

**J-3 Comments on the Draft EA
and FAA Responses**

Comments and Responses Volume 2

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AVIATION DEPARTMENT - Fort Lauderdale-Hollywood International Airport

2200 SW 45th Street, Suite 101 • Dania Beach, Florida 33312 • 954-359-6100

July 23, 2020

Mr. Michael C. O’Harra
 Regional Administrator
 Federal Aviation Administration Southern Region
 1701 Columbia Avenue
 College Park, GA 30337

RE: Comments on the FAA’s South-Central Florida Metroplex Draft Environmental Assessment

Dear Mr. O’Harra:

On behalf of Broward County, attached please find and accept our comments on the FAA’s South-Central Florida Metroplex (FL Metroplex) Draft Environmental Assessment (Draft EA). These comments represent a cumulative body of work stemming from not only a review of the Draft EA, but also multiple interactions between the FAA and the Broward County Aviation Department (BCAD) over the last several years regarding the FL Metroplex project, and specifically air traffic arriving to and departing from the Fort Lauderdale-Hollywood International Airport (FLL).

Many of our comments expressed relate to alleviating long-standing community concerns with the 15-degree heading separation for departures at FLL and impacts to communities near the Airport. As noted from past BCAD comments, BCAD has repeatedly emphasized that the FL Metroplex must consider Equivalent Lateral Spacing Operations (ELSO) or “ELSO-like” procedures that would provide communities around FLL with some relief from aircraft overflights and associated noise. During the three virtual public workshops held for the Fort Lauderdale area, the FAA made several references indicating that they have developed “RNAV (Area Navigation) off the ground” to address our “ELSO-like” procedures request. Additionally, with respect to arrivals approaching from the west, the FAA indicated that procedures were developed with the intent of keeping aircraft at higher approach altitudes when possible to minimize noise impacts on several communities. It is BCAD’s expectation that these procedures will be part of any adopted Metroplex implementation.

Enclosed with this transmittal you will find BCAD’s most recent comments on the FAA’s FL Metroplex Draft EA, along with BCAD’s past comments (2017 and 2019) related to the project. Graphics contained in our comments reflect diagrams sourced directly from the FAA’s EA documents.

As noted by the FAA during the Metroplex process, the FAA’s project is completely separate from FLL’s Part 150 Noise Compatibility Study currently underway. That said, FLL’s Part 150 Study submission will also include recommendations to reduce the current divergent heading separation of 15 degrees for departures both to the east and to the west of FLL. The intent of these recommendations is to address long-standing noise concerns from FLL’s surrounding communities, especially those located immediately northeast and northwest of the airport.

Broward County Board of County Commissioners

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M. O'Harra, FAA – Southern Region
Comments - South-Central FL Metroplex Draft EA
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BCAD looks forward to working with the FAA and our Broward County communities through this process, but clearly some concerns remain on the new procedures identified in the Draft EA. These concerns have been referenced multiple times in our comment submissions. We remain committed to the safe, efficient and effective operation of our airports, while minimizing noise impacts and affecting positive changes for communities located in Broward County.

Sincerely,



Mark E. Gale, A.A.E.
CEO/Director of Aviation

MG/WC/ml

Enclosure: FLL Comments on the FAA FL Metroplex Draft EA, July 23, 2020

C: Broward County Board of County Commissioners
Bertha Henry, County Administrator
Monica Cepero, Deputy County Administrator

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FLL Comments - FAA South-Central Florida Metroplex Draft EA - July 23, 2020

Commenter	Point of Contact	Airport	Procedure	Affected neighborhood, city, or area(s)	Issue or concern	Graphic provided?
Broward County Aviation Dept. (BCAD)	Winston Cannicle, Noise Information Officer, wcannicle@broward.org; 954-359-6181	FLL	FAA Draft Metroplex EA Document	Broward County	Overall, the documentation provided with the Draft Metroplex EA is very vague and it is difficult to understand the effect that the procedures are likely to have in communities in Broward County. While the Google Earth files are helpful, they do not provide information about the altitudes of aircraft, the volume or actual location/concentration of overflights.	Slides 5-22; 24-34 Attachment A
Broward County Aviation Dept. (BCAD)	Winston Cannicle, Noise Information Officer, wcannicle@broward.org; 954-359-6181	FLL	FAA Draft Metroplex EA Document	Broward County	The maps provided within the document were very large in scale making it difficult for citizens to understand how the procedures effect their specific community.	
Broward County Aviation Dept. (BCAD)	Winston Cannicle, Noise Information Officer, wcannicle@broward.org; 954-359-6181	FLL	FAA Draft Metroplex EA Document	Broward County	It was difficult to understand the specific benefits of the proposed procedures in the Draft Metroplex EA. BCAD suggests that the benefits be more clearly identified and communicated to the broader public.	
Broward County Aviation Dept. (BCAD)	Winston Cannicle, Noise Information Officer, wcannicle@broward.org; 954-359-6181	FLL	FAA Virtual Public Workshops (Jun 9-11, 2020)	Broward County	As expressed in BCAD's April 30th, 2020, letter to the FAA, BCAD remains concerned about the effects of the pandemic on the virtual workshops and the limited accessibility of some in our community to the Draft Metroplex EA and the associated workshops. Our community members have expressed a great deal of frustration in trying to download and review the materials and others may not have access to broadband or digital devices. The lack of hard copy access may have limited the ability of some community members to effectively review the EA and provide comments.	BCAD Letter to the FAA April 30, 2020 Attached
Broward County Aviation Dept. (BCAD)	Winston Cannicle, Noise Information Officer, wcannicle@broward.org; 954-359-6181	FLL	ELSO or ELSO-Like Procedures	Areas west/NW and east/NE of the airport	On Monday, June 1st, BCAD received an e-mail in response to an inquiry from BCAD to the FAA relative to the disposition of previous comments regarding proposed Metroplex flight procedures. In response to a BCAD comment suggesting use of ELSO or ELSO like procedures to reduce the separation in heading, FAA indicated that the new procedures would result in a "reduced separation (less than 15 degrees but more than 10 degrees) between simultaneous runway departures". During the public workshops the week of June 9th, the FAA further clarified this separation to the public as 11 degrees for departures to the west (DREDS waypoint). It is BCAD's understanding that the future initial headings west would therefore be 275 degrees (no change) and 286 degrees or a four-degree reduction in the heading separation from the current 290 heading. Please confirm the reduction in departure separations and the resulting benefits for surrounding communities.	Slides 5-12, 21-22, Attachment A

FLL Comments - FAA South-Central Florida Metroplex Draft EA - July 23, 2020

Commenter	Point of Contact	Airport	Procedure	Affected neighborhood, city, or area(s)	Issue or concern	Graphic provided?
Broward County Aviation Dept. (BCAD)	Winston Cannicle, Noise Information Officer, wcannicle@broward.org; 954-359-6181	FLL	ELSO or ELSO-Like Procedures	Broward County	The FAA has indicated that ELSO or ELSO like procedures have been incorporated in procedures reflected in the Draft Metroplex EA. In addition, we also heard from the FAA during the virtual public workshops that RNAV procedures developed will keep departing aircraft from FLL south of I-595. The FAA stated this during the Jun 10th virtual public workshop (55-58 minute). Please confirm which of the procedures in the Draft EA would operate as ELSO or ELSO-like procedures and will keep aircraft south of I-595, thereby, providing benefits to surrounding communities NW of the airport. Also, please verify the departure headings and departure heading separations for each.	
Broward County Aviation Dept. (BCAD)	Winston Cannicle, Noise Information Officer, wcannicle@broward.org; 954-359-6181	FLL	RNAV Off the Ground	Broward County	While "RNAV off the ground" is referenced in a few procedures in Appendix G of the Draft Metroplex EA, there is no description of what this is or how it differs from other RNAV procedures. Please provide a description of RNAV off the ground and identify proposed FLL procedures that would be considered RNAV off the ground procedures.	
Broward County Aviation Dept. (BCAD)	Winston Cannicle, Noise Information Officer, wcannicle@broward.org; 954-359-6181	FLL	RNAV SIDS - AARPS, FEELX, REGAE, SNAPR, and VACAY	Davie, Plantation, Sunrise, North Tamarac, Pompano Beach, Lauderdale Isles; Harbor Inlet, Oakland Park	The workshop graphics indicate that the flight corridors associated with the DREDS and SHELZ waypoints are in fairly narrow corridors on the inside or to the east of those points. This would imply that these are flyby waypoints and that the heaviest concentration of aircraft would be to the east or right of the waypoints. The same comment would apply to all similar flight tracks/corridors throughout the Metroplex study area. The "Proposed Flight Tracks" shown in the Google Earth files appear to reflect a wider path than the corridors reflected in the workshop materials or the associated discussion. The "Proposed Flight Tracks" reflect a 2 nautical mile wide corridor. The workshop discussion noted that the actual concentration of aircraft would likely be in a ½ mile wide corridor for straight segments and slightly larger area for turning segments. If the Google Earth flight tracks reflect what was modeled from a noise standpoint, wouldn't they disperse the noise exposure effects of the heavily concentrated tracks thereby reducing the likelihood that there would be reportable impact? If noise was modeled for the flight tracks shown in Google Earth, the results would not appear to reflect the corridors where aircraft will actually fly.	Slides 5-22 Attachment A

FLL Comments - FAA South-Central Florida Metroplex Draft EA - July 23, 2020

Commenter	Point of Contact	Airport	Procedure	Affected neighborhood, city, or area(s)	Issue or concern	Graphic provided?
Broward County Aviation Dept. (BCAD)	Winston Cannicle, Noise Information Officer, wcannicle@broward.org; 954-359-6181	FLL	DREDS Waypoint	Lauderdale Isles, Plantation	It was indicated by the FAA in the June 2020 virtual workshops that there is a reduction in heading separation from 15 degrees to 11 degrees reflected in west flow operations (DREDS waypoint). Is this waypoint a Fly-over or Fly-by? We recommend that this waypoint be established as a Fly-over waypoint to help ensure that aircraft do not make early turns over the residential communities NW of the airport.	Slides 5-12, 21-22, Attachment A
Broward County Aviation Dept. (BCAD)	Winston Cannicle, Noise Information Officer, wcannicle@broward.org; 954-359-6181	FLL	RNAV SIDS	Lauderdale Isles, Plantation; Davie	As indicated by the FAA in the June 2020 virtual workshops, please confirm that aircraft departures to the west from FLL will be south of I-595	Slides 5-22 Attachment A
Broward County Aviation Dept. (BCAD)	Winston Cannicle, Noise Information Officer, wcannicle@broward.org; 954-359-6181	FLL	Noise Modeling	Broward County	BCAD understands that the FAA believes that the changes are unlikely to result in significant noise impacts based on federal criteria. However, there is a concern that potentially reportable impacts may be understated due to the methodology used in modeling the highly concentrated corridors. Given the community concerns related to implementation of similar procedures nationally, it is critical to ensure that any reportable changes in noise exposure are accurately identified and disclosed. BCAD requests that the FAA review the noise modeling flight tracks and methodology and revise as appropriate.	
Broward County Aviation Dept. (BCAD)	Winston Cannicle, Noise Information Officer, wcannicle@broward.org; 954-359-6181	FLL	New SIDS and STARS	Broward County	Comparison of existing procedures vs proposed were not immediately clear. It is difficult for the average citizen to ascertain the existing vs proposed changes.	Slides 6, 8, 12, 14, 22, 25, 27, 30, 32, 34 Attachment A
Broward County Aviation Dept. (BCAD)	Winston Cannicle, Noise Information Officer, wcannicle@broward.org; 954-359-6181	FLL	New SIDS and STARS	Broward County	The EA Google Earth files show fairly wide flight corridors. How will the new procedures change the width of flight corridors? What width will 90 percent of the aircraft actually fall within?	Slides 5-22; 23-33 Attachment A
Broward County Aviation Dept. (BCAD)	Winston Cannicle, Noise Information Officer, wcannicle@broward.org; 954-359-6181	FLL	New SIDS and STARS	Broward County	The EA Google Earth files show a set of tracks for each procedure "with vectoring". If the purpose of these procedures is to create more precise routing of aircraft, why is vectoring being shown? This information is confusing and implies that large areas beyond the concentrated corridors will also be affected by the implementation of the new procedures. How will vectoring be included in the new procedure implementation?	Slides 6, 8, 10, 12, 14, 16, 18, 22, 25, 27, 30, 32, 34 Attachment A

FLL Comments - FAA South-Central Florida Metroplex Draft EA - July 23, 2020

Commenter	Point of Contact	Airport	Procedure	Affected neighborhood, city, or area(s)	Issue or concern	Graphic provided?
Broward County Aviation Dept. (BCAD)	Winston Cannicle, Noise Information Officer, wcannicle@broward.org; 954-359-6181	FLL	New STARS	Broward County	The Draft Metroplex EA indicates that in addition to the new SIDS and STARS there are also 4 new ILS and 5 new RNAV instrument approach procedures included in the Metroplex project. The June 1st e-mail response from the FAA to BCAD indicates that the approach procedures were modified and provided an example that the "HOLID IAF for Runway 10L was at or above 2500' and is now at or above 5000' to match the new STAR". No information related to any of the modified approach procedures is included in the Draft Metroplex EA. Please clarify	
Broward County Aviation Dept. (BCAD)	Winston Cannicle, Noise Information Officer, wcannicle@broward.org; 954-359-6181	FLL	New SIDS and STARS	Broward County	Some communities affected by other Metroplex projects have expressed significant concerns related to increased concentrations of flights over their homes. Is there potential for similar issues with these new metroplex procedures for Broward County residents?	
Broward County Aviation Dept. (BCAD)	Winston Cannicle, Noise Information Officer, wcannicle@broward.org; 954-359-6181	FLL	STARS	Broward County	During the FAA June virtual workshops comments were made indicating that OPD would not necessarily play a major part in arrivals at FLL. FAA ATC indicated that arrivals on the north runway would be cleared down to 1500' so as to allow separation with aircraft arriving on the south runway. How is that consistent with what has been discussed with the City of Weston and your commitment to keep aircraft at higher altitudes over communities west of the airport?	
Broward County Aviation Dept. (BCAD)	Winston Cannicle, Noise Information Officer, wcannicle@broward.org; 954-359-6181	FLL	CONCK SID	Dania Beach, Davie, West Plantation, Sunrise, North Tamarac, Fort Lauderdale	FLL CONCK SID appears to have been removed from the proposed Draft Metroplex EA procedures, but it is referenced multiple times through Appendix G. Please verify.	
Broward County Aviation Dept. (BCAD)	Winston Cannicle, Noise Information Officer, wcannicle@broward.org; 954-359-6181	FLL	LLBOW Waypoint	East Fort Lauderdale, Pompano Beach	It was indicated by the FAA in the June 2020 virtual workshops that a reduction in heading separation from 15 degrees to 11 degrees is also reflected in east flow operations (LLBOW waypoint). Is this waypoint a Fly-over or Fly-by? We recommend that this waypoint be established as a Fly-over waypoint to help ensure that aircraft do not make early turns over the beach communities and resorts northeast of the airport.	Slides 5, 6, 13-18, 21-22 Attachment A
Broward County Aviation Dept. (BCAD)	Winston Cannicle, Noise Information Officer, wcannicle@broward.org; 954-359-6181	FLL	RNAV STARS - CUUDA OLAHS	Plantation, Weston, Davie, Cooper City, Southwest Ranches	BCAD and communities to the west have been working with the FAA to keep aircraft higher longer while they are transitioning from the downwind to the approach. How will the FAA incorporate "visual approaches" with these procedures to keep aircraft higher over the communities west of the airport?	
Broward County Aviation Dept. (BCAD)	Winston Cannicle, Noise Information Officer, wcannicle@broward.org; 954-359-6181	FLL	BNGOS, MHITO, TWTZR, GLADZ SIDS	Plantation, Weston, Davie, Cooper City, Southwest Ranches	Clarify the headings aircraft will use when departing to the SEAZZ and TIDEZ waypoints during simultaneous operations from the both runways	Slides 13-20 Attachment A
Broward County Aviation Dept. (BCAD)	Winston Cannicle, Noise Information Officer, wcannicle@broward.org; 954-359-6181	FLL	BNGOS, MHITO, GLADZ, VACAY SIDS	Broward County	Why are these SIDS called MIA RNAV SIDS if the RNAV "off the ground" procedures occurs at FLL?	Slides 15-22 Attachment A

FLL Comments - FAA South-Central Florida Metroplex Draft EA - July 23, 2020

Commenter	Point of Contact	Airport	Procedure	Affected neighborhood, city, or area(s)	Issue or concern	Graphic provided?
Broward County Aviation Dept. (BCAD)	Winston Cannicle, Noise Information Officer, wcannicle@broward.org; 954-359-6181	FLL	RNAV SIDS	Broward County	Did the FAA consider relocating the DREDS waypoint for the REGAE, AARPS, FEELX and SNAPR RNAV SIDS to the SEAZZ waypoint to keep aircraft over compatible land use areas south of I-595 as long as possible?	Slides 5-14 Attachment A
Broward County Aviation Dept. (BCAD)	Winston Cannicle, Noise Information Officer, wcannicle@broward.org; 954-359-6181	FLL	RNAV SIDS	Broward County	It does not appear that the term "waypoint" is defined in the Draft Metroplex EA document nor are there any reference to whether the waypoints for the proposed procedures are "fly-by" or "fly-over". As a result, it is not clear how aircraft will actually fly the procedures outlined in the Draft Metroplex EA. It was indicated that aircraft would "fly to" a waypoint in the public workshop, but exactly what that means is also not clear. As a result it is impossible for members of the public to understand how they will be affected by the proposed procedures. At a minimum, a definition of fly over versus fly to should be included in the Draft Metroplex EA along with a description of how aircraft will actually fly the proposed procedures.	
Broward County Aviation Dept. (BCAD)	Winston Cannicle, Noise Information Officer, wcannicle@broward.org; 954-359-6181	FLL	All RNAV Procedures	Plantation, Weston, Davie, Cooper City, Southwest Ranches	Will these procedures inhibit or enhance the ability to conduct simultaneous arrivals or departures?	
Broward County Aviation Dept. (BCAD)	Winston Cannicle, Noise Information Officer, wcannicle@broward.org; 954-359-6181	FLL	All RNAV Procedures	Plantation, Weston, Davie, Cooper City, Southwest Ranches	How will the local FAA ATC implement the new RNAV procedures and reduced separation for simultaneous aircraft departures from FLL?	
Broward County Aviation Dept. (BCAD)	Winston Cannicle, Noise Information Officer, wcannicle@broward.org; 954-359-6181	FLL	AARPS SID	Communities east of the Everglades	The northbound leg of the west departure should be shifted to the west to route aircraft over the everglades rather than the numerous communities east of the everglades.	Slide 5 in Attachment B
Broward County Aviation Dept. (BCAD)	Winston Cannicle, Noise Information Officer, wcannicle@broward.org; 954-359-6181	FLL	AARPS SID	Pembroke Pines, West Hollywood, Davie, Plantation, Sunrise, Tamarac, Weston	This procedure has the potential to create community concerns where concentrated tracks cross back over the coast in Pompano Beach. Additionally, this procedure will concentrate overflights especially in areas to west between DREDS, SHELZ and AGERS.	Slides 5-6 Attachment A
Broward County Aviation Dept. (BCAD)	Winston Cannicle, Noise Information Officer, wcannicle@broward.org; 954-359-6181	FLL	BAHIA STAR	West Plantation, Weston, West & East Fort Lauderdale, Oakland Park, Wilton Manors	It appears that the BAHIA STAR is generally consistent with the existing CORSO STAR, but will generally concentrate tracks north of the City of Fort Lauderdale during west flow. This could result in community concerns.	Slides 24-25 Attachment A
Broward County Aviation Dept. (BCAD)	Winston Cannicle, Noise Information Officer, wcannicle@broward.org; 954-359-6181	FLL	CUUDA STAR	East Fort Lauderdale, Oakland Park, Wilton Manors, Las Olas; Plantation, Sunrise	It appears that the CUUDA STAR generally replicates the existing FISEL STAR with some increased dispersion as aircraft cross the coast north of the airport. Any changes in frequency of use could result in community concerns.	Slides 26-27 Attachment A
Broward County Aviation Dept. (BCAD)	Winston Cannicle, Noise Information Officer, wcannicle@broward.org; 954-359-6181	FLL	OLAAS STAR	Riviera Isles, , Las Olas Isles, East Fort Lauderdale, Victoria Park, South Middle River	Arrivals on the north downwind will be shifted farther to the north and further concentrated as they cross the coast to use the BEPAC waypoint resulting in increased overflights between KEVEY and BEPAC over areas northeast of the airport. This could result in community concerns.	Slides 29-30 Attachment A

FLL Comments - FAA South-Central Florida Metroplex Draft EA - July 23, 2020

Commenter	Point of Contact	Airport	Procedure	Affected neighborhood, city, or area(s)	Issue or concern	Graphic provided?
Broward County Aviation Dept. (BCAD)	Winston Cannicle, Noise Information Officer, wcannicle@broward.org; 954-359-6181	FLL	TEEKY STAR	Weston and West Plantation	The TEEKY STAR largely replicates the JINGL STAR and vectoring may result in more overflights of Weston and West Plantation during west flow. This could result in community concerns.	Slides 31-32 Attachment A
Broward County Aviation Dept. (BCAD)	Winston Cannicle, Noise Information Officer, wcannicle@broward.org; 954-359-6181	FLL	FEELX, REGAE and SNAPR SIDs	Dania Beach, Davie, West Plantation, Sunrise, North Tamarac, Fort Lauderdale	These procedures will concentrate departing flight paths west/northwest over different paths than PREDA4 . This may result in community concerns during west flow, especially in areas at SHELZ and JMACA and BEEDZ and may concentrate flights transitioning over coast near Pompano Beach.	Slides 7-12 Attachment A
Broward County Aviation Dept. (BCAD)	Winston Cannicle, Noise Information Officer, wcannicle@broward.org; 954-359-6181	FLL	TWTZTR SID	Pompano Beach, Dania Beach, Davie, Weston	This procedure has the potential to create community concerns where concentrated tracks cross back over the coast in Pompano Beach. Straight-out paths to west are more consistent with existing THNDR SID but concentrate departing aircraft over areas that are currently receiving limited departure overflights	Slides 13-14 Attachment A
Broward County Aviation Dept. (BCAD)	Winston Cannicle, Noise Information Officer, wcannicle@broward.org; 954-359-6181	FLL	VACAY SID	Pompano Beach, Coral Springs, Margate, Coconut Creek, Dania Beach, Davie, Weston	This procedure has the potential to create community concerns due to the concentration of aircraft overflights in areas such as Pompano Beach, Margate, Coconut Creek and Coral Springs. This procedure may also result in the concentrate of aircraft overflights in areas to the west between DREDS and SHELZ waypoints.	Slides 21-22 Attachment A
Broward County Aviation Dept. (BCAD)	Winston Cannicle, Noise Information Officer, wcannicle@broward.org; 954-359-6181	MIA	BNGOS SID	Southwest Broward	This procedure has the potential to concentrate east departing flight paths from MIA over locations in south Broward and west departures may concentrate flights paths over locations in southwest Broward. While it appears that FLL departures are vectored to MRENO - as an open SID, this procedure has the potential to create community concerns where concentrated tracks cross back over the coast in Pompano Beach.	Slides 15-16 Attachment A
Broward County Aviation Dept. (BCAD)	Winston Cannicle, Noise Information Officer, wcannicle@broward.org; 954-359-6181	MIA	GLADZ SID	West Broward	This procedure may concentrate east departing flight paths from MIA over locations in south/central Broward and FLL west departures will concentrate flights paths over locations in west Broward. FLL east flow departures will concentrate flights over Pompano Beach and areas in northern Broward County. This could result in community concerns.	Slides 17-18 Attachment A
Broward County Aviation Dept. (BCAD)	Winston Cannicle, Noise Information Officer, wcannicle@broward.org; 954-359-6181	FLL	AARPS and TWTZR SIDS	Pompano Beach	The YOLLO waypoint potentially concentrates aircraft transitioning back over land over communities to the north of the airport. This could result in community concerns.	Slides 7, 8, 13, 14 Attachment A
Broward County Aviation Dept. (BCAD)	Winston Cannicle, Noise Information Officer, wcannicle@broward.org; 954-359-6181	FLL	All procedures	Various Communities	All comments submitted by BCAD in May 2017 and March 2019 are hereby incorporated by reference to the extent that they have not been directly addressed previously.	See Attachment B

General Notes:

- SID - Standard Instrument Departure Procedure
- STAR - Standard Instrument Arrival Procedure
- ELSO - Equivalent Lateral Spacing Operations



AVIATION DEPARTMENT - Fort Lauderdale-Hollywood International Airport
 2200 SW 45th Street, Suite 101 • Dania Beach, Florida 33312 • 954-359-6100

April 30, 2020

Michael C. O'Harra
 Regional Administrator
 Federal Aviation Administration (FAA) Southern Region
 1701 Columbia Avenue
 College Park, GA 30337

RE: FAA's South-Central Florida Metroplex (FL Metroplex) Revised Public Outreach Efforts

Dear Mr. O'Harra: *Michael*

I hope this letter finds you and your family safe and well. These are very concerning times we find ourselves in these days.

This letter is written to provide comments regarding the FAA's South-Central Florida Metroplex (Metroplex) revised outreach efforts presented to the airports on April 17, 2020. During the presentation, the FAA indicated that Draft Environmental Assessment (EA) for the Metroplex will be made public on May 11, 2020. Also, due to the current COVID-19 pandemic, the FAA outlined a revised outreach plan to allow the public to participate in "virtual public workshops" for this project.

The Broward County Aviation Department (BCAD) has some concerns regarding the FAA's concept for hosting virtual public workshops for the greater Fort Lauderdale area. We understand the FAA's desire and the need to complete the Metroplex process. However, we believe that conducting virtual workshops in June of 2020 may not be the most opportune time. We are particularly concerned that both elected officials and the community at large are focused on dealing with the ongoing impacts from this pandemic.

As you know, BCAD remains concerned about the potential concentration of aircraft overflights within Broward County that might be associated with new Metroplex procedures. During the FAA's first round of public engagement in the Fort Lauderdale area, it was evident that the community was very concerned over any potential changes to flight patterns in Broward County. Some were concerned with the presence and volume of existing overflights, and some concerned with potentially "new" overflight activity. With the current reduction of aircraft operations at FLL due to the pandemic, we anticipate community participation would be low. This is particularly concerning since the current operations are not representative of the "normal" operational capacity to be addressed in the FL Metroplex process. Additionally, a virtual public workshop, albeit unintentional, may further exclude members of our communities

Broward County Board of County Commissioners
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Michael C. O'Harra
FAA's South-Central Florida Metroplex
April 30, 2020
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who may either have difficulty navigating the digital platform or not have access to mobile devices and/or internet service.

BCAD remains committed to working with the FAA, where possible, on efficient and effective procedures which avoid added noise impacts to our Broward County communities, and also on procedures that may bring relief to some communities already experiencing noise issues with overflight activity.

Finally, BCAD encourages the FAA to further consider the timing of having virtual public workshops during this time of crisis related to COVID-19 pandemic.

Please stay safe, and I look forward to hearing back from you.

Sincerely,



Mark E. Gale, A.A.E.
CEO/Director of Aviation

MEG/ml

- C: Jose Colon, FAA Southern Region
- Kishawn Griffin, FAA Southern Region
- Perlis Johnson, FAA Southern Region
- Bart Vernace, FAA Orlando ADO
- Laura Zabriske, FAA Mission Support Services
- Marc Gambrell, Aviation Chief Development Officer
- Mike Pacitto, Director of Planning, Aviation
- Winston Cannicle, Environmental Program Manager, Aviation

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South-Central Florida Metroplex

REVIEW OF FAA SOUTH-CENTRAL FLORIDA METROPLEX DRAFT EA

ATTACHMENT A Supporting Graphics for FLL and MIA RNAV Procedures

July 23, 2020

This presentation contains the following information:

- Graphics for 9 proposed RNAV SIDS and 6 proposed RNAV STARS
 - Proposed procedure design from Appendix G of the Draft EA
 - Google Earth graphics for proposed procedure and primary tracks
 - Google Earth graphics for proposed procedure and primary tracks plus vectoring tracks
 - Google Earth graphics for existing procedure and track graphics plus proposed procedure layout
 - All percentage use information is based on current usage information for the procedure being replaced as provided by the FAA in Appendix G (if available)

NEW RNAV PROCEDURES SERVING FLL

New FLL Related RNAV Procedures	MIA	FLL	07FA	KFXE	KHST	KHWO	KOPF	KPMP	KTMB	X51
<u>New RNAV SIDS</u>										
FLL AARPS RNAV SID	X	X	X		X	X	X		X	X
FLL FEELX RNAV SID		X				X	X			
FLL REGAE RNAV SID		X								
FLL SNAPR RNAV SID		X								
FLL TWZTR RNAV SID	X	X	X	X	X	X	X	X	X	X
MIA BNGOS RNAV SID*	X	X	X	X	X	X	X	X	X	X
MIA GLADZ RNAV SID*	X	X					X			
MIA MHITO RNAV SID*	X	X	X	X	X	X	X	X	X	X
MIA VACAY RNAV SID*	X	X	X	X	X	X	X	X	X	X
<u>New RNAV STARS</u>										
FLL BAHIA RNAV STAR		X		X		X	X	X		
FLL CUUDA RNAV STAR		X				X	X			
FLL KYAKS RNAV STAR		X		X		X	X	X		
FLL OLAHS RNAV STAR		X		X		X	X	X		
FLL TEEKY RNAV STAR		X		X				X		
MIA TARPEN RNAV STAR*	X	X	X		X	X	X		X	X

*This MIA procedure would also serve FLL



FAA PROPOSED RNAV STANDARD INSTRUMENT DEPARTURES (SIDS)

FLL AARPS RNAV SID – Departure percent not defined

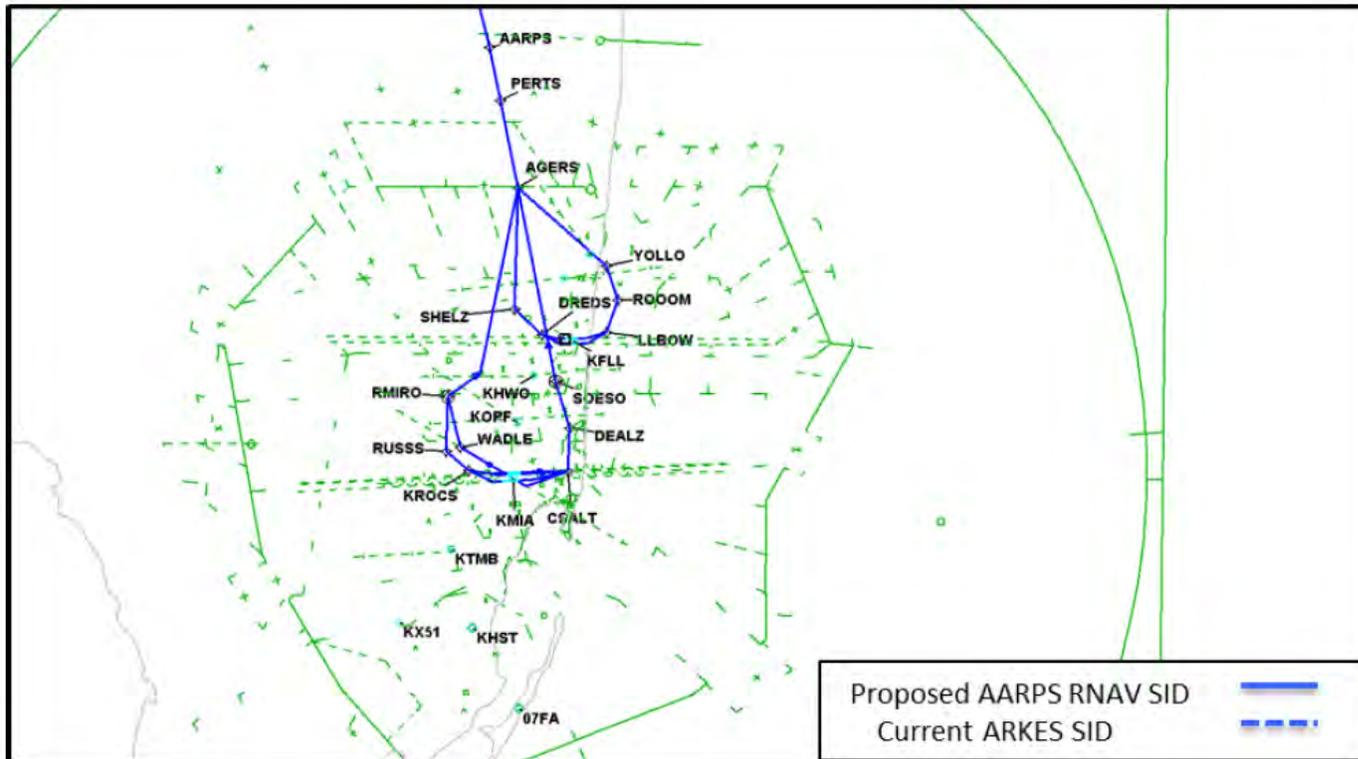
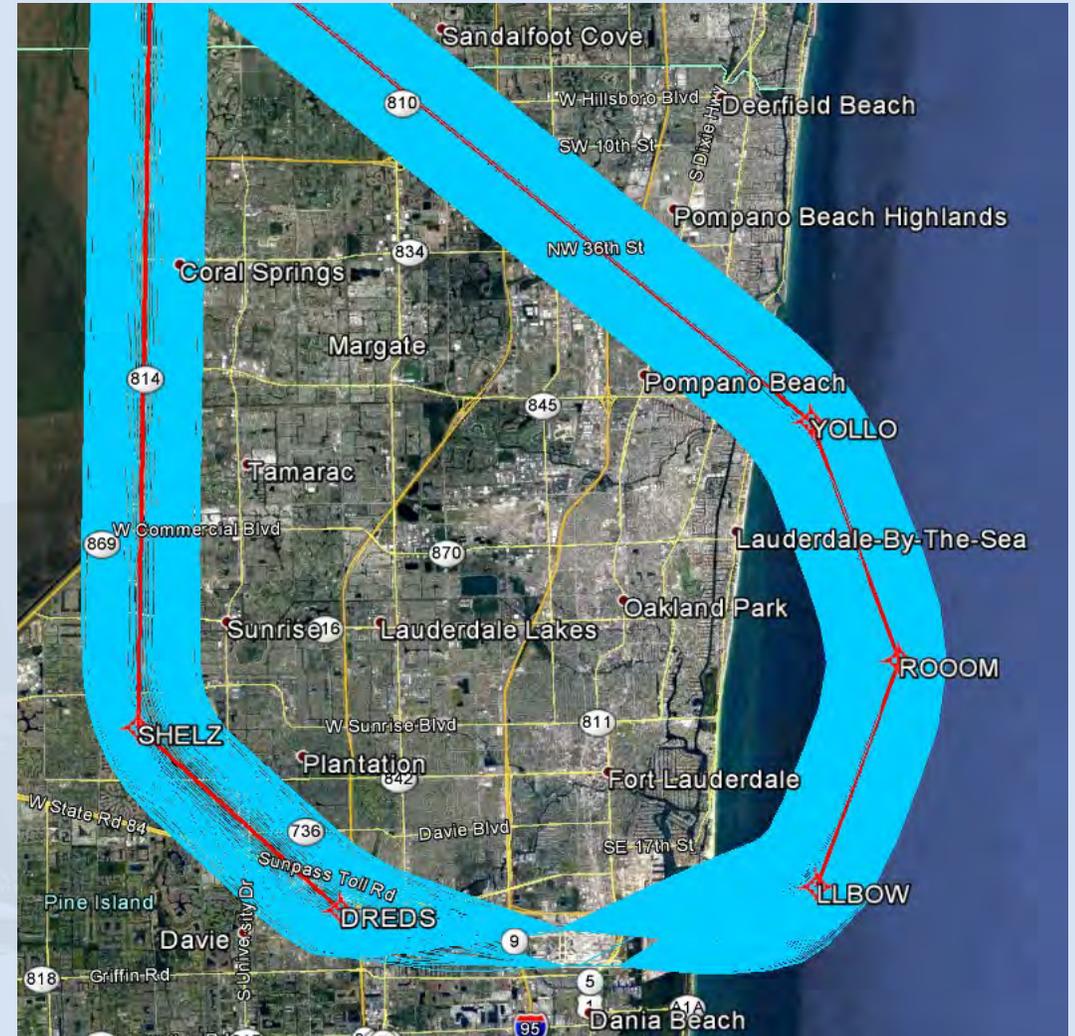
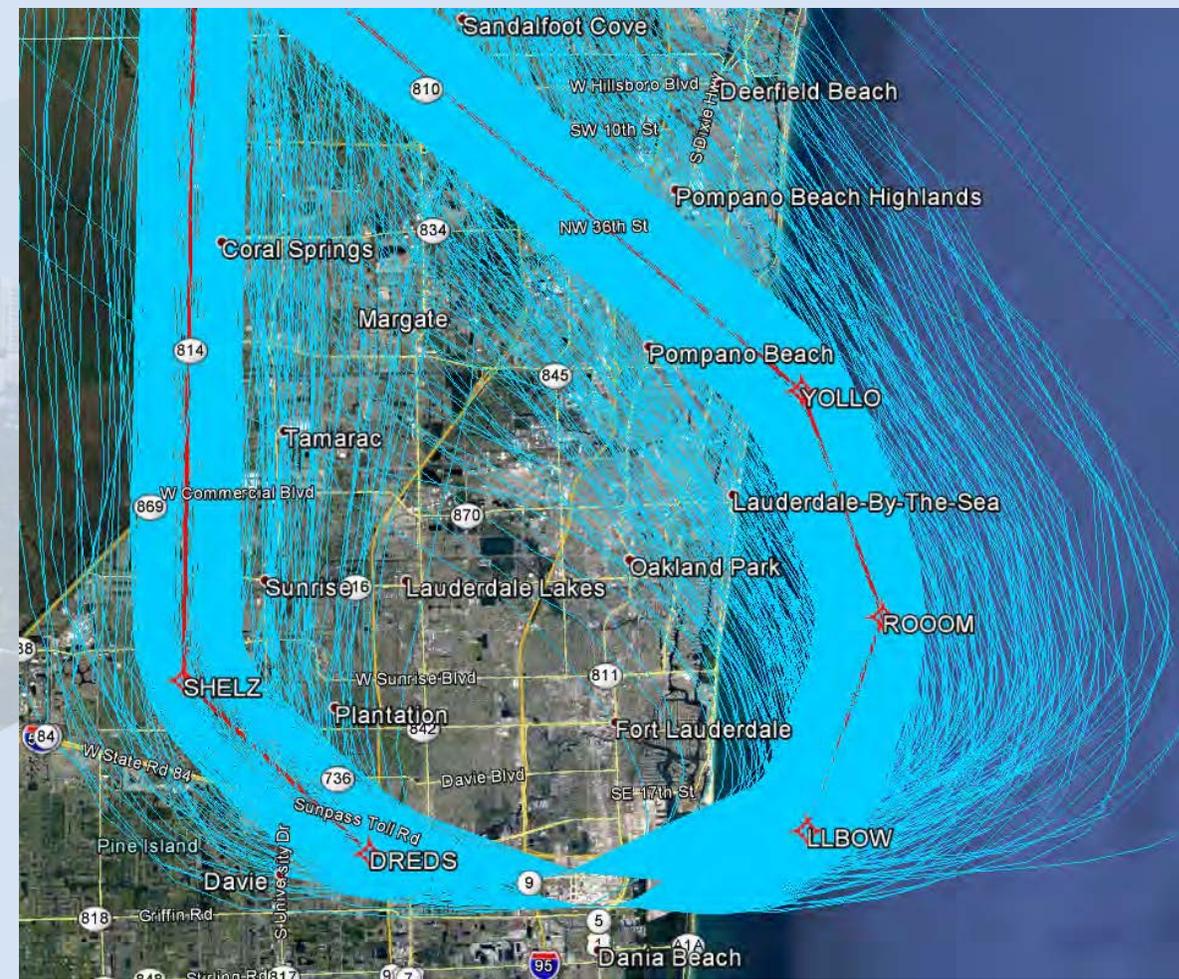


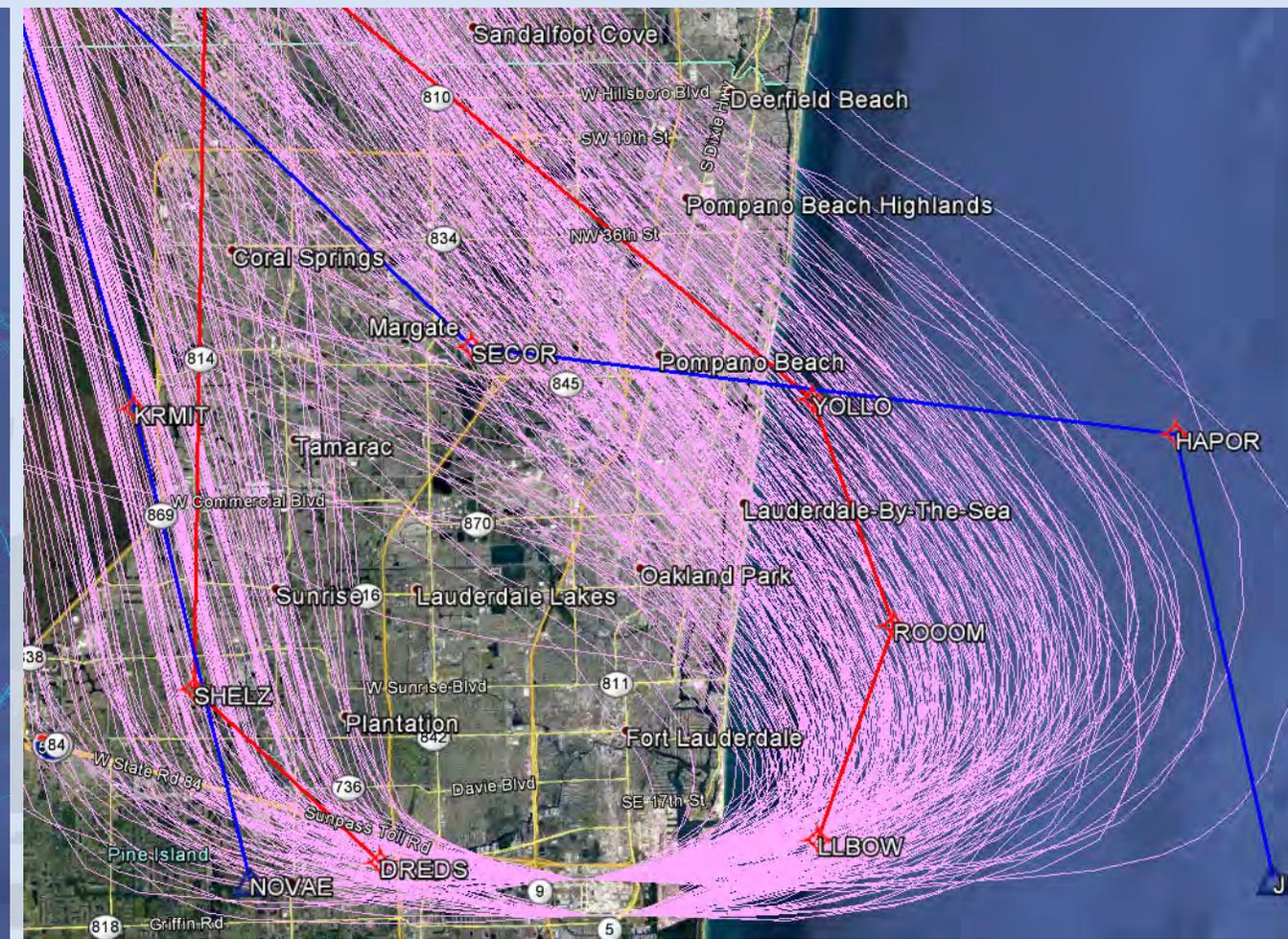
Figure 6. FLL AARPS RNAV SID and Current ARKES SID (Terminal)



FLL AARPS RNAV SID – Departure percent not defined



New AARPS RNAV SID with Vectoring



Existing ARKES SID with No Action
Flight Tracks and Proposed AARPS SID

FLL FEELX RNAV SID – 23% of Jet Departures

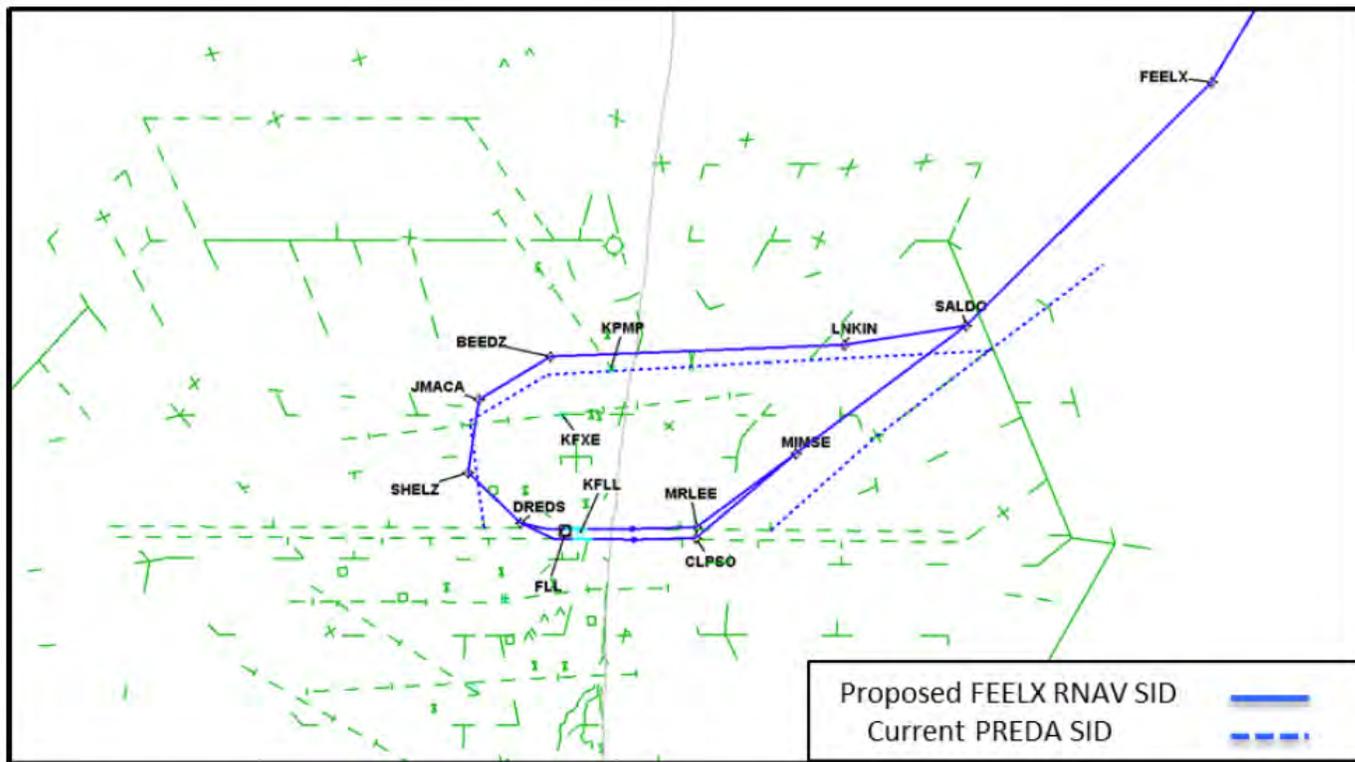
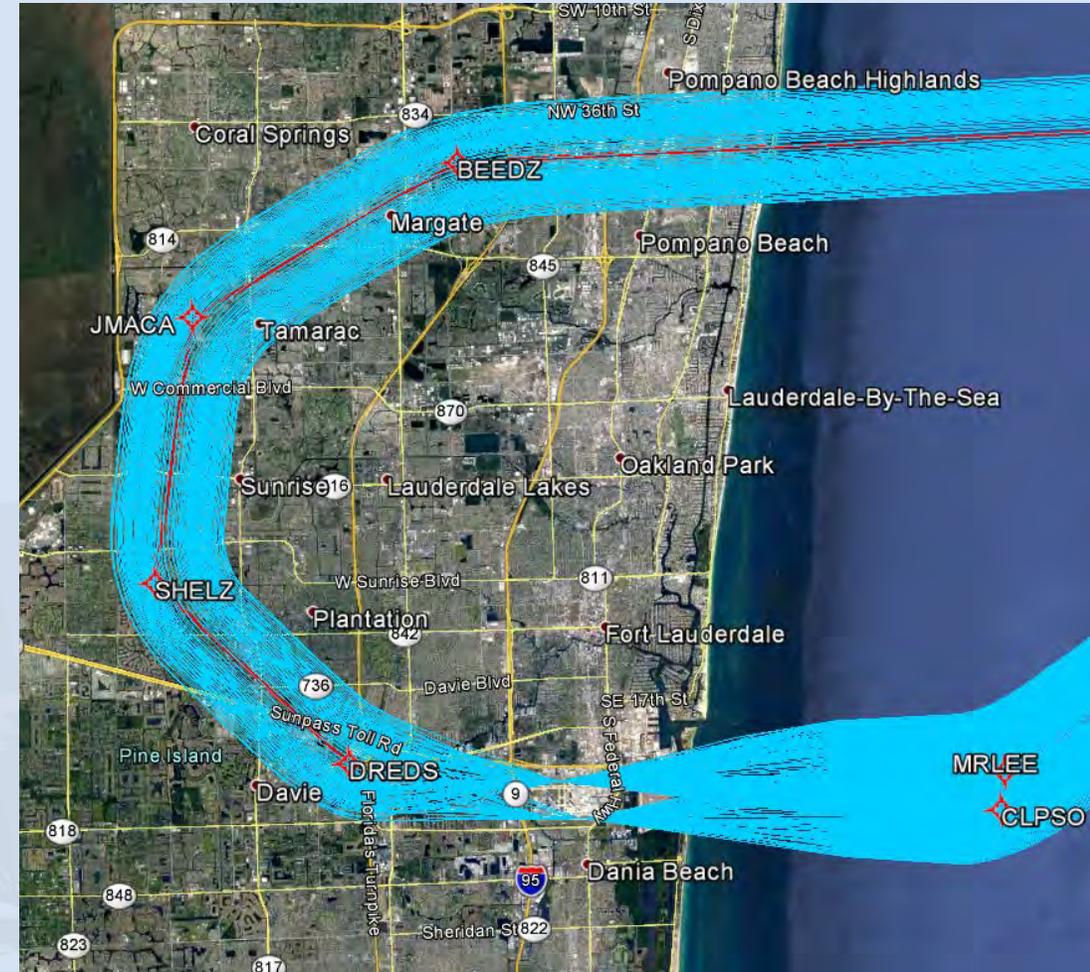
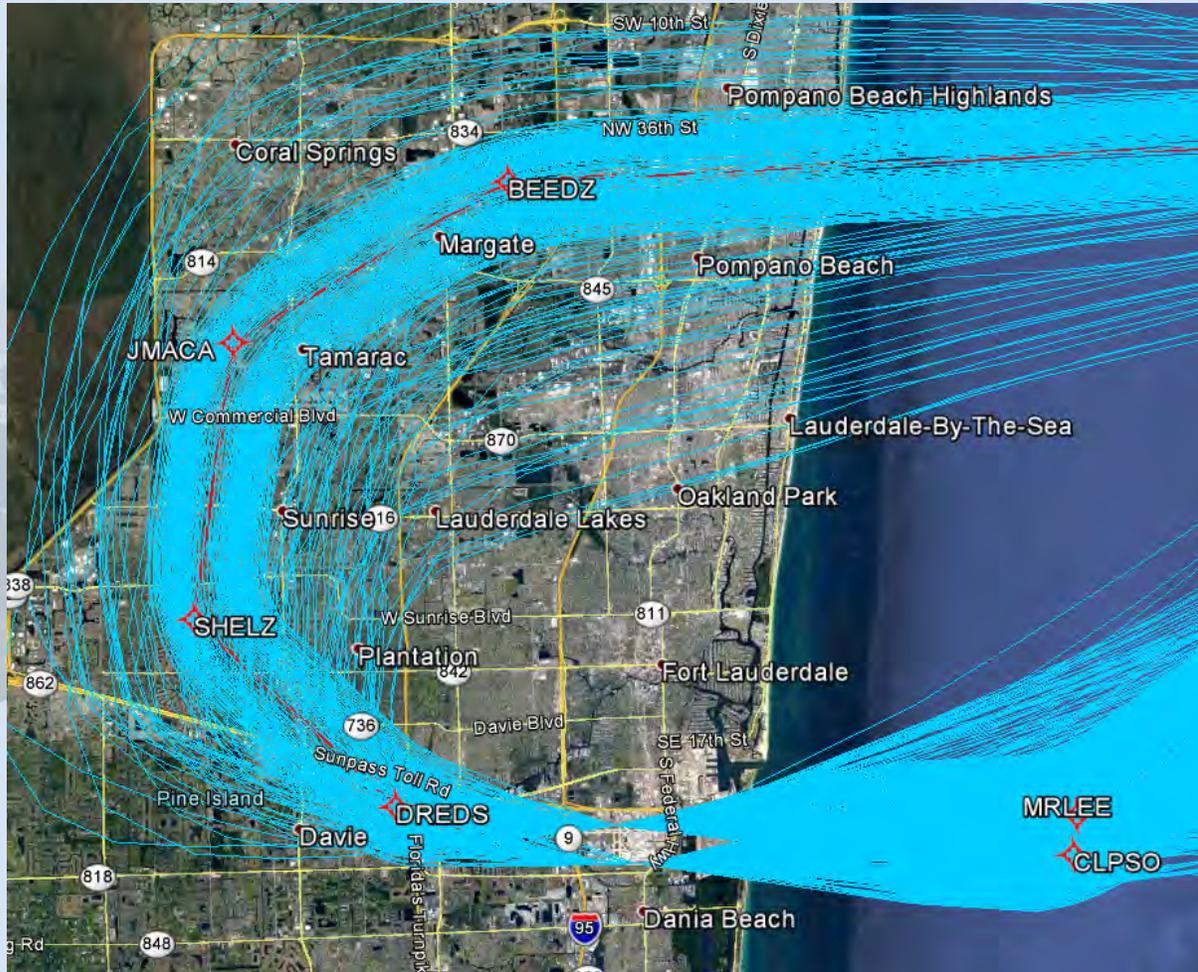


Figure 3. FLL FEELX RNAV SID and Current PREDA SID (Terminal)

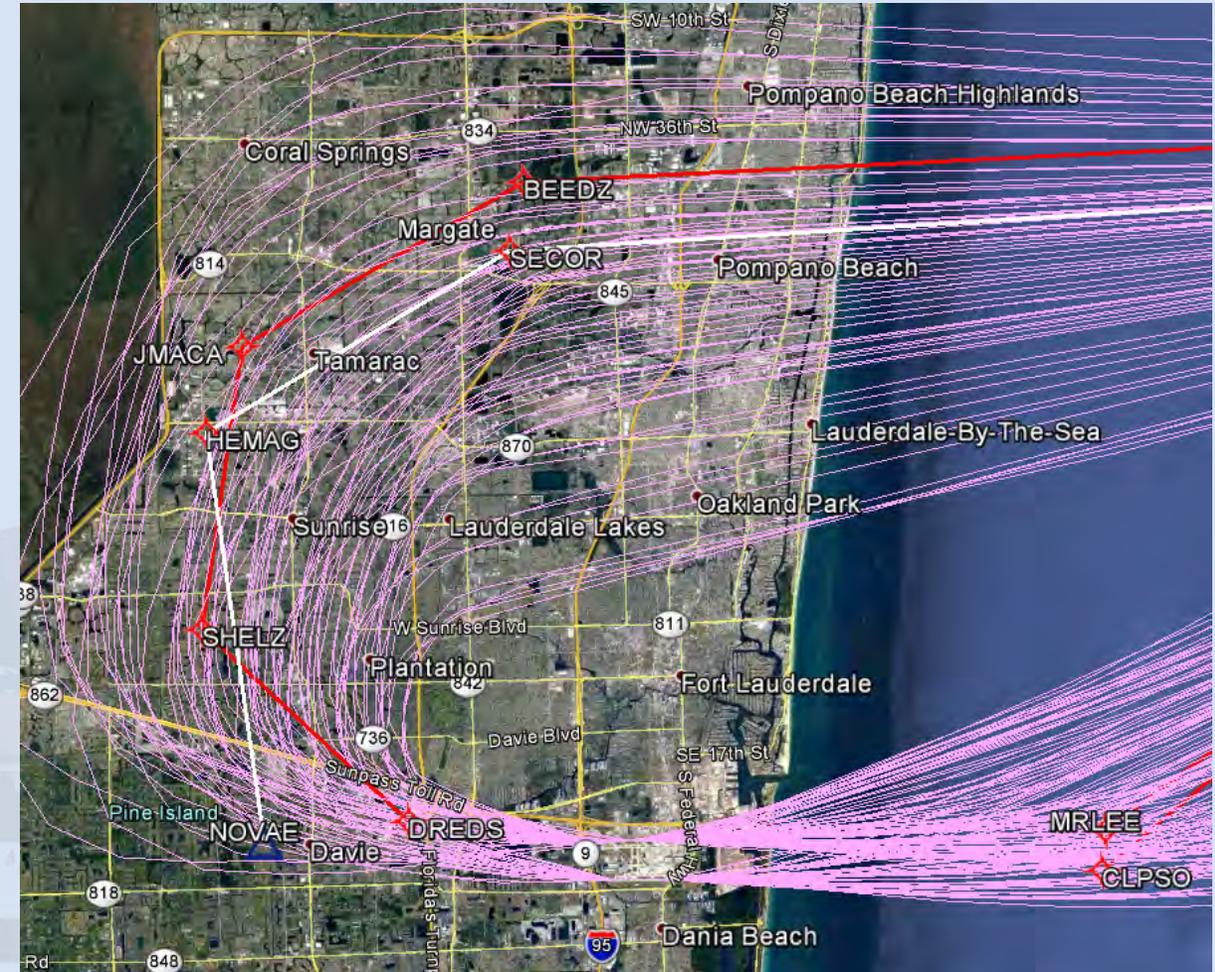


Proposed FEELX RNAV SID

FLL FEELX RNAV SID – 23% of Jet Departures



New FEELX RNAV SID with Vectoring



Existing PREDA SID with No Action Flight Tracks and Proposed FEELX SID

FLL REGAE RNAV SID – 3% of Jet Departures

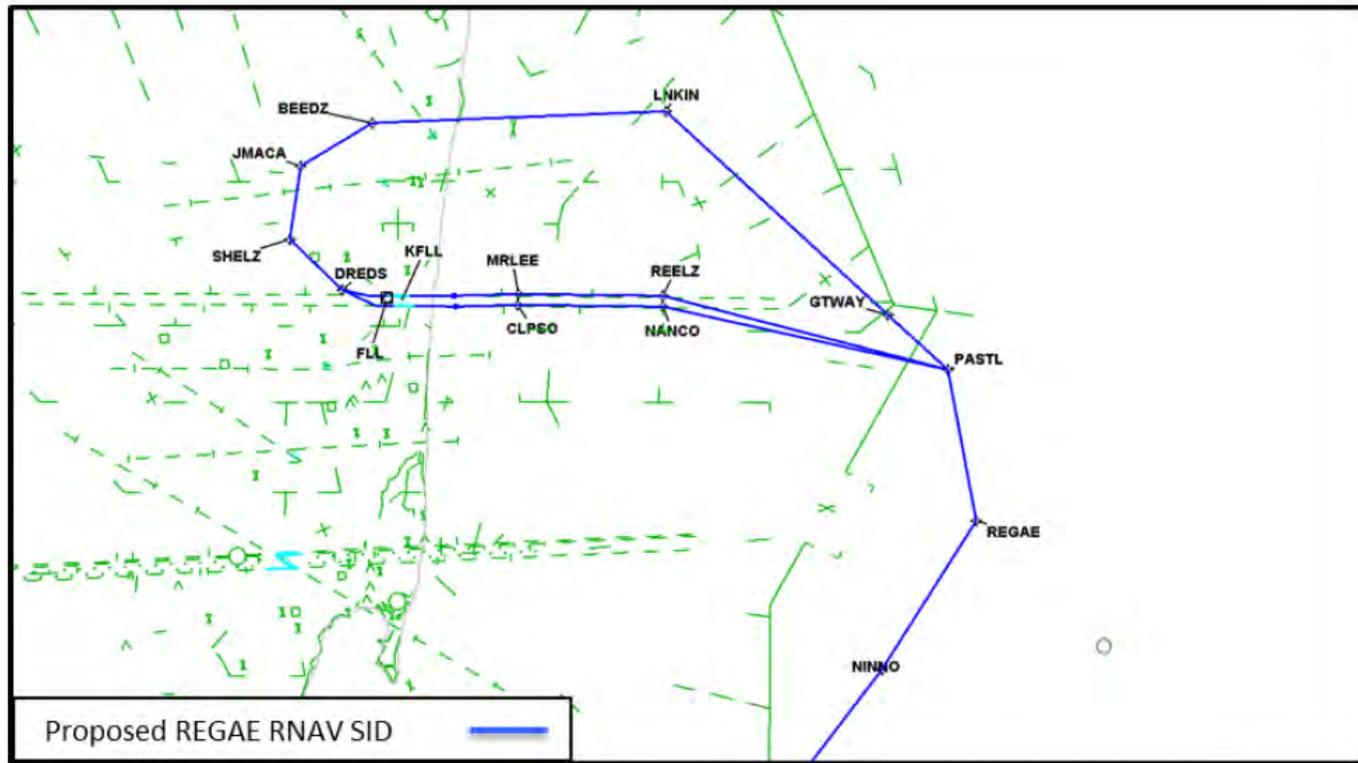
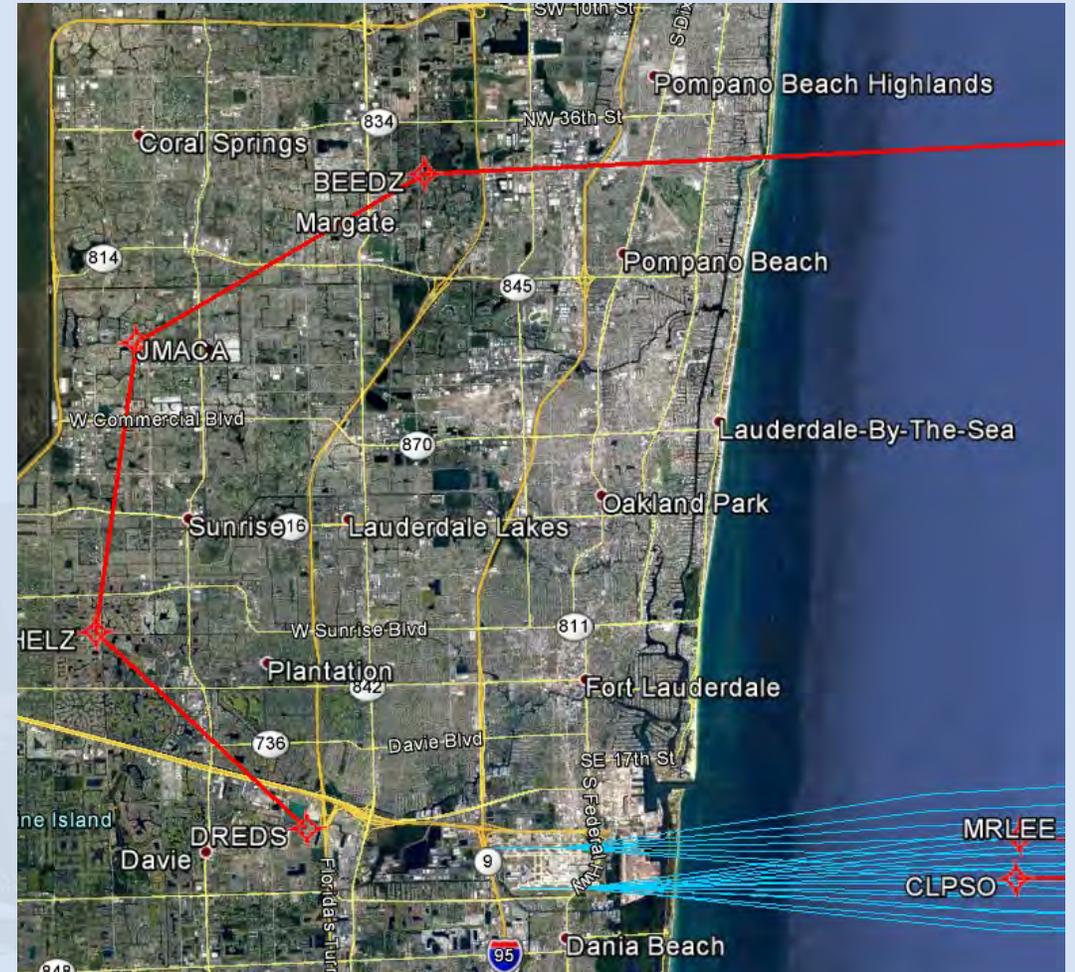
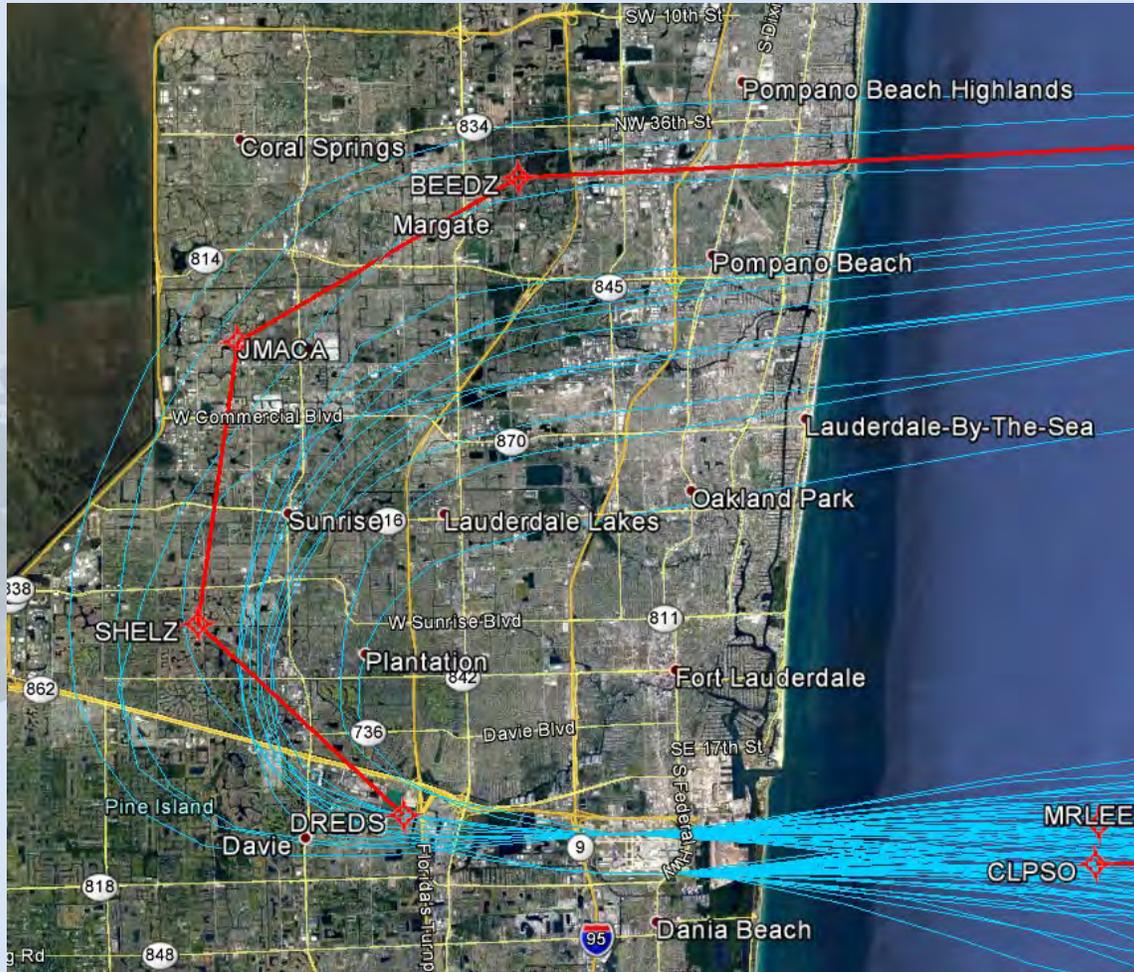


Figure 3. FLL REGAE RNAV SID and Current EONNS SID (Terminal)



Proposed REGAE RNAV SID

FLL REGAE RNAV SID – 3% of Jet Departures



New REGAE RNAV SID with Vectoring

There is no comparison to the existing EONNS SID for FLL. It is understood that the EONSS SID is an existing MIA SID that is not currently used by FLL.

FLL SNAPR RNAV SID – 11% of Jet Departures

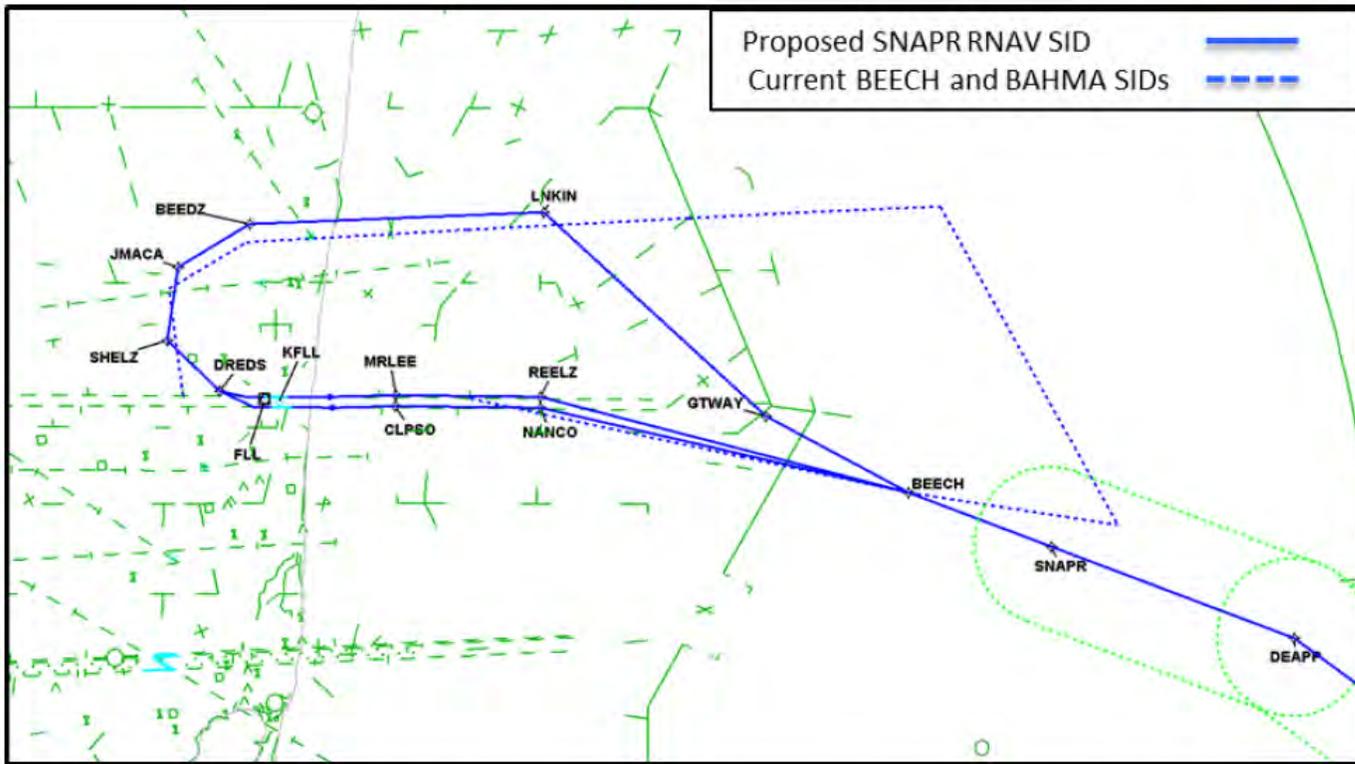
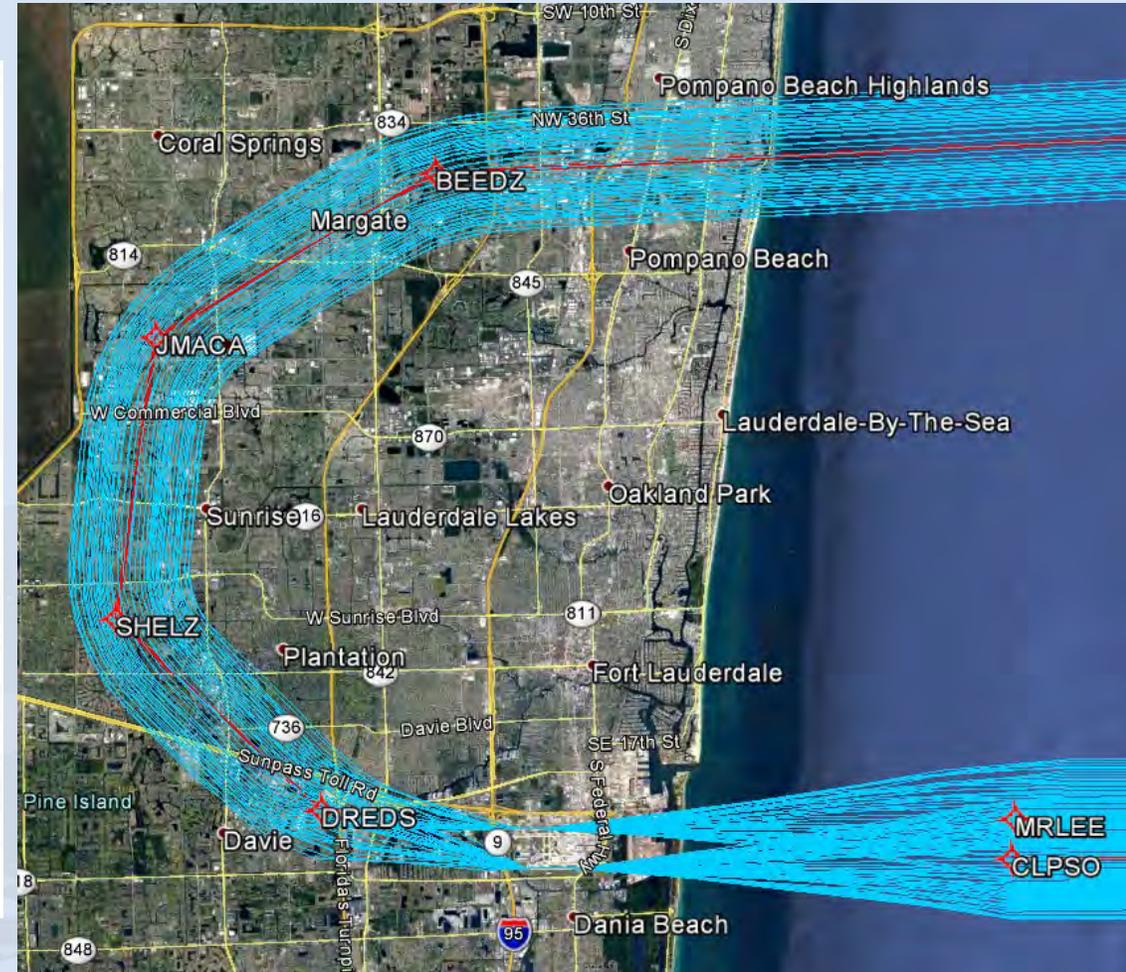
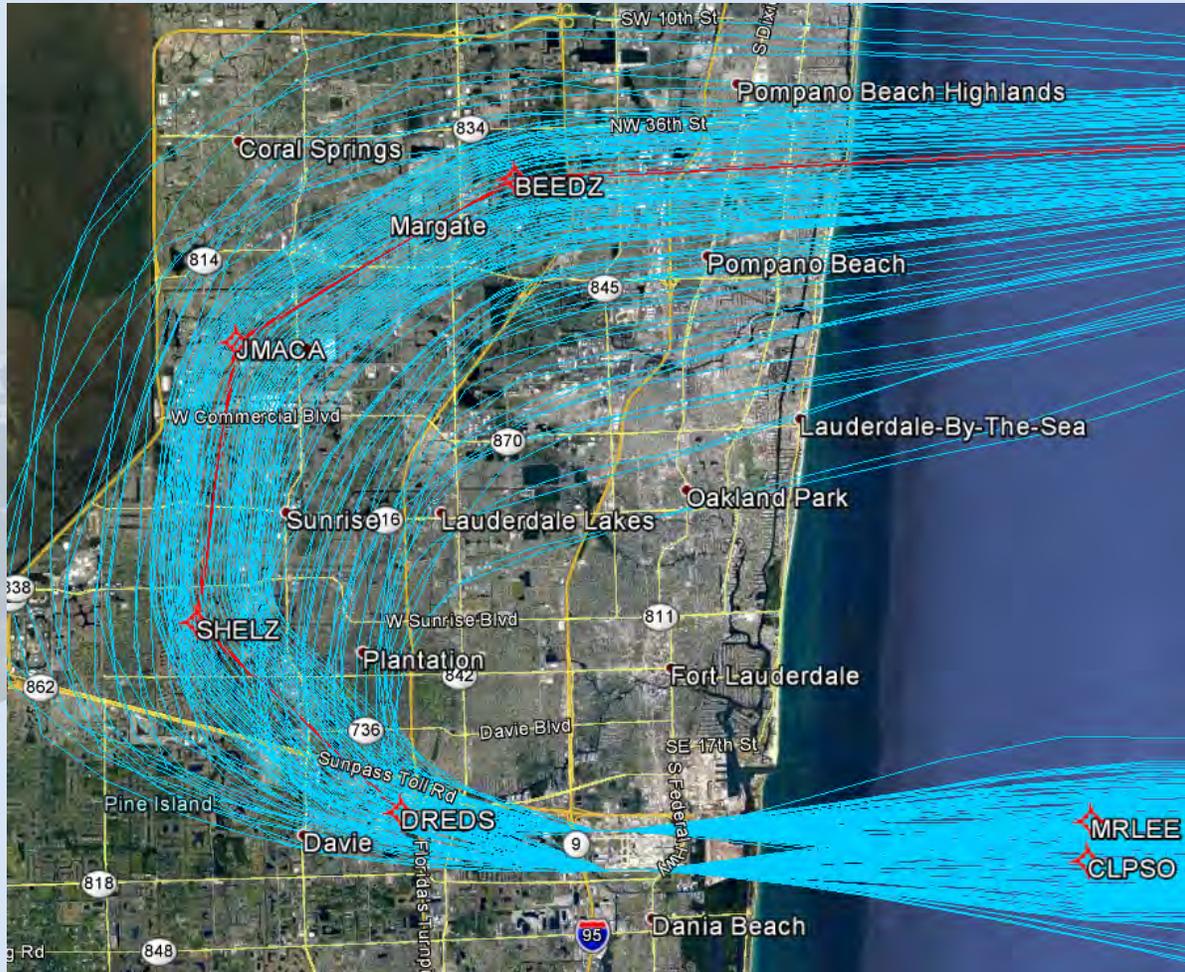


Figure 3. FLL SNAPR RNAV SID and Current BEECH and BAHMA SIDs (Terminal)

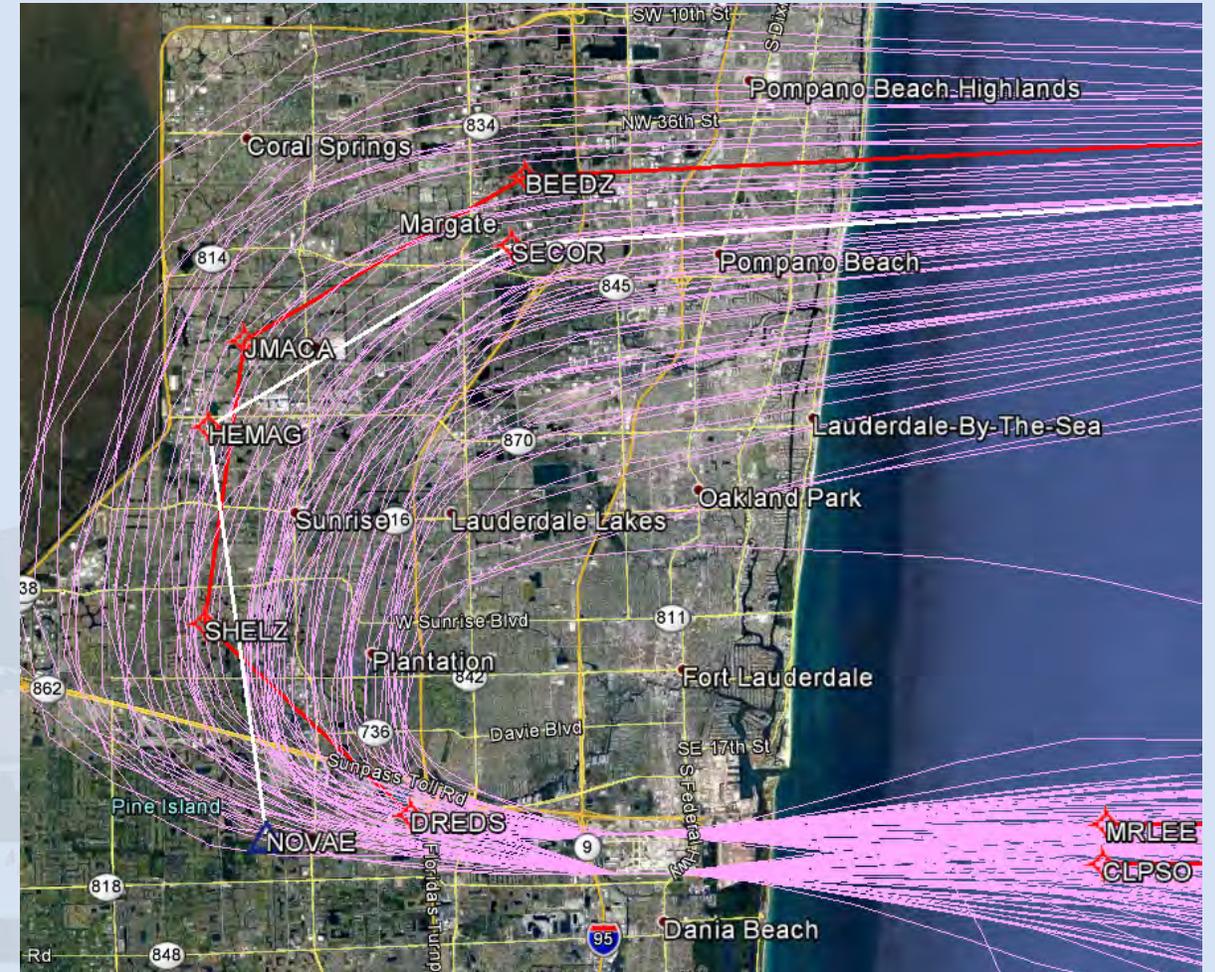


Proposed SNAPR RNAV SID

FLL SNAPR RNAV SID – 11% of Jet Departures



New SNAPR RNAV SID with Vectoring



Existing BEECH and BAHMA SIDs with No Action Flight Tracks and Proposed SNAPR SID

