



Welcome!

Noise Compatibility Study (Part 150) Update Piedmont Triad International Airport

Technical Advisory Committee Meeting #4
December 3, 2020





Meeting Agenda

- Welcome and introductions
- Project status
- Draft Noise Exposure Map
 - report availability and comment period
- Second public workshop and public hearing
 - December 8, 2020
- Overview of NEM Update
- Overview of NCP Amendments
- Next steps
- TAC member discussion





Piedmont Triad Airport Authority

- Kevin Baker, Executive Director
 - o Part 150 Airport Sponsor
- Alex Rosser, Chief Operating Officer
 - o Part 150 Program Manager
- Suzanne Akkoush, Project Manager Noise Program
 - o Part 150 Project Manager





Part 150 Consultant Team

- Gene Reindel, HMMH Vice President
 - o Part 150 Principal
- Bob Mentzer, HMMH Principal Consultant
 - o Part 150 Project Manager
- Ron Miller, Ron Miller & Associates
 - o Part 150 Public Outreach





TAC Members

Name	Affiliation	Name	Affiliation	Name	Affiliation
Lisa Cooke	FAA, Memphis ADO	Jim Messura	FedEx	Steve Galanti	Greensboro
Jennifer Adams / Felicia Reeves	FAA, Southern Region	David Daubenmire	UPS	Lee Burnette	High Point
Charlie Dale	FAA, ATCT/TRACON - FAA	Brian Hofheins	HAECO Americas	Matthew Johnson	Jamestown
Ryan Hampton	FAA, ATCT/TRACON - NATCA	Israel Stolze	Cessna/Textron	Rochelle Joseph	Kernersville
John Parker	FAA, FSDO	Nathan Wilsford	GTCC	Chris York	Summerfield
Kelly Scudder	American Airlines	Bernie Dalere	US Customs and Border Protection	Sean Taylor	Oak Ridge
Bryan Street	Delta Airlines	Jason Dean	Honda Aircraft Company	Ted Kaplan	Forsyth County
Erica Simmons	Spirit Airlines	Rachel Wall	Samaritan's Purse	Joe Saldarini	CAC Representative
Donald Brookshire	Signature Flight Support	Kaye Graybeal	Guilford County	Janet Mazzurco	CAC Representative
Scott Stuart	Koury Aviation			Stan Tennant	CAC Representative





Project Status





Part 150 Update Status

We are here

Noise Study Database

- Review Previous NEM and Studies
- GIS and land use data
- Flight track data
- Operational forecasts
- Setup AEDT model

Develop Noise Exposure Maps

- Prepare aviation forecast
- Develop noise contours for existing and forecast conditions
- Noise impact evaluation for > DNL 65 dB
- Prepare maps in accordance with 14 CFR
 Part 150

Review Current Noise Compatibility Program

- Operational measures
- Land Use Measures
- Program Measures

Noise Exposure Map Report

- Document input data
- Document Land Use,
 Flight Tracks and DNL
 contours
- Provide population and housing counts
- Draft Report

Public Process

- Draft report available for public review
- Public Workshop
- Response to comments received in Final report
- Final report submittal to FAA





Part 150 Update Public Process

- This is the final of four TAC/CAC meetings
 - o First June 2019
 - o Second October 2019
 - o Third held virtually, May 2020
- First Public Workshop June 27, 2019
- Second Public Workshop will present Study results on December 8, 2020
- CAC NCP Workshop held virtually, August 2020
- Presentations for all prior meetings available at https://ptipart150update.com/public-outreach/







Draft Report Summary





Draft Report Availability and Comment Period

- Comment period on draft NEM report and proposed NCP amendments is from November 17 December 17
- Draft NEM and proposed NCP amendments report is available
 - On the PTI Part 150 website, at: https://ptipart150update.com/documents/
 - o At one physical location:
 - PTAA office, 1000A Ted Johnson Parkway, Greensboro, NC 27409
 - Available during normal business hours
- Draft report availability and comment period advertised through:
 - o Legal advertisements in newspapers
 - o Press release
 - o 2nd project newsletter posted on website and emailed to contact list
 - o TAC and CAC meeting





