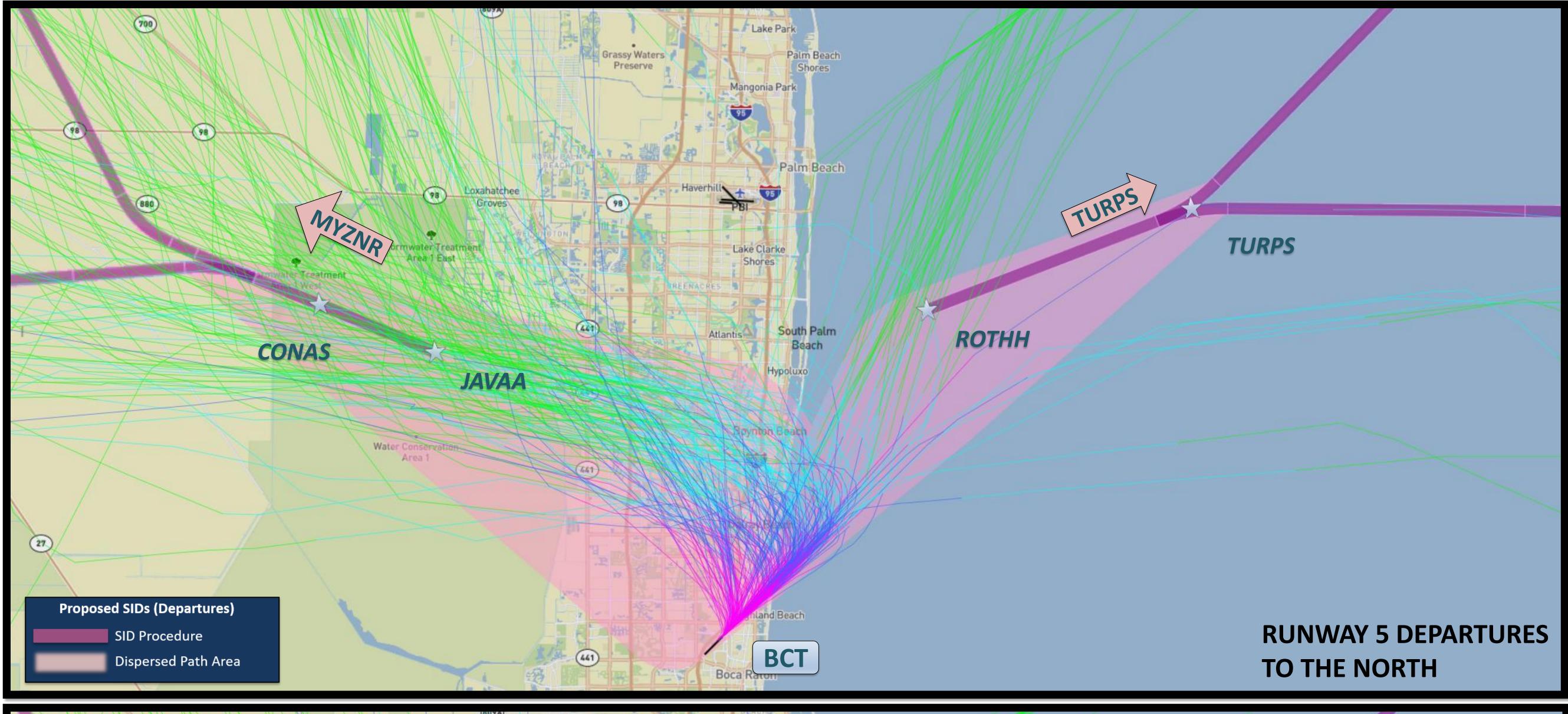
Arrival Procedures in North and South Flow