FLL TWTZR RNAV SID – Departure percent not defined

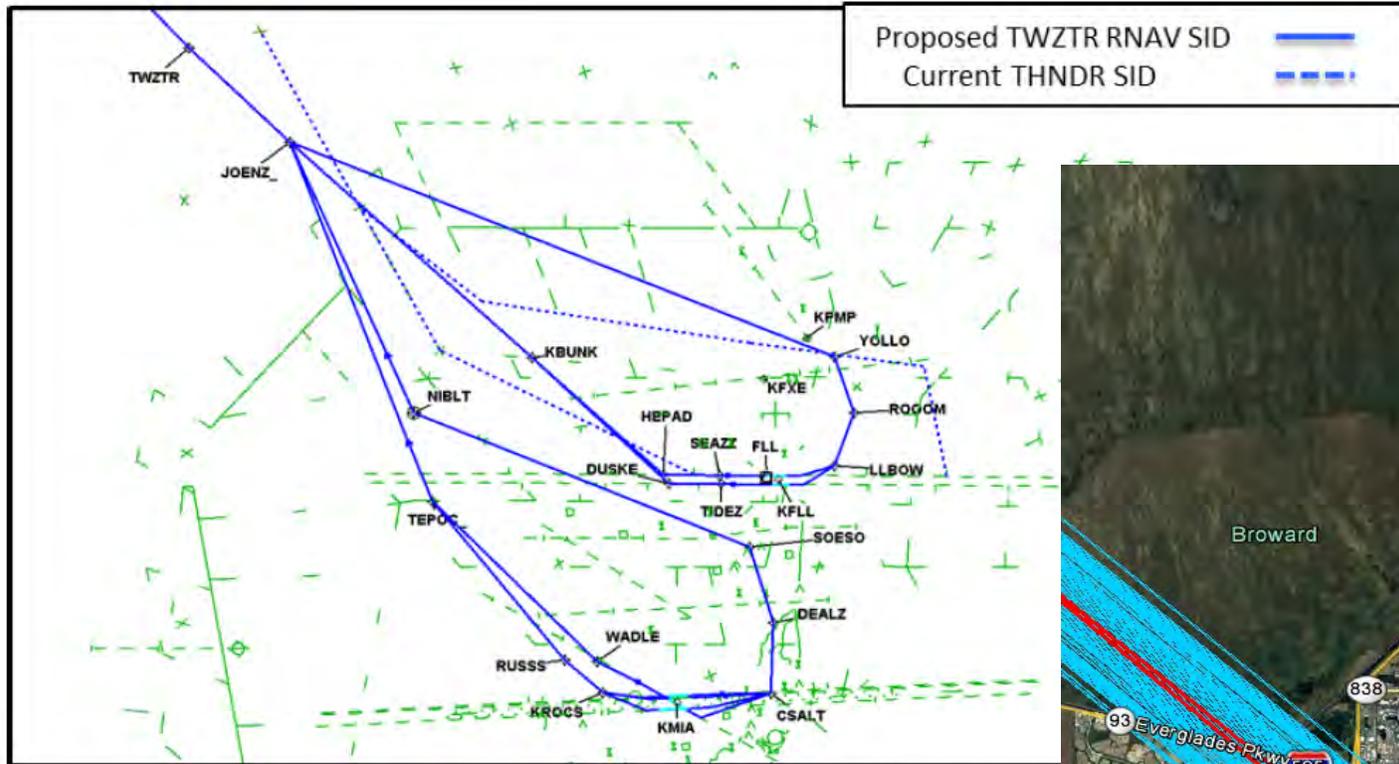
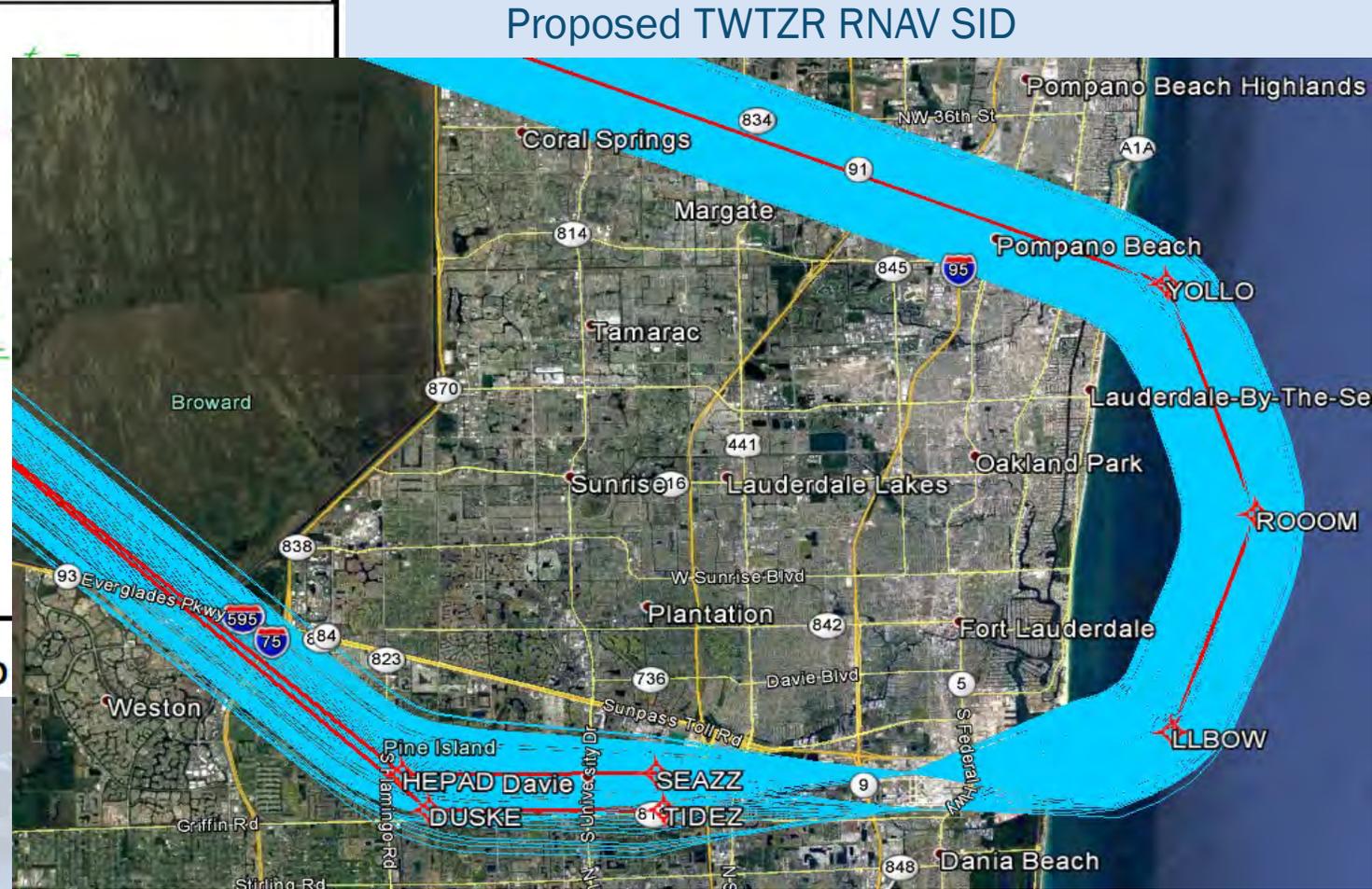
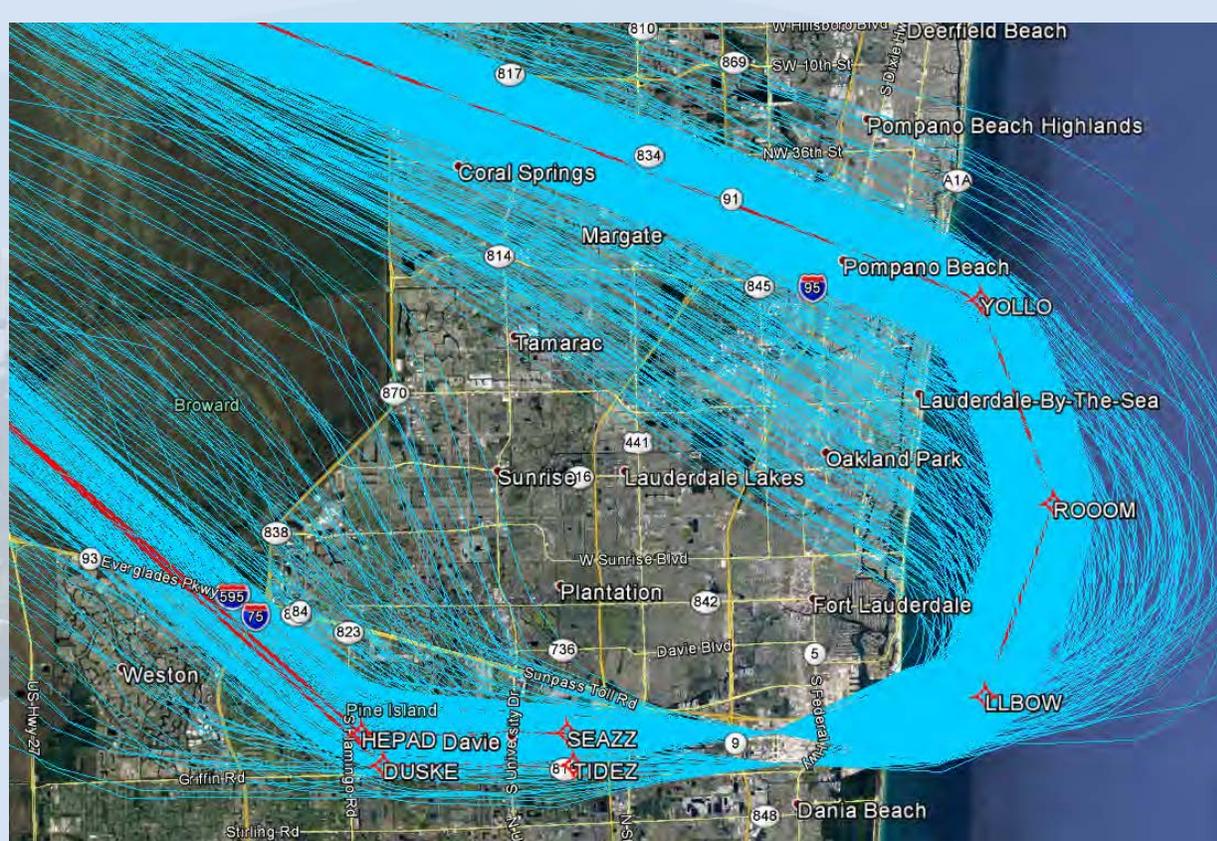


Figure 6. FLL TWTZR RNAV SID and Current THNDR SID

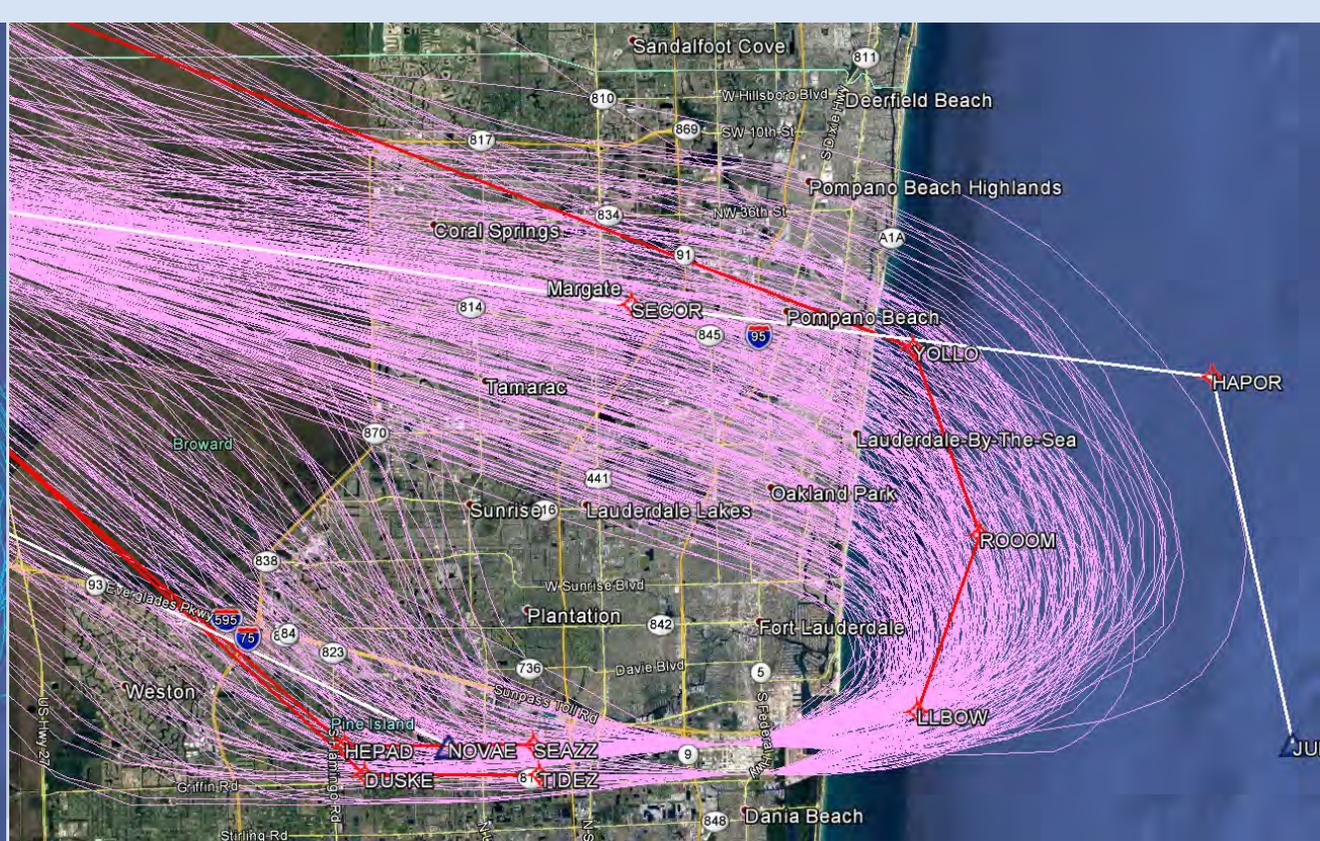


Proposed TWTZR RNAV SID

FLL TWTZR RNAV SID – Departure percent not defined



New TWTZR RNAV SID with Vectoring



Existing THNDR SID with No Action Flight Tracks and Proposed TWTZR SID

MIA BNGOS RNAV SID – Departure percent not defined

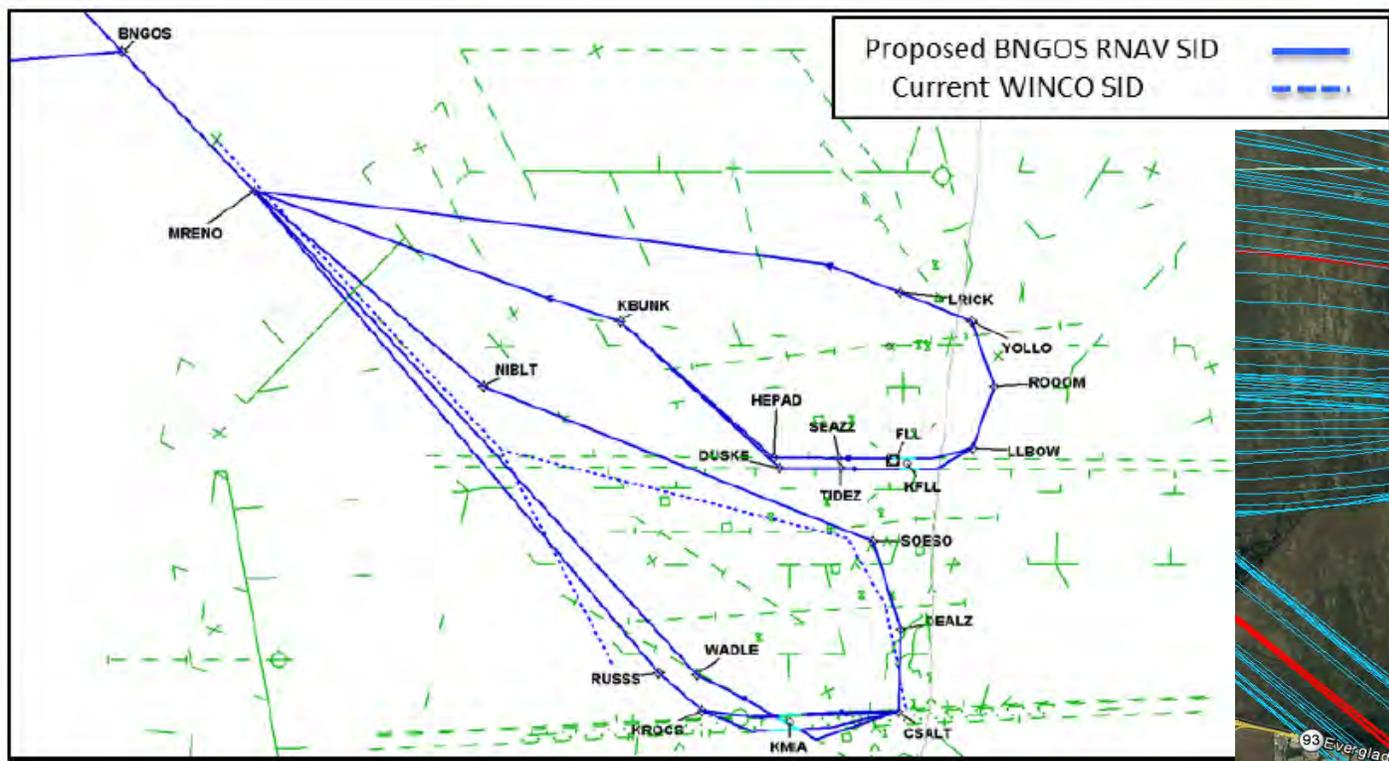
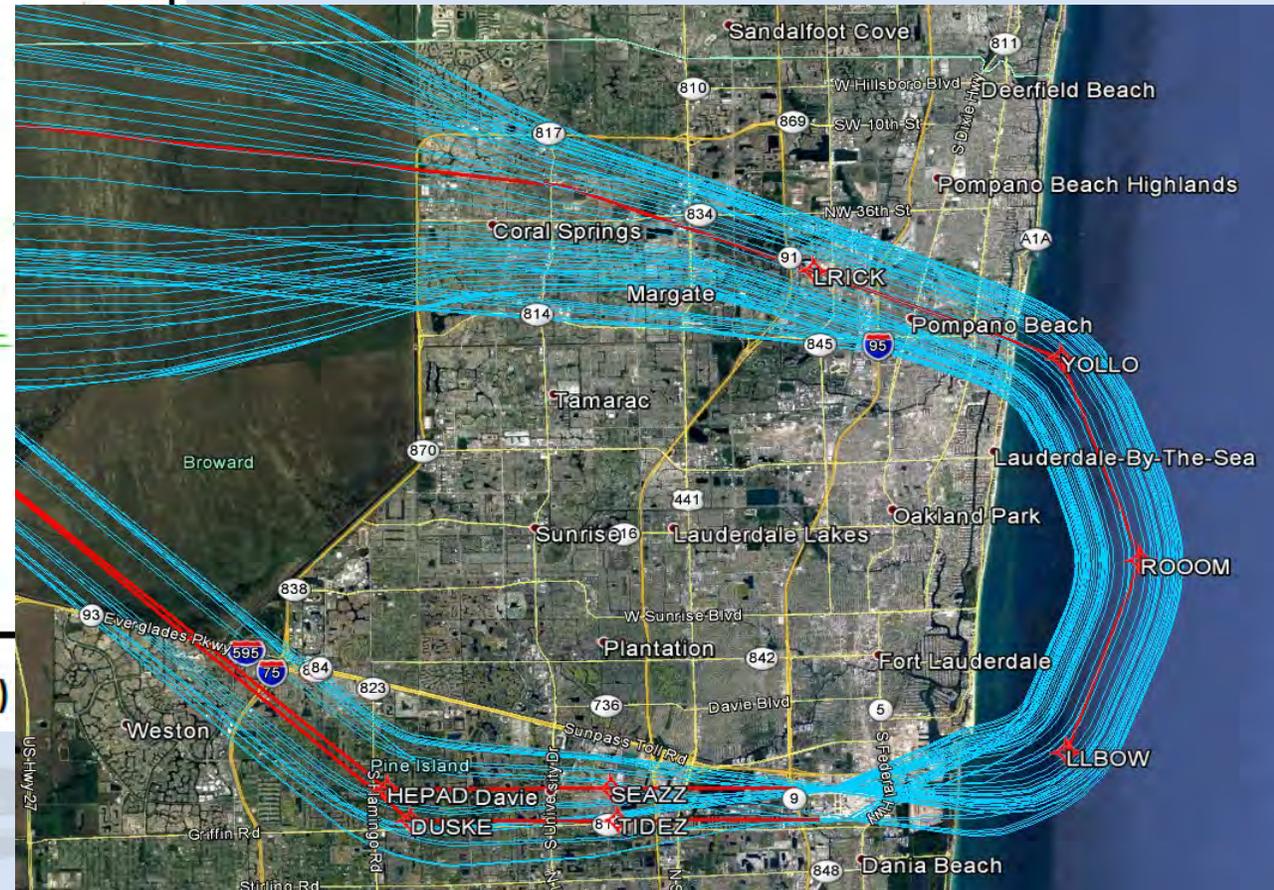


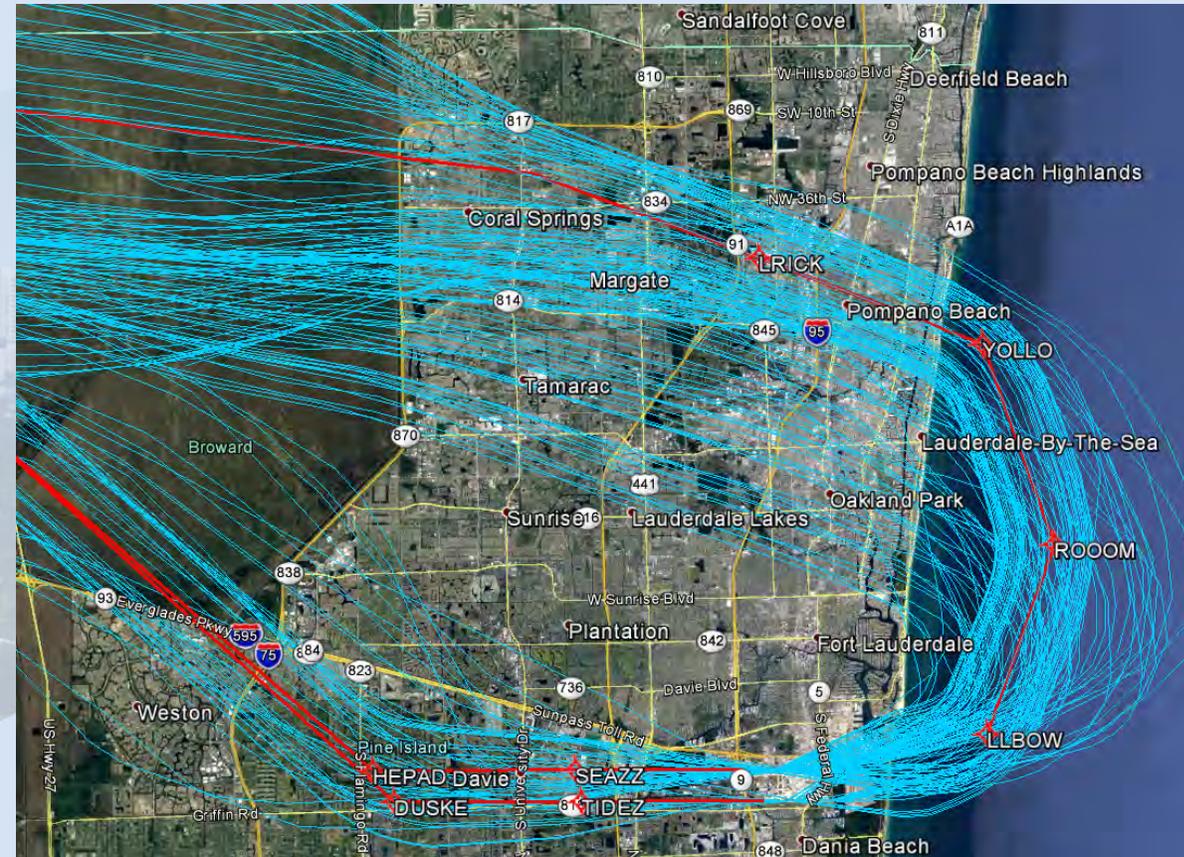
Figure 3. MIA BNGOS RNAV SID and Current WINCO SID (Terminal)

Note: This MIA procedure would also serve FLL

Proposed BNGOS RNAV SID



MIA BNGOS RNAV SID – Departure percent not defined



There is no comparison to the existing WINCO SID for FLL. It is understood that the WINCO SID is an existing MIA SID that is not currently used by FLL.

New BNGOS RNAV SID with Vectoring

MIA GLADZ RNAV SID – Departure percent not defined

Note: This MIA procedure would also serve FLL

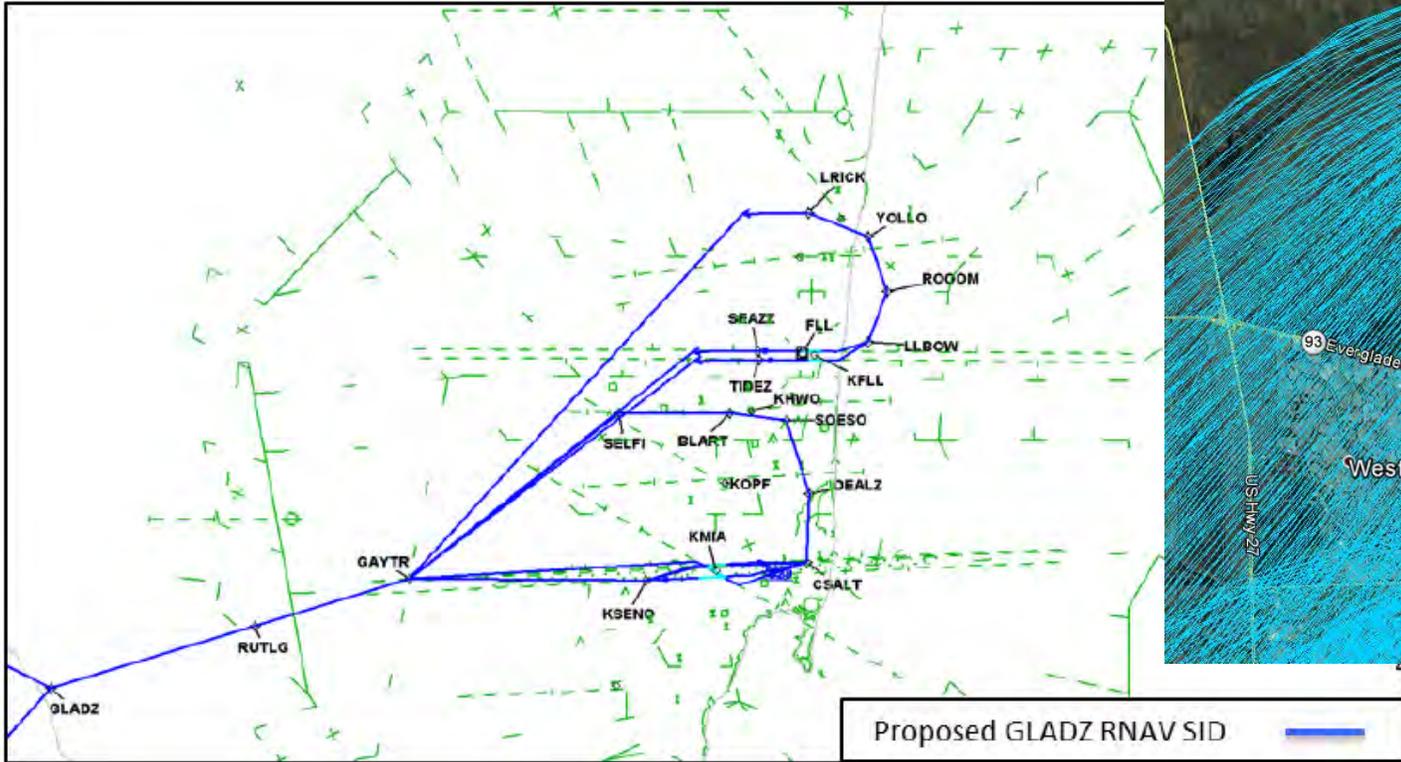
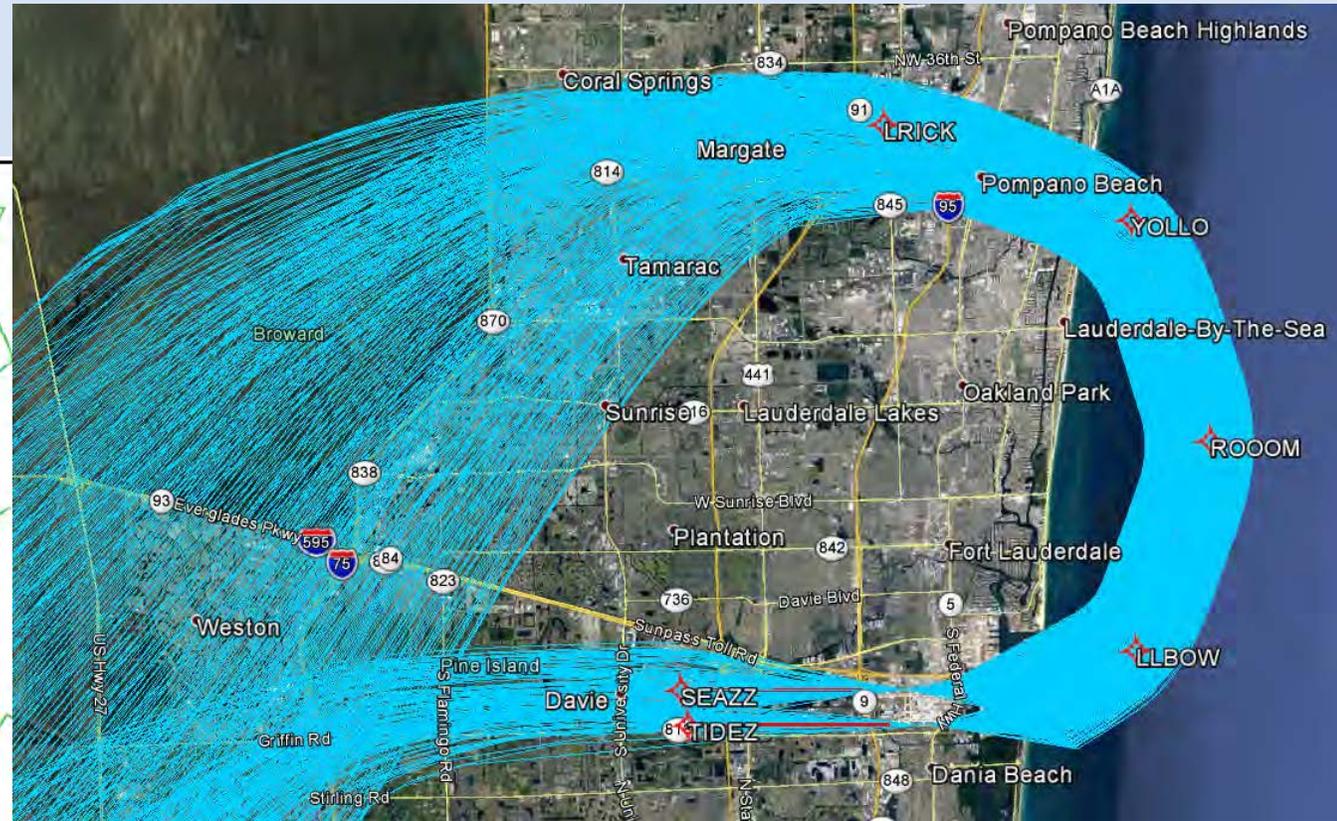
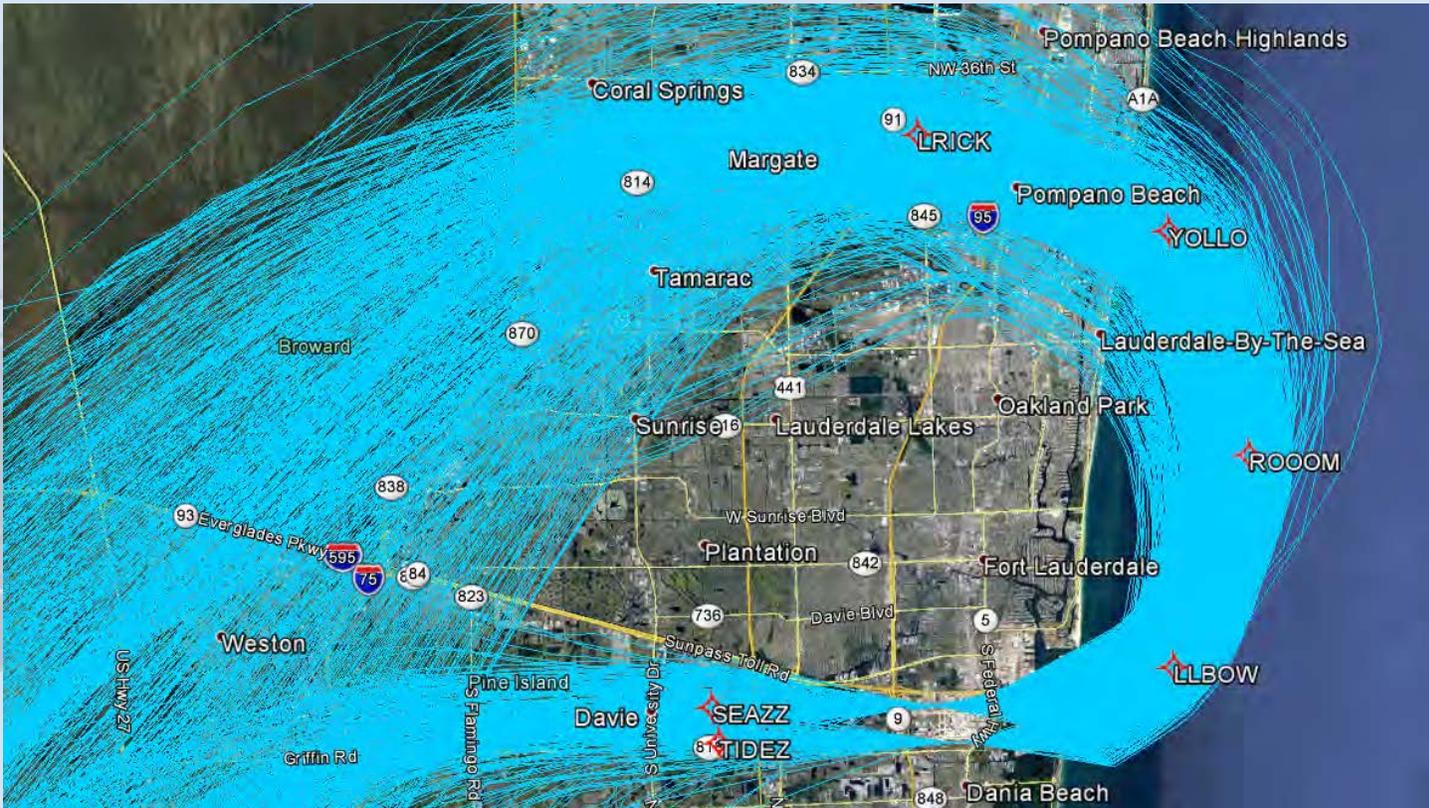


Figure 3. MIA GLADZ RNAV SID (Terminal)



MIA GLADZ RNAV SID – Departure percent not defined

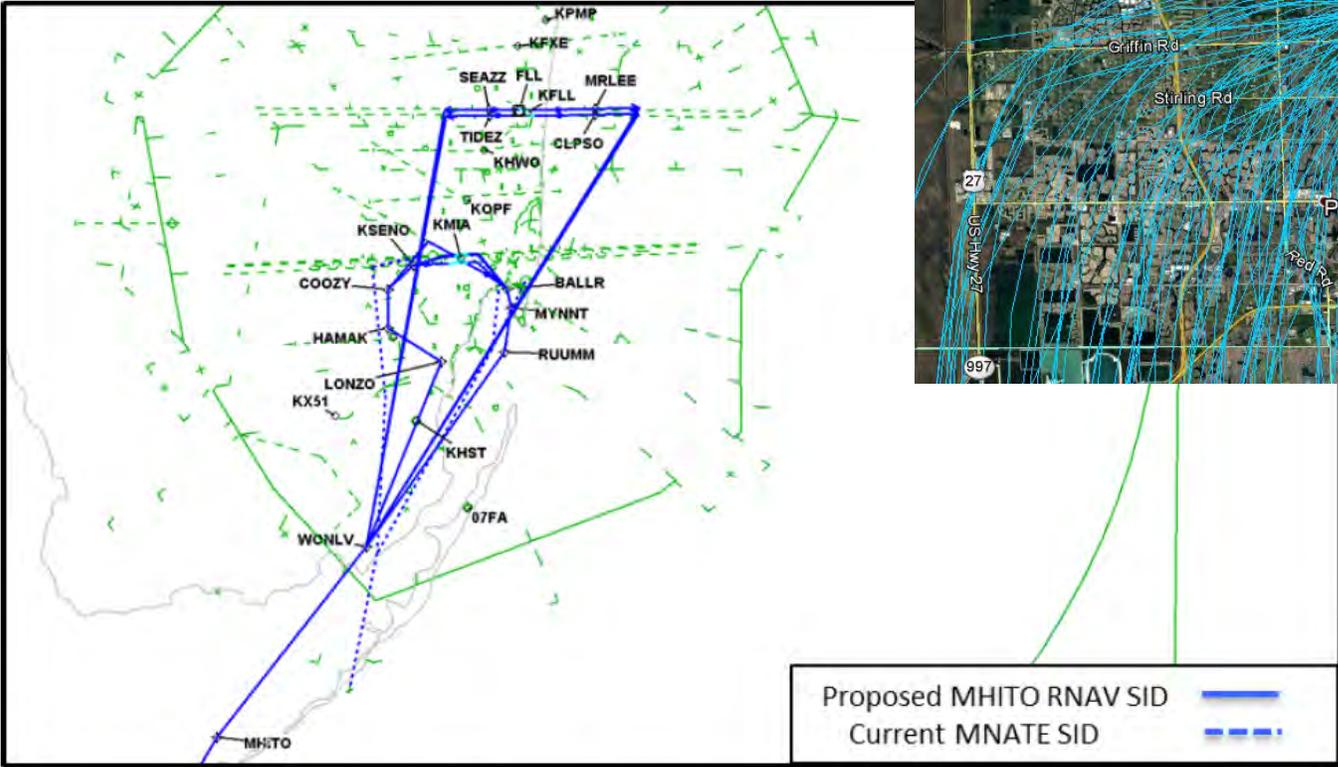
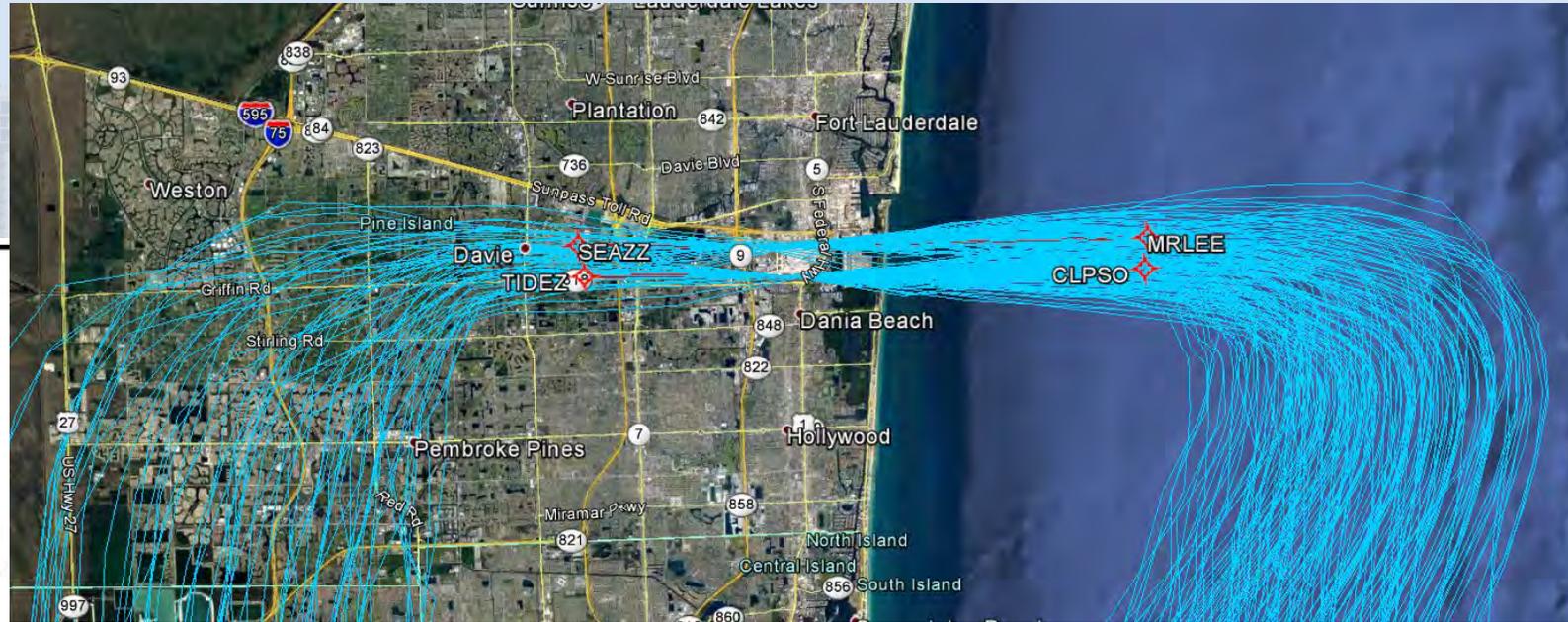


GLADZ does not directly replace an existing FLL SID

New GLADZ RNAV SID with Vectoring

MIA MHITO RNAV SID – Departure percent not defined

Note: This MIA procedure would also serve FLL

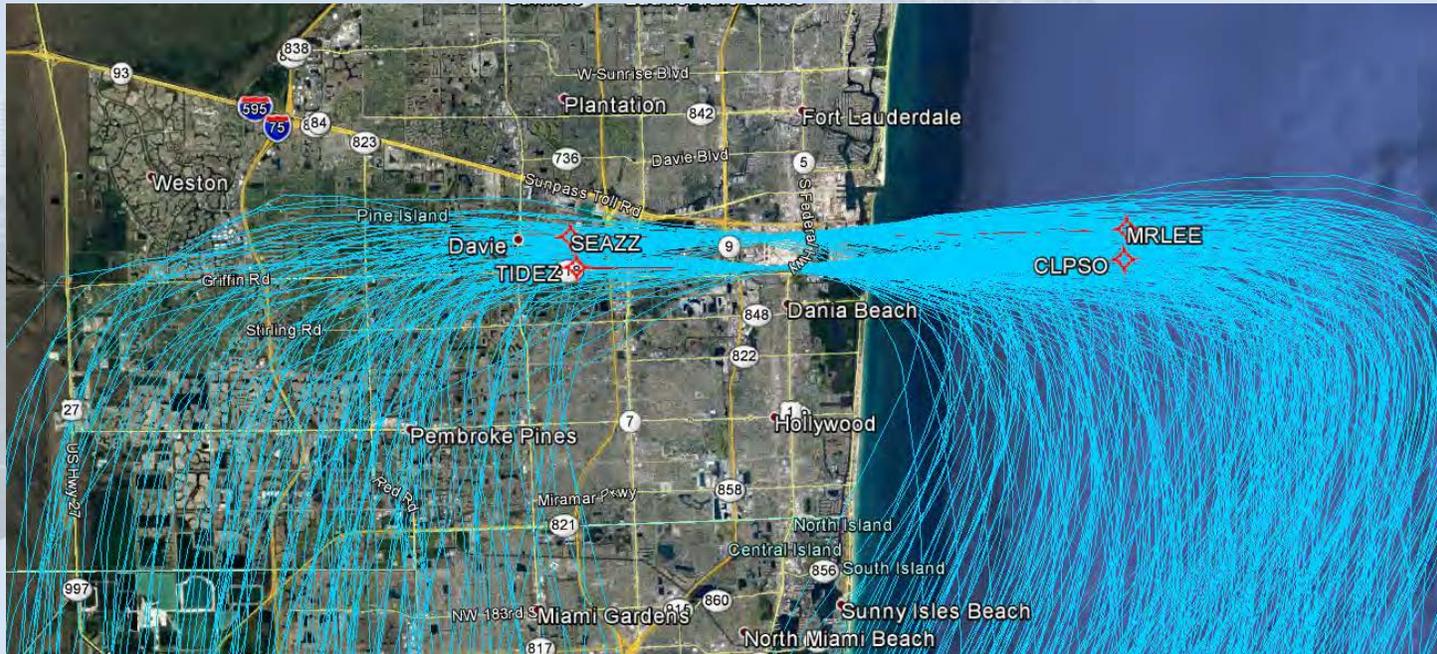


Proposed MHITO RNAV SID

Figure 3. MIA MHITO RNAV SID and Current MNATE SID (Terminal)

South-Central Florida Metroplex

MIA MHITO RNAV SID – Departure percent not defined



There is no comparison to the existing MNATE SID for FLL. It is understood that the MNATE SID is an existing MIA SID that is not currently used by FLL.

New MHITO RNAV SID with Vectoring

MIA VACAY RNAV SID – Departure percent not defined

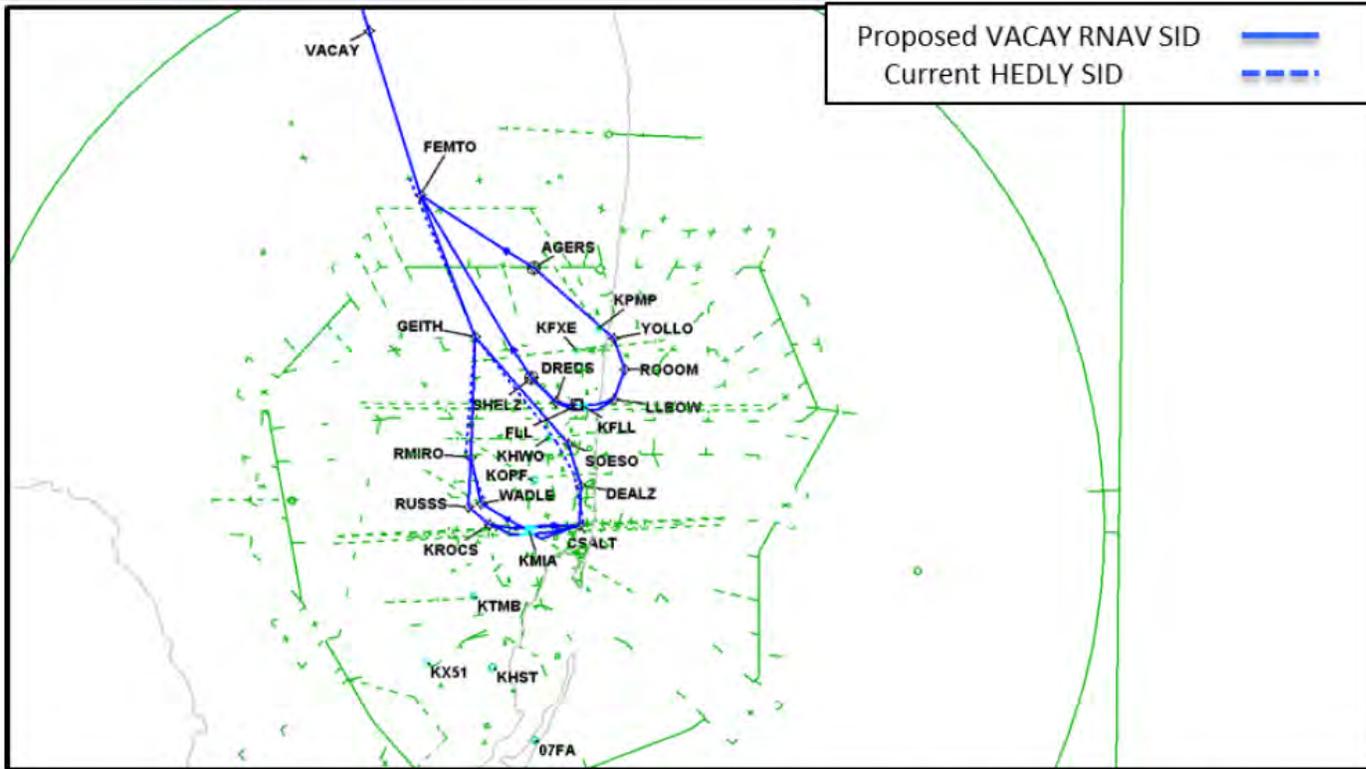
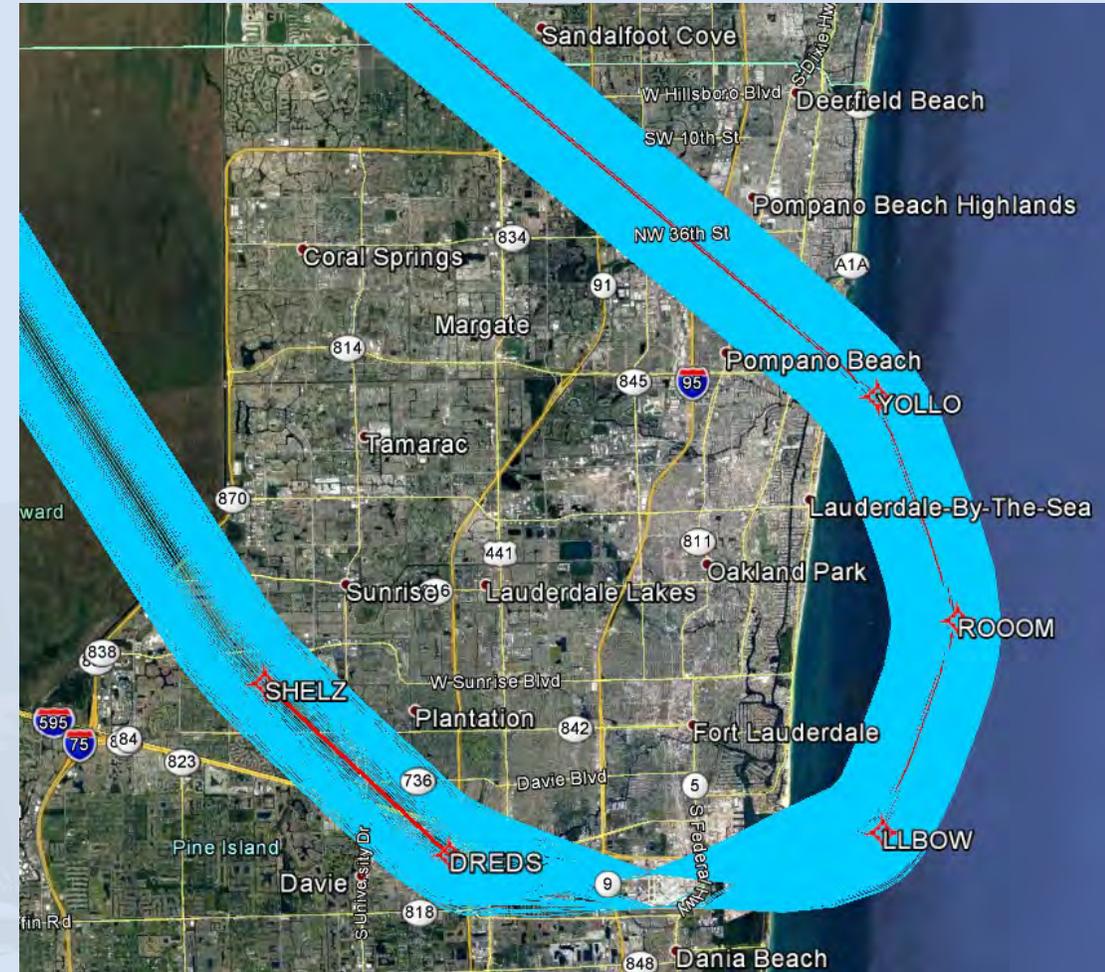


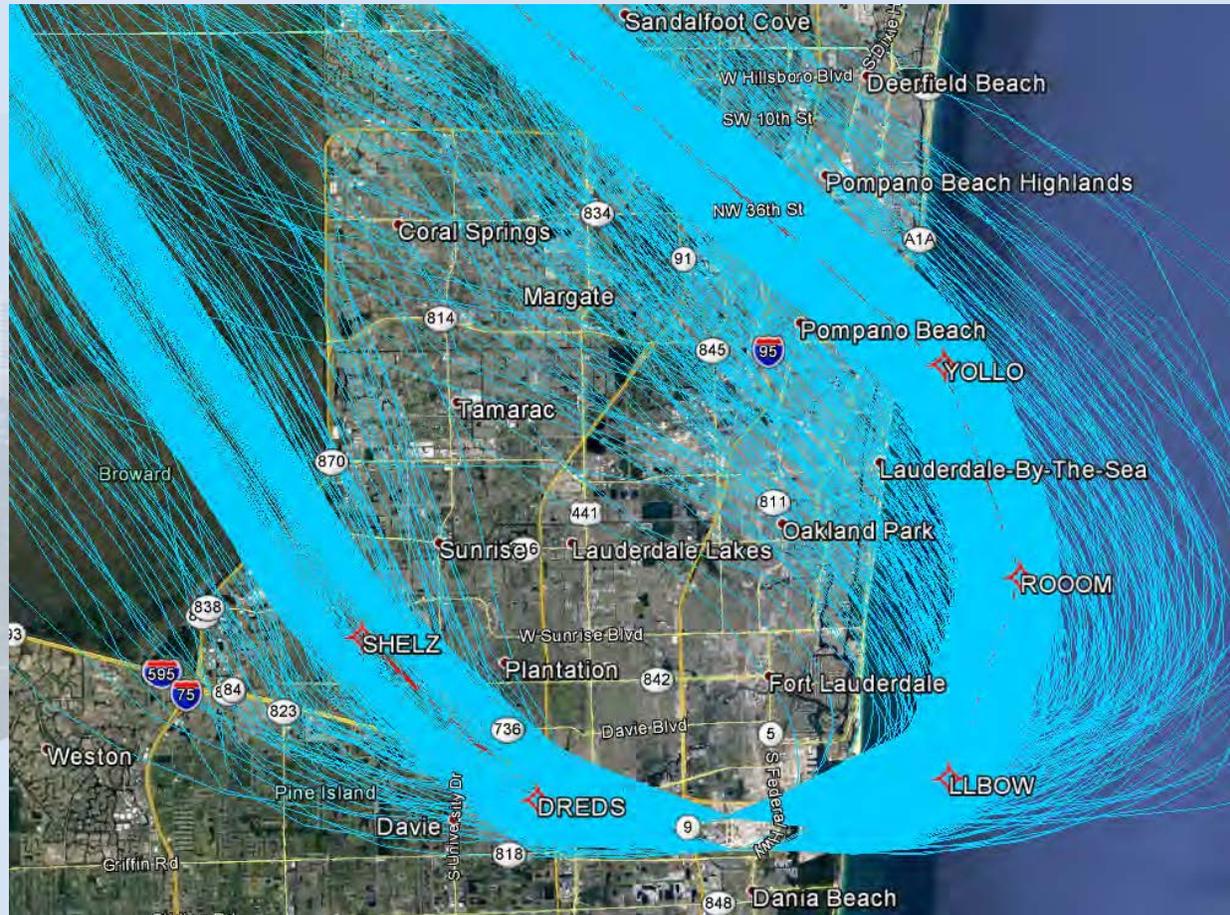
Figure 5. MIA VACAY RNAV SID and Current ARKES SID (Terminal)



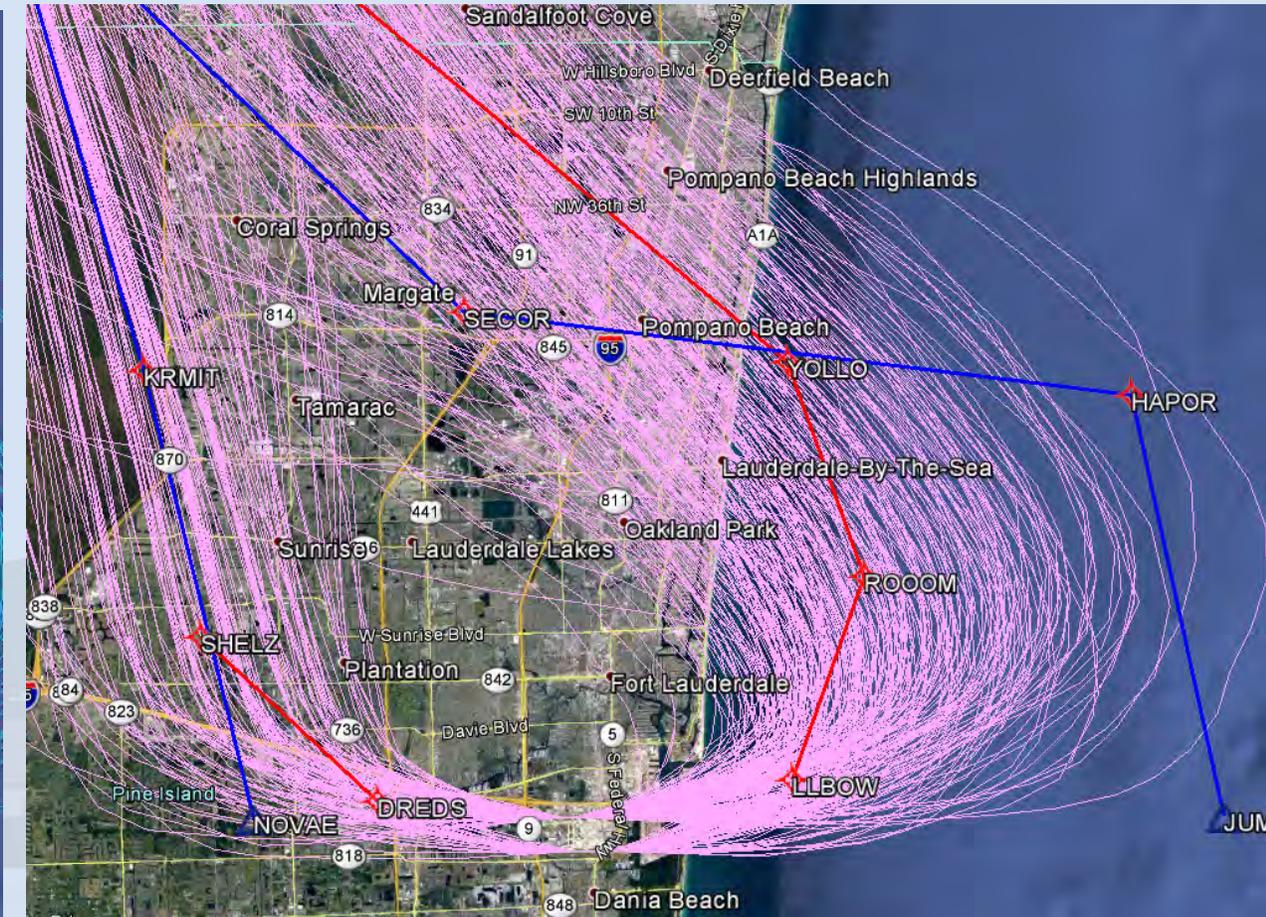
Proposed VACAY RNAV SID

Note: This MIA procedure would also serve FLL

MIA VACAY RNAV SID – Departure percent not defined



New VACAY RNAV SID with Vectoring



Existing ARKES SID with No Action
Flight Tracks and Proposed VACAY SID



FAA PROPOSED RNAV STANDARD INSTRUMENT ARRIVALS (STARS)

FLL BAHIA STAR – 5% of Jet Arrivals

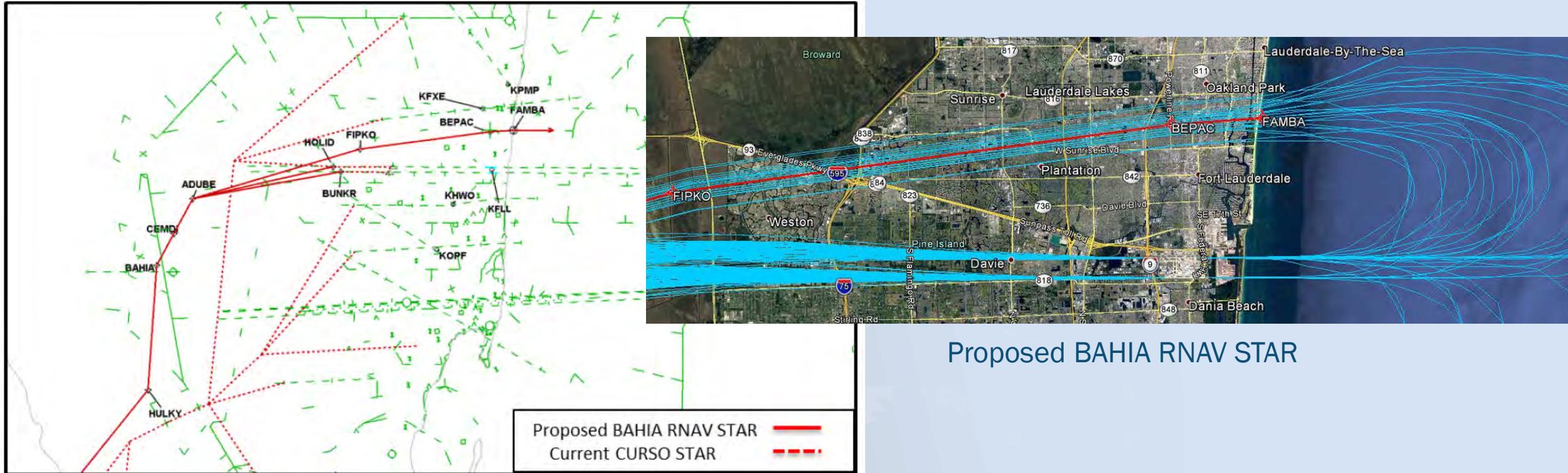
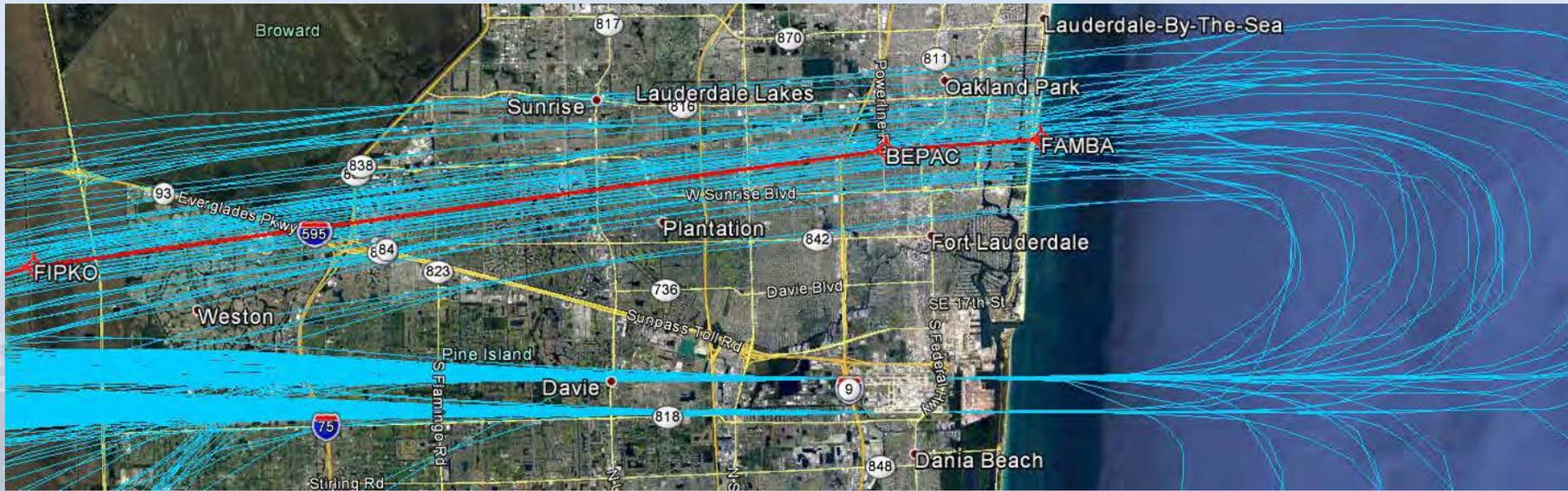
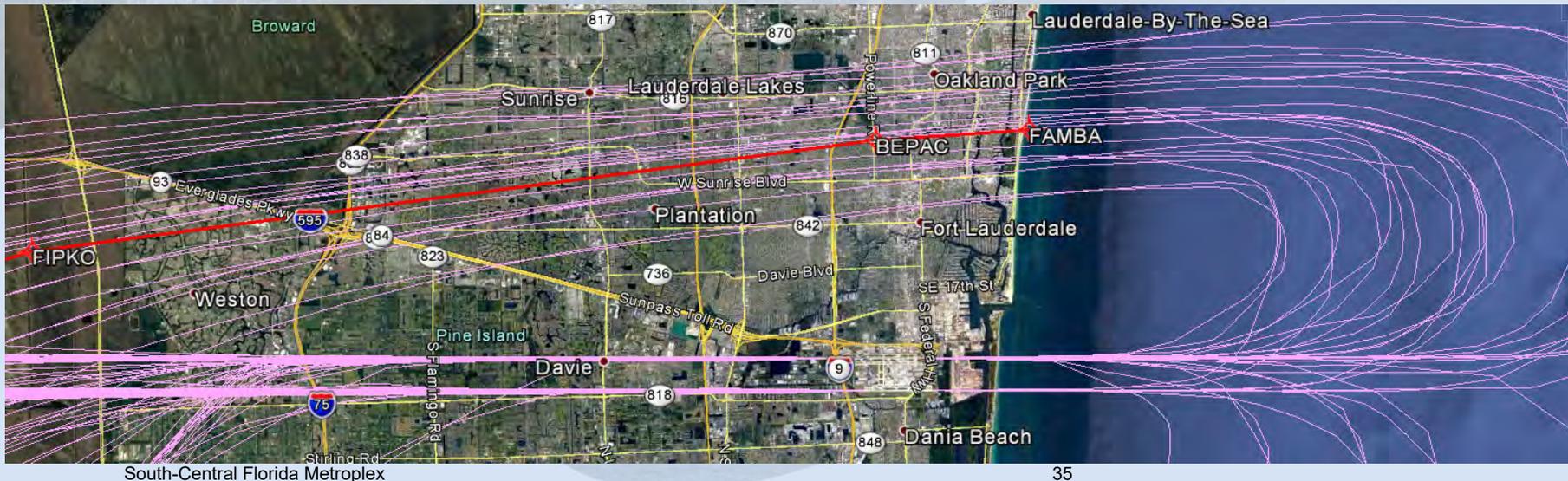


Figure 4. Proposed FLL BAHIA RNAV STAR and current CORSO STAR (Terminal)

FLL BAHIA STAR – 5% of Jet Arrivals



New BAHIA RNAV STAR with Vectoring



Existing CURSO STAR with No Action Flight Tracks and Proposed BAHIA STAR

FLL CUUDA STAR – 47% of Jet Arrivals

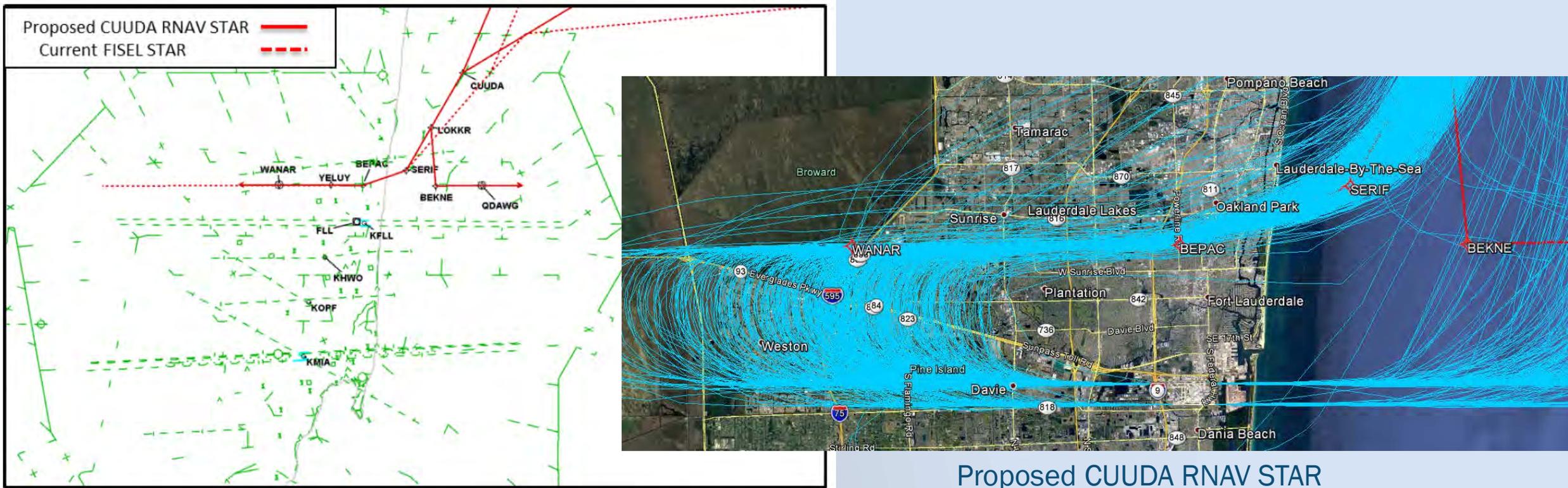
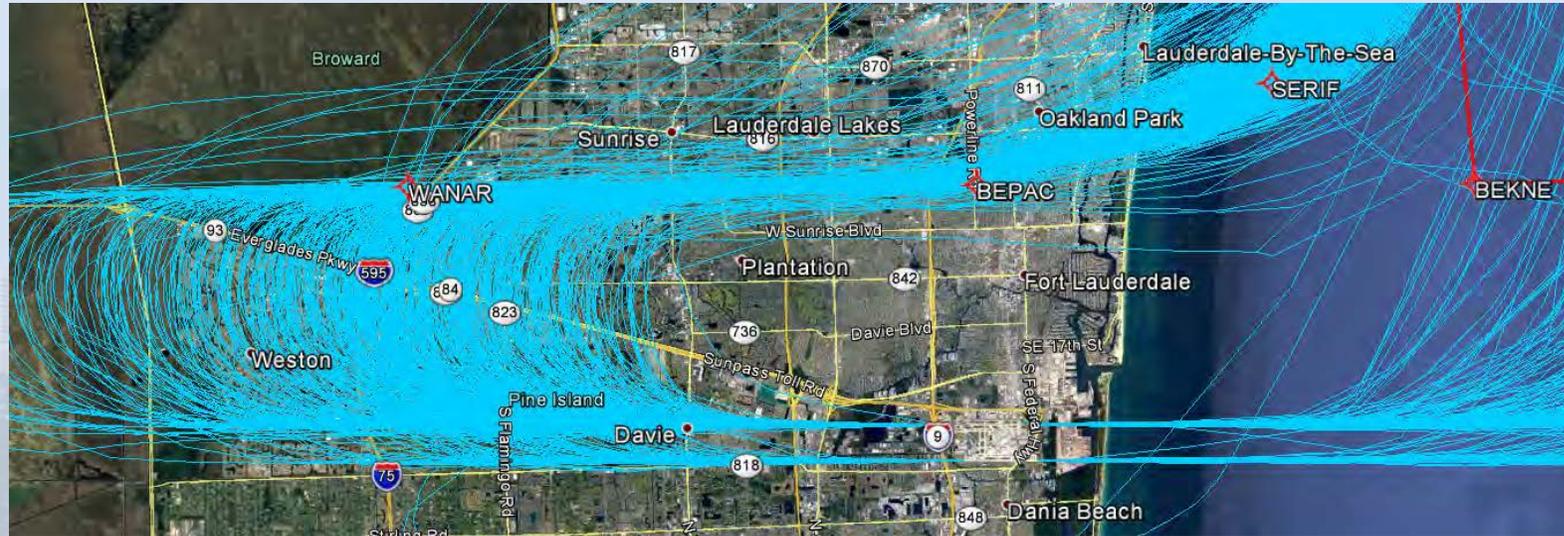
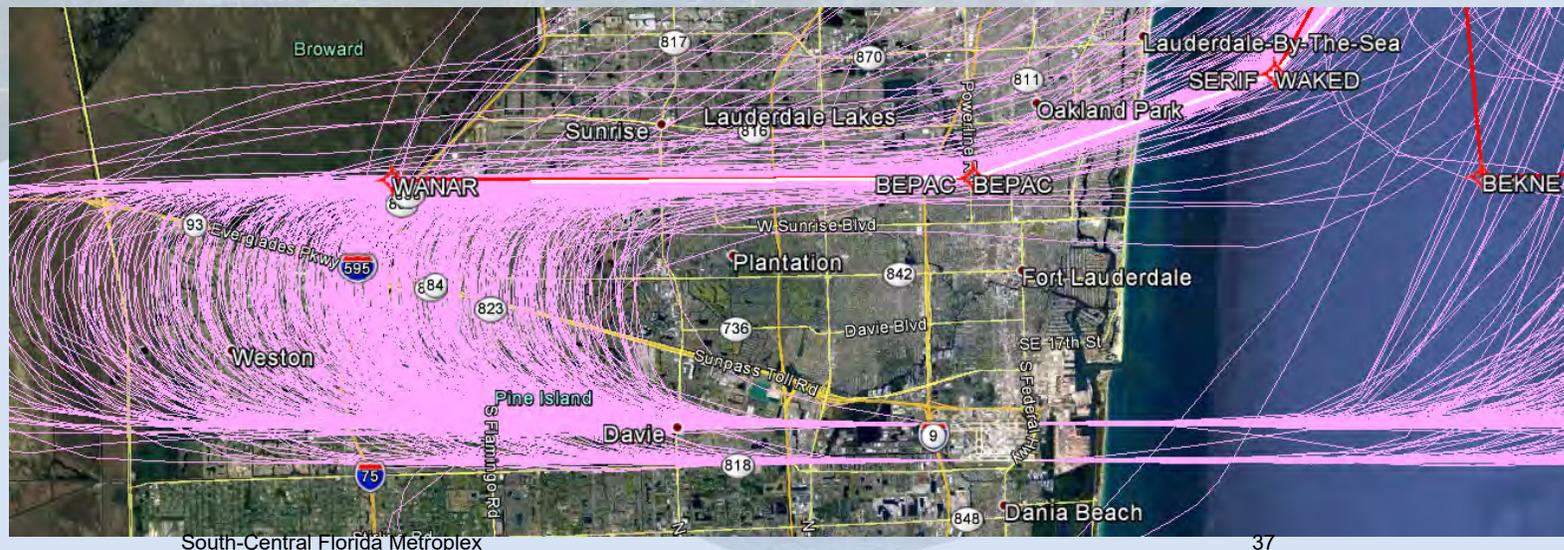


Figure 4. Proposed FLL CUUDA RNAV STAR and current FISEL STAR (Terminal)

FLL CUUDA STAR – 47% of Jet Arrivals



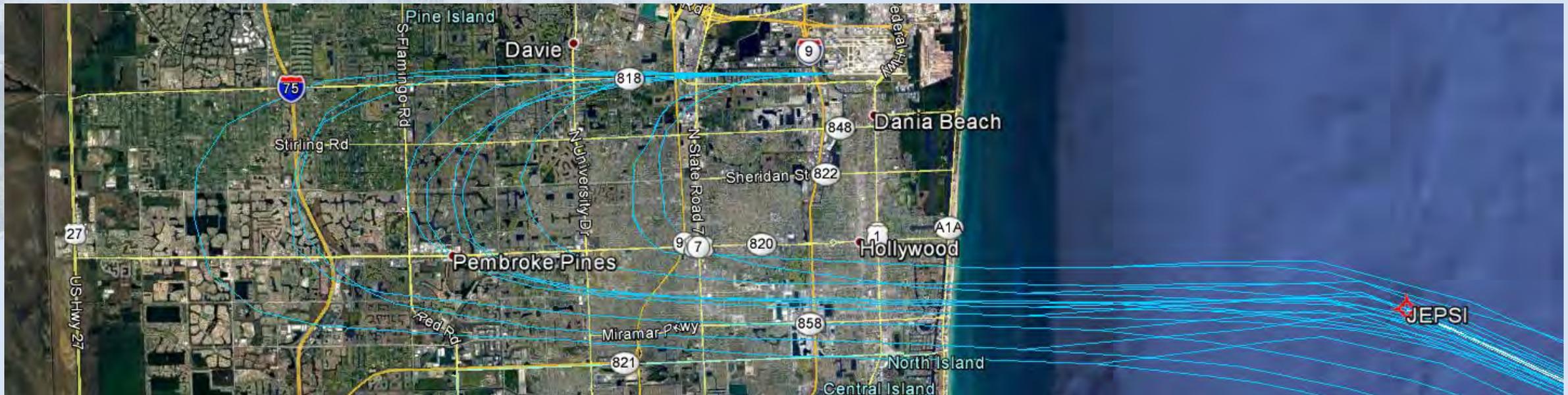
New CUUDA RNAV STAR with Vectoring



Existing FISEL STAR with No Action Flight Tracks and Proposed CUUDA STAR

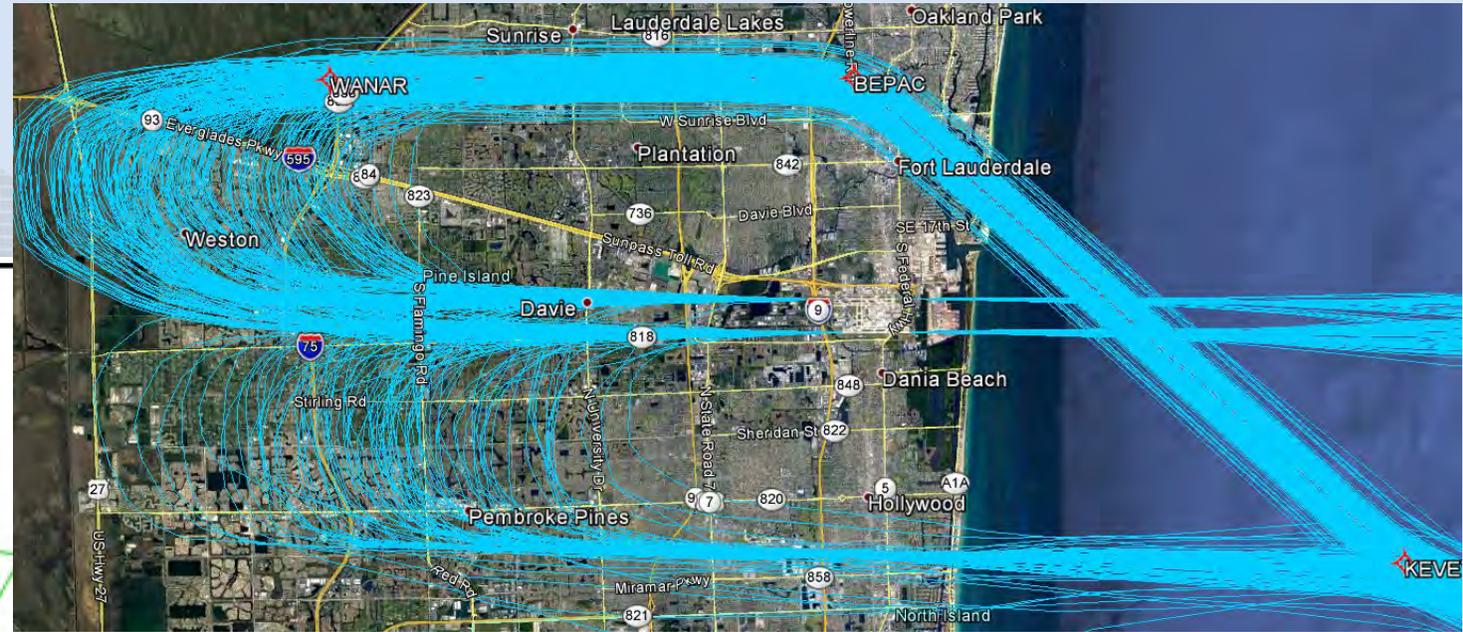
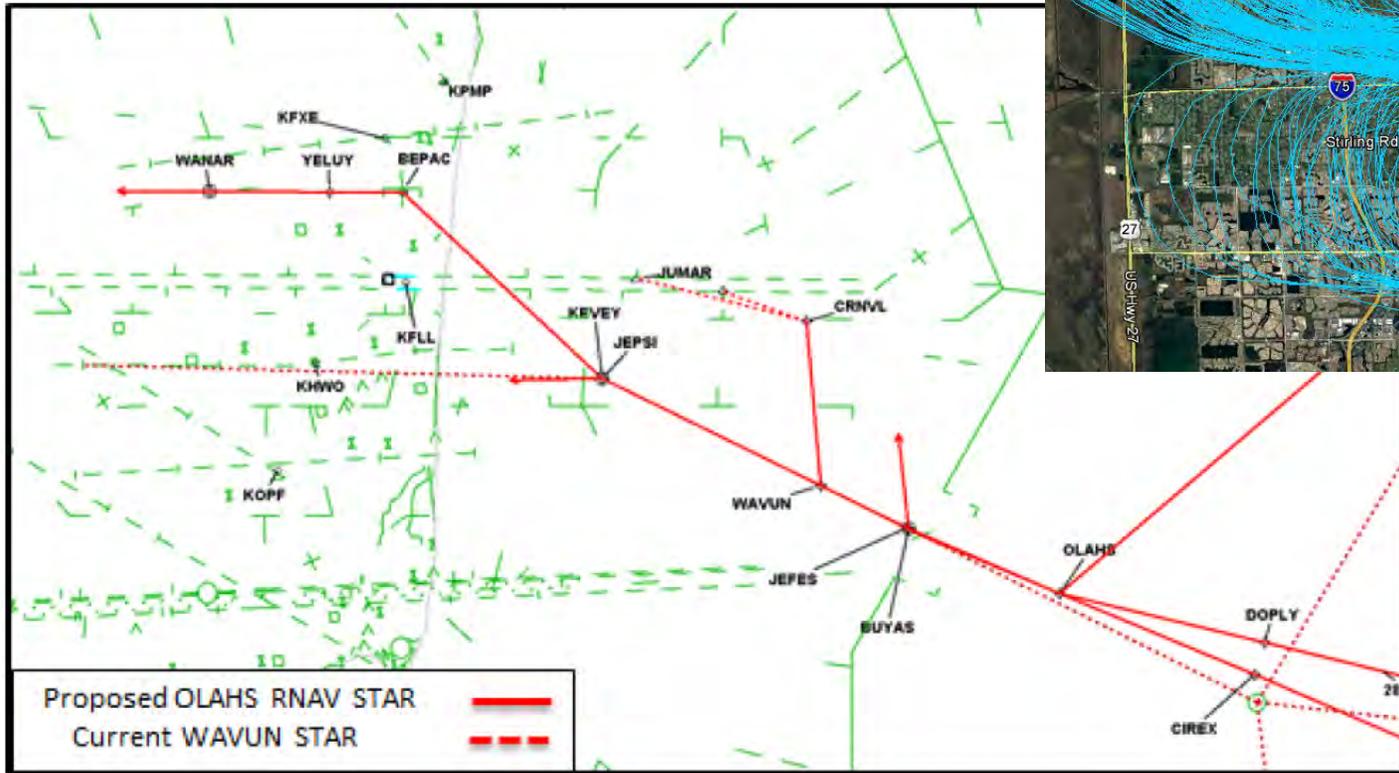
FLL KYAKS STAR – Arrival percent not defined

No procedure
template
provided



KYAKS replaces WAVUN. Similar to OLAHS but is exclusively used by prop and turboprop aircraft

FLL OLAHS STAR – 15% of Jet Arrivals



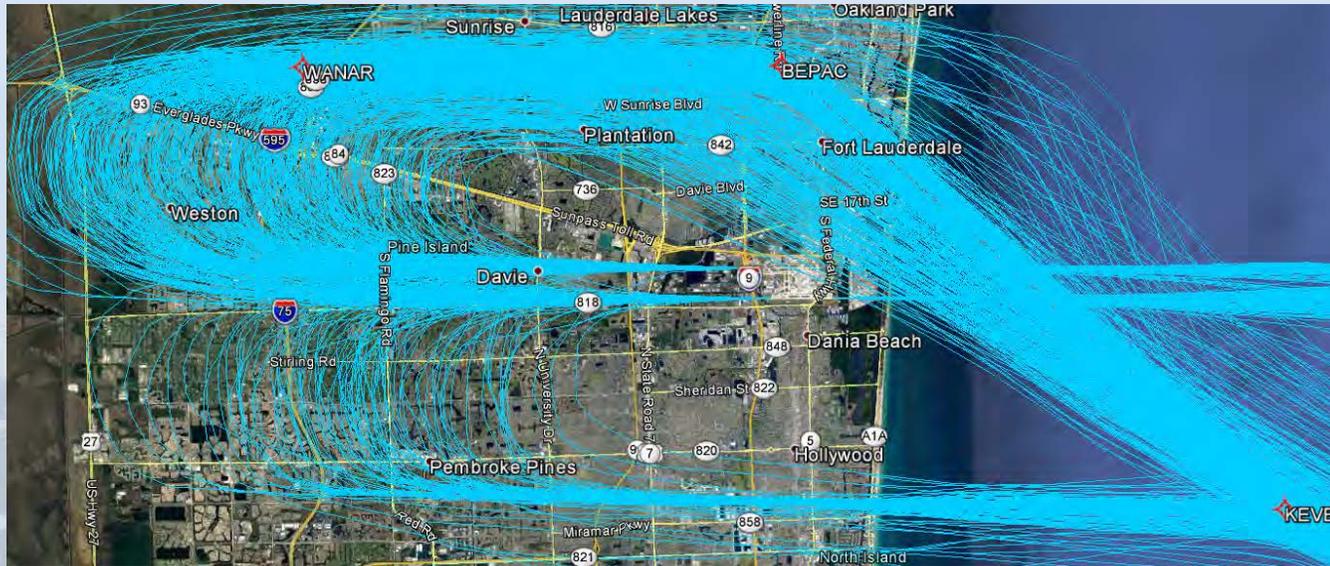
Proposed OLAHS RNAV STAR

Figure 5. Proposed FLL OLAHS RNAV STAR and current WAVUN STAR (Terminal)

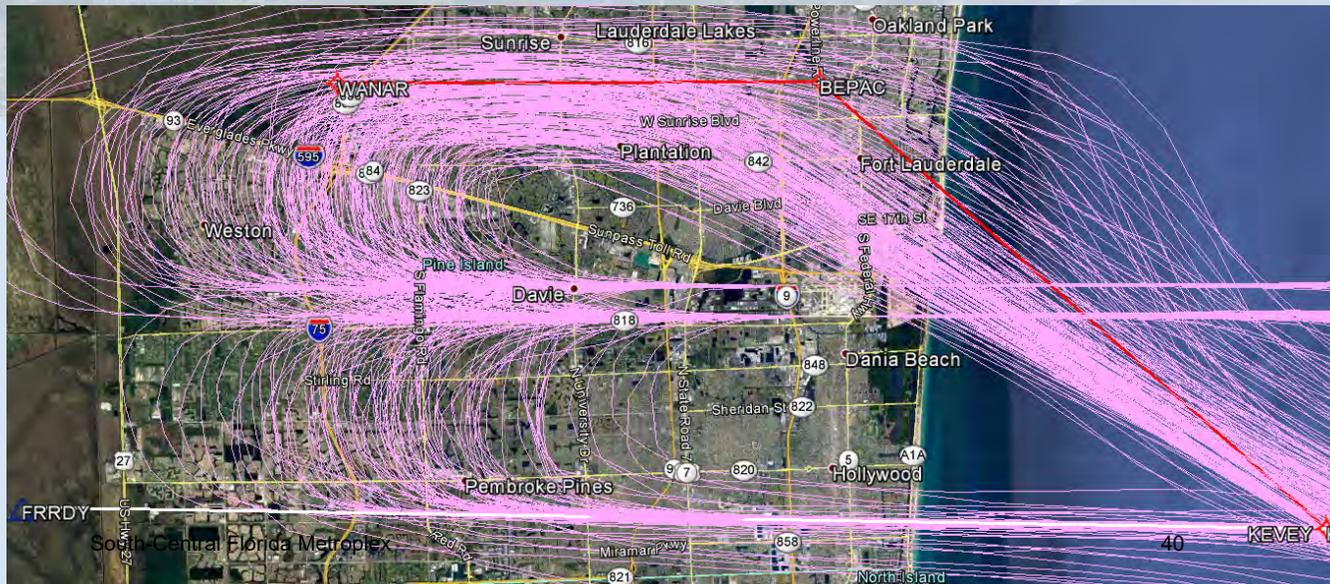
South-Central Florida Metroplex

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FLL OLAHS STAR – 15% of Jet Arrivals

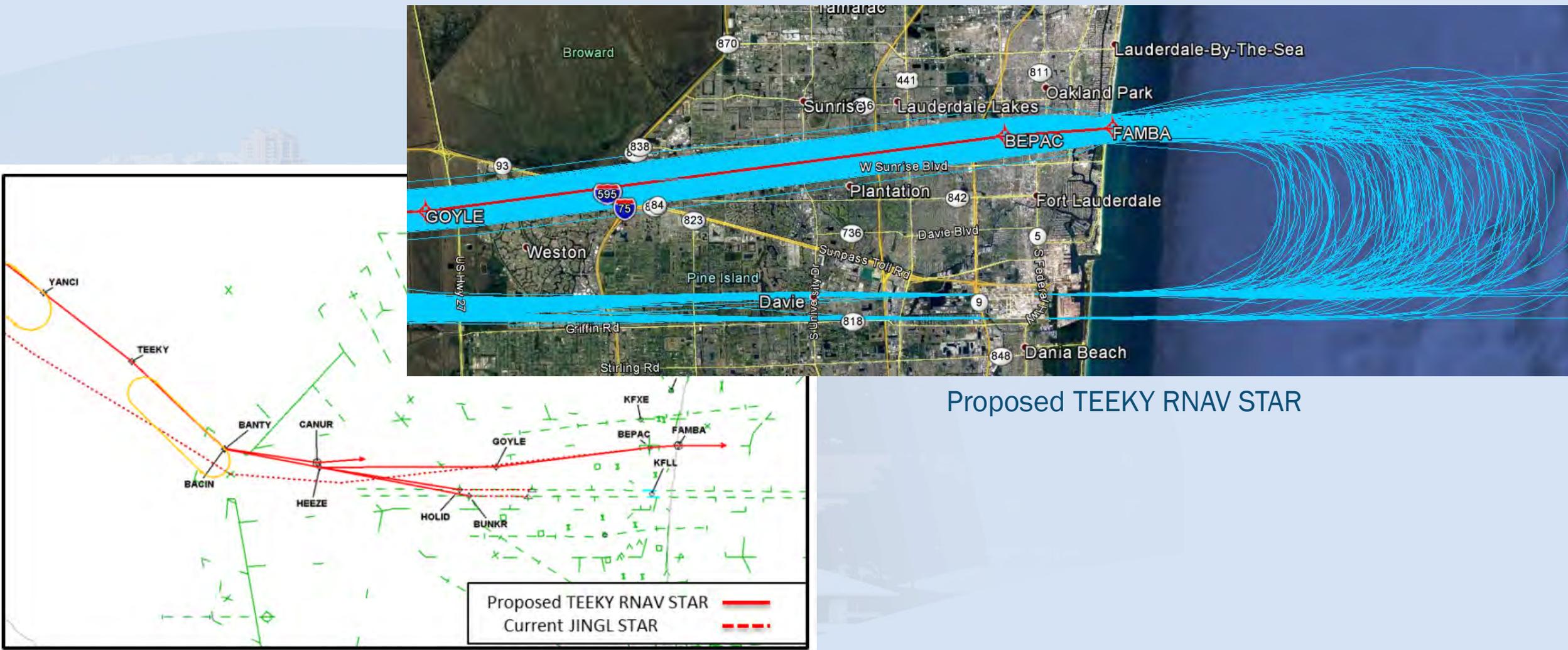


New OLAHS RNAV STAR with Vectoring



Existing JINGL STAR with No Action Flight Tracks and Proposed OLAHS STAR

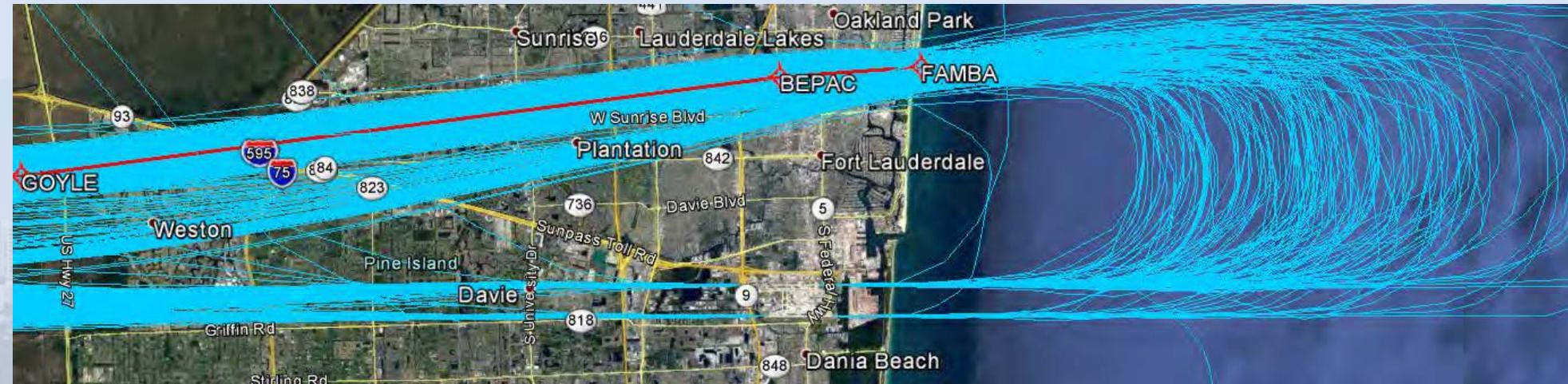
FLL TEEKY STAR – 33% of Jet Arrivals



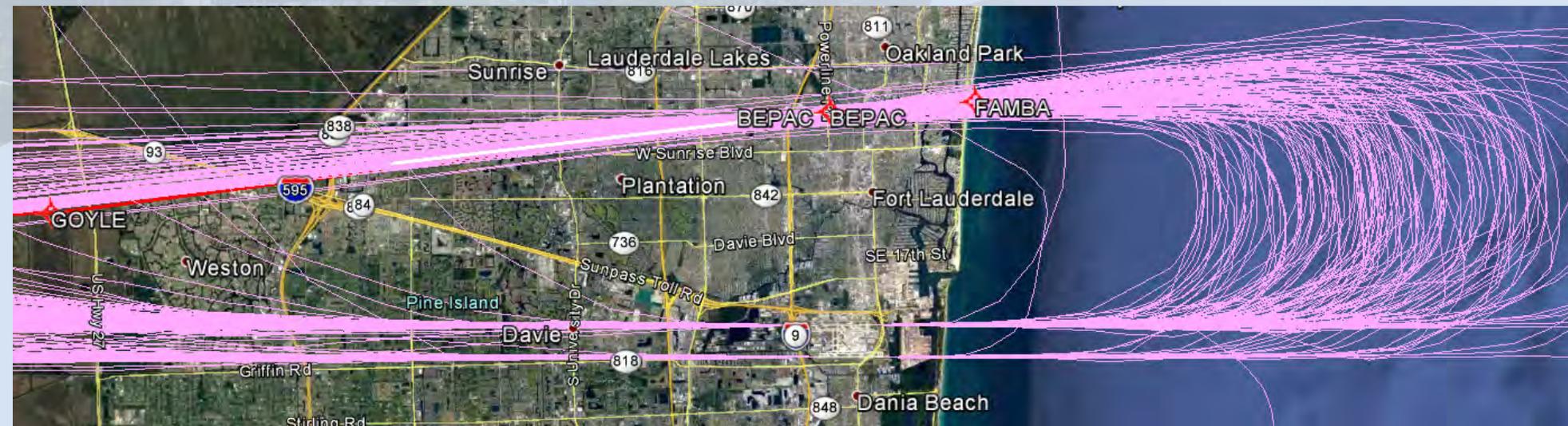
Proposed TEEKY RNAV STAR

Figure 6. Proposed FLL TEEKY RNAV STAR and current JINGL STAR (Terminal)

FLL TEEKY STAR – 33% of Jet Arrivals



New TEEKY RNAV STAR with Vectoring



Existing JINGL STAR with No Action Flight Tracks and Proposed TEEKY STAR

MIA TARPEN STAR – Arrival percent not defined

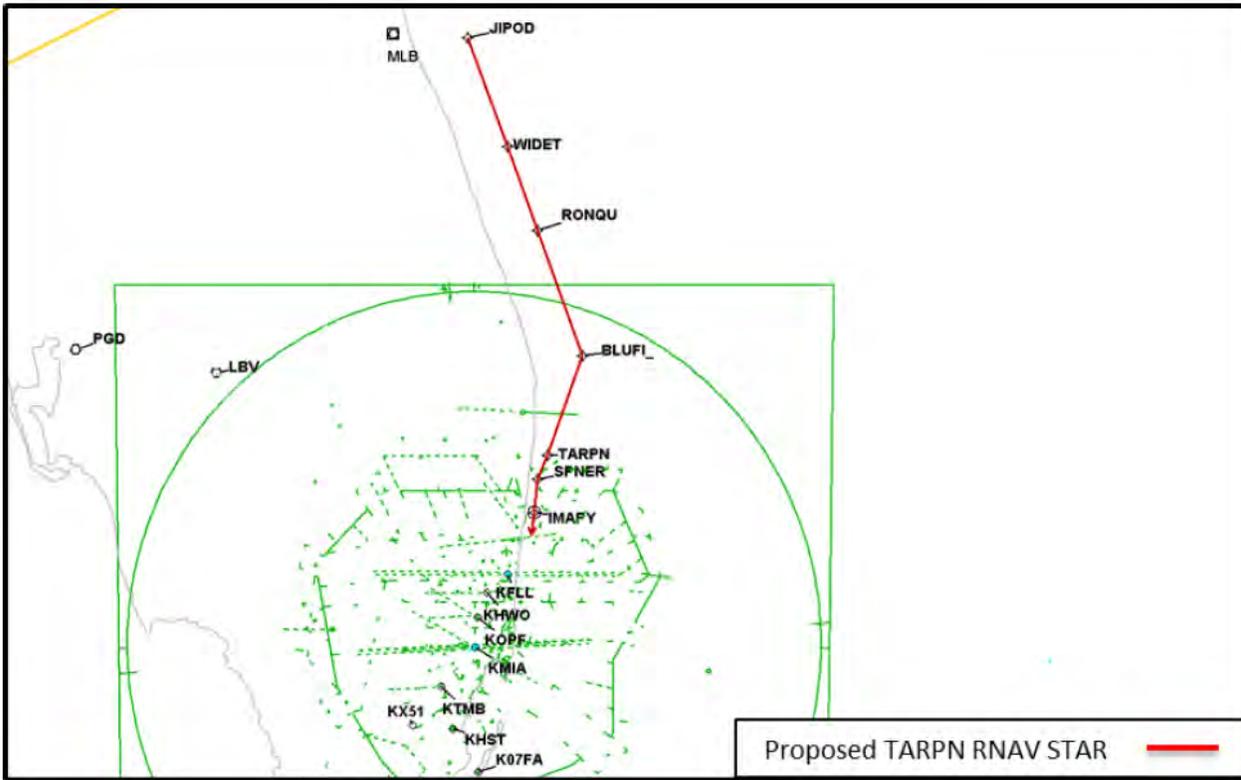
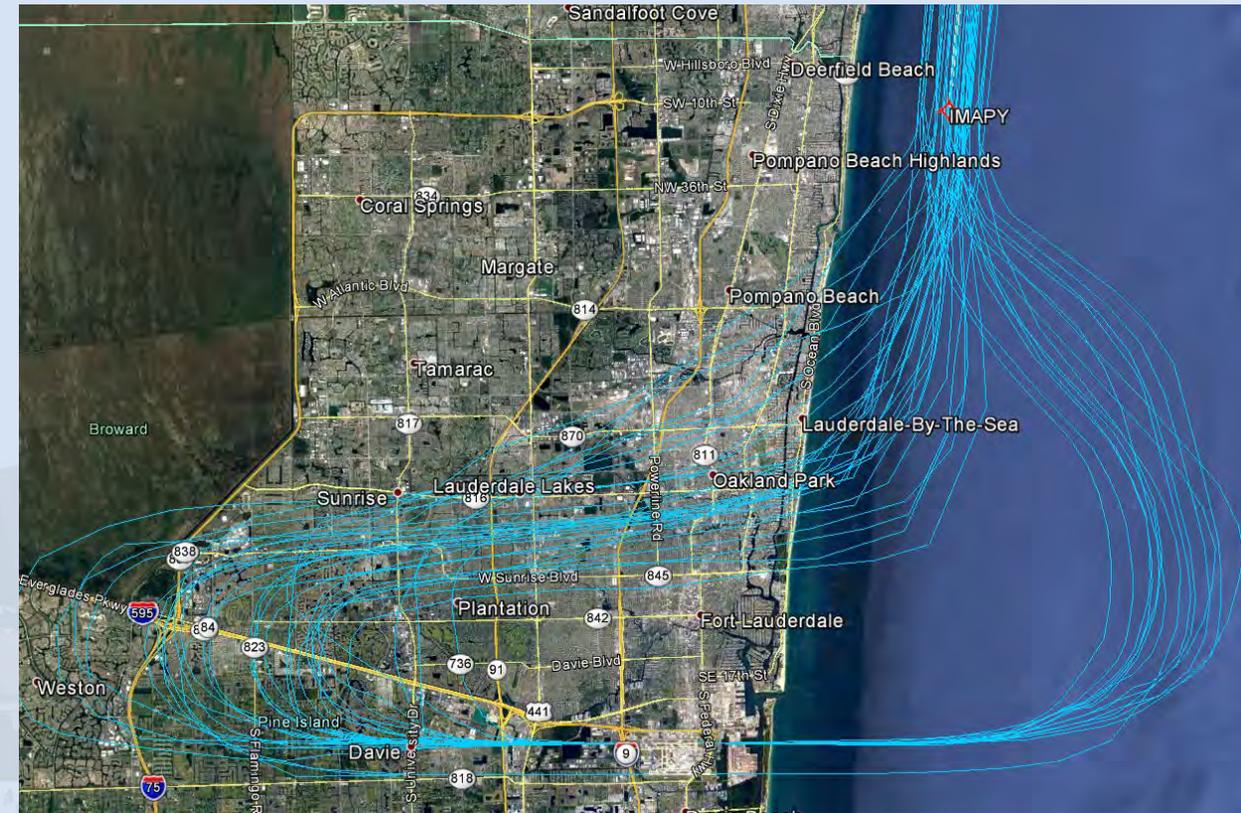


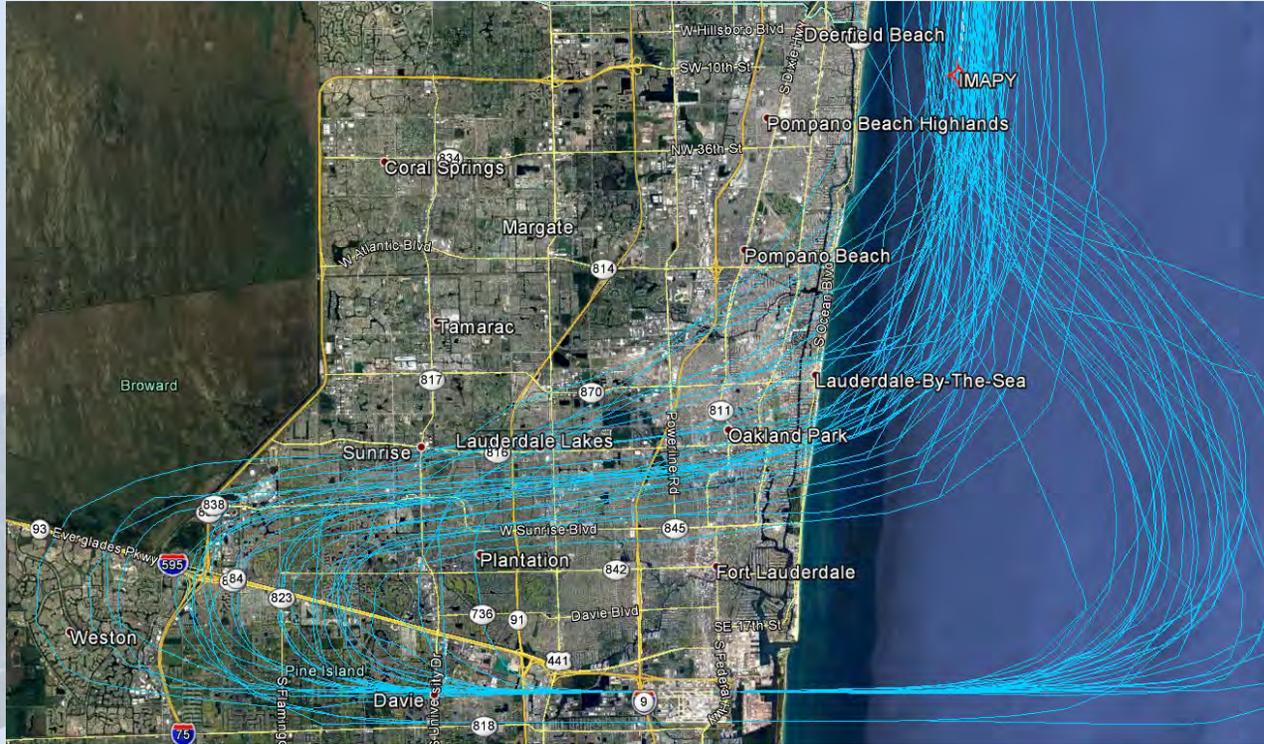
Figure 1. Proposed MIA TARPEN RNAV STAR



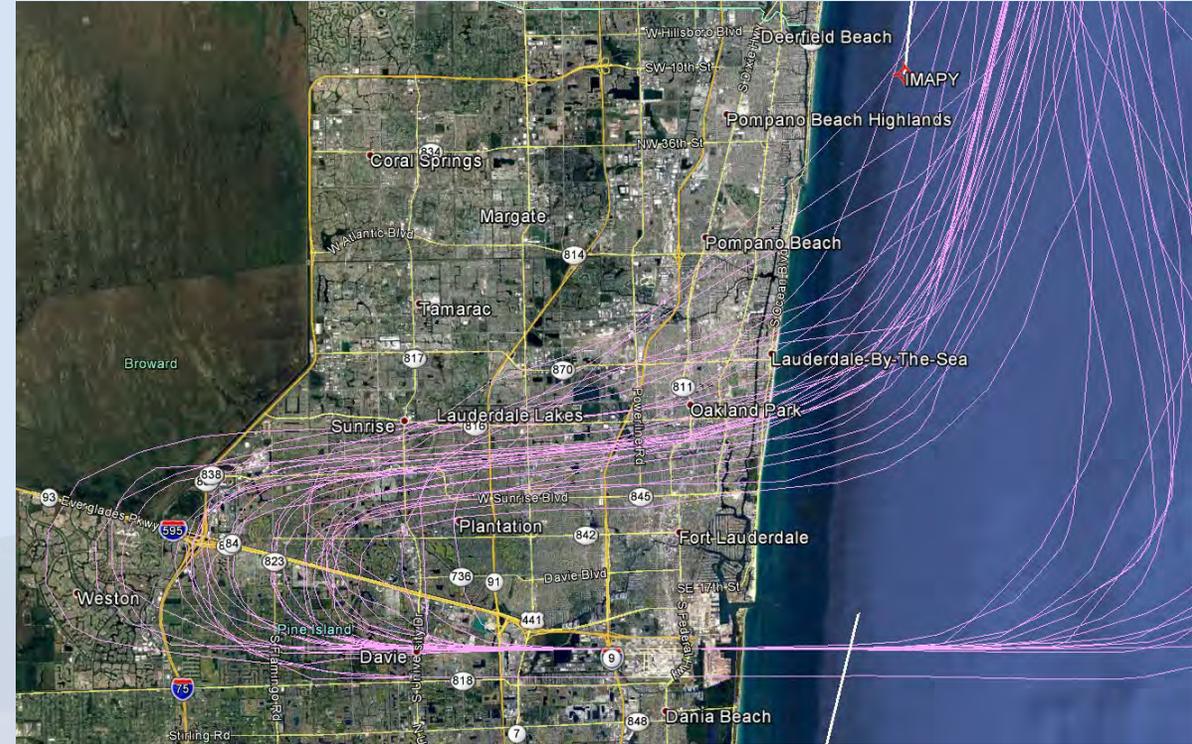
Proposed TARPEN RNAV STAR

Note: This MIA procedure would also serve FLL

MIA TARPEN STAR – Arrival percent not defined



New TARPEN RNAV SID with Vectoring
(Primarily turboprop >210 kts)



Existing BLUFI 3 Conventional STAR
with No Action Flight Tracks and
Proposed TARPEN STAR

FLL Previous Metroplex Comments (May 2017; March 2019)

ATTACHMENT B

Commenter	Point of Contact	Airport	Procedure	Arrival/ Departure/ Other?	Affected neighborhood, city, or area(s)	Issue or concern	Recommended mitigation	Graphic provided?	BCAD's Disposition based on review of the FAA's May 2020 Draft South-Central Florida Metroplex EA (July 2020)
Comments on Metroplex Procedures submitted to the FAA by BCAD on May 10, 2017									
Broward County Aviation Dept. (BCAD)	Winston Cannicle, Noise Information Officer, wcannicle@broward.org; 954-359-6181	FLL	BAHIA STAR	Arrival	West Plantation, Weston, West & East Fort Lauderdale, Oakland Park, Wilton Manors	The western portion of the downwind leg for arrivals to Runway 28 is slightly different than the current track and increases overflights of some populated areas in West Broward. This could result in community concerns for those areas in West Broward. Additionally, while areas between BEPAC and FAMBA already receive over-flights, the increase in over-flights could result in community concerns.			No change made. It appears that the BAHIA STAR is generally consistent with the existing CORSO STAR, but will generally concentrate tracks north of the airport during west flow. This could result in community concerns.
Broward County Aviation Dept. (BCAD)	Winston Cannicle, Noise Information Officer, wcannicle@broward.org; 954-359-6181	FLL	CUUDA STAR	Arrival	East Fort Lauderdale, Oakland Park, Wilton Manors, Las Olas; Plantation, Sunrise	In east flow, the downwind leg shifts arrivals to Runway 10 over the coast and increases overflights to some populated areas along the extended downwind. While these areas already receive overflights, the increase could result in community concerns. Additionally, while areas between BEPAC and WANAR already receive over-flights, the increase could result in community concerns.			No change made. It appears that the CUUDA STAR generally replicates the existing FISEL STAR with some increased dispersion as aircraft cross the coast north of the airport. This could result in community concerns.
Broward County Aviation Dept. (BCAD)	Winston Cannicle, Noise Information Officer, wcannicle@broward.org; 954-359-6181	FLL	OLAAS STAR	Arrival	Riviera Isles, Las Olas Isles, East Fort Lauderdale, Hendricks and Venice Isles, Victoria Park, South Middle River	In east flow, arrival traffic between KEVEY and BEPAC will be concentrated over areas previously not experiencing high traffic volumes and introduces new over-flights over highly populated areas and could result in community concerns	Include waypoint LAYYI to procedure. ->KEVEY->LAYYI->BEPAC		No change made. Arrivals on the north downwind will be shifted farther to the north as they cross the coast to use the BEPAC waypoint resulting in increased overflights between KEVEY and BEPAC over areas northeast of the airport. This could result in community concerns.
Broward County Aviation Dept. (BCAD)	Winston Cannicle, Noise Information Officer, wcannicle@broward.org; 954-359-6181	FLL	TEEKY STAR	Arrival	Weston and West Plantation	The downwind leg for arrivals to Runway 28 shifts slightly north overflying new residents in Weston and Plantation between GOYLE and BEPAC. This could result in community concerns.			No change made. The TEEKY STAR largely replicates the JINGL STAR while vectoring may result in more higher altitude overflights of west and plantation during west flow. This could result in community concerns.
Broward County Aviation Dept. (BCAD)	Winston Cannicle, Noise Information Officer, wcannicle@broward.org; 954-359-6181	FLL	CONCK SID	Departure	Dania, Davie, Weston, Cooper City, SW Ranches	Provides straight-out departure fixes to TIDEZ and SEAZZ consistent with some current operations. Not clear how this will affect or change operations, however, this will likely result in community concerns.			FAA removed procedure from Metroplex project

Commenter	Point of Contact	Airport	Procedure	Arrival/ Departure/ Other?	Affected neighborhood, city, or area(s)	Issue or concern	Recommended mitigation	Graphic provided?	BCAD's Disposition based on review of the FAA's May 2020 Draft South-Central Florida Metroplex EA (July 2020)
Broward County Aviation Dept. (BCAD)	Winston Cannicle, Noise Information Officer, wcannicle@broward.org; 954-359-6181	FLL	FEELX SID	Departure	Dania Beach, Davie, West Plantation, Sunrise, North Tamarac, Fort Lauderdale	This procedure will concentrate departing flight paths west/northwest over different paths than PREDA4 . This will result in community concerns, especially in areas at SHELZ and JMACA	Reduce separation between waypoints for DREDS and SEAZZ		DREDS waypoint was moved .25 mile SE. This procedure will concentrate departing flight paths west/northwest over different paths than PREDA4 . This may result in community concerns during west flow, especially in areas at SHELZ and JMACA and BEEDZ and may concentrate flights transitioning over coast. FAA indicated an 11 degree departure heading separation to the east in June 2020 public workshops.
Broward County Aviation Dept. (BCAD)	Winston Cannicle, Noise Information Officer, wcannicle@broward.org; 954-359-6181	FLL	PALMZ SID	Departure	East Fort Lauderdale, Pompano Beach	Appears to have the potential to create community concern where concentrated tracks cross back over coast in Pompano Beach. Additionally, departure traffic between YOLLO and LRICK will be concentrated over an area where traffic previously was dispersed.	Departures should remain on runway centerline longer before making turns to LLBOW and LEGG waypoints		FAA determined procedure "unviable" based on testing in November 2016 and eliminated from Metroplex. Replaced by GLADZ SID
Broward County Aviation Dept. (BCAD)	Winston Cannicle, Noise Information Officer, wcannicle@broward.org; 954-359-6181	FLL	REGAE SID	Departure	Dania Beach, Davie, West Plantation, Sunrise, North Tamarac, North Fort Lauderdale	This procedure will concentrate departing flight paths west/northwest over different paths than PREDA4 . This will result in community concerns, especially in areas at SHELZ, JMACA and BEEDZ	Reduce separation between waypoints for DREDS and SEAZZ		DREDS waypoint was moved .25 mile SE. This procedure will concentrate departing flight paths west/northwest over different paths than EONNS . This may result in community concerns during west flow, especially in areas at SHELZ and JMACA and BEEDZ and may concentrate flights transitioning over coast. FAA indicated an 11 departure heading separation to the east in June 2020 public workshops.
Broward County Aviation Dept. (BCAD)	Winston Cannicle, Noise Information Officer, wcannicle@broward.org; 954-359-6181	FLL	SNAPR SID	Departure	Davie, West Plantation, Sunrise, North Tamarac, Pompano Beach	This procedure will concentrate departing flight paths west/northwest over different paths than PREDA4 . This will result in community concerns, especially in areas at SHELZ and JMACA	Reduce separation between waypoints for DREDS and SEAZZ		DREDS waypoint was moved .25 mile SE. This procedure will concentrate departing flight paths west/northwest over different paths than BEECH and BAHMA SIDS . This may result in community concerns during west flow, especially in areas at SHELZ and JMACA and BEEDZ and may concentrate flights transitioning over coast. FAA indicated an 11 departure heading separation to the east and west in June 2020 public workshops.
Broward County Aviation Dept. (BCAD)	Winston Cannicle, Noise Information Officer, wcannicle@broward.org; 954-359-6181	FLL	TWTZTR SID	Departure	Pompano Beach, Dania Beach, Davie, Weston	This procedure has the potential to create community concerns where concentrated tracks cross back over coast in Pompano Beach. Straight-out paths to west are more consistent with historic paths but concentrate departing aircraft over areas that are currently receiving limited departure overflights	Departures to the east should remain on runway centerline longer before making turns to LLBOW and LEGG waypoints		No change made. This procedure has the potential to create community concerns where concentrated tracks cross back over the coast in Pompano Beach. Straight-out paths to west are more consistent with existing THNDR SID but concentrate departing aircraft over areas that are currently receiving limited departure overflights

Commenter	Point of Contact	Airport	Procedure	Arrival/ Departure/ Other?	Affected neighborhood, city, or area(s)	Issue or concern	Recommended mitigation	Graphic provided?	BCAD's Disposition based on review of the FAA's May 2020 Draft South-Central Florida Metroplex EA (July 2020)
Broward County Aviation Dept. (BCAD)	Winston Cannicle, Noise Information Officer, wcannicle@broward.org; 954-359-6181	FLL	VACAY SID	Departure	Pompano Beach, Coral Springs, Margate, Coconut Creek, Dania Beach, Davie, Weston	This procedure have the potential to create community concern where concentrated tracks cross back over coast in Pompano Beach, Margate, Coconut Creek and Coral Springs. Straight-out paths to west are more consistent with historic paths but concentrate departing aircraft over areas that are currently receiving limited departure overflights	Departures to the east should remain on runway centerline longer before making turns to LLBOW and LEGG waypoints		Modification to initial departure headings. This procedure has the potential to create community concern where concentrated tracks cross back over coast in Pompano Beach, Margate, Coconut Creek and Coral Springs. Also will concentrate especially in areas to west between DREDS, SHELZ and the everglades. DREDS waypoint was moved .25 mile SE and LLEGG waypoint was removed. FAA indicated an 11 degree departure heading separation to the east and west in June 2020 public workshops.
Broward County Aviation Dept. (BCAD)	Winston Cannicle, Noise Information Officer, wcannicle@broward.org; 954-359-6181	MIA	AARPS SID	Departure	Pembroke Pines, West Hollywood, Davie, Plantation, Sunrise, Tamarac, Weston	This procedure will concentrate east departing flight paths from MIA over locations in south/central Broward and west departures will concentrate flights paths over locations in west Broward. This could result in community concerns			Modification to initial departure headings. This procedure has the potential to create community concerns where concentrated tracks cross back over the coast in Pompano Beach. Also will concentrate overflights especially in areas to west between DREDS, SHELZ and AGERS. DREDS waypoint was moved .25 mile SE and LLEGG waypoint was removed. FAA indicated an 11 degree departure heading separation to the east and west in June 2020 public workshops.
Broward County Aviation Dept. (BCAD)	Winston Cannicle, Noise Information Officer, wcannicle@broward.org; 954-359-6181	MIA	BNGOS SID	Departure	West & East Hollywood, Pembroke Pines, Miramar,	This procedure will concentrate east departing flight paths from MIA over locations in south Broward and west departures will concentrate flights paths over locations in southwest Broward. This could result in community concerns			This procedure has the potential to concentrate east departing flight paths from MIA over locations in south Broward and west departures may concentrate flights paths over locations in southwest Broward. While it appears that FLL departures are vectored to MRENO - as an open SID, this procedure has the potential to create community concerns where concentrated tracks cross back over the coast in Pompano Beach.
Broward County Aviation Dept. (BCAD)	Winston Cannicle, Noise Information Officer, wcannicle@broward.org; 954-359-6181	MIA	FOLZZ SID	Departure	West & East Hollywood, Pembroke Pines, Miramar,	This procedure will concentrate west departing flight paths from MIA over locations in southwest Broward . This could result in community concerns			No change made. This procedure may concentrate west departing flight paths from MIA over locations in southwest Broward . This could result in community concerns
Broward County Aviation Dept. (BCAD)	Winston Cannicle, Noise Information Officer, wcannicle@broward.org; 954-359-6181	MIA	GLADZ SID	Departure	Pembroke Pines, West Hollywood, Davie, Plantation, Sunrise, Tamarac, Weston	This procedure will concentrate east departing flight paths from MIA over locations in south/central Broward and west departures will concentrate flights paths over locations in west Broward. This could result in community concerns			No change made. This procedure may concentrate east departing flight paths from MIA over locations in south/central Broward and FLL west departures will concentrate flights paths over locations in west Broward. FLL east flow departures will concentrate flights over Pompano Beach and areas in northern Broward County. This could result in community concerns.

General Comments:

- Environmental processes (NEPA) should evaluate potential impacts to historical sites/locations, parks, etc. within Broward County during this process
- FAA should consider the implementation of ELSO or an ELSO "like" procedure at FLL which would allow for the reduction in the 15 degree separation for departures at FLL

Commenter	Point of Contact	Airport	Procedure	Arrival/ Departure/ Other?	Affected neighborhood, city, or area(s)	Issue or concern	Recommended mitigation	Graphic provided?	BCAD's Disposition based on review of the FAA's May 2020 Draft South-Central Florida Metroplex EA (July 2020)
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Comments on Metroplex Procedures submitted to the FAA by BCAD on March 14, 2019

Broward County Aviation Dept. (BCAD)	Winston Cannicle, Noise Information Officer, wcannicle@broward.org; 954-359-6181	FLL	AARPS SID	Departure	West Hollywood, Davie, Plantation, Sunrise, Tamarac, Weston, Coral Springs	This procedure will concentrate west departing flight paths over locations in west Broward. This could result in community concerns.	Impacts to the community should be avoided. Public outreach should be conducted in all affected areas.	yes (Graphic 2)	No Change, AARPS SID will concentrate overflights east of everglades.
Broward County Aviation Dept. (BCAD)	Winston Cannicle, Noise Information Officer, wcannicle@broward.org; 954-359-6181	FLL	AARPS, FEELX, REGAE and SNAPR SIDS	Departure	Fort Lauderdale (Lauderdale Isles), Plantation, Davie	DREDS and KLEET are flyby waypoints with a 287 heading. These procedures potentially concentrate west departing flight paths over communities to the west in immediate proximity to the airport. This could result in community concerns.	Keep aircraft south of I-595 as long as possible using a 285 heading and consider fly over waypoint rather than flyby. Impacts to the community should be avoided. Public outreach should be conducted in all affected areas.	yes (Graphic 3)	KLEET removed, no further adjustment to DREDS. 11 degree departure heading identified by FAA in June 2020 workshops. Therefore, this appears to be an ELSO or ELSO equivalent procedure.
Broward County Aviation Dept. (BCAD)	Winston Cannicle, Noise Information Officer, wcannicle@broward.org; 954-359-6181	FLL	AARPS and TWTZR SIDS	Departure	Fort Lauderdale (Harbor Isles)	LLBOW and LLEGG are flyby waypoints with a 080 heading. These procedures potentially concentrate east departing flight paths over communities to the east in immediate proximity to the airport. This could result in community concerns.	Keep aircraft south of residential areas as long as possible using a 085 heading and consider fly over waypoint rather than flyby. Impacts to the community should be avoided. Public outreach should be conducted in all affected areas.	yes (Graphic 4)	LLEGG removed. FAA indicated an 11 departure heading separation to the east in June 2020 public workshops. Therefore, this appears to be an ELSO or ELSO equivalent procedure.

Committer	Point of Contact	Airport	Procedure	Arrival/ Departure/ Other?	Affected neighborhood, city, or area(s)	Issue or concern	Recommended mitigation	Graphic provided?	BCAD's Disposition based on review of the FAA's May 2020 Draft South-Central Florida Metroplex EA (July 2020)
Broward County Aviation Dept. (BCAD)	Winston Cannicle, Noise Information Officer, wcannicle@broward.org; 954- 359-6181	FLL	AARPS and TWTZR SIDS	Departure	Pompano Beach	The YOLLO waypoint potentially concentrates aircraft transitioning back over land over communities to the north of the airport. This could result in community concerns.	Impacts to the community should be avoided. Public outreach should be conducted in all affected areas.	yes (Graphic 5)	No Change, AARPS and TWTZR SID will concentrate overflights transitioning back over land to north of airport

General Comments:

- Need for Community Outreach for all potential Metroplex procedures remains regardless of whether a community is specifically referenced in the second round of comments
- Earlier FLL comments (5-10-17) relative to SIDS and STARS, potential for community concern and need for Community Outreach remain to the extent that they have not already been addressed.
- Environmental processes (NEPA) should evaluate potential impacts to historical sites/locations, parks, etc. within Broward County during this process
- FAA should consider the implementation of ELSO or an ELSO "like" procedure at FLL which would allow for the reduction in the 15 degree separation for departures at FLL

General Notes:

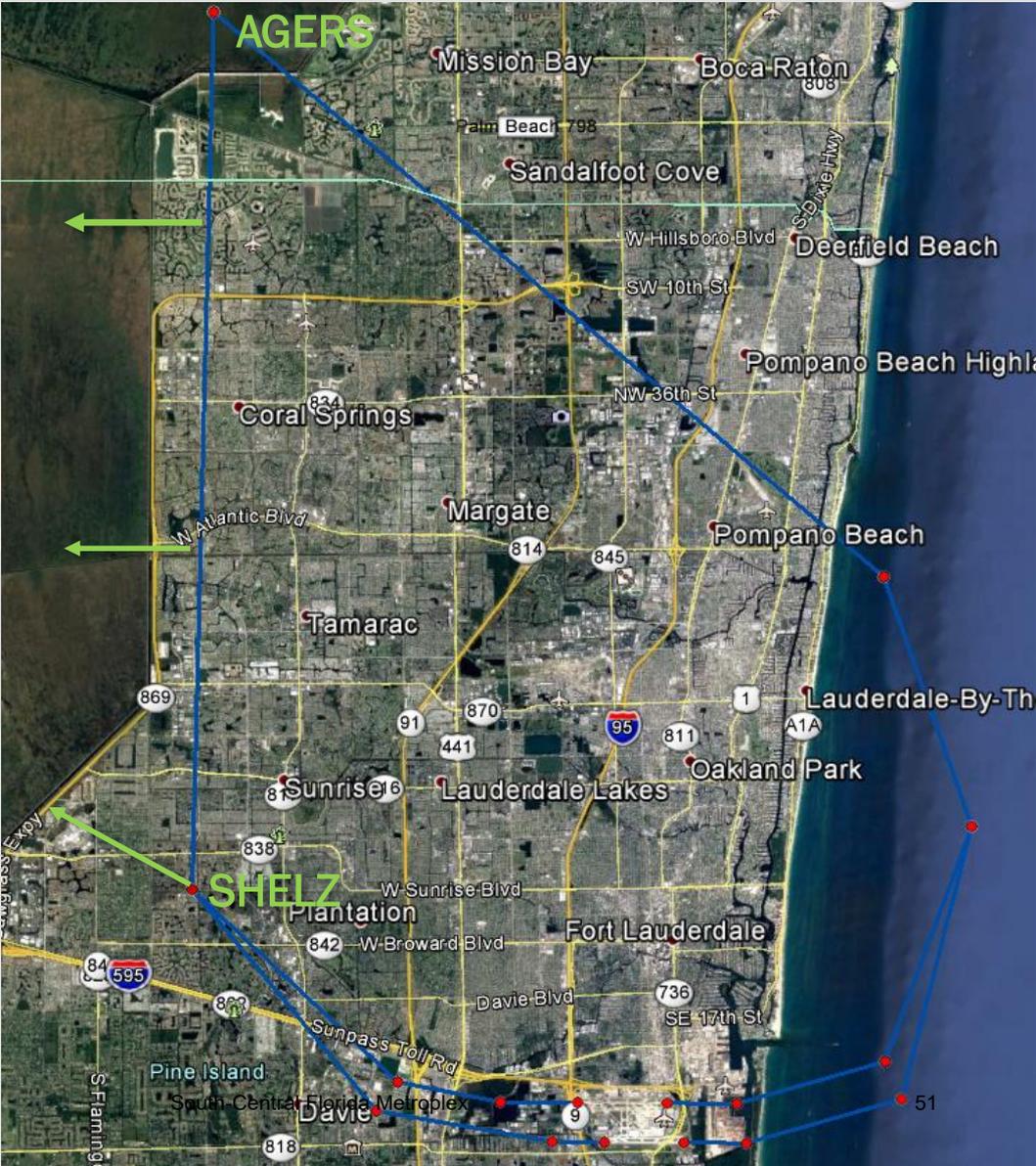
- SID - Standard Instrument Departure Procedure
- STAR - Standard Instrument Arrival Procedure
- ELSO - Equivalent Lateral Spacing Operations



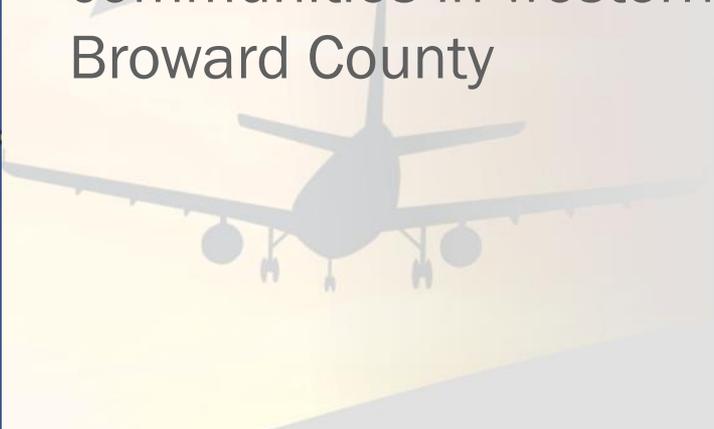
METROPLEX PROCEDURE REVIEW

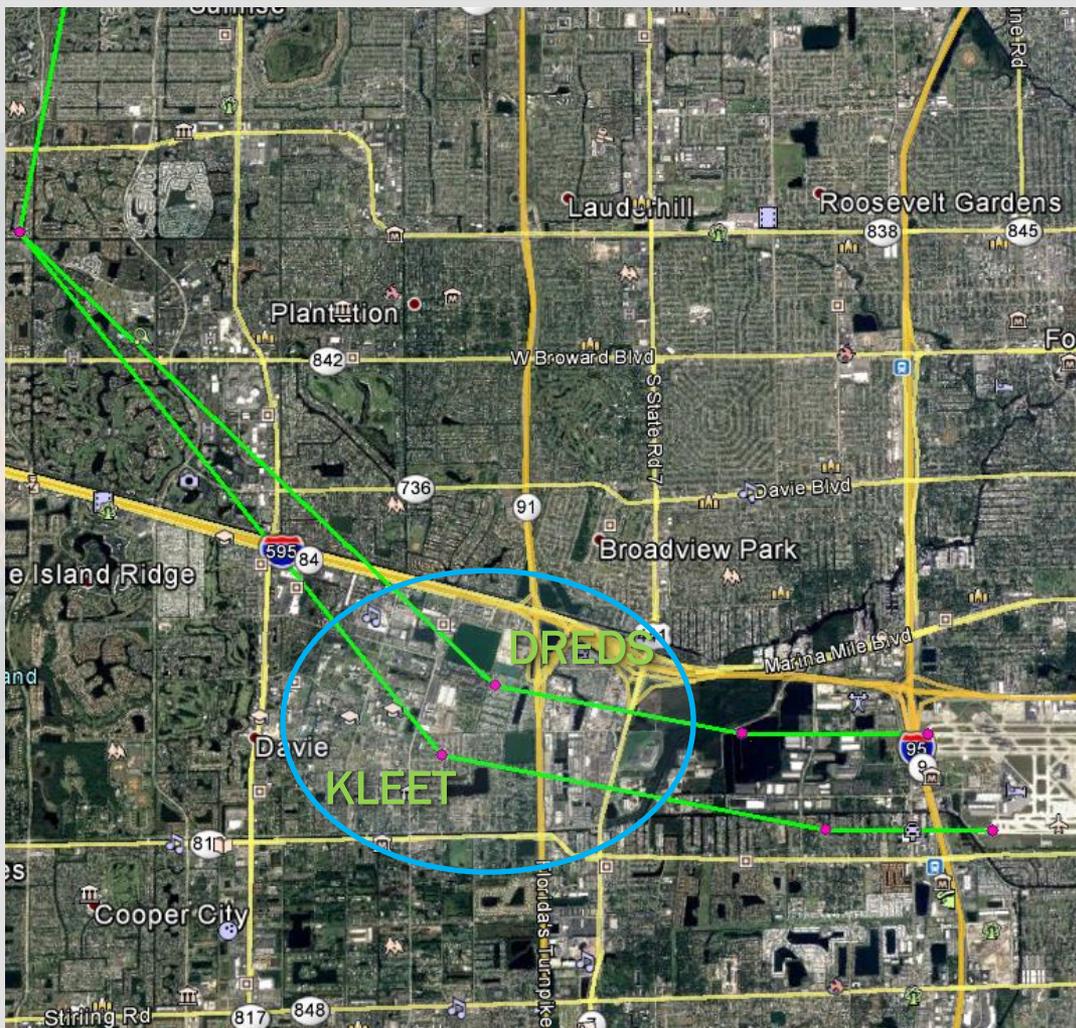
BCAD COMMENTS (GRAPHICS) SUBMITTED TO THE FAA

March 2019

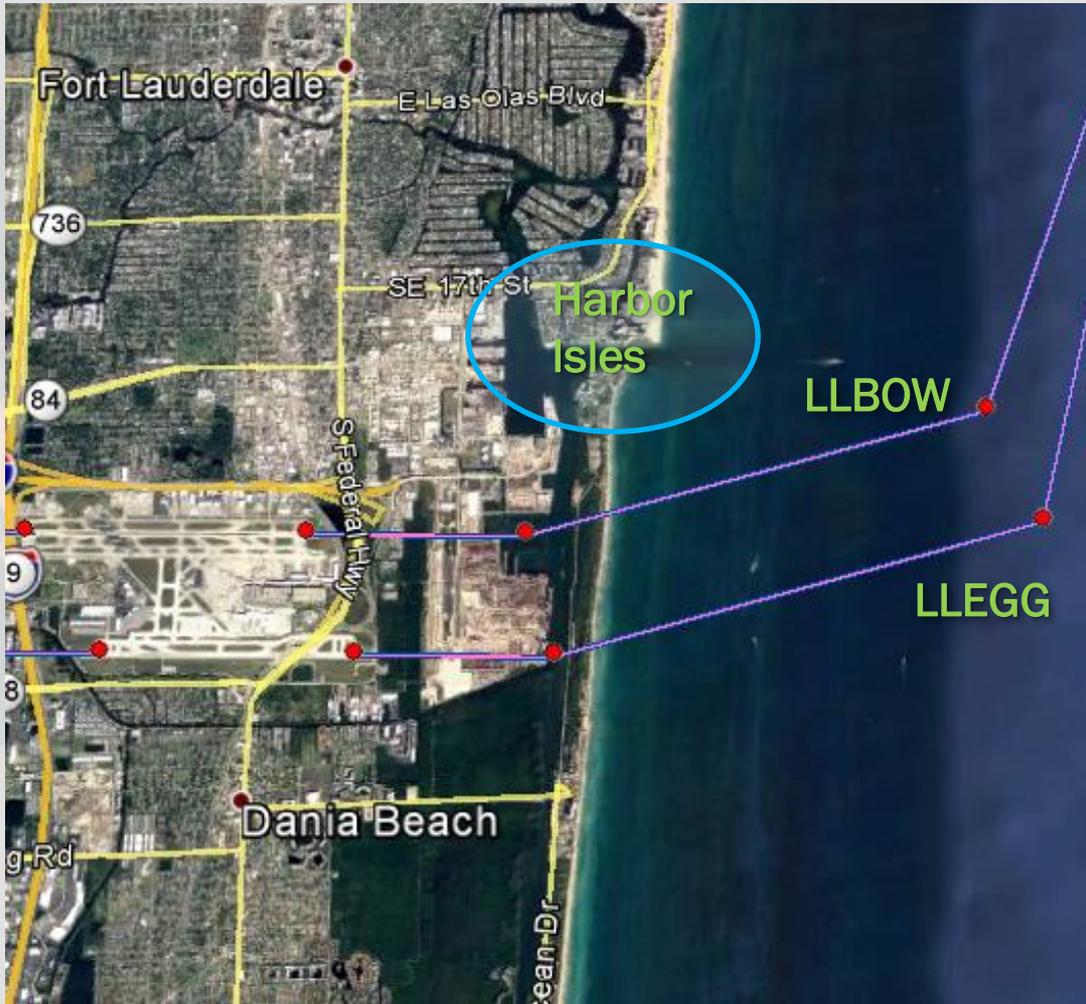


A westward shift in the departure segment between the SHELZ and AGERS waypoints would avoid direct overflights of a number of communities in western Broward County

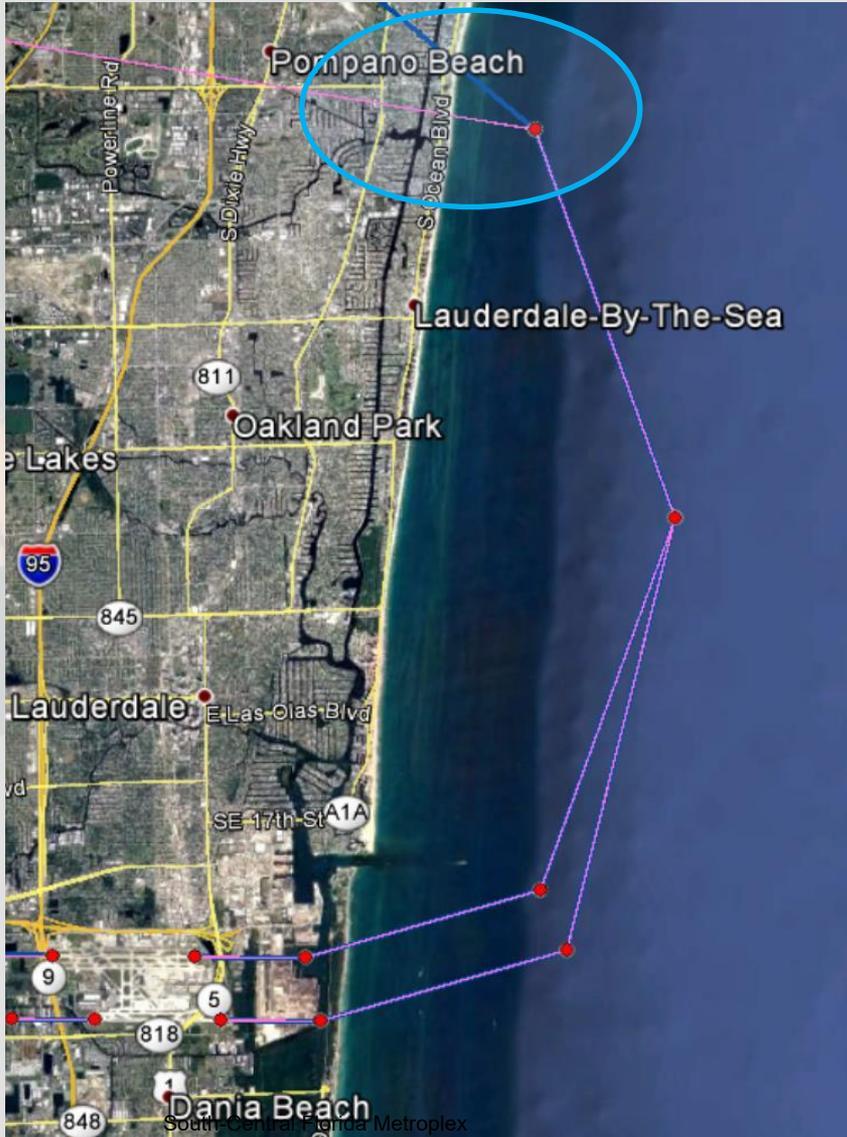




DREDS and KLEET are flyby waypoints with a 287 heading. Changing them to flyover waypoints or a shift further south would help keep aircraft in the compatible corridor south of I-595 longer during climb out.



LLBOW and LLEGG are flyby waypoints with a 080 heading. Changing them to flyover waypoints or a shift further south would help keep aircraft south of the Harbor Isles communities during climb out.



Noise complaints are currently generated where aircraft transition from water back over the coast in the Pompano Beach area. Concentration of overflights has the potential to increase community concerns. Consider using RNAV vector or open RNAV procedures to increase dispersion.

**FAA Responses to Comments of the Broward County Florida Aviation Department
(BCAD) on the Draft EA for the South-Central Florida Metroplex Project**

NOTE: With the exception of the “General Comments” below, this document contains only the FAA’s responses to BCAD’s comment letter dated July 23, 2020.

General Comment (second paragraph on first page): “BCAD has repeatedly emphasized that the FL Metroplex must consider Equivalent Lateral Spacing Operations (ELSO) or "ELSO-like" procedures that would provide communities around FLL with some relief from aircraft overflights and associated noise.”

Response to General Comment: The FAA appreciates BCAD’s comments. The proposed procedure designs as discussed during the virtual workshops would address the ELSO concerns raised by BCAD. To the extent warranted, the FAA has made changes in the Final EA in response to BCAD’s comments.

General Comment (last paragraph on first page): “As noted by the FAA during the Metroplex process, the FAA's project is completely separate from FLL's Part 150 Noise Compatibility Study currently underway. That said, FLL's Part 150 Study submission will also include recommendations to reduce the current divergent heading separation of 15 degrees for departures both to the east and to the west of FLL. The intent of these recommendations is to address long-standing noise concerns from FLL's surrounding communities, especially those located immediately northeast and northwest of the airport”

Response to General Comment: The revised departure procedures from FLL to the east and west were shared with BCAD and are part of the proposed action analyzed in the Final EA. Reduced divergence paths are included for west departures. We have extended the VI legs for east and west departures, which addresses BCAD’s concerns.

The following comments are in response to specific comments dated July 23, 2020, and presented to the FAA in table form. The responses appear here the same order as the comments presented in that table.

Responses to Enclosure- FLL Comments – FAA South-Central FL Metroplex Draft EA – July 23, 2020

BCAD suggests that the Draft EA and accompanying Google Earth files are insufficiently detailed to fully understand the details of the proposed action. To further explain the Metroplex Project to the public, the FAA developed a large number of specific graphics. These were presented to the public during the virtual workshops and are included in Appendix A of the Final EA. These should make it easier for members of the public to visualize particular aspects of the Proposed Procedures.

The comment states that the maps included in the Draft EA were very large in scale, making individual community impacts difficult to understand. Given the expansive Study Area for the Project, detailed graphics at the community level were impractical to produce. And given that the environmental analysis did not indicate the presence of any significant environmental impacts, detailed graphics at the community level were unnecessary for purposes of an environmental

assessment. Nevertheless, the FAA appreciates the public's interest in better understanding localized impacts, and thus produced supplemental material in the form of the Google Earth files. The Google Earth files allow an infinite adjustment of range so the viewer can tailor the materials to specific needs. The FAA's public engagement website also offered a "noise tool" that allows any interested person to type in any address or location within the Study Area and learn the precise change in aircraft noise anticipated nearby.

The comment states it was difficult to understand specific benefits of the proposed project from the Draft EA. The purpose of the Metroplex initiative is to optimize air-traffic control procedures and airspace on a regional scale. This is accomplished by developing air-traffic control procedures that take advantage of technological advances in navigation, such as Area Navigation (RNAV) and Required Navigation Performance procedures, while ensuring that aircraft not equipped to use RNAV flight procedures continue to have access to the National Airspace System. The overall intent is to be as operationally efficient as possible when using the limited airspace available for congested Metroplex areas. Please refer to **Topical Response for Purpose and Need of the Project**. An environmental assessment is designed only to aid the FAA in determining whether an environmental impact statement is necessary. It is required by law to be "concise" and "brief," and is not intended to contain every conceivable detail about an upcoming agency action. The FAA's virtual workshops and accompanying explanatory material that were provided in summer 2020 were designed to give interested members of the public more detail about the Metroplex Project than was included in the text of the Draft EA. We are including the workshop materials in Appendix A to the Final EA for ease of reference.

The comment stated that the virtual workshops provided limited opportunity for public participation. While the FAA typically provides for public participation in the NEPA process, there is no specific requirement that the FAA provide for in-person meetings to discuss a draft environmental assessment. Although the FAA sometimes does so for actions of particular interest, the typical public engagement process was inconsistent with the need during this time to minimize in-person interactions. Insofar as such gatherings were not viable in light of the COVID-19 public health emergency, the FAA expended considerable time and resources to provide a similar level of public involvement through virtual workshops. The virtual workshops enabled individuals to participate via Internet and/or telephone connection. The FAA was mindful that not everyone has Internet access, so a request for information contact number was provided for such instances. One benefit of these workshops is that the recording of the presentations and the accompanying materials remained available after the workshop was over, so real-time participation was not necessary for any member of the public to learn more about the Project.

The FAA recognizes some may have had difficulty downloading the files. Such difficulty may relate to the capacity of each individual computer and the size of the file being downloaded. The EA contains high-quality exhibits with commensurately large file-sizes. The agency believes it is important to use such high-quality exhibits, figures, diagrams, etc. to aid in understanding the matters discussed.

The commenter also made reference to the lack of hard copy access. The FAA made a good-faith effort to disseminate this material widely during these extraordinary times, and sent the Draft EA

electronically to 117 libraries across the Study Area upon public release. The FAA was later told that some of the libraries were not able to provide the electronic version of the Draft Environmental Assessment, but is not certain as to what may have occurred with accessing these documents at certain libraries. Most did not report any problems.

On Monday, June 1st, BCAD received an e-mail in response to an inquiry from BCAD to the FAA relative to the disposition of previous comments regarding proposed Metroplex flight procedures. In response to a BCAD comment suggesting use of ELSO or ELSO like procedures to reduce the separation in heading, FAA indicated that the new procedures would result in a “reduced separation (less than 15 degrees but more than 10 degrees) between simultaneous runway departures”. During the public workshops the week of June 9th, the FAA further clarified this separation to the public as 11 degrees for departures to the west (DREDS waypoint). It is BCAD’s understanding that the future initial headings west would

therefore be 275 degrees (no change) and 286 degrees or a four- degree reduction in the heading separation from the current 290 heading. Please confirm the reduction in departure separations and the resulting benefits for surrounding communities.

Response: The track changes contained in the comment are correct. Revised departure procedures (FLL east and west) as shared with BCAD will be included in the Final EA. Reduced divergence paths are included for west departures. The VI legs for east and west departures have been extended to address comment concerns.

BCAD’s understanding of the departure headings for western departures from FLL is correct. Separate from comments received from BCAD, the FAA reviewed suggestions from the City of Fort Lauderdale to amend departure procedures utilizing the LLBOW waypoint for east departures and the DREDS waypoint for west departures. A review of proposed designs listed in the Draft EA led to a move of 1,499 feet west for the DREDS waypoint, utilizing 11 degrees divergence for west departures. The proposed designs for east bound departures over the LLBOW waypoint were amended to delay the turn after departure by .61 miles. Departure divergence for eastbound departures BCAD will remain approximately 20 degrees, although the newly proposed design addresses comments received concerning earlier turns to the northeast. BCAD was advised of proposed departure amendments on August 14, 2020.

The commenter inquired about the incorporation of procedures that would operate as ELSO or ELSO-like in the Draft EA. All proposed westbound departure procedures are expected to utilize reduced divergence departures. Headings will not be assigned. Aircraft will fly the proposed procedures upon engagement of LNAV at 400 feet AGL.

The commenter asked for clarification between “RNAV off the ground” and other RNAV procedures. RNAV off the ground procedures are procedures used immediately after departure until joining another route. FAA Order 8260.58b, Section 5-6. Vector SID provides criteria for Performance Based Navigation design. All FLL proposed departure procedures will be RNAV off the ground.

The commenter suggests that the Google Earth files shows wider dispersion and flight corridors than those depicted in the materials presented at the virtual workshops. DREDS and SHELZ are flyby waypoints. The corridors depicted in the Google Earth files demonstrate the maximum width of the potential flight corridors, while the narrower corridors presented at the workshops more closely resemble the expected real-world usage of the procedures. This distinction does not indicate any improper assumptions made in the actual noise model. The noise model that FAA used to analyze the procedures accounts for a variety of flight conditions including temperatures, winds and expected circumstances (traffic or weather) that could result in deviations from the centerline of RNAV procedures. Since routes are designed utilizing RNAV 1.0 criteria modelling is made using a distance of one nautical mile on either side of the centerline.

The commenter suggested that the DREDS waypoint should be a flyover waypoint to ensure aircraft do not make early turns. The use of a flyover waypoint does not meet design criteria for this SID.

The commenter requested clarification on whether aircraft departures to the west from FLL would be south of I-595. The proposed designs for westbound FLL departures will route all jet aircraft south of I-595 immediately after departure.

Regarding the commenters request to review modelling flight tracks and methodology, the noise analysis of the Preferred Alternative compared to the No Action Alternative completed for the Final Environmental Assessment (EA) was prepared using the Aviation Environmental Design Tool (AEDT) version 2d, which is the FAA's required noise model. The noise analysis was conducted in compliance with FAA Order 1050.1F. The assumptions made when applying the noise model to analyze this project properly accounted for the increased concentration of operations near the centerline of RNAV procedures. In the FAA's extensive experience in modeling noise impacts from NextGen procedures, the results of the noise analysis are robust and consistent with real-world use of the procedures. *See also **Topical Response for Noise Modelling and Noise Modelling Analysis***. Additional information on the methodology can be found in Appendix I: Noise Technical Report.

The commenter raised concern that the Draft EA does not readily allow for visual comparison of existing procedures to proposed procedures. The extent of the proposed action and the limited purpose of an environmental assessment do not make inclusion of such details necessary or practical in the document itself. The FAA has written the EA in compliance with the CEQ regulations and FAA Order 1050.1F. The EA includes extensive appendices providing the depictions that the commenter has requested, as well as TARGETs outputs and other background information. The FAA held a series of virtual workshops in June 2020 where subject matter experts from the agency were available to directly explain the material to the public and answer questions. At these workshops, the FAA highlighted changes over the general study area and made the requested comparisons relevant to specific major Study Airports. The workshops and all supporting information are still available for the public to review online.

The commenter pointed out that the Google Earth files show wide flight corridors and inquires about the width of corridors for the new procedures. As described above, most operations are

expected to fly closer to the centerline of the procedure, as depicted in many of the graphics contained in Appendix A. Some vectoring of aircraft will still occur, depending on conditions and the judgment of air-traffic controllers. When modelling expected flight tracks to account for noise impacts of the proposed action, we interviewed controllers to determine their expected use of the proposed procedures. With the high frequency of weather events in the south Florida area, it was estimated that radar vectors could be expected for as many as 30% of operations. Modeling of environmental impacts accounts for all areas that procedures could overfly including when they are vectored.

The commenter alleges that the Draft EA does not contain information related any of the modified approach procedures. For a list of the ILS and RNAV instrument approaches, refer to the list of proposed approaches provided in Chapter 3, Table 3-3 of the Final EA. Detailed explanations of the proposed approaches are in the Design Packages located in Appendix G, Attachment 1 of the Final EA.

The commenter expressed concerns over increased concentration of flights over homes. We do not anticipate substantial concerns about overflight concentration because the noise modeling we conducted accounts for that concentration and did not indicate that even a “reportable” increase in aircraft noise would occur in the areas around Fort Lauderdale. Although the environmental assessment is a tool designed only to identify “significant” environmental impacts, we provided the “noise tool” so that all residents could get a clear picture of how specific locations of concern (like their houses or schools) might be affected by the project. Some increase in aircraft noise at some locations is expected in the transition to NextGen but because the Metroplex Project is not increasing the number of operations and because most of the Metroplex procedures remain within historic flight tracks, we do not anticipate substantial concerns related to the small increases in aircraft noises identified at a few locations.

To help maintain safety in the NAS, FAA Air Traffic Control (ATC) will continue to employ air traffic management methods and coordination techniques as described in *Section 1.2.2 Air Traffic Control within the National Airspace System*, of the Environmental Assessment (EA). Therefore, the FAA expects that some dispersion of flight tracks will continue even for some aircraft operating on RNAV procedures. The noise modelling analysis accounts for both concentration and expected continuation of some dispersion. The noise modelling was conducted in accordance with *FAA Order 1050.1F, Environmental Impacts: Policies and Procedures*. Additional modelling information may be found in *Section 5.1.2: Noise Modeling Methodology* of the EA.

The commenter expressed concerns about FAA’s commitment to keep aircraft at higher altitudes over communities west of the airport. Optimized Profile Descents can begin as high as 30,000 feet. They are intended to provide separation from other procedures and airspace to a designated altitude and do not necessarily perform these functions to the ground. Sequencing for final approach is dependent on traffic, airport configuration, weather and other factors, requiring Miami Approach to adjust altitudes dynamically. To enhance approach courses over Weston, the waypoint HOLID attitude restriction was raised to 5,000 feet to match the proposed northwest STAR (TEEKY).

The commenter correctly notes that some references to the FLL CONCK SID remain in the design packages found in the Draft EA. The FLL CONCK SID was removed from the Metroplex Project, and those references to the FLL CONCK SID were removed in the Final EA.

The commenter recommends that LLBOW be a flyover waypoint to keep aircraft from making “early turns.” A flyover waypoint after departure does not meet design criteria for this procedure. Therefore, the FAA is not able to comply with this request. However, the FAA did modify this procedure after receiving comments on the Draft EA to allow aircraft to travel farther to the east before turns must be accomplished. The FAA received numerous comments concerning the proposed designs for the AARPS, BNGOS, GLADZ, TWSTR and VACAY SIDS. Some suggestions were made to extend the runway centerline past the shoreline before turning north. The decision by the controller to issue a turn north is dependent on traffic situations, workload and aircraft performance.

The proposed design was a result of safety considerations and input from the Broward County Aviation Department (BCAD), which advised utilizing RNAV procedures off-the-ground to avoid conflicts with other procedures. Existing departure procedures utilize radar vectors (typically 070 or 090 degrees) issued by controllers for departures from FLL that are routed to the north and east. The development of the proposed AARPS, BNGOS, GLADZ, TWSTR and VACAY SIDS establishes modern air-traffic procedures that mimic existing departures and remain within historical flight tracks. The new procedures take advantage of criteria for departures from parallel runways that permit aircraft headings to diverge within the first two miles from the end of the runway.

The FAA reviewed multiple suggestions from community residents and a specific suggestion from the City of Fort Lauderdale all suggesting the extension of the runway heading portion of the procedure. After reviewing the proposed procedure, the FAA concluded that it could delay the turn to LLBOW by .61 nautical miles farther east compared to the original proposal, for those aircraft departing from FLL Runway 10L. Because the FLL Runway 10R is further to the south, no design changes were made. Absent weather and traffic, aircraft are expected to remain on the procedure.

In response to BCAD’s request to incorporate visual approaches with the proposed procedures, the FAA is not able to incorporate this request at this time because visual approaches are beyond the scope of the South-Central Metroplex Project. Consequently the request would not meet the purpose and need.

The commenter requests clarification of the heading aircraft will use when departing to the SEAZZ and TIDEZ waypoints during simultaneous operations. SEAZZ and TIDEZ waypoints cannot be used simultaneously. All aircraft over these waypoints will be sequential.

The commenter inquires about MIA RNAV SIDS if RNAV “off the ground” procedures occur at FLL. The BNGOS, MHITO, GLADZ, VACAY SIDS serve both MIA and FLL. Only one airport can be designated in the title of the procedure. MIA was chosen since the original design only included MIA. At a later date FLL and other airports (example, Opa-Locka) were added to the procedure.

The commenter inquired about consideration to relocate DREDS to SEAZZ location to keep aircraft over compatible land use areas south of I-595 as long as possible. Please refer to the response above.

The commenter pointed out that the term “waypoint” is not defined in the Draft EA nor is it clear how the procedures will be flown. A waypoint is a specified geographical location used to define an area navigation route or the flight path of an aircraft employing area navigation. Waypoints are identified as either:

- Fly-by waypoint. A waypoint which requires turn anticipation to allow tangential interception of the next segment of a route or procedure, or
- Flyover waypoint. A waypoint at which a turn is initiated in order to join the next segment of a route or procedure.

A complete explanation of Fly-by and Flyover waypoints can be found in the FAA Airman’s Information Manual Chapter 1, Section 2. Performance-Based Navigation (PBN) and Area Navigation (RNAV).

The commenter inquired about how FAA will implement the procedures. The affected facilities will adhere to procedures in FAA Air Traffic Procedures Document 7110.65 pertaining to reduced divergence departures.

BCAD suggests that the northbound leg of the west departure should be moved west to route operations over the Everglades. The AARPS and VACAY SIDS were developed to provide separate departure paths depending on destination. Moving the AARPS procedure west over the Everglades would conflict with the VACAY departure procedure.

BCAD now says it is concerned about the potential to create a concentration of overflights over Pompano Beach when they cross back over the coast. Additionally, BCAD is concerned about concentration of overflights in areas to west between DREDA, SHELZ and AGERS. The FAA has been in continuous contact with BCAD and coordinated the designs of these procedures with BCAD. After release of the DRAFT EA the public was afforded 74 days to provide comment on the proposed procedures. The FAA has reviewed and responded to approximately 3,299 comments received. The comments we received have not indicated concerns north of LLBOW.

The commenter suggests BAHIA STAR could result in community concerns due to concentrated tracks north of Fort Lauderdale during west flow. The existing CORSO STAR historical tracks indicate minimized dispersion for aircraft landing to the west. It is expected that the BAHIA arrival tracks will be similar.

The commenter suggests the change in frequency of use between new CUUDA and old FISEL could result in community concerns. Aircraft assigned the FISEL can be expected to fly the proposed CUUDA STAR. Both procedures share the waypoint BEPAC and flight tracks are expected to be similar over populated areas.

The commenter discusses concentration on north downwind and increases flights over areas northeast of the airport would result in community concerns. It is expected that aircraft should

exhibit similar patterns compared to existing tracks. Controllers currently and will continue to use radar vectors for sequencing. After release of the DRAFT EA the public was afforded 74 days to provide comment on the proposed procedures. The FAA has reviewed and responded to approximately 3,299 comments received. Comments received have not indicated concerns over increased concentration between KEVEY and BEPAC.

BCAD suggest that west flow TEEKY could result in more overflights for Weston and West Plantation. Aircraft assigned the JINGL can be expected to fly the proposed TEEKY STAR. Both procedures share the waypoint BEPAC and flight tracks are expected to be similar over populated areas. It is not expected that aircraft will be radar vectored for sequencing until east of the shoreline.

The commenter is concerned that the proposed procedures will concentrate departing flight paths to the west/northwest. The historical tracks of the existing PREDA 4 departure indicate minimized dispersion for aircraft departing to the west. It is expected that the FEELX, REGAE and SNAPR SIDs tracks will be similar. The FAA has been in continuous contact and coordinated designs with BCAD.

The commenter is concerned community concerns where concentrated tracks cross back over the coast in Pompano Beach. The proposed design for the TWZTR SID remains within historical tracks compared to the THNDR SID related to areas where they cross the shoreline over and near Pompano Beach. It is expected that aircraft assigned the TWZTR will be at similar or higher altitudes compared to current land crossings on the THNDR SID.

The commenter is concerned that VACAY has the potential to create community concerns due to concentration over Pompano Beach, Margate, Coconut Creek and Coral Springs between DREDS and SHELZ. Please refer to **Topical Response for Track Consolidation/Dispersal**.

The commenter is concerned that BNGOS has potential to create concerns over MIA east departures over south Broward and MIA west departures over southwest Broward. The commenter suggests that FLL departures vectored and has potential to concentrate over Pompano Beach which could create community concerns. Please refer to **Topical Response for Track Consolidation/Dispersal**.

The commenter suggest that GLADZ could result in concerns due to concentrate MIA east departures over south/central Broward. FLL west departures will concentrate over Pompano Beach and northern Broward County. Please refer to **Topical Response for Track Consolidation/Dispersal**

The commenter suggest that AARPS and TWTZR SIDS may concentrate over communities north of the airport and could result in community concerns. Please refer to **Topical Response for Track Consolidation/Dispersal**.

We appreciate the attachment of prior rounds of comments from BCAD, which demonstrate the continued discussions that BCAD and the FAA have had about this Project for a long time. BCAD states that its comments submitted in May 2017 and March 2019 that have not been addressed are also included in the most recent comments, and we believe we have addressed them all here.



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June 10, 2020

South-Central Florida Metroplex Draft EA
 Federal Aviation Administration
 Eastern Service Center - Operations Support Group
 1701 Columbia Ave.
 College Park, GA 30337

RE: Comments on Draft Environmental Assessment, South-Central Florida Metroplex Project

Dear Sir or Madam:

On behalf of the Boca Raton Airport Authority (Authority), thank you for the opportunity to comment on the Draft Environmental Assessment (EA) for the South-Central Florida Metroplex Project (Project) proposed by the Federal Aviation Administration (FAA).

The Authority governs Boca Raton Airport (BCT or Airport), one of the premier general aviation facilities in the Southeast. BCT averages more than 70,000 operations annually, including private aviation, corporate travel, and air taxi operations. Nearly 300 aircraft are based at the airport.

The Authority has long supported a variety of efforts to maximize safety and efficiency, both in the air and on the ground. For example, in 2018, BCT opened an onsite Customs and Border Protection facility, enabling international travelers to proceed directly to Boca Raton rather than stopping at another facility to go through customs. Eliminating this stop has helped reduce low altitude flights in the area, enhancing safety for pilots, passengers, and individuals on the ground at and around the Airport.

BCT has also been a leader in efforts to protect both airspace and community noise expectations around the Airport. Working in partnership with the City of Boca Raton, BCT has proactively negotiated and secured appropriate aviation easements, undertaken multiple Part 150 studies

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 Chair • Vice-Chair • Secretary/Treasurer • Member • Member • Member • Member



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(dating back to the 1990s), and developed and implemented a successful community sound insulation program.

It should come as no surprise, then, that we support the overarching purposes of the Project — increasing efficiency and enhancing safety by improving the predictability of transitioning air traffic, the segregation of arrivals and departures, and the flexibility of available procedures.

However, we also have significant concerns about the way the Project is presented in the Draft EA. The document simply does not provide basic information in a format that can readily be used and understood by our community — a failure that seems entirely unnecessary because, according to the Draft EA's conclusions, the impacts of the proposed airspace changes would be less than significant. Stakeholders will not find substantial evidence for those conclusions unless the document is substantially revised and clarified.

To be clear, we have not yet reached a conclusion as to the adequacy of the technical studies on which the Draft EA appears to have been based. In fact, we are not able to fully evaluate the EA's technical elements unless and until the document is clarified. Thus, our primary concern at this point is that the Draft EA is so opaque — so difficult for the community to use and understand, particularly at this time of multiple overlapping health and safety concerns — that it will lead to the same sort of public controversy that has proven to be extremely divisive and damaging in communities like Phoenix, Los Angeles, Denver, and Washington, DC.

Accordingly, we urge you to (a) revise the Draft EA to provide a clear and straightforward description of the proposed action and its impacts; and (b) consider recirculating the document for a second round of public review and comment. Our specific comments and suggestions are as follows:

1. The Draft EA contains a series of tables listing new and proposed procedures. Separately, FAA has also made available downloadable electronic files containing map layers which purport to specify the locations of elements of the proposed action and relevant

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environmental features. For large parts of our community, this approach does not provide a meaningful explanation of current conditions, proposed changes, or the potential impacts of those changes. What is missing is a narrative that describes, evaluates, and characterizes changes — if any — in overflights near BCT. Without that narrative, the community will find it difficult to understand the proposed action, exposing the FAA to criticism that the agency was not transparent. This is particularly important for changes that may involve the coastal areas of Boca Raton. Flights crossing our coastal zone are likely to be at low altitudes and, as you are well aware, coastal land uses are often extremely noise sensitive.

2. The Draft EA's reliance on downloadable map layers is particularly problematic because the map files are difficult to manipulate, poorly organized, and appear to lack important specifics. For example, a reader interested in understanding potential changes at and around BCT would need to simultaneously (a) toggle between multiple map layers within Exhibits 3-17 and 3-19; (b) cross-reference figures and descriptions in various portions of Appendix G; and (c) manipulate additional map layers in separately-downloaded Google Earth files. We do not think this is a reasonable approach to public engagement and participation, and we are concerned that FAA's failure to find a more straightforward way to explain the proposed action and its consequences will create unnecessary confusion, concern, and controversy within our community. We strongly recommend that you revise the main body of the EA to include detailed, stand-alone images of each of the procedures at issue, using a scale and format that allows readers to easily perform side-by-side comparisons (either on a screen or by printing hard copies of the relevant pages) without downloading additional files in unfamiliar formats. This is particularly important in light of the current public health and public safety emergencies facing the community. Interested parties will have to review this document in their own homes, with their own computing resources. And they will not have the benefit of in-person workshops at which important questions can be answered face-to-face, in real time. FAA's own NEPA procedures require the agency to "achieve the policy objectives of 40 C.F.R. § 1500.2 to the fullest extent possible." FAA Order 1050.1F, § 1-8 (emphasis added). And those policy

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objectives, in turn, require FAA to ensure that the NEPA process is “useful to...the public” (40 C.F.R. § 1500.2(a)) and “[e]ncourage and facilitate public involvement in decisions which affect the quality of the human environment” (40 C.F.R. § 1500.2(d)). Those requirements have not been met here.

3. The Draft EA identifies a substantial number of “new” procedures, but it provides little detail about the extent to which those procedures overlay existing routes. The document thereby leaves the impression that the proposed action will fundamentally change overflights throughout the study area — a proposition that, as a matter of common sense, cannot be squared with FAA’s conclusion that no significant impacts will result.
4. FAA has represented that the vast majority of the procedures within the proposed action — including CAPTAN, CLMNT, FEBAD, MAHHI, MLB, MYZNER, RASAE, SHRVY, STOOP, TTYLR, and TURPS, all of which would serve BCT — will not result in modifications to flight paths below 3,000 feet. But those representations are scattered through the 1,156 pages of Appendix G and will be difficult for the general public to find. If it is true that no changes will occur below 3,000 feet, substantial evidence explaining that conclusion should be compiled and summarized within the main body of the EA. However, common sense once again raises questions. It is difficult to understand how extensive changes to procedures above 3,000 feet would have no impact whatsoever on the paths aircraft use to reach that altitude — particularly where, as here, the stated purpose of the proposed action is to concentrate aircraft along more predictable routes. Previous Metroplex projects in Phoenix, Los Angeles, Denver, and elsewhere indicate that failure to address this issue in a transparent, straightforward manner will result in significant public controversy.
5. Relatedly, it is unclear whether FAA’s representations about low-altitude changes refer to direct impacts (i.e., whether the procedure in question itself changes flight paths below 3,000 feet), to indirect impacts (i.e., whether the procedure in question does not itself change flight paths below 3,000 feet but might nonetheless result in changes to the paths followed by low-flying aircraft), or to both. This must be clarified. An EA must fully

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disclose and evaluate the significance of both direct and indirect impacts. See 40 C.F.R. §§ 1508.8, 1508.9(b). If procedures within the proposed action might indirectly result in changes below 3,000 feet, that fact must be clearly set forth and thoroughly addressed in the Draft EA. Again, previous Metroplex projects in other regions have shown this to be an issue of significant public controversy.

6. As noted above, Appendix G contains various representations about elements of the proposed action that will not result in any modifications to flight paths below 3,000 feet. However, it does not provide clear information about whether any procedures within the proposed action might result in reductions or increases in aircraft altitude (even if flight paths remain unchanged) compared to current conditions. It is critically important to make this information available to the public in the main body of the EA, using a clear and accessible format. This, too, has been a significant problem in prior Metroplex projects, and we think it would be a mistake not to learn from — and improve upon — previous failures.
7. One of the ways in which items 3 through 6 (above) could be addressed is by providing additional information about vectoring. Although the proposed action does not appear to include any particular vectoring procedures, several of the RNAV STARs within proposed action — including some of the STARs that would serve BCT — seem to assume that aircraft will be vectored from the end of the procedure to the runway. How, if at all, will such vectoring result in changes to current conditions? How and when should the community expect changes to manifest themselves? And might such changes have environmental consequences?
8. We understand the scope and contents of the Project have significantly changed since the beginning of the FAA's decision-making process. Since the 1990s, we have asked the FAA to consider a Standard Instrument Departure procedure whereby aircraft departing BCT follow the existing noise corridor created by I-95. Such a procedure would help BCT departures reach a higher altitude before flying over residential areas, beaches, and

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parklands, thereby limiting impacts to noise-sensitive areas. This flight path has been approved (as a voluntary measure) in connection with previous Part 150 proceedings. As such, it is a presumptively feasible option that is at least worthy of investigation. Indeed, in prior meetings with FAA, FAA staff informed BCT staff that a departure procedure (initially) following I-95 would be designed and could be included in the Metroplex Project. Unfortunately, the Draft EA says nothing about such a procedure. In fact, there is no evidence that the FAA ever evaluated it. Nor has the agency explained why such an evaluation cannot be undertaken. This failure must be remedied in the next version of the EA (whether a supplemental draft or a final document). Although the range of alternatives considered in an EA may be narrower than the range of alternatives required for an Environmental Impact Statement, NEPA nonetheless requires an EA to provide a reasonable discussion of alternative courses of action. 42 U.S.C. § 4332(2)(E); 40 C.F.R. § 1508.9. And for any alternative excluded from detailed study, the EA must explain the reasons for exclusion. See FAA Order 1050.1F, § 6-2.1(d). The FAA has not complied with those requirements here.

9. We noted with interest FAA's April 14, 2020, Report to Congress pursuant to sections 173 and 188 of the FAA Reauthorization Act of 2018 (Pub. L. 115-254). Among other things, the Report acknowledges that FAA's standard DNL noise metric — on which the analyses and conclusions of the Draft EA are based — should be accompanied by "supplemental metrics" in certain situations. More specifically, the Report notes that "consideration of established supplemental metrics is encouraged" in "unique operational situations" or "for noise sensitive locations" so as to "assist in the public's understanding" of potential noise impacts. See Report to Congress at 18 (emphasis added). The coastal area of Boca Raton is both a "unique operational situation" and a "noise sensitive location" — a place where historical circumstances have created a unique and complex operational environment in close proximity to residential and recreational areas with exceptional noise sensitivity. These are precisely the sort of circumstances in which supplemental metrics should be used to help inform the public of the potential consequences of FAA actions. We respectfully request that FAA add the following supplemental metrics to the

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noise analysis in the EA: (i) a single-event metric (preferably SEL) capable of addressing noise associated with individual flights; and (ii) a “speech interference” metric capable of addressing impacts associated with low-altitude overflights of recreational and residential areas where people spend the vast majority of their time outside.

10. The problems described above are exacerbated by the format and contents of FAA’s Project webinars. As the Supreme Court has long recognized, meaningful public involvement is one of NEPA’s most fundamental requirements. See, e.g., *Baltimore Gas & Electric Co. v. Nat. Res. Def. Council*, 462 U.S. 87, 97 (1983). To comply with the statute, FAA “must insure that environmental information is available to public officials and citizens before decisions are made.” 40 C.F.R. § 1500.1(b). That information “must be of high quality” and “public scrutiny [is] essential.” *Id.* Accordingly, both the Council on Environmental Quality’s NEPA regulations (applicable to all federal agencies) and FAA’s own NEPA procedures require public meetings or hearings where, as here, a proposed action presents complex matters of substantial interest across a broad geographic area. See 40 C.F.R. § 1506.6; FAA Order 1050.1F, § 2-5.3. We understand and agree that convening large, in-person public meetings may be unwise during the ongoing COVID-19 pandemic. But FAA’s proposed substitute — a series of on-line webinars — simply does not provide an adequate opportunity for public involvement in the Metroplex decision-making process. Instead, the webinars consist primarily of generic information about Performance-Based Navigation and a series of talking points repeating elements of the Project’s purpose and need statement. Maps and other graphics are presented at a scale that does not allow viewers to understand the Project or its impacts. And interested parties who ask specific questions about particular elements of the proposed action are generally referred to the Google Earth files available on the Project website — an approach to environmental review whose manifest inadequacy we have addressed above. If the FAA fails to correct these problems, the Metroplex environmental review process will not satisfy NEPA’s public participation requirements.

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11. Finally, we hope you will be sensitive to the fact that many — if not most — of the interested stakeholders within our community may find it difficult to fully participate in this NEPA process in light of the ongoing COVID-19 public health emergency. While we can certainly understand your interest in moving forward with this long-delayed project, we also believe it is important to provide additional time and information to any community members requesting them.

Again, thank you for the opportunity to provide comments on the Draft EA for the South-Central Florida Metroplex Project. We are available to discuss them with you and your team at any time. Please feel free to contact me at 561-391-2202 ex. 211 or at clara@bocaairport.com with any questions.

Sincerely,

Clara Bennett

Clara Bennett
Executive Director

Melvin Pollack • Randy Nobles • James R. Nau • Cheryl Budd • Mitch Fogel • Gene Folden • Bob Tucker
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FAA Responses to Comments of the Boca Raton Airport on the Draft EA for the South-Central Florida Metroplex Project

The Federal Aviation Administration (FAA) has established a process to ensure compliance with the provisions of NEPA through FAA Order 1050.1F, Environmental Impacts: Policies and Procedures (FAA Order 1050.1F). The Draft EA and the Final EA were prepared in accordance with FAA Order 1050.1F and with applicable regulations implementing the National Environmental Policy Act. Notably, federal law requires that environmental assessments be “concise” and that they only “briefly” describe the basis for the agency’s conclusion that environmental impacts will not be “significant.” 40 C.F.R. § 1508.9. The FAA has exceeded those requirements and provided additional information to the public by, for example, providing the online Google Maps noise tool that allows interested parties to look up any address of concern to identify the specific changes in aircraft noise expected at that location. The purpose of the environmental assessment document is to focus on the environmental impacts, but the FAA wanted to ensure that the fuller details of its action were well described to the public to ensure the broadest possible scope of public input. In order to better describe the proposed action to the public, the FAA provided websites to accompany its public workshops that provided specific information about changes at five different areas within the study area (available at www.floridametroplexworkshops.com). There, members of the public could see the detailed depictions of individual procedures requested by the commenter, as well as other information about the proposal. Further information was available by downloading and viewing the Google Earth files provided.

To assess the environmental impacts of the South-Central Florida Metroplex Project, the FAA used a study area encompassing airspace above much of Florida, and including 5 major airports and 16 satellite study airports. Because of both the number of changes to procedures (many of which are changes that would not actually alter flight paths) and the geographic scope involved, the level of detail requested by the commenter would likely result in an environmental assessment document that is more, rather than less, confusing to the general public. For example, the commenter objects that anticipated changes are depicted in multiple figures in the EA rather than in a single graphic. But elsewhere, the commenter requests images at a much smaller scale. In the FAA’s experience, the best way to address the requirements of NEPA and the agency’s interest in additional public outreach is to present the environmental assessment alongside additional information about the proposed action, as was done here. The graphics prepared for the public workshops contain the additional detail requested, and are being included in Appendix A to the Final EA to provide the fullest possible depiction of the proposed action. There is no special knowledge of the Adobe Acrobat program needed to review Exhibits 3-7 through 3-20. Readers unfamiliar with the use of layers in this program can read the step-by-step instructions that appear on each exhibit. The instruction page can then be deselected from the list of layers that is displayed by selecting the Adobe Acrobat icon for layered pages. Because of the size of the General Study Area and the likelihood that a reader may only be interested in procedures serving one or two airports, the various arrival and departure procedures included in the No Action Alternative

(Exhibit 3-7 through 3-13) and the Proposed Action (Exhibit 3-14 through 3-20) are grouped by the Air-traffic Control procedure type (conventional or Area Navigation), operation (arrival or departure), and airport. This allows a reader to easily focus on his or her own area of interest and turn on or off only those flight corridors they are interested in. Similarly, other map features, such as airport icons, federal and state park properties, and highways, can be turned on or off to allow the user to select and view the details he or she is interested in. The information shown in Exhibits 3-7 through 3-20 has also been made available in the Google Earth format located at: http://www.metroplexenvironmental.com/fl_metroplex/fl_introduction.html

The FAA released information on the proposed South-Central Florida Metroplex Project in Google Earth format. This information is provided to allow the public to better understand the proposed procedures and the results of the noise analysis. These files can be downloaded from the project website at http://www.metroplexenvironmental.com/fl_metroplex/fl_docs.html. The information provided in Google Earth format includes the following:

- The flight corridors for the No Action Alternative and the Proposed Action depicted in the exhibits in Chapter 3 of the Final Environmental Assessment (EA)
- The AEDT model flight tracks used to complete the noise analysis prepared for the Final EA and to develop the flight corridors depicted in exhibits in Chapter 3 of the Final EA
- The procedure route designs including waypoints
- The results of the noise analysis for each grid point modeled under each scenario [i.e., Existing Conditions, No Action Alternative (2021 and 2026), and Proposed Action (2021 and 2026)]. As discussed in Section 5.1.2, three groups of points were modeled: 2010 Census block centroids, grid points at 0.5-nautical mile intervals located on a uniform grid that covers the entire General Study Area, and unique points representing Section 4(f) resources and historic sites listed on the National Register of Historic Places.