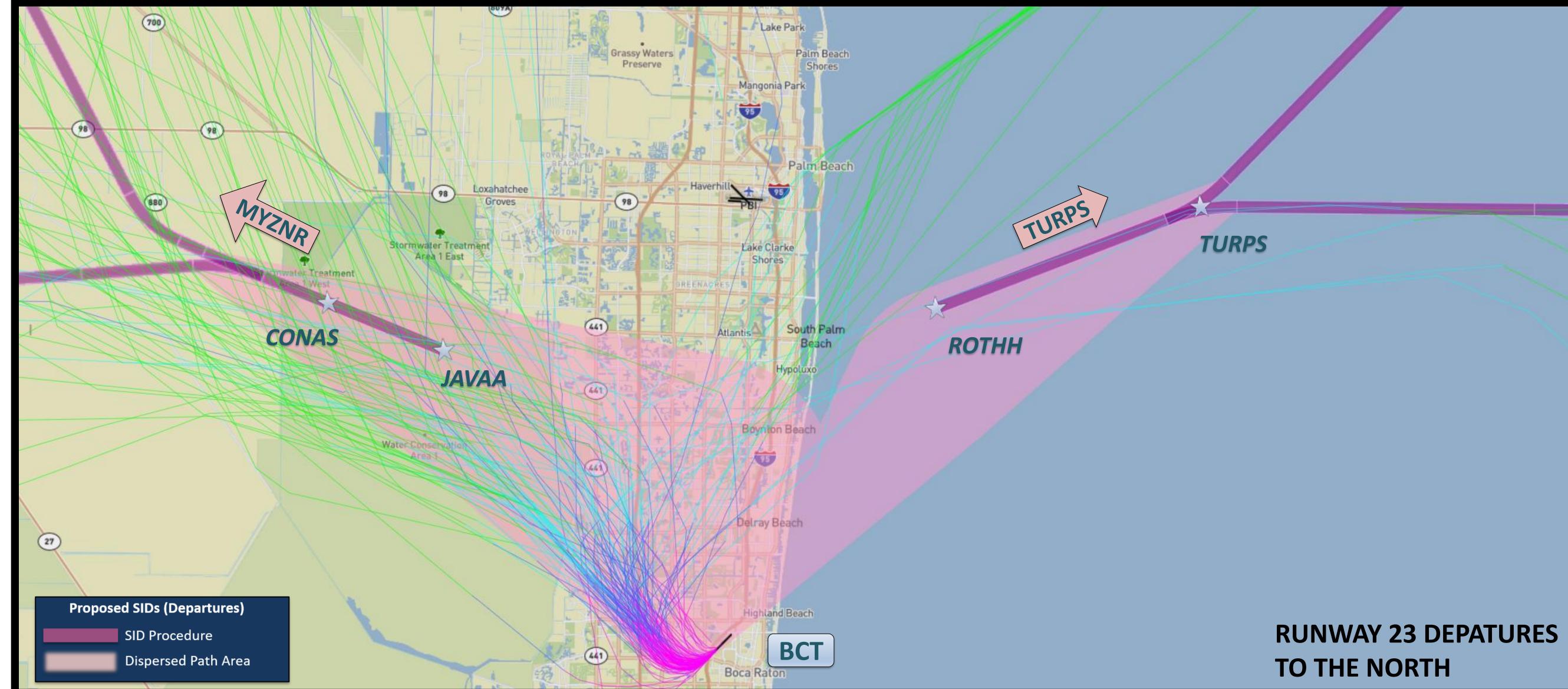
- This board shows BCT arrival traffic using Runway 5 and Runway 23
- Aircraft arriving would be radar vectored by ATC to the runway as they currently are today
- ATC occasionally would direct aircraft away from the procedure to avoid hazardous weather, for operational need, or for safety
- Radar track data are a sample from January to May 2018











### BCT Boca Raton Airport

Area Navigation (RNAV)

Standard Instrument Departures
(SIDs)

MYZNR ONE TURPS ONE

Departure Procedures in North and South Flow

- This board shows BCT departure traffic using Runway 5 and Runway 23
- Aircraft departing BCT would be radar vectored by ATC to join the SID procedures
- ATC occasionally would direct aircraft away from the procedure to avoid hazardous weather, for operational need, or for safety
- Radar track data are a sample from January to May 2018