Because of the size of the data presented, the files that present the flight corridors, flight tracks, and procedure routes are broken up by area: Northeast, Northwest, Southeast, Southwest Quadrants. More information on the noise analysis process, including development of the AEDT model flight tracks can be found in the South-Central Florida Metroplex Noise Technical Report, available at http://www.metroplexenvironmental.com/fl_metroplex/fl_docs.html.

The Proposed Action Procedures were designed wherever possible to remain within the existing historical flight tracks, to help minimize the chance of dramatic shifts in aircraft noise from one location to another, and to avoid the possibility of significant environmental impacts. The Proposed Procedures were analyzed in the Environmental Assessment according to FAA Order 1050.1F, and as discussed in Chapter 4 of the Environmental Assessment, the Proposed Action would not involve any actions that would be inconsistent with management plans for designated Coastal Barrier Resource System (CBRS) area found in the General Study Area. Nor would the proposed action change the use of shoreline zones and be inconsistent with any National Oceanic and Atmospheric Administration approved state Coastal Zone Management Plan. Nor does the South-Central Florida Metroplex project change the current conditions close to the Boca Raton Airport. The intent of the Metroplex Project is for controllers to leave aircraft on the designed procedures as much as possible. Aircraft will be vectored from the end of the STARs that serve

BCT to the end of the runway because current technology does not allow for RNAV-to-the-ground arrivals. However, the fact that these aircraft will be vectored does not mean that low-altitude conditions will change from the status quo, as the runways are not moving and the Metroplex is not anticipated to result in a change of the fleet mix. The noise analysis for the Metroplex project accounts for the possibility of vectoring by controllers when necessary in situations involving safety, increased complexity, weather and other factors.

The alternatives analysis was prepared pursuant to Council on Environmental Quality regulations and Federal Aviation Administration guidance provided in FAA Order 1050.1F. Development of alternatives for the South-Central Florida Metroplex was a multi-step process that is discussed in Chapter 3 of the Environmental Assessment.

The Federal Interagency Committee on Noise (FICON) report, “Federal Agency Review of Selected Airport Noise Analysis Issue,” dated August 1992, concluded that the DNL is the recommended metric and should continue to be used as the primary metric for aircraft noise exposure. There is no single supplemental methodology that is preferable in all situations and these metrics often do not reflect the magnitude, duration, or frequency of the noise events under study. Such supplemental noise analysis is not, by itself, a measure of adverse aircraft noise or significant aircraft noise impact. Because of the diversity of situations, the variety of supplemental metrics available, and the limitations of individual supplemental metrics, the FICON report concluded that the use of supplemental metrics to analyze noise should remain at the discretion of individual agencies. However, associations between aircraft noise and disruption to normal activity like speech are key components in the establishment of FAA’s residential noise impact thresholds defined in FAA Order 1050.1F. Use of DNL 65dB (including the 10dB nighttime penalty) as the threshold for significant noise exposure considers both sleep disturbance and speech interference in its definition. As discussed in Chapter 5 of the EA, the noise modeling analysis indicated that the proposed South-Central Florida Metroplex would not result in changes to noise exposure that exceed the significant noise threshold for the forecasted years of 2021 and 2026. Based on the results of the noise modelling analysis, and the fact that the proposed flight procedures are refinements to existing Area Navigation flight procedures and air-traffic management strategies, the FAA has determined that the use of supplemental noise metrics would not substantially inform its decision in assessing the impacts from the proposed Project.

While the typically provides for public participation in the NEPA process, there is no specific requirement that public participation in the development of an Environmental Assessment take the form of in-person meetings. Insofar as such gatherings are not viable in light of the COVID-19 public health emergency, reasonable efforts were made to allow a similar level of public involvement through virtual workshops. The virtual workshops enabled individuals to participate via Internet and/or telephone connection. The FAA was mindful that not everyone has Internet access, so a contact number was provided for such instances. By providing the information (in the form of graphics, videos, and highly detailed Google Earth files), the FAA endeavored to ensure that any interested members of the public who could not attend the virtual workshops in real time would still have a chance to review all of the material during the public comment period. All of that information continues to be online to ensure the public is fully informed.



June 19, 2020

South-Central Florida Metroplex Draft EA
Federal Aviation Administration
Eastern Service Center – Operations Support Group
1701 Columbia Avenue
College Park, GA 30337

Re: Comments on Draft Environmental Assessment, South-Central Florida Metroplex Project

Dear Sir or Madam:

On behalf of the City of Boca Raton, thank you for the opportunity to comment on the Draft Environmental Assessment (EA) for the South-Central Florida Metroplex Project (Project) proposed by the Federal Aviation Administration.

The City of Boca Raton is proud to be home to the Boca Raton Airport (BCT), which is operated by the Boca Raton Airport Authority (Authority). The City has a long-standing, fruitful relationship with the Authority, and the City Council appoints five of its seven members (the other 2 members are appointed by the Palm Beach County Board of Commissioners). BCT is a prime economic driver for the City, and it has been the leading partner with the City in our joint efforts to protect both airspace and community noise expectations around the Airport. Through our ongoing partnership, BCT has secured appropriate aviation easements, undertaken multiple Part 150 studies, successfully implemented a residential sound insulation program, and fully engaged with the community as a strategic partner.

Like the Authority, the City supports the underlying purpose of the Project to increase efficiency and enhance safety by improving the predictability of transitioning air traffic, segregation of arrivals and departures, and flexibility of procedures.

The City also shares the Authority’s significant concerns about how the project is presented in the Draft EA. The document does not provide basic information in a format that can be understood by our community. It appears that the impacts of the proposed airspace changes would not be significant, but community stakeholders will likely be unable to find evidence to support that conclusion unless the document is revised and clarified. The EA and its contents should be fully transparent to all interested parties, particularly potentially affected stakeholders.

(cont.)

FAA-South-Central Florida Metroplex Draft EA
Page 2

The Authority has provided us with a copy of their letter to you dated June 10, 2020. The City agrees with the Authority's position as expressed in that letter, and we urge the FAA to provide full consideration to the Authority's concerns and to implement its recommendations regarding the Project and the Draft EA.

Thank you again for the opportunity to comment on the Draft EA for the South-Central Florida Metroplex Project. If you have questions regarding the City's concerns, please contact Deputy City Manager George Brown at 561-393-7703 or at grbrown@myboca.us.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Leif J. Ahnell', written over a horizontal line.

Leif J. Ahnell, C.P.A., C.G.F.O.
City Manager

/gmm

c: Clara Bennett, Executive Director, Boca Raton Airport Authority
George S. Brown, Deputy City Manager
Maurice Kurland, Alcalde and Fay

FAA Responses to Comments of the City of Boca Raton on the Draft EA for the South-Central Florida Metroplex Project

Thanks you for your comment. City of Boca Raton agrees with the Boca Raton Airport Authority's June 10, 2020 comments on the Draft EA. For a complete response, see the response to that letter in this Appendix.



July 24, 2020

Federal Aviation Administration
Eastern Service Center – Operations Support Group
1701 Columbia Ave.
College Park, GA 30337

Re: Comments on Draft Environmental Assessment
South-Central Florida Metroplex Project

Dear Sir or Madam:

This letter provides comments of the City of Fort Lauderdale on the Draft Environmental Assessment (“EA”) for the South-Central Florida Metroplex Project (“Project”) proposed by the Federal Aviation Administration (“FAA”).

One of the City’s most important policy concerns is the urgent need to address noise impacts arising from departure procedures at Fort Lauderdale-Hollywood International Airport (“FLL”). The Fort Lauderdale City Commission, which is responsible for setting policy under our Commission-Manager form of government, has issued multiple resolutions calling on the FAA to make common-sense changes that will protect residential neighborhoods from low-flying FLL departures.¹

The City is also an airport sponsor of the Ft. Lauderdale Executive Airport. A number of other general aviation airports are located nearby as well. For these reasons, too, takeoffs, landings, and overflights, as well as proper design and implementation of air traffic procedures, are of critical importance to the City.

Indeed, the City has committed considerable time, attention, and resources to studying air traffic issues. Those studies show that FLL departures often fail to follow existing, published flight procedures, which generally overfly the Atlantic Ocean (to the east of FLL) and industrial areas (to the west) so as to minimize impacts on noise-sensitive areas. Instead, FAA controllers vector aircraft over residential neighborhoods at low altitude. When FLL is in east flow, for example, flights with destinations to the north and west are often instructed to make a series of turns that result in two successive low-altitude crossings over noise-sensitive residential communities along the coast. And when FLL is in west flow, flights to the north and northeast are often given an immediate right turn,

¹ See Attachment 1.

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bringing them over residential communities such as Lauderdale Isles. Again, these problems could be avoided by simply following existing, published procedures.²

As you can imagine, then, we noted with interest FAA's on-again, off-again effort to implement a Metroplex NextGen project in south and central Florida. After all, one of the core elements of the Metroplex program has been to increase the predictability and efficiency of air traffic by implementing satellite-based Area Navigation ("RNAV") procedures — procedures expressly designed to concentrate aircraft along predictable routes and minimize vectoring.

Over the course of the South-Central Florida Metroplex process, however, we have grown increasingly concerned about (i) the FAA's failure to present the Project in a transparent fashion that is meaningful and understandable to the public and (ii) fundamental flaws in the agency's proposed RNAV procedures themselves. The Draft EA does not provide our community with essential information in a format that can readily be used and understood. And a detailed expert analysis — applying technical tools and expertise unavailable to the general public — reveals that reasonable, unevaluated alternatives to FAA's proposed FLL departure procedures would provide safe, efficient, and predictable air traffic over southeast and southwest Fort Lauderdale, while reducing noise impacts on residential neighborhoods. Put simply, the EA fails to meet even the most basic requirements for environmental review under the National Environmental Policy Act ("NEPA").

To remedy these fundamental problems, the FAA must (i) update proposed FLL departure procedures to advance Project purposes while avoiding unnecessary noise impacts on residential communities in southeast and southwest Fort Lauderdale; (ii) prepare and implement an enforceable plan to ensure that FLL departures follow published procedures; and (iii) revise and recirculate the Draft EA to provide a clear and straightforward account of the (updated) proposal for FLL departure procedures and their impacts. If the FAA fails to take these steps, it will not have a legally defensible basis on which to approve the Project.

Our concerns should not come as a surprise. Nationwide, Metroplex projects have been characterized by opaque and inadequate environmental review, heated public controversy, legal challenges, and, as a result, impediments to implementation. In city after city, FAA has failed to engage with affected stakeholders in a transparent fashion, leaving airport sponsors and other state and local governments to explain (federal) Metroplex projects to an aggrieved public.³ In Florida, earlier efforts to initiate the Metroplex process were greeted with considerable consternation, which may help explain why the Draft EA is years behind schedule. And Congress, recognizing the seriousness of this situation, has mandated improved transparency and accountability. In short, FAA

² Of course, failure to follow procedures is not the official subject of the instant EA. But it helps underscore the importance of accurate, transparent and reliable Project information to our community.

³ Examples include, but are not limited to, Phoenix, Los Angeles, Baltimore, and Denver.

should be well aware that Metroplex environmental reviews require attention to transparency and public engagement, and the agency has had ample time to learn from its prior mistakes. Against this backdrop, the pervasive, fundamental defects in this Project's Draft EA are especially disappointing.

Our specific comments and suggestions appear below. **Part A** addresses fundamental deficiencies in the Draft EA and the FAA's public engagement. **Part B** explains how the FLL departure procedures proposed can be optimized to satisfy Project purposes while also minimizing noise impacts to the City's residential neighborhoods. **Part C** identifies the specific actions requested by the City.

A. The Draft Environmental Assessment

1. A substantial portion of the Draft EA consists of boilerplate descriptions of Metroplex, RNAV, and the National Airspace System. Project-specific information is largely limited to a series of tables listing new and proposed procedures and maps (with separately downloadable map layers) purporting to identify the proposed action and its relationship to various population centers and land uses. The EA contains virtually no *analysis* explaining, in narrative form, FAA's proposed air traffic changes, the potential environmental consequences of those changes, and reasonable alternatives thereto. As a result, the document does not provide our community with a concise, analytic, plain-language environmental review, as NEPA requires.⁴
2. We are particularly concerned about the FAA's apparent reliance on separately downloadable map layers. These files are virtually impossible for the general public to download, work with, and organize. To obtain a detailed understanding of current and proposed FLL departure procedures, for example, a user must simultaneously cross-reference Adobe maps from the main body of the Draft EA, technical design notations from the Draft EA's appendices, and separately downloaded map layers visible only on the Google Earth platform. All of this requires technical expertise and computing resources that are simply beyond the reach of the general public, particularly in a time of multiple public health and safety emergencies. The map layers are not available on mobile devices, and they are so large as to be unmanageable on all but the most recent desktop computers and the fastest internet connections. Our City's public computers are not designed for downloading and manipulating these files, and the FAA has not made alternative arrangements for members of our community who cannot access state-of-the-art computing equipment or suffer from disabilities. FAA's failure in this regard is particularly frustrating because the agency should have been aware that libraries, schools and other institutions that might have high performance computers would not be readily available to the public during the COVID-19 pandemic. The overall result of FAA's flawed approach has been widespread, needless confusion and

⁴ See 40 C.F.R. § 1500.4.

public controversy about the scope of the Project and the degree, extent, and nature of its impacts. We believe the agency can — and must — do better. To provide the general public with a reasonable opportunity to participate in the NEPA process, the main body of the Draft EA should be revised to provide detailed, stand-alone descriptions of each proposed procedure, the extent to which each proposed procedure is anticipated to result in changes to actual flight tracks and the locations, altitudes, and environmental effects of any such changes, in each case accompanied by maps or other images that are formatted and scaled to permit the general public to perform side-by-side comparisons without downloading additional documents and files in unfamiliar formats. If electronic access is needed to understand FAA's data, the data must be formatted to permit access by the lay public on mobile devices or commonly available home computers. Unless the Draft EA is revised in this manner, it will not satisfy the public information and participation mandates of NEPA and FAA Order 1050.1F.

3. Although the Draft EA contains several charts listing components of a “no action” alternative, the document fails to address the relationship between these baseline conditions and existing, published FLL flight procedures. This is a major omission. As explained above, FAA has blatantly and repeatedly failed to ensure that FLL departures follow published departure procedures. As a result, the “no action” alternative presented in the Draft EA does not represent the regulatory *status quo*. In other words, the Draft EA's environmental baseline is not something that has ever been subject to environmental review under NEPA. Proceeding from such a baseline risks distorting the true consequences of FAA's proposal for Fort Lauderdale residents.⁵
4. Understandably, our residents are most interested in understanding the Project's potential to result in low-altitude flight path changes. FAA has represented that most of the procedures within the proposed action — including AARPS, BNGOS,

⁵ It is also worth noting that the Council on Environmental Quality's (CEQ's) current NEPA regulations, in effect through at least September 15, 2020, require FAA to fully evaluate the cumulative effects of the proposed action — defined to include the incremental impact of the proposed action when combined with the effects of other “*past*, present and reasonably foreseeable future actions.” 40 C.F.R. § 1508.7 (emphasis added). By failing to address the gap between “no action” conditions and currently-approved procedures, the Draft EA violates this fundamental environmental review mandate. True, recently-announced amendments to CEQ's regulatory framework purport to strike the concept of cumulative impacts. See 85 Fed. Reg. 43304, 43343-44 (July 16, 2020). But the effective date of those amendments remains months away. *Id.* at 43372-73. And it would be a serious mistake for FAA to ignore cumulative impacts notwithstanding the amendments' effective date. CEQ's decision to delete cumulative impacts from its regulations will certainly be challenged and is likely to be vacated. See, e.g., *Kleppe v. Sierra Club*, 427 U.S. 390 (1976) (Supreme Court recognition of the importance of cumulative impact analysis). And even if the elimination of cumulative impacts analysis were to survive judicial review, CEQ's amended regulations would nonetheless require FAA's environmental baseline to account for cumulative trends and conditions. *Id.* at 43331.

FEELX, GLADZ, REGAE, SNAPR, TWZTR, VACAY, all of which would serve FLL — do not involve flight path modifications below 3,000 feet. Unfortunately, those representations do not appear in the main body of the Draft EA. Instead, they are buried in various subsections of Appendix G, a dense 1,000-page document written for technical specialists rather than the general public. If it is true that no changes will occur below 3,000 feet, that conclusion should be clearly stated — and substantial evidence provided — within the body of the Draft EA. Moreover, the Draft EA must explain how and why changes to flight procedures above 3,000 feet would have no impact on the paths aircraft use to reach that altitude — a proposition that seems contrary to common sense, particularly where, as here, one of the purposes of the Project is to concentrate aircraft along predictable route. This is a matter of substantial public controversy, as several of the Google Earth files linked on FAA’s Project website seem to show a wide dispersion of *different* flight tracks beginning at runway end (and sometimes, oddly, before runway end) for FLL departure procedures. In other words, FAA’s own modeled tracks seem to show changes in flight patterns below 3,000 feet AGL — both changes from what FAA asserts to be the environmental baseline and changes from what appears to be the regulatory *status quo*. See, e.g., Attachment 2.

5. It is also unclear whether FAA’s representations regarding low-altitude flight path changes refer to *all* reasonably foreseeable effects of the proposed action. An EA must fully disclose, evaluate the significance of, and, if necessary, identify mitigation for any such effects, whether directly or indirect resulting from the proposed federal action.⁶ If any of the proposed procedures serving FLL might cause flight path modifications below 3,000 feet, even if only *indirectly*, that fact must be clarified and fully addressed in the Draft EA. Similarly, if FAA’s noise modeling assumes any change in flight paths below 3,000 feet AGL, those modeling assumptions must also be disclosed and explained to the community. After all, FAA’s own NEPA procedures presume that new procedures (or modifications to existing procedures) below 3,000 feet AGL may have the potential for significant environmental consequences.⁷

⁶ Recent CEQ amendments to NEPA’s implementing regulations (*see* footnote 5, above) strike all explicit references to “direct” and “indirect” effects. However, the amended regulations continue to require consideration of effects previously referred to as “indirect,” so long as those impacts are reasonably foreseeable and proximately caused by the proposed action. *See* 85 Fed. Reg. 43375, 43304 (July 16, 2020) (definition of “effects or impacts” in revised version of 40 C.F.R. § 1508.1(g)). Both criteria are easily satisfied here. FAA claims to have conducted extensive modeling of FLL departures; therefore, the locations of anticipated flight tracks (and their impacts) are reasonably foreseeable. And no intervening cause would break the close causal connection between RNAV flight paths, overflights, and the impacts of those overflights.

⁷ *See, e.g.*, FAA Order 1050.1F, §§ 3-1.2(b)(12) (procedures below 3,000 feet AGL normally require preparation of EA to evaluate significance of impacts), 5-6.5(i) (procedures below 3,000 feet AGL excluded from scope of categorical exclusion.)

6. Relatedly, FAA has long championed the RNAV procedures which form the backbone of NextGen by asserting that they allow aircraft to maintain tighter adherence to assigned flight paths. As a practical matter, then, even if the Project would not change *assigned* flight paths below 3,000 feet AGL, the *actual* impacts of implementing the proposed action will likely represent a change from current conditions — aircraft will fly a narrower path, thereby concentrating noise over a smaller area. The impacts of this concentration must be disclosed and analyzed. The EA must explain what, if any changes, are proposed in instructions being given to pilots from the beginning of the takeoff roll and whether those changes in instructions could result in on-the-ground impacts — particularly where aircraft would be below 3,000 feet AGL. And the FAA should confirm that RNAV tracks have been designed to concentrate flights over non-residential areas to the maximum extent possible. Because of the substantial technological difference between traditional radar tracks and RNAV, it would be improper for the agency to *assume* that the assignment of identical tracks will necessarily result in identical impacts between the no-action and Project conditions.
7. Similarly, the Draft EA and its appendices fail to explain whether any of the procedures within the proposed action may result in reductions or increases in aircraft altitude — *even if* flight paths above and/or below 3,000 feet remain unchanged — when compared to current conditions. This information must be provided to the public in the main body of the EA, using a clear and accessible format. This is particularly important for proper consideration and disclosure of impacts associated with east flow departures using the TWZTR and AARPS procedures, both of which involve multiple overflights of residential areas along the coastline — first from west to east, then from east to west — with the potential to impact noise-sensitive communities. As you are doubtless aware, flight paths over coastal communities are a matter of great sensitivity and concern throughout the South-Central Florida Project area. In neighboring Palm Beach County, even small changes have occasioned contentious litigation. And, like their Palm Beach County neighbors, Fort Lauderdale residents have a right to better information about the locations and altitudes at which these coastal overflights will occur.
8. The Draft EA also fails to address FLL's nighttime procedures, originally established in 2015, whereby the facility's south runway is closed between 10:30 p.m. and 6:00 a.m. and departures from the north runway remain on runway heading during that same time period. The Draft EA must either explicitly reaffirm the continuation of these procedures or set out, in detail, the impacts of discontinuing them. Even if implementation of changes to the nighttime preferential runway procedures would be covered by a separate FAA action, it must nonetheless be analyzed in this Draft EA as a connected action. Without this information, the public cannot meaningfully comment on the Project or the Draft EA.
9. Similarly, the Draft EA does not provide meaningful information about aircraft that will not or cannot (for whatever reason) fly RNAV departure procedures. To

provide the public with a meaningful opportunity for comment, the Draft EA must be revised to explain (i) whether such aircraft will continue to be required to remain on assigned heading until 3,000 feet AGL or 3 miles from runway end; and, if not, (ii) how and why will these arrangements be changed, and with what consequences for the community.

10. The noise analysis in the Draft EA relies exclusively on a yearly day-night average sound level metric known as DNL. Our community has voiced strong concerns about exclusive reliance on DNL, which is known to obscure the impact of (i) frequent, short-term noise events such as overflights and (ii) windy conditions. Indeed, in a recent report to Congress, the FAA acknowledged that DNL analyses should be accompanied by “supplemental metrics” for “unique operational situations” and “noise-sensitive locations” in order to “assist in the public’s understanding” of potential noise impacts.⁸ This makes sense. Supplemental metrics provide an important way to help the public understand current and future conditions, particularly where (as here) the DNL metric provides limited information. The Draft EA should be updated to include (i) a single-event noise metric such as SEL; (ii) a “speech interference” metric suitable for addressing the impacts of low-altitude overflights of residential and recreational areas where people spend a significant amount of time outdoors, and (iii) a number-of-occurrences above a defined threshold (e.g., 70 dB) metric to show whether a particular community will experience more or fewer overflights and noise events. The validity and importance of these metrics is acknowledged in FAA’s recent report to Congress,⁹ as well as multiple scientific papers to which the agency has ready access. And NextGen implementation in other communities — Phoenix, Los Angeles, Burbank, Washington, DC, and Minneapolis, to name just a few — clearly demonstrates that such metrics are essential to meeting NEPA’s mandate to take a “hard look” at all environmental issues.
11. Moreover, there appear to be significant errors in the Draft EA’s DNL noise modeling. First, the data provided in the Draft EA is insufficient to support conclusions about the level of dispersion (or concentration) that can be expected if the Project is approved. Without knowing the extent of dispersion, accurate noise modeling is impossible. Second, the Draft EA lacks information about the FAA’s assumptions regarding distribution of traffic among the flight tracks used for modeling purposes. Third, and most fundamentally, the modeled flight tracks themselves look nothing like the precise, concentrated tracks that would be expected for RNAV procedures (see comment 6, above). This has created substantial public controversy about the size, nature, and effects of the Project. To address that controversy, the FAA’s NIRS files (as well as the methodology used to create NIRS tracks) must be made available for public review and comment in

⁸ Federal Aviation Administration, *Report to Congress* (April 14, 2020) at 18. The *Report* was submitted to Congress pursuant to sections 173 and 188 of the FAA Reauthorization Act of 2018, Pub. L. 115-254.

⁹ *Id.* at 17-19.

a format and manner that is reasonably accessible to the lay public. Without that data, the City and other interested stakeholders will not have a meaningful opportunity for input and the controversy will remain unresolved.

12. Relatedly, the noise data presented in the Draft EA is inconsistent with forecast flight paths and operations volumes. In some locations, the Draft EA projects noise increases despite fewer expected overflights. In other locations, the Draft EA projects noise decreases, notwithstanding the expectation of more concentrated overflights. Please make available for public review and comment the flight path geometry and operations used in FAA's modeling. Without this information, it is not possible for interested stakeholders to fully understand the noise exposure forecasts presented in the Draft EA.

13. The problems described above have been heightened by FAA's failure to meaningfully engage with the Fort Lauderdale community. NEPA requires FAA to ensure that environmental information be made available to public officials and residents before decisions are made.¹⁰ To satisfy this mandate, the information must be of high quality and subject to public scrutiny. Accordingly, NEPA's implementing regulations¹¹ and FAA's own NEPA procedures¹² both require robust public engagement, including public meetings where, as here, a proposed action presents complex and controversial matters of substantial interest across a broad geographic area. We understand and agree that alternative means of public engagement may be more appropriate during the ongoing COVID-19 pandemic. But FAA's substitute proceedings — a series of three online webinars — were woefully inadequate even in the unique circumstances of a pandemic. The webinars largely consisted of generic talking points about RNAV and the National Airspace System. Maps and other graphics were often presented at such low resolution that it was impossible for viewers to read text, legends, and other explanatory information.¹³ The technology did not allow for interaction among participants, did not allow participants to see or hear the actual questions posed, and did not permit real-time verbal questions — all essential elements of adequate public meetings, workshops, and hearings. Participants in the webinars have reported numerous problems, including situations where FAA officials (i) refused to respond to public questions and/or (ii) inaccurately paraphrased questions submitted by interested residents.¹⁴ Moreover, a number of participants who tried to complete FAA's sign-up process — an inappropriate impediment to participation in and of itself — received email bouncebacks leading them to believe that they could not join the webinars. These are not intractable problems: throughout the

¹⁰ 40 C.F.R. § 1500.1(b).

¹¹ *See, e.g.*, 40 C.F.R. § 1506.6.

¹² FAA Order 1050.1F, § 2-5.3.

¹³ *See* Attachment 1.

¹⁴ *Id.*

nation, city councils, commissions and boards have figured out in the last four months how to meaningfully engage the public even while convening electronic meetings. Again, the FAA simply must do better. The contrast between the rudimentary technology FAA chose to employ for public engagement purposes and the cutting-edge computing technology needed for the public to access and review the agency's environmental information and data provides could not be more striking.

14. Moreover, we are extremely concerned by FAA's repeated insistence that the webinars — flawed though they were — will not be part of the agency's administrative record. As you know, the record must include all information considered by the agency in reaching its decision. By insisting that the webinars will be excluded from the record, FAA has effectively refused to consider any of the information, comments, and other input provided by the public during the webinar series. There is no sound basis to exclude from consideration public input received in proceedings *convened by the FAA itself*, and we cannot imagine that such an approach would survive judicial review.
15. Many interested residents of Fort Lauderdale may find it especially difficult to participate effectively in the NEPA process in light of ongoing public health concerns regarding COVID-19. We trust you will provide additional time, information, and accommodations to any residents requesting them.

B. Optimization of Departure Procedures From FLL

In addition to the failures of NEPA compliance described above, we are also concerned about fundamental flaws in the substance of the FAA's proposed action. Several of the proposed FLL departure procedures fail to take advantage of clear opportunities to advance Project purposes while minimizing noise impacts to residential neighborhoods.

As we have explained above, residential neighborhoods in southeast and southwest Fort Lauderdale are impacted by the failure of FLL departures to follow existing published flight procedures impacts. In east flow, existing published procedures call for departures from Runway 10L to remain on runway heading until well over the Atlantic Ocean. In west flow, existing published procedures for Runway 28R call for FLL departures to remain on runway heading over industrial areas immediately west of the airport for approximately 3 miles. Instead, FLL departures are often given "early turns" and vectored at low altitude over residential neighborhoods such as the Harbor Inlet area (on the east side) and the Lauderdale Isles neighborhood (on the west side).

If FAA were to implement procedures which carry a greater fidelity to standard RNAV procedures (and less vectoring), the agency would thereby avoid many of the unnecessary noise impacts resulting from these "early turns." Assignment of RNAV headings as an element of the departure procedure (rather than as an open RNAV procedure that is initiated after departure vectoring) would have two key benefits: (i) it would help achieve the Project's stated purpose and need of efficiency, safety, and

predictability; and (ii) it would reduce noise impacts on nearby residential areas that lie to the north of the intended track(s).

Our understanding is that FAA's proposed departure procedures in both east flow (AARPS, GLADZ, TWZTR, and VACAY) and west flow (AARPS, FEELX, REGAE, SNAPR, and VACAY) do, in fact, provide the infrastructure to implement RNAV off the ground (*i.e.*, without initial departure vectoring over residential neighborhoods) and utilize Equivalent Lateral Spacing Operations ("ELSO") for successive departures off the same runway and simultaneous departures on parallel runways, both of which may help realize some of the benefits referenced above. Unfortunately, the procedures (as they are described in the Draft EA) are not optimized to maximize these benefits. We are not aware of any reasonable basis for failing to optimize RNAV operational benefits *and* avoidance of noise impacts, and the Draft EA certainly does not identify one.

We therefore recommend, in the strongest possible terms, the following changes (alternatives) to FAA's proposed east flow and west flow FLL departure procedures.

1. In east flow, the initial runway heading (immediate upon departure) segment for AARPS, GLADZ, TWZTR and VACAY, prior to the turn toward LLBOW waypoint, should be extended beyond the shoreline in order to minimize the potential for noise impacts to residential areas in the Harbor Inlet area. We have analyzed this proposed adjustment utilizing the FAA's Terminal Area Route Generation and Traffic Simulation ("TARGETS") tool, and it meets all design criteria. The initial turn toward LLBOW remains within 2 NM of runways 10 L/R and provides at least 10 degrees of divergence, as required to facilitate ELSO. The adjustment is shown in Attachment 3. Upon request, the City will make its technical experts and their analyses available to the FAA.
2. In west flow, DREDS is the first waypoint on the Runway 28 L/R transitions for AARPS, FEELX, REGAE, SNAPR and VACAY. The location of DREDS should be moved north and west to a point west of Davie Road and south of I-595. Doing so will help ensure low-flying aircraft remain over the industrial area immediately west of FLL and deliver substantial benefits to the Lauderdale Isles neighborhood. We have analyzed this proposed adjustment using TARGETS, and it meets all design criteria. The initial turn to DREDS remains within 2 NM of runways 28 L/R and provides at least 10 degrees of divergence, as required to facilitate ELSO. The adjustment is shown in Attachment 3. Upon request, the City will make its technical experts and their analyses available to the FAA.

These adjustments are consistent with the Broward County Aviation Department's recommendations for both east ("[d]epartures should remain on centerline longer before making the turn to LLBOW waypoint") and west ("keep aircraft over compatible land use areas south of I-595 as long as possible") departures.

It also bears repeating that both proposed adjustments (i) will further the stated purposes and need of the Project; (ii) have been designed using FAA's own TARGETS tool; (iii)

meet all design criteria; (iv) provide noise benefits to affected residential communities; and (v) do not impact any other residential areas. As such, they are reasonable and feasible alternatives within the meaning of NEPA.¹⁵ We stand ready to provide you with any information or data you may need — including TARGETS files — in order to make these changes.

To ensure that all stakeholders realize the benefits of these proposed adjustments, we also request that FAA immediately prepare and implement an enforceable plan to ensure FLL departures adhere to published procedures in both east and west flow operations. We are prepared to work with agency staff on the details of such a plan. However, we must respectfully insist that the plan require reports to the City on plan implementation and enforcement no less than quarterly. Without that level of feedback and coordination, our community cannot be sure of proper plan implementation.

¹⁵ See, e.g., FAA Order 1050.1F, §§ 6-2(d), 7-1.1(e).

C. Requested Actions

In summary, the City requests the following actions by the FAA:

1. Thoroughly revise the Draft EA, correcting all errors noted herein.
2. Recirculate the revised Draft EA for additional public review and comment. The revised Draft EA should be recirculated in a format that allows underlying data to be accessed by the public using generally available mobile and home computer technology. If that is not technologically possible, FAA should host a website where the public can access and, most importantly, manipulate data to produce view maps and flight track information at a scale that shows the location of expected overflights within a several block range.
3. Reconvene a public input session that accords with agency best practices for appropriate outreach and input in the NEPA process. The session should emphasize real-time interaction with interested stakeholders rather than scripted lectures or pre-packaged content. If social distancing is still in effect at the time, the City will be happy to help provide access to available technology and to assist FAA staff in identifying appropriate methods for soliciting public comment.
4. Provide an appropriate comment period on the revised and recirculated Draft EA, recognizing the complexity of soliciting meaningful input during the pandemic. We recommend a 90-day comment period on the recirculated Draft EA, with the document made available appropriate locations. Again, the City will be happy to help make suitable arrangements.
5. In the revised and recirculated Draft EA, provide supplemental noise analysis — using supplemental metrics — as described in these comments.
6. Include in the revised and recirculated Draft EA the two additional reasonable, feasible and practical alternatives presented in these comments.
7. Treat these comments, and the specific alternatives proposed herein, as an airport sponsor request pursuant to Section 175 of the FAA Reauthorization Act of 2018.¹⁶

¹⁶ For the record, we note that nothing in these comments should be interpreted as waiving (or otherwise limiting) the City's right to petition for redress of community concerns under Section 175 of the FAA Reauthorization Act of 2018, Pub. L. No. 115-254. To the contrary, the City expressly reserves its rights under Section 175 and other applicable provisions of state and federal law

Thank you for the opportunity to comment on the Draft EA for the South-Central Florida Metroplex Project. We would welcome the opportunity to discuss with the Project team our comments and our proposed adjustments to FLL departure procedures, and we will be reaching out to Regional Administrator O'Harra shortly to make arrangements. Should you have any questions in the meantime, please do not hesitate to contact my office.

Sincerely,



Chris Lagerbloom, ICMA-CM
City Manager

cc: United States Senator Marco Rubio
United States Senator Rick Scott
United States Representative Ted Deutsch
United States Representative Debbie Wasserman Schultz
Florida Senator Gary Farmer
Florida Representative Michael Gottlieb
Florida Representative Evan Jenne
Steve Geller, Vice Mayor, Broward County
Lamar Fisher, Commissioner, Broward County
Beam Furr, Commissioner, Broward County
Tim Ryan, Commissioner, Broward County
Mark Gale, CEO and Aviation Director, Broward County Department of Aviation
City Commission, City of Fort Lauderdale
Alain Boileau, City Attorney, City of Fort Lauderdale
Denise Horland, Commissioner, City of Plantation
Nick Sortal, Commissioner, City of Plantation

Attachment 1

RESOLUTION NO. 20-107

A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF FORT LAUDERDALE, FLORIDA, REQUESTING THAT THE FEDERAL AVIATION ADMINISTRATION MODIFY ITS SOUTH-CENTRAL FLORIDA METROPLEX PROJECT SO AS TO EMPLOY DEPARTURE PROCEDURES AT FORT LAUDERDALE-HOLLYWOOD INTERNATIONAL AIRPORT THAT ADDRESS NOISE IMPACTS TO THE RESIDENTS OF THE CITY.

WHEREAS, airspace issues relating to Fort Lauderdale-Hollywood International Airport (FLL) are managed by the Federal Aviation Administration (FAA) pursuant to federal statutes, regulations, and procedures; and

WHEREAS, on March 17, 2015, after receiving reports of low-flying aircraft outside of established departure corridors from neighbors residing in the southeast and southwest sections of the City of Fort Lauderdale, the City adopted Resolution number 15-68 identifying the need for a proactive approach to address aircraft noise at FLL by exploring flight pattern opportunities that are reasonable and provide operational safety while also reducing noise impacts to residential areas; and

WHEREAS, on May 17, 2016, after receiving further reports of low-flying aircraft over residential areas in southwest Fort Lauderdale, the City adopted Resolution number 16-85 identifying the need for modified departure procedures that are reasonable and provide operational safety, while reducing aircraft noise impacts to southwest Fort Lauderdale residential neighborhoods; and

WHEREAS, current FAA flight procedures purport to require aircraft departing FLL in west flow to remain over industrial areas immediately west of the airport; and

WHEREAS, notwithstanding existing procedures purporting to require aircraft to remain over industrial areas immediately west of the airport, the City has received reports that neighbors living in the southwest section of Fort Lauderdale continue to experience low-flying aircraft over residential areas and resulting noise impacts, indicating that existing procedures are not being flown as designed; and

WHEREAS, neighbors living in southwest Fort Lauderdale filed 44,451 aircraft noise complaints with the Broward County Aviation Department in 2019, which is 4 times more than the total of all the complaints filed by the citizens in the rest of Broward County; and

WHEREAS, the FAA has proposed the South-Central Florida Metroplex Project (Project), which, among other things would implement Area Navigation (RNAV) departure procedures from FLL; and

WHEREAS, in 2019, FAA convened a series of "public workshops" at which neighbors living in southwest Fort Lauderdale requests that FAA identify and implement departure procedures whereby aircraft departing FLL in west flow would be required to remain over industrial

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areas immediately west of the airport rather than crossing over residential areas of the City north of Interstate-595; and

WHEREAS, on May 10, 2020, the FAA released a Draft Environmental Assessment for the Project; and

WHEREAS, the Draft Environmental Assessment does not address the departure procedures requested by southwest Fort Lauderdale neighbors during FAA's 2019 public workshops; and

WHEREAS, the Draft Environmental Assessment, together with its appendices and associated data files, predict that if the Project is implemented aircraft departing FLL in west flow will not be restricted to industrial areas immediately west of the airport, but will also fly over residential areas of southwest Fort Lauderdale at low altitudes; and

WHEREAS, the Draft Environmental Assessment also predicts that if the Project is implemented aircraft departing FLL in east flow will fly over residential areas of southeast Fort Lauderdale at low altitudes; and

WHEREAS, the FAA did not hold public meetings or hearings on the Draft Environmental Assessment or the proposed Project, but instead hosted a series of Metroplex "webinars"; and

WHEREAS, the FAA has repeatedly stated that neither the Metroplex webinars, nor the public questions and comments submitted as part of the webinars, nor the FAA's responses to those questions and comments will be part of the decision-making record for the Project; and

WHEREAS, the City has received numerous reports of problems with the FAA's Metroplex webinars, including reports of situations where FAA officials refused to respond to some of the questions submitted by the public, situations where FAA officials inaccurately paraphrased questions submitted by the public, and situations where the graphics and images presented by the FAA were too small to be read by participants; and

WHEREAS, the Draft Environmental Assessment also uses "averaged" computer models in depicting noise levels, which does not accurately depict high short-term noise levels that occur frequently, especially during periods of west winds; and

WHEREAS, Section 175 of the Federal Aviation Administration Reauthorization Act of 2018 requires the FAA to consider using diverging departure flight paths or later spacing to address community noise concerns when proposing or adjusting departure procedures, if requested the by the airport operator and community leaders;

RESOLUTION NO. 20-107

PAGE 3

NOW, THEREFORE BE IT RESOLVED BY THE CITY COMMISSION OF THE CITY OF FORT LAUDERDALE, FLORIDA:

SECTION 1. That the City Commission requests FAA take all reasonable steps to identify, evaluate, and implement alternatives to currently proposed departure procedures so as to minimize aircraft over residential areas of southeast and southwest Fort Lauderdale, including alternatives consistent with Section 175 of the Federal Aviation Administration Reauthorization Act of 2018.

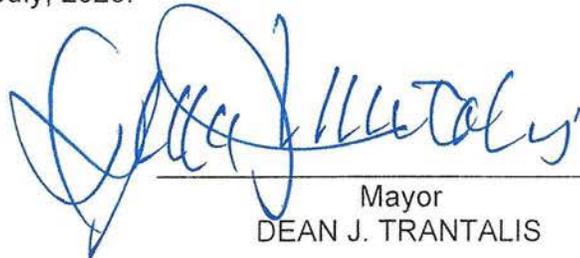
SECTION 2. That the City Commission requests FAA, in taking the actions referenced in Section 1, to identify, evaluate, and implement alternative departure procedures no less protective of the City's residential areas than the proposals set forth in the City's formal comments on the Draft Environmental Assessment.

SECTION 3. That the City Commission requests FAA immediately prepare and implement an enforceable plan to ensure FLL departures follow published departure procedures in both east and west flow operations, and, further, that the FAA report to the City Commission no less than quarterly regarding the plan's implementation and enforcement.

SECTION 4. That the City Clerk is directed to send a certified copy of this resolution to the Department of Transportation, Federal Aviation Administration, and the Director of Aviation for the Broward County Aviation Department.

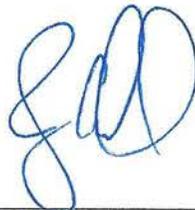
SECTION 5. That this Resolution shall be in full force and effect upon final passage.

ADOPTED this 7th day of July, 2020.



Mayor
DEAN J. TRANTALIS

ATTEST:



City Clerk
JEFFREY A. MODARELLI

CERTIFICATION

I certify this to be a true and correct copy of the record of the City of Fort Lauderdale, Florida.

WITNESSETH my hand and official seal of the City of Fort Lauderdale, Florida, this the 13th day of June, 2016
[Signature] City Clerk

RESOLUTION NO. 16-85

A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF FORT LAUDERDALE, FLORIDA, ENCOURAGING BROWARD COUNTY AND THE FEDERAL AVIATION ADMINISTRATION TO WORK TOGETHER IN A COOPERATIVE PROACTIVE APPROACH TO REDUCE AIRCRAFT NOISE AT FORT LAUDERDALE-HOLLYWOOD INTERNATIONAL AIRPORT BY EXPLORING FLIGHT PATTERN OPPORTUNITIES THAT ARE REASONABLE AND PROVIDE OPERATIONAL SAFETY, WHILE REDUCING AIRCRAFT NOISE IMPACTS TO RESIDENTS OF THE SOUTHWEST AREA OF THE CITY OF FORT LAUDERDALE.

WHEREAS, Fort Lauderdale-Hollywood International Airport (FLL) is owned by Broward County and operated by the Broward County Aviation Department (BCAD); and

WHEREAS, all airspace issues are managed by federal regulations and procedures; and

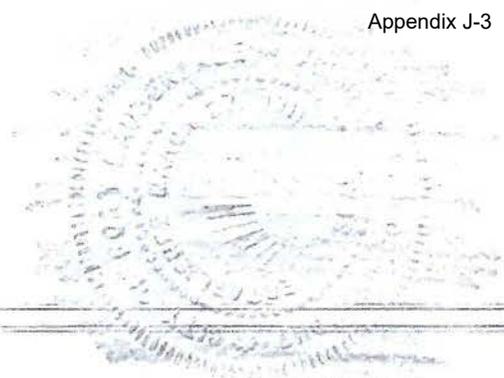
WHEREAS, on March 17, 2015, the City issued resolution number 15-68 after receiving reports from neighbors living in the southeast and southwest sections of the City, that aircrafts are flying over their homes, which depart FLL Runway 10L and 28R; and

WHEREAS, on August 3rd, 2015, BCAD issued a memo to Mayor Seiler stating that the, "FAA intends to implement the departure corridors as depicted on the attached layout in accordance with their letter of July 17th. Pilots will also be requested to maintain their heading within the respective corridor until an altitude of 3,000 feet, or a distance from the runway end of three miles is reached."; and

WHEREAS, the City has received numerous reports from citizens living in the southwest sections of the city that the westbound departure heading changes have resulted in more aircraft flying over their homes after Aug. 3rd; and

WHEREAS, the "runway heading" for westbound departures on Runway 28R is in accordance with the EIS, and is believed to be used for westward departures from 10:30 PM to 6:00 AM; and

WHEREAS, the current westbound departure headings now place departing aircraft over residential neighborhoods, instead of over industrial areas west of Runway 28R; and



RESOLUTION 16-85

PAGE 2

WHEREAS, the Part 150 Noise Compatibility Study to be conducted starting in 2016 will take 18 to 24 months to complete; and

WHEREAS, the citizens in the southwest section of the City are being denied their right to Quiet Enjoyment of their homes due to unbearable aircraft noise as a result of the August 3rd heading changes;

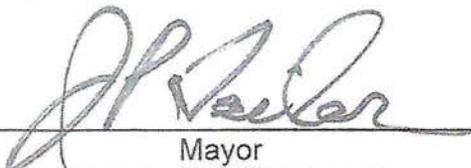
NOW, THEREFORE BE IT RESOLVED BY THE CITY COMMISSION OF THE CITY OF FORT LAUDERDALE, FLORIDA:

SECTION 1. That the City Commission hereby encourages Broward County and the Federal Aviation Administration (FAA) to work together in a cooperative proactive approach to reduce aircraft noise at Fort Lauderdale-Hollywood International Airport by modifying current flight pattern and departure procedures that are reasonable and provide operational safety, while reducing aircraft noise impacts to southwest Fort Lauderdale neighborhoods.

SECTION 2. That the City Clerk is directed to send a certified copy of this resolution to the Mayor of Broward County and the Board of County Commissioners, the County Administrator, the Director of Aviation for Broward County's Aviation Department and the Department of Transportation, Federal Aviation Administration, and Air Traffic Manager of the Fort Lauderdale-Hollywood International Airport.

SECTION 3. That this Resolution shall be in full force and effect upon final passage.

ADOPTED this the 17th day of May, 2016.



Mayor
JOHN P. "JACK" SEILER

ATTEST:



City Clerk
JEFFREY A. MODARELLI

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RESOLUTION NO. 15-68

A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF FORT LAUDERDALE, FLORIDA, ENCOURAGING BROWARD COUNTY AND THE FEDERAL AVIATION ADMINISTRATION TO WORK TOGETHER IN A PROACTIVE APPROACH TO REDUCE AIRCRAFT NOISE AT FORT LAUDERDALE-HOLLYWOOD INTERNATIONAL AIRPORT BY EXPLORING FLIGHT PATTERN OPPORTUNITIES THAT ARE REASONABLE AND PROVIDE OPERATIONAL SAFETY, WHILE REDUCING AIRCRAFT NOISE IMPACTS TO SURROUNDING RESIDENTS.

WHEREAS, Fort Lauderdale-Hollywood International Airport (FLL) is owned by Broward County and operated by the Broward County Aviation Department (BCAD); and

WHEREAS, with the recent opening of the south runway at FLL, the Federal Aviation Administration (FAA) implemented a new procedure to route aircrafts using the north runway in a manner that brings aircrafts closer to some of the neighborhoods of Fort Lauderdale; and

WHEREAS, all airspace issues are managed by federal regulations and procedures; and

WHEREAS, the City has received reports from neighbors living in the southeast and southwest sections of the City, that aircrafts are flying over their homes, which depart FLL Runway 10L and 28R; and

WHEREAS, on February 18, 2015, Broward County Mayor Tim Ryan hosted a public meeting along with BCAD Airport Director, Mr. Kent George, who provided a presentation on the *Noise Mitigation Program* underway at FLL; and

WHEREAS, during the meeting, the Airport Director explained that BCAD will be conducting a Noise Study for FLL in 18 months (August 2016); and

WHEREAS, Fort Lauderdale neighbors affected by FLL aircraft noise are encouraged to participate in the County's noise study through the various public meetings and workshops; and

15-68

RESOLUTION NO. 15-68

PAGE 2

WHEREAS, the City supports BCAD's current efforts to address noise with BCAD's Quieter Sky Reports, Airport Noise Abatement Committee (ANAC), and Aircraft Noise Complaint line; and

WHEREAS, The City shall continue to encourage FLL stakeholders to take a proactive approach to discuss and explore opportunities with the FAA that may reduce aircraft noise impacts to our neighbors, especially during the most noise-sensitive hours;

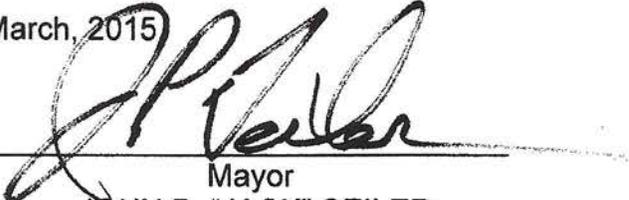
NOW, THEREFORE, BE IT RESOLVED BY THE CITY COMMISSION OF THE CITY OF FORT LAUDERDALE, FLORIDA:

SECTION 1. That the City Commission hereby encourages Broward County and the Federal Aviation Administration (FAA) to work together in a proactive approach to reduce aircraft noise at Fort Lauderdale-Hollywood International Airport by exploring flight pattern opportunities that are reasonable and provide operational safety, while reducing aircraft noise impacts to surrounding residents.

SECTION 2. That the City Clerk is directed to send a certified copy of this resolution to the Mayor of Broward County and the Board of County Commissioners, the County Administrator, the Director of Aviation for Broward County's Aviation Department and the Department of Transportation, Federal Aviation Administration, Air Traffic Manager of the Fort Lauderdale-Hollywood International Airport.

SECTION 3. That this Resolution shall be in full force and effect upon final passage.

ADOPTED this the 17th day of March, 2015

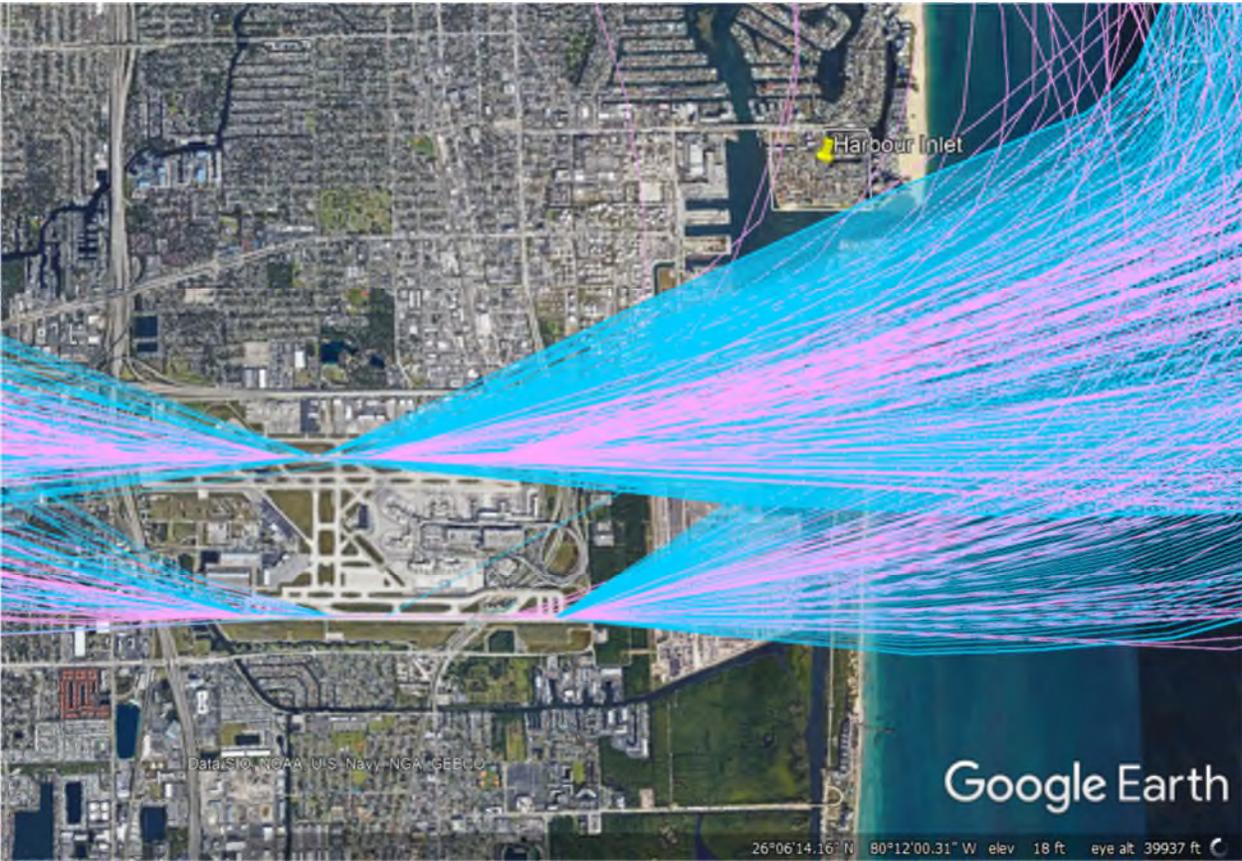

 Mayor
 JOHN P. "JACK" SEILER

ATTEST:


 City Clerk
 JONDA K. JOSEPH

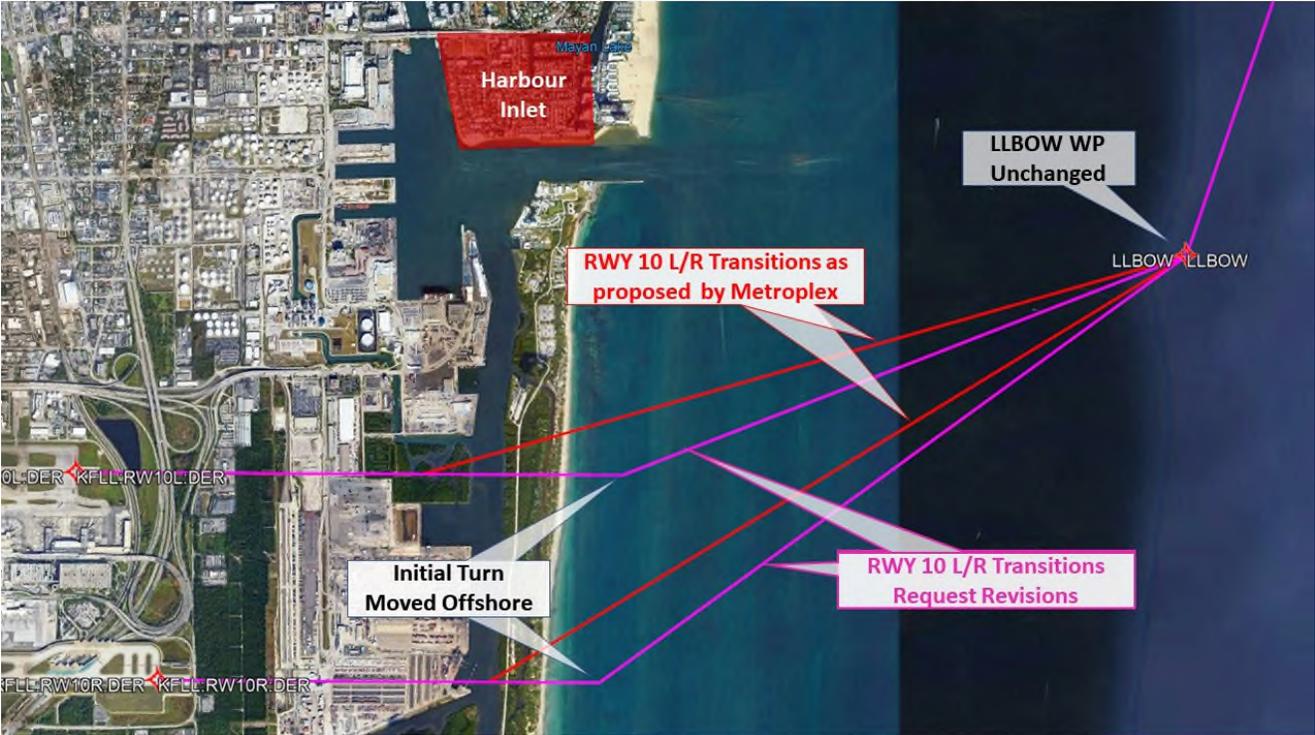
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Attachment 2



Attachment 3

East Flow Departure Adjustments



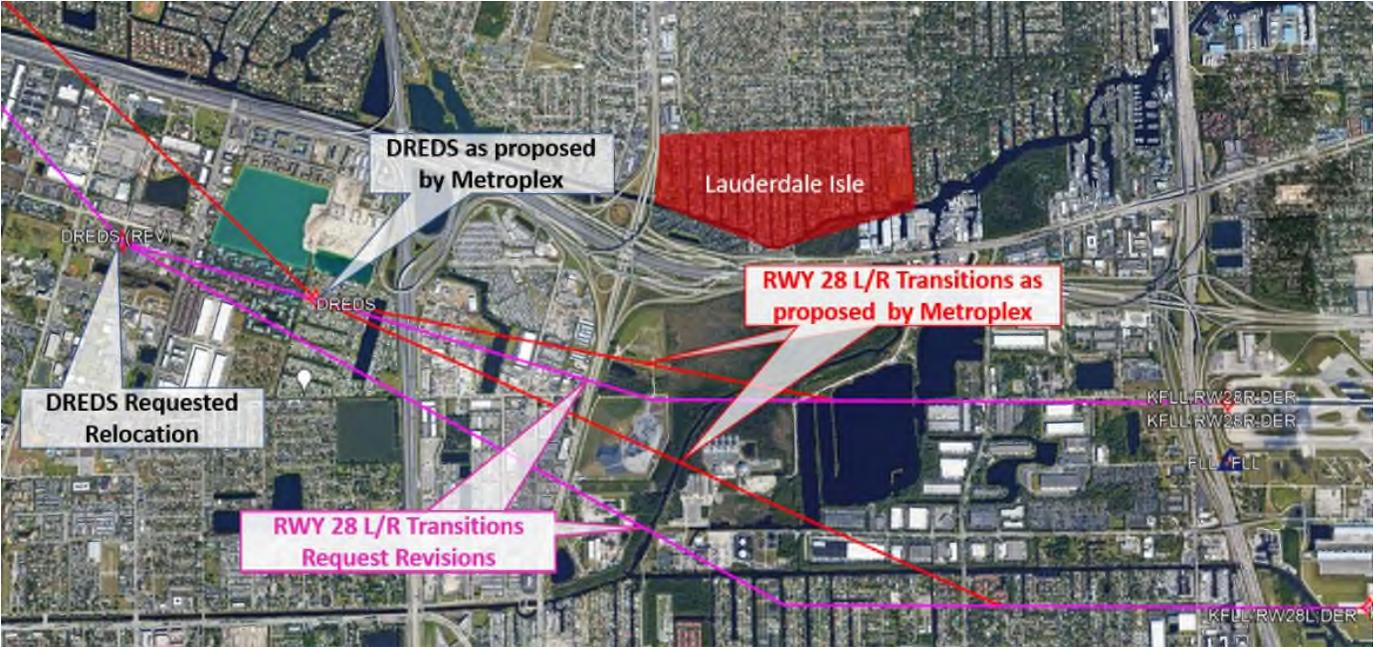
Locations Of East Flow Departure Adjustments

Runway 10 Left Transition									
End Point	Leg Type	Turn Type	Latitude	Longitude	Magnetic Course	True Course	Reverse Course	Distance	Turn Angle
RW10L:DER			N26° 04' 36.49"	W080° 08' 20.83"					
ghost	VI	FB	N26° 04' 35.79"	W080° 06' 22.99"	96.37	90.37	270.37	1.77	21.37
LLBOW	CF	FB	N26° 05' 18.36"	W080° 04' 20.24"	75	69	249	1.97	48.93
ROOOM	TF	FB	N26° 09' 14.71"	W080° 02' 44.55"	26.07	20.07	200.07	4.18	39.17

Runway 10 Right Transition									
End Point	Leg Type	Turn Type	Latitude	Longitude	Magnetic Course	True Course	Reverse Course	Distance	Turn Angle
RW10R:DER			N26° 03' 56.67"	W080° 08' 02.34"					
ghost	VI	FB	N26° 03' 56.09"	W080° 06' 27.91"	96.38	90.38	270.38	1.42	35.88
LLBOW	CF	FB	N26° 05' 18.36"	W080° 04' 20.24"	60.5	54.5	234.5	2.35	34.43
ROOOM	TF	FB	N26° 09' 14.71"	W080° 02' 44.55"	26.07	20.07	200.07	4.18	39.17

<i>Table 2: Requested Revisions to RWY 10 L/R Transitions to proposed AARPS, GLADZ, TWZTR and VACAY SIDs</i>									
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West Flow Departure Adjustments



Location Of West Flow Departure Adjustments

Runway 28 Left Transition									
End Point	Leg Type	Turn Type	Latitude	Longitude	Magnetic Course	True Course	Reverse Course	Distance	Turn Angle
RW28L:DER			N26° 03' 57.19"	W080° 09' 30.06"					
ghost	VI	FB	N26° 03' 57.91"	W080° 11' 36.10"	276.37	270.37	90.37	1.89	28.13
DREDS V2	CF	FB	N26° 05' 08.78"	W080° 14' 00.58"	304.5	298.5	118.5	2.47	19.01
SHELZ	TF	FB	N26° 08' 10.81"	W080° 17' 05.35"	323.51	317.51	137.51	4.1	43.79

Runway 28 Right Transition									
End Point	Leg Type	Turn Type	Latitude	Longitude	Magnetic Course	True Course	Reverse Course	Distance	Turn Angle
RW28R:DER			N26° 04' 36.98"	W080° 09' 59.54"					
ghost	VI	FB	N26° 04' 37.67"	W080° 12' 04.33"	276.36	270.36	90.36	1.87	16.14
DREDS V2	CF	FB	N26° 05' 08.78"	W080° 14' 00.58"	292.5	286.5	106.5	1.82	31.01
SHELZ	TF	FB	N26° 08' 10.81"	W080° 17' 05.35"	323.51	317.51	137.51	4.1	43.79

<i>Table 1: Requested Revisions to RWY 28 L/R Transitions to proposed AARPS, FEELX, REGAE, SNAPR and VACAY RNAV SIDs</i>									
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FAA Responses to Comments of the City of Fort Lauderdale on the Draft EA for the South-Central Florida Metroplex Project

Section A, 1. The commenter suggests that the Draft EA does not provide a concise, plain-language review. At the same time, the commenter elsewhere requests that the FAA revised the EA to provide “detailed” descriptions of each of the 106 STARs and SIDs and 11 T-routes involved in the Project. The Federal Aviation Administration (FAA) has established a process to ensure compliance with the provisions of NEPA through FAA Order 1050.1F, Environmental Impacts: Policies and Procedures (FAA Order 1050.1F). The Draft EA and the Final EA were prepared in accordance with FAA Order 1050.1F and with applicable regulations implementing the National Environmental Policy Act. Notably, federal law requires that environmental assessments be “concise” and that they only “briefly” describe the basis for the agency’s conclusion that environmental impacts will not be “significant.” 40 C.F.R. § 1508.9. The purpose of the environmental assessment document is to focus on the environmental impacts, but the FAA wanted to ensure that the fuller details of its action were well described to the public to ensure the broadest possible scope of public input. In order to better describe the proposed action to the public, the FAA provided websites to accompany its public workshops that provided specific information about changes at five different areas within the study area (available at www.floridametroplexworkshops.com). There, members of the public could see the detailed depictions of individual procedures, as well as other information about the proposal. Further information was available by downloading and viewing the Google Earth files provided.

Section A. 2 Response – The FAA recognizes some individuals may have had difficulty downloading the files, although it received very few comments to that effect. Such difficulty may relate to the capacity of each individual computer and the size of the file being downloaded. The EA contains high-fidelity exhibits with commensurately large file-sizes.. The agency believes it is important to use such high-fidelity exhibits, figures, diagrams, etc. to aid in understanding the matters discussed. As discussed above, the FAA conducted virtual workshops, three of which were specific to procedures at FLL, where these exhibits were presented. These workshops consisted of FAA and airline industry personnel, available to answer questions and provide additional insight for the project. While the FAA typically provides for public participation in the NEPA process, there is no specific requirement that the FAA provide for in-person meetings to discuss a draft environmental assessment. Although the FAA sometimes does so for actions of particular interest, the typical public engagement process was inconsistent with the need during this time to minimize in-person interactions and with federal guidance prohibiting the agency from hosting in-person meetings. Insofar as such gatherings were not viable in light of the COVID-19 public health emergency, the FAA expended considerable time and resources to provide a similar level of public involvement through virtual workshops. The virtual workshops enabled individuals to participate via Internet and/or telephone connection. The FAA was mindful that not everyone has Internet access, so a request for information contact number was provided for such instances. One benefit of these workshops is that the recording of the presentations and the

accompanying materials remained available after the workshop was over, so real-time participation was not necessary for any member of the public to learn more about the Project.

Section A. 3 Response – The commenter states that the EA fails to address the relationship between the baseline and existing conditions. The existing RNAV procedures at FLL have not been used as published due to inefficiencies and do not represent the baseline conditions at FLL. Consequently, the noise modelling for the Proposed Project was conducted utilizing historical track data, not a direct comparison between the Proposed Action and No Action Alternative. A comparison between the proposed designs and unused existing procedures would not provide an accurate determination of noise impacts. The Proposed Procedures were designed wherever possible to remain within the existing historical flight tracks, to help minimize the change of dramatic shifts in aircraft noise from one location to another, and to avoid the possibility of significant environmental impacts.

Section A. 4 Response – The commenter suggests that the Google Earth files show a wider dispersion of different flight tracks for FLL departure procedures. The corridors depicted in the Google Earth files demonstrate the maximum width of the potential flight corridors, while the narrower corridors presented at the workshops more closely resemble the expected real-world usage of the procedures. This distinction does not indicate any improper assumptions made in the actual noise model. The proposed final designs were intended to limit changes below 10,000 feet, including those below 3,000 feet which were confined to safety concerns or approach and departure amendments. The Broward County Airport Authority recommended the use of RNAV off-the-ground to mitigate noise. The design of RNAV off the ground procedures will naturally have an effect on lateral paths at or above 520 feet after departure. Approach paths into FLL were not changed below 3,000 feet. Typically, amendments to approach paths were accomplished at the start of the approaches. As an example, the altitude restriction at the HOLID waypoint increased from 2,500 feet to 5,000 feet.

Section A. 5 Response – The commenter is concerned that the EA doesn't address all reasonably foreseeable effects. As stated above, the EA was prepared in full compliance with regulations implementing NEPA and FAA Order 1050.1F. For purposes of the EA, a "reasonably foreseeable future action" was determined to be an activity sufficiently likely to occur within the planning horizon for the South-Central Florida Metroplex Project already proposed at a level of detail that would permit meaningful analysis in this EA. Furthermore, as stated in Section 5.10.2 of the EA, because of the nature of the resources affected by the Proposed Action, only past, present, and reasonably foreseeable future actions with direct or indirect effects on aircraft flight patterns within the General Study Area were considered. The noise modeling employed in this EA accounted for all shifts of flight tracks resulting from the Project, including the very few that may affect operations below 3,000 feet above ground level.

Section A.6 Response – The commenter states that the EA does not analyze the concentration of noise over a smaller area, particularly at altitudes below 3,000 feet above ground level. Section 1.2. in the Final Environmental Assessment (EA) describes the difference between RNAV and conventional routes. With performance-based navigation, the overall number of aircraft flying in close proximity to a defined path is greatly improved for both approach and departure tracks. This

will mean aircraft noise exposure levels are concentrated on a smaller area, thereby exposing fewer people to aircraft noise than occurs with equivalent conventional procedures that may have more dispersed flight tracks. In some areas, flight concentration already exists because many RNAV procedures have already been published and have been used for several years. There are also many conventional procedures with defined routes between two points, which also create a concentration of flight tracks. Table 3-1 in Chapter 3, *Alternatives*, contains a listing of already-published RNAV and conventional flight procedures. Accordingly, aircraft concentration along many routes already occurs within the General Study Area for the proposed South-Central Florida Metroplex Project.

Section A. 7 Response – The commenter states that the Draft EA fails to explain specific details about procedures. The requested details were provided in Appendix G to the Draft EA, but not included in the body of the main document. To assess the environmental impacts of the South-Central Florida Metroplex Project, the FAA used a study area encompassing airspace above much of Florida, and including 5 major airports and 16 satellite study airports. Because of both the number of changes to procedures (many of which are changes that would not actually alter flight paths) and the geographic scope involved, the level of detail requested by the commenter would likely result in an environmental assessment document that is more, rather than less, confusing to the general public. As stated above, the EA was prepared in compliance with NEPA and FAA Order 1050.1F. The EA provided further information by referencing technical documents that were provided along with the Draft EA. The FAA believes that it has provided more than sufficient information for the public to understand the environmental impacts of the proposed action.

Section A. 8 Response – The comment points out that the Draft EA fails to address FLL’s nighttime procedures. The commenter is correct. The design of new arrival and departure procedures has no impact on any existing nighttime noise abatement procedures at FLL and the FAA is not discontinuing their use.

Section A. 9 Response – The commenter alleges the Draft EA does not provide meaningful information about aircraft that fly RNAV departure procedures. Not all aircraft are equipped to operate on an RNAV procedure; therefore, some conventional procedures will still be used in the South-Central Florida Metroplex airspace. Please see Table 3-2 in Chapter 3, *Alternatives*, for a listing of the conventional procedures that are maintained as part of the proposed South-Central Florida Metroplex Project.

Section A. 10 Response – The commenter referenced the use of yearly day-night average sound metric. See **Topical Responses for Supplemental Noise Metric** for detailed information.

Section A. 11 Response – The comment alleges that there are errors in the DNL noise modelling, but does not support that allegation. The commenters note correctly that the complete dataset used for noise modeling is not included with the Draft EA, which is intended only to summarize and explain the results of that modeling. In other similar projects, the FAA has released these extensive input files to the public and found that they are unhelpful, as their use requires training and access to proprietary software programs. For purposes of NEPA, the Environmental Assessment accurately summarizes the results of the computerized noise modeling of the Project in a format and manner that is reasonably accessible to the lay public. For noise modeling purposes, our

forecasts assumed that approximately 90 percent of aircraft to or from major airports on an RNAV procedure would be located within a half mile of the published route centerline. All aircraft on an RNAV will be within one mile of the published route centerline. The FAA's modeling fully accounted for each of the issues identified by the commenter. See **Topical Response for Track Consolidation/Dispersal** for more information.

Section A. 12 Response – As mentioned above, the noise modelling analysis accounts for both concentration and expected continuation of dispersion. For detailed information geometry and operations used in the modeling, refer to Appendix E, Basic of Noise and Appendix, Noise Technical Report.

Section A. 13 Response – The comment pointed out several problems with the virtual workshops that limited opportunity for public participation. The comment stated that the virtual workshops provided limited opportunity for public participation. While the FAA typically provides for public participation in the NEPA process, there is no specific requirement that the FAA provide for in-person meetings to discuss a draft environmental assessment. Although the FAA sometimes does so for actions of particular interest, the typical public engagement process was inconsistent with the need during this time to minimize in-person interactions and with federal guidance prohibiting the agency from hosting such interaction. Insofar as such gatherings were not viable in light of the COVID-19 public health emergency, the FAA expended considerable time and resources to provide a similar level of public involvement through virtual workshops. The virtual workshops enabled individuals to participate via Internet and/or telephone connection. The FAA was mindful that not everyone has Internet access, so a request for information contact number was provided for such instances. The FAA was not aware of the numerous problems reported to the City of Fort Lauderdale. However, one benefit of these workshops is that the recording of the presentations and the accompanying materials remained available after the workshop was over, so real-time participation was not necessary for any member of the public to learn more about the Project.

Section A. 14 Response –The FAA is not aware of any public comments about the content of an administrative record, which would be prepared in response to litigation in federal court and which is not pertinent to the current NEPA process. The commenter may have misunderstood the disclaimer on the virtual workshop website explaining that questions asked in the text Q&A box during the live webinar sessions would not be recorded and reproduced as an “official comment” on the Draft EA. The FAA regrets any confusion on that point. As stated above, the virtual workshops were conducted in the same manner as previous in person workshops where interaction between the public and subject matter experts are not documented. The public was offered the opportunity to submit comments electronically. The FAA has received and reviewed over 3,200 comments on the Draft EA, 645 of which were from the Fort Lauderdale area.

Section A. 15 Response – Please see Response to Section A. 13 above.

Section B. 1 Response – The development of the proposed AARPS, BNGOS, GLADZ, TWSTR and VACAY SIDS establishes modern air-traffic procedures that mimic existing departures and remain within historical flight tracks. The new procedures take advantage of criteria for departures

from parallel runways that permit aircraft headings to diverge within the first two miles from the end of the runway. The new procedures will allow aircraft to travel farther to the east before turns must be accomplished.

The FAA reviewed multiple suggestions from community residents and a specific suggestion from the City of Fort Lauderdale all suggesting the extension of the runway heading portion of the procedure. After reviewing the proposed procedure, the FAA concluded that it could delay the turn to LLBOW by .61 nautical miles farther east compared to the original proposal, for those aircraft departing from FLL Runway 10L. Because the FLL Runway 10R is further to the south, no design changes were made. Absent weather and traffic, aircraft are expected to remain on the procedure.

Section B. 2 Response – The proposed design was a result of safety considerations and input from the Broward County Aviation Department (BCAD), which advised utilizing RNAV procedures off-the-ground to avoid conflicts with other procedures. Existing departure procedures utilize radar vectors (typically 070 or 090 degrees) issued by controllers for departures from FLL that are routed to the north and east. The development of the proposed AARPS, BNGOS, GLADZ, TWSTR and VACAY SIDS establishes modern air-traffic procedures that mimic existing departures and remain within historical flight tracks. The new procedures take advantage of criteria for departures from parallel runways that permit aircraft headings to diverge within the first two miles from the end of the runway. The new procedures will allow aircraft to travel farther to the east before turns must be accomplished.

The FAA reviewed multiple suggestions from community residents and a specific suggestion from the City of Fort Lauderdale all suggesting the extension of the runway heading portion of the procedure. After reviewing the proposed procedure, the FAA concluded that it could delay the turn to LLBOW by .61 nautical miles farther east compared to the original proposal, for those aircraft departing from FLL Runway 10L. Because the FLL Runway 10R is further to the south, no design changes were made. Absent weather and traffic, aircraft are expected to remain on the procedure.

Friends of Biscayne Bay

1277 NE 79th St,
Miami, FL 33138-4206

July 24, 2020

Michael C. O’Harra
Federal Aviation Administration's Southern Region
South Central Florida Metroplex Draft EA
Federal Aviation Administration
Eastern Service Area - Operations Support Group
1701 Columbia Avenue
College Park, GA 30337

Re: Potential Impacts of Newly Proposed Flight Paths on Biscayne Bay Aquatic Preserve

Dear Mr. O’Harra,

We write on behalf of the Friends of Biscayne Bay and ask that you take into consideration how the South-Central Florida Metroplex Project (“Metroplex”) flight path changes will impact The Biscayne Bay Aquatic Preserve System and the Bill Sadowski Critical Wildlife Area. We feel the Environmental Assessment is deficient in regard to the increase environmental impacts that Biscayne Bay will shoulder. The changes of flight paths move a significant amount of air traffic from overland to over the aquatic preserve system and that will likely have a negative impact on Biscayne Bay, protected as an Outstanding Florida Water¹ and part of the State of Florida Aquatic Preserve system as well as containing the Bill Sadowski Critical Wildlife Area, see Figure 1 below.

¹ <https://floridadep.gov/dear/water-quality-standards/content/outstanding-florida-waters>

Biscayne Bay is home to an abundance of protected marine species². According to the Department of Environmental Protection:

At least 173 species occurring in Biscayne Bay, its coastal wetlands or uplands, including barrier islands, can be found on a list of protected species (either federal or state listings). These include the Florida manatee, American crocodile, wood stork, hawksbill turtle, green sea turtle, and Johnson's seagrass.

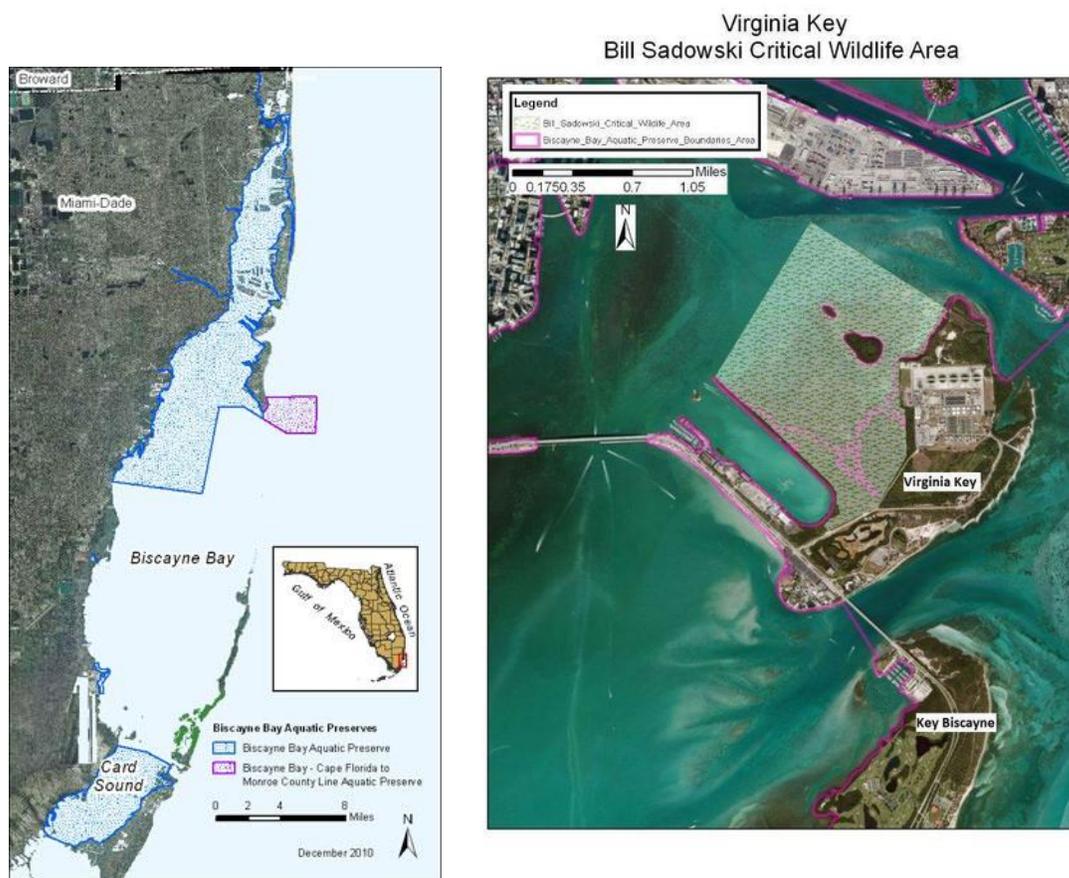


Figure 1: on the left blue shaded areas depict the Biscayne Bay Aquatic Preserve. The figure on the right depicts the Bill Sadowski Critical Wildlife Area in green.

Biscayne Bay's clear blue waters, coral colonies, and lush seagrass beds serve as both critical economic and cultural resources as well as invaluable elements of our community's

²Florida DEP- Biscayne Bay Aquatic Preserves

ecological heritage. In 1974, the Bay was declared to be an aquatic preserve and conservation area by the County Commission (Ordinance 74-13). By changing the flight paths, the Bay becomes susceptible to noise pollution³, which would put the surrounding wildlife at risk⁴. In accordance with rule 68A-19.005, the Biscayne Bay is a protected area “closed to the public”. Critical Wildlife Areas (CWAs) are an important conservation tool for endangered species⁵, and the MIA Metroplex plan would greatly disturb this delicate area. The critical wildlife area is closed to boat traffic and home to many nesting wading birds, we are concerned that the increased noise and air pollution will impact these nesting colonies just as the Fish and Wildlife service determined boat traffic would impact these areas and has made it only accessible by non-motorized vessel.

Additionally, water pollution⁶ issues are also to be expected as most of the fluids applied to an airplane eventually fall to the ground and can impact coastal waters.⁷ As stated in a fact sheet provided by the Florida Department of Environmental Protection (DEP), “*activities or discharges within an OFW, or which significantly degrade an OFW, must meet a more stringent public interest test. The activity or discharge must be clearly in the public interest*”. Overland traffic gives the soil an opportunity to clean the water of the toxins or to be filtered through storm water runoff facilities that many parts of Miami have now put in place prior to reaching the bay. Flights directly over the bay will likely have adverse impacts to overall water quality because of this direct exposure. Biscayne Bay is already at a tipping point ⁸from water pollution as evidence of the seagrass die off already occurring in the very area where increased flight traffic is proposed. Biscayne Bay is Miami-Dade’s public park where many residents and tourists alike spend their time recreationally, and where many seek a quiet and peaceful atmosphere. Part of the tourism economy is of course viewing and experiencing wildlife and that requires a healthy habitat to support these species.

Due to climate related issues and human activity, the Bay is at a tipping point and we need to do everything possible to protect it from further decline⁹ Our main concern over the changes proposed in flight patterns is the increased risk it poses to avian and marine life that depend on the ecosystem and the overall health of Biscayne Bay. The EA proposes a change of flight paths without adequate evaluation of the environmental implications which fails to align with the requirements of the National Environmental Policy Act of 1969 (NEPA). A change of flight paths could potentially affect the water and air quality of Biscayne Bay and contribute to irreversible damage to the delicate ecosystems in the area which are already in decline. In

³ Physiological and Physical Impacts of Noise Pollution on the Environment, 2017

⁴ <https://www.nrdc.org/issues/protect-marine-mammals-ocean-noise>

⁵ FWC- Critical Wildlife Areas

⁶ Florida DEP- Outstanding Florida Waters

⁷ <https://www.nrdc.org/stories/ocean-pollution-dirty-facts>

⁸ <https://www.wlrn.org/post/grand-jury-report-warns-health-biscayne-bay-tipping-point#stream/0>

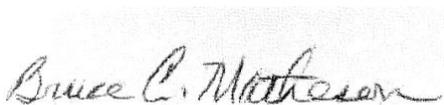
⁹ <https://www.miamiherald.com/article235178352.html>

addition, the indirect effects that the flight path would have on the bay go against rule 18-20.006 Cumulative Impacts. ¹⁰

We respectfully ask that the Environmental Assessment be declared deficient and a full NEPA analysis be conducted with actual filed measurements and data to show how avoidance and minimization of impacts to the environment will be employed to ensure we are not just moving ahead with cost savings for the airlines without consideration of how that will impact the environment, which in Florida is our economy. The EA is clearly deficient and relies on modeling and predictive tools alone and therefore should be rejected.

We ask that the FAA take into consideration how changing these flight paths would negatively impact Biscayne Bay, the marine and avian life that depends on the ecosystem, and its water quality. The Environmental Assessment provided does not adequately study these impacts and these has not been sufficient public involvement in this process and we are concerned that these changes are being proposed during a pandemic where the public in not been given proper notice on this issue. We request a public hearing to address these environmental concerns before any flight patterns are changed.

Sincerely,



Bruce Matheson
President
Friends of Biscayne Bay



Laura Reynolds
Vice President
Friends of Biscayne Bay

¹⁰ <https://www.flrules.org/gateway/RuleNo.asp?title=FLORIDA%20AQUATIC%20PRESERVES&ID=18-20.006>

cc:

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FAA Responses to Comments of the Friends of Biscayne Bay on the Draft EA for the South-Central Florida Metroplex Project

The Federal Aviation Administration's (FAA) Draft Environmental Assessment (EA) considered impacts to Biscayne Bay and associated areas, Bill Sadowski Park and associated areas, and many others in the General Study area. Additionally, FAA consulted with the National Park Service regarding potential noise impacts to national parks and national wildlife refuges. The consulting agency did not identify any constructive use of any resources protected under Section (4f) of the Department of Transportation Act for which aircraft noise and/or aircraft overflights would have an effect on the resource.

When stating concerns about water pollution from overflights, the commenter cites an article from the Natural Resources Defense Council that refers specifically to pollution from ships and ocean vessels, not aircraft. The Draft EA concluded that the South-Central Florida Metroplex Project is not anticipated to cause water quality issues. The Project is not anticipated to alter the number of aircraft operations, and will therefore not increase any discharges resulting from aircraft operations. Although the commenter expresses concern that "most of the fluids applied to an airplane eventually fall to the ground," this occurs primarily on the tarmac and not during flight. Additionally, deicing chemicals applied to aircraft in winter at some airports in the country are not in widespread use in the warm climate of Southern Florida.

The commenter request a full NEPA analysis be conducted. The FAA believes it has done that and has provided more than sufficient information for the public to understand the environmental impacts of the Proposed Action. The FAA has established a process to ensure compliance with the provisions of NEPA through FAA Order 1050.1F, *Environmental Impacts: Policies and Procedures*. The Draft EA and the Final EA were prepared in accordance with FAA Order 1050.1F and with applicable regulations implementing the National Environmental Policy Act. Notably, federal law requires that environmental assessments be "concise" and that they only "briefly" describe the basis for the agency's conclusion that environmental impacts will not be "significant." 40 C.F.R. § 1508.9.

July 24, 2020

VIA E-mail9-AJO-MIA-FL-Metroplex-Comments@faa.gov

BERNARD KLEPACH
MAYOR

JAVIER HOLTZ
VICE MAYOR

ROBERT DIENER
COUNCIL MEMBER

IRMA BRAMAN
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IRWIN E. TAUBER
COUNCIL MEMBER

JENNIFER MEDINA
VILLAGE MANAGER

STEPHEN J. HELFMAN
VILLAGE ATTORNEY

MARILANE LIMA
VILLAGE CLERK

South-Central Florida Metroplex Draft EA
Federal Aviation Administration
Eastern Service Center – Operations Support Group
1701 Columbia Avenue
College Park, GA 30337

**RE: Comments/Objections to FAA Draft Environmental Assessment for
Central-South Florida Metroplex – Village of Indian Creek, Florida**

Dear Sir or Madam:

On behalf Indian Creek Village, Florida (“Indian Creek”), its Village Council and residents, we submit the following and attached public comments to the Draft Environmental Assessment for the South-Central Florida Metroplex Project, dated March 11, 2020 (the “Assessment”). Indian Creek is a municipality situated on a man-made barrier island along Biscayne Bay in north eastern Miami-Dade County, Florida. Protection of Indian Creek’s sensitive coastal environment is paramount.

Indian Creek is concerned that the Assessment is deficient in several respects, and does not examine or present the required information needed to evaluate the impacts that may be caused by implementation of the South-Central Florida Metroplex Project (the “Proposed Action”) on areas near major airports such as Miami International Airport, and Indian Creek. Due to the deficiencies in the Assessment, it is not possible at this time to determine the full extent of impacts that the Proposed Action may have on Indian Creek.

The Assessment’s deficiencies include, but are not limited to the following. Lack of detail in maps of existing/no change and Proposed Action flight paths and areas of overflight, including omission of aircraft altitudes, and speeds. Maps included in the Assessment depicting both existing/no change and Proposed Action Standard Instrument Departures (“SID”) and Standard Terminal Approach Routes (“STAR”) do not provide the location of specific flight paths, aircraft direction, altitude, or expected use frequency so that impact to existing or new overflowed areas can be evaluated. The Assessment also fails to examine whether a greater number of overflights can be expected over certain areas as a result of route consolidation under new or reconfigured SIDs and STARs implemented under the Proposed Action. Additionally, the Assessment is deficient in its examination and methodologies related to its determination that the Proposed Action will not subject surrounding areas to reportable noise increases. The report produced by Power Acoustics, Inc. related to noise impacts of the Proposed Action Indian Creek is incorporated and enclosed at Appendix A. A further brief examination of some notable deficiencies in the Assessment are discussed below.

I. Existing/No Change and Proposed Action Flight Track Maps Do Not Provide Sufficient Detail For Comparison of Impacts.

The level of detail and resolution provided for the flight track maps at exhibit 4a, 4b, 5a, 5b, 6a, 6b, 7a, and 7b, of Appendix I, “Noise Technical Report” of the Assessment make them impossible to distinguish between existing/no change conditions and the Proposed Action resulting condition. The map series, which provides a comparison of departure and arrival tracks under the existing/no change and Proposed Action conditions, is not detailed enough to see differences in flight path locations or patterns. On each of these maps, the all flight tracks are shown in the same single color. This results in a mostly solid area of color over most of South Florida’s Atlantic coastline. It is impossible to examine any single flight track, or to associate any flight tracks with its existing/no change SID or STAR, or Proposed Action SID or STAR. There is no information as to which airport the flight track originates from or terminates. In addition, the solid single color for flight tracks provide no altitude information which is needed to assess the amount of sound that may be expected as an aircraft on the track overflies a location. The resulting maps end up providing little useful information to compare the existing/no change conditions with those of the Proposed Action.

The Assessment should be improved with more useful flight track maps focusing on Major Study Airports rather than simply all of the South Florida region, and which include altitude and use (flight frequency) information for each track. The presentation titled FAA NextGen South-Central Florida Airspace Modernization Airport Brief Miami International Airport, dated March, 2019 (the “2019 MIA Presentation”), contains some helpful maps and visualizations. The maps contained in the 2019 MIA Presentation provide existing flight tracks with altitude information as those tracks approach and depart Miami International Airport. The maps also provide proposed waypoints that will serve as vectoring points for the proposed SIDs and STARs, as well as a general visualization of the SID and STAR paths approaching and departing Miami International Airport. Unfortunately, as the 2019 MIA Presentation is not incorporated or referenced in the Assessment, the accuracy of the information contained cannot be relied upon to examine the proposed tracks and altitudes.¹

II. SID and STAR Maps Provided in the Assessment are Deficient.

The Assessment’s PDF layer-enabled maps of existing/no change and Proposed Action SIDs and STARs does not provide sufficient information. The maps of both existing/no action and Proposed Action SIDs and STARs, included in Section 3.2.1.2 of the Assessment (at Exhibits 3-9 and 3-16), show only shaded polygons over the general area where flights may be routed as they use the procedure. They do not show exit and transition points, nor do they show expected direction of aircraft flight, or expected altitudes along the SID or STAR. Also, certain SIDs and STARs appear to be disjointed, which adds to confusion in attempting to assess the route and areas impacted. Although provided separately, the Google Earth layers which show existing/no change and Proposed Action tracks do not show altitudes, speeds or other information necessary to gauge the Proposed Action’s impacts on surrounding or overflown areas.

should also provide existing flight tracks and altitudes, as well as flight tracks and altitudes projected in connection with the proposed action SIDs and STARs.

¹ According to the 2019 MIA Presentation, the maps and diagrams contained are subject to change. Due to the lack of detail in Appendix I maps, and Exhibits 3-9 and 3-16 of the Assessment, it is impossible to confirm if the 2019 MIA Presentation maps are consistent with the proposed change discussed in the Assessment.

III. Impact on Overflight Frequency pursuant to Proposed Action SIDs and STARs not Provided.

The Assessment fails to provide information as to the expected usage of Proposed Action SIDs and STARs or compare them to present usage of existing/no change SIDs and STARs. Therefore, impacts from increased frequency of overflights cannot be determined. Certain Proposed Action SIDs and STARs replace more than one existing SID or STAR. For example, Table 3-2 of the Assessment notes that the Proposed Action LUUCE STAR will replace both ANNEY and BLUFI existing STARs; however, it provides no information as to the number of aircraft that presently use ANNEY and BLUFI, nor the number of aircraft expected to use LUUCE. In addition the Google Earth layer tracks provide visualization of the differences between the ANNEY, BLUFI and LUUCE STARs flight tracks. The LUUCE STAR has significantly less tracks shown than ANNEY and BLUFI STARs. Information as to expected use rates of each STAR's flight tracks is necessary to determine impacts of the proposed change and apparent consolidation of many existing flight tracks into just a few. Additionally, the Google Earth layer tracks contain no altitude information along the tracks to gauge the changes in noise impacts to nearby areas.

Other areas that may see overflight due to new projected tracks over new areas require information as to the expected frequency of flights on each track, as well as expected aircraft altitude. Overflight increases may result from the increases in en route and runway transitions under Proposed Action SIDs and STARs. Section 3.3.1 of the Assessment confirms that the Proposed Action and implementation of new SIDs and STARs will result in increased numbers of route and runway transitions. According to the Assessment, route transitions will increase by nearly double from 135 to 232, while runway transitions will more than double, from 193 to 461. The Assessment specifically notes: "The additional runway transitions allow controllers to assign aircraft to routes that were not available previously." These increases in route and runway transitions imply that there will be more dispersal of departing and arriving aircraft to different points of intercepts of flight routes, and of runway approaches. Table 3-1 lists the existing SID and STAR procedures, including the airport(s) and number of en route and runway transitions served. Table 3-2 of the Assessment lists the names of new SIDs and STARs proposed to replace the existing procedures, and which airport(s) and number of route and runway transitions it serves. However, it is unclear which runways at the served airports will be transitioned by the new procedures. Without this information, it cannot be determined whether the Proposed Action and its additional transition points will result in additional overflights over presently overflown areas, nor whether new areas will be overflown, and at which altitudes.

IV. New or Revised Approaches at Miami International Airport.

Table 3-3 of the Assessment claims that Miami International Airport will have eight (8) "new or revised approaches" to the airport's runways. These new or revised approaches are designed to be "used by landing aircraft to line up with the designated runway and descend at a steady, stabilized rate during the final phase of flight prior to touchdown." New or revised approaches have the potential of changing the areas of overflight and the altitude of those overflights in the areas surrounding major airports like Miami International Airport. However, the Assessment does not provide any details on existing/no change, or Proposed Action approaches (to MIA or any other airport). Impacts of new approaches on the surrounding areas cannot be determined unless details of existing and proposed approach procedures are provided for comparison. This information should include maps of proposed and existing approach paths, and include the communities they overfly, and flight tracks and altitudes along the flight path as the airport is approached under both existing and Proposed Action conditions.

V. Noise Exposure Contour Maps are Deficient.

The noise contour maps included in the Assessment is deficient to the requirements of 14 CFR Part 150, Appendix A, Section A150.101(e). According to this section of the Code of Federal Regulations, noise contour maps produced for airport noise compatibility planning must include runway locations and flight tracks so that the noise contour can be contextualized to the location of the noise source. The noise exposure map for the Miami International Airport area, located at exhibit 4-9 of the Assessment, contours the different levels of sound exposure for the surrounding area. However, it does not contain either the runway locations for the airports shown, or the flight tracks required by the Code of Federal Regulations and which indicate the sources of the noise reflected on the map.

VI. Potential Visual Impacts are not Sufficiently Considered.

Section 5.9 of the Assessment provides a brief review of methodology used to review possible visual impacts of the proposed changes. While the methodology does not consider the visual sight of aircraft at altitudes above 3,000 above ground level ("AGL") as "intrusive". Subsection 5.9.3 notes that changes in aircraft routes would *generally* occur at altitudes above 3,000 feet AGL, and thus anticipates no significant visual impacts from the proposed action. However, as noted earlier, the Assessment provides no details as to the altitude of any existing/no action or Proposed Action flight track that can demonstrate whether any "intrusive" visual impacts are created. Additionally, the Proposed Action includes eight (8) new or revised approaches for Miami International Airport's runways. These new approaches cover a segment of aircraft flight below 3,000 feet all the way down to ground level at touchdown. The Assessment provides no maps, glide slope profiles, or any other details about the Proposed Action's new or revised approaches (nor the existing approach procedures for comparison) that can confirm whether aircraft overflight or sightings at lower altitudes will result, and therefore cause a significant visual impact to surrounding areas.

VII. Consultant Report – Deficiencies as to Noise Reporting, Modeling, and/or Projection in the Assessment.

Indian Creek has engaged a noise consultant, Power Acoustics, Inc. to review and assess the figures, studies, methodologies and findings contained in the Assessment related to noise impacts, particularly in Appendix I, and to produce a report (the "Consultant Report"). The Village incorporates the Consultant Report, which is enclosed as Appendix A.

We respectfully request review and consideration of the above-identified concerns and deficiencies in the Assessment, and that all impacts to Indian Creek be adequately addressed. Thank you in advance for your attention to this matter.



Jennifer Medina
Village Manager

cc: Bernard Klepach, Mayor
Village Council
Stephen J. Helfman, Esq, Weiss Serota Helfman, Village Attorney

Appendix A



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July 24, 2020

Jennifer Medina
Village Manager
Indian Creek Village
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**LR#20-00722-1-A1 Air Traffic Noise Impacts to the Village of Indian Creek
Related to the FAA’s South-Central Florida Metroplex Environmental Assessment**

Dear Ms. Medina;

Provided herein is an analysis/discussion of noise impacts presented in the USDOT/FAA **“Draft Environmental Assessment for the South-Central Florida Metroplex Project”**[1] as it applies to the Village of Indian Creek.

The Power Acoustics, Inc. analysis discusses what can be extracted from the **South-Central Florida Metroplex Environmental Assessment (SCFMEA)** draft report[1], and the report’s deficiencies, including inadequate data, data presented in a confusing or overwhelming way, and metrics of sound that make it impossible for the public to fully understand the impacts of the proposed NextGen flight path changes.

In summary, both prior to and after the proposed action, the Indian Creek area is at the lower end of the FAA’s reportable noise envelope (45-60 DNL). The SCFMEA[1] indicates Indian Creek will experience a small noise increase of approximately 0.9 dB (47.1 dB to 48 dB DNL) after the proposed action is implemented. The FAA considers this an insignificant increase in noise. The FAA determines that the DNL 45 dB level is the minimum level at which noise needs to be considered because *“even distant ambient noise sources and natural sounds such as wind in trees can easily exceed this (DNL 45 dB) value”* [reference 1, page 1-1]. We speculate few residents of Indian Creek would equate their current aircraft noise exposure as comparable to “wind in trees.” For additional perspective, the FAA would require a 5 dB DNL increase before it would consider the increase to be significant and “reportable.” A 5 dB increase would require three (3) times as many aircraft to be observed/heard in the Indian Creek area than currently exists. Therefore, we do not agree with the criteria used by the FAA for determining impacts in low noise areas. We request the FAA provide several additional pieces of data in their final Environmental Assessment report so a clearer picture of the proposed action noise impacts can be seen by impacted parties.

BACKGROUND NEEDED TO UNDERSTAND THE SCFMEA RESULTS

The FAA's Method for Modeling (Computing) Noise Impacts

The SCFMEA[1] noise impact analysis is based on results for a computer program (computer model) of current and future air traffic conditions. The computer program, *Aviation Environmental Design Tool 2d (AEDT)*, utilizes aircraft type, airport origins and destinations, daytime or nighttime operation times, and the average number of daily operations to estimate noise.

The sound levels presented by the SCFMEA[1] do not reflect a particular noisy or quiet day, but a typical day averaged over a period of a year. Individual sound observer locations will experience some considerably noisier aircraft traffic days than the sound data computed/presented by the SCFMEA and some days will likely be quieter than those presented in the SCFMEA. *“FAA Order 1050.1F, requires that aircraft noise be analyzed in terms of the yearly DNL metric. In practice, this requirement means that DNL levels are computed for the Average Annual Day (AAD) of operations for the year of interest. The AAD represents all the aircraft operations for every day in a study year divided by 365, the number of days in a year. The AAD does not reflect a particular day, but is meant to represent a typical day over a period of a year.”*

FAA Noise Metrics

The FAA uses a simplified metric for correlation with human response to noise called the Day/Night average sound level (abbreviated as DNL). DNL represents the calculated sound of all daily aircraft that have been averaged over a contiguous period of 24-hours (86,400 seconds). The basis of the DNL metric is A-weighted sound level. The A-weighted scale is the typical level used to represent human reaction or exposure to loudness, such as when measuring noise in the workplace or in the environment. To account for an undesirable human response to noise at nighttime, the DNL includes a 10 decibel (dB) penalty applied to sound made between the hours of 10 PM and 7 AM. The simple A-weighted sound level can be measured/displayed on a sound level meter while DNL must be calculated from a 24-hour time history of the sound data.

The SCFMEA[1] **does not** report community noise impacts from specific aircraft flyovers or flybys as would be measured instantaneously with a sound level meter. The use of a 24-hour average DNL results in individual flyovers or flyby events contributing very small amounts to the daily DNL. As an example, if an individual aircraft *during daytime hours* registered an instantaneous 1-second maximum sound level of 60 decibels (dBA) during a flyover (*as could be measured on a sound meter*) and persisted for a duration of 20 seconds, the individual aircraft flyover would result in a DNL of less than 24 dB. If the same event occurred between the 10 PM and 7 AM *nighttime hours*, the DNL would have a 10 dB penalty and reported as 34 dB. Effectively, any individual sound level is largely discounted by the DNL metric due to the long 24-hour duration averaging process.

In order to have substantial DNL, many individual noise events must occur in a day. While the previous example of an individual event is relatively easy to describe, the impact of multiple aircraft flyovers or flybys is more complicated. The DNL is dependent not only on the loudness of the event, but also the duration of event, the number and time of events that occur per day and the percentage of time the area is quiet. Continuing on the example in the previous paragraph, we'll assume identical aircraft, each producing 60 dBA maximums and 20 second durations occurred in the same 24-hour period. The DNL would be <27 dB if two aircraft flyovers occurred per day, while 10 aircraft flyovers per day would result in DNL <34 dB and 100 aircraft flyovers per day would result in DNL <44.

The importance of the previous two paragraphs is that sound data reported by the FAA is not representative of what someone would directly measure with a sound level meter. Furthermore, while the example is intended to show how DNL compares to a measured sound level, readers are warned that the computation of DNL with the various types of aircraft becomes complex as the number of each aircraft, the aircraft's position (altitude and ground track) relative to sound receptor locations and the airport runway, time of flight and the aircraft's operating condition (takeoff or landing) all come into play when the FAA estimates DNL at any given sound observer position.

FAA ESTIMATED NOISE IMPACTS

FAA DNL Estimated in Before and After Conditions

The FAA has estimated changes in DNL before and after the proposed flight path changes. Appendix I of the SCFMEA[1] lists several thousand locations where noise estimates were made within the State of Florida. For the Indian Creek area, the applicable calculation locations are shown in Figure 1.

The SCFMEA[1] provides sound estimates for only one position within Indian Creek at the Indian Creek Country Club. We've included estimated DNL from two locations outside of but within 1000 feet of Indian Creek for additional reference. The FAA modeled three operation levels including existing conditions and forecast operations projected to 2021 and 2026 as shown in Table A.

Table A. Numbers of Takeoffs and Landings Modeled for MIA

Existing Conditions (06/2017 – 05/2018)	2021	2026
1,120.8	1,160.7	1,254.3

The before and after DNL sound levels are presented in Table B. Existing Conditions (E.C.), Proposed Action (P.A.) and No Action (N.A.) conditions define the projected before and after DNL sound levels if the proposed flight path action is taken and if no action is taken (i.e. if existing flight rules are retained).



Figure 1. Indian Creek FAA DNL Locations

Table B. Indian Creek DNL Estimates With and Without Proposed Action

Site Name	Location		2017/18 E.C.	dB DNL					
	Latitude	Longitude		2021			2026		
				N.A.	P.A.	Change	N.A.	P.A.	Change
INDIAN CREEK COUNTRY CLUB	25.8761	-80.1422	47.2	47.1	48.0	0.9	47.6	48.5	0.9

Site Name	Location		2017/18 E.C.	dB DNL					
	Latitude	Longitude		2021			2026		
				N.A. Avg.	P.A. Avg.	Change (Avg.)	N.A. Avg.	P.A. Avg.	Change (Avg.)
92ND STREET PARK	25.8826	-80.1294	45.3	45.2	46.0	0.7	45.7	46.4	0.7
HAWTHORNE PARK TOT LOT	25.8762	-80.1295	45.7	45.6	46.1	0.5	46.1	46.6	0.5

*Avg. Represents the average DNL calculated by the FAA over an area instead of a point specific location.

The FAA’s estimated increase for areas adjacent to Indian Creek and within Indian Creek ranged from a 0.5 dB increase to a 0.9 dB increase.

The SCFMEA[1] indicates an Optimized Profile Descent (OPD) are utilized that allows an aircraft using to fly continuously from the top of descent to landing with minimal level-off segments and suggests “*Aircraft that fly OPDs can maintain higher altitudes and lower thrust for longer periods thereby reducing emissions and noise.*” If this is the case, the resulting sound levels should *decrease*. However, the DNL are shown to increase by as much as 0.9 dB. The increase in DNL is conjectured to represent the increase in the number of flyovers/flybys concentrated at/near the impacted sites of the CSTAL flight path. A 0.9 DNL increase would equate to about a 23% higher concentration of flights in site area. We speculate that a larger increase would be seen but may be offset by increased altitude of the OPD. Causes of noise increases are not adequately described or documented in the SCFMEA[1].

Levels Used by FAA in Determination of Noise Impact

The FAA has set criteria for determining impacts based on changes in predicted aircraft noise before and after implementation of the proposed action in the SCFMEA[1], and FAA Order 1050.1F[2] are as follows:

DNL of 65 and higher – Increase or decrease in DNL of 1.5 dB or more

Exceeds Threshold of Significance

DNL 60 to 65 - Increase or decrease in DNL of 3.0 dB or more

Reportable Noise Increase (Considered When Evaluating Air Traffic Actions)

DNL 45 to 60 - Increase or decrease in DNL of 5.0 dB or more

Reportable Noise Increase (Information Disclosed When Evaluating Air Traffic Actions)

The before after DNL data provided by the FAA in the Indian Creek area falls in the lower end of the DNL 45 to 60 range. The FAA, in accordance with FAA Order 1050.1F[2], determines increases less than 5 dB are not reportable or cause an impact. However, in order to reach a 5 dB increase in DNL, a threefold increase in daily flights would be required. It is highly likely that a threefold increase in air traffic would be very noticeable and objectionable to residents in the area.

The SCFMEA[1]states it evaluated noise levels down to the DNL 45 dB level for potential increases in DNL noise exposure of 5 dB or higher. The FAA determines that the DNL 45 dB level is the minimum level at which noise needed to be considered because “*even distant ambient noise sources and natural sounds such as wind in trees can easily exceed this (DNL 45 dB) value*” [reference 1a, page 1-1]. This is a misleading comparison because it equates a very quiet **continuous sound** (wind) to a very noisy but short duration sound (aircraft flyover) that is averaged with quiet times over a 24-hour period to obtain a similar sound level. We speculate few residents of Indian Creek would equate their current aircraft noise as comparable to “wind in trees” and therefore, we don’t agree with the criteria used by the FAA for determining impacts in low noise areas.

DNL Noise Levels Compared to Annoyance

The Federal Interagency Committee On Noise (FICON)[3] has shown the results of two studies correlating DNL with the percentage of people that are “highly annoyed” by air traffic noise. The studies indicate that approximately 0.41% to 2.12% of people are highly annoyed when sound levels are between 40 and 50 DNL. However, the studies have large variability and could be closer to 6-7% in the 40-50 DNL range. The studies also indicate people are likely to be more annoyed when ambient sound levels are low in the absence of the air traffic noise source. The FAA does not take existing ambient (non-aircraft) noise levels into account when determining noise impacts of air traffic.

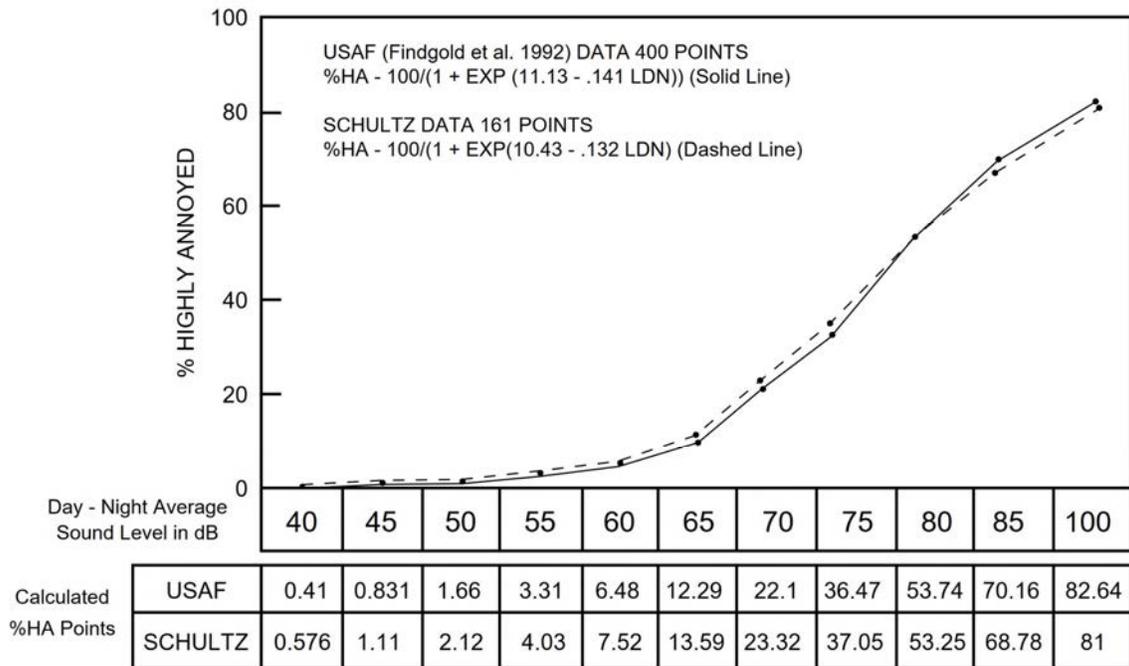


Figure 2. Percentage of People Highly Annoyed by Air Traffic Noise (DNL)

References

- 1.) United States Department of Transportation Federal Aviation Administration, **Draft Environmental Assessment for the South-Central Florida Metroplex Project**, May 11, 2020 including the Noise Technical Report, Appendix I
- 2.) U.S. Department of Transportation Federal Aviation Administration, Order 1050.1F, Effective Date: July 16th 2015.
- 3.) Federal Interagency Committee on Noise, “Federal Agency Review of Selected Airport Noise Analysis Issues,” August 1992.

Sincerely,



David J. Parzych, INCE.Bd.Cert
Power Acoustics, Inc.

FAA Responses to Comments of Indian Creek Village on the Draft EA for the South-Central Florida Metroplex Project

The exhibits mentioned in the comment are intended to display historical arrival and departure tracks along with study airports in the entire General Study Area for the South-Central Florida Metroplex project. The size of the Study Area and the scope of the project prohibits the level of detail that commenter requests from being included in these graphics. The FAA produced graphics depicting individual air-traffic procedures and comparing flight tracks of the proposed action and no-action alternatives, and presented these to the public during the virtual public workshops. Those graphics remained online for members of the public to review, and are included in Appendix A of the Final Environmental Assessment. To facilitate access to the documents and reduce download time, the appendices and technical reports were posted on the website as standalone documents. These boards display more detailed information on the proposed final designs, overlaid with historical track data. The EA was prepared in full compliance with regulations implementing the National Environmental Policy Act and FAA Order 1050.1F, which require it only to be a concise document summarizing the anticipated environmental impacts of the proposed action.

Because of the size of the General Study Area and the likelihood that any individual reader may only be interested in procedures serving on or two airports, the various arrival and departure procedures included in the No Action Alternative and the Proposed Action are grouped by airport. This allows the reader to easily focus on their own area of interest and turn on or off only those flight corridors they are interested in. The FAA also provided detailed supplemental materials in the form of Google Earth files that were provided to the public. The Google Earth files allow an infinite adjustment of range so the viewer can tailor materials to specific needs.

The Google Earth files do not contain all details of the air-traffic procedures like altitudes or speeds. They are designed to inform the public about the location of aircraft overflights, coupled with other information in the Environmental Assessment that focuses on anticipated environmental impacts. Commenters that want more detail about a particular procedure may refer to Appendix G, which contains detailed information (including TARGETS distribution packages) about each procedure for aviation experts. The requested level of detail about the procedures is not necessary to be provided in the layered PDF maps or Google Earth files in order to assess the potential environmental impacts of the Metroplex Project on a particular location. Any member of the public concerned about aircraft noise at a specific location can enter that address into the provided online tool and see the precise change in aircraft noise anticipated from the project, expressed in DNL, at all nearby grid points. Impacts on all other environmental resources were evaluated by taking into account all details of the proposed procedures.

Section 1.2. in the Final Environmental Assessment (EA) describes the difference between RNAV and conventional routes. With performance-based navigation, the overall number of aircraft flying in close proximity to a defined path is greatly improved for both approach and departure tracks. This will mean aircraft noise exposure levels are concentrated on a smaller area, thereby exposing fewer people to aircraft noise than occurs with equivalent conventional procedures that may have more dispersed flight tracks. In some areas, flight concentration already exists because many RNAV procedures have already been published and have been used for several years. There are also many conventional procedures with defined routes between two points, which also create a

concentration of flight tracks. Table 3-1 in Chapter 3, *Alternatives*, contains a listing of already-published RNAV and conventional flight procedures. Accordingly, aircraft concentration along many routes already occurs within the General Study Area for the proposed South-Central Florida Metroplex Project.

For noise modeling purposes, our forecasts assumed that approximately 90 percent of aircraft to or from major airports on an RNAV procedure would be located within a half mile of the published route centerline. All aircraft on an RNAV will be within one mile of the published route centerline. Not all aircraft are equipped to operate on an RNAV procedure; therefore, some conventional procedures will still be used in the South-Central Florida Metroplex airspace. Please see Table 3-2 in Chapter 3, *Alternatives*, for a listing of the conventional procedures that are maintained as part of the proposed South-Central Florida Metroplex Project.

To help maintain safety in the national airspace system, FAA's Air Traffic Control will continue to employ air-traffic management methods and coordination techniques as described in Section 1.2.2 of the Final EA (titled "Air Traffic Control within the NAS"). Therefore, the FAA expects that some dispersion of flight tracks will continue even for some aircraft operating on RNAV procedures. To account for this, the noise model includes flight tracks that follow a proposed RNAV flight path but are turned off the flight path at designated areas where the FAA has forecasted the likelihood of vectoring or rerouting. It is not true, as commenter suggests, that this issue is "unconsidered." The noise modelling analysis accounts for anticipated levels of both concentration of flight tracks and some continued dispersion. As described in Chapter 5 of the Final EA, changes in noise exposure levels may occur as a result of flight path concentration. However, the results of the noise modelling analysis indicate that the Preferred Alternative for the South-Central Florida Metroplex Project would not exceed the thresholds of significance for changes in aircraft noise exposure when compared to the No Action Alternative.

The commenter stated that the EA failed to provide information on expected usage of the procedures. Arrival and departure routings (STARs and SIDs) are comprised of common routes closer to airports. These common routes can extend a substantial distance from the airport. Transitions for procedures can be explained in lay terms as entry and exit points. That is, a procedure could route aircraft in a straight line, but for each waypoint along that straight line, a transition can be developed to provide entry and/or exit from the procedure. The fact that a transition exists does not necessarily mean that a unique path has been developed, although that is also possible. The increase in numbers of transitions for proposed procedures is a result of increased flexibility. Using the examples offered by the comment, the common route for the proposed LUUCE begins 41.12 miles north of Virginia Key at the SPNER waypoint. All aircraft assigned this procedure will follow the same route after SPINR. The development of the proposed LUUCE is not expected to increase the number of aircraft from the north/northwest, but will increase efficiency and reduce complexity for conventional aircraft landing at MIA.

The commenter alleges the Draft EA does not provide details on approaches to MIA. Only approach procedures for Runways 26 L/R and Runway 27 at MIA are proposed for amendments. Aircraft will be established on the final approach course prior to the shoreline. These are no lateral changes for proposed approach procedures to MIA over land.

The commenter alleges that the noise contour map included as Exhibit 4-9 in the Draft Environmental Assessment is deficient. This map was prepared to provide additional information about baseline aircraft noise at the census block level, using the sources listed at the bottom of the map. It is not prepared to comply with any program authorized by 40 C.F.R. Part 150, and is not subject to the specific requirements cited by commenters, which apply to maps prepared by airport sponsors and not the FAA. According to FAA Order 1050.1F, Appendix B, the FAA does not prepare noise contours for large airspace actions involving more than one airport, which are not within the immediate vicinity of the airport, and/or includes actions above 3,000 feet AGL. The FAA evaluated aircraft noise impacts of the Project using the AEDT model. Per FAA 1050.1F, AEDT can be used to provide noise contours for airport development projects or other actions in the immediate vicinity of the airport; however, the South-Central Florida Metroplex Project is not an airport development project or action involving the immediate vicinity of one airport. Rather, it is a large airspace action involving more than one airport. The map is informative with respect to locations of existing aircraft noise levels and serves the intended purposes within the Environmental Assessment.

As noted by the commenter, the FAA considered the visual effects of the Proposed Action in the General Study Area. The results of the analysis showed that the Proposed Action would not result in a significant visual impact in 2021 or 2026 when compared to the No Action. Any changes in aircraft traffic patterns would occur at altitudes and distances from viewers that would not substantially impair the view or setting or the Section 4(f) resources. Therefore the Proposed Action would not result in potential impacts to Section 4(f) resources from a visual impact perspective. Nearly all of the changes made by the Metroplex occur at altitudes above 3,000 feet above ground level – while some change below that altitude may occur, they will occur within pre-existing historic flight tracks. The commenter requests additional information about the significance of these impacts. No specific significance thresholds for visual effects exist because of the subjectivity and variability of the experiences involved. The new or revised approaches for runways at MIA all occur within areas where overflights currently occur, and will not affect the frequency of those overflights. They will neither affect the nature of the visual character of the area nor contrast with other visual resources at those locations. FAA Order 1050.1F at 4-10. Any visual effects of the proposed project were therefore not considered significant for purposes of NEPA or other special purpose statutes.

*See **Topical Responses for Noise Modelling and Supplemental Noise Metrics*** for further discussion of the commenter's suggestions that the FAA use alternative measurements of single noise events for addressing noise impacts under NEPA.

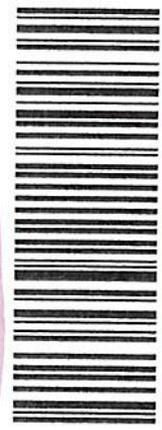
The requested information about the location of individual grid points is easily searchable by common address online by interested parties by using the Google Noise Tool. The tool contains more than 122,000 grid points of noise data in the Study Area and can be found at <https://floridametroplexworkshops.com/>

Additionally, the requested information specific to waypoint locations is not informative and is potentially misleading. Aircraft noise impacts occur continuously along the flight path, and are not concentrated or especially noticeable at a waypoint. Although noise impacts may increase as an aircraft turns at or near a waypoint, these turns do not occur at precise locations but vary depending

on weather, type of aircraft, weight, and other factors.

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AJ42

South Central Florida Mosquitoes Staff EA
Federal Aviation Administration
Eastern Service Center - Operations Support Group
1701 Columbia Avenue
College Park GA 30037

450-88



July 24, 2020

VIA U.S. POST AND EMAIL (9-AJO-MIA-FL-Metroplex-Comments@faa.gov)

South-Central Florida Metroplex Draft EA
 Federal Aviation Administration
 Eastern Service Center – Operations Support Group
 1701 Columbia Avenue
 College Park, Georgia 30337

**Re: Keystone Point Homeowners Association’s Public Comments
 on South-Central Florida Metroplex Project and Draft
 Environmental Assessment**

Dear Sir/Madam:

This letter represents the comments of Keystone Point Homeowners Association (“Keystone Point”) regarding the Federal Aviation Administration’s proposed the South-Central Florida Metroplex Project (“Project”) and the draft Environmental Assessment that was published on May 11, 2020 (the “Draft EA”). Keystone Point will be materially affected by the changes in arrival and departure procedures proposed in Project and reviewed in the draft Environmental Assessment.

It should be noted at the outset that these comments are necessitated by the discomfort and confusion of Keystone Point’s residents with respect to the Project’s potential noise and other environmental impacts. Keystone Point’s residents are already suffering demonstrable increases in overflights at low altitudes and resulting noise impacts. They are now being asked to become the recipients of the Project’s additional noise, overflight, and other environmental impacts, the precise degree of which is as yet unascertainable, because the precise projected flight paths to be implemented by the Project cannot be deduced from the information provided to define them. This approach flies in the face of Congress’ requirement that the Project’s design of airport approach and departure flight paths seek to reduce exposure of noise and emissions pollution on affected residents. The Draft EA, however, ignores this mandate and instead limits its focus on improving the efficiency of the procedures and airspace utilization. Draft EA, § 1.1. In fact, the

absence of any discussion in the Draft EA's "Purpose of the Proposed Action" section of such an effort to reduce noise, emissions or other environmental impacts, clearly demonstrates that the Project does not meet the goals Congress defined for it.

These omissions are not insignificant. Not only do they go to the heart of public concerns regarding the unreported noise and other impacts of the Project on the public exposed to them, but also clearly reflect a "boilerplate" approach to NEPA analysis, in which EAs for other airspace redesigns, in other parts of the country, unrelated to the environmental issues prevalent in the South-Central Florida Metroplex, were cut and pasted into the Draft EA. For those reasons, as well as the analytic deficiencies set forth below, a full Environmental Impact Statement ("EIS") should be prepared and circulated for public review, taking into account full information and the results of a complete analysis, as well as a complete catalogue of local environmental effects of the Project on each airport in the region.

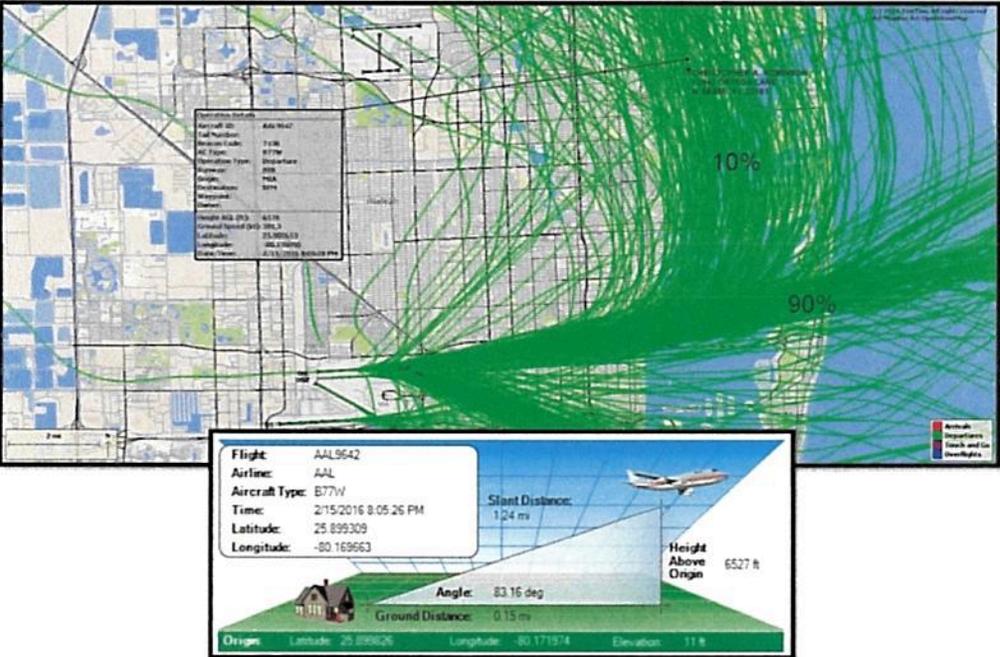
I. The FAA Has Increased Aircraft Noise Over North Miami in Increments so that the Project's Noise Impacts Will Not Be "Significant."

Prior to 2010, Air Traffic Control vectored aircraft on departures. In 2012, the FAA began implementing a series of RNAV Standard Instrument Departures (SID) and RNAV Standard Terminal Arrivals (STAR) at Miami International Airport (MIA). Although these RNAV procedures have a much different impact on the environment than the "conventional" procedures previously used by the FAA, these procedures were implemented without any community input and, to the knowledge of the community, without any environmental analysis under the National Environmental Policy Act (NEPA).¹ On November 8, 2018, for example, the FAA published 55 Performance-Based Navigation Routes, including RNAV routes for MIA, FLL, MCO, and TPA – all airports that are included in the Project. These routes have not been given any public scrutiny or comment, let alone any environmental analysis under NEPA. According to the Draft EA, it was not until July 25, 2019, that the FAA distributed its "Notice of Intent to Prepare an Environmental Assessment" regarding the flight procedures that now comprise the Project. Draft EA, § 2.6, p.2-18.

¹ We assume that categorical exclusions were used for the implementation of the early RNAV routes, but that means the environmental analysis was done behind closed doors without any public scrutiny.

However, these RNAV routes were not used much prior to the beginning of the South-Central Florida Metroplex Project. Approximately 10% of the flights used the new RNAV routes. See Graphic 1, next page. According to the Miami Herald: “[i]n 2019, just 10 percent of departures from Miami International followed two recommended flight paths known as ‘Hedly 2’ and ‘Winco 2,’ which cross over Northeast Miami-Dade neighborhoods along the lines of the Metroplex DEALZ flight paths. But in 2020, the FAA was recommending air traffic controllers to shift more than half of all departure traffic to those paths.” Miami Herald, July 22, 2020. When the FAA began to use the RNAV routes more, the communities underneath the new “highway in the sky” noticed and began complaining about the increase in noise. However, because these un-analyzed, non-NEPA reviewed RNAV routes were published routes that were being used at the time the FAA conducted its noise analysis for the Project, they were used as the baseline. The FAA should have used the routes that had been used prior to the implementation of the RNAV routes as its “no action” alternative. By using the RNAV routes that had never been subject to NEPA analysis and community input, the FAA created a false baseline. This false baseline was used by the FAA when it assessed whether the flight procedures created by the Project would exceed the FAA’s “significance thresholds.”

**MR. CHRISTOPHER A. ROBINSON -012940 ORTEGA LANE, N. MIAMI, FL 33181
02/15/2016 (24 HRS) – TTL EAST FLOW OPERATIONS FOR ALL MIA RWYs: 583**

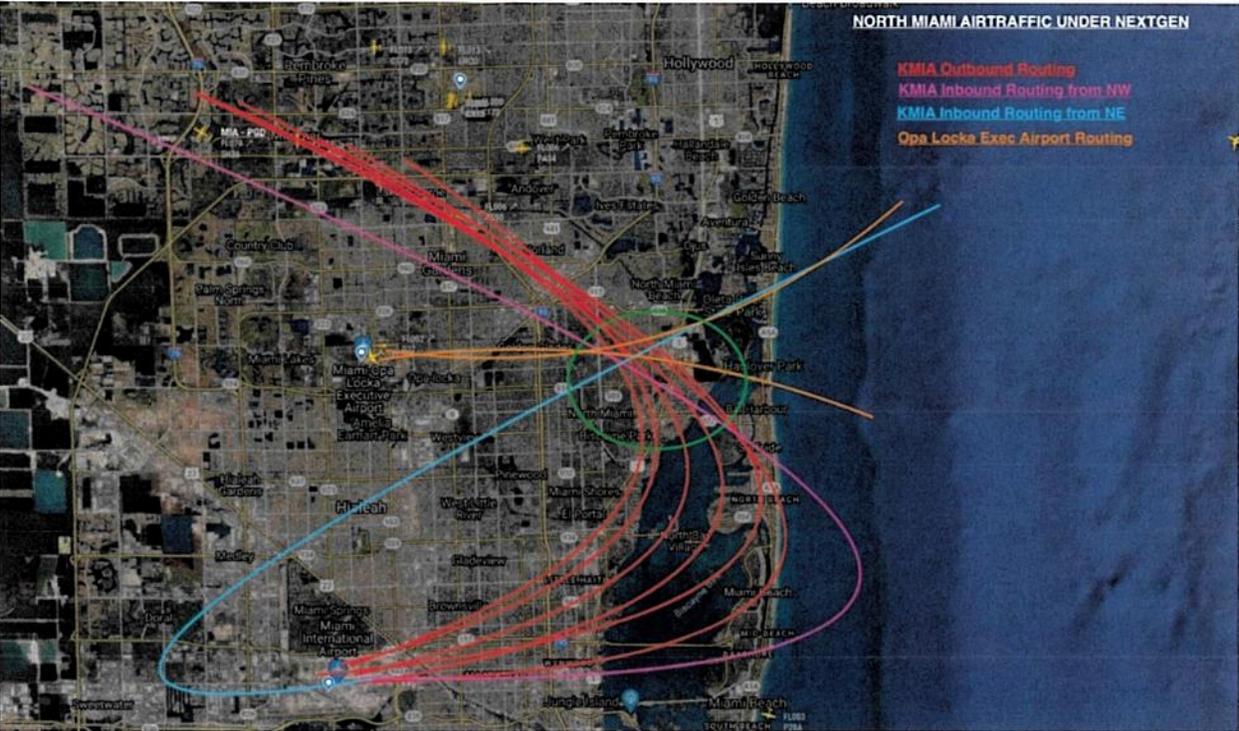


Graphic 1.

The current RNAV routes have wreaked havoc on our community. The proposed RNAV routes will cause even more harm to our community’s health and well-being. See Graphic 2, next page. FAA has been implementing RNAV routes over the years that have increased the noise over our communities in increments. These RNAV routes did not receive public scrutiny or notice nor were their environmental impacts analyzed under NEPA. The fact that the FAA is using a false baseline – a baseline it created to evade public scrutiny and comment and evade NEPA, Clean Air Act and 4(f) analysis, calls into question the integrity of the whole Draft EA.

II. The Draft EA and Attendant Documents Do Not Give Enough Data to Properly Assess the Impact of the New Procedures on Keystone Point.

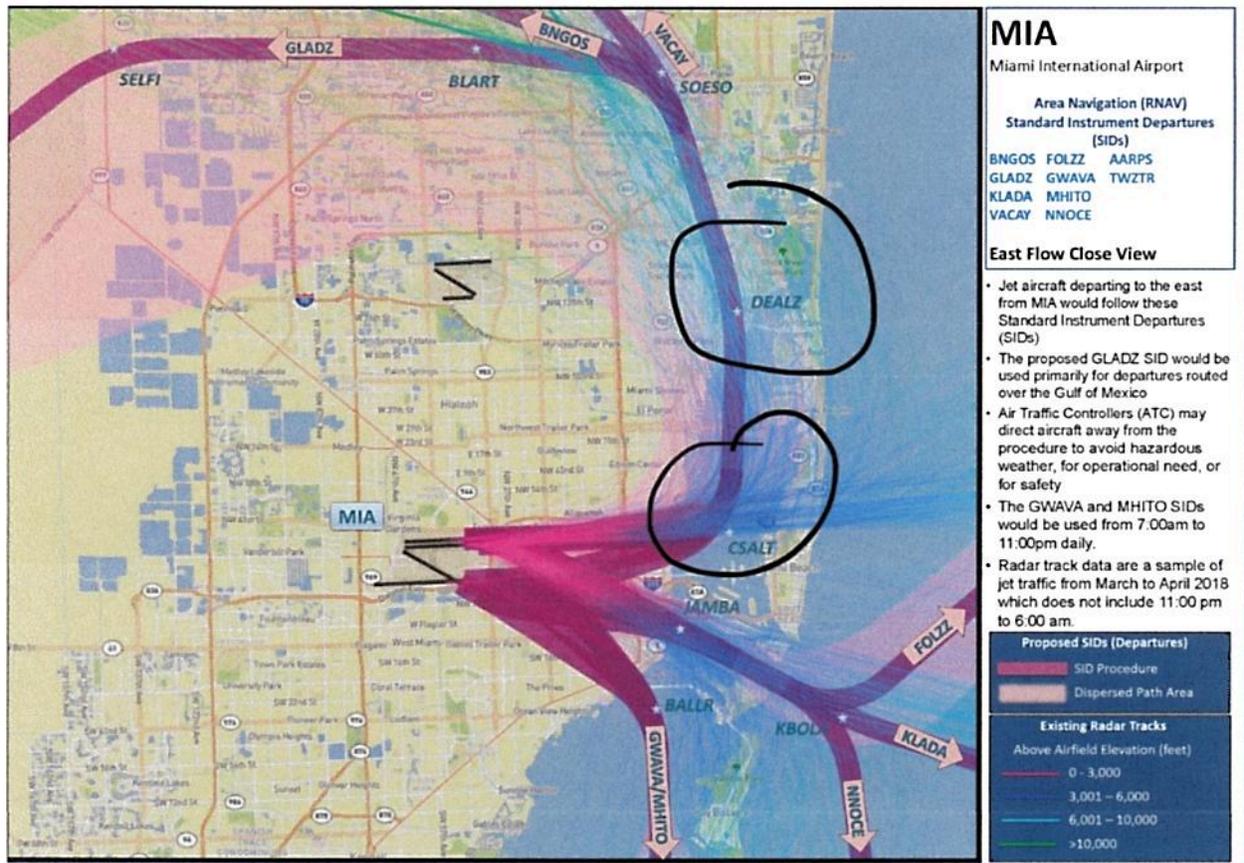
As indicated by Graphic 2, below, the impact that the Project’s proposed flight procedures will have on North Miami and the surrounding communities cannot be underestimated.



Graphic 2

However, the Draft EA is manifestly deficient in data and analysis concerning individual flight procedures that are supposedly part of the Project. For example, the Draft EA mentions new RNAV SIDs BNGOS, GLADZ, and VACAY in passing. See pp.3-31 and 3-42. However, no details are given concerning flight paths and altitudes implicated in individual project implementation. Indeed, none of these procedures are mentioned in Appendix F of the Draft EA, entitled *South-Central Florida Metroplex Study Team Final Report*. Without the details of the flight procedures it is impossible to properly assess the impact they will have on residents on the ground.

The FAA does, however, *some* information about the flight procedures. It presented the following route map to the public that mentioned a couple of details of the proposed flight procedures.



Graphic 3

Before anyone can properly evaluate the proposed flight procedures, more information is required. The TARGETS (“Terminal Area Route Generation and

Traffic Simulation”) Distribution package, and the Radio Fix and Holding Data Records (Form 8260-2), for example, should have been provided along with the information provided other flight procedures in Appendix F. This information needs to be presented as part of the Draft EA because it is vital to understanding the impact of the proposed flight procedures on our community.

If Graphic 3 is accurate, new routes GLADZ, BNGOS and VACAY will fly directly over Keystone Point at low altitudes. This issue could be resolved by pushing the waypoints CSALT and DEALZ over the ocean. This would allow aircraft to be at a higher altitude when they cross back over land causing less of a noise and emission impact on everyone.

III. The Environmental Impacts of the Project Should Be Evaluated in an EIS.

It is Keystone Point’s understanding that the Project encompasses a vast area ranging from Alachua County to the north, to Monroe County to the south, and includes a myriad of urban and natural areas as well as a population approaching 20 million. FAA has decided to limit its environmental review to an EA on the ground that, among other things: (1) “the proposed action would not result in a significant noise exposure impact on populations exposed to DNL 65 dB or higher levels under the proposed action, or produce reportable noise increases in areas exposed to DNL 45 dB to 65 dB,” Draft EA, § 5.1.3, p. 5-7; and (2) even though “the proposed action would result in a slight increase in emissions when compared to the no action alternative,” Draft EA, § 5.2.1, p. 5-8, most of the changes would occur at or above 3,000 feet, and are, therefore, “presumed to conform” pursuant to Federal Presumed to Conform Actions Under General Conformity. 72 Fed.Reg. 41565 (July 30, 2007).

Nevertheless, there are numerous facets to a decision as to whether to perform an elevated level of environmental analysis, or rely on a FONSI, that the Draft EA does not consider. Before a decision to perform an EA instead of an EIS is made, the agency must decide, based on substantial evidence, that the Project will not have significant environmental impacts. See, e.g., *Town of Cave Creek, Arizona v. FAA*, 325 F.3d 320, 327 (D.C. Cir. 2003). The definition of significance includes, but is not limited to: “... (4) the degree to which effects on the environment are likely to be highly controversial;... (7) whether the action is related to other actions with

individually insignificant but cumulatively significant effects;... [and] (10) whether the action threatens a violation of federal, state or local environmental law.” 40 C.F.R. § 1508.7 (“CEQ Guidelines”). It is also notable that neither airport owners nor communities affected by changes in airport operations have been included, until the very latest time, in the development of the NextGen or the Project. Thus, the Draft EA is not the product of significant community input, as set forth in more detail below, but rather appears to be a restatement of environmental analyses used in other parts of the country, and, thus, does not meet the public participation goals which are the fundament of NEPA. In short, the environmental effects reported in the Draft EA, if fully and properly analyzed, fit all these categories of significance and, as set forth below, should be evaluated in a full EIS.

IV. The Draft EA’s Reliance on a “Presumption” of Conformity Is Seriously Misplaced.

As the Draft EA acknowledges, “typically, significant air quality impacts would be identified if an action would result in the exceedance of one or more of the NAAQS [National Ambient Air Quality Standards] for any time period analyzed.” FAA Order 1050.1F *Desk Reference*, Section 1, July 2015; Draft EA, § 5.2.2. The Draft EA fails, however, to analyze and determine whether these standards are exceeded by the Project, and, instead, relies on the “Presumed to Conform” provisions in the Clean Air Act’s implementing regulations, 40 C.F.R. § 93.153(f), FAA’s Federal Presumed to Conform Actions Under General Conformity, 72 Fed.Reg. 41565-580 (July 30, 2007) (“Presumed to Conform Rule”). That section specifies, among other things, that even air traffic actions taking place below the mixing height (usually 3,000 feet above ground level) would be presumed to conform where there are “modifications to routes and procedures ... designed to enhance operational efficiency (i.e., to reduce delay).” In this case, the evidence in the record appears to contradict the assumption relied upon throughout the Draft EA that the Project will increase efficiency, and, thus, the record obviates the presumption of conformity. Specifically, the Draft EA admits that the procedures specified in the Project will increase fuel burn, and, consequently, increase emissions, Draft EA, § 5.2.3, p. 5-9, even if by a small amount. The Draft EA is, however, devoid of explanation or documentation as to the way in which procedures aimed at increasing operational “efficiency” (i.e., reducing the time an aircraft spends in arrival and departure) will result in an increase in emissions, an effect normally associated with increased time spent in arrival and departure.

In this case, such a determination has never been made. While it could have been accomplished in the process of approving the Presumed to Conform Rule, at the outset, FAA declined to do so, stating “FAA has decided to defer action on this aspect [regional significance] in its draft notice, based on consultation with the EPA.” 72 Fed.Reg. 41580. Despite the broad scope of the instant Project, covering hundreds of miles and millions of people, FAA has again declined to make the required findings in the Draft EA. As such, the Draft EA air quality analysis is fatally flawed.

V. Section 175 of the FAA Reauthorization Act of 2018 Have Not Been Addressed

Section 175 of the FAA Reauthorization Act of 2018 states that:

When proposing a new area navigation departure procedure, or amending an existing procedure that would direct aircraft between the surface and 6,000 feet above ground level over noise sensitive areas, the Administrator of the Federal Aviation Administration shall consider the feasibility of dispersal headings or other lateral track variations to address community noise concerns.

It is not apparent from the documents currently available that the FAA has considered the feasibility of dispersal headings or other lateral track variations to address community noise concerns.

VI. The FAA Must Use ISO 1996-1:2016 to Determine the Noise Impact of the South-Central Florida Metroplex Project on the Communities Living Below the Proposed Flight Paths.

What is needed is a method that analyzes population percentages in different communities associated with definitions of noise impacts. A method whereby by specifying two parameters, the percentage of the population of a nominally average community to be protected from high “annoyance” and detriment and the percentage of people in all communities to be similarly protected, can result in a gauge of the efficacy and efficiency of regulatory policies expressed in acoustic units. This method is ISO 1996-1:2016.

The International Organization for Standardization (ISO) produces international standards. An international standard “provides rules, guidelines or characteristics for activities or for their results, aimed at achieving the optimum degree of order in a given context.”² ISO 1996-1:2016 “Description, Measurement and Assessment of Environmental Noise – Part 1: Basic Quantities and Assessment Procedures,” was published in March 2016. ISO 1996-1:2016 defines the basic quantities to be used for the description of noise in community environments and describes basic assessment procedures. It also specifies methods to assess environmental noise and gives guidance on predicting the potential annoyance response of a community to long-term exposure from various types of environmental noises. Application of ISO 1996-1:2016 to predict annoyance response is limited to areas where people reside and to related long-term land uses. ISO 1996-1:2016 and its companion ISO 1996-2:2016, have been approved for use by the ISO countries, which includes the United States. As with all ISO standards, ISO 1996-1:2016 represents the best scientific practices. The FAA is required under the terms of the Data Quality Act (Section 515 of the Consolidated Appropriations Act, 2001 (Pub.L. 106–554)) to use ISO 1996-1:2016 in its noise analysis.

ISO 1996-1:2016 states in its introduction that “[its] broad aim . . . is to contribute to the international harmonization of methods of description, measurement, and assessment of environmental noise from all sources.” The introduction adds, “the aim of the ISO 1996 series is to provide authorities with material for the description and assessment of noise in community environments. Based on the principles described in this part of ISO 1996, national standards, regulations, and corresponding acceptable limits for noise can be developed. The methods and procedures described in Part 1 of the ISO 1996 are intended to be applicable to noise from various sources,”³ not just those emanating from aircrafts.

Relevant passages in ISO 1996-1:2016 that refer to how governmental agencies should assess noise in affected communities:

- Annex A:

² <https://www.iso.org/deliverables-all.html>

³ ISO Part 1 - Introduction

- “It is usually found that for the same equivalent continuous sound pressure level, aircraft noise is more annoying than road-traffic noise.”
 - Discusses Community Tolerance Level variable in depth (“L_{CT}”) and adjustments to such variable.
- Annex D:
- In newly created situations, especially when the community is not familiar with the sound source in question, higher community annoyance can be expected. This difference may be equivalent to up to 5 dB.
 - A new, unfamiliar sound source cited in a quiet rural area can engender much greater annoyance levels than are normally estimated by these formulae. This increase in annoyance may be equivalent to adding up to 15 dB to the measured or predicted levels.
- Annex E: Estimated prevalence of a population highly annoyed as a function of adjusted day-evening-night or day-night sound levels using the community tolerance level formulation.
- E.1 (Aircraft Noise), Table E.1 and Figure E.1.
- Annex F: Estimated prevalence of a population highly annoyed as a function of adjusted day-evening-night or day-night sound level using a regression formulation.
- F.1 Aircraft Noise – introduces prevalence of high annoyance variable (P_{HA}).
- Annex H:
- Theory-based approach to predict the growth of annoyance.
 - The community tolerance level is explained in Annex H to ISO Part 1 as part of a theory-based approach to predict the growth of annoyance.

Thus, ISO 1996-1:2016 corrects the reliance on the “Schultz curve” and gives policymakers a much more accurate view of community tolerance levels of noise. The additional variable used in ISO 1996-1:2016 is the community tolerance level or

“L_{CT}”). This variable, as explained in ISO Part 1, is the “day-night sound level at which 50% of the people in a particular community are predicted to be highly annoyed by noise exposure.” Note 1 to ISO Part 1 states that L_{CT} is a parameter that accounts for differences between sources and/or communities when predicting the percentage highly annoyed by noise exposure. It is worth reiterating that Annex D to ISO 1996 Part 1 states that in newly created situations, especially when the community is not familiar with this sound source, higher community annoyance can be expected. This difference may be equivalent to up to 5 dB. A new, unfamiliar sound source can engender much greater annoyance levels than are normally estimated by these formulae. This increase in annoyance may be equivalent to adding up to 15 dB to the measured or predicted levels.⁴

VII. The FAA Has Failed to Consider Noise and Emission Reduction in the Draft Environmental Assessment for the South-Central Florida Metroplex Project.

The Draft Environmental Assessment states that “[t]he purpose of the Metroplex initiative is to optimize air traffic procedures and airspace on a regional scale.” This ignores completely what Congress intended to be one of the purposes of the implementation of the *Next Generation Air Transportation System* (NextGen): to *reduce* the amount of noise and emissions experienced by residents in the ground as a result of the project.

In *Vision 100 – Century of Aviation Reauthorization Act of 2003*, (Pub.L. No. 108-176, § 709(c)(7)) Congress required that in the FAA’s development of NextGen flight procedures, such as the South-Central Florida Metroplex Project, that the FAA “take into consideration, to the greatest extent practicable, design of airport approach and departure flight paths **to reduce exposure** of noise and emissions pollution on affected residents.” 49 U.S.C. § 40101 note (emphasis added). The South-Central Florida Metroplex Project, which is part of the NextGen program, ignores this direction. There is no discussion of any effort to *reduce* noise, emissions, or other environmental impacts. The only discussion is a perfunctory discussion about how the South-Central Florida Metroplex Project does not *increase* noise a “significant” amount.

⁴ *Id.*, at Annex D - D4.4.

Keystone Point believes that the FAA has not appropriately considered the *reduction* of environmental impacts, particularly noise, in developing the South-Central Florida Project and that the proposals do not meet the goals Congress has defined for NextGen.

VIII. The Draft EA Fails to Consider the Impacts to All Parks or Recreation Areas in its 4(f) Analysis.

The FAA must “document compliance” with its Section 4(f) obligations, including “any required consultations, findings, or determinations.” JA 619, FAA Order No. 1050.1F ¶ 5-5; see also JA 83, FAA Order No. 1050.1E ¶ 306. Here, the Draft EA is missing critical natural resources and historical properties from its findings, determinations, or evidence of consultation under the National Historic Preservation Act (“NHPA;” Public Law 89-665; 54 U.S.C. § 300101 et seq.) and Section 4(f) of the U.S. DOT Act of 1966 (“Section 4(f);” now codified at 49 U.S.C. § 303) regarding those resources.

Section 4(f) provides that the FAA may approve a project “requiring the use of publicly owned land of a public park, recreation area . . . or land of an historic site of national, State, or local significance . . . only if—(1) there is no prudent and feasible alternative to using that land; and (2) the program or project includes all possible planning to minimize harm . . . resulting from the use.” 49 U.S.C. § 303(c). Under the FAA’s procedures, it first must “identify as early as practicable in the planning process section 4(f) properties that implementation of the proposed action and alternative(s) could affect.” JA 641-42, FAA Order No. 1050.1F ¶ B-2.1. The FAA then makes an “initial assessment . . . to determine whether the proposed action and alternative(s) would result in the use of any of the properties.” JA 642, id. ¶ B-2.2. (“[N]oise that is inconsistent with a parcel of land’s continuing to serve its recreational, refuge, or historical purpose is a ‘use’ of that land.” *City of Grapevine v. Dept. of Transp.*, 17 F.3d 1502, 1507 (D.C. Cir.1994)). The FAA must consult “all appropriate . . . State[] and local officials having jurisdiction over the affected section 4(f) areas when assessing whether a noise increase might substantially impair these areas.” *City of Phoenix v. Huerta*, 869 F.3d 963 at 973 (quoting FAA Order No. 1050.1E, App. A, ¶ 6.2e) (emphasis omitted); see also JA 643-44, FAA Order No. 1050.1F ¶ B-2.2.2.

The NHPA “requires Federal agencies to consider the effects of their undertakings on historic properties.” 36 C.F.R. § 800.1(a). For any undertaking that has the potential to affect historic properties, the FAA must identify the project’s “area of potential effect,” locate all historic properties in that area listed or eligible for listing on the National Register, and assess the effect of the undertaking on those properties. 36 C.F.R. §§ 800.3(a), 800.4(a)–(c), 800.5. In fulfilling those requirements, the FAA “must consult with certain stakeholders in the potentially affected areas,” including the SHPO and representatives of local governments. *City of Phoenix*, 869 F.3d at 971; 36 C.F.R. § 800.2(a)(4), (c)(1), (c)(3). If the FAA determines that no historic structures will be adversely affected, “it still has to ‘notify all consulting parties’”—including the SHPO and representatives of local governments—“and give them any relevant documentation.” *City of Phoenix*, 869 F.3d at 971 (quoting 36 C.F.R. § 800.5(c)).

There is no evidence in the Draft EA that the FAA considered, much less fulfilled, any of those requirements with respect to Biscayne Bay, a State of Florida Aquatic Preserve and Miami-Dade County Aquatic Park and Conservation Area, and Arch Creek Archeologic Site, listed July 15, 1986 on the National Register of Historic Places.

In 1974 the County Commission declared Biscayne Bay to be an “Aquatic Park and Conservation Area.” (Ordinance 74-13) The County’s legislative action was followed by the Florida legislature’s enactment of the Biscayne Aquatic Preserve Act. (Fla. Statute 74-171; and omnibus Aquatic Preserve Act, Chapter 258 Fla. Statute, with special protective provision for Biscayne Bay). Thus, Biscayne Bay, which is “beyond argument, Greater Miami’s most precious natural resource” (Miami Herald Editorial, Jan. 30, 1984) should be listed in the inventory of significant Historic and Cultural Resources Table A6.2. Likewise, the Arch Creek Archeologic Site, a prehistoric site with 19th and 20th century historic importance, should also have been listed. This is a significant omission because there is a small interpretative museum at the site and there are ongoing outdoor youth activities at the park. Since it is located at NE 135th Street and Biscayne Boulevard, it will be negatively impacted by noise from the proposed Project flight procedures.

IX. The FAA Has a Statutory Duty to Protect Residents and Property from the Deleterious Effects of Aircraft Noise.

Separate and apart from the goals set for the FAA under NextGen, the FAA has a statutory duty to protect residents and property owners from the deleterious effects of aircraft noise. Federal law establishes the absolute duty of the federal government to protect both people and property from aircraft noise. “[T]he Congress declares that it is the policy of the United States to promote an environment for all Americans free from noise that jeopardizes their health or welfare.” 42 USC § 4901(b). In at least two other statutes, federal law puts the onus of assuring that aircraft noise does not jeopardize the public’s health, welfare, or property squarely on the FAA. 49 U.S.C. § 40103(b)(2) states that the “Administrator shall prescribe air traffic regulations on the flight of aircraft (including regulations on safe altitudes) for . . . protecting individuals and property on the ground.” This has been construed by the U.S. Court of Appeals for the District of Columbia Circuit to apply to restricting aircraft noise over sensitive receptors and protecting the property over which aircraft fly. *Helicopter Association International Inc. v. Federal Aviation Administration*, 722 F.3d 430, 433 – 435 (D.C. Cir. 2013). Likewise, the FAA has a duty under 49 U.S.C. § 44715(a)(1)(A) to “prescribe . . . regulations to control and abate aircraft noise and sonic boom” in order “[t]o relieve and protect the public health and welfare from aircraft noise and sonic boom.” 49 U.S.C. § 44715(a)(1)(A).

Further, *Helicopter Association International* stated that the FAA has the authority as well as the duty to protect people on the ground from noise from aircraft: “[u]nder the plain text of [49 U.S.C.] § 40103, the FAA has authority to ‘prescribe air traffic regulations . . . [to] protect[] individuals and property on the ground.’” In that case, the FAA changed helicopter routes along the north shore of Long Island because of noise complaints, even though the noise levels were below 45 DNL. The Court pointed out that the “FAA found that ‘residents along the north shore of Long Island emphatically agreed that helicopter overflights during the summer months are unbearable and negatively impact their quality of life.’” On this basis, the Court found, the FAA made the North Shore Helicopter route mandatory, although “[t]he FAA found that the sound levels, which were below DNL 45 dB, were ‘below levels at which homes are significantly impacted.’” Thus, the FAA has a duty and authority to protect individuals on the ground – like it did on the north shore of Long Island – who experience unbearable aircraft noise that negatively affects their quality of life. This duty extends to people and property under flight paths below which the FAA believes to not be significantly impacted.

In developing the Draft EA and Project, the FAA has ignored its statutory and regulatory duty to control and abate “aircraft noise and sonic boom.” The FAA’s statutory duty to protect people and property on the ground from the deleterious effects of aircraft noise goes beyond its duty under NEPA. The FAA’s statutory obligations under 42 USC § 4901(b), 49 U.S.C. § 40103(b)(2) and 49 U.S.C. § 44715(a)(1)(A) require the FAA address aircraft noise separate and apart from its duties under NEPA because the FAA’s proposed action will create aircraft noise that will have a deleterious effect on the public health and welfare.

X. Conclusion

The FAA in drafting the Draft EA and designing the Project has failed to meet its statutory duties under various federal laws, regulations, and orders. In sum, the FAA’s Draft EA and Project fails to fulfill the FAA’s statutory duty to “protect[] individuals and property on the ground” and adequately explain the environmental risks and impacts that the Project will have on people underneath the proposed flight corridors.

If you have questions or comments, please feel free to call me at or send me an email at

Very truly yours,



Karen DeLeon, President

FAA Responses to Comments of the Keystone Point HOA on the Draft EA for the South-Central Florida Metroplex Project

Response I. – “The FAA Has Increased Aircraft Noise Over North Miami in Increments so that the Project's Noise Impacts Will Not Be Significant.”

The commenter alleges the noise over North Miami increased over time to avoid a determination that the proposed Metroplex Project would have significant environmental impacts. The commenter’s description of the environmental baseline is incorrect. Because of this misunderstanding, the commenter suggests that the environmental baseline used in the Final EA is inaccurate. But the baseline accurately represents real-world conditions, consistent with the commenter’s request.

New Q and Y Routes (at or above 18,000 feet) were implemented on November 8, 2018 after a NEPA review that concluded they were subject to a categorical exclusion. At the same time, the FAA’s preferential route database was updated. This database has been mischaracterized to infer that aircraft lateral departure paths have been changed. The database routes do not affect how air traffic directs flights over Biscayne Bay.

The database is a national traffic management tool to ensure expeditious movement of traffic during heavy demand periods. It is a flight-planning tool primarily used for air carrier and business aviation. Preferred IFR Routes are established only when air traffic density and/or safety make preferential routes necessary. The database has more than 10,000 routes, and 122 of the routes are Miami “city pair” routes to 73 destinations.

The agency uses accurate radar track data to analyze flight paths.

HEDLY and WINCO were implemented in 2006. After implementation, inefficiencies were discovered in the design that led to alternative actions in order to maintain departure separation between parallel runways. Since that time, controllers have used radar vectors until aircraft were over Biscayne Bay. After parallel runway separation is accomplished, aircraft are vectored to join the HEDLY or WINCO departure procedures.

A review of historical departure data shows the following results:

- In February 2015, an average of 138 aircraft per day flew over the Keystone Point area at an average altitude of 4,800 feet.
- In February 2017, an average of 162 aircraft per day flew over the Keystone Point area at an average altitude of 4,829 feet.
- In February 2020, an average of 164 aircraft per day flew over the Keystone Point area at an average altitude of 5,246 feet.

Response II. – “The Draft EA and Attendant Documents Do Not Give Enough Data to Properly Assess the Impact of the New Procedures on Keystone Point.”

The commenter states that the Draft EA fails to explain specific details about procedures. Because of both the number of changes to procedures (many of which are changes that would not actually alter flight paths) and the geographic scope involved, providing the level of detail requested by the commenter in the general graphics provided in the body of the EA would likely result in an environmental assessment document that is more, rather than less, confusing to the general public. The EA provided further detailed information by referencing technical documents that were provided along with the Draft EA. The commenter referenced omitted information in Appendix F. The Study team recommendations were considered by the D&I Team but not necessarily adopted.

The goal of an environmental assessment is to summarize the agency's conclusion that an environmental impact statement is not required, not to provide full and complete operational details of highly technical air-traffic procedures. To provide the public far more information about the proposed action, the agency produced numerous additional graphics showing individual procedures, and recorded virtual workshops to further explain them. The additional detail requested by the commenter was provided there, and we have reproduced those graphics in Appendix A of the Final EA. The FAA believes that it has provided more than sufficient information for the public to understand the environmental impacts of the proposed action.

Response III. – “The Environmental Impacts of the Project Should Be Evaluated in an EIS”

The Federal Aviation Administration (FAA) has established a process to ensure compliance with the provisions of NEPA through FAA Order 1050.1F, *Environmental Impacts: Policies and Procedures*. The Draft EA and the Final EA were prepared in accordance with FAA Order 1050.1F and with applicable regulations implementing the National Environmental Policy Act. Notably, federal law requires that environmental assessments be “concise” and that they only “briefly” describe the basis for the agency's conclusion that environmental impacts will not be “significant.” 40 C.F.R. § 1508.9.

The FAA disagrees with the commenter's statement that “neither airport owners nor communities affected by changes in airport operations have been included, until the very latest time, in the development of the NextGen or the Project.” During the design process, the FAA design team held an extensive series of public outreach meetings with relevant organizations, communities and officials to gather feedback on the notional designs (see Appendix A). The feedback received was instructive and considered in the alternative development process. More details can be found in Appendix F and Appendix G.

Response IV – “The Draft EA's Reliance on a “Presumption of Conformity Is Seriously Misplaced.”

The Proposed Project does not require further review under the Clean Air Act. It is not intended or designed to increase the number of aircraft operations, but requires efficiently handling current and forecasted demand which is determined locally on an airport-by-airport basis. It is thus designed to enhance operation efficiency. The increase in fuel burn is the result of only a handful of changes and is not a widespread impact across the Study Area at a variety of altitudes. Any

operational changes that could result in an increase in fuel burn would occur higher than 3,000 feet AGL. De minimis increases at that altitude are presumed to conform to all applicable State Implementation Plans pursuant to federal law. 40 C.F.R. § 93.153(c)(2)(xxii); *Federal Presumed to Conform Actions Under General Conformity*, 72 Fed. Reg. 41565, 41578 (Jul. 30, 2007).

Response V. – “Section 175 of the FAA Reauthorization Act of 2018 Have Not Been Addressed”

The comment alleges that dispersal headings or other lateral track variations were not considered. With respect to MIA specifically, the FAA met with the Miami-Dade Aviation Department (MDAD) to discuss the feasibility of dispersal headings at MIA. MDAD advised the FAA of the importance of adhering to existing noise abatement procedures for MIA eastbound departures. The existing radar vectoring procedure for east departures requires that aircraft make no turns prior to five miles from the airport. CSALT is located 5.17 miles west of MIA. Turns prior to this point would route aircraft outside of historic flight tracks. The Proposed Final Designs are fully consistent with the existing noise abatement procedures. MDAD also requested to have aircraft remain over Biscayne Bay as much as possible. The Proposed Procedures are expected to keep aircraft over Biscayne Bay until they reach 7,000 ft. AGL.

No other lateral track variations were requested. MDAD has been continuously updated on procedure designs and Metroplex status, and the FAA has considered all input it received.

Response VI. – “The FAA Must Use ISO 1996-1:2016 to Determine the Noise Impact of the South-Central Florida Metroplex Project on the Communities Living Below the Proposed Flight Paths.”

As stated earlier, the EA was prepared in full compliance with regulations implementing NEPA and FAA Order 1050.1F. This Order requires that aircraft noise analysis use the yearly Day-Night Average Sound Level (DNL) metric. The use of the DNL metric was recently reaffirmed by the Federal Interagency Committee on Aviation Noise, in its report title *Federal Agency Review of Selected Aviation Noise Issues*, published in 2018. In 2020, the FAA provided a report to Congress assessing the benefits and advantages of DNL over a variety of alternative noise metrics and measurement methods. Federal Aviation Administration, *Report to Congress, FAA Reauthorization Act of 2018 (Pub. L. 115-254), Section 188 and Sec 173* (Apr. 14, 2020). The method to analyze noise impacts to communities suggested by the commenter will not be used.

Response VII. – “The FAA Has Failed to Consider Noise and Emission Reduction in the Draft Environmental Assessment for the South-Central Florida Metroplex Project.”

The FAA disagrees with the commenter’s interpretation of FAA’s mandate from Congress and the FAA’s legal obligations when transitioning the National Airspace System to a more widespread use of NextGen air-traffic technologies. Nevertheless, the South-Central Florida Metroplex Project fully satisfied the direction of Congress to “take into consideration, to the greatest extent practicable, design of airport approach and departure flight paths to reduce exposure of noise and emissions pollution on affected residents.” The entire Project was designed from the beginning to minimize changes to air-traffic procedures below 10,000 feet above ground level and to adhere to historic flight tracks to avoid any significant noise impacts as defined by FAA’s Order governing

NEPA compliance. The FAA adjusted the design of several procedures in response to comments received during the 2019 scoping period, and further adjusted others in response to comments received on the Draft EA. The FAA has fully considered whether the exposure of noise and emissions pollution on affected residents can be reduced. *See Vaughn v. FAA*, 756 F3d. Appx. 8, 13 (D.C. Cir. Nov. 30, 2018).

Response VIII. – “The Draft EA Fails to Consider the Impacts to All Parks or Recreation Areas in its 4(f) Analysis.”

The FAA’s Draft EA considered impacts to Biscayne Bay and associated areas, Arch Creek Park and many others in the General Study area. The complete list of resources protected under Section 4(f) can be found in Table A6.3 in Appendix I.

Response IX - “The FAA Has a Statutory Duty to Protect Residents and Property from the Deleterious Effects of Aircraft Noise.”

The FAA disagrees with the commenter’s interpretation of some of the cited statutory references, and of the D.C. Circuit’s opinion in *Helicopter Association International, Inc. v. FAA*, 722 F.3d 430, 433 (D.C. Cir. 2013). Although that opinion acknowledged that FAA has the appropriate delegated authority to consider the impacts of aircraft noise when designing procedures, the statement that FAA has “the duty to protect people on the ground from noise from aircraft” is the commenter’s own statement rather than that of the federal court. Nevertheless, the FAA fully considered the potential impacts of aircraft noise when developing this project, and made changes where practicable to account for those impacts. *See* Response to Comment VII (above). FAA acted consistent with the statutory provisions cited by commenter here by developing a Metroplex Project that avoided all significant noise impacts throughout the entire Study Area, and thus avoiding any deleterious or other substantially adverse impacts on those on the ground. Aircraft noise is a major component of the FAA’s focus on environmental impacts in the Environmental Assessment, and the FAA has fully considered and addressed it.

Response X: “Conclusion”

The FAA interprets this comment to repeat the legal claims made in comments VII and IX and refers the commenter to those responses.



**LAUDERDALE ISLES
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Nonprofit
Organization
Since 1959

*THIS COMMENT
WAS EMAILED TO
YOU ON JULY 23, 2020,
AT 12:09 PM*

July 23, 2020

The Lauderdale Isles Civic Improvement Association files this comment to the Draft Metroplex Environmental Assessment on behalf of the 700 homeowners in our neighborhood.

The neighborhood of Lauderdale Isles has experienced horrendous airport noise for over five years, due to new departure procedures implemented upon the opening of the new south runway at FLL in October of 2014. If planned properly, Metroplex could solve our noise problem. However, we do not believe that you are at all concerned with the airport noise we experience in southwest Fort Lauderdale.

Here are the reasons why:

The 5000 page Metroplex Environmental Assessment is so complicated that only an aerospace engineer can understand it. It is not written for laypersons to understand. You have never provided a concise, simple, and exact explanation of how Metroplex will affect nearby neighborhoods during the first 60 seconds of flight, when the effects of noise are the greatest.

Your virtual workshops were vague and answers you gave to questions were often inexact and misleading. You stated that west departures would be south of I595, but your actual data shows plenty of flight tracks north of I595. We had no opportunity to discuss this project one-on-one with you, nor could we ask follow-up questions to answers you provided. This should have been at a live, in-person workshop like last year. Using COVID as an excuse to run virtual workshops instead of waiting until in-person workshops can be conducted is totally unfair to every resident affected by this project.

In the virtual workshops, you stated that westbound departures will stay south of I595. However, your own graphics that you provide with Google Earth, show that is not true, and you will make the noise situation worse than it is now for southwest Fort Lauderdale. Furthermore, your Google Earth files are so huge and difficult to use that they are useless to a layperson with a typical laptop computer.

You have stated that the noise situation will not change. What this really means is that the noise situation in southwest Fort Lauderdale is already horrible, and will continue to be horrible with Metroplex. You can solve the noise situation by adjusting DREDS and/or SEAZZ, but you refuse to do so. But you do not provide any factual statistics from any studies as to why you cannot adjust these waypoints.

The FAA Reauthorization Act of 2018, Sec. 175, requires the FAA to consider diverging departure flight paths or lateral spacing to address community noise concerns when proposing or adjusting departure procedures, if requested by the airport operator and community leaders. BCAD and the City of Fort Lauderdale have made such requests to you, but you have ignored them and Sec. 175.

We doubt that you will incorporate any changes requested in the comments you receive for this Metroplex Project, and you are just forcing this whole project upon us. You received hundreds of comments from your workshops in April 2019, but you never tabulated them nor did you share them with the public. You say you "considered" them, but your plan now is virtually the same plan that you presented last year with no changes. We don't believe you considered those comments at all from last year, and that you won't consider the comments you receive now for the Environmental Assessment.

Metroplex is using essentially the same westward departure patterns on the north runway that were established when the new south runway opened in 2014. These patterns cause deafening noise for southwest Fort Lauderdale. We object to your using these same patterns for the north runway, when you can actually improve the noise situation for this area by using waypoints farther west, thereby putting flights over industrial areas west of the airport, where they were before the new runway opened.

Locating the waypoint DREDS as a fly-by waypoint will make the noise situation worse in southwest Fort Lauderdale as shown in your own graphics. You can use SEAZZ for all north runway departures and stagger occasional simultaneous flights as necessary.

The 290 heading was originally established in 2014 to provide 15 degrees of separation for safety. Now you say you need to keep this heading essentially unchanged for "efficiency." This is bogus. The airport ran just fine with only one runway for four months last year for all takeoffs and landings. Having both runways operational now gives you all the capacity you need to put all departures on due west headings, and stagger the occasional simultaneous departures. And you provide no studies or statistics to prove to what degree, if any, "efficiency" will be affected.

In the virtual workshops, you stated that you decreased the dispersion angle for flights off the north runway from 15 degrees to 11 degrees. This change is insignificant. To reduce the noise in southwest Fort Lauderdale, you need to put all departures on a due west heading, over industrial areas, and stagger the occasional simultaneous departure. In the virtual workshops, you stated you moved the DREDS waypoint farther west. However, we requested the lat/lon for DREDS last year, and again requested the lat/lon after your virtual workshops this year. THE LOCATION OF DREDS IS EXACTLY THE SAME -- YOU DIDN'T MOVE IT AT ALL. DREDS needs to be moved a mile west or SEAZZ needs to be used for all departures on the north runway.

You stated during the workshops that using runway heading, which is due west, for all departures from the north runway, could not be done because it would affect sequencing and efficiency. Yet you do not provide numbers from any study you have done to substantiate this.

Lastly, and most importantly -- regarding nighttime westbound departures -- The current nighttime departure procedure for FLL, which was established in 2015, is:

"During the daily nighttime voluntary closure of Runway 10R/28L between the hours of 10:30pm and 6:00am, all aircraft operating from the north runway will be requested to fly runway heading."

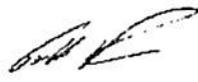
This nighttime procedure is essential to minimize noise from departing flights so that residents can sleep. We do not see mention of this procedure in the Metroplex Environmental Assessment. This procedure must be maintained when the Metroplex plan is adopted.

Sincerely,

The Lauderdale Isles Civic Improvement Association, Inc.



Audrey Edwards
President



Geoff Rames
Director



Dick Cahoon
Director

Email : g.ames.lucia@gmail.com

FAA Responses to Comments of the Lauderdale Isles Civic Improvement Association on the Draft EA for the South-Central Florida Metroplex Project

Please see **Topical Response – 10. Existing Aircraft Noise, 15. Google Earth Files, 22. Noise Modelling, 23. Noise Modelling Analysis, 50. COVID-19**

The commenter notes that the Draft Environmental Assessment was long and alleges that this made it difficult to understand. The body of the Draft Environmental Assessment was approximately 200 pages, not 5000, and is designed only to summarize the agency’s overall conclusions about whether its proposed actions might “significantly affect the human environment” and therefore require an environmental impact statement under the National Environmental Policy Act. Many other commenters suggested that they felt that the Draft Environmental Assessment should have contained far more detail, not less. The commenter seeks additional information about environmental impacts during the first minute of flight. Those impacts were considered and are included in the agency’s overall determination of the extent of environmental impacts. The Project makes few changes below 10,000 feet above ground level, and almost no changes below 3,000 feet (as aircraft must be aligned with the runways on takeoff and landing, and the Project does not alter locations of runways). Therefore no significant environmental impacts are anticipated within the first minute of flight.

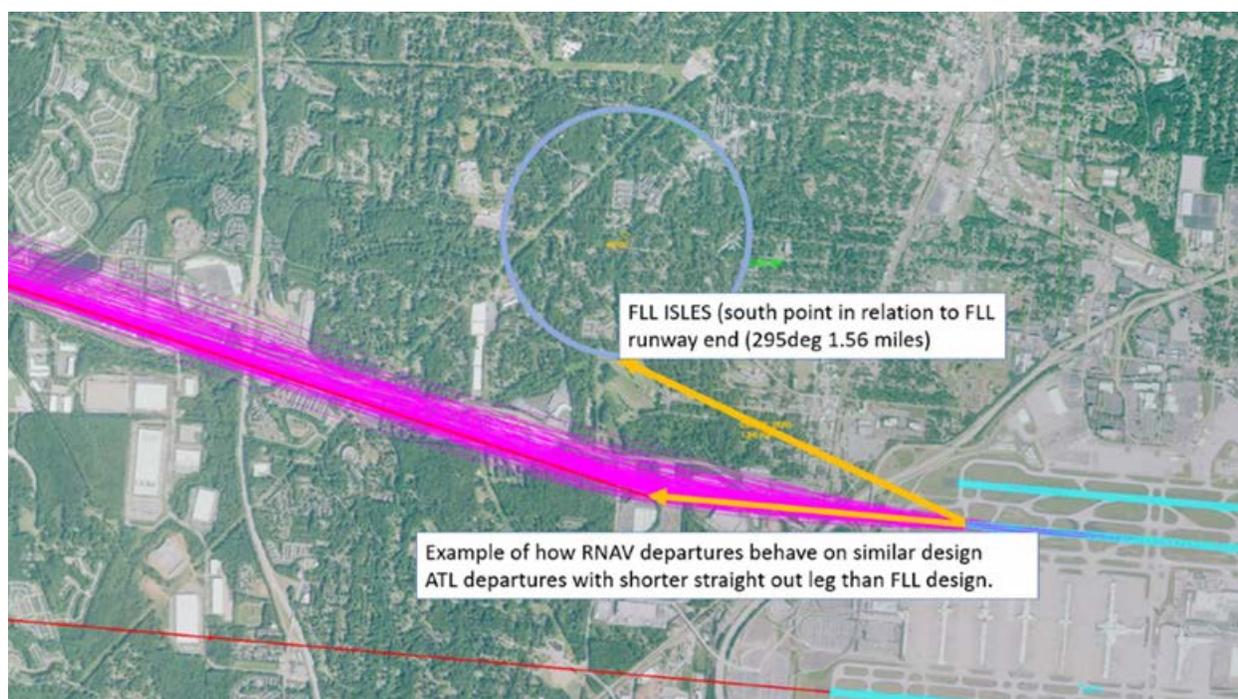
The flight corridors depicted in the provided Google Earth files show the overall width of the possible flight corridor for each air-traffic procedure proposed as part of the Project. The statements made at the virtual workshops about the actual, anticipated locations of aircrafts during real-world flight conditions were accurate. Westbound departures from FLL are expected to stay south of I-595.

The commenter’s description of current noise conditions in southwest Fort Lauderdale as “horrible” is noted. Both the current noise conditions and the future noise conditions resulting from the Project are within ranges established by federal regulation as compatible with the land uses of that area, and are not increased by the Project to an extent that further action is required by the FAA. Nevertheless, we were able to partially grant the commenter’s request to adjust the DREDS waypoint, as explained in the Final EA and in Topical Response Number 49. That response also explains why west departures cannot proceed all the way to SEAZZ before turning.

The location of the DREDS waypoint remained the same between initial design and submission in the Draft EA. After a review of comments related to release of the Draft EA, the FAA examined the procedure and recommendations, resulting in a move of 1,497 feet west for the DREDS waypoint. Please see the topical response for DREDS.

The FAA designs procedures to take advantage of the full existing capacity of an airport. The purpose of the project is not to increase operations, but to provide the necessary infrastructure to safely and efficiently handle forecasted demand. Noise modelling takes future operations and potential increases into account. The design of procedures also provides accommodation for any forecasted increase.

The following graphic presents a display of actual track data after implementation of an RNAV departure procedure. It depicts actual Atlanta Hartsfield International Airport departures from Runway 26L. The Atlanta departure routes aircraft 1.28 miles before turning. In comparison, the revised FLL AARPS, VACAY, BNGOS and TWSTR procedures route departures 1.52 miles before turning to a course for the DREDS waypoint. This graphic is submitted to provide an example of expected departure routing for FLL west bound departures. The arrow in yellow points to an approximate location of the southernmost portion of Fort Lauderdale Isles if this departure could be overlaid on the Florida Metroplex Study Area.



Discussions with the airport authority revealed desire to use reduced divergence for departures using PBN tracks. Florida Metroplex proposed designs utilize 10.34 divergence. Current departure procedures utilize 15 degrees of divergence. Alternative designs were examined utilizing 15 degrees of divergence or less. After considering safety, complexity, and efficiency, the proposed final designs were deemed to be in compliance with the FAA Reauthorization Act of 2018, Sec. 175.

Comments that the FAA received in 2019 did result in changes to several air-traffic procedures that had originally been proposed, and the commenter's view that the Draft EA reviewed "virtually the same plan" as that discussed in early 2019 is inaccurate.

The commenter is correct that there is no mention of daily nighttime procedures in the Draft EA. The Metroplex Project makes no changes to nighttime voluntary closures of FLL Runways 10R/28L.



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June 9, 2020

BENJAMIN R. SIEGEL, CPA, C.M.
ACTING EXECUTIVE DIRECTOR

RICHARD Wm. WESCH
PORT AUTHORITY ATTORNEY

South-Central Florida Metroplex Draft EA
Federal Aviation Administration
Eastern Service Center – Operations Support Group
1701 Columbia Ave
College Park, GA 30337

**BOARD OF
PORT COMMISSIONERS**

BRIAN HAMMAN

RE: Draft EA for FAA South-Central Florida Metroplex Project

FRANK MANN

JOHN E. MANNING

To Whom It May Concern:

CECIL L PFENDERGRASS

This letter is being provided on behalf of the Lee County Port Authority (Port Authority) in response to the Federal Aviation Administration (FAA) Draft Environmental Assessment (EA) for the South-Central Florida Metroplex Project. The Port Authority operates the Southwest Florida International Airport (RSW) and Page Field (FMY) in Fort Myers, Florida.

RAY SANDELLI

Based on our review of the Draft EA, it is our understanding that RSW and FMY were not Study Airports and the proposed South-Central Florida Metroplex Project would have no effect on the operations at RSW and FMY. However, if changes to the National Airspace System are implemented, appropriate consideration should be given to the measures outlined in our Noise Compatibility Program (NCP) from the RSW 2013 14 Code of Federal Regulations (CFR) Part 150 Noise and Land Use Compatibility Study (Part 150 Study) approved by the FAA on April 7, 2014. Since the Part 150 Study for RSW did not identify noise-sensitive land uses within the existing or projected 65 dB DNL contours, the NCP portion of the study focuses on measures that reduce noise levels to local communities whom receive the bulk of aircraft overflights and have the greatest potential for annoyance.

In 2014 and 2018, the Port Authority evaluated the implementation status of each of the Part 150 NCP measures. The 2018 RSW Noise Compatibility Program Post Study Update and Status of FAA Initiatives Report (originally prepared in 2014) is enclosed. The Port Authority requests the FAA consider the operational measures outlined in the NCP when finalizing the EA for the South-Central Florida Metroplex Project.

SOUTHWEST FLORIDA INTERNATIONAL AIRPORT
11000 Terminal Access Road, Suite 8671 - Fort Myers, Florida 33913-8213
www.flylcpa.com

We understand the need for optimization of the National Airspace System through advanced technology. However, aircraft overflight initiatives from airports not included in the South-Central Florida Metroplex Project, but are in the same geographical area (i.e. RSW & FMY), should be considered.

We appreciate the opportunity to comment on the Draft EA and look forward to continuing this cooperative relationship.

Sincerely,

LEE COUNTY PORT AUTHORITY



Alicia Dixon
Director, Planning & Environmental Compliance

Enc: 2018 Noise Compatibility Program Study Update and Status of FAA Initiatives Report

CC: Ben Siegel, Acting Executive Director, LCPA

SOUTHWEST FLORIDA INTERNATIONAL AIRPORT

Noise Compatibility Program 2018 Post Study Update and Status of FAA Initiatives

Prepared for
Lee County Port Authority

2014 Original
Revised - September 2018



SOUTHWEST FLORIDA INTERNATIONAL AIRPORT

Noise Compatibility Program

2018 Post Study Update and Status of FAA Initiatives

Prepared for
Lee County Port Authority

2014 Original
Revised - September 2018



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SOUTHWEST FLORIDA INTERNATIONAL AIRPORT

Noise Compatibility Program – 2018 Post Study Update and Status of FAA Initiatives

1.0 Introduction

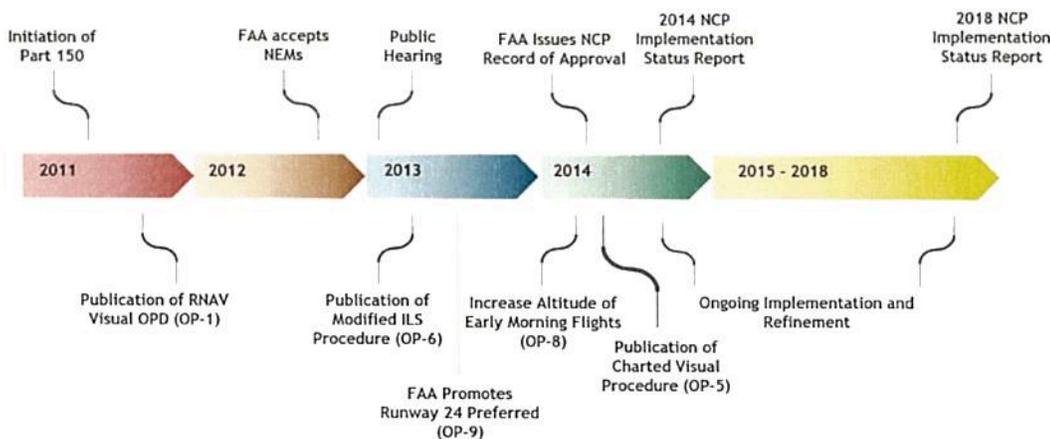
This report provides an update of the implementation status of the Noise Compatibility Plan (NCP) recommendations outlined in the 2013 14 Code of Federal Regulations (CFR) Part 150 Noise and Land Use Compatibility study (2013 Part 150 Study) conducted for Southwest Florida International Airport. Specifically, it provides an overview of the 2013 Part 150 Study process and recommendations, the resulting FAA determination, the current implementation status of those recommendations, and the next steps and time lines for implementation. For those measures already implemented, attempts are made to either quantitatively or qualitatively identify the net benefit provided. This report, originally prepared in 2014, has been updated to reflect conditions as of May 2018.

2.0 RSW Noise Abatement and Part 150 Background

The aircraft noise abatement program at RSW has evolved continually since the airport's opening in 1983. An initial noise abatement program was established shortly after opening of the airport and has evolved through periodic updates at various milestones in the airport's development. In order to address the potential for continued encroachment of residential development and other noise sensitive uses, a 14 CFR Part 150 Noise Study was prepared in the late 1980s. A key feature of the resulting noise compatibility program was the establishment of a Noise Overlay Zone encompassing the lands surrounding the airport. The limits of the overlay zones were largely based on noise contours associated with the one runway facility.

A Master Plan for RSW, prepared in 1986, identified the future need for a second runway. Following the environmental approval of the new runway in 1994, a 1995 14 CFR Part 150 update expanded the overlay zones to incorporate areas that would be affected by aircraft activity on the new runway. The 1995 Noise Compatibility Program also included additional noise abatement operational measures/ procedures. A 2006 14 CFR Part 150 Study Update included further refinements to the overlay zone including limiting noise sensitive land uses within the 60 DNL contour and establishing a public notification area within the 55 DNL contour. Refinements to operational procedures since the implementation of the initial measures to address San Carlo

General Timeline of Major 2013 Part 150 Milestones



2.2 Part 150 Noise Exposure Maps Overview

In 14 CFR Part 150, the FAA required primary metric for assessing aircraft noise exposure is the Day-Night Average Sound Level (DNL). The DNL combines the noise energy from all aircraft operations occurring from the events in one day into an average, while applying a penalty to nighttime events, between the hours of 10:00 pm and 6:59 am, when people are more sensitive to sound. The standard methodology for analyzing the noise conditions at airports involves the use of an aircraft noise model to determine noise exposure. The FAA has approved the Integrated Noise Model (INM) for use in 14 CFR Part 150 Studies. In order to develop DNL noise contours, the INM uses a series of input factors. Some of these factors are included in the database for the model (such as engine noise levels, thrust settings, aircraft profiles and aircraft speeds) and others are airport-specific and need to be determined for each condition analyzed. These airport-specific data include the airport elevation, average annual temperature, runway layout, the mathematical description of ground tracks above which aircraft fly, and the assignment of specific aircraft with specific engine types at specific takeoff weights to individual flight tracks. Other INM input factors specific to RSW include:

- Runway orientation and use
- Existing 2011/2012 aircraft operations and fleet mix
- Projected 2017 aircraft operations and fleet mix
- Time of day/night operations
- Stage lengths of aircraft (flight distance)

DNL levels are indicated by a series of contour lines superimposed on a map of the airport and off-airport environs. These levels are calculated for designated grid points on the ground from the weighted summation of the effects of all aircraft operations occurring on the average 24-hour day. Some operations are far enough away from a grid point location that their effect is minimal, while

other operations may dominate noise exposure at that location. The RSW 2012 existing and 2017 projected NEMs were formally accepted by the FAA on November 27th, 2012.

The FAA defines noise sensitive sites as uses within the 65 DNL that would be incompatible with aircraft noise without the proper Noise Level Reduction (NLR). Such sites would include residences, schools, places of worship, hospitals, passive parks, historic properties and other uses that could be adversely affected by aircraft noise. Outside the 65 DNL contour, all land uses are considered compatible with aircraft activities. Since the 65 DNL limits remain on Airport property for both the 2012 and 2017 conditions, no population or noise sensitive sites are located within the 65 DNL or higher for 2012 or 2017 (see **Figures 1 and 2**).

2.3 Leveraging the Part 150 Process

While there are no impacts to noise sensitive uses within the highest noise areas, the LCPA Board/Board of County Commissioners (BCC) recognizes that there are still community concerns and annoyance associated with the operation of the Airport. As a result the LCPA committed to using the 14 CFR Part 150 process to explore potential operational modifications, update its existing long term land use compatibility measures, and explore management measures to enhance its near term and long term relationship with the surrounding communities.

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3.0 Noise Compatibility Program Overview

The purpose of 14 CFR Part 150 Study is to reduce or eliminate noise-sensitive land uses within the 65 dB DNL contour. Traditionally, 14 CFR Part 150 Studies use the DNL metric for evaluating measures in the Noise Compatibility Program (NCP) portion of the Study. Since noise-sensitive land uses do not exist within the existing (2012) or projected (2017) 65 dB DNL contours, the NCP portion of the Study focuses on measures that will reduce noise levels to local communities whom receive the bulk of aircraft overflights and have the greatest potential for annoyance. Measures evaluated include those that are not approvable for the purposes of Part 150 (reduction in impacts within the 65 dB DNL contour cannot be demonstrated), but can be implemented voluntarily at the local level subject to the discretion of the FAA ATC.

Evaluation of NCP measures for RSW adhered to the following criteria:

- Develop a balanced and cost effective program for reducing noise without limiting airport utility, aviation efficiency, or adversely affecting safety.
- Improve the overall noise environment, while not shifting noise from one community to another.
- NCP measures must be technically and legally feasible, and approved by the FAA (flight procedures) and local governments (land use measures).
- Measures subject to 14 CFR Part 161 evaluation will not be part of the Study recommendations¹.

On April 7, 2014 the FAA issued its ROA, as shown in **Appendix A**, which formally approved 5 of the 16 proposed action measures as follows:

- All 10 of the operational measures were disapproved for the purposes of Part 150. Since there are no incompatible land uses within the 65 dB DNL contour, noise benefits related to the 65 dB DNL contour cannot be demonstrated. These measures can be pursued on a voluntary basis subject to the discretion of local air traffic control (ATC).
- The single land use measure was disapproved for the purposes of Part 150. The land use measure uses a long term composite contour representing the existing single runway operating at 85 percent capacity combined with a future two runway configuration operating at 2030 activity levels. While composite contours are useful in land use planning, their use is no longer being approved for the purposes of Part 150.
- All 5 of the program management measures were approved.

3.1 Status of NCP Measures

In late 2017, the LCPA began a series of meetings with the Fort Myers Beach and Estero communities and RSW FAA TRACON and ATC management to review the status of implementation actions detailed in the 2014 post study implementation report. As of the completion of this (2018) status update, 9 of the 16 measures recommended in the NCP have been fully implemented, one measure has been partially implemented, one measure has been determined infeasible for implementation, and one measure has been determined no longer

¹ 14 CFR Part 161 along with the Airport Noise and Capacity Act of 1990 (ANCA) outlines the process for implementing aircraft noise and access restrictions. Although a number of airports have initiated the Part 161 process, only one such action (Naples) has been approved by the FAA in the 28 years since the act was passed.

effective and is not being pursued. The disposition of each measure is summarized in **Table 1** and changes since the 2014 status update are noted.

For each of the operational, land use and program management measures included in the NCP, a more detailed description highlighting the intent of the measure, the current disposition, benefits already achieved and next steps is provided in the following sections.

TABLE 1
NCP DISPOSITION SUMMARY
SOUTHWEST FLORIDA INTERNATIONAL AIRPORT

NCP Measure	FAA Determination	Implementation Status	Change Since 2014 Post Study Update	Next Steps
Operational				
OP-1	Promote Use of RNAV Visual Optimized Profile Descent to Runway 06	Disapproved for purposes of Part 150	Implemented	Most airlines have now been certified to fly the approach with exception of Air Canada. ATC vectoring initiated to replicate procedure.
OP-2	Explore Feasibility of Initiating RNAV Optimized Profile Descent Further From the Airport	Disapproved for purposes of Part 150	Not Yet Implemented Feasibility Pending National Testing	Continue to monitor NextGen progress
OP-3	Explore Feasibility of Raising the Downwind Altitude to Runway 06	Disapproved for purposes of Part 150	Feasibility Coordination Implemented Not Feasible based on review with FAA	No longer being pursued
OP-4	Shift Downwind Flight Track to the South	Disapproved for purposes of Part 150	To be Implemented Concurrent with Future Parallel Runway	No further action until implementation of parallel runway
OP-5	Publish Chartered Visual Approach to Runway 6 from the North and South	Disapproved for purposes of Part 150	Implemented – Updated Procedure published October 16, 2014	No further action
OP-6	Keep Aircraft at 3,000 Ft. Over Fort Myers Beach	Disapproved for purposes of Part 150	Implemented – Procedure published May 2, 2013, verbal directives issued mid 2013	Work with FAA to explore feasibility of increasing Runway 6 RNAV altitudes
OP-7	Delay Point at which Aircraft Lower their Landing Gear	Disapproved for purposes of Part 150	Not Yet Implemented	Promote with airlines
OP-8	Increase Altitude for Early Morning Arrivals	Disapproved for purposes of Part 150	Implemented – Reflected in Miami Center's Standard Operating Procedures (SOP)	No further action
OP-9	Change Runway 24 to Preferred Runway From 10:00 PM – 6:00 AM	Disapproved for purposes of Part 150	Implemented – Tower began promoting with controllers on August 1, 2013, included in Tower SOP	No further action
OP-10	Modify CSHEL FOUR Departure Procedure	Disapproved for purposes of Part 150	Partially Implemented	Modification no longer being pursued
Land Use Measures				
LU-1	Update Noise Overlay Zones	Disapproved for purposes of Part 150	Implemented – Comprehensive Plan Amendment effective November 18, 2016 and Land Development Code Amendment effective November 23, 2016	No further action
Program Management				
PM-1	Noise Compatibility Program Management	Approved	Implemented	Continue management of program
PM-2	Update Noise Program as Mandated by Lee Plan	Approved	Implemented	Continue periodic review
PM-3	Noise Forums with RSW Air Traffic Controllers	Approved	Implemented	Continue periodic meetings
PM-4	Develop a Jeppesen Insert on Noise Abatement Program at RSW	Approved	Not Yet Implemented	No longer being pursued
PM-5	Install Runway End Reminder Signs	Approved	Not Yet Implemented	Monitor adjacent projects and funding

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3.2 Operational Measures

OP-1. Promote Use of RNAV Visual Optimized Profile Descent (OPD) to Runway 06

Description: This measure promotes use of an RNAV Visual OPD procedure that directs aircraft arrivals over unpopulated areas between the mainland and Estero Island (Fort Myers Beach). Recent advancements in technology and flight procedures that combine the precision of instrument navigation with visual references allow aircraft to approach the airport in a constant descent and reduced engine thrust setting while also flying a precise path over more compatible land uses. During completion of the 2013 Study, an RNAV Visual Optimized Profile Descent (OPD) to Runway 06 was introduced by the FAA and Southwest Airlines. RSW's RNAV Visual OPD to Runway 06 routes aircraft off of the SHFTY TWO RNAV Arrival and the TYNEE ONE RNAV Arrival over the back bay waters to the east of Fort Myers Beach as shown in **Figure 3**.

Benefits: This procedure reduces overflights of populated areas including Fort Myers Beach and reduces thrust setting when overflying communities such as Estero. It also shortens aircraft flight paths and fuel consumption, noise, and emissions by maintaining a reduced power (idle) approach

FAA's Record of Approval Decision: "Disapproved for purposes of Part 150. The analysis in the NCP does not demonstrate the measure's noise benefits on the DNL 65 dB contour." This measure can be pursued at the local level on a voluntary basis subject to the discretion of local air traffic control.

Current Disposition: Implemented. This procedure was published November 11, 2011 and actively promoted with airlines by the FAA on August 20, 2012. As of November 2017, nearly all airlines have been certified to fly the approach with the exception of Air Canada. There have been a number of challenges in implementing this procedure. This special procedure was originally only available if requested by a pilot. In efforts to increase its use, the availability of the procedure was advertised by ATC on the Automatic Terminal Information Service (ATIS). This resulted in approximately 4-5 aircraft using this approach per day. The ATC staff was then allowed to assign this procedure in efforts to increase use, but required the controllers to know if the aircraft and the pilot were certified to fly the approach. Because of the logistical challenges of knowing this, pilots are now required to request the procedure. ATC noted that use of the procedure remains relatively limited. In October 2017, FAA implemented procedures to allow the vectoring of aircraft through the back bay. While there is less control over the altitude and exact location of aircraft, vectoring is conducted with the same goal of minimizing overflights of populated areas by routing aircraft through the back bay. This has been successful in reducing the number of overflight over Fort Myers Beach. However, due to the less precise nature of vectoring and variations in where aircraft initiate their turn, aircraft have the potential to travel over Fort Myers Beach at a lower altitude.

Effectiveness: **Figure 4** identifies the track locations and aircraft altitudes for the published procedure based on FAA tests. This special procedure requires airline certification, pilot and controller training and properly equipped aircraft and must be requested by the pilot. While there has been considerable interest from both the ATC and airlines in using this approach, it is not yet

widely used. Aircraft that are not capable of flying the approach typically fly the entire SHFTY TWO or TYNEE ONE arrival procedures out over Fort Myers Beach. This in turn creates spacing issues with aircraft that can fly the approach which reduces the amount of time it can be used. In 2017, the FAA implemented vectoring of aircraft through the Back Bay which may help mitigate these spacing concerns.

As these types of approaches become more common, use of this procedure is expected to increase. However, utilization of this procedure will be limited during busy periods, when the sequencing of aircraft from both the north and south arrival streams requires aircraft to fly extended final approach paths to ensure adequate separation. This measure should become more prevalent moving forward and is contingent on controller training, airline certification, and pilot proficiency.

Enforcement Action: None. This measure can only be pursued as a voluntary measure and is subject to the discretion of ATC, the pilot in command and the airlines.

Next Steps and Timeline: The LCPA should continue to work with ATCT to promote to airlines and pilots as part of its overall noise abatement program.

FIGURE 3
RNAV VISUAL OPTIMIZED PROFILE DESCENT

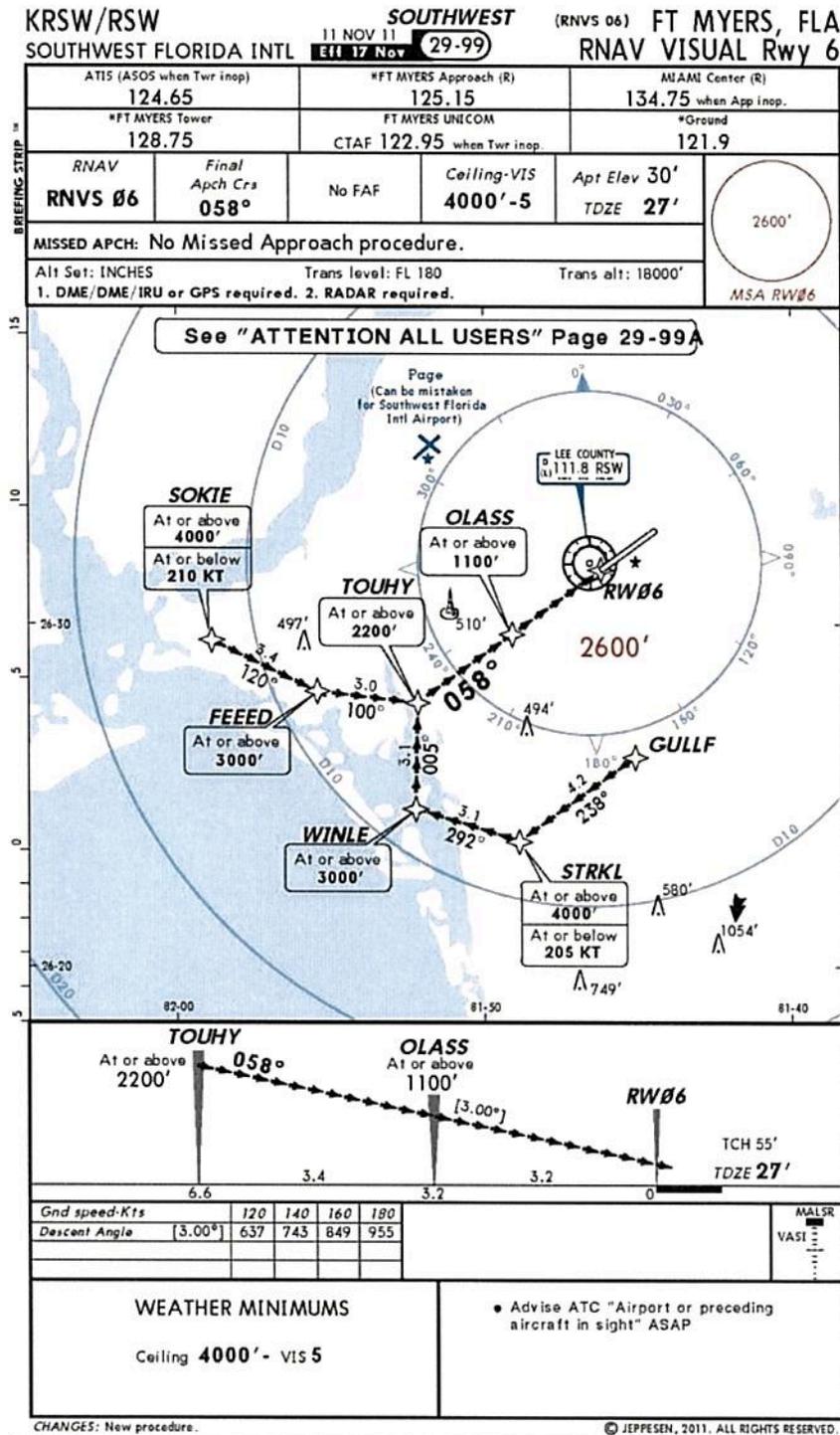
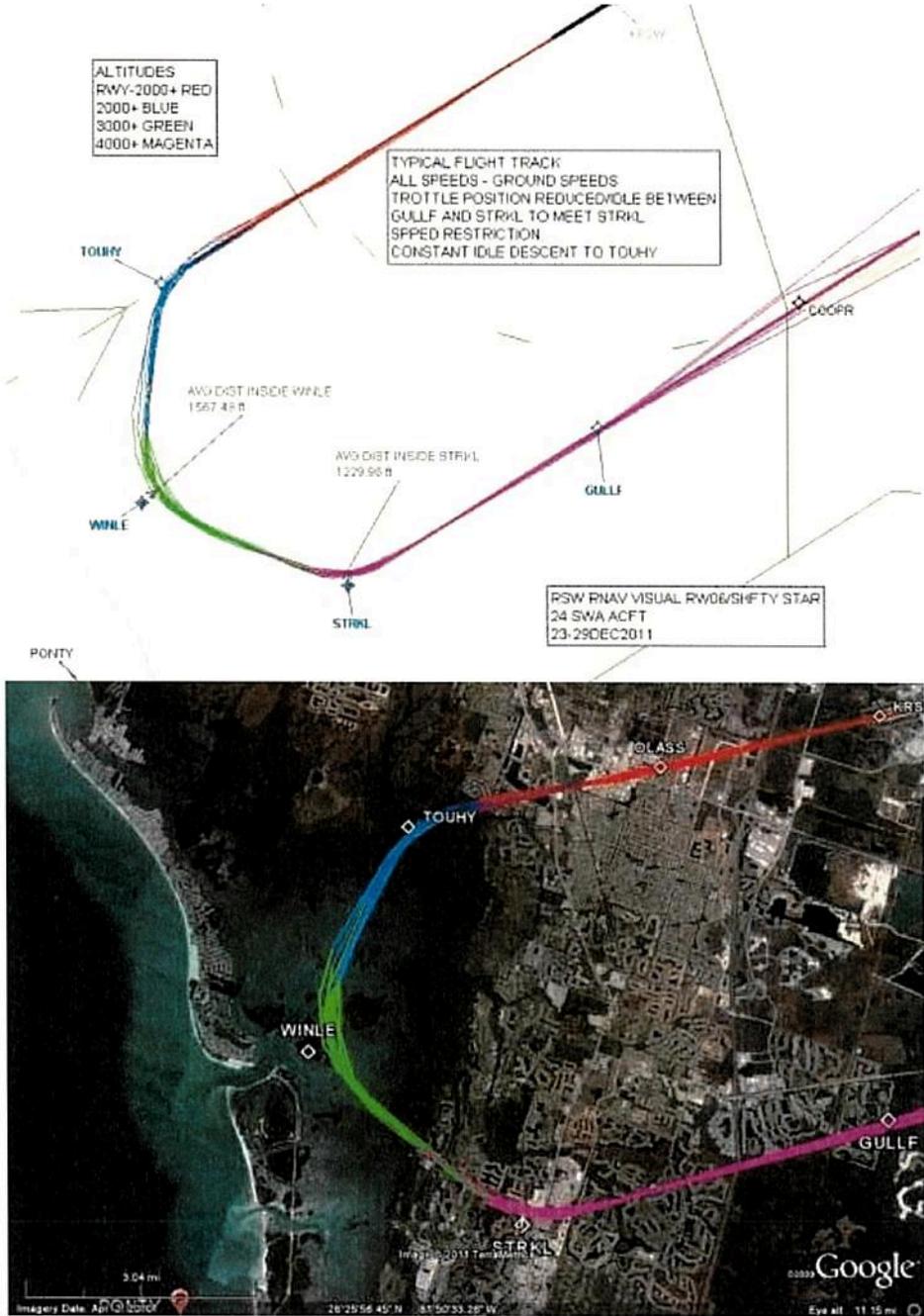


FIGURE 4
AIRCRAFT TRACKS AND ALTITUDES RNAV VISUAL OPD



OP-2. Initiate RNAV Optimized Profile Descent Further From the Airport

Description: This measure involves implementation of an RNAV OPD procedure to transition aircraft when they are further from the airport to the airport environment while maintaining a reduced engine thrust setting. OP-2 builds and extends the benefits of measure OP-1.. The FAA is currently testing procedures that result in operational and noise benefits further from the airport and begin at higher altitudes. Currently aircraft level-off over communities on the south downwind approach over Estero. This leveling off requires the pilots to add thrust which generates more noise. By initiating RNAV OPD and/or constant descent approaches at RSW at a greater distance from the airport, greater benefits can be achieved from the new technology. **Figure 5** compares a traditional approach to an OPD approach. This measure recommends monitoring the progress of FAA testing and evaluating the feasibility of implementing the initiation of RNAV OPD procedures further from the airport.

Benefits: This procedure reduces thrust setting when overflying communities such as Estero. It also increases the fuel efficiency by maintaining a continuous descent (idle) approach from a much higher altitude much further from the airport and reduces noise and emissions. This increased fuel efficiency provides even more of an incentive of airlines to use and promote the use of these procedures.

FAA’s Record of Approval Decision: “Disapproved for purposes of Part 150. The analysis in the NCP does not demonstrate the measure’s noise benefits on the DNL 65 dB contour.” This measure can be pursued at the local level on a voluntary basis subject to the discretion of local air traffic control.

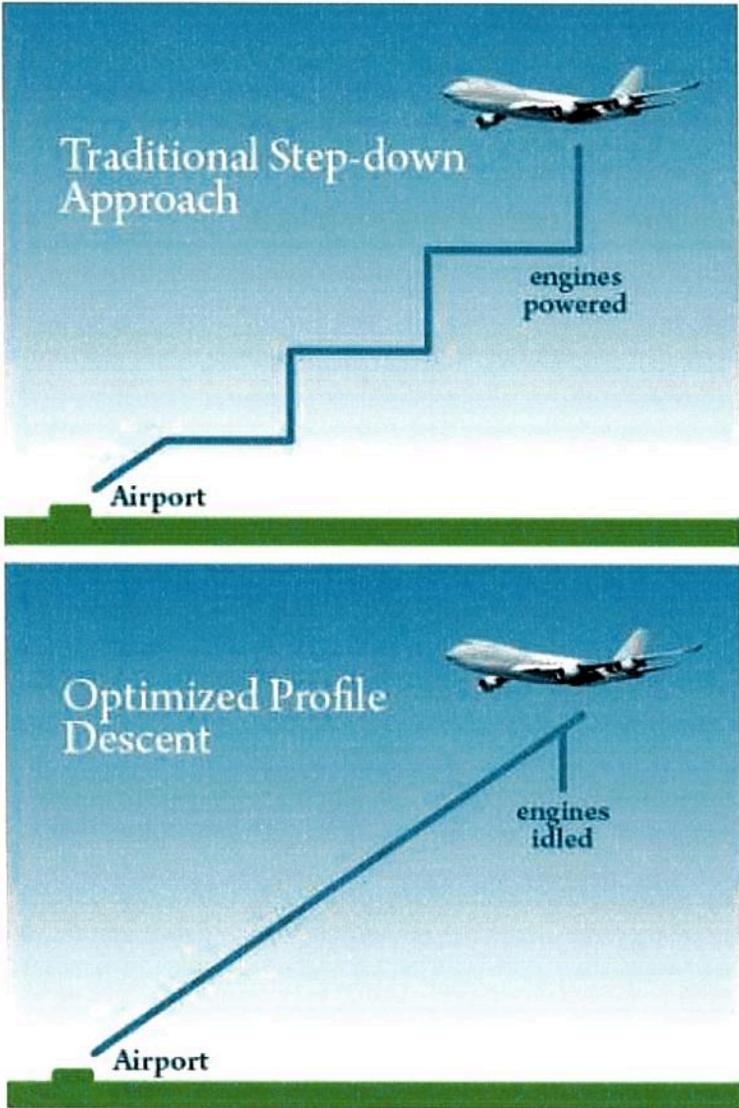
Current Disposition: Not yet implemented. As part of the FAA’s NextGen program, a goal is to sequence the enroute phase of flight with the arrival and landing phase so that aircraft perform arrivals and approaches in a continuous descent to the airport. Implementation of OPD arrivals connecting the enroute phase of flight to the arrival phase is still being evaluated by the FAA.

Effectiveness: To be determined. Progress and feasibility will depend on FAA, but it is estimated that OPD arrivals will become more common throughout the country as older aircraft are retired and newer aircraft with more sophisticated flight management systems continue to transition into the fleet.

Enforcement Action: None. This measure can only be pursued as a voluntary measure and is subject to the discretion of ATC and the pilot in command.

Next Steps and Timeline: The LCPA should continue to review feasibility during its regular check-ins with FAA .

FIGURE 5
TRADITIONAL VERSUS OPD ARRIVAL FLIGHT PROFILES



Source: FAA

OP-3. Raise the Downwind to Runway 06

Description: This measure involves increasing the altitude of aircraft the SHFTY RNAV arrival to Runway 06 during the downwind approach segment as they pass south of the airport. A RNAV arrival procedure to Runway 06 (SHFTY) that was implemented as part of FLOWCAR resulted in a considerable increase in the volume of overflights experienced by residential areas south of the airport. The procedure concentrates flights to a very narrow path over communities in the Estero area, known as the Estero Corridor, that previously (prior to FLOWCAR) only occasionally experienced overflights. Concurrent with the initiation of the 2013 study, the altitude of the downwind approach was raised from 3,000 ft. to 4,000 ft. The purpose of this measure is to evaluate the feasibility of further increasing the altitude from 4,000 ft. to 5,000 ft. and if determined feasible, proceed with implementation.

Benefits: Increasing the aircraft altitudes as they overfly residential communities may help reduce the annoyance of the overflights. An increase in the altitude of the south downwind approach to 5,000 ft. over the Estero Corridor results in an estimated reduction in noise ranging between 1.9 and 2.5 decibels according to the INM. Figure 6 shows the reduction in the noise 70 dB noise exposure footprint that would result from an increase in altitude from 4,000 ft. to 5,000 ft for a Boeing 737-700 aircraft.

FAA's Record of Approval: "Disapproved for purposes of Part 150. The analysis in the NCP does not demonstrate the measure's noise benefits on the DNL 65 dB contour." This measure can be pursued at the local level on a voluntary basis subject to the discretion of local ATC.

Current Disposition: Feasibility evaluation implemented. Based on discussions with the FAA, this measure is not currently feasible. Specifically, FAA safety concerns were raised related to the sequencing of aircraft, the 4,000 ft. MSL Class C airspace ceiling and separation requirements with the jet departures from Naples Airport (APF) that overfly the downwind at 5,000 ft. MSL.

Effectiveness: A 3-5 decibel change is generally required to be noticeable in the community. As a result the noise benefit of this change would provide limited noticeable benefit.

Enforcement Action: None. This measure can only be pursued as a voluntary measure and is subject to the discretion of ATC and the pilot in command.

Next Steps and Timeline: No further action by the LCPA is anticipated at this time. This action is no longer being pursued.

FIGURE 6
REDUCTION IN B737-700 70 dB SEL FOOTPRINT FROM RAISING DOWNWIND TO 5,000 FT



OP-4. Shift Downwind Flight Track to the South

Description: This measure involves a shift of the downwind flight corridor to the south concurrent with construction of the new parallel runway. Citizens that live along the Estero Corridor noted that there are more compatible land uses to the south of the corridor that could be utilized by aircraft flying the south downwind approach. However, a shift in the location of the downwind flightpath would result in exposure of new communities to aircraft overflights and increase the flight distance without a specific operational need. A second parallel runway is planned for construction approximately 5,000 ft south of the current Runway 06-24 (**Figure 7**). This will likely create an operational need to shift the current arrival flight paths approximately one mile south.

Benefit: In moving the downwind approach one mile further south, there is an average decrease of 7.2 decibels for the communities located along the Estero Corridor. While there is a similar increase in noise for the new communities that did not previously experience direct overflights, the number of people exposed to the shifted flight path is estimated to be roughly half those currently overflown.

FAA’s Record of Approval Decision: “Disapproved for purposes of Part 150. The analysis in the NCP does not demonstrate the measure’s noise benefits on the DNL 65 dB contour.” This measure can be pursued at the local level on a voluntary basis subject to the discretion of local air traffic control.

Current Disposition: To be implemented by the FAA concurrent with construction of the future parallel runway. The FAA has noted that changes in procedure design may result in a shift in the downwind further south in advance of construction of the new runway. Specifically, the downwind flight path may shift from 5 miles south of the airport to 5.8 miles south to address RNAV procedure design changes. Completion timeline for the new runway is subject to future demand and is not currently known.

Effectiveness: To be determined When parallel runway is constructed.

Enforcement Action: None. This measure can only be pursued as a voluntary measure and is subject to the discretion of ATC and the pilot in command.

Next Steps and Estimated Timeline: No further action by the LCPA is anticipated until implementation of the parallel runway..

FIGURE 7
FUTURE SOUTH PARALLEL RUNWAY



OP-5. Publish Charted Visual Approach to Runway 06 from the North and the South

Description: This measure involves the FAA publishing a procedure that identifies visual landmarks to assist pilots flying under visual flight rules to avoid flying over non-compatible land uses. By publishing charted visual approaches that all aircraft can fly when certain weather conditions permit, more compatible land uses can be taken advantage of. Using this procedure to mirror or overlay the new RNAV Visual OPD approach will improve sequencing and allow the ATCT to use the RNAV Visual OPD procedure more consistently.

Benefit: This procedure will help to reduce overflights of Fort Myers Beach during visual flight conditions.

FAA’s Record of Approval Decision: “Disapproved for purposes of Part 150. The analysis in the NCP does not demonstrate the measure’s noise benefits on the DNL 65 dB contour.” This measure can be pursued at the local level on a voluntary basis subject to the discretion of local ATC.

Current Disposition: Implemented. The Bay Visual Approach to Runway 06 was published by the FAA on May 9, 2014 as shown in **Figure 8** and was updated May 29, 2014 as shown in **Figure 9**. The current version of the procedure was published on May 24, 2018 (**Figure 10**).

Effectiveness: This type of procedure is new for RSW and since pilots fly this procedure based on visual cues, this procedure is not authorized at night. Utilization of this procedure is also limited during busy periods, when the sequencing of aircraft from both the north and south arrival streams requires aircraft to fly extended final approach paths to ensure adequate separation. While the FAA initially believed this measure could result in a meaningful reduction in overflights of Fort Myers Beach during daytime VFR conditions, it is rarely used. RSW ATCT staff indicate that the new vectoring procedures incorporated into the SOP in October 2017 allow greater control of aircraft while meeting the goals of the charted visual procedure.

Enforcement Action: None. This measure can only be pursued as a voluntary measure and is subject to the discretion of ATC and the pilot in command.

Next Steps and Estimated Timeline: Work with ATCT to promote to airlines and pilots as part of overall noise abatement program.

FIGURE 8
 RUNWAY 6 CHARTED VISUAL APPROACH – Published May 9, 2014

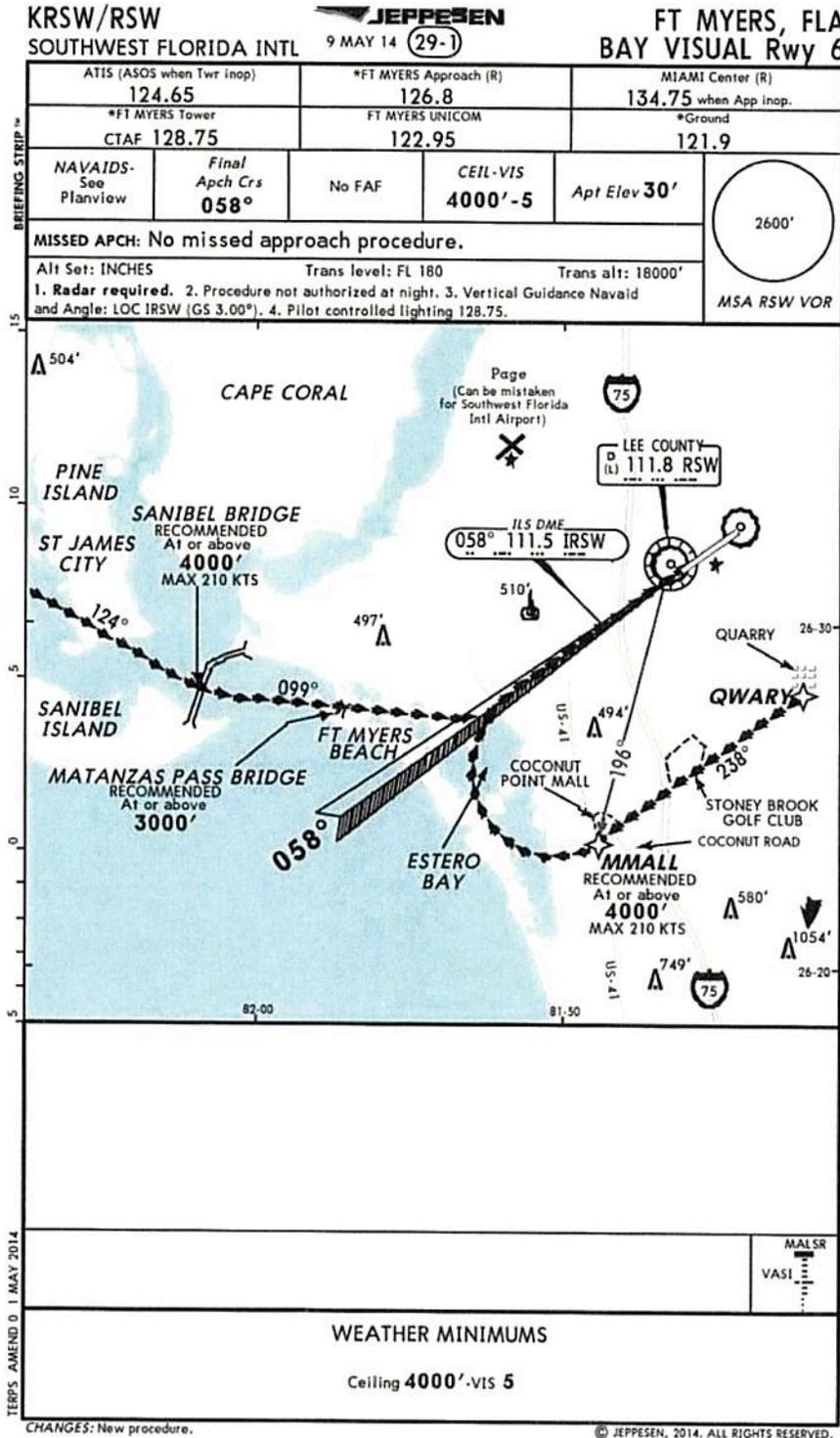


FIGURE 9
 RUNWAY 6 CHARTED VISUAL APPROACH – Published May 29, 2014

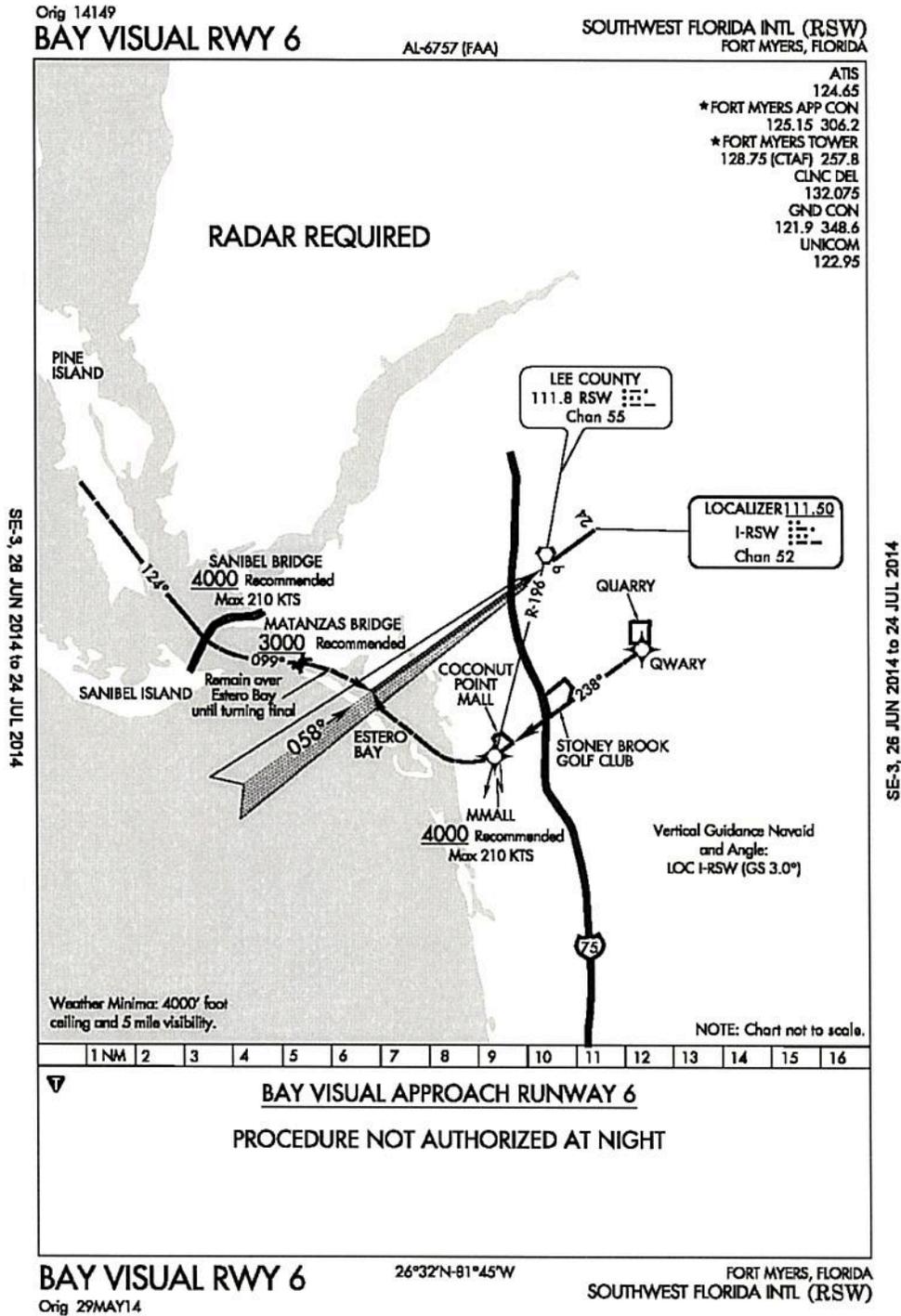
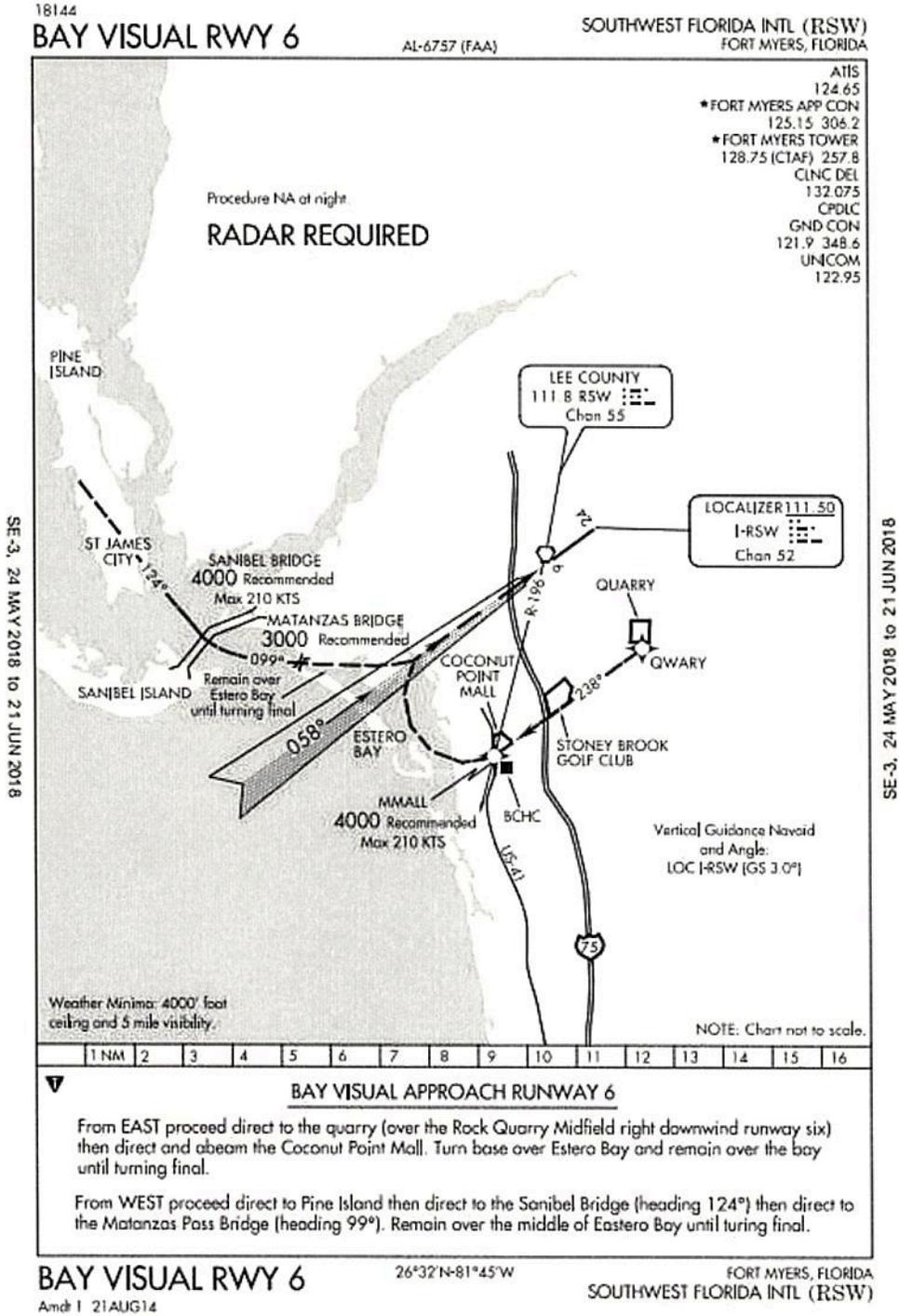


FIGURE 10
RUNWAY 6 CHARTED VISUAL APPROACH – Published May 24, 2018



OP-6. Keep Aircraft at 3,000 Ft. Over Fort Myers Beach

Description: This measure is consistent with a previously approved voluntary measure from the 2006 14 CFR Part 150 Study to “Keep'em High”. The previous measure was revisited to explore mechanisms to improve its effectiveness. When the 2013 14 CFR Part 150 Study was initiated (2011), the Instrument Landing System (ILS) arrival procedure had a minimum glide slope intercept altitude of 1,600 ft. MSL as shown in **Figure 11**. The designation resulted in aircraft descending to that altitude well in advance of intercepting the glide slope. A significant number of comments were received at the public workshops held during the 2013 Study from citizens of the Fort Myers Beach (also referred to as Estero Island) community concerning aircraft arrival overflights that are low and noisy at a distance of approximately 10 nautical miles from the approach end of Runway 06. It is the intent of this measure to implement mechanisms to delay the descent of arriving aircraft and maintain an altitude of up to 3,000 feet until after they overfly Fort Myers Beach.

In an effort to keep aircraft at 3,000 ft. MSL over Estero Island, the Town of Fort Myers Beach passed a resolution that was submitted during the Part 150 public hearing in late 2013. The request included increasing the altitude aircraft passed over TROPC (just west of Fort Myers Beach) to 3,300 ft. with the goal of ensuring that aircraft would remain at or above 3,000 ft. over Fort Myers Beach while descending on the glide slope. That resolution was approved for transmittal to the FAA ATO by the Lee County Port Authority Commission.

Benefit: An increase in the altitude of aircraft from 1,600 ft. to 3,000 ft. over Fort Myers Beach results in a reduction in noise of approximately 5.2 dB. The magnitude of this change exceeds the 3-5 dB change that is typically required to be noticeable.

FAA's Record of Approval Decision: “Disapproved for purposes of Part 150. The analysis in the NCP does not demonstrate the measure's noise benefits on the DNL 65 dB contour.” This measure can be pursued at the local level on a voluntary basis subject to the discretion of local ATC.

Current Disposition: Implemented. An ILS procedure was published on May 2, 2013 that increases the glide slope intercept altitude from 1,600 ft. to 3,000 ft. MSL just west of Fort Myers Beach (**Figure 12**). This places aircraft descending on the ILS glide slope to Runway 6 at between 2,700 and 2,800 ft. MSL as they cross Fort Myers Beach. The FAA has indicated that an increase in the intercept altitude from 3,000 ft. to 3,300 ft. is not feasible and/or would create potential safety concerns. It was noted that the average intercept altitude for ILS approaches at all commercial service airports in Florida is 2,100 ft. In addition to publication of the ILS procedure, in August 2013 the FAA began including verbal directives to aircraft operating under VFR to remain at 3,000 ft until over Fort Myers Beach. The FAA believes that this action has been the most effective at providing relief to the Fort Myers Beach community. The FAA Airport Facilities Directory has also been updated to include the following language “Visual apchs to Runway 06 west of Fort Myers Beach are req to maintain 3,000' until crossing Fort Myers Beach shoreline 12 NM southwest of arpt.” In April 2018 discussions with the FAA and the Fort Myers Beach Community relative to this status update, it was noted the Runway 6 RNAV procedure

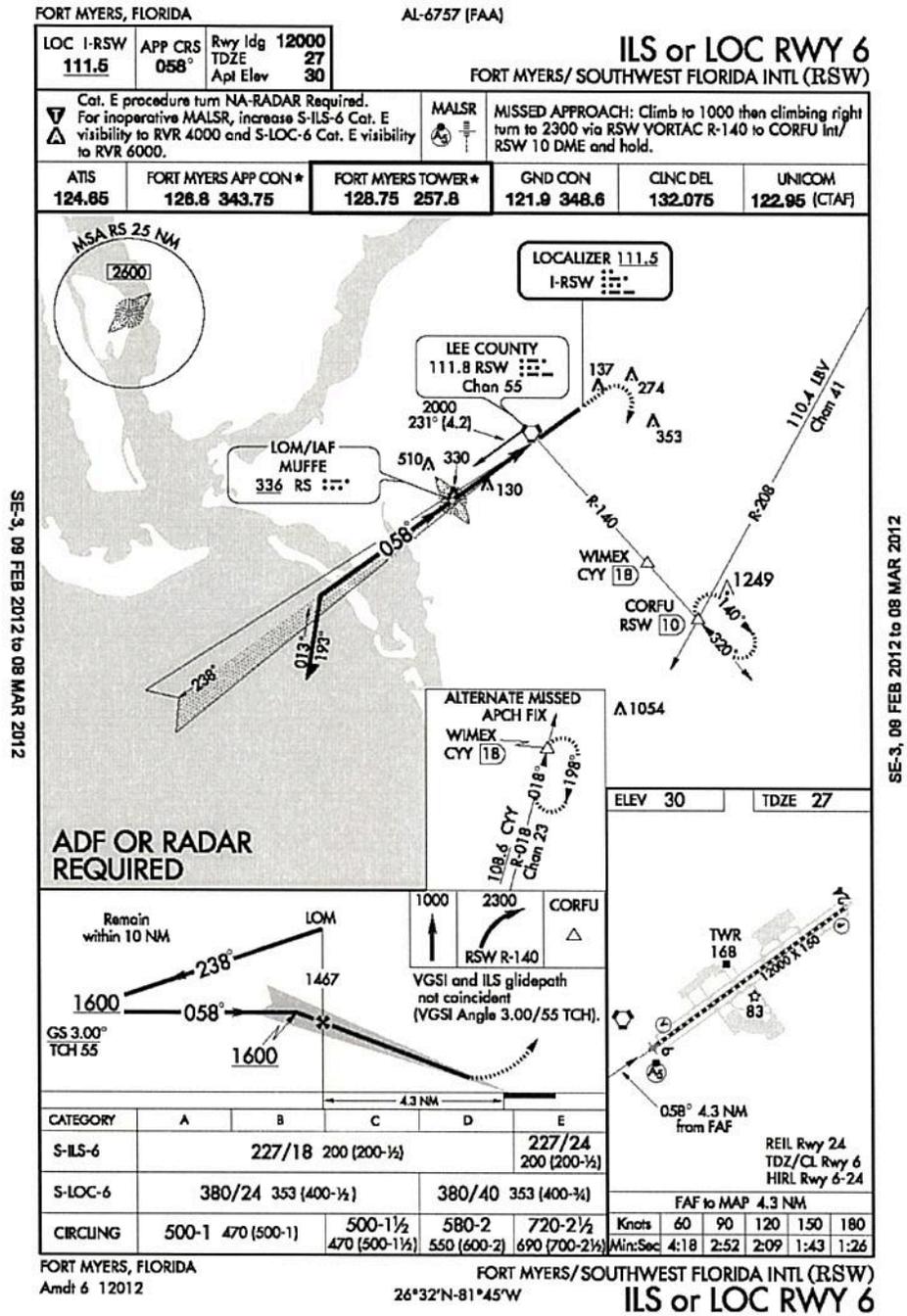
currently uses an altitude of 2000 feet at a fix located west of Fort Myers Beach. The FAA indicated that the RNAV arrival is typically only used when the ILS is out of services. However, they are reviewing and considering a potential modification to this procedure to reflect the changes made to the ILS.

Effectiveness: FAA analyzed sample days in January 2011, 2012, 2103 and 2014 to compare the altitudes of aircraft over Fort Myers Beach (**Figure 13**). The FAA analysis indicates that shortly after the start of the RSW 14 CFR Part 150 Study Update in 2012, nearly 69 percent of aircraft were overflying Fort Myers Beach below 3,000 ft. MSL, and 12 percent were below 2,000 ft. MSL. As of January 2014, the percentage of aircraft flying over Fort Myers Beach below 3,000 ft. MSL has been reduced to 27 percent, with approximately 1 percent below 2,000 ft. MSL. **Figures 14 and 15** depict the associated flight tracks. During busy periods aircraft sequencing and spacing requirements will reduce the effectiveness of this measure. The FAA has indicated that due to altitude separation requirements associated with sequencing of the two arrival streams and the need for one stream to be below the glidepath (with the other on the glidepath), there will likely never be a time that all aircraft will be at or near 3,000 when transiting Fort Myers Beach. A subsequent analysis was conducted by the FAA after implementing new vectoring procedures in November 2017. This analysis (**Figures 16, 17 and 18**) showed that 5- to 60 percent of the aircraft during the sample periods were being vectoring through the back bay and that more than half of the remaining aircraft were at or above 3,000 feet over Fort Myers Beach. The FAA did note however, that the routing and altitude of overflight is complicated on busy days during the season when the sequencing of the north and south arrival streams requires both altitude and lateral separation. Additionally, since the time will vary between a controller issuing a directive and the pilot initiating the turn, vectoring can have the unintended consequence of an aircraft transiting the full length of the island as they are descending rather than the back bay.

Enforcement Action: None. This measure can only be pursued as a voluntary measure and is subject to the discretion of ATC and the pilot in command.

Next Steps and Timeline: Promote awareness with airlines as part of overall noise abatement program. Explore feasibility of increasing the altitudes associated with the Runway 6 RNAV procedure with the FAA.

FIGURE 11
PREVIOUS ILS APPROACH TO RUNWAY 6



SE-3, 09 FEB 2012 to 08 MAR 2012

SE-3, 09 FEB 2012 to 08 MAR 2012

FIGURE 12
REVISED ILS APPROACH TO RUNWAY 6

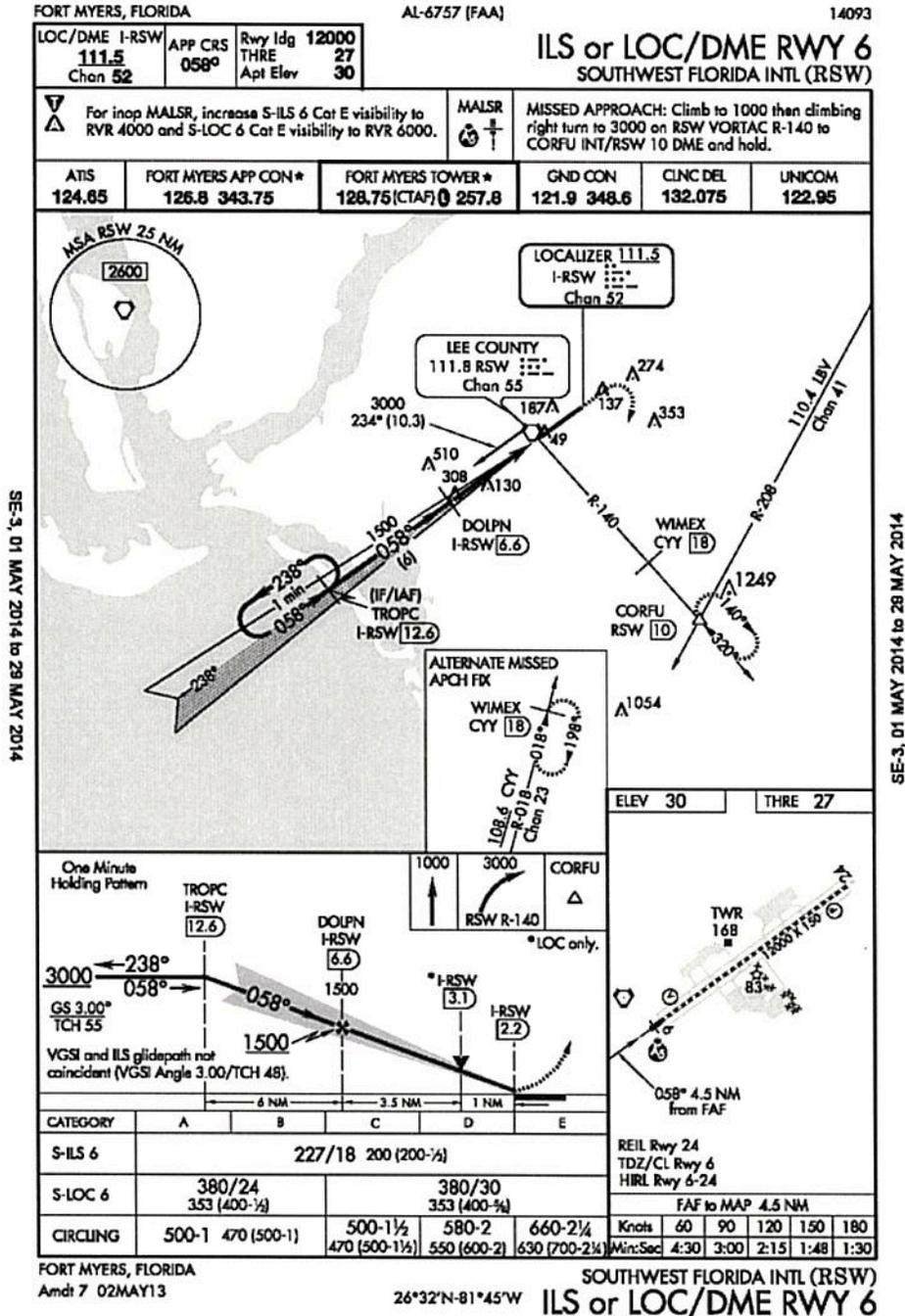
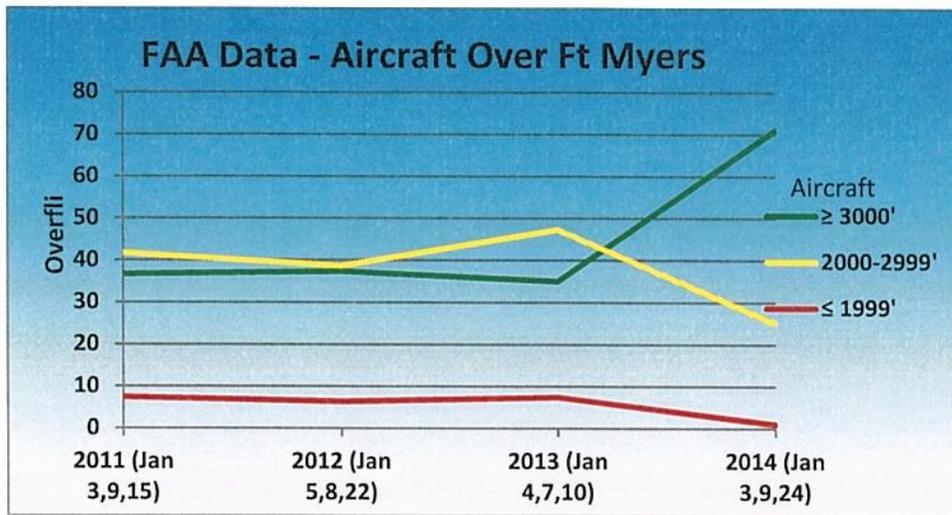
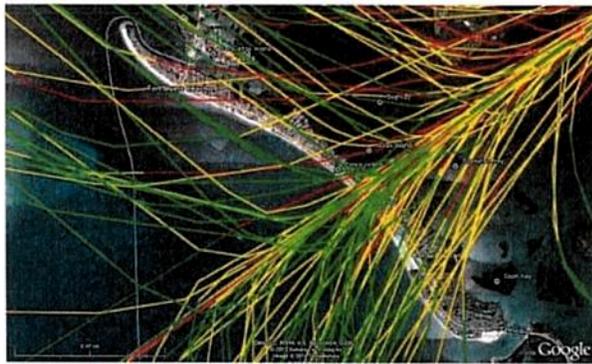


FIGURE 13
AIRCRAFT ALTITUDES OVER FORT MYERS BEACH January 2011- 2014



Source: RSW FAA ATC

FIGURE 14
AIRCRAFT ALTITUDES OVER FORT MYERS BEACH – January 22, 2012



Source: RSW FAA ATC

83 Tracks
 26 Green (3,000' and above)
 47 Yellow (2000'-2900')
 10 Red (1900' and below)
 69% below 3000'

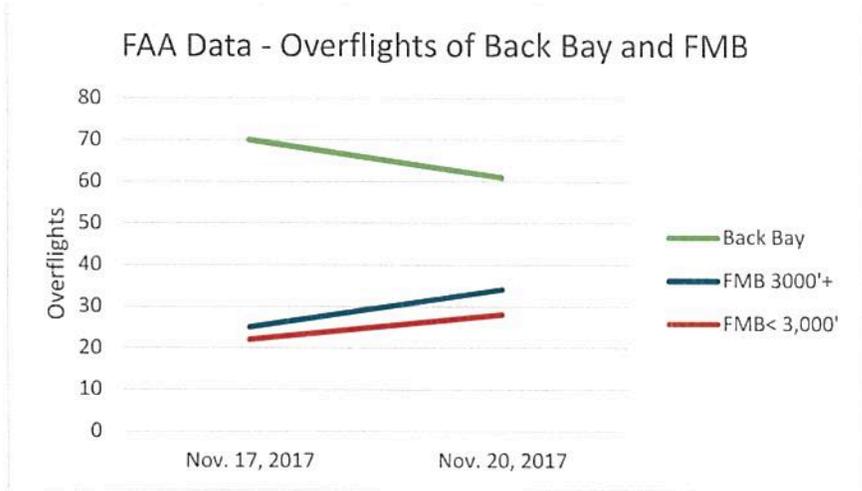
FIGURE 15
AIRCRAFT ALTITUDES OVER FORT MYERS BEACH – January 3, 2014



Source: RSW FAA ATC

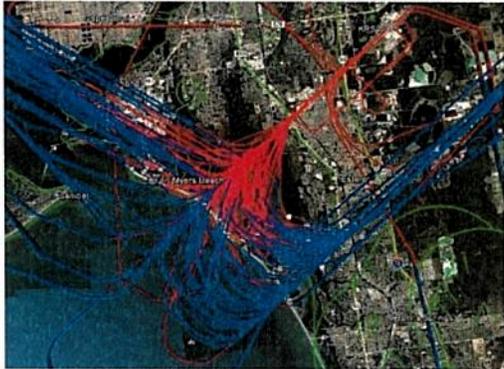
82 Tracks
 71 Green (3,000' and above)
 11 Yellow (2000'-2900')
 0 Red (1900' and below)
 13% below 3000'

FIGURE 16
AIRCRAFT OVER BACK BAY AND FORT MYERS BEACH - November 2017



Source: RSW FAA ATC

FIGURE 17
AIRCRAFT LOCATIONS OVER BACK BAY AND FMB – November 17, 2017



Source: RSW FAA ATC

117 Total Tracks
Back Bay (70 tracks or 60%)
Fort Myers Beach (47 tracks)
25 Blue (3,000' and above)
- 22 Red (below 3000')

FIGURE 18
AIRCRAFT LOCATIONS OVER BACK BAY AND FMB – November 20, 2017



Source: RSW FAA ATC

123 Tracks
Back Bay (61 tracks or 49.5%)
Fort Myers Beach (62 tracks)
34 Blue (3,000' and above)
- 28 Red (below 3000')

OP-7. Delay Point at which Aircraft Lower their Landing Gear

Description: This measure involves working with air carriers and operators to delay the point at which landing gear is lowered. The drag that results when the landing gear is dropped requires an increase in the engine thrust to maintain altitude and airspeed. This increase in thrust results in an increase in engine noise. Additionally, the air frame noise generated by an aircraft increases when the gear is lowered. Concerns were raised by members of the community about the distance from the airport that pilots are configuring the aircraft for landing and the associated increased noise. In particular, it was noted that the current procedure of routing all aircraft on the SHIFTY TWO downwind approach well west of the airport to PONTY without an early visual release is likely increasing the number of pilots that are configuring their aircraft for landing much further from the airport than they would otherwise. Recommended measures such as the RNAV OPD which turn the aircraft earlier may reduce this practice. However, working with the operators to increase awareness may also help to reduce potential annoyance.

Benefit: Delaying the lowering of the landing gear will allow aircraft to operate at reduced thrust settings until closer to the airport. This will help reduce both engine and airframe noise and annoyance associated with individual overflights.

FAA Record of Approval Decision: “Disapproved for purposes of Part 150. The analysis in the NCP does not demonstrate the measure’s noise benefits on the DNL 65 dB contour.” This measure can be pursued at the local level on a voluntary basis subject to the discretion of local air traffic control.

Current Disposition: Not yet implemented.

Effectiveness: To be determined. The effectiveness of this measure will depend on airline procedures certified by the FAA, and the point at which the landing gear is put down would remain the pilot’s discretion. Arrival procedures implemented at RSW (RNAV OPD and Bay Visual) that turn the aircraft to final earlier will help pilots to better gauge the appropriate time to lower their landing gear. However, it was noted previously that these procedures are currently limited in their use. It is recommended this measure be promoted once the pilots have had a chance to become familiar with the new procedures that have been published by the FAA.

Enforcement Action: None. This measure can only be pursued on a voluntary basis and is subject to the discretion of ATC and the pilot in command.

Next Steps and Estimated Timeline: Promote use with airlines over the next 18 months.

OP-8. Increase Altitude of Early Morning Arrivals

Description: This measure involves working with the FAA to help ensure that early morning overflights remain above 3,000 ft as they pass over Fort Myers Beach. Concerns were raised during the public workshops about low and noisy aircraft arrival overflights during the early morning hours. In particular, cargo carrier flights occurring before 6:00 am were cited as a concern. Since the RSW tower is not yet in operation (open 6 am until 12 am) when these flights arrive, these aircraft receive clearances from FAA’s Miami Air Route Traffic Control Center (ARTCC).

Benefit: Keeping early morning arrival overflights higher until closer to the airport will reduce the potential annoyance associated with these aircraft.

FAA Record of Approval Decision: “Disapproved for purposes of Part 150. The analysis in the NCP does not demonstrate the measure’s noise benefits on the DNL 65 dB contour.” This measure can be pursued at the local level on a voluntary basis subject to the discretion of local ATC.

Current Disposition: Implemented. In early 2014, RSW ATCT coordinated with Miami Center to have the Center keep these aircraft higher as they transition Fort Myers Beach and language has been incorporated into Miami Center’s SOP. As noted in OP-6, the FAA Airport Facilities Directory has also been updated to include the following language “Visual apchs to Runway 06 west of Fort Myers Beach are req to maintain 3,000’ until crossing Fort Myers Beach shoreline 12 NM southwest of arpt.” Coordination with the cargo carriers in early 2018 indicates that at least one of the carriers has incorporated language into their operating procedures for RSW that notes the 3,000 ft altitude. A review of a sample of early morning aircraft overflights in early 2018 indicates that aircraft appear to be at 3,000 ft over Fort Myers Beach. This review also indicated that shortly after the tower opened at 06:00 local, aircraft arriving on TYNEE were often routed through the back bay

Effectiveness: It appears that the number of early morning overflights below 3,000 ft has been reduced based on review of flight track data in early 2018. It was also noted in review of flight schedules and discussions with the FAA that seasonal flights may require ongoing coordination to ensure that pilots are familiar with the need to maintain 3,000 ft until after they transit Fort Myers Beach.

Enforcement Action: None. This measure can only be pursued as a voluntary measure and is subject to the discretion of ATC and the pilot in command.

Next Steps and Estimated Timeline: No further action. Continue to promote measure as part of overall noise abatement program during coordination with the airlines, RSW ATCT and Miami ARTCC.

OP-9. Change Runway 24 to Preferred Runway From 10:00 PM – 6:00 AM

Description: This measure involves the use of Runway 24 as the preferred runway during nighttime hours (10 pm -6 am). In exploring opportunities to address late night and early morning aircraft operations occurring at RSW, it was determined that a potential change in the voluntary preferential runway after 10:00 PM (shown in **Figure 19**) could reduce nighttime annoyance. It was determined that this would be beneficial to the local communities because it would reduce the number of overflights that would be routed over the noise sensitive communities in the Estero Corridor and Fort Myers Beach area during periods when potential annoyance from aircraft activities is the highest.

Benefit: With Runway 24 as the preferred nighttime runway, aircraft arriving down the west coast of Florida would be flying over the Estero Corridor at a higher altitude on the TYNEE ONE Arrival, and aircraft arriving down the middle of the state flying the SHFTY TWO Arrival would fly straight-in to Runway 24, avoiding the Estero corridor and Fort Myers Beach altogether. Nearly all operations being conducted at the airport after 10:00 PM are arrivals. As a result, the Runway 24 departure noise concerns for the communities of Fiddlesticks and The Forest would be minimal.

FAA Record of Approval Decision: “Disapproved for purposes of Part 150. The analysis in the NCP does not demonstrate the measure’s noise benefits on the DNL 65 dB contour.” This measure can be pursued at the local level on a voluntary basis subject to the discretion of local ATC.

Current Disposition: Implemented by the RSW ATCT August 1, 2013 on a voluntary basis from 10:00 PM to 12:00 AM when weather and conditions permit. Subsequently, the RSW TRACON incorporated language into their SOP that emphasizes use of Runway 24 or vectors aircraft through the back bay when the tower is open. Language was also added to the FAA’s Airport Facility Directory that indicates “Rwy 24 preferred btn0300-1100Z.” This time period is equal to 10:00 pm to 6:00 am local time.

Effectiveness: Pilots traveling down the coast on the TYNEE ONE procedure often request Runway 6 during nighttime hours to avoid the 15 plus miles of added flight distance that this measure would require. They also typically want to make sure they get on the ground in time to have RSW ATC close out their flight plan. The RSW tower is closed from 12:00 AM until 6:00 AM and aircraft are handled by the Miami Center during the closure period. Coordination has occurred between RSW ATC and Miami ARTCC, but the effectiveness of this measure is limited by weather and pilot preference. Pilots can still request Runway 6 and the FAA is obligated to accommodate the request if traffic and conditions allow.

Enforcement Action: None. This measure can only be pursued as a voluntary measure and is subject to the discretion of ATC and the pilot in command.

Next Steps and Estimated Timeline: No further action. The LCPA will continue to promote utilizing Runway 24 with the airlines and the FAA as the preferential runway between the hours of 10 pm and 6 am as part of its overall noise abatement program.

**FIGURE 19
PREFERENTIAL RUNWAY USE**



Current Preferential Runway – Runway 6



Recommended Nighttime Preferential Runway – Runway 24

OP-10. Modify CSHEL FOUR Departure Procedure

Description: This measure involves modification of the CSHEL FOUR departure procedure to reduce overflights of densely populated areas. The CSHEL FOUR Departure Procedure off of Runway 24 directs departing aircraft through the Alico industrial corridor. This measure would modify that procedure to reduce noise and annoyance for the communities located at the west end of this corridor.

Analysis of RSW airport operations from January 2008 to April 2011 determined that Runway 24 is used approximately 30 percent of the time. It was also noted that Runway 24 can be used as little as 10 percent in a given month or as much as 50 percent or more depending on the seasonal wind conditions. The Forest community is located at the west end of the Alico industrial corridor directly under the Runway 24 CSHEL FOUR Departure procedure. Through the noise monitoring conducted as part of the 2013 Study, it was determined that this community experiences the highest levels of aircraft noise of any local community. In discussions with ATCT, it was determined that the current CSHEL FOUR Departure procedure provides a safe separation between departing and arriving aircraft at RSW as well as an altitude cushion from aircraft that could be departing out of Page Field (FMY). It was also noted that slight modifications could be made in the CSHEL FOUR Departure procedure to reduce the number of direct overflights over The Forest community while providing a more direct routing to the north for some aircraft as shown in **Figure 20**.

Benefit: This measure will help reduce the number of overflights experienced by The Forest community by modifying the Runway 24 RNAV Departure procedure to lessen the concentration of aircraft departures over a narrow corridor (railroad effect). It would also reduce the flight distance for aircraft with greater climb out capabilities.

FAA’s Record of Approval Decision: “Disapproved for purposes of Part 150. The analysis in the NCP does not demonstrate the measure’s noise benefits on the DNL 65 dB contour.” This measure can be pursued at the local level on a voluntary basis subject to the discretion of local ATC.

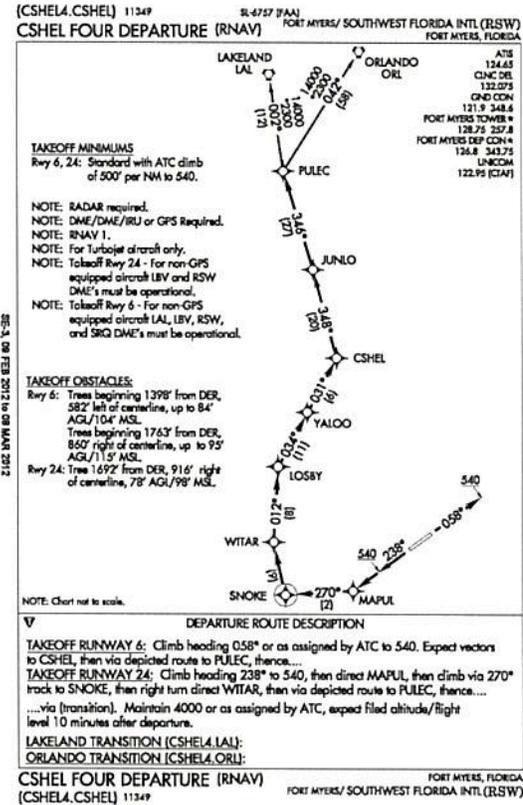
Current Disposition: Partially implemented. The tower has indicated that they may be able to manage implementation of this measure without formally modifying the published procedure. The FAA is currently providing verbal guidance directing aircraft reaching MAPUL and 3,000 ft MSL to turn direct to CSHEL, but a published procedure is not currently in development.

Effectiveness: Aircraft are sometimes being turned to the north earlier which has reduced the railroad effect over the Forest community.

Enforcement Action: None. This measure can only be pursued on a voluntary basis and is subject to the discretion of ATC and the pilot in command.

Next Steps and Estimated Timeline: Modification of this procedure is no longer being pursued. However, the LCPA should continue to promote overflights of more compatible land uses located east of The Forest community with RSW ATCT.

FIGURE 20
CSHEL FOUR DEPARTURE – EXISTING AND PROPOSED ROUTING



3.2 Off-Airport Land Use Compatibility Planning Measures

LU-1. Update Noise Overlay Zones

Description: This measure involves updating the existing airport noise overlay zones to ensure long term land use compatibility in proximity of the airport. The 2006 Part 150 update modified previously established overlay zones around the airport to protect from future non-compatible land uses through 2020. With changes in activity and progression of time since the 2006 study, this measure involves updating these zones to reflect the land use and sound exposure conditions within the County expected in the year 2030. Composite 2030 DNL contours were generated during the 2013 Study that reflect the combination of the current single runway configuration operating at 85 percent of capacity and the future two runway configuration operating at 2030 activity levels. The updated noise overlay zones include four zones: A, B, C and D, as shown in **Figure 21**. Zone A is existing airport property and Zone B is the 60 DNL contour. Zone C reflects the 55 DNL contour or area that receives 10 percent of the cumulative noise exposure considered significant by the FAA. Finally, Zone D is a potential future flight pattern area that may be subject to aircraft overflights. Noise sensitive uses are not allowed in Zones A or B.

Benefit: Ensure long term compatible land uses in near proximity to the airport. Increase awareness of potential noise exposure to those that may be more sensitive to aircraft overflights.

FAA’s Record of Approval Decision: “Disapproved for purposes of Part 150. The local jurisdiction has adopted a local standard lower than the Federal standard that defines incompatible land uses below DNL 65 dB. However, the recommended noise overlay zones are not based on either of the “official Noise Exposure Maps” accepted by the FAA in this study. The Federal government has no authority to control current or future local land use designations. The local jurisdictions have the authority to pursue their own proposed land use controls and enact the proposed Noise Overlay Zoning without FAA approval. Below the 65 DNL contour, FAA as a matter of policy encourages local efforts to prevent new non-compatible development immediately abutting the 65 DNL contour and to provide a buffer for possible growth in noise beyond the forecast period. Therefore, FAA’s disapproval should not be interpreted as minimizing or negating the efforts of local jurisdictions to provide prudent planning.”

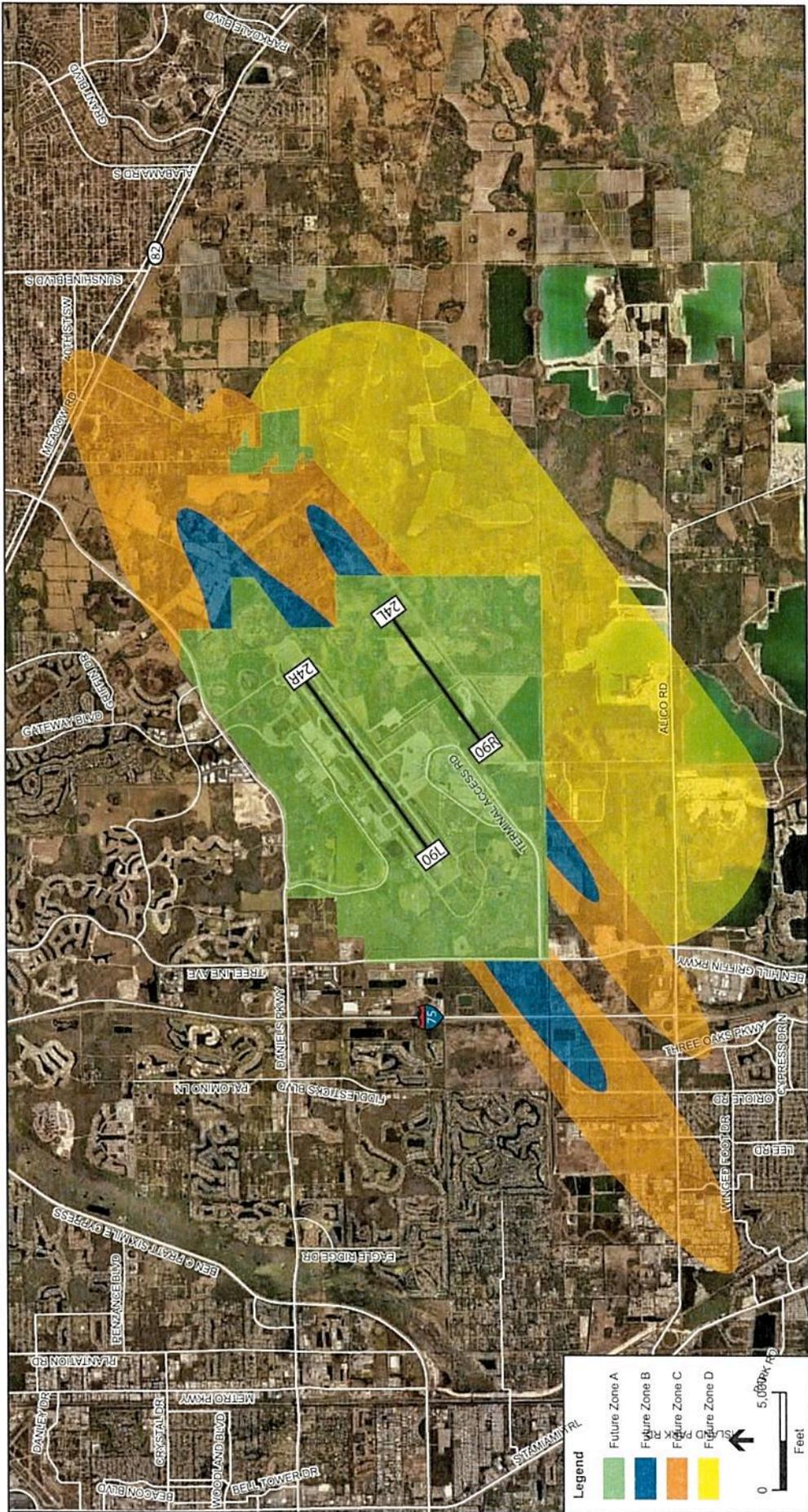
Current Disposition: Implemented. The Lee County Comprehensive Plan was amended effective November 18, 2016 and Lee County Land Development Code was amended effective November 23, 2016.

Effectiveness: No non-compatible land uses are currently located within the long term overlay zones that preclude noise sensitive development (Zones A and B). Additionally, notification is provided for those buying noise sensitive uses within the 55 DNL contour (Zones C and D).

Enforcement Action: N/A

Next Steps and Timeline: No further action required.

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Southwest Florida International Airport - 14 CFR Part 150 Study
Figure 22h
Airport Noise Zones

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3.3 Noise Program Administration Measures

PM-1. Noise Compatibility Program Management

Description: This measure involves the management of the NCP implementation. The LCPA is the owner/operator of RSW and has the current responsibility for working with the operators at the Airport to establish and implement the NCP at RSW. This measure recommends that LCPA assign resources as may be required to assist in implementation and management the recommendations from this Study Update.

FAA's Record of Approval Decision: Approved.

Benefit: Maintaining program oversight allows the LCPA to effectively track implementation and maximize the effectiveness of the NCP recommendations brought forth by the RSW 14 CFR Part 150 Study Update.

Current Disposition: Implemented. The LCPA has implemented the measures identified in the NCP recommended during the 2013 14 CFR Part 150 Study Update. This NCP implementation technical memorandum is part of the LCPA's ongoing efforts to manage the implementation of the noise program.

Effectiveness: The LCPA has been working with the FAA throughout the Part 150 Update process to begin implementation of many of the recommended measures well in advance of the FAA's ROA. This has resulted in 11 of the 16 recommendations already being partially or completely implemented.

Enforcement Action: N/A

Next Steps and Estimated Timeline: The LCPA will continue to manage the implementation process as appropriate for each implementation measure. Following implementation of each measure, the LCPA will continue to promote as part of its overall noise abatement program.

PM-2. Update Noise Program as Mandated by Lee Plan

Description: This measure involves periodic update of the NEM and NCP when appropriate. The FAA, through 14 CFR Part 150 regulations, requires airport sponsors to prepare and submit revised NEMs if changes in operations of the Airport would result in a change in the amount of incompatible land uses. The FAA defines a substantial change as a noise sensitive area that would experience a 1.5 dB DNL or greater increase or decrease for noise sensitive land uses exposed to 65 dB DNL and above.

The LCPA staff should periodically review the number of operations as well as the operational characteristics, such as runway use and fleet mix, to determine if any major changes in operations at the Airport have resulted in increased or decreased aircraft noise exposure to noise sensitive land uses. Assuming runway use and fleet mix are consistent, a 40 percent change in traffic roughly equates to a 1.5 dB DNL change. However, if the fleet or runway use changes, a 1.5 dB could result from a smaller change in activity.

The Lee Plan no longer stipulates a set period of time for update of the noise program. As a result, updates should occur when it is anticipated that there is a significant change in aircraft noise exposure to noise sensitive land uses. **Benefit:** Gives the LCPA the responsibility of updating its noise contours should conditions at the Airport change significantly..

FAA's Record of Approval Decision: Approved.

Current Disposition: Implemented. The LCPA will review operating conditions annually to determine if future updates are required.

Effectiveness: Implementation of this measure ensures that the airport noise contours remain representative of local conditions.

Enforcement Action: N/A

Next Steps and Estimated Timeline: The LCPA should periodically review operational changes to determine if an update to the noise program is warranted.

PM-3. Noise Forums with FAA Air Traffic Controllers

Description: This measure establishes a regular noise forum with RSW ATC in an effort to highlight areas where opportunities might exist to address community concerns. Regular meetings should be held between the two parties so that the latest issues impacting ATC and the LCPA can be addressed and to determine if any mitigating efforts can be established. These meetings are a continuation of the meeting and strong working relationship fostered with ATC throughout the 14 CFR Part 150 Study Update.

Benefit: Opens the lines of communication between the LCPA and RSW ATCT to maximize the effectiveness of the NCP implementation and allow review of current issues and concerns.

FAA's Record of Approval Decision: Approved.

Current Disposition: Implemented. The LCPA has met with the ATC periodically to continue discussions relative to noise program implementation.

Effectiveness: Regular meetings are anticipated to maximize the effectiveness and refinement of the noise program.

Enforcement Action: N/A

Next Steps and Estimated Timeline: The LCPA will continue to meet with RSW ATCT staff periodically to discuss noise issues and the status of program measures.

PM-4. Develop a Jeppesen Insert on Noise Abatement Program at RSW

Description: This measure involved development of a Jeppesen type insert to raise awareness of noise concerns with pilots. Pilot education is one of the strongest tools for addressing noise concerns at an airport. Since operations at RSW are mostly conducted by air carrier operations, educating pilots on the airport's specific procedures or noise concerns can be a challenge since the same pilots may not regularly fly in and out of RSW.

This measure involves development of a Jeppesen type insert that contains all noise abatement information, including graphics depicting noise sensitive areas. The half page specially formatted inserts allow integration into the pilot flight manuals. This allows pilots to be aware of noise sensitive areas and noise considerations at an airport that might not have yet been integrated into the specific operational notices (green sheets or dash 7 pages) for a specific carrier. It will also assist in communicating these measures to non-commercial pilots through distribution by RSW's fixed based operators (FBOs).

Benefit: Helps create pilot awareness of the noise sensitive communities around RSW and the recommended measures to reduce annoyance associated with aircraft overflights.

FAA's Record of Approval Decision: Approved.

Current Disposition: Not implemented. Because of the shift to electronic information in the cockpit, this measure is no longer being pursued. Alternatively, the LCPA will engage the airlines to elevate awareness of community noise concerns.

Effectiveness: TBD

Enforcement Action: N/A

Next Steps and Estimated Timeline: The LCPA will engage the airlines through periodic outreach meetings to elevate awareness of community noise concerns.

PM-5. Install Runway End and Noise Abatement Reminder Signs

Description: This measure involves installation of noise abatement reminder sign at key areas on the airfield. While locally based pilots may be familiar with the noise abatement or noise measures, RSW is predominantly an air carrier airport with few locally based aircraft. To continue to educate and raise awareness of noise concerns for unfamiliar pilots, this measure involves adding runway end reminder signs that are visible to pilots just prior to takeoff.

Benefit: The signs can help reduce noise exposure by increasing pilot awareness. The signs can also identify locations of noise sensitive areas by directing pilots to avoid certain turns or fly certain instrument procedures aimed at avoiding noise sensitive sites.

FAA Record of Approval Decision: Approved. “Signage must not be construed as mandatory air traffic procedures. Prior to purchase and installation, signage must be reviewed and approved by the FAA outside of the Part 150 process.”

Current Disposition: Not Implemented. The LCPA will work with the FAA to ascertain funding for signage on the Airport to help spread awareness of the noise abatement policies and procedures at RSW.

Effectiveness: To be determined. It should be noted that these signs are of most benefit to departing aircraft.

Enforcement Action: N/A

Next Steps and Estimated Timeline: The LCPA will review funding opportunities. Timing of this measure is subject to funding availability. Implementation should be carried out in conjunction with an adjacent project to minimize costs and operational disruption.

5.0 Summary

A 2018 review of the status of NCP measures indicates continued significant progress both in program implementation and refinement and effectiveness of the measures since the 2014 status update. The RSW ATCT continues to work as an effective partner in accomplishing the overall goals of program. Program progress spans the range of operational, land use and program measures.

While the FAA disapproved all ten of the operational measures for the purposes of Part 150, there has been significant progress in implementing these measures to reduce annoyance caused with aircraft overflights for the communities surrounding RSW. Six of the ten measures have been implemented either fully or in part. Feasibility evaluation of a seventh has been implemented and determined not feasible. Of the three remaining measures, two are slated for future implementation (extending the OPD procedure further from the airport and shifting the downwind to the south at time of the new parallel runway construction) and one is in the process of being coordinated (delay point at which aircraft lower gear). While a variety of factors have limited the effectiveness of certain measures, the FAA's RSW ATCT and TRACON have implemented alternative techniques including the vectoring of aircraft in attempts to achieve the desired results.

Implementation of the single land use measure required a multiphase approval process and was completed in late 2016. While disapproved by the FAA for the purposes of the 2913 Part 150, the zones now in effect protect the airport against incompatible land use encroachment and also provide notifications for new owners.

All five of the program measures were approved by the FAA and three of the five have been implemented. One of the five has been determined no longer effective (publication of a Jeppesen type insert) and is no longer being pursued and the remaining measure (noise abatement airfield signage) is recommended for implementation when funding is available and it makes sense from an operational phasing standpoint.

Next steps include monitoring progress as appropriate, coordinating with the airlines and continuing to promote the measures outlined in the overall noise program. Maximum effectiveness of the overall program will likely occur as some of the longer term measures are implemented. It should be noted that future changes in FAA procedure design standards have the potential to impact any or all of the proposed operational measures and future modifications may be required.

APPENDIX A

RSW 14 CFR Part 150 Study Update FAA Record of Approval

received
4-10-14



U.S. Department
of Transportation
**Federal Aviation
Administration**

ORLANDO AIRPORTS DISTRICT OFFICE
5959 Hazeltine National Drive
Suite 400
Orlando, FL 32822
Phone: (407) 812-6331 Fax: (407) 812-6978

April 7, 2014

Ms. Juliet S. Inglesias
Grants Manager
Southwest Florida International Airport
11000 Terminal Access Road
Suite 8671
Fort Myers, FL 33913-8213

Dear Ms. Inglesias:

RE: Southwest Florida International Airport, Ft. Meyers, FL
Noise Compatibility Program Record of Decision

The Federal Aviation Administration (FAA) has evaluated the Noise Compatibility Program for Southwest Florida International Airport contained in the Noise Compatibility Program and related documents submitted to this office under the provisions of 49 U.S.C., Section 47504. The recommended Noise Compatibility Program proposed by the Lee County Port Authority is identified by action element number in Chapters 11, 12 and 13 of the Noise Compatibility Program for Southwest Florida International Airport. I am pleased to inform you that the Regional Airports Division Manager has fully approved five (5) of the sixteen (16) proposed action measures in the Noise Compatibility Program. The specific FAA action for each Noise Compatibility Program measure is set forth in the enclosed Record of Approval. The effective date of this approval is April 4, 2014.

Eleven of the proposed measures in the NCP were disapproved because the analysis in the NCP does not demonstrate the measure's noise benefits on the DNL 65 dB contour, nor did they result in achieving the goals of reducing existing noncompatible land uses around the airport and preventing the introduction of additional noncompatible land uses in the area around the airport. However, these measures can be implemented by the Airport Sponsor on a voluntary basis. All of the FAA's approval and disapproval actions are more fully explained in the enclosed Record of Approval.

Each airport Noise Compatibility Program developed in accordance with 14 CFR Part 150 is a local program, not a Federal program. The FAA does not substitute its judgment for that of the airport operator with respect to which measures should be recommended for action.

The FAA's approval or disapproval of 14 CFR Part 150 Program recommendations is measured according to the standards expressed in 14 CFR Part 150 and the Aviation Safety and Noise Abatement Act of 1979, (49 U.S.C. 47501-47507) and is limited to the following determinations:

The Noise Compatibility Program was developed in accordance with the provisions and procedures of 14 CFR Part 150;

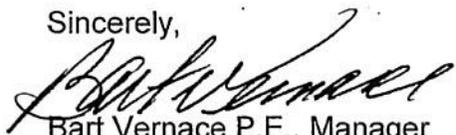
Program measures are reasonably consistent with achieving the goals of reducing existing noncompatible land uses around the airport and preventing the introduction of additional noncompatible land uses;

Program measures would not create an undue burden on interstate or foreign commerce, unjustly discriminate against types or classes of aeronautical uses, violate the terms of airport grant agreements, or intrude into areas preempted by the Federal Government; and

Program measures relating to the use of flight procedures can be implemented within the period covered by the Program without derogating safety, adversely affecting the efficient use and management of the Navigable Airspace and Air Traffic Control Systems, or adversely affecting other powers and responsibilities of the Administrator prescribed by law.

Specific limitations with respect to FAA's approval of an airport Noise Compatibility Program are delineated in 14 CFR Part 150, Section 150.5. Approval is not a determination concerning the acceptability of land uses under Federal, state, or local law. Approval does not by itself constitute a commitment by FAA to implement specific noise compatibility measures. FAA approval of some measures may require preparation of an environmental assessment. Further, approval of a plan does not commit FAA to financially assist in the implementation of the program nor are all measures covered by the program necessarily eligible for grant-in-aid funding from the FAA under the Airport and Airway Improvement Act of 1982. Where Federal funding is sought, requests for project grants should be submitted to the FAA Airports District Office.

Sincerely,



Bart Vernace P.E., Manager
Orlando Airports District Office

1 Enclosure

cc:

APP-400

ASO-610

ASO-7

FEDERAL AVIATION ADMINISTRATION

RECORD OF APPROVAL
14 CFR PART 150
NOISE COMPATIBILITY PROGRAM

Southwest Florida International Airport
Ft. Myers, Florida

Randy Elyman
Regional Counsel, ASO-7

CONCUR NONCONCUR

1st April 2014
Date

Wesley R. Giffert
Airports Division Manager
Southern Region

APPROVED DISAPPROVED

4/3/2014
Date

RECORD OF APPROVAL
Southwest Florida International Airport (RSW)
Ft. Myers, Florida

The Southwest Florida International Airport (RSW or Airport), Ft. Myers, Florida developed a Noise Compatibility Program (NCP) that describes current and future land uses based on the parameters established in Title 14 Code of Federal Regulations (CFR) Part 150, Airport Noise Compatibility Planning. The NCP is an update to RSW's existing program, which the FAA most recently approved in 2006. It consists of 16 new program measures, including ten operational measures, one land use measure, and five program management measures for which RSW seeks Federal Aviation Administration (FAA) approval. Additionally, the NCP contains 14 existing program measures, previously approved by the FAA, that will remain in place. The 2006 Record of Approval identifying these existing program measures is attached to this document as Attachment "A".

This NCP was submitted subsequent to a determination by the FAA that associated Noise Exposure Maps (NEM) for RSW were in compliance with applicable requirements of 14 CFR Part 150, effective February 8, 2013, the same date the determination was published in the Federal Register.

The measures listed in the body of this Record of Approval (ROA) are those for which RSW has requested FAA approval. FAA approval indicates only that the actions would, if implemented, be consistent with the purposes of 14 CFR Part 150. The FAA has provided technical advice and assistance to the Airport to ensure that the operational elements are feasible (see 14 CFR 150.23(c)). Nevertheless, approval of a measure does not constitute FAA funding commitments or decisions to implement that measure. The FAA will make funding eligibility determinations as funds are requested. Later decisions concerning possible implementation of measures in this ROA will be subject to all applicable environmental compliance and other procedures and requirements including, but not limited to, the National Environmental Policy Act and Section 106 of the National Historic Preservation Act.

There follows a summary of the proposed operational, land use control, and program management measures identified in the NCP followed by the FAA's action for each. Each measure contains a cross-reference to the NCP. The summaries are derived from the NCP and do not represent the opinions or decisions of the FAA. The Disapproval for Purposes of Part 150 of any measure listed below does not prohibit the Airport Sponsor from implementing such measure outside of the Part 150 process.

Attachment "B" to this ROA contains Public Comments that were received by the FAA during the regulatory 60-day public comment period that started on October 21, 2013 as a result of the FAA publishing a Federal Register Notice advising of the beginning of the formal 180-day NCP review period. FAA's responses to these public comments are also contained in Attachment "B". FAA fully considered the public comments received in the development of this ROA.

OPERATIONAL MEASURES

OP-1. Promote Use of RNAV Visual Optimized Profile Descent (OPD) to Runway 06

RSW requests that the Airport, the FAA, and various stakeholders including air carriers continue to promote the use of the RNAV Visual OPD procedures at RSW highlighting the benefits of fuel efficiency and noise reduction to surrounding communities (p. 11-5; fig. 11.1 and 11.2).

FAA Action: Disapproved for purposes of Part 150. The analysis in the NCP does not demonstrate the measure's noise benefits on the DNL 65 dB contour.

OP-2. Initiate RNAV Optimized Profile Descent Further From the Airport

RSW requests that the Airport, working with the FAA, continue to explore the feasibility of implementing new RNAV OPD arrival technology that will allow aircraft to initiate continuous descent arrivals further from the Airport, thereby remaining higher over noise sensitive areas including the Estero Corridor (p.11-9; fig. 11.1 and 11.3).

FAA Action: Disapproved for purposes of Part 150. The analysis in the NCP does not demonstrate the measure's noise benefits on the DNL 65 dB contour.

OP-3. Raise the Downwind Altitude to Runway 06

RSW requests that the Airport, working with the RSW air traffic control tower (ATCT), determine if raising the altitude of the south downwind leg is feasible from a safety and efficiency standpoint. RSW also requests that the Airport continue to work with the FAA to develop arrival procedures that will take advantage of optimized profile descents or continuous descent approaches so that aircraft minimize leveling off at low altitude over residential areas during arrival operations (p. 11-9; pp. 4-1 – 4-19; p. 5-1 - 5-11; figs. 4.1 - 4.4; 5.1, 5.2, and 5.5 - 5.10).

FAA Action: Disapproved for purposes of Part 150. The analysis in the NCP does not demonstrate the measure's noise benefits on the DNL 65 dB contour.

OP-4. Shift Downwind Flight Track to the South

RSW requests that with the completion of the new south parallel runway at RSW (Runway 06R-24L) the south downwind leg be shifted approximately one mile further south because of both an operational need and a reduction to population impacts from aircraft overflights (p. 11-17 and 11-18).

FAA Action: Disapproved for purposes of Part 150. The analysis in the NCP does not demonstrate the measure's noise benefits on the DNL 65 dB contour.

OP-5. Publish Charted Visual Approach to Runway 06 from the North and South

RSW requests that the Airport, working with the FAA, publish a charted visual approach procedure for Runway 06 to maximize routing of aircraft over compatible land uses when conditions permit; and also allow for aircraft that are not capable of flying the RNAV Visual OPD to follow a similar track (p. 11-18; fig. 11.5).

FAA Action: Disapproved for purposes of Part 150. The analysis in the NCP does not demonstrate the measure's noise benefits on the DNL 65 dB contour.

OP-6. Keep Aircraft at 3,000 ft. Over Fort Myers Beach

RSW requests that the Airport, working with the FAA, explore the feasibility of raising the altitude of aircraft arriving over Fort Myers Beach to Runway 06 to 3,000 ft. by increasing the ILS intercept altitude for the ILS to Runway 06, increasing the altitude of aircraft at TROPC, creating a step down procedure, or some combination thereof (pp. 11-21 – 11-24; fig. 11.6; tables 11.4 and 11.5; app. C and app. S).

FAA Action: Disapproved for purposes of Part 150. The analysis in the NCP does not demonstrate the measure's noise benefits on the DNL 65 dB contour.

Note: This measure is currently being performed outside of the Part 150 process.

OP-7. Delay Point at which Aircraft Lower the Landing Gear

RSW requests that the Airport work with air carriers to make sure they are aware of noise sensitive areas around the Airport to reduce impacts associated with early dropping of landing gear on approach (p. 11-25).

FAA Action: Disapproved for purposes of Part 150. The analysis in the NCP does not demonstrate the measure's noise benefits on the DNL 65 dB contour.

OP-8. Increase Altitude of Early Morning Arrivals

RSW requests that the Airport work with the FAA and air carriers to increase awareness of noise concerns in efforts to keep aircraft higher when arriving to the Airport during early morning hours (p. 11-25).

FAA Action: Disapproved for purposes of Part 150. The analysis in the NCP does not demonstrate the measure's noise benefits on the DNL 65 dB contour.

OP-9. Change Runway 24 to Preferred Runway From 10:00 PM – 6:00 AM

RSW requests that the Airport, working with RSW ATCT and air carriers who routinely operate at RSW, establish Runway 24 as the voluntary preferential arrival runway from 10:00 PM to 6:00 AM local time when Airport operational and weather conditions permit (p. 11-25 and 11-26; fig. 11.7).

FAA Action: Disapproved for purposes of Part 150. The analysis in the NCP does not demonstrate the measure's noise benefits on the DNL 65 dB contour.

Note: This measure is currently being performed outside of the Part 150 process.

OP-10. Modify CSHEL FOUR Departure Procedure

RSW requests that the Airport work with the RSW ATCT to explore the advantages of having aircraft climb out at a speed of 220 knots, and once passing the MAPUL Intersection and upon leaving 3,000 ft.MSL, to avoid conflicts at FMY, make their right turns direct to CSHEL. This would keep aircraft on their current course south of Fiddlesticks, but allow the better performing aircraft to turn before reaching The Forest community, therefore not increasing overflights over the Fiddlesticks community, and reducing overflights over The Forest, as shown in NCP Figure 11.10. This procedure would also reduce aircraft flight path distance and possibly fuel burn (p. 11-29 – 11-32; figs. 11.8 – 11.0; table 11.6).

FAA Action: Disapproved for purposes of Part 150. The analysis in the NCP does not demonstrate the measure's noise benefits on the DNL 65 dB contour,

Note: This measure is currently being performed outside of the Part 150 process.

LAND USE MEASURES

LU-1. Airport Overlay Zone Update

RSW requests that the Airport and Lee County update the current Airport Noise Overlay Zones consistent with the goals and objectives of local government for long term land use compatibility with activities at RSW (p. 12-11; figs. 12.2 – 12.4; Appendix P).

FAA Action: Disapproved for purposes of Part 150. The local jurisdiction has adopted a local standard lower than the Federal standard that defines incompatible land uses below DNL 65 dB. However, the recommended noise overlay zones are not based on either of the "official Noise Exposure Maps" accepted by the FAA in this study. The Federal government has no authority to control current or future local land use designations. The local jurisdictions have the authority to pursue their own proposed land use controls and enact the proposed Noise Overlay Zoning without FAA approval. Below the 65 DNL contour, FAA as a matter of policy encourages local efforts to prevent new noncompatible development immediately abutting the 65 DNL contour and to provide a buffer for possible growth in noise beyond the forecast period. Therefore, FAA's disapproval should not be interpreted as minimizing or negating the efforts of local jurisdictions to provide prudent planning.

PROGRAM MANAGEMENT MEASURES

PM-1. Noise Compatibility Program Management

Recommendation: RSW requests that the LCPA manage the implementation of the NCP measures contained in the NCP (p. 13-2).

FAA Action: Approved.

PM-2. Update Noise Program as Mandated by Lee County Plan

RSW requests that LCPA staff routinely examine operating characteristics at RSW to determine if significant changes have occurred that would require an update to the NEMs. If a significant change has occurred, then the NEMs should be updated. The NCP should be updated every five years as designated in the Lee County Comprehensive Plan (p.13-2).

FAA Action: Approved.

PM-3. Noise Forums with RSW Air Traffic Control

RSW requests that the LCPA meet with RSW ATC on a quarterly or yearly basis to address concerns raised by both parties and to explore potential solutions that can be beneficial for all Airport stakeholders (p. 13-3).

FAA Action: Approved.

PM-4. Develop a Jeppesen Insert on Noise Abatement Programs at RSW

RSW requests that the Airport voluntarily work with RSW ATCT, air carrier station managers, and the FAA to publish Jeppesen Type pilot handouts notifying pilots of the noise abatement measures in place at RSW for better awareness and compliance of preferred measures (p. 13-3).

FAA Action: Approved

PM-5. Install Runway End and Noise Abatement Reminder Signs

RSW requests approval to install noise abatement reminder signs at the end of each runway in an effort to create pilot awareness of the noise sensitivity of the communities in proximity to RSW (pp. 13-3 and 13-4).

FAA Action: Approved. Signage must not be construed as mandatory air traffic procedures. Prior to purchase and installation, signage must be reviewed and approved by the FAA outside of the Part 150 process.

FAA Responses to Comments of the Lee County Port Authority on the Draft EA for the South-Central Florida Metroplex Project

The commenter correctly stated that RSW and FMY were not included in the Study Airports and the Proposed Project would have no effect on the operations at either airport. The purpose of the proposed Project is to address the problem of inefficiency of the existing aircraft flight procedures in the South-Central Florida Metroplex airspace, within the Study Area identified in the EA. The suggestion to consider proposals contained in the Port Authority's Part 150 Study falls outside of the scope for the proposed project. Chapter 2 of the Final Environmental Assessment presents the problem being addressed and describes what the FAA is trying to achieve with the proposed South-Central Florida Metroplex Project. The requests would not meet the purpose and need proposed South-Central Florida Metroplex Project, and are not being considered as part of this Project.

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LABEL 11-B, MARCH 2019

PSN 7830-02-000-9939

8 July 2020

South-Central Florida Metroplex Draft EA
Federal Aviation Administration
Eastern Service Center – Operations Support Group
1701 Columbia Avenue
College Park, GA 30337

Dear Sir or Madam,

I am writing to provide comments and questions concerning the United States Department of Transportation (DOT), Federal Aviation Administration (FAA) Draft Environmental Assessment (EA) for the South-Central Florida Metroplex Project. The main EA report file is entitled A_FL_Metroplex_DEA_Ch1-5 .pdf, and the title page is dated “May 11, 2020.” Questions and recommendations are also provided with the comments.

As was requested by the FAA on their website to help focus the FAA’s response to my comments, my main concern is the potential negative impact of the FAA NextGen/Metroplex Project on the Tampa Bay area (e.g. TPA and PIE airports and surrounding areas), but my EA comments cover potential problems throughout the entire South-Central Florida region, as covered by the report. I request a written response to my comments and questions.

Comment 1 - This is a general comment concerning FAA Exhibit 4-11 from the main EA report, which was cropped and used as to make a figure in a Tampa Bay Times (TBT) article on June 1st 2020 entitled “Changes to Tampa Bay area jet routes wouldn’t worsen noise, study says.” The article seems to present a one-sided view because it only detailed information about the FAA (<https://www.tampabay.com/news/business/2020/06/01/changes-to-tampa-bay-area-jet-routes-wouldnt-worsen-noise-study-says/>) Metroplex Project as told to the TBT by the FAA. And while I perceive the article as factual, based on my understanding of the FAA, the devil is surely in the details.

The TBT article shows only part of Exhibit 4-11, which is an FAA map of current noise impacts (as defined by the FAA) for areas around two of the Tampa Bay region’s airports. The TBT figure caption states, “The dots represent levels of noise: Gray: Under 45 decibels. Dark green: 45 to 50 decibels. Green: 50 to 55 decibels. Light green: 55 to 60 decibels. Yellow: 60 to 65 decibels. [Federal Aviation Administration]” Most people would look at this figure and assume, incorrectly, the levels are common dBA levels, which are easily read-off of a store-bought sound level meter, adjusted with A-weighting to match the response of the human ear. For example, dBA levels are what Pinellas County (where PIE is located) uses for defining noise ordinances, because dBA can be used to assess loudness relative to a background. The problem with the EA is the FAA instead uses the day-night average sound level (DNL) invented more than 40 years ago in the 1970’s as a way to characterize noise annoyance. DNL is documented as misleading. The scale on the EA figure, which is cropped in the TBT article, ranges from “<45 dB” to “>75 dB”.

shades of red to highlight the human harm due to increased exposure to aircraft noise above 45 DNL.

Note that one of the devils in the details is FAA regulations appear to allow the FAA to somewhat ignore $DNL < 60$ dB. This was at odds with the EPA report of DNL assessment back in 1974, and a $DNL = 60$ dB is now known to be even more harmful to humans.

Comment 2 – To help emphasize the misleading nature of the DNL in the first general comment, consider the following simple scenario and associated questions. Imagine a hypothetical rural area where the noise level is a constant 35 dBA throughout the 24 hour day. This level is chosen for two reasons. First, 35 dBA is higher than most one-second noise readings in the evening outside in Northern Pinellas County. Secondly, the constant 35 dBA level is used because DNL can be computed using discrete events that exceed the background level by at least 10 dBA. Now consider a person living in a small home with a demonically possessed vacuum cleaner (PVC) 10 feet from their bed. Vacuum cleaners are commonly rated as having a noise level of 70 dBA, which is quite loud, interrupting all thoughts and speech. Next, suppose the possessed vacuum cleaner magically starts up every hour between 10:00PM until 6:00AM and runs for exactly one second (e.g. counting “one alligator” in Florida) before shutting itself off. The DNL calculation for this series of 8 discrete harrowing nighttime noise events following the formulas provided in the “Handbook of Aircraft Noise Metrics”, Bolt Beranek and Newman, Inc. 1981, becomes:

$$DNL = 70 \text{ dB} + 10 \text{ dB} + 9 \text{ dB} - 49.4 \text{ dB} = \mathbf{39.6 \text{ dB}}$$

It’s amazing isn’t it? Eight times during the night, peaceful sleep is rudely interrupted by a 70 dBA vacuum cleaner noise event, but the combination of those noise events has been averaged and massaged into a noise metric of only 39.6 dB. FAA, please check my math.

The point is the $DNL = 39.6$ dB is not a real noise level, and it cannot be easily compared to a 35 dBA bedroom background level or the 70 dBA PVC. The DNL is a noise dosage, having averaged the loud noise events over the 86,400 seconds in a 24 hour day in favor of the FAA to minimize noise perception. The problem is the public sees 39.6 dB and they think, “Oh, that’s quiet!” compared to the 56 dBA homeowner leaf blower. The DNL is misleading, and the FAA is aware of this, yet they used it exclusively in the EA. Why, in 2020, is the FAA basing adjustments in flight profiles using noise science from the 1970’s? Why, in 2020, is the FAA basing adjustments in flight profiles using only DNL? Why is the FAA seemingly ignoring all noise science and discoveries over the last 40 years?

It would seem an averaging metric, like the DNL, would be a very poor metric for predicting sleep disturbance, which is typically measured using motility. For characterizing potential sleep disturbance due to FAA flight path changes, nighttime peak dBA or peak dBC values are better indicators of aircraft-induced “jump-scares”. The dBC metric doesn’t attenuate low frequencies as much as dBA (which is used to compute DNL), and dBC potentially better models the noise sensed by humans through the body. Can the FAA produce figures like Exhibit 4-11, except modeling peak dBA and/or dBC of aircraft flyovers instead of DNL? All it really takes is one

anomalously loud aircraft to ruin a night's sleep. When will the FAA recognize that humans can *feel* aircraft, like humans sense inaudible earthquakes, not just hear them with ear-based hearing?

Notice that Exhibit 4-11 from Chapter 4 of the Main EA report lumps together all DNL estimates below 45 dB and paints them innocuous grey. The FAA is actually probably using the yearly day-night average level (YDNL), which further minimizes the perception of aircraft noise on the map. But continuing with my example above, if the possessed vacuum cleaner repeats its annoying evolutions each night for 365 days a year, then the DNL = YDNL. The point is that even a DNL of ~40 dB could mean a serious lack of sleep! The FAA should be using additional noise metrics like Peak dBA exposure for aircraft under 5000 feet in altitude, and Peak dBC exposure for aircraft above 5000 feet, because higher frequencies get filtered out due to attenuation and human bodies feel the low vibrations of high altitude aircraft, just like humans don't hear earthquakes, they feel them. This is an example of noise discoveries made during the past 40 years. When will the FAA embrace noise discoveries made in the last 40 years?

Comment 3 – Please provide a list of past and current law suits and court cases filed against the FAA that have mentioned that the DNL, by itself, is an inadequate measurement to characterize aircraft noise impacts.

Comment 4 – Please provide a bibliography of past DOT-sponsored and FAA-sponsored consortium meetings, reports and studies that have searched for alternative (or augmentative) metrics to the DNL.

Comment 5– If the FAA Metroplex made a modification to flight paths that raised a DNL at a home from 40 dB to 43 dB, perhaps doubling the number of demonically possessed vacuum cleaner events from 8 to 16 through the night (e.g. one event every half hour), would this be listed as “No Impact” in the EA report because it is less than YDNL = 60 dB? This is an example of what I meant when I mentioned that the devil is in the details. The FAA seems to speak a different language than ordinary citizens.

Comment 6 – The TBT article also mentions that, “Federal Aviation Administration officials say they have no plans to make changes to jet operations below 10,000 feet, where noise would get noticeable.” There are two issues here. First, even though the aircraft may be at or above 10,000 feet, I have experienced first-hand the annoying low frequency rumbles as fully loaded Amazon aircraft depart TPA to the south and then turn northwest over Old Tampa Bay and Northern Pinellas County. If the FAA were to make changes to flight paths to reduce human harm, wouldn't it be better to have all flights continue south staying over water and exit Tampa Bay before turning into the Gulf of Mexico? This way, aircraft spend less time over populous areas, right?

Note that the dBA measurements that go into creating the non-unique DNL noise dosage tend to filter out low frequency rumble, but a measurement like Peak dBC would confirm what you feel with your body; what you hear with your jawbone, what modern science tells us about how humans experience sound. Perhaps it's not that modern seeing as how Beethoven supposedly clenched a rod in his teeth to improve his hearing of music. When will the FAA embrace noise measurements that accurately reflect what humans experience?

The second issue is the claim the FAA has no plans to make changes below 10,000 ft. If I count this as a factual statement, then there seem to be errors in the Metroplex documentation package. In Appendix L_FL_Metroplex_DEA_App_F_Study.pdf, Figures 37 & 38, the “Current and Proposed TPA BLOND STAR”, the images show modeled track changes that clearly extend below 10,000 ft down to 5,000 ft. To be honest, I’m not sure how one moves arrival and departure points near 10,000 ft without impacting flight regions from 0 to 10,000 ft, or from 10,000 ft to zero. Which is it? Is the TBT article accurate, or is the EA Appendix in error? This comment is reiterated in more detail at the end of this list of comments.

Comment 7 – This is more of a production comment. Some of the figures in the report when viewed by Adobe Acrobat in Windows 10 are taking time to repaint every dot or polygon in certain figures. After going back and forth through the report, eventually Adobe Acrobat pops up an unescapable series of “out of memory” messages, requiring the employment of Task Manager to kill the confused Adobe processes. At least this happens to me on a new computer with the latest Adobe software. I recommend modifying the EA report and pasting images and not objects into the report. This will also likely reduce the size on disk for “A_FL_Metroplex_DEA_Ch1-5.pdf” to less than 125MB.

Comment 8 – A potential failing of the current May 2020 Draft EA for the South-Central Florida Metroplex Project is the lack of time history showing the growing noise problems around airports due to increased aircraft prevalence. For example, Allegiant Air, with the help of PIE Management ignoring noise complaints, has approximately doubled the number of passengers served at PIE between 2013 and 2019. Please provide Exhibit 4-11 for modeling inputs from 2013 aircraft traffic to show the evolution of the noise footprint over time.

Comment 9 – The analysis of the noise footprint shown in Exhibit 4-11 does not account for the noise from aircraft from CLW or SPG, as is stated in the EA, even though those airports use the same airspace as PIE and TPA. And CLW spawns helicopters that actually circle over neighborhoods in Pinellas for long periods of time. Does the noise modeling in Exhibit 4-11 account for the US Coast Guard C-130 and H-60 platforms, or law enforcement helicopters, or Army reserve helicopters? If not, then please mention in the figure caption that Exhibit 4-11 is likely a gross under-estimate of the noise being projected on Pinellas Citizens. Note that if the FAA believes the modeling is not an underestimate of real life, please state why all the other noise sources are not accounted for.

Comment 10 - Please add an Appendix to the Metroplex documentation package informing the public of the status of the Phoenix, AZ lawsuit against the FAA. My understanding is that the FAA (NextGen) Metroplex published their draft Environmental Assessment, held local informative meetings and then implemented their planned changes in 2014, following the same process they are using in Tampa. But in 2017, after three years of legal battles as a result of the Metroplex noise impacts (e.g. shifting aircraft routes, precisely aligning paths and concentrating noise, etc), a court finally struck down the new flight paths and ordered that the FAA Metroplex changes be reverted. Has the FAA complied with the court order and reverted the flight changes? <https://www.azcentral.com/story/news/local/phoenix/2017/08/29/appeals-court-strikes-down-controversial-sky-harbor-flight-paths/612134001/> What is the status?

Comment 11 - Which is more important to the FAA, a) generating cost savings for Airline companies by reducing fuel requirements, or b) reducing the number of people impacted by aircraft noise to improve citizen health? My reading of the draft EA suggests the FAA is focused on “a)” with minimal consideration for “b)”, mostly because of the employment of 40 year old noise science. Does the FAA even keep track of the number of people impacted by aircraft noise in terms of Peak dBA exposure? Does the FAA ever modify the aircraft noise predictions based on age of aircraft? If not, why?

Comment 12 - Please add an Appendix to the Metroplex documentation informing the public of the status of the BWI Metroplex lawsuit against the FAA. In 2017, Maryland Governor Hogan asked his Attorney General to sue the FAA to revert the Metroplex flight patterns at BWI Airport. The Governor had to resort to legal action, “...on behalf of all Marylanders suffering from the adverse effects of the implementation of the Next Generation Air Transportation System.” <https://www.baltimoresun.com/maryland/bs-md-hogan-frosh-faa-20170912-story.html>

Comment 13 - Please add an Appendix to the Metroplex documentation informing the public of the status of the DCA Metroplex lawsuit against the FAA. In 2018, FAA Metroplex lawyers won a battle in Washington DC to keep the noisy flight paths in place, but it appears the FAA lawyers only won on a technicality (<https://www.hklaw.com/en/insights/publications/2018/03/dc-circuit-silences-airportnoise-critics>). Apparently, residents get only 60 days to complain. It was reported that the good news in this case is that the airline pilots are apparently ignoring the new FAA Metroplex flight paths as planes seemingly get too close to national monuments. Is this true? Also, when does the FAA plan to implement Tampa flight path changes? Please inform me in writing when the FAA does implement the changes. I wouldn't want to inadvertently miss the 60 day deadline for complaints.

Comment 14 - Please add an Appendix to the Metroplex documentation informing the public of the status of the Washington DC Council petition to the FAA. In 2016 a group of homeowners (<https://static1.squarespace.com/static/56428713e4b00c09aad32023/t/579301d8725e254c7c7bfe2cf/1469252058505/Petition+to+the+FAA.pdf>) and DC Council Members filed a detailed petition about the negative impacts of the new noise patterns caused by the Metroplex changes. What resolution came from this? One would think after all the complaints and lawsuits in the DC Area that someone in Congress would direct the FAA to provide a full reporting of positive and negative results and all costs from Metroplex project, including documentation on all legal cases resulting from FAA Metroplex flight path adjustments and reversions.

Comment 15 - Please add an Appendix to the Metroplex documentation informing the public of the status of other Maryland Metroplex issues. Apparently, after more than a year's worth of Maryland roundtable meetings, in 2018, the FAA begrudgingly admitted that local airport authorities can request the FAA to make flight path changes, including implementation of dispersal headings and other variations to alleviate harmful noise. <http://oaklandmills.org/wp-content/uploads/2019/01/Final-2018-Annual-Report-FINAL-1.pdf>. How long will it take to implement these changes? Years? What will happen to home values, communities and lives that are negatively impacted? Doesn't it seem like the FAA Metroplex flight changes should never

have happened in the first place? Should the FAA Metroplex changes come with some sort of warranty?

Comment 16 - Please add an Appendix to the Metroplex documentation informing the public of the status of the Los Angeles lawsuit against the FAA. In 2019 in Los Angeles CA, the Los Angeles City Attorney announced his office was suing the FAA over disastrous noise-inducing changes in flight patterns at Hollywood Burbank Airport. <https://beverlypress.com/2019/12/feuersues-faa-over-noise-from-flight-path-changes/> FAA Metroplex changes at Los Angeles Van Nuys Airport seem to have almost started riots. <https://www.sfvbj.com/news/2019/aug/07/meeting-about-van-nuys-airport-turns-noisy/> Again, it appears to be the same story. The FAA Metroplex team provides an Environmental Assessment based on outdated 40 year-old noise science. Then the FAA holds informative meetings, and tells the public all is well, showing green noise plots. The public doesn't understand the FAA's use of metrics, and the FAA goes forward and implements poorly engineered changes characterized only by DNL, to flight paths sometimes diverting planes away from traditional industrial and commercial areas subjected to perhaps decades of high levels of aircraft noise. The new routes concentrate flights, sometimes over neighborhoods that have never had to deal with much aircraft noise. If a neighborhood's 35 dB DNL increased to 39.6 dB DNL as a result of FAA Metroplex changes, like the PVC example provided above, would this be listed as "No Impact" by the FAA EA? Is the FAA Metroplex trying to dictate changes in local Land Use to reduce fuel costs for airline corporations at the expense of citizens?

Comment 17 – The sheer number of lawsuits following the FAA Metroplex project as it moves from region to region suggests there is a problem with the overall process. Does the problem stem from the FAA's reliance on the 40 year-old noise science and the misleading DNL used by the FAA?

Comment 18 – There are many journal articles and reports dating back to the 1960's stating that noise is harmful to humans, and more should be done to manage it effectively. Does the number of lawsuits suggest that perhaps the FAA did not do sufficient homework when they drafted regional EAs to reflect that changes in noise patterns are truly not noticeable?

Comment 19 – Based on the number of lawsuits following the FAA Metroplex efforts, does it seem like the FAA is implementing changes based on faulty models with 40 year old noise technology and then misusing the courts and justice system to avoid full rollbacks?

Comment 20 – Based on the number of lawsuits following the FAA Metroplex efforts, does it appear that the FAA Metroplex effort has substantial hidden costs? How much money has been spent by the FAA in fighting lawsuits related to the Nextgen/Metroplex activities? How much has been spent by opposing parties in the lawsuits? Is it possible that the FAA Metroplex is also an enormous waste of human capital?

Comment 20 – Now the FAA Metroplex is coming to the Tampa Bay area. Why should residents expect a positive result? Has anything changed in the FAA's noise modeling approach or EA documentation process since the Phoenix, Baltimore, Washington DC and Los Angeles

lawsuits began? Or, is the FAA simply plowing forward doing the same thing over again and hoping for a different result?

Comment 21 – The current May 2020 Draft Environmental Assessment for the South-Central Florida Metroplex Project (downloaded on 26 May 2020) seems to have very little actual assessment of any South Florida environments in the report. Part of the problem is that too many regions are grouped together. Lumping together Tampa Bay, a coastal region, with Orlando, a central land-locked region does both areas a great disservice. I recommend the EA be split into multiple Environmental Assessments, one for each collection of closely associated airports in South-Central Florida, such as TPA and PIE that are both coastal and both share Tampa TRACON. This is likely the only way a true environmental assessment can be made. At the very least, the figures will be more zoomed into the areas of interest making them more interpretable.

Comment 22 – Page 1-1, 1st paragraph: “...requires federal agencies to disclose to decision makers and the interested public a clear, accurate description of the potential environmental impacts that could arise from proposed federal actions.” In the FAA’s opinion, who are the “decision makers”? I assume these are members of Congress. Who are the top ten members of Congress the FAA is concerned with? Which members of Congress support the FAA Metroplex initiative? Which members of Congress are against the FAA Metroplex initiative? This question is asked so we may know who to contact if FAA Metroplex changes cause problems.

Comment 23 – Page 1-1, 1st paragraph: “...requires federal agencies to disclose to decision makers and the interested public a clear, accurate description...” The term “accurate description” is used, but there is no mention of the required degree of accuracy, nor is there any mention of who validates the input report data, models and assessments in the report to determine the degree of accuracy contained herein. Typically, accuracy is qualified with a statistical confidence. Perhaps the word “accurate” should be removed. Who validates FAA models? Please list all models used and provide links to verification and independent validation reports.

Comment 24 – Page 1-1, 2nd paragraph: “The South-Central Florida Metroplex Project seeks to optimize aircraft arrival and departure procedures in the South-Central Florida Metroplex by employing advanced navigational technology.” Does this mean that reduced separation of aircraft is now supported? For example, could the Tampa TRACON now use GPS to allow aircraft departing PIE to the north to use the approved RNAV departures route exclusively? Currently, corporate aircraft and general aviation do not follow the RNAV, and it is unclear whether this is a PIE Management failure or an issue with Tampa TRACON.

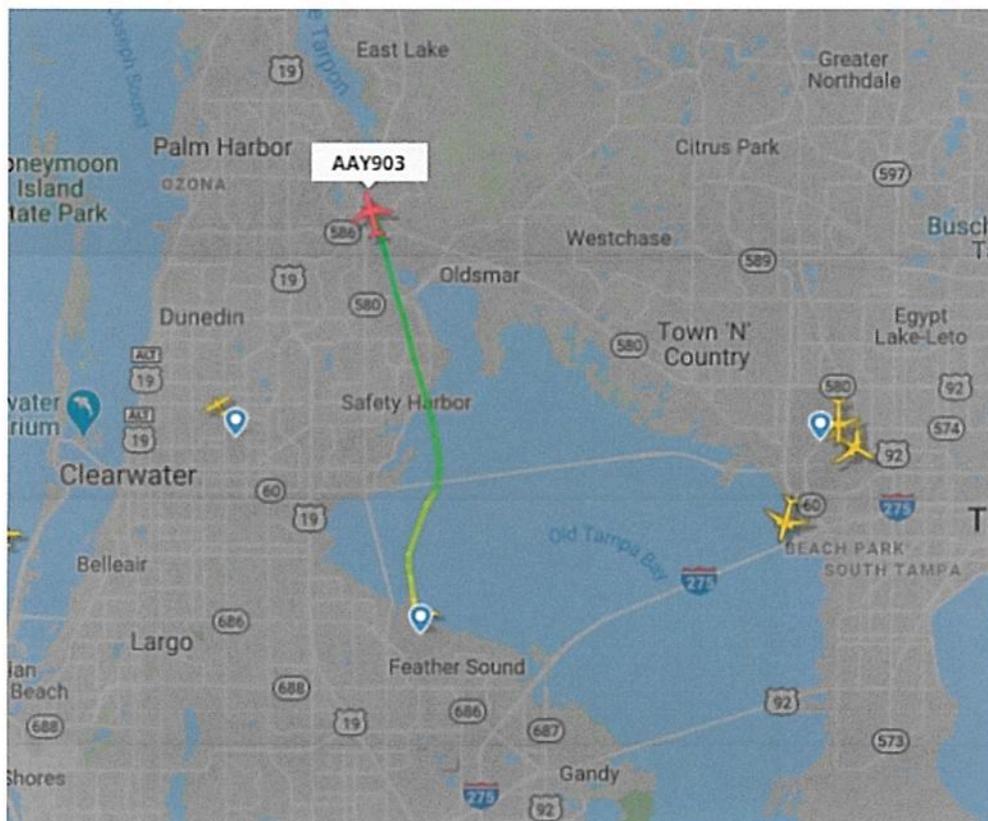
Comment 25 – Page 1: How can “advanced navigational technology” be the only criteria used to “optimize aircraft arrival and departure procedures”? Years of effort addressing Aircraft Noise impacts and Land Use conflicts dominate current flight path selection. Does the FAA really believe they can throw out all of the past information and just use GPS positioning to move and “optimize” routes to reduce fuel costs for airlines?

Comment 26 – Why would the FAA try to shorten flight paths for airlines to save fuel at the expense of moving noisy aircraft over areas of Land Use that have not been exposed to as many noisy aircraft? Note that Title 14 → Chapter I → Subchapter I → Part 150 of the e-CFR states

that the FAA believes residential land use is acceptable below DNL 65 dB. But it is not clear if the FAA fully supports this sole metric based on 40 year old noise science because of the qualifying asterisk added below Part 150 Table 1 stating: “**The designations contained in this table do not constitute a Federal determination that any use of land covered by the program is acceptable or unacceptable under Federal, State, or local law. The responsibility for determining the acceptable and permissible land uses and the relationship between specific properties and specific noise contours rests with the local authorities. FAA determinations under part 150 are not intended to substitute federally determined land uses for those determined to be appropriate by local authorities in response to locally determined needs and values in achieving noise compatible land uses.*” In other words, DNL 65 dB is not a valid criterion for determination of anything at the state and local level. DNL 65 dB is only now used by the FAA to control what it will pay for around airports, even though the vast majority of aircraft noise complaints are from well outside the DNL 65 dB noise contour. Instead of relying on DNL, wouldn't it be more beneficial to US Citizens to optimize flight path adjustments, and noise impacts as measured by DNL and peak dBA and peak dBC to visualize the true noise levels before and after Metroplex changes? And wouldn't it also be better to minimize the number of people exposed to higher noise levels?

Comment 27 – Ideally, all flights in and out of TPA and PIE should maximize time spent flying over water to avoid annoying or harming residents. And when not flying over water, the paths should be over industrial and commercial areas, or over non-residential areas. Should the FAA consider adding a new more-meaningful noise metric called Potentially Harassed Persons (PHPs), where numbers of PHPs are computed in census blocks based on Peak dBA exposure for aircraft below some altitude (e.g. 5000 ft) and Peak dBC above some altitude? Considering Pinellas County is the most densely populated county in FL, do Mextroplex flight path changes reduce or increase the number of PHPs?

Comment 28 – Based on some observed FlightRadar24 trajectories, Tampa TRACON appears to discriminate against PIE in favor of TPA by directing PIE flights over high-density populated areas in Northern Pinellas County so that TPA flights may have unfettered access to Old Tampa Bay, even when there are no flights over Old Tampa Bay. In other words, Tampa TRACON appears to often arbitrarily take away from Northern Pinellas County residents the valuable PIE noise abatement RNAV flight path. Consider the example figure below from FlightRadar24. AAY903 departs to the north and initially turns right to follow the RNAV Noise Abatement Procedure (NAP) route over Old Tampa Bay. Then for some unknown reason, the aircraft turns hard left over high-density residential areas, leaving Old Tampa Bay devoid of air traffic. If the FAA tracked PHPs, then this type of flight adjustment would stand out as failed departure. How will the FAA Metroplex changes affect flight management at the Tampa TRACON?



Comment 29 – Page 1-16, Exhibit 1-5: In discussing NAVAIDs, please add descriptions of all NAVAIDs at all South Florida airports and include an assessment of their age and condition. Would replacing the PIE ILS with an LDA to offset aircraft to and from Old Tampa Bay be useful to reduce potentially harassed persons (PHPs) in Northern Pinellas County? What FAA Metroplex flight paths would have to change to support an LDA over Old Tampa Bay for northern departures and approaches at PIE?

Comment 30 – Page 1-16, Exhibit 1-5: Some current ground NAVAIDs while old, still have the advantage of naturally spreading out or dispersing airplane tracks and noise onto the ground into polygon areas, while RNP concentrates the flight paths onto a razor-thin line on the ground. Using DNL 65 dB contours, which only occur near airports, these navigational comparisons are likely non-impactful and completely uninformative. But considering that 100% of noise complaints at PIE are outside of the DNL 65 dB contour, in areas where the yearly DNL might be 45 dB or less, changing from current ground NAVAIDs to RNP could be catastrophic in terms of ground noise over one specific area. Please provide DNL noise contours from models around all airports down to DNL = 35 dB showing before and after Metroplex changes. Alternatively, show analyses that the RNP area is chosen to minimize the number of PHPs.

Comment 31 – Page 1-33, Table 1-2: The Table lists IFR Annual Operations at PIE as 44,151, representing 2.4% of Annual Operations. How were these numbers computed? At the January ANATF Meeting at PIE, after Mr. Sprague, Deputy Airport Manager, presented detailed information on Allegiant Air departures and arrivals, he was asked about statistics for general aviation, corporate and private jets, military, law enforcement and US Coast Guard flight

statistics, and he said he was unable to track them. Other data suggest these non-airline flights represent more than 50% of all flight activity. If PIE is unable to track their flights in and out of the airport, then did the data come from the Tampa TRACON? Can PIE Management and citizens access this data? How?

Comment 32 – Page 2-14 Exhibit 2-7: This chart depicts a good example of a concentration of aircraft noise. Why can't fanning procedures, whereby noise is spread over a larger area, be built into the use of advanced navigational technology? It seems like the new GPS technology could actually be used for precise dispersion.

Comment 33 – Page 2-14 Exhibit 2-7: One potential issue with the FAA Metroplex Project is that when flight paths are moved without realistic (e.g. more than just DNL) consideration for noise, new noise annoyances may suddenly appear. Then the citizens who were perhaps used to DNL = 40 dB, are suddenly experiencing DNL = 43 dB, which might indicate a doubling in the number of discrete and potentially disturbing (e.g. 70 dBA) noise events. Since it appears the FAA is only flagging some DNL > 60 dB noise events as impactful, what is the expected change in property values and human health for people who are suddenly subjected to a new amount of aircraft noise? What recourse do these people have except to organize and file lawsuits and wait three years, like other FAA Metroplex regions, to recover a semblance of their previous lives?

Comment 34 – Page 3-4 Section 3.1.2.1 Community Engagement in Design Process: I was provided a link to this Metroplex EA file on May 26th. If the FAA had previously done noise modeling down to DNL = 40 dB around airports, then wouldn't direct mailings to potentially impacted households be a better informative process?

Comment 34 – Page 3-4 Section 3.1.2.1 Community Engagement in Design Process: Please list publications, dates and references for notices given to citizens about the Metroplex project, giving them time to read, understand, and comment on the proposed changes.

Comment 35 – Page 3-1 South-Central Florida Metroplex Project Alternative Development: "The Proposed Action alternative that this Environmental Assessment (EA) evaluates is a package of many individual, interrelated procedures combined into one alternative." This statement is unclear. Please provide an example Alternative Assessment for each Procedure. My impression from reading the EA documentation is that the FAA (or its contractors) ran models and made flight routes more direct and then only assessed potential fuel savings and airline cost savings. Then based on DNL assessments and FAA policy, the FAA deemed the changes to have no impacts. Is my understanding in error? Please discuss the noise impacts of each alternative down to DNL 40 dB level, or perhaps at least down to the DNL level that covers all of the locations where all current airport noise complaints originate.

Comment 35 – Page 3-1 South-Central Florida Metroplex Project Alternative Development: I may be reading this wrong, but it seems like lumping a group of procedural changes into one proposed action (e.g. flight path change) bypasses some aspects of a detailed assessment of the original flight path procedures. What were the processes used to establish the original flight paths that are to be changed? How is changing flight paths based on minimizing flight-travel

distance, estimates of reduced fuel costs and DNL models not like a direct “taking” of land from citizens to gain some minimal efficiency for airline companies?

Comment 36 – Page 3-2 South-Central Florida Metroplex Study Team: It is somehow discomfoting to know that the FAA has been working on the Nextgen/Metroplex Projects for 8 years (since 2012) without addressing the real problem with airplanes and airports: unwanted and unhealthy noise and pollution. Which citizen groups were incorporated into early Metroplex Study Teams and how was notice given?

Comment 37 – Page 3-3 Operational Criteria: Please list the specific operational criteria. Also please identify the specific full motion simulators used, and what results were learned from the simulations?

Comment 38 – Page 3-3 Operational Criteria: It seems likely that Noise Abatement Procedures (NAPs) in place at many airports would be among the most important Operational Criteria that FAA Metroplex “efficiency” improvements must consider. In many cases the NAPs are the results of years of costly effort and planning. Please list the Noise Abatement Procedures (NAPs) at all South Florida Airports and describe how the FAA Metroplex changes relate to those NAPs.

Comment 39 – Page 3-3 Operational Criteria: Which NAPs at South Florida region airports will be used more or less with FAA Metroplex flight path changes? Or, will new NAPs need to be established, taking years? Show the NAPs on Google Earth plots so that they may be easily understood.

Comment 40 – Page 3-3 Operational Criteria: NAPs currently in place at many airports have taken thousands of hours of human capital to put in place. What percentage of NAPs address the noise concerns largely outside the DNL 65 dB contour around airports?

Comment 41 – Page 3-53 Table 3-5 Alternatives Evaluation: Please provide the details for all “Alternatives Evaluation” for PIE and TPA. I could not find the analyses of existing flight paths, or flight paths with increasing numbers of aircraft over time, and any comparative alternative changes, in this report. For example, why save \$250K, when the FAA could choose a different flight path that reduces the number of Potentially Harassed Persons (PHPs) and still save \$220K? The figures seem to present a single model run to minimize flight distance, and a calculation of fuel costs saved. Then the 40-year old DNL analyses are used after the fact to minimize the appearance of true negative impacts.

Comment 42 – Page 3-4 Section 3.1.2.1 Community Engagement in Design Process: Please provide a Table that lists all the meetings, briefings and public workshops in the South Florida study area. Please list the number of persons that actually attended each meeting. Identify the dates, times and locations of any workshops that were held in the Tampa Bay area. Please make available on a website copies of all presentation and meeting materials, including notes from all meetings in order to see if the FAA’s planning evolved.

Comment 43 – Page 3-4 Alternative Design Process (FLL FEELX SID): The description of the FEELX Standard Instrument Departure (SID) from FLL is an interesting operational procedure,

but it is incomplete because there is no associated environmental impact analysis. For example, why not start with all the FLL existing flight paths and current EAs, then show the FEELX SID and show how the EAs are updated? For example, does the new FEELX SID destroy some rare bird species habitat? Does the FEELX SID make null and void any previous NAPs? Why do we need a modified FEELX SID? Also, please show the flight paths on Google Earth plots, as the current flight path plots are difficult to read. What year was the flight plot software initially developed?

Comment 44 – Consider Title 14 → Chapter I → Subchapter I → Part 150 of the e-CFR that states that the FAA believes residential land use is acceptable below DNL 65 dB. Below Table 1 is an asterisk that states: “**The designations contained in this table do not constitute a Federal determination that any use of land covered by the program is acceptable or unacceptable under Federal, State, or local law. The responsibility for determining the acceptable and permissible land uses and the relationship between specific properties and specific noise contours rests with the local authorities. FAA determinations under part 150 are not intended to substitute federally determined land uses for those determined to be appropriate by local authorities in response to locally determined needs and values in achieving noise compatible land uses.*” In other words, DNL 65 dB is not a valid criterion for determination of anything at the state and local level. Knowing this, what is the impact of FLL FEELX SID on areas near the airport that generate noise complaints? Please show where noise complaints are relative to FLL?

Comment 45 – Page 3-30 Table 3-2 Proposed Action SIDs, STARs and T-Routes: The Table is unclear because it combines too much information into one format. Please provide separate tables for each airport where proposed actions are recommended. Then also provide Google Earth images showing existing and planned changes so the citizens may instantly understand the potential impact.

Comment 45 – Figures 37 & 38 from Page 60 in Appendix F: According to the Tampa Bay Times (1 June 2020), “Federal Aviation Administration officials say they have no plans to make changes to jet operations below 10,000 feet, where noise would get noticeable.” The Metroplex documentation seems to present evidence that some flight paths below 10,000 ft may change.

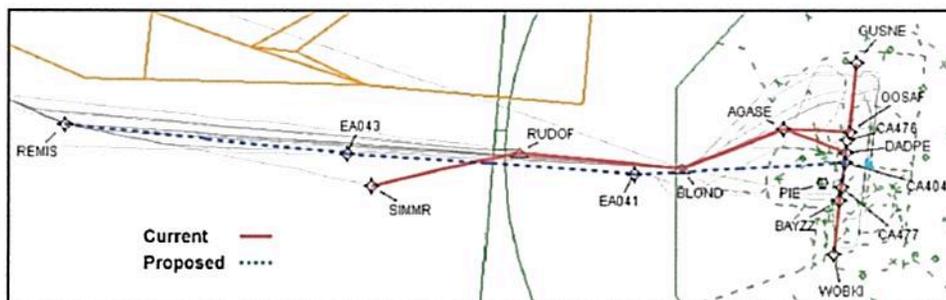


Figure 37. Current and Proposed TPA BLOND STAR

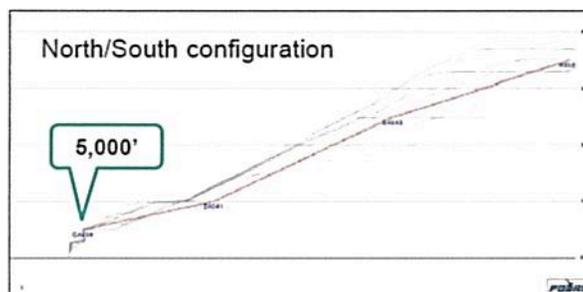


Figure 38. Proposed TPA BLOND STAR: Current Vertical Profile of Flight Tracks and Nominal Proposed Vertical Profile

In Figure 37 (on top), the red lines are current flight paths coming from out of the Gulf of Mexico to TPA, represented by the cyan dot on the right hand side of Figure 37. PIE is shown too. The name BLOND for the western approach to TPA is likely an FAA beach joke. Other series of waypoints and routes names are often hilarious, such as the IDEED STAR for Portsmouth, NH, which has ITAWT ITAWA PUDYE TTATT IDEED as waypoints. A more current joke is the THRNE path to Burbank airport, which has waypoints like DROGO, JOFRY and NNEDD.

The blue line in Figure 37 is the proposed flight path change. It would be much clearer on a Google Earth plot. Note that it appears to be a straight-in leg to minimize fuel costs (e.g. no zig zags), but there also appears to be no considerations for noise pollution on citizens.

This new blue line looks like a pretty big change relative to the location of PIE. From Figure 38 (at the bottom) we learn that the CA404 marker is 5,000 ft. There is no description of the scale on the right hand side of Figure 38, but it appears as if marker EA041 might be around 10,000 ft. The proposed blue dashed line, which goes from EA041 to CA404 describes changes to airplane routes below 10,000 ft, which conflicts with the TBT article. Something is in error. Please provide a Google Earth image with current and proposed flight paths to see what the real changes are for TPA and for PIE.

Feel free to contact me with questions.

Sincerely,

Dr. Mark Owen, Safety Harbor Resident

**FAA Responses to Comments to Mark Owens on the Draft EA for the South-Central
Florida Metroplex Project**

Please see **Topical Responses: 22. Noise Modelling, 23. Noise Modelling Analysis, 25. Project Scope, 31. Purpose and Need, 33. Suggestions to Change Air Traffic Patterns, 39. FOIA,**

Comment 6 Response: The commenter states the FAA has no plans to make changes below 10,000 ft. The references in this comment are in reference to the Final Report of the Study Team reproduced in Appendix F. The study team recommendation were considered by the Design and Implementation (D&I) team but were not adopted. All changes to air-traffic procedures both above and below 10,000 feet above-ground-level were evaluated for potential environmental impacts.

Comment 31 Response: In reference to the data used in Table 1-2, the source of the data is the U.S. Department of Transportation, Federal Aviation Administration Operations Network: Tower. This data is accessible to the public. See <https://aspm.faa.gov>.

Comment 32 Response: In response to the commenters question about “fanning procedures” using advanced technology, random path generation is not a function of current NextGen Technology.

Comment 34 Response: A complete description of all public involvement/engagement activities for the South-Central Florida Metroplex project can be found in Appendix A of the Final EA.

Comment 37 Response: The D&I team defines operational criteria as including “increasing efficiency and flexibility while decreasing complexity in air traffic management.” These metrics are always superseded by safety considerations. The FAA went through an iterative process, considering alternative lateral and vertical paths, various speed and altitude restrictions, alternative segment leg types, different procedure segregation options, various charting considerations and other influencing factors. The Proposed Final Designs considered safety, interaction with other procedures and traffic flows, complexity, and efficiency. These proposed final designs were then evaluated for potential environmental impacts under NEPA requirements. Aircraft simulations for procedures were conducted by airlines, not the FAA, with the exception of certain SID simulations conducted at the Mike Monroney Aeronautical Institute in Oklahoma City, OK.

Comment 38 Response: The existence of a noise abatement procedure does not remove the responsibilities from the FAA to provide safe and orderly management of air traffic, by any necessary action. The proposed Metroplex procedures have no impact on any existing noise abatement procedures.

Comment 39 Response: The existence of a noise abatement procedure does not remove the responsibilities from the FAA to provide safe and orderly management of air traffic, by any necessary action. The proposed Metroplex procedures have no impact on any existing noise abatement procedures.

Comment 40 Response: The existence of a noise abatement procedure does not remove the responsibilities from the FAA to provide safe and orderly management of air traffic, by any

necessary action. The proposed Metroplex procedures have no impact on any existing noise abatement procedures.

Comment 42 Response: A complete summary, including dates and locations of the community engagement activities will be included in the Final EA.

Comment 43 Response: The EA was prepared in full compliance with regulations implementing the National Environmental Policy Act and FAA Order 1050.1F, which require it only to be a concise document summarizing the anticipated environmental impacts of the proposed action. The FEELX SID was fully analyzed, along with other aspects of the proposed action, for potential environmental impacts. It was found to not “significantly impact the human environment” by itself or in conjunction with the Metroplex Project. Because of the size of the General Study Area and the likelihood that any individual reader may only be interested in procedures serving on or two airports, the various arrival and departure procedures included in the No Action Alternative and the Proposed Action are grouped by airport. This allows the reader to easily focus on their own area of interest and turn on or off only those flight corridors they are interested in. The FAA also provided detailed supplemental materials in the form of Google Earth files that were provided to the public. The Google Earth files allow an infinite adjustment of range so the viewer can tailor materials to specific needs.

Comment 45 Response: The references in the comment are to the Study Team Final Report in Appendix F. The Study Team recommendations were considered by the D&I Team but not necessarily adopted. *See also* our response to Comment 6.

To FAA: Comments to Draft EA-So.Central Florida Metroplex July 7, 2020

I am timely submitting these comments under protest. I protest because the time frame for reviewing the Proposed Action, the South-Central Florida Metroplex Project ("Metroplex") the subject of the Environmental Assessment (EA), as it applies to Miami International Airport flights is unnecessarily rushed. I object to the rushed and short comment period ending July 10, 2020; and if additional time for response is not granted, I request "No Action" on the Proposal because:

A. Notice has been deficient. The EA states that on 7/25/19 a Notice of Intent (NOI) to prepare the EA was published. This is a significant problem because the affected communities did not get notice:

- (1) In the list of newspapers of general circulation where it was published. It does not include the Biscayne Times, the only newspaper of general circulation dedicated to "serving communities along the Biscayne Corridor" including Arch Creek East, Aventura, Bay Point, Biscayne Park, Keystone Point, Morningside, Miami Shores, North Bay Island, North Miami, North Miami Beach, Sans Souci.
- (2) The NOI was in English and Spanish. The affected communities have significant Haitian population. Notice should have been provided in Creole. Election ballots are written in English, Spanish and Creole.

B. The physical report has not been made available to the affected community. All local libraries have been closed so there is no place within the affected cities of North Miami and North Miami Beach to read and review the document. Many residents do not have computer access to the internet.

C. Miami-Dade is a hot spot within the State of Florida for the Covid-19 raging viral state-wide epidemic. Requiring concerned and interested commenters to make appointments to travel out of their neighborhoods to distant Miami-Dade regional libraries is ill-advised and potentially hazardous to health.

D. Covid-19 restrictions on convening large meetings have precluded public information sessions with discussions about the contents and meaning of the EA within the affected cities and the affected neighborhoods.

E. I, along with many others with profound hearing impairment, have great difficulty with Zoom meetings and require closed captions.

II. I object to the conclusions of the EA because the document is deficient in describing impacts to significant sites within the geographic area to be impacted by the Metroplex flight paths.

A. Furthermore, there are reports that the Metroplex flight paths over Biscayne Bay and the cities of North Miami/North Miami Beach were selected only after political influence exerted on the FAA from wealthy municipalities forced the resulting proposed Metroplex flight paths.

B. The document fails to address or take into consideration the burdens that will be placed as a result of Metroplex flights paths over North Miami.

C. Residents of the City of North Miami, for the first time in its history since MIA was established, will find itself under designated flight paths. The EA fails to appropriately consider the character and demographics of the residential and commercial properties that are potentially adversely affected by the Metroplex flights. This is a problem that should not be created because it violates federal guidelines addressing Environmental Justice.

D. The EA uses boilerplate language and relies on modeling as applied to noise and particulate emissions that may not adequately reflect the South Florida reality. The EA fails to take into consideration that:

1. North Miami's blighted areas, comprising approximately 60% of the City, some 3,250 acres, have been designated as a Community Redevelopment Area (CRA). The CRA was established in 2005 pursuant to Chapter 163, Florida Statutes to eliminate conditions of slum and blight and improve the quality of life within the CRA boundaries.
2. Black lives and their neighborhoods matter. North Miami residents have one of the lowest per capita incomes in all of Miami-Dade County.
3. North Miami has the longest -running well-attended monthly jazz concert programs. The free concerts are performed in the MOCA (Museum of Contemporary Art) plaza, an outdoor venue on NE 125th Street, with no other alternative indoor performance space available.
4. North Miami has regular music celebrations for Hispanic and Haitian festivals in the MOCA plaza, with no alternative indoor space available.
5. North Miami has one of the largest brownfields in Miami-Dade County. The approximately 170 acre Munisport dump site located east of Biscayne Blvd at approximately from NE 139 Street to NE151 Street. (Currently being developed as SoLeMia, a private residential and commercial development project.)

- (a) Munisport was the busiest urban waste dump in Miami Dade County operating on 170 acres of city property, leased from the City of North Miami property from 1974 to 1980.
- (b) The State of Florida Department of Environmental Regulation (DER) and the US Army Corps of Engineers authorized the privately operated dump. They issued dump operating and Dredge and Fill permits despite the scientific testimony and objections of the community and environmental organizations.
- (c) The objections to the issuance of the state and federal permits were ignored and dismissed because the agencies relied on modeling prepared by the permit applicants.
- (d) Please take note that reliance on modeling to determine environmental impacts on human and ecological health do not always reflect reality. The dump operation was authorized based on models predicting that the leachate-contaminated groundwater would be naturally treated “in situ” and would not migrate off the site to impact Biscayne Bay and its sensitive productive wetlands. The dump operation was inspected and regulated by Miami-Dade County.
- (e) The modeling was deficient. Munisport ended up on the Superfund List, one of 54 sites in the State of Florida. (Significant contamination was found in the Biscayne Bay Mangroves off-site that could cause chronic and acute toxicity in surface waters. The leachate contains a witches brew of chemicals.)
- (f) The unfortunate reliance of both the DER and the US ACOE on modeling, forced the issuance of the first Clean Water Act 404(c) veto of an ACOE permit by the US EPA, Region 4. (1/19/81) Dumping ended. But a Superfund had been created.

III. I object to the conclusions of the EA that support the Metroplex flight path changes from the prior established flight paths because the document is deficient. It fails to give appropriate consideration to the environmental resources that will be adversely affected. The deficiencies include, but are not limited to:

A. Arch Creek Archeologic Site, listed on the National Register of Historic Places, 7/15/86 is not identified in the EA, and should be.

1. The appendix providing the list of sites on the National Register of Historic Places fails to include the 9.3 acre Arch Creek State of Florida Archeologic Site. According to historians Arch Creek is the most significant historic site in Miami-Dade County,

a. This is a significant omission because there is a small interpretive museum at the site; and there are on-going outdoor youth activities at the park. It is located at NE 135th Street and Biscayne Blvd and will be impacted by Metroplex flights.

b. Although Arch Creek Archeologic Site is a state-owned property, it is part of the Miami-Dade County Park system and managed as a Natural Area. Activities are conducted year round throughout the open air site. A quiet setting is a generally recognized purpose and attribute.

B. Biscayne Bay Aquatic Preserve, a Miami Dade County park. The document is deficient by failing to identify the Biscayne Bay area as an area that needs special protection because of its unique natural resources.

1. Biscayne Bay, a subtropical coastal lagoon was designated in 1974 as a Miami Dade County Park and conservation area. (Ordinance 74-13) It has been designated as a State of Florida Aquatic Preserve and Outstanding Florida Waters because of its sensitive environmental values and exceptional recreational opportunities.

a. Biscayne Bay contains seagrass beds that provide critical habitat for the endangered West Indian manatee. There are no wake or minimum wake Manatee protection zones throughout north Biscayne Bay.

b. The mangrove stands that are a significant component of the Oleta River State Park and its Mangrove Preserve abutting the former Munisport site serve as nursery grounds, refuge areas for fish and invertebrates, and food resources for fish species that are commercially and recreationally desirable. (de Sylva D. (1976) University of Miami Sea Grant Special; Report. 6:181-202)

c. As a County park it serves the open space and recreational needs of more than 2.6 million people clustered around its shoreline, with the greatest density of population in the region of central and north Biscayne Bay.

(1) Paddle boarders, kayakers, canoeists, fishermen, bird watchers and recreational boaters recreate in the Bay.

d. In 1983, for a two week period of time the world renowned artist Christo installed the internationally celebrated "Surrounded Islands" project in

Biscayne Bay. The project was installed in virtually the same area as the FAA now proposes as the Metroplex flight path for 300-400 planes a day.

- (1) The Christo project only proceeded after scientists had spent many months of intensive study to determine whether there would be any potentially negative impacts on the Biscayne bay environment from the temporary project.
- (2) In contrast the EA relies on generic modeling and proposes that Metroplex establish flight paths for 300-400 jets a day right up the middle of the Bay.
- (3) The EA has failed to follow Federal guidance that requires that Parks and natural area where a quiet settings a generally recognized purpose and attribute receive special consideration.

2. Although the Metroplex proposal projects that there will be fuel savings, a benefit to private corporations, it also projects that there will " a slight increase in emissions" . This statement reveals a significant deficiency of the Metroplex proposal because:

- (a) The EA fails to describe or quantify the increased referenced emissions.
- (b) This omission is significant because it blocks the public from obtaining a full evaluation of the impacts of the Metroplex proposal on public health and the environment.
- (c) The failure of the EA to evaluate impacts on human and ecological public health by failing to meaningfully address the unquantified increase in emissions, potentially increases a risk of harm to the already stressed warm subtropical Biscayne Bay waters, its users, and to the people under the flight path.

In sum, I respectfully request that the EA proposal as it applies to the MIA Metroplex be rejected; and that the " No Action" option be selected.

Very truly yours,

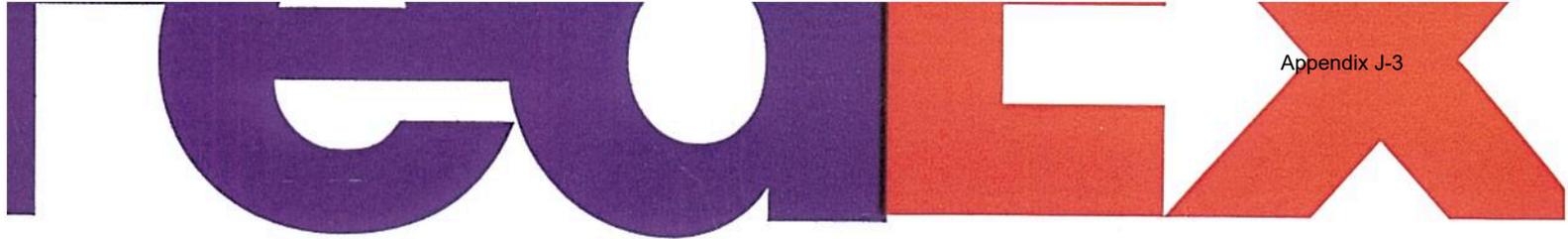

 Maureen Brody Harwitz
 Attorney at Law, 55 year resident of North Miami

2390 BAYVIEW LN.

Experience:

Past Executive Director of Munisport Dump Coalition, an EPA Region 4 Technical Assistance Grant Recipient, 1989-1999.

Past Member : Miami Dade County Biscayne Bay Management Committee; Environmentally Endangered Lands Committee; Historic Preservation Board, Past Member of State of Florida Pollution Prevention Council



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South Central Florida METROPLEX
DRAFT EA

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To FAA: Comments to Draft EA-So. Central Florida Metroplex July 14, 2020

- I. I am resubmitting my Comments dated July 14, 2020 to the Draft EA-So. Central Florida Metroplex, replacing my previously submitted Comments dated July 7, 2020, for reasons described below.
- II. I am timely submitting these comments under protest. I protest because the time frame for reviewing the Proposed Action, the South-Central Florida Metroplex Project ("Metroplex") the subject of the Draft Environmental Assessment (EA), as it applies to Miami International Airport flights is unnecessarily rushed. I object to the rushed and short comment period ending July 24, 2020, because:

A. Notice has been deficient. The EA states that on 7/25/19 a Notice of Intent (NOI) to prepare the EA was published. This is a significant problem because the affected communities, along the Biscayne Corridor, did not get adequate notice:

- 1. In the list of newspapers of general circulation where it was published. It does not include the Biscayne Times, the only newspaper of general circulation dedicated to "serving communities along the Biscayne Corridor" including Arch Creek East, Aventura, Bay Point, Biscayne Park, Keystone Point, Morningside, Miami Shores, North Bay Island, North Miami, North Miami Beach, Sans Souci.
- 2. The NOI was in English and Spanish. Other affected communities have significant Haitian population. Notice should have been provided in Creole. Election ballots are written in English, Spanish and Creole.
- 3. FAA has not provided for meaningful public involvement by minority and low income populations.

B. Instructions for submitting comments are deficient and misleading. The EA's instructions for submitting responsive comments has a significant omission that undermines the process of considering the required and necessary community participation in the evaluation of the EA. It is a fact that FAA itself states that comments are being disregarded. Please note:

- 1. In compliance with the instructions in the EA, I submitted a brief email with an attachment of five pages of comments on July 7, 2020; following the instructions in the EA that state: "If you wish to provide comments please provide them by mail, email, or through the FAA Community Engagement website comments form until July 24, 2020...)"
- 2. I did not receive confirmation that the email had been received; and the EA does not state that the FAA will confirm receipt of emails.

3. I learned that my comments were not “heard” and would not be “read or responded to”, when a neighbor shared her FAA-generated email response:

“ Thank you for providing feedback on the proposed South-Central Florida Metroplex project. We have received your comment and appreciate the opportunity *to hear your input*. Given the number of comments expected, the FAA is not able to respond directly to each one, but all concerns will be reviewed and documented and comment or subject-specific responses will be provided in the final environmental assessment, if one is issued.

This mailbox will accept comments regarding the proposed South-Central Metroplex project through July 24, 2020.

Due to security requirements, *the FAA will not accept attachments in emails sent to this mailbox. Any such attachments will not be read or responded to.* If your comment requires additional documentation, please consider mailing it to this address: ...” (Emphasis added.)

4. A review of public notices will show that not only does FAA fail to state that “ attachments will not be read...” ; but also fails to state that emails will be acknowledged as “ received” by a return FAA email. This is a significant deficiency because:

(a) Community members sending emails to FAA deemed “ unacceptable” will have no way of knowing that their comments will be disregarded.

(b) They will have no notice that comments need to be resubmitted comments so that FAA will “ hear your input.”

5. The Izaak Walton League of Florida (“League”) submitted their Comments with my comments as an attachment. It did not get a confirmation email of receipt of their comments. For that reason the League President Michael Chenoweth has requested that League comments be resubmitted along with my comments. (See Attachment” A”)

C. The physical report has not been made available to the members off the affected community. The electronic report is not publicly available to those without computers. All local libraries have been closed so there is no place within the affected areas either in the cities of North Miami and North Miami

Beach or in the surrounding areas (Biscayne Park, Miami Shores, unincorporated County) to read and review the document. Many low income and senior citizen residents do not have computer access to the internet in the affected North Dade area. Thus, they did not have an opportunity to be informed; and to provide input.

1. The EA is available in only five(5) regional libraries, in a County with 2.6 million people. This is a problem because:

(a) Miami-Dade is a hot spot within the State of Florida for the Covid-19 raging viral state-wide epidemic. (Miami Herald, July 14, 2020, “ South Florida hospital ICUs at capacity with COVID patients”)

(b) Requiring concerned and interested commenters to make appointments to travel out of their neighborhoods to distant Miami-Dade regional libraries is ill-advised and potentially hazardous to health.

2. Covid-19 restrictions on convening large meetings have precluded public information sessions with discussions about the EA's content and the meaning and impact of the Metroplex proposal on the impacted cities and the impacted area neighborhoods.

D. There are reports that the Metroplex flight paths now designated to travel right up the middle of Biscayne Bay and then over cities of North Miami/North Miami Beach were selected only **after** political influence was exerted on the FAA by wealthy municipalities.

1. This reported influence has resulted in proposed Metroplex flight paths, using Biscayne Bay as a corridor for 300- 400 flights a day.

2. It raises the questions of the professionalism and independence of the FAA in its decision-making in its selection of flight paths for the Metroplex proposal.

In Sum: This Draft EA process has created a significant problem with effectuating meaningful and public involvement as required by law. The EA comment period should be started *ab initio*, after Notice problem deficiencies and Comments instructions are corrected and republished. If a corrected process is not reinitiated, I request “No Action” on the Proposal .

III. I object to the conclusions of the EA that support the Metroplex flight path changes from the prior established flight paths because: the document is deficient for failing to

adequately evaluate impacts to significant environmental and cultural resources within the affected geographic area .

A. This deficiency results in the EA failing to fulfill the requirements of the National Environmental Policy Act of 1969 (NEPA). The deficiencies include, but are not limited to impacts on:

1. Biscayne Bay ("Bay") , a State of Florida Aquatic Preserve and Miami-Dade County Aquatic Park and Conservation Area . The Bay is not listed in the inventory of significant Historic and Cultural Resources, Table A6.2, but should be. For a better understanding of Biscayne Bay's significance, please note:

a. Biscayne Bay is " beyond argument, Greater Miami's most precious natural resource." (Miami Herald Editorial, Jan.30, 1984)

b. In 1974 the County Commission declared Biscayne Bay to be an " Aquatic Park and Conservation Area." (Ordinance 74-13) The County's legislative action was followed by the Florida legislature's enactment of the Biscayne Aquatic Preserve Act. (Fla. Statute 74-171; and omnibus Aquatic Preserve Act , Chapter 258 Fla. Statute, with special protective provision for Biscayne Bay)

c. Biscayne Bay is a designated Outstanding Florida Water because of its sensitive environmental values and exceptional recreational opportunities.

d. As a County park it serves the open space and recreational needs of more than 2.6 million people clustered around its shoreline, with the greatest density of population in the region of central and north Biscayne Bay.

e. Biscayne Bay, is a shallow subtropical coastal lagoon extending from Dumfounding Bay in the north to Card Sound extension to the south. The bay is composed of three basins, separated from each other by shoals and causeways. The northern basin ("north Biscayne Bay") extends north from Rickenbacker causeway. (Wilson S.U.(1975) University of Miami Sea Grant Special Report. NOAA 04-5-2158-14)

f. Biscayne Bay contains seagrass beds that provide critical habitat for the endangered West Indian manatee. There are no wake or

minimum wake Manatee protection zones throughout north Biscayne Bay.

g. The Bay is home for manatees, turtles, birds. The mangrove stands that are a significant component of the Oleta River State Park and its Mangrove Preserve abutting the former Munisport site serve as nursery grounds, refuge areas for fish and invertebrates, and food resources for fish species that are commercially and recreationally desirable. (de Sylva D. (1976) University of Miami Sea Grant Special; Report. 6:181-202

h. Paddle boarders, kayakers, canoeists, fishermen, bird watchers, wind surfers and recreational boaters recreate in the Bay.

i. In 1983, for a two week period of time the world renowned artist Christo installed the internationally celebrated "Surrounded Islands" project in north Biscayne Bay. The project was installed in virtually the same area as the FAA now proposes as the Metroplex flight path for 300-400 planes a day.

(1) The Christo project only proceeded after scientists had spent many months of intensive study to determine whether there would be any potentially negative impacts on the Bay environment from the temporary 14 day project.

j. By not addressing the existence of the Biscayne Bay Aquatic Park and Conservation area, the EA has failed to follow Federal guidance that requires that Parks and natural areas where a quiet settings is a generally recognized purpose and attribute, receive special consideration.

k. .Although the Metroplex proposal projects that there will be fuel savings (a benefit to private corporations), it also projects that there will " a slight increase in emissions" . This statement reveals a significant deficiency of the Metroplex proposal because:

(1) The EA fails to describe or quantify the increased referenced emissions.

(2) This omission is significant because it blocks the public from obtaining a full evaluation of the impacts of the Metroplex proposal on public health and the environment.

2. Arch Creek Archeologic Site, listed 7/15/86 on the National Register of Historic Places, is not identified in the EA, and should be.

a. The appendix providing the list of sites on the National Register of Historic Places fails to include the 9.3 acre Arch Creek State of Florida Archeologic Site. According to historians Arch Creek is the most significant historic site in Miami-Dade County. It is a prehistoric site, as well as having an important 19th and 20th century history.

b. This is a significant omission because there is a small interpretive museum at the site; and there are on-going outdoor youth activities at the park. It is located at NE 135th Street and Biscayne Blvd and will be impacted by noise from the Metroplex flights.

c. It is part of the Miami-Dade County Park system and managed as a Natural Area. Activities are conducted year round throughout the open air site. A quiet setting is a generally recognized purpose and attribute.

IV. Issues of Environmental Justice: Requirements of the Department of Transportation Act , concerning the noise burdens that will occur as a result of Metroplex flights paths over the North Miami area have not been addressed or taken into consideration.

A. . Residents of the City of North Miami and its neighbors living in this quiet area , for the first time in its history since MIA was established, will find itself under low flying flight paths. This area will be blanketed with noise.

1. The EA fails to appropriately consider the character and demographics of the residential and commercial properties that are potentially adversely affected by the Metroplex flights. This is a problem that should not be created because it violates federal guidelines addressing Environmental Justice.

2. The EA uses boilerplate language and relies on modeling as applied to noise and particulate emissions that may not adequately reflect the South Florida reality. The EA fails to take into consideration that:

a. North Miami's blighted areas, comprising approximately 60% of the City, some 3,250 acres ,have been designated as a Community Redevelopment Area (CRA). The CRA was established in 2005 pursuant to Chapter 163, Florida Statutes to eliminate conditions of slum and blight and improve the quality of life within the CRA boundaries.

b. Black lives and their neighborhoods matter. North Miami residents have one of the lowest per capita incomes in all of Miami-Dade County.

c. North Miami has the longest-running monthly jazz concert programs in South Florida. The concerts are performed in the MOCA (Museum of Contemporary Art) plaza, an outdoor venue on NE 125th Street. The concerts are a very well-attended community event, free and open to all, and attended by a diverse array of city residents, as well as other music lovers from other Miami-Dade and Broward County areas. There is no other alternative indoor performance space available. Airplane noise will be a disruptive problem.

d. North Miami has regular music celebrations for Hispanic and Haitian festivals in the MOCA plaza , free and open to the public, with no alternative indoor space available.

e. North Miami has one of the largest brownfields in Miami-Dade County. The approximately 170 acre acre Munisport dump site located east of Biscayne Blvd at approximately from NE 139 Street to NE151 Street. (Currently being developed as SoLeMia, a private residential and commercial development project.)

(1) Munisport was the busiest urban waste dump in Miami Dade County operating on 170 acres of city property, leased from the City of North Miami property from 1974 to 1980.

(2) The State of Florida Department of Environmental Regulation (DER) and the US Army Corps of Engineers (ACOE) authorized the privately operated dump. They issued dump operating and Dredge and Fill permits despite the scientific testimony and objections of the community and Tropical and Florida Audubon and Izaak Walton League .

(a) The objections to the issuance of the state and federal permits were ignored and dismissed because the agencies relied on modeling prepared by the permit applicants.

(b) Please take note that reliance on noise or emissions modeling to determine environmental impacts on human and ecological health do not always reflect reality.

The dump operation was authorized based on models predicting that the leachate-contaminated groundwater would be naturally treated “in situ” and would not migrate off the site to impact Biscayne Bay and its sensitive productive wetlands. The dump operation was inspected and regulated by Miami-Dade County.

(c) The modeling was deficient. Munisport ended up being placed on the Superfund List, one of 54 sites in the State of Florida. Significant contamination was found in the Biscayne Bay Mangroves Bay off-site that could cause chronic and acute toxicity in surface waters. The leachate contained a witches brew of chemicals.

(d) The unfortunate reliance of both the DER and the US ACOE on modeling, forced the issuance of the first Clean Water Act 404(c) veto of an ACOE permit by the US EPA, Region 4.(1/19/81)
Dumping ended. But a Superfund site had been created.

In Sum: The failure of the EA to evaluate impacts on human and ecological public health by failing to meaningfully address the unquantified increase in emissions, potentially increases a risk of harm to the already stressed warm subtropical Biscayne Bay waters, its users, and to the people under the flight path.

I respectfully request that the EA proposal as it applies to the MIA Metroplex be rejected; and that the “ No Action” option be selected.

Very truly yours,



Maureen Brody Harwitz,
Attorney at Law, 55 year resident of North Miami

Experience: Past Executive Director of Munisport Dump Coalition, an EPA Region 4 Technical Assistance Grant Recipient, 1989-1999. Past Member : Miami Dade County Biscayne Bay Management Committee; Environmentally Endangered Lands Committee; Historic Preservation Board; Past Member of State of Florida Pollution Prevention Council; Duck Stamp Committee; Past Boards: Citizens for a Better South Florida; Biscayne Bay Nature Center; Florida Audubon; Izaak Walton League, Mangrove Chapter

Attachment A:

Michael F. Chenoweth

Attachments

Thu, Jul 9, 9:15 AM (4 days ago)

to 9-AJO-MIA-FL-Metroplex-comments@faa.gov, me, Robert, Pete

Dear FAA:

For nearly 100 years, since 1922, the Izaak Walton League of America ("IWLA") has been working to protect America's natural resources, finding sensible, workable, science-based solutions to a broad spectrum of challenges. Since at least the 1960s, the Florida Division of the IWLA has been actively working to protect Biscayne Bay. The Mangrove Chapter of the IWLA (part of the Florida Division) was closely involved in the establishment of Biscayne National Park and in numerous ongoing programs to preserve, protect or restore natural systems related to the portions of Biscayne Bay north of downtown Miami.

The Florida Division of the IWLA has reviewed the comments submitted to your office by Maureen Brody Harwitz, shares her concerns, and joins in those comments. A copy of her comments is attached.

Thank you for the opportunity to comment on this process.

Michael F. Chenoweth, President

Florida Division of the Izaak Walton League of America

Post Office Box 236

Homestead, Florida 33090-0236 Mobile (305) 302-4443

FAA Responses to Comments to Maureen Harwitz on the Draft EA for the South-Central Florida Metroplex Project

Comment II.A.1.

The commenter notes that the Notice of Intent to prepare the Draft Environmental Assessment for the South-Central Florida Metroplex Project was not published in the *Biscayne Times*. Contrary to commenter's description of that publication as a "newspaper of general circulation," it appears to be a monthly magazine serving a select demographic within the same region served by the *Miami Times*, a newspaper of general circulation that published the FAA's Notice of Intent in 2019 as well as notice of the availability of the Draft EA in 2020. Recent news reports indicate that the *Miami Times* now owns the *Biscayne Times*, further indicating the overlap of readership.

Comment II.A.2 and II.A.E

The commenter requests that Creole translation should have been provided for some notices issued during the NEPA review process. The FAA published these notices in English and Spanish. Neither members of the Creole-speaking community nor any of their elected representatives made the request made by this commenter. The FAA provided ample opportunity for public input and comment, and refers the commenter to **Topical Response Numbers 24 and 28**.

Comment II.B.1 and II.B.2

The FAA regrets any misunderstanding that arose through the commenter's review of an auto-generated email response to a different commenter. FAA received and considered both sets of comments submitted by this commenter. The warning referred to by commenter is specific to that particular mailbox and is intended to warn of the difficulty of accepting certain file types. The FAA does not send individual responses to commenters to indicate that their comment was received and read, but no comments submitted to that email address during the public comment period on the Draft EA were rejected or otherwise left unread.

Comment III. A.1.2.

The FAA Draft EA considered impacts to Biscayne Bay and associated areas, Arch Creek Park and associated and associated areas, and many others in the General Study area. Additionally, FAA consulted with the National Park Service regarding potential noise impacts to national parks and national wildlife refuges and historic sites. The consulting agency did not identify any constructive use of any resources protected under Section 4(f) of the Department of Transportation Act for which aircraft noise and/or aircraft overflights would have an effect on the resource. The aircraft noise exposure resulting from the Proposed Action procedures would not substantially change the noise environment at any Section 4(f) resource identified within the General Study Area when compared to the No Action alternative. Furthermore, any changes in aircraft traffic patterns would occur at altitudes and distances from viewers that would not substantially impair the view or setting of the Section 4(f) resources. Consequently, the FAA has determined that the Proposed Action would not result in potential impacts to Section 4(f) properties.

Comment IV

Refer to **Topical Responses Number 1, 9, 19, 22, 23 and 45.**

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USPS TRACKING[®] NUMBER



9505 5154 6415 0190 5957 73

3000001000014

OD: 12 1/2 x 9 1/2



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Ave. W.S.

Oldsmar, FL 34677

ASTV-
EN-
(8)

TO:

-South Central Florida
Metropolx Draft EA

-Federal Aviation Admin.
Eastern Service Area

-Operation Support Group

1701 Columbia Ave.

College Park, GA

30337

Label 228, March 2016

FOR DOMESTIC AND INTERNATIONAL USE

FAA

South Central Florida
 Metroplex Draft
 EA

July 7, 2020
 Kay Rose
 400 Buckingham
 Ave. W.
 Oldsmar, Fl.
 34477
 813-892-0329

To Whom it may concern;

Enclosed please find
 two years of documentation
 of the disruptive flight path
 utilized by Allegiant Airlines.

The citizens of Oldsmar
 were never notified of the
 proposed flight path which
 is now utilized by AAY.

These planes are ruining
 my quality of life.

Sincerely
 Kay Ellen Rose

3-2-20 (cont) (#50 03-03)
 9759p AAU-183-18-182k
 called for all
 1007p AAU-764-18-193k
 1013p AAU-969-18-122k
 1015p AAU-921-18-
 1019p AAU-802-18-162k
 called for all
 1031p AAU-851-18-129k
 Tolerable - not loud

3-2-20 (#50 03-03)
 810p AAU-1340-18-146k
 814p AAU-1272-17-173k
 829p AAU-894-17-168k
 911p AAU-908-19-179k
 NOT Whistling
 Flaps ?? -

3-2-20 (#50 03-03) cont
 1113p AAU-823-22-174k
 called
 DLHMSB

3-3-20
 359p AAU-1351-18-151k
 called
 828p AAU-894-18-172k
 called
 830p AAU-802-18-181k
 954p AAU-9201-18-187k

3-4-20
 501p AAU-824-18-184
 529p AAU - Higher / Slower / Tolerable
 * Portal Not Func.
 Complaint Line NOT Func. either
 552p AAU - NO Portal
 601p NO Portal
 658p NO Portal called for all

3-8-20

1147p NO RADAR

3-10-20

1240p AA4-967

1249p AA4-829-18-
180k

412p
~~1147p~~ AA4-974-NB-22
230k

3-19-20

313p AA4-848-15-171
K

351p AA4-987-14-175k

359p AA4-764-15-184k

631p AA4-2443-15-188k

751p AA4-1863-16-130k
called for ALL

3-4-20

Appendix J-3
#50
03-05

1050p - NO Radar
DESMOND LAD

3-5-20

218p AA4-1383-18-
1481

3-12-20 #50
03-17

1101p NO Radar
DESMOND

3-17-20

#50
03-17

1252 ~~AM~~ NO Radar

Called @ 1255 AM

BSM ~~1252~~

3-20-20 #50 (3-24)
825p AA4-1340-14-172
DLANK 10/3
K

3-22-20
1244AM AA4-1225-14
213K
DISMISSED
CALLED

3-20-20
1220p AA4
1225p AA4-962-15-186
1231p AA4-431-14-197
101p AA4-954-14-219
212p AA4-901NB-
523p AA4-800-16-191K
called for all

3-22-20 #50 (3-25)
1057p AA4-989-16-188K
DLANK 10/3
called
mmmmmmmm

3-23-20
1026AM AA4
1051AM AA4
406 AA4-824-15

3-22-20 #50 (3-25)
925p AA4-751-15-198K
GLHMR 10/3
called

1009p AA4-883-15-217K
RDSG 10/3
called
1016p AA4-818-15-184
DLANK 10/3
called

1028p AA4-907-16-186
RDSG 10/3
1028p AA4-801-16-225
DLANK 10/3
called for B
1032p AA4-922-16
RDSG 10/3
called for FINAL
October 2020

3-25-20

154p AAU-973

156p AAU-1863-18-207

232p AAU-758-

320 AAU-2430

3-24-20

#50
07-25

252p AAU-812-15-162

303p AAU-978-18-207

501p AAU-776-17-224

633p AAU-883-17-170

810p AAU-802-17-172
RDCMHL

3-30-20 #50
04-02

839p AAU-951-16-138

AGUADILLA
PUERTO RICO!

RDCMHL

3-28-20 #50
04-02

118p AAU-846-16-175

443p AAU-802-17-180

3-29-20

808p AAU-761-16-142

RDCMHL

4-18-20 (#50,04-19)
0

338p APAY-2435-16-
200k

64p APAY-801-17-208k

called for both

754p APAY-8410-17-220k

called
DRBGMLD

1019p APAY-898-18-223

called
DLHMGBRD

4-11-20 (#50,04-19)

1039p APAY-924-18-210
DRBGMLD check. OAH

DLHMGBRD

4-8-20 (#50,04-19)

948p
DLHMGBRD

5-3-20 (#50,04-19)

920 AM APAY
called

900p APAY-912-17-199

930p APAY-903-17-210

1000p APAY-894-17-193

called
DLHMGBRD

1080p APAY-801-20-

called
DRBGMLD

4-19-20 (#50,04-19)

205p APAY-1341-17-173k

4-20-20

637p APAY-181-19-
208k

called

4-23-20

814p APAY-933-18-1105

called
DRBGMLD

5-8-20

339p AA4-156-20-199

403p AA4-849-16
called for both

410p ^{AA4} NB 1287-113A.

SB 781-24
called for both

512p AA4-937-16-190

called

See Clipboard

5-8-20

(05-08 #50)

1246 AM - AA4-161-

DLAMR B2 16-173

called

5-8-20

1203p AA4-889-20

220p AA4-1351-16
called for both

310p AA4-1225-16
called

DIE

- First day of Major # of flights resuming
 - 5-8-20

Called

State

\$50
05-19

RBGMLA
05-19
DREAMFLIGHT \$50
PABSMHLA 05-19
APLWMSBRO
LAWG BDR

AMHC BRO
\$50
05-19

\$704
05-19
JRMHGBRO
JRMHGBRO
JRMHGBRO
JRMHGBRO
JRMHGBRO
JRMHGBRO
JRMHGBRO

- ✓ 530p AAU - 431-24-159
- ✓ 535p AAU - 954-17-203
- ✓ 837p AAU - 776-18-184
- ✓ 839p AAU - 1818-21-223
- ✓ 907p AAU - 1295-16-195
- ✓ 937p AAU - 761-16-200
- ✓ 1007p AAU - 944-16-184

called
All 3

called Both

- TN
- IA
- IL
- IN
- PA
-
- SC
- ~~IA~~

5-10-20

- 919p AAU - 944 - 16
- 948p AAU - 779 - 21
- 953p AAU - 942 - 17
- 1027p AAU - 818 - 16-200

- IA
- NC
- NY

5-15-20

- 919p AAU - 814 - 23-188
- 1058p AAU - 871 - 22-224

- OH
- SC

5-17-20

- ✓ 620p AAU — —
- ✓ 958p AAU - 939- —
- ✓ 1041p AAU - 882-17-186
- ✓ 1048p AAU - 914-17-163
- ✓ 1000p AAU - 877-18-200
- ✓ 107p AAU - 992-22-177
- ✓ 142p AAU - 2478-17-

- Va
- NY
- TN
- MD
- MO
- IA

20

5-22-20 (cont)

Slak

called

DPLMKG BRD #50 06-06)

~~1135p~~

~~AAU-919-15-197~~

~~MO~~
MO

5-24-20

349p AAU-803-17-203

Va

5-27-20

✓ 344p AAU-434-17-192

TN

#50 06-06

DPLMKG BRD
DPLMKG BRD
DPLMKG BRD

#50 06-06

DPLMKG BRD
DPLMKG BRD
DPLMKG BRD

#50 06-06

DPLMKG BRD
DPLMKG BRD
DPLMKG BRD

5-28-20

503p AAU-782-17-194
958p AAU-906-15-224
1109p AAU-898-16-168
1120p AAU-944-15-182
1126p AAU-2470-16-246

MO
OH
NY
VA
IA

5-29-20

540p AAU-892-17-176
557p AAU-879-17-203
1105p AAU-864-16-226
1128p AAU-811-17-191
1132p AAU-831-16-183

WV
SC
TN
PA
OH

6-1-20

1047p AAU-774-16-212
1054p AAU-938-17-180
1108p AAU-952-16-184
1122p AAU-1477-14-250

PA
TN
PA
PA



17

126

⑧ 6-8-20

(\$50 06-14)

Safety Questions

RBHNG130
RBHNG140
PLM140
RBHNG150
JPL6440
RBHNG160
PLM160

✓ 1012p
✓ 1039p
✓ 1102 p 05
✓ 1102 p 10
✓ 1112 p 15
✓ 1114 p 20
✓ 1117 p 25
✓ 1147 p 30

AA4 - 913 - 16 - 200
AA4 - 939 - 17 - 202
AA4 - 922 - 16 - 205
AA4 - 957 - 17 - 208
AA4 - 1821 - 17 - 205
AA4 - 2494 - 17 - 187
AA4 - 926 - 16 - 184
AA4 - 919 - 16

↑
KY
IN
PA
NC
IN
IA
SC
!?
!?
!?
!?

★ 6-11-20

(\$50 06-14)

DR140
DR140
DR140
DR140
DR140

✓ 1059⁵⁵ pm
✓ 102⁰⁰ pm
✓ 105 pm
✓ 1109 pm
✓ 1129 pm

AA4 - 983 - 17 - 252
AA4 - 828 - 17 - 192
AA4 - 788 - 17 - 212
AA4 - 837 - 17 -
AA4 - 927 - 16 - 198

17
17
17
17
NY
OH
NC
NY
MI

6-17-20

(\$50 06-14)

RBHNG170
DR140

✓ 142 p
✓ 44 p
✓ 450 p
1005p
1130 p 15
1117 p 20

AA4 - 1276 - 16 - 192
AA4 - 167 - 16 - 201
AA4 - 2733 - 25 - 183
AA4 - 913 - 17 - 224
AA4 - 919 - 17 - 211
AA4 - 231 - 17 - 221

NC
WV
TN
KY
MO
OH

19

called

6-13-20 (#50 06-14)

~~1126 p~~ AA4-773-17-208 PA

DPLMIBRD

★ ⑤ 6-14-20 (#50 06-19) ★

>RBANGLO
PPLMIBRD
RBANGLO
PPLMIBRD
DRBANGLO

✓ 1155 pm 15 AA4-821-16-174
✓ 1147 pm 20 AA4-788-16-201
✓ 1119 pm 25 AA4-947-24-x
✓ 1128 p 30 AA4-793-16-200
✓ 1132 p 35 AA4-983-17-198

! ? MI
! ? NC
! ? IL
KY

★
⑥
>RBANGLO
PPLMIBRD
DRBANGLO
PPLMIBRD
RBANGLO
PPLMIBRD

6-18-20 (#50 06-21) ★

✓ 1105 p AA4-828-17
✓ 1109 p 05 AA4-983-16-206
✓ 1141 p 10 AA4-837-16-201
✓ 1143 p 15 AA4-892-16-202
✓ 1147 p 20 AA4-947-16-198
✓ 1149 p 30 AA4-793-16-179

OH ! ? these are
NY ! ? all timed
NY ! ? perfectly.
NV ! ?
IL ! ?
KY ! ?
Unsafe

precisely timed and all after 11 p.

6-19-20 (#50 06-21)

✓ 1118 p 15 AA4-926-16-191
✓ 1120 p 20 AA4-919-16-159

>RBANGLO
PPLMIBRD

6-20-20
904 p
906 p
909 p

@ 200 ft.
N415CC Piper - did
Several low flying loops.
(owned by Delaware Trust Co.)

⑤ ⑧

U-20-20 (50 06-21) Clear Skies

DLGMBRD
RBTNGWPD
DLGMBRD

✓ 1017 p²⁰ AA4 - 767 - 18 - 216
 ✓ 1117 p²⁰ AA4 - 839 - 19 - 187
 ✓ 1119 p²⁵ AA4 - 757 - 17

WV
OH
IL

① U-21-20 Clear Skies

DRANGWPD
DLGMBRD
RBTNGWPD

✓ 1108 p²⁵ AA4 - 821 - 16 -
 ✓ 1112 p¹⁰ AA4 - 892 - 16 - 197
 ✓ 1114 p¹⁵ AA4 - 837 - 16 - 193
 ✓ 1116 p²⁰ AA4 - 828 - 16 - 202
 X 1118 p²⁰ AA4 - 947 - 16 - 204
 X 1122 p²⁵ AA4 - 788 - 16 - 206
 X 1136 p⁴⁰ AA4 - 793 - 16 - 171

IA
WV
NY
OH
IL
NC
KY

② U-22-20 Clear Skies

✓ 602 p AA4 - 9300 - 17 - 186
 ✓ 824 p AA4 - 2445 - 17 - 192
 ✓ 858 p AA4 - 909 - 16 - 208
 ✓ 1036 p AA4 - 2731 - 17 - 216
 ✓ 1046 p AA4 - 939 - 16 - 215
 ✓ 1107 p AA4 - 922 - 16 - 251
 ✓ 1110 p AA4 - 926 - 16 - 202
 ✓ 1112 p AA4 - 919 - 15 - 207
 ✓ 1114 p AA4 - 957 - 16 -
 ✓ 1117 p AA4 - 1821 - 16 - 187
 ✓ 1119 p AA4 - 2494 - 16 - 186
 ✓ 1122 p AA4 - 884 - 16 - 167

KY
MI
KY
OH
IN
PA
SC
MO
NC
IN
IA
NY

22

6-23-20
 NONE
6-24-20

725 p AAU - 801 - ~~16~~-204 IN

6-25-20
 1050 pm AAU - 983 - 16 (Normal Path) NY

↓ Flights are NOT using
 the "Blue" flight path?
 ↓ they are all west of path.

1131 p AAU - 828 - 16 - 203 (Normal Path) OH
 1131 p AAU - 892 - 16 - 229 NV

6-26-20

✓ 1015 p AAU - Unable to get Radar
 ✓ * 1047 p - * Check Screenshots AAU 2494
 ✓ 1049 p - AAU - 939 - 17 - 185 IN
 ✓ 1055 p - AAU - 858 - 17 - 208 NY
 ✓ 1058 p - AAU - 922 - 16 - 174 PA
 ✓ 1109 p AAU - 1821 - 16 - 184 IN
 ✓ 1111 p AAU - 919 - 16 - 197 MO
 ✓ 1123 p AAU - 2731 - 16 - 176 OH

6-27-20

✓ 1204 AAU - AAU - 924 - 15 - 185 SC
 1108 AM AAU
 1147 AM AAU - 771 - 17 - 170
 1106 pm AAU - 953 - 17 - 191 IL

(16)

10-26-20

Spoke to S. Santamaria - was told that late 11pm Berage is due to Covid cleaning of planes. If that's the case... are the other airports departing these planes 2 minutes apart?!

No planes all evening, why the 11 pm Berage? Appendix J-3

6-28-20

✓ 1110 pm	AA4 - 837 - 17-214	NY
✓ 1112 pm	AA4 - 793 - 11 -193	KY
✓ 1115 pm	AA4 - 892 - 11 -190	WV
✓ 1118 pm	AA4 - 947 - 11 -190	IL
✓ 1122 pm	AA4 - 788 - 17 - 217	NC
✓ 1128 pm	AA4 - 921 - 17-210	MI

6-29-20

✓ 1205 AM AA4 - 821 - 11

7-1-20

1115p AA4 - 912 - 17-211

7-2-20

✓ 134p	AA4 - 207 - 17-209	PA
✓ 406p	AA4 - 967 - <u>11</u> - 208	VA
✓ 443p	AA4 - 934	TN
✓ 540p	AA4 - 971 - 17	IL
✓ 609p	AA4 - 979 - 17 - 188	KY
✓ 1053p	AA4 - 2472 - 18-214	IA
✓ 1056p	AA4 - 986 - 17-208	TN
✓ 1059p	AA4 - 848 - 17-205	VA
✓ 1104p	AA4 - 823 -	
	AA4 -	

(17)

7-3-20

✓ 1036 p AAJ - 753-18-211
(See Screenshot)

NC

✓ 1109 p AAJ - 938 - 18-210

TN

✓ 1112 p AAJ - 846-24

IL

✓ 1118 p AAJ - 886-17-208

KY

✓ 1120 p AAJ - 809-18-200

PA

✓ 1123 p AAJ - 919-18-217

MO

✓ 1124 p AAJ - 992-18-204

MO

7-4-20

✓ 1132 AM - AAJ - 941-18-204

IN

✓ 1224 p AAJ - 797-18-208

WI

✓ 902 p AAJ - 884-18-177

NY

✓ 1016 p AAJ - 912-17-175

OH

7-5-20

✓ 446 p AAJ - 934-11-186

✓ 538 p AAJ - 971-25-228

IL

✓ 613 p AAJ - 1856-17-198

IN

✓ 722 p AAJ - 979-17-198

KY

✓ 736 p AAJ - 2408-17-

MI

✓ 912 p AAJ - 2729-17-197

NY

7-6-20

✓ 1200 AM AAJ - 848-11-177

VA

1210 AM AAJ - 900-17-177

WV

~~18~~

- All flights have either corresponding email and/or phone calls.

Free - frequency

Appendix J-3

①

2-24-18 Saturday

1200 AM Low

2-26-18 Monday

1720 Low

2105 Low

2114 Low

2-28-18

2042 Freq., Low

2050 " "

2053 " "

2056 " "

2149 Low

2241 Freq

3-05-18 Monday

2256 Low, Land

Thu. 3/1

113p Low

114p Low

3-6-18

849A Low

912A Low

1410 "

1324 "

3-10-18

1139A Low

1300 Low

1324 Low

1410 Low

1424 Low

1426 Low

1447 Low, Freq

1451 Low, Freq

1026p Low

1029p Very Low

1034p Low, Freq

3-11-18

458p Low

640p Low

728p Low

742p Low

813p Low

833p Low

845p Low

857p Low

922p Low

3-17-18

520p

532p

535p

912p Low, Freq

917p Low, Freq, Late

927p Freq

931p Freq

950p Freq, Late

②

3-18-18

856p Low
 903p Low
 933p Low
 957p Low
 1000p Low, Freq

3-19-18

810p Low
 836p Low
 837p Very Low, Freq
 1012p - Normal, very
 tolerable

3-20-18

756p Low
 821p
 825p Low, Fast

3-22-18

912p Low, Fast
 921p Low, Fast, Freq.
 948p Low, Freq.
 950p Low, Freq.
 1025p Low, Late

3-25-18

705 Am Low
 502p Low
 611p
 735p
 812p Low
 826p Low

3-25-18 cont

835p Low
 850p Low
 906p Low
 927p Low, Late
 935p Late
 959p Late
 1000p Late

3-27-18

404p Low
 519p Very Low
 716p Low
 849p Low
 907p Low
 939p
 1024p

3-28-18

708 A Early, Low
 403p
 405p
 450p
 850p - Tolerable
 858p - Low, Freq, Loud
 936p Low, Loud
 942p Low, Loud
 948p Low, Loud

③

3-29-18

* 121 AM Low, Late
 52p Low
 628p Low
 744p Low, Fast
 828p Low
 831p Freq
 942p Late, Low
 953p Late, Low
 957p Late
 1021p
 1031p

3-30-18

619p Low

4-2-18

1205p Very Low, Freq
 1208p Very Low, Freq
 1218p Very Low, Freq

4-3-18

849p Low

4-6-18

801p Low
 832p Freq
 1009p Low, Low
 1011p Low, Low, Freq
 1023p Low, Low, Freq
 1035p Low, Low, Freq

4-7-18

941p Low

4-13-18

739p Low
 740p Low
 1004p Low

4-19-18

1042p Low
 1105p Low, Low

4-20-18

212p
 220p

4-20-18

1200 AM Late *

1014 AM

1130 AM

1200p Freq, Low
 1212p Freq, Low
 1214p Freq, Low
 1235p Freq, Low
 114p Freq, Low

(May-June records
Lost)7-31-18

245p Low

8-4-18

1043p Low

7-25-18

1029p Low, Late
 1031p Low, Late

(4)

7-26-18

925p Low, Late

7-27-18

1059p Low

7-30-18

555p Low, Loud

600p Low, Loud

1121p Low, Loud

10-29-18

10:11p Low

10-31-18

806p Low, Loud

901p Low, Loud, Fast

1020p Low, Loud

1023p Low, Loud, Freq

11-1-18

757p Low

726p Low

737p Low, Loud, Freq

754p Low, Loud, Freq

759p Low, Loud, Freq

1013p Low, Fast

1046p Low

11-02-18

1019p Tolerable

1032p Very Low

Very Fast

South-Central Florida Metroplex

11-6-18

638p Low, Fast

11-7-18

140p Low, Fast

206p Low, Fast

11-12-18

827AM Low, Loud

1017AM Low, Loud

1138AM Low, Loud

1231AM Low, Loud, Freq

1233AM Low, Loud, Freq

109AM Freq

117AM Loud Freq

11-13-18

131p Low

133p Low, Freq

207p Low, Freq

256p Low, Freq

926p Low

951p Low, Late

1024p Low, Late

11-14-18

117p Low

120p Low

159p Low

11-23-18

1133A

1146A Freq

1209 Freq

5

11-23-18 (cont)

115p low, loud, fast
 117p low, loud, Freq
 1023p low, loud, late

11-24-18

638 Am. Early, Northbound
 1153A
 1154A Freq
 1256p low
 1pm low
 146pm low
 910pm low
 1002pm low

11-25-18

716AM, low, loud, Northbound
 1056am low, fast
 439p low, fast
 514p low
 521p low
 652p low, fast
 903p low, fast
 921p low
 927p low, loud, fast
 Freq. is out of control !!
 1124p low, loud, fast

11-26-18

None, Cold Front + Rain

11-30-18

535p low
 653p low
 749p low
 754p low, Freq.
 843p low, Freq.
 916p low, Freq
 1031p low, fast, freq.
 1155p low, fast, late

12-1-18

1230p low
 212p low, fast
 230p low, fast
 241p low, fast
 856p low
 917p low
 921p low
 950p low

(out of Chrono. order)
 ↓

12-2-18 + 12-4-18
 NO planes

12-7-18

430p low, loud

12-8-18.

531p low
 835p low, loud, fast
 859p low, loud, fast
 912p low, loud, fast
 918p low, loud, fast, Freq
 945p very low, loud
 951p very low, loud
 1077p low

(6)

12-9-18

516p Loud

528p Loud

12-13-18

1216p Low, Loud, Fast

1227p Low, Loud, Fast

1231p Low, Loud, Fast

1241p Low, Loud, Fast, Freq

1255p Low, Loud, Fast, Freq

1258p Low, Loud, Fast, Freq
Video

227p Low, Loud, Fast

555p " " "

613p " " "

619p Low, Loud, Fast, Freq

713p Low, Loud

726p " " , Freq

729p " " "

737p " " "

750p

826p " " "

1131p " " "

12-14-18

422p

12-15-18

228p Low, Loud, Fast

844p " " "

901p " " "

920p " " "

928p " " "

1005p " " "

12-16-18

12.25p Low

322p Low

400p Low, Loud

415p Rec'd call from
Steve @ PIE will forward
complaints to Deputy
Director and he will be
calling us back.* NEVER RECEIVED
Call Back from
Dep. Director12-16-18 cont

447p Low

517p Low

12-19-18

725p Low, Loud

842p " "

856p " "

912p " "

932p " "

12-20-18

428p Low, Loud

447p " "

508p Very, Low, Fast

533p " " "

537p " " " Freq

①

12-21-18

1040 AM Low, Loud
1050 AM " "

12-24-18

1037pm Very Loud
1039p " ", late

12-25-18

1030p Late
1130p Very Fast + Loud

12-26-18

947p Loud, Fast

12-27-18

633p Low, Loud
700p Low, Loud
731p Low, Loud, Free
734p " " "
859p Very Fast, Loud

12-28-18

303pm Low, Loud
304pm Low, Loud, Free
402p " " "
452p " " "
454p " " "
530p " " "
544p " " "
655p " " "
744p " " "
817p " " "
859p " " "

12-28-18

911p Low, Loud
1010p " "
1024p " "

12-29-18

947p Low, Loud, Fast
951p Low, Loud, Free
951p Low, Loud, Free, Late

12-30-18

713 AM Loud
736p Low, Loud
1032p " "
1045p " "
1050p " "

12-31-18

1246p Low, Loud
1254p Low, Loud, Free
158p " " "
335p " " "
338p " " "
355p " " "
425p " " "
445p " " "
509p " " "
522p " " "
739p " " "
749p " " "
940p " " "
1014p " " "
1032p " " "
1051p " " "
1105p " " "

12-31-18 cont

1192p Low, Loud, Free

* Note -
New Years Eve
Trying to sit
on deck &
Enjoy Friends
and Family
Time. !!

All Flights have 8
 corresponding email or phone call

1-1-19

144p Low, Loud
 453p " "
 508p " "
 619p " "
 622p " " Freq
 645p " " "
 734p " "
 828p " " "
 842p " " "
 931p
 103p " " " , Late

1-2-19

658AM Low, Loud, North-
 714AM Bound
 714AM " " "
 723AM " " "
 244 pm " " "
 259 pm " " Freq
 328 p " " "
 1028 p " " "
 1045 p " " "
 1056p " " "

1-3-19

631 p low, loud
 713 p " "

1-4-19

918p Low, Loud, Freq
 933p " " "
 951p " " "
 10:00p " " "

1-12-19

1146 AM Very Low, Loud
 1202 pm " "
 122p Freq " "
 133p " " "
 141p " " "
 151p " " "
 201p " " "
 215p " " "

1-13-19

1124 p Low, Loud
 1141 p " "
 1234 p Low Loud
 209 p " "

1-14-19

1201p Low, Loud, Northbound

1-15/1-16-19

None

All Flights have
 corresponding email and/or Phone
 calls

1-17-19

1055 p Low, Loud
 1057 p Low, Loud

1-18-19

11 pm Low, Loud, Late

1-19-19

* 1258 AM Low, Loud, Late
 713 AM Low, Loud, early
 734 AM " " "
 846 AM " " "

1-20-19

717 AM Northbound, Loud
 721 AM " " "

1-23-19

720 pm Low, Loud
 744 pm " "

1-24-19

NONE

1-25-19

* 1151 pm Low, Loud
Late

1-26-19

NONE

1-29-19

* 802 AM early, Low, Late

1-30-19

* 624 AM " " "

1-31-19

630 pm Northbound, Loud

2-1-19

740 AM " "

2-2-19

* 611 AM " early "
 * 633 AM " " "
 1242 pm Low, Loud
 1248 pm " "
 104 pm " "

2-06-19

946 p Low, Loud

2-07-19

1046 AM Low, Loud
 503 p " "
 507 p " " FREQ
 656 p " "
 708 p " " "
 710 p " " "
 712 p " " "



All flights have corresponding email and or phone calls ^{Appendix J-3} (10)

2-7-19 (cont)

913p Low, Loud, Freq
 ★ 1018p Low, Loud, Freq, Late
 ★ 1103p " " " "
 ★ 1112p " " " "
 ★ 1150p " " " "

2-8-19

655A Low, Loud, Northbnd
 703A " " " "

2-10-19

613pm Low, Loud, Northbnd
 830p " " "
 ★ 1027p " " Late
 ★ 1032p " " "
 ★ 1111p " " "

2-11-19

955A Low, Loud, Freq
 1004 AM " " "
 1015 AM " " "
 1109 AM " " "
 1215 pm " " "
 1220 pm " " "
 1239 pm " " "
 109p " " "
 120p " " "
 702p " " "
 707p " " "
 721p " " "
 813p " " "
 830p " " "

2-11-19 (cont)

912p Low, Loud, Freq, Late
 1055p " " " "
 1057p " " " "
 1103p " " " "

News Chanel 8 Interview w/ Peter Bernard.

2-12-19

★ 1254 AM Very low, Loud Late

2-15-19

1249p Low, Loud, Late
 102p " " "
 127p Very low, Loud,
 158p " "
 346p " "
 356p " "
 430p " "
 444p " "
 547p " "
 623p " "
 739p " "
 814p " "
 828p Tolerable
 933p low, Loud,
 958p Low, Loud, Fast, Late
 1000p " " " "
 1049p " " " "
 1047p " " " "

Every flight has either email or phone calls

(11)

2-16-19

857p Low, Loud, Freq
 859p " " "
 902p " " "
 905p " " "
 * 1101p Low, Loud, Freq, late

2-17-19

1059A Low, Loud
 1119A " "
 1122A Low, Loud, Freq
 1132A " " "
 101p " " "
 156p " " "
 223p " " "
 239p " " "
 348p " " "
 439p " " "
 613p " " "
 756p " " "
 845p " " "
 847p " " "
 938p " " "
 955p " " "
 1053p " " "
 1104p " " "
 1127p " " "
 1135p " " "
 1152p " " "

2-18-19

This is the start of my recording flight #'s and altitude of Allegiant Air lines as ~~per~~ recorded on the PIE Airport Public Portal Radar.

2-19-19

145p #893 - 16 → (1,600ft)
 ↳ Time ↳ Flight # ↳ Altitude

All flights on the Portal, that are disrupting our home are labeled as "AA", the call letters for Allegiant Airlines

239p - 909 - 15
 242p - 1202 - 15
 307p - 843 - 15
 1119p - 821 - 15

2-20-19

503p No Radar
 839p - 909 - 16
 902p - 853 - 16
 916p - 883 - 16
 925p - 919 - 15
 946p - 825 - 23

All flights have either email or phone correspondence. Appendix 1.8

All flights are 'AA'" (12)

2-21-19

- 1246p - 883-16
- 131p - 941-16
- 214p - 895-15
- 248p - 1202-15
- 339p - 843-16
- 451p - 815-16
- 559p - 889-17
- 746p - 412-14
- 839p - 863-16
- 927p - 845-15
- 1008p - 811-15
- 1037p - 837-15
- 1048p - 819-15
- 1108p - 807-15
- 1110p - 847-21

FREQ
Late

Called Left Message
5th request for
Return call!

2-22-19

- 1243p - 825-15
- 808p - 843-15

2-23-19

- 116p - 883-15
- 252p - 1347-16
- 418p - 961-16
- 639p - 1400-16
- 851p - 417-15
- 908 - 821-16
- 927 - 853-15

With request for return
call

2-23-19 (Cont)

- 1029p - ~~813~~ 913-16 ★

2-24-19

- 908p - 821-14 Late/Freq
- 938p - 849-14 " "
- 1022p - 879-14 " v
- 1101p - 881-14 " v

2-25-19

- ★ 1221AM 803-14 LATE

2-27-19

- ★ 243AM LATE
- ★ 1040AM - Low, Loud, Earl

2-28-19

- ★ 115p - 815-15 Low, Loud, Late

3-1-19

- 1133A - 816-26
- 220A - 1812-15
- 319A - 919-15
- 337p Low, Loud
- 447p " " Freq
- 500p " " "
- 537p - 865-15 "
- 610p - 1714-14
- 709p Low, Loud
- 734p " "
- 939p - 849-15
- 1034p 843-15 Very loud

All flights # are AAY
 All flights have corresponding
 email and/or phone calls

(13)

3-1-19 (Cont)

- * 1041 p - 881-21 Tolerable
- * 1049 p - 803-15 Low
- * 1117 p - 821-15 LATE
- * ~~1211ea - 879-18 LATE~~

3-2-19

- * 1211e AM 879-18 LATE
- 834 pm Low, Low
- 836 pm " "
- 850 p - 895-15
- 904 p - 803-15
- 951 p - 939-23 Tolerable
- * 1113 p - 913 - Very Fast
LATE Very Low

3-3-19

- 126 p Low, Low
- 323 p " "
- 505 p - 1302-17
- 555 p - 861-17
- 639 p - 941-17
- 653 p - 889-17
- 734 p - 883-17

3-4-19

- * 945 Am Northbound - Low
- 220 p - 908-

Why is it that when Planes
 are flying NB, they are
 able to gain Altitudes
 that are tolerable?

3-8-19

- 1059A 859-14
- 1106A 849-14
- 1141A 803-14
- 1147A 879-14
- 1238p Low, Low
- 1243p 825-18
- 1247p - 919-14
- 220p Low, Low
- 545p 1714-14
- 600p 891
- 633p 913-17
- 843p 855-15
- 910p 821-15
- 931p 817-16
- 1019p 290401-15
- 1045p 881-15
- 1052p 805-25

3-9-19

- 1108 A Low, Low
- 307 p " "
- 321p - 1396
- 333p - 1812-16 Very Low, Low
- 418p - 412
- 518p - 891
- 619p - 1400-15
- 1020p - 895-15
- 1023p - 961-15
- 1100p - 290AZA - 17 Low, Late

- All flights have either written or emailed and/or phone calls.
- All flights are AAY.

(14)

3-10-19

314p Low, Low
 325p - ~~843~~ - 8137-16
 327p - 843-15 Freq
 407p - 813 Freq
 418p - 961 Freq
 447p - 861-16 "
 638p - 412-16
 646p - Low, Low
 725p - 883-15
 809p - 895-15
 811p - 845-15 Freq

3-11-19

1044A NB Low, Low
 401p - 835-15
 606p - 891
 623p - 913
 732p - 855

3-13-19

201p - 412-16
 326p - 1400
 754p - 843-16
 757p - 919-15
 804p - 421-15 Freq
 819p - 1852-16 Freq
 820p - 1895-16 Freq
 947p - 883-15
 1115p - 897-15

3-15-19

959A Low, Low
 104p - 891-16
 *1020p - 909-15 LATE, Freq
 *1022p - 817-15 " "
 *1048p - NO RADAR - (Low, " , "

3-17-19

159p - 819
 201p - 894 - Northbound, 32

3-23-19

*1113p - 877 - Low, Low, LATE

3-24-19

1032A - 811-14 Freq
 1057A - 819-14 "
 1101A - 827-14 "
 1116A - 861-14 "
 1245pm - NB - 812
 105p - Low, Low, NO RADAR
 108p - 939-14
 409p - NB - 846
 *757p - NB - 413-35
Tolerable
 1111p - 847-15
 1114p - 837-15

- All flights have either corresponding email or phone call
- All flight #'s are "AAY"

(15)

3-25-19

954^{AM} 819 - 15
 1058A - 859 - 15, Freq
 1109A - 849 - 15 - "
 1154 - 803 - 15 - "
 1247p 877 - 14 - "
 1252p - 919 - 15 - "
 1257p - 883 - 15 - "
 1259p - 1812 - 15
 352p - 835 - 16
 402p - 867 - 16
 457p - 907 - 17
 551p - 1714 - 16 "
 609p - 891 - 16 "
 630p - 913 - 16 "
 739p - 855 - 17 "
 829p - 909 - 16
 907p - 821 - 16
 945p - 87 - 15

3-26-19

* 1128A - 1303 - NB - Quiet
 * 130p - 876 - NB - 4,000 ft
 Freq Quiet
 * 138p NB - 820 - 3300 ft
 Quiet

3-30-19

858p - 821 - 16
 913p - 853 - 16
 1000p - 851 - 19
 1044p - 827 - 15
 1053p - 897 - 16

3-31-19

1033A - 1302 - 16 Freq
 1051A - 801 - 16 "
 1107A - 819 - 17 "
 1115A - 937 - 17 "
 1132A - 827 - 16 "
 1245p - 905 - 16
 1253p - 939 - 16 "
 222p - 941 - 16
 302p - 1202 - 16
 354p - 1319
 443p - 815 - 17 "
 456p - 889 - 16 "
 608p - 863 -
 642p - 843 - 16
 820p - 895 - 16
 845p - 915 - 17
 * 1121p - 883 - 20 Late
 * 1132p NO Radar - Late
 * 1143p " " "
 * 1148p Low, Loud, Late

4-1-19

* 1248 AM Low, Loud, Late

4-4-19

841p - 919 - 15
 900p - 915 - 15 Freq
 941p - 1202 - 18
 * 1114p - 847 - 18 LATE

- All flights have either correspondence by e-mail and/or phone call. Appendix J-3
 - All flights are "AA4"

(10)

4-5-19

*148 AM low, late
 *152 AM " " Freq
 1002 A - 819-17
 1153 A - 879
 1244 AM - low, low
 1258 p - 1812-20
 105p - 877-15 - Freq
 121p - 920-15 - "
 157p - 919
 354p - 867
 408p - 835-22
 440p - 907-16
 458p - 825-17
 702p - 913-15 "
 738p - 855-16 "
 747p - 891-16
 814p - 909-16
 936p - 897-17
 *956p - 821-15 late
 *1009p - 817-15 "
 *1034p - 843-16
 *1148p - 805-16 "

4-6-19

130p low, low
 700p - 1400-16

4-7-19

101p low, low
 604p - 905-16
 617p - 889-15

4-8-19

142p - 919-16
 405p - 835-16
 407p - 867-16 Freq
 920p - 855-17
 1041p - 821
 1045 - 843-16
 1055p low, low
 *1103p - 1202-17 Late
 *1158p - 1714-16 "

4-9-19

1224p low, low
 1236p " "
 205p - 895-18
 852p - 889-19
 856p - 821-18 Freq
 900p - 919 "
 950p - 2942-18

4-9-19

*1222AM - 883-19 LATE

4-11-19

*1230AM - 897-18
 119A low, low
 111p - 941-18
 239p - 895-18
 331p - 827-18
 516p - 889-18
 610p - 905-17
 840p - 919-17

- All flights have either unlogged or logged emails and/or phone calls. Appendix J-3
- All flights are "AA4" (17)

4-12-19

353p - 835-16
 403p - 867
 454p - 897
 612p - 1714-16

4-13-19

1234p - 823
 1244p - 827-16
 226p - 875-16 Freq
 228p - 1812-16 "
 709p - Low, Land
 723p - 871-18
 856p - 821-17
 1058p - 851-17
 *1118p - 877-17 LATE

4-17-19 NO Radar Access

855A Low, Land
 915A " "
 1005A " "
 1247p " " "
 137p " " Freq
 139p " " "
 141p " " "
 156p " " "
 159p " " "

4-18-19

112Am - 937-16 Freq
 114A - 807-16 "
 1250p - 863-16
 140p - 845-16

4-18-19 895

103p - 944-16 Freq
 105p - 941-16 "
 255p - 1202-16
 344p - 827-17
 455p - 813-17
 536p Low, Land
 600p - 905-17
 753p - 883-17
 815p - 939-17
 1043p - 819-17
 1047p - 843-17 Freq
 *1130p - 847-17 LATE

4-20-19

730p Low, Land
 804p - 1400-17
 835p - 965-16
 907p - 901-17
 915p - 883-22 Freq
 956p - 843
 *1054p - 875-16 - Late

4-21-19

1111p - 847-16

4-25-19

147p - 941-16
 248p - 915
 314p - 1202-16
 354p - 1319-16
 450p - 813-17
 558p - 905-17

- All flights have either written or
emails and/or phone calls. Appendix J-3

- All flights are "AA4"

(18)

4-25-19 (cont)

654p - 412-17
905p - 919-17
928p - 801-17
935p - 895-14
1024p - 827-14 Freq
1034p - 819 "
* 1124p - 847-16 Late

4-28-19

1052A Low. Loud
1104A - 937
1118A - 815
1132A Low. Loud

4-29-19

1051p - 881-15
* 1100p - 821-15 LATE

4-30-19

843p - 883-15

5-1-19

749p - 891-10

5-2-19

Rec'd call from Steve
Santamaria @ PIE. 6:16 pm
Was told planes only need to
be 500 ft above lowest
surrounding obstacle.

It was extremely condescend-
ing. Steve stated that
there are only 2 people from
Oldsmar that are complaining.
* Also stated that we are
"watering down the validity
of our complaint by calling
and emailing too often!"

* Steve also told me that
PIE Staff thinks that
this tracking and recording
this noise problem has
become my "New hobby!"
Steve stated that once
the new path is approved
no one will have any
recourse re-noise.

Steve stated that
Allegiant "fought" with the
FAA to get this flight
path approved.

Steve finished the
conversation by stating
that "it was nice talking
w/ you!"

- All flights have either corresponding emails and/or phone calls.
- All flights are "AA4" (19)

5-5-19

347p Low/Loud

5-7-19

*1209 AM - 843-14 LATE

*1234 AM - 817-14 "

222p - Northbound

30ep Northbound 882

5-8-19

829p - 877-14

5-9-19

*1148p - 847 LATE

5-10-19

225p Low/Loud

*2

5-11-19

*1245 AM 821-14
Late

339p 1812-17

908p 853-14

5-12-19

312p 827-17 Freq

344p - 1319-17 "

513p - 889-18 "

*1105p - 887 17 "

5-13-19

606p - 883-17 Freq

626p - 907-21 "

646p - 835-19 "

900p - 891-17

947p - 913-18

*1001p - 843-17 Late

*1030p - 897-17 "

*1153p - 821-17 LATE

5-16-19

954p - 958-14

*1018 - 944-14 Late/Freq

*1030 - 854-14 Late/Freq

*1034 - 773-14 " "

5-17-19

*1107p - 828-14 Late/Freq

*1115p - 879-14 " "

Called PIE - followed all prompts as usual, but when I pressed # for help recording, stated that my # was blocked!

How is it that they are allowed to block citizens phones?

Really disturbed
Mothers Day

- All flights have either corresponding emails and/or phone calls.
 - All flights are "AA4" (20)

5-18-19

1055p - 8666-16

5-21-19

614p - 919-17

629p - 863-17

805p - 408

★ Rec'd call from Steve Santamaria @ P.I.E 5/23/19 4:01pm he took note of last 3 days complaints. When I stated that my # was blocked he had NO response.

5-24-19

7022p - 814-17

1051p - 869-15

★ 1102p - 758-15 Late

★ 1104p - 821-16 Late/Freq

★ 1123p - 886-16 " "

★ 1141p - 796-15 " "

5-25-19

1044p - 793-17

5-26-19

415p - 976-16

428p - 894-16

5-27-19

835 AM Low, Loud, Freq

5-29-19

1013 A Low, Loud

1015 A " " Freq

1221p - 776-17

1247p Low, Loud, Freq

220p " "

252p - 421-17

323p - 1835-17

535p - 808

625p Low, Loud

707p - 993-17

5-30-19

1152 A - 891-17

1220p - 903-16

1233p - 824-16

102p - 938-16

288p - 859-16

504p - 854-17

605p - 803-17

630p - 1863-17

749p - 846-18

801p Low, Loud

1007p - 901-16

1031p - 756-16

1038p - 958-16 Freq

- All flights have either corresponding email and/or phone calls.
 - All flights are "AA4" (21)

5-31-19

1211p - low, low
 117p - 1916-17
 412p - 901-17
 450p - 879-17
 513p - 764-17
 522p - 851-17
 550p - 842-17
 640p - 408-20
 735p. NB - 457-20
 * 1110p - 927-17 late
 * 1119p - 946-17 "
 * 1123p - 829-18

6-1-19

739p - 808
 1022p - 793-17
 1024p - 772-17 Freq

6-3-19

1054p - 873-17
 1057p - 927-18 late
 * 1102p - 829-18 "
 * 1107p - 946-17 "
 * 1110p 758-17 late
 Freq.

6-4-19

224p - 761

6-5-19

1000A low, low
 1149A - 811-14

6-5-19 (Cont)

1209p - 993-16
 113p - 806-17 Freq
 132p - 1381-17 "
 135p - 858-14 "

6-6-19

1113A - 971-18
 1119A - 801-17 Freq
 1124A - 909-17 "
 1132A - 783-17 "
 502p - 927-17
 514p - 863-17 "
 548p - 874-17
 708p - 2521-17
 728p - 797-17
 * 1103p - 773-16 LATE
 * 1105p - 803-18 LATE

6-7-19

* 1202 AM - 947-17
 500p - 962-22
 533p low, low
 1036p - 924-17
 1059p - 939-17 Freq
 * 1106p - 772-17 late
 * 1156p - 976-18 - Freq/late

6-8-19

1004p - 1853-17
 622p - 816-17
 * 1149pm - 858-17 late

- All flights have either corresponding email and/or phone call
 - All flights are "AA4"

(22)

6-9-19

326p - 437-19

6-10-19

319p - 9201-17

658p - 982-17

704p - 764-17 Freq

725p - 997-17 "

727p - 946-18 "

759p - 781-17 "

924p - 758-17 "

1040p - 1371-16 "

1043p - 939-16 "

* 1136p - 924-16 "late

6-11-19

753p - 1441-17

901p - 914-18

1038p - 863-16

6-12-19

253p - 1856-17

313p - 437-17

834p - 981-17 Freq

842p - 876-17

845p - 952-17

6-13-19

935p - 884-15

938p - 947-20

6-14-19

* 1029p - 879-16 late

* 1032p - 508-23 late/freq

* 1036p - 841-15 " "

* 1049p - 1612-15 " "

* 1059p - 845-15 " "

* 1108p - 827-18 " "

* 1159p - 957-18

Note - Many flight in succession after 10pm

6-16-19

938p - 884-16

1049p - 958-16

* 1109p - 773-16

* 1114p - 803-16

6-17-19

* 1217 AM - 901-16

334p - 782-16

457p - 946-17

6-19-19

1100 AM 873-16 ~~Freq~~

113A - 826-16 Freq

1140A - 959-16 "

1215p - 2507-22

1221p - 963-16 "

1224p - 977-16 "

741p - 938-23

744p - 876-17 "

952p - 951-16

- All flights have either corresponding email and/or phone calls
- All flights are "AA4"

(23)

6-20-19

- 307p-5889-15
- 546p-2403-16
- 509p-927-18 Freq
- 540p-2521-13 Freq
- 1052p-958-13

Very Low, Loud

- ★ 1110p-901-16-Late
- ★ 1120p-773-16-late

6-21-19

- ★ 1104p-827-16-Late Freq
- ★ 1107p-772-16 " "
- ★ 1109p-854-16 " "

6-22-19

- ★ 117p-892-15 Very low late, loud, ~~freq~~
- ★ 1123p-1853-18 LATE

6-23-19

- 1224p-Low, Loud
- 1252p-801-23
- 1003p-853-16
- 422p-464-16
- 432p-NB-942-27
- ★ 1105p-803-17 Late
- ★ 1138p-901-16 Late

6-24-19

- ★ 1118p 901-16 ~~LATE~~

6-27-19

- ★ 1159p-773-15

6-28-19

- ★ 1200 ~~AM~~

6-29-19

- 1104A-889-15

Note - Two flights are SWA

- 346p-2888-15
- 350p-4448-15

- 1022p-861-16

- 1042p-863-16 Freq

6-30-19

- 937p-797-15
- 948p-884-16
- 1009p-899-16
- ★ 1045p-773-17 Late
- ★ 1055p-901-16 late/freq
- ★ 1122p-803-16 Late

7-1-19

Rec'd call from Steve Santamaria re confirmed + logged all emails + calls for June.

- All flights have either corresponding email and/or phone call
- All flights are "AA4"

(24)

7-3-19
★ 1111p-901-17 late
★ 1114p-813-16 late-freq

7-7-19 (cont)
★ 1150p-113-16 low, late

7-4-19
559p-927-16
703p-784-16
747p-1236-17
837p-829-17
920p-884-17
951p-947-17
★ 1113pm-899-16 late

7-8-19
432p-807-15
★ 1044p-936-17 late, freq
★ 1048p-841-17 " "
★ 1054p-827-17 " "
★ 1056p-992-17 " "
★ 1058p-758-17 " "
★ 1103p-774-17 " "

7-5-19
1105A-762-15
1140A-809-17
1155A-908-18 freq
1239p-977-16
10ep-1992-16
234p-878-16
945p-863-16

7-10-19
441p-992-22 land
455p-1420-20 "
737p-808-17
80ep-782-17
944p-834-16

7-6-19
★ 1054pm low, land
NO Radar

7-11-19
★ 1240 AM late land
308pm 1353-16
31ep-437-17 freq
749p-853-17
844p-884-17
1033p-958-17
★ 1132p-863-17 LATE

7-7-19
307p-437-16
345p-756-17
424p-1353-17
★ 1133pm-~~883~~803-16
Late, low, land

★ 1115p-901-17 low, land, late
★ 1119p-12-17 land, late

- All flights have corresponding email and/or phone call
- All flights are "AAH"

(25)

7-12-19

- ★ 1205 AM 901-17 Late
- ★ 1224 AM 773-17 Late
- 1131p - 827-17
- 1133p - 841-17 Freq
- 1143p - 774-17 "

7-13-19

- 1138 A - 998-17
- 508p - 923
- 1033p Low, Loud
- 1037p - 977-16 Freq
- ★ 1107p - 922-15 Late
- ★ 1144p - 761-17

7-14-19

- 1057A - 971-17
- 1112A - 909-17
- 1124A - 801-17
- 1135A - 937-17
- ★ 1115pm - 773-15 LATE
- ★ 1117pm - 899-15 LATE, Freq

7-15-19

- ★ 1045 AM 883-15 Freq
- ★ 1047 AM 762 15 "

**FAA Responses to Comments to Kay Rose on the Draft EA for the South-Central Florida
Metroplex Project**

The South-Central Florida Metroplex Project has not been implemented and will not be implemented until after the FAA has carefully and thoroughly considered the results of the Environmental Assessment (EA). The EA, prepared in accordance with the National Environmental Policy Act and FAA Order 1050.1F, documents the potential effects to the environment that may result from implementation of the Proposed Action. Accordingly, any existing noise or air quality issues being experienced by the commenter cannot be attributed to the South-Central Florida Metroplex Project.

The FAA does not have the authority to direct or influence commercial service providers to provide commercial air carrier services at a particular airport or to require them to shift services from one airport to another. Additionally, the FAA and Airport Sponsors do not dictate what aircraft use an airport or what aircraft are assigned to commercial air carrier routes if the proposed aircraft could safely operate at the proposed airport in compliance with all applicable statutes. Public use airports cannot deny access to an aircraft operator if they can safely operate at that facility.



July 24, 2020

VIA EMAIL

9-AJO-MIA-FL-Metroplex-Comments@faa.gov

South-Central Florida Metroplex Draft EA
 Federal Aviation Administration
 Eastern Service Center – Operations Support Group
 1701 Columbia Avenue
 College Park, GA 30337

Re: Comments/Objections to FAA Draft Environmental Assessment for South-Central Florida Metroplex – Town of Surfside, Florida

Dear Sir or Madam:

On behalf of the Town of Surfside, Florida (“Town”), its Commission and residents, we submit the following and attached public comments and objections to the Draft Environmental Assessment dated March 11, 2020 for the South-Central Florida Metroplex Project (the “Assessment”). The Town of Surfside is a coastal community located on a barrier island in northeast Miami-Dade County, Florida, situated between Miami Beach to the south and Bal Harbour Village to the north, and bounded on the east by the Atlantic Ocean and on the west by Atlantic Intracoastal Waterway. Protection and preservation of the Town’s sensitive coastal environment is paramount.

The Town is concerned that the Assessment is deficient in several respects, and does not present or examine the required information needed to properly evaluate the impacts that may be caused by implementation of the South-Central Florida Metroplex Project (the “Proposed Action”) on areas near major airports, such as Miami International Airport, and the Town. Due to the deficiencies in the Assessment, it is not possible at this time to determine the full extent of impacts that the Proposed Action may have on the Town and surrounding areas.

The Assessment’s deficiencies include, but are not limited to, the following: Lack of detail in maps of existing/no change and Proposed Action flight paths and areas of overflight, including omission of aircraft altitudes and speeds. Maps included in the Assessment depicting both existing/no change and Proposed Action Standard Instrument Departures (“SID”) and Standard Terminal Approach Routes (“STAR”) do not provide the location of specific flight paths, aircraft direction, altitude, or expected use frequency so that impact to existing or new overflow areas can be evaluated.

The Assessment also fails to examine whether a greater number of overflights can be expected over certain areas as a result of route consolidation under new or reconfigured SIDs and STARs implemented under the Proposed Action. Additionally, the Assessment is deficient in its examination and methodologies related to its determination that the Proposed Action will not subject surrounding areas to reportable noise increases. The report produced by Power Acoustics, Inc. related to noise impacts of the Proposed Action to the Town of Surfside is incorporated and enclosed as Appendix A. A further brief examination of notable deficiencies in the Assessment are discussed below.

I. Existing/No Change and Proposed Action Flight Track Maps Do Not Provide Sufficient Detail For Comparison of Impacts.

The level of detail and resolution provided for the flight track maps in exhibits 4a, 4b, 5a, 5b, 6a, 6b, 7a, and 7b, of Appendix I, “Noise Technical Report” of the Assessment are inadequate to distinguish between existing/no change conditions and the Proposed Action resulting condition. The map series, which provides a comparison of departure and arrival tracks under the existing/no change and Proposed Action conditions, is not detailed enough to see differences in flight path locations or patterns. On each of these maps, all flight tracks are shown in the same single color, which results in a mostly solid area of color over most of South Florida’s Atlantic coastline. It is impossible to examine any single flight track, or to associate any flight tracks with its existing/no change SID or STAR, or Proposed Action SID or STAR. There is no information as to which airport the flight track originates from or terminates. In addition, the solid single color for flight tracks provide no altitude information which is needed to assess the amount of sound that may be expected as an aircraft on the track overflies a location. The resulting maps end up providing little useful information to compare the existing/no change conditions with those of the Proposed Action.

The Assessment should be improved with more useful flight track maps focusing on Major Study Airports, rather than simply all of the South Florida region, and which include altitude and use (flight frequency) information for each track. The presentation titled FAA NextGen South-Central Florida Airspace Modernization Airport Brief Miami International Airport, dated March, 2019 (the “2019 MIA Presentation”), contains some helpful maps and visualizations. The maps contained in the 2019 MIA Presentation provide existing flight tracks and altitude information as those tracks approach and depart Miami International Airport. The maps also provide proposed waypoints that will serve as vectoring points for the proposed SIDs and STARs, as well as a general visualization of the SID and STAR paths approaching and departing Miami International Airport. Unfortunately, as the 2019 MIA Presentation is not incorporated or referenced in the Assessment, the accuracy of the information contained cannot be relied upon to examine the proposed tracks and altitudes.¹

II. SID and STAR Maps Provided in the Assessment are Deficient.

The Assessment’s PDF layer-enabled maps of existing/no change and Proposed Action SIDs and STARs does not provide sufficient information. The maps of both existing/no action and Proposed Action SIDs and STARs, included in Section 3.2.1.2 of the Assessment (at Exhibits 3-9 and 3-16), show only shaded polygons over the general area where flights may be routed as they use the procedure. They do not show exit and transition points, nor do they show expected direction of aircraft flight, or expected altitudes along the SID or STAR. Also, certain SIDs and STARs appear to be disjointed, which adds to confusion in attempting to assess the route and areas impacted. Although

¹ According to the 2019 MIA Presentation, the maps and diagrams contained are subject to change. Due to the lack of detail in Appendix I maps, and Exhibits 3-9 and 3-16 of the Assessment, it is impossible to confirm if the 2019 MIA Presentation maps are consistent with the proposed change discussed in the Assessment.

provided separately, the Google Earth layers which show existing/no change and Proposed Action tracks do not show altitudes, speeds or other information necessary to gauge the Proposed Action's impacts on surrounding or overflown areas.

The 2019 MIA Presentation, contains much more detailed and helpful maps and visualizations of the then-proposed SIDs and STARs. The maps contained in that presentation provide existing flight tracks approaching and departing Miami International Airport. However, the 2019 MIA Presentation did not contain maps of the existing/no change SIDs and STARs. Maps with more detailed information, such as those within the 2019 MIA Presentation, are needed for both existing conditions/no action SIDs and STARs, as well as proposed action SIDs and STARs. These maps also need to provide existing flight tracks and altitudes, as well as flight tracks and altitudes projected in connection with the proposed action SIDs and STARs.

III. Impact on Overflight Frequency pursuant to Proposed Action SIDs and STARs not Provided.

The Assessment fails to provide information as to the expected usage of Proposed Action SIDs and STARs or compare them to present usage of existing/no change SIDs and STARs. Therefore, impacts from increased frequency of overflights cannot be determined. Certain Proposed Action SIDs and STARs replace more than one existing SID or STAR. For example, Table 3-2 of the Assessment notes that the Proposed Action LUUCE STAR will replace both ANNEY and BLUFI existing STARs; however, it provides no information as to the number of aircraft that presently use ANNEY and BLUFI, nor the number of aircraft expected to use LUUCE. In addition the Google Earth layer tracks provide visualization of the differences between the ANNEY, BLUFI and LUUCE STARs flight tracks. The LUUCE STAR has significantly less tracks shown than ANNEY and BLUFI STARs. Information as to expected use rates of each STAR's flight tracks is necessary to determine impacts of the proposed change and apparent consolidation of many existing flight tracks into just a few. Additionally, the Google Earth layer tracks contain no altitude information along the tracks to gauge the changes in noise impacts to nearby areas.

Other unconsidered overflight increases may result from the increases in en route and runway transitions under Proposed Action SIDs and STARs. Section 3.3.1 of the Assessment confirms that the Proposed Action and implementation of new SIDs and STARs will result in increased numbers of route and runway transitions. According to the Assessment, route transitions will increase by nearly double from 135 to 232, while runway transitions will more than double, from 193 to 461. The Assessment specifically notes: "The additional runway transitions allow controllers to assign aircraft to routes that were not available previously." These increases in route and runway transitions imply that there will be more dispersal of departing and arriving aircraft to different points of intercepts of flight routes, and of runway approaches. Table 3-1 lists the existing SID and STAR procedures, including the airport(s) and number of en route and runway transitions served. Table 3-2 of the Assessment lists the names of new SIDs and STARs proposed to replace the existing procedures, and which airport(s) and number of route and runway transitions it serves. These tables show that the Proposed Action LUUCE STAR (replacing both ANNEY and BLUFI existing STARs) serves one en route transition and 16 different runway transitions at various airports including MIA. The existing ANNEY and BLUFI serve the same airports, but are listed in Table 3-1 as having a total of only four en route transitions and no runway transitions. The Assessment does not identify whether this Proposed Action STAR and its additional transition points will result in additional overflights over presently overflown areas nor whether new areas will be overflown, and impacts cannot be determined.

IV. New or Revised Approaches at Miami International Airport.

Table 3-3 of the Assessment claims that Miami International Airport will have eight (8) “new or revised approaches” to the airport’s runways. These new or revised approaches are designed to be “used by landing aircraft to line up with the designated runway and descend at a steady, stabilized rate during the final phase of flight prior to touchdown.” New or revised approaches have the potential of changing the areas of overflight and the altitude of those overflights in the areas surrounding major airports, such as Miami International Airport. However, the Assessment does not provide any details on existing/no change, or Propose Action approaches (to MIA or any other airport). Impacts of new approaches on the surrounding areas cannot be determined unless details of existing and proposed approach procedures are provided for comparison. This information should include maps of proposed and existing approach paths, and include the communities they overfly, and flight tracks and altitudes along the flight path as the airport is approached under both existing and Proposed Action conditions.

V. Noise Exposure Contour Maps are Deficient.

The noise contour maps included in the Assessment is deficient to the requirements of 14 CFR Part 150, Appendix A, Section A150.101(e). According to this section of the Code of Federal Regulations, noise contour maps produced for airport noise compatibility planning must include runway locations and flight tracks so that the noise contour can be contextualized to the location of the noise source. The noise exposure map for the Miami International Airport area, located at exhibit 4-9 of the Assessment, contours the different levels of sound exposure for the surrounding area. However, it does not contain either the runway locations for the airports shown, or the flight tracks required by the Code of Federal Regulations and which indicate the sources of the noise reflected on the map.

VI. Potential Visual Impacts are not Sufficiently Considered.

Section 5.9 of the Assessment provides a brief review of methodology used to review possible visual impacts of the proposed changes. The methodology does not consider the visual sight of aircraft at altitudes above 3,000 above ground level (“AGL”) as “intrusive”. Subsection 5.9.3 notes that changes in aircraft routes would *generally* occur at altitudes above 3,000 feet AGL, and thus anticipates no significant visual impacts from the proposed action. However, as noted earlier, the Assessment provides no details as to the altitude of any existing/no action or Proposed Action flight track that can demonstrate whether any “intrusive” visual impacts are created. Additionally, the Proposed Action includes eight (8) new or revised approaches for Miami International Airport’s runways. These new approaches cover a segment of aircraft flight below 3,000 feet all the way down to ground level at touchdown. The Assessment provides no maps, glide slope profiles, or any other details about the Proposed Action’s new or revised approaches (nor the existing approach procedures for comparison) that can confirm whether aircraft overflight or sightings at lower altitudes will result, and therefore cause a significant visual impact to surrounding areas.

VII. Consultant Report – Deficiencies as to Noise Reporting, Modeling, and/or Projection in the Assessment.

The Town of Surfside has engaged a noise consultant, Power Acoustics, Inc., to review and assess the figures, studies, methodologies and findings contained in the Assessment related to noise impacts, particularly in Appendix I of the Assessment and produce a report (the “Consultant Report”). The Town incorporates the Consultant Report, which is enclosed as Appendix A.

We respectfully request review and consideration of the above-identified concerns and deficiencies in the Assessment, and that all impacts to the Town of Surfside be adequately addressed. Thank you in advance for your attention to this matter.

Sincerely,



Charles W. Burkett, IV
Mayor

cc: Town Commission, Town of Surfside
Jason Greene, Interim Town Manager
Lillian M. Arango, Esq, Weiss Serota Helfman, Town Attorney



Appendix A



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July 24, 2020

Mayor Charles W. Burkett
Town of Surfside
9293 Harding Avenue
Surfside, Florida 33154

LR#20-00723-1-A1 Air Traffic Noise Impacts to the Town of Surfside Related to the FAA's South-Central Florida Metroplex Environmental Assessment

Dear Mayor Burkett;

Provided herein is an analysis/discussion of noise impacts presented in the USDOT/FAA **“Draft Environmental Assessment for the South-Central Florida Metroplex Project”**[1] as it applies to the Town of Surfside.

The Power Acoustics, Inc. analysis discusses what can be extracted from the **South-Central Florida Metroplex Environmental Assessment (SCFMEA)** draft report[1], and the report's deficiencies, including inadequate data, data presented in a confusing or overwhelming way, and metrics of sound that make it impossible for the public to fully understand the impacts of the proposed NextGen flight path changes.

In summary, both prior to and after the proposed action, the Surfside area is at the lower end of the FAA's reportable noise envelope (45-60 DNL). The SCFMEA[1] indicates Surfside will experience a small noise increase of approximately 0.5 dB (46.1 dB to 46.6 dB DNL) after the proposed action is implemented. The FAA considers this an insignificant increase in noise. The FAA determines that the DNL 45 dB level is the minimum level at which noise needs to be considered because *“even distant ambient noise sources and natural sounds such as wind in trees can easily exceed this (DNL 45 dB) value”* [reference 1, page 1-1]. We speculate few Surfside residents would equate their current aircraft noise exposure as comparable to “wind in trees.” For additional perspective, the FAA would require a 5 dB DNL increase before it would consider the increase to be significant and “reportable.” A 5 dB increase would require three (3) times as many aircraft to be observed/heard in the Surfside area than currently exists. Therefore, we do not agree with the criteria used by the FAA for determining impacts in low noise areas. We request the FAA provide several additional pieces of data in their final Environmental Assessment report so a clearer picture of the proposed action noise impacts can be seen by impacted parties.

BACKGROUND NEEDED TO UNDERSTAND THE SCFMEA RESULTS

The FAA's Method for Modeling (Computing) Noise Impacts

The SCFMEA[1] noise impact analysis is based on results for a computer program (computer model) of current and future air traffic conditions. The computer program, *Aviation Environmental Design Tool 2d (AEDT)*, utilizes aircraft type, airport origins and destinations, daytime or nighttime operation times, and the average number of daily operations to estimate noise.

The sound levels presented by the SCFMEA[1] do not reflect a particular noisy or quiet day, but a typical day averaged over a period of a year. Individual sound observer locations will experience some considerably noisier aircraft traffic days than the sound data computed/presented by the SCFMEA and some days will likely be quieter than those presented in the SCFMEA. *“FAA Order 1050.1F, requires that aircraft noise be analyzed in terms of the yearly DNL metric. In practice, this requirement means that DNL levels are computed for the Average Annual Day (AAD) of operations for the year of interest. The AAD represents all the aircraft operations for every day in a study year divided by 365, the number of days in a year. The AAD does not reflect a particular day, but is meant to represent a typical day over a period of a year.”*

FAA Noise Metrics

The FAA uses a simplified metric for correlation with human response to noise called the Day/Night average sound level (abbreviated as DNL). DNL represents the calculated sound of all daily aircraft that have been averaged over a contiguous period of 24-hours (86,400 seconds). The basis of the DNL metric is A-weighted sound level. The A-weighted scale is the typical level used to represent human reaction or exposure to loudness, such as when measuring noise in the workplace or in the environment. To account for an undesirable human response to noise at nighttime, the DNL includes a 10 decibel (dB) penalty applied to sound made between the hours of 10 PM and 7 AM. The simple A-weighted sound level can be measured/displayed on a sound level meter while DNL must be calculated from a 24-hour time history of the sound data.

The SCFMEA[1] **does not** report community noise impacts from specific aircraft flyovers or flybys as would be measured instantaneously with a sound level meter. The use of a 24-hour average DNL results in individual flyovers or flyby events contributing very small amounts to the daily DNL. As an example, if an individual aircraft *during daytime hours* registered an instantaneous 1-second maximum sound level of 60 decibels (dBA) during a flyover (*as could be measured on a sound meter*) and persisted for a duration of 20 seconds, the individual aircraft flyover would result in a DNL of less than 24 dB. If the same event occurred between the 10 PM and 7 AM *nighttime hours*, the DNL would have a 10 dB penalty and reported as 34 dB. Effectively, any individual sound level is largely discounted by the DNL metric due to the long 24-hour duration averaging process.

In order to have substantial DNL, many individual noise events must occur in a day. While the previous example of an individual event is relatively easy to describe, the impact of multiple aircraft flyovers or flybys is more complicated. The DNL is dependent not only on the loudness of the event, but also the duration of event, the number and time of events that occur per day and the percentage of time the area is quiet. Continuing on the example in the previous paragraph, we'll assume identical aircraft, each producing 60 dBA maximums and 20 second durations occurred in the same 24-hour period. The DNL would be <27 dB if two aircraft flyovers occurred per day, while 10 aircraft flyovers per day would result in DNL <34 dB and 100 aircraft flyovers per day would result in DNL <44.

The importance of the previous two paragraphs is that sound data reported by the FAA is not representative of what someone would directly measure with a sound level meter. Furthermore, while the example is intended to show how DNL compares to a measured sound level, readers are warned that the computation of DNL with the various types of aircraft becomes complex as the number of each aircraft, the aircraft's position (altitude and ground track) relative to sound receptor locations and the airport runway, time of flight and the aircraft's operating condition (takeoff or landing) all come into play when the FAA estimates DNL at any given sound observer position.

FAA ESTIMATED NOISE IMPACTS

FAA DNL Estimated in Before and After Conditions

The FAA has estimated changes in DNL before and after the proposed flight path changes. Appendix I of the SCFMEA[1] lists several thousand locations where noise estimates were made within the State of Florida. For the Surfside area, the applicable calculation locations are shown in Figure 1.

The SCFMEA[1] provides sound estimates for seventeen locations within the Town of Surfside. While most locations are located along the beach, four are at western locations so a reasonably good distribution of sound data is supplied. The FAA modeled three operation levels including existing conditions and forecast operations projected to 2021 and 2026 as shown in Table A.

Table A. Numbers of Takeoffs and Landings Modeled for MIA

Existing Conditions (06/2017 – 05/2018)	2021	2026
1,120.8	1,160.7	1,254.3

The before and after DNL sound levels are presented in Table B. Existing Conditions (E.C.), Proposed Action (P.A.) and No Action (N.A.) conditions define the projected before and after DNL sound levels if the proposed flight path action is taken and if no action is taken (i.e. if existing flight rules are retained).



Figure 1. Surfside FAA DNL Locations

Table B. Surfside DNL Estimates With and Without Proposed Action

Site Name	Location		dB DNL						
	Latitude	Longitude	2017/18 E.C.	2021			2026		
93RD STREET BEACH ACCESS	25.8817	-80.1210	44.6	N.A.	P.A.	Change	N.A.	P.A.	Change
94TH STREET PUBLIC BEACH	25.8836	-80.1212	44.5	44.5	44.9	0.4	44.9	45.3	0.4
SURFSIDE COMMUNITY CENTER	25.8817	-80.1217	44.6	44.6	45.0	0.4	45.0	45.4	0.4

Site Name	Latitude	Longitude	2017/18 E.C.	N.A. Avg.	P.A. Avg.	Change (Avg.)	N.A. Avg.	P.A. Avg.	Change (Avg.)
87TH STREET BEACH ACCESS	25.8719	-80.1208	45.0	45.0	45.1	0.1	45.4	45.5	0.0
87TH TERRACE BEACH ACCESS	25.8726	-80.1208	45.0	45.0	45.1	0.1	45.4	45.5	0.1
88TH STREET BEACH ACCESS	25.8733	-80.1208	45.0	44.9	45.1	0.2	45.4	45.5	0.1
89TH STREET BEACH ACCESS	25.8748	-80.1209	44.9	44.9	45.1	0.3	45.3	45.5	0.2
90TH STREET BEACH ACCESS	25.8763	-80.1211	44.8	44.8	45.1	0.3	45.2	45.5	0.3
92ND STREET BEACH ACCESS	25.8799	-80.1215	44.7	44.7	45.0	0.4	45.1	45.4	0.3
94TH STREET BEACH ACCESS	25.8835	-80.1218	44.6	44.5	45.0	0.4	45.0	45.3	0.4
95TH STREET BEACH ACCESS	25.8853	-80.1220	44.5	44.5	44.9	0.4	44.9	45.3	0.4
96TH STREET BEACH ACCESS	25.8871	-80.1222	44.5	44.5	44.9	0.4	44.9	45.3	0.4
FROUDE AVENUE PARK	25.8726	-80.1273	45.6	45.6	45.8	0.2	46.0	46.2	0.2
HAWTHORNE PARK TOT LOT	25.8762	-80.1295	45.7	45.6	46.1	0.5	46.1	46.6	0.5
PAWS UP DOG PARK	25.8817	-80.1251	44.9	44.9	45.4	0.5	45.3	45.8	0.5
SURFSIDE BEACH	25.8799	-80.1197	44.6	44.6	44.9	0.4	45.0	45.3	0.3
SURFSIDE URBAN GARDENERS	25.8747	-80.1260	45.4	45.3	45.7	0.3	45.8	46.1	0.3

*Avg. Represents the average DNL calculated by the FAA over an area instead of a point specific location.

The FAA’s estimated increase for Surfside areas ranged from a 0.0 dB increase near the 87th Street beach access to a 0.5 dB increase near Hawthorne Park.

The SCFMEA[1] indicates an Optimized Profile Descent (OPD) are utilized that allows an aircraft using to fly continuously from the top of descent to landing with minimal level-off segments and suggests “*Aircraft that fly OPDs can maintain higher altitudes and lower thrust for longer periods thereby reducing emissions and noise.*” If this is the case, the resulting sound levels should *decrease*. However, the DNL are shown to increase by as much as 0.5 dB. The increase in DNL is conjectured to represent the increase in the number of flyovers/flybys concentrated at/near the impacted sites of the CSTAL flight path. A 0.5 DNL increase would equate to about a 12% higher concentration of flights in site area. We speculate that a larger increase would be seen but may be offset by increased altitude of the OPD. Causes of noise increases are not adequately described or documented in the SCFMEA[1].

Levels Used by FAA in Determination of Noise Impact

The FAA has set criteria for determining impacts based on changes in predicted aircraft noise before and after implementation of the proposed action in the SCFMEA[1], and FAA Order 1050.1F[2] are as follows:

DNL of 65 and higher – Increase or decrease in DNL of 1.5 dB or more

Exceeds Threshold of Significance

DNL 60 to 65 - Increase or decrease in DNL of 3.0 dB or more

Reportable Noise Increase (Considered When Evaluating Air Traffic Actions)

DNL 45 to 60 - Increase or decrease in DNL of 5.0 dB or more

Reportable Noise Increase (Information Disclosed When Evaluating Air Traffic Actions)

The before after DNL data provided by the FAA in the Surfside area falls in the lower end of the DNL 45 to 60 range. The FAA, in accordance with FAA Order 1050.1F[2], determines increases less than 5 dB are not reportable or cause an impact. However, in order to reach a 5 dB increase in DNL, a threefold increase in daily flights would be required. It is highly likely that a threefold increase in air traffic would be very noticeable and objectionable to residents in the area.

The SCFMEA[1]states it evaluated noise levels down to the DNL 45 dB level for potential increases in DNL noise exposure of 5 dB or higher. The FAA determines that the DNL 45 dB level is the minimum level at which noise needed to be considered because “*even distant ambient noise sources and natural sounds such as wind in trees can easily exceed this (DNL 45 dB) value*” [reference 1a, page 1-1]. This is a misleading comparison because it equates a very quiet **continuous sound** (wind) to a very noisy but short duration sound (aircraft flyover) that is averaged with quiet times over a 24-hour period to obtain a similar sound level. We speculate few residents of Surfside would equate their current aircraft noise as comparable to “wind in trees” and therefore, we don’t agree with the criteria used by the FAA for determining impacts in low noise areas.

DNL Noise Levels Compared to Annoyance

The Federal Interagency Committee On Noise (FICON)[3] has shown the results of two studies correlating DNL with the percentage of people that are “highly annoyed” by air traffic noise. The studies indicate that approximately 0.41% to 2.12% of people are highly annoyed when sound levels are between 40 and 50 DNL. However, the studies have large variability and could be closer to 6-7% in the 40-50 DNL range. The studies also indicate people are likely to be more annoyed when ambient sound levels are low in the absence of the air traffic noise source. The FAA does not take existing ambient (non-aircraft) noise levels into account when determining noise impacts of air traffic.

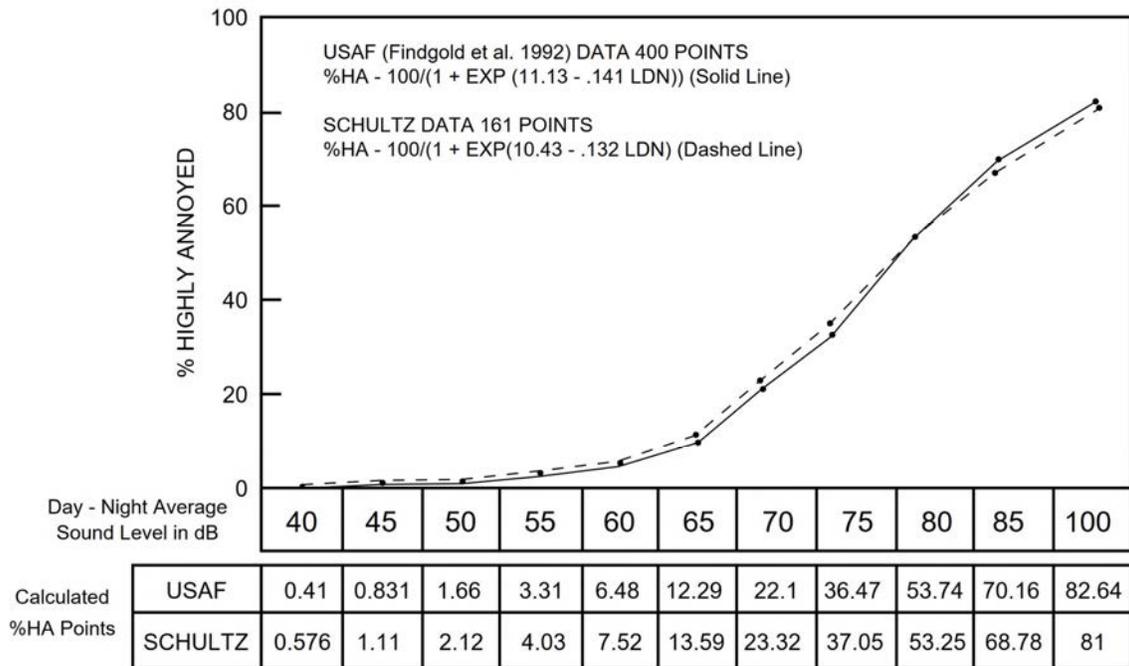


Figure 2. Percentage of People Highly Annoyed by Air Traffic Noise (DNL)

References

- 1.) United States Department of Transportation Federal Aviation Administration, **Draft Environmental Assessment for the South-Central Florida Metroplex Project**, May 11, 2020 including the Noise Technical Report, Appendix I
- 2.) U.S. Department of Transportation Federal Aviation Administration, Order 1050.1F, Effective Date: July 16th 2015.
- 3.) Federal Interagency Committee on Noise, “Federal Agency Review of Selected Airport Noise Analysis Issues,” August 1992.

Sincerely,



David J. Parzych, INCE.Bd.Cert
Power Acoustics, Inc.

CC: Jason Greene, Interim Town Manager
Lillian M. Arango, Weiss Serota, Town Attorney

FAA Responses to Comments to the Town of Surfside Beach on the Draft EA for the South-Central Florida Metroplex Project

The exhibits mentioned in the comment are intended to display historical arrival and departure tracks along with study airports in the entire General Study Area for the South-Central Florida Metroplex project. The size of the Study Area and the scope of the project prohibits the level of detail that commenter requests from being included in these graphics. The FAA produced graphics depicting individual air-traffic procedures and comparing flight tracks of the proposed action and no-action alternatives, and presented these to the public during the virtual public workshops. Those graphics remained online for members of the public to review, and are included in Appendix A of the Final Environmental Assessment. To facilitate access to the documents and reduce download time, the appendices and technical reports were posted on the website as standalone documents. These boards display more detailed information on the proposed final designs, overlaid with historical track data. The EA was prepared in full compliance with regulations implementing the National Environmental Policy Act and FAA Order 1050.1F, which require it only to be a concise document summarizing the anticipated environmental impacts of the proposed action. Because of the size of the General Study Area and the likelihood that any individual reader may only be interested in procedures serving on or two airports, the various arrival and departure procedures included in the No Action Alternative and the Proposed Action are grouped by airport. This allows the reader to easily focus on their own area of interest and turn on or off only those flight corridors they are interested in. The FAA also provided detailed supplemental materials in the form of Google Earth files that were provided to the public. The Google Earth files allow an infinite adjustment of range so the viewer can tailor materials to specific needs.

The Google Earth files do not contain all details of the air-traffic procedures like altitudes or speeds. They are designed to inform the public about the location of aircraft overflights, coupled with other information in the Environmental Assessment that focuses on anticipated environmental impacts. Commenters that want more detail about a particular procedure may refer to Appendix G, which contains detailed information (including TARGETS distribution packages) about each procedure for aviation experts. The requested level of detail about the procedures is not necessary to be provided in the layered PDF maps or Google Earth files in order to assess the potential environmental impacts of the Metroplex Project on a particular location. Any member of the public concerned about aircraft noise at a specific location can enter that address into the provided online tool and see the precise change in aircraft noise anticipated from the project, expressed in DNL, at all nearby grid points. Impacts on all other environmental resources were evaluated by taking into account all details of the proposed procedures.

Section 1.2. in the Final Environmental Assessment (EA) describes the difference between RNAV and conventional routes. With performance-based navigation, the overall number of aircraft flying in close proximity to a defined path is greatly improved for both approach and departure tracks. This will mean aircraft noise exposure levels are concentrated on a smaller area, thereby exposing fewer people to aircraft noise than occurs with equivalent conventional procedures that may have more dispersed flight tracks. In some areas, flight concentration already exists because many RNAV procedures have already been published and have been used for several years. There are

also many conventional procedures with defined routes between two points, which also create a concentration of flight tracks. Table 3-1 in Chapter 3, *Alternatives*, contains a listing of already-published RNAV and conventional flight procedures. Accordingly, aircraft concentration along many routes already occurs within the General Study Area for the proposed South-Central Florida Metroplex Project.

For noise modeling purposes, our forecasts assumed that approximately 90 percent of aircraft to or from major airports on an RNAV procedure would be located within a half mile of the published route centerline. All aircraft on an RNAV will be within one mile of the published route centerline. Not all aircraft are equipped to operate on an RNAV procedure; therefore, some conventional procedures will still be used in the South-Central Florida Metroplex airspace. Please see Table 3-2 in Chapter 3, *Alternatives*, for a listing of the conventional procedures that are maintained as part of the proposed South-Central Florida Metroplex Project.

To help maintain safety in the national airspace system, FAA's Air Traffic Control will continue to employ air-traffic management methods and coordination techniques as described in Section 1.2.2 of the Final EA (titled "Air Traffic Control within the NAS"). Therefore, the FAA expects that some dispersion of flight tracks will continue even for some aircraft operating on RNAV procedures. To account for this, the noise model includes flight tracks that follow a proposed RNAV flight path but are turned off the flight path at designated areas where the FAA has forecasted the likelihood of vectoring or rerouting. It is not true, as commenter suggests, that this issue is "unconsidered." The noise modelling analysis accounts for anticipated levels of both concentration of flight tracks and some continued dispersion. As described in Chapter 5 of the Final EA, changes in noise exposure levels may occur as a result of flight path concentration. However, the results of the noise modelling analysis indicate that the Preferred Alternative for the South-Central Florida Metroplex Project would not exceed the thresholds of significance for changes in aircraft noise exposure when compared to the No Action Alternative.

The commenter stated that the EA failed to provide information on expected usage of the procedures. Arrival and departure routings (STARs and SIDs) are comprised of common routes closer to airports. These common routes can extend a substantial distance from the airport. Transitions for procedures can be explained in lay terms as entry and exit points. That is, a procedure could route aircraft in a straight line, but for each waypoint along that straight line, a transition can be developed to provide entry and/or exit from the procedure. The fact that a transition exists does not necessarily mean that a unique path has been developed, although that is also possible. The increase in numbers of transitions for proposed procedures is a result of increased flexibility. Using the examples offered by the comment, the common route for the proposed LUUCE begins 41.12 miles north of Virginia Key at the SPNER waypoint. All aircraft assigned this procedure will follow the same route after SPINR. The development of the proposed LUUCE is not expected to increase the number of aircraft from the north/northwest, but will increase efficiency and reduce complexity for conventional aircraft landing at MIA.

The commenter alleges the Draft EA does not provide details on approaches to MIA. Only approach procedures for Runways 26 L/R and Runway 27 at MIA are proposed for amendments.

Aircraft will be established on the final approach course prior to the shoreline. These are no lateral changes for proposed approach procedures to MIA over land.

The commenter alleges that the noise contour map included as Exhibit 4-9 in the Draft Environmental Assessment is deficient. This map was prepared to provide additional information about baseline aircraft noise at the census block level, using the sources listed at the bottom of the map. It is not prepared to comply with any program authorized by 40 C.F.R. Part 150, and is not subject to the specific requirements cited by commenters, which apply to maps prepared by airport sponsors and not the FAA. According to FAA Order 1050.1F, Appendix B, the FAA does not prepare noise contours for large airspace actions involving more than one airport, which are not within the immediate vicinity of the airport, and/or includes actions above 3,000 feet AGL. The FAA evaluated aircraft noise impacts of the Project using the AEDT model. Per FAA 1050.1F, AEDT can be used to provide noise contours for airport development projects or other actions in the immediate vicinity of the airport; however, the South-Central Florida Metroplex Project is not an airport development project or action involving the immediate vicinity of one airport. Rather, it is a large airspace action involving more than one airport. The map is informative with respect to locations of existing aircraft noise levels and serves the intended purposes within the Environmental Assessment.

As noted by the commenter, the FAA considered the visual effects of the Proposed Action in the General Study Area. The results of the analysis showed that the Proposed Action would not result in a significant visual impact in 2021 or 2026 when compared to the No Action. Any changes in aircraft traffic patterns would occur at altitudes and distances from viewers that would not substantially impair the view or setting or the Section 4(f) resources. Therefore the Proposed Action would not result in potential impacts to Section 4(f) resources from a visual impact perspective. Nearly all of the changes made by the Metroplex occur at altitudes above 3,000 feet above ground level – while some change below that altitude may occur, they will occur within pre-existing historic flight tracks. The commenter requests additional information about the significance of these impacts. No specific significance thresholds for visual effects exist because of the subjectivity and variability of the experiences involved. The new or revised approaches for runways at MIA all occur within areas where overflights currently occur, and will not affect the frequency of those overflights. They will neither affect the nature of the visual character of the area nor contrast with other visual resources at those locations. FAA Order 1050.1F at 4-10. Any visual effects of the proposed project were therefore not considered significant for purposes of NEPA or other special purpose statutes.

See Topical Responses for Noise Modelling and Supplemental noise Metrics for further discussion of the commenter's suggestions that the FAA use alternative measurements of single noise events for addressing noise impacts under NEPA.

The requested information about the location of individual grid points is easily searchable by common address online by interested parties by using the Google Noise Tool. The tool contains more than 122,000 grid points of noise data in the Study Area and can be found at <https://floridametroplexworkshops.com/>

Additionally, the requested information specific to waypoint locations is not informative and is

potentially misleading. Aircraft noise impacts occur continuously along the flight path, and are not concentrated or especially noticeable at a waypoint. Although noise impacts may increase as an aircraft turns at or near a waypoint, these turns do not occur at precise locations but vary depending on weather, type of aircraft, weight, and other factors.