Second Newsletter

- Advertises 2nd workshop and hearing
- Posted on PTI Part 150 website
 PTI Part150 Newsletter2.pdf
- Distributed November 17th
- Distributed to PTAA email distribution list
 - based on prior involvement/interest



Noise Compatibility Program Amendments

In accordance with Part 150 regulations, PTAA developed an NCP in 2007 to improve the aircraft noise and land use compatibility around PTI. The PTI NCP includes three categories of measures: (1) noise abatement measures intended to reduce aircraft noise at the source, (2) land use measures intended to mitigate existing non-compatible land uses and to discourage the introduction of new non-compatible land uses and (3) program measures intended to implement and monitor compliance with the PTI NCP.

As part of the 2020 Part 150 Update, the implementation status and compliance with each of the 20 PTAA-recommended and FAA-approved 2007 NCP measures was determined and is provided in the document. After review of the 20 NCP measures, PTAA determined no need to update the NCP at this time but recommends several amendments to the existing measures.

There were 12 noise abatement measures in the 2007 PTI NCP. For the 2020 amended NCP, it is recommended that six (6) remain as written, three (3) be amended, and three (3) be eliminated, resulting in a remaining set of nine (9) recommended noise abatement measures.

There were five (5) land use measures in the 2007 PTI NCP. Of the five land use measures, PTAA has completed or is in the process of completing the implementation of two of the measures and implementation was not required for two others. Therefore, it is recommended only one (1) remain as provided in the 2007 PTI NCP and that the other four (4) be eliminated.

There were three (3) program management measures in the 2007 PTI NCP. Of the three program management measures, it is recommended that all three (3) remain as provided in the 2007 PTI NCP.

Virtual Public Workshop for the Draft Part 150 Update Document and Public Hearing on the Proposed NCP Amendments for Piedmont Triad International Airport

Information and an opportunity to ask questions related to the Draft PTI NEM Update will be provided to the public through a Virtual Public Workshop. Immediately following the Workshop, PTAA will begin a public hearing to take public comments regarding the recommended amendments to the NCP. The details of the date, time, and format of the Workshop and Hearing are listed below.

Virtual Public Workshops: Date: Tuesday, December 8, 2020 Virtual Public Hearing: Date: Tuesday, December 8, 2020

Time: 6:00 P.M.- 7:30 P.M.

Location: The Virtual Public Workshop and Hearing will be conducted online via Zoom.

Please Register in Advance: To register please email Part150@gsoair.org or call Suzanne Akkoush at 336.665.5664. Registration to speak is required for all who wish to provide oral comments related to the NCP amendments during the Public Hearing.

The public workshop will begin with a presentation that will include information regarding the 14 CFR Part 150 process, the NEM Update and details on the proposed amendments to the PTI NCP. Following the 30-minute presentation, attendees will be afforded the opportunity to ask questions, which will be answered by members of the Study Team.

During the public hearing, the public will have an opportunity to provide oral comments for the record on the recommended NCP amendments.

All comments (written and oral) will be included in the Final PTI NEM Update and NCP Amendment document and PTAA will submit the document to the Federal Aviation Administration (FAA) for acceptance of the document as being prepared in accordance to 14 CFR Part 150 and to approve or disapprove the individual amendments.

Stay Connected

For more information or to submit comments and feedback, the PTAA has several ways you can participate and stay informed:

1. To make comments, give feedback, or ask questions, please email us at Part150@gsoair.org. You can also mail your

comments to PTAA at 1000A Ted Johnson Parkway, Greensboro, NC, 27409.

The project website (http://PTIPart150Update.com) is updated regularly with project documents, meeting announcements,

and other general information about the study. Register here to join the mailing list and receive project updates.

3. PTAA noise information website provides broader information: https://flyfrompti.com/noise-information/



Piedmont Triad International Airport 1000A Ted Johnson Parkway Greensboro, NC 27409 flyfrompti.com







Second Public Workshop and Public Hearing

December 8, 2020





Overview of Workshop and Hearing

Public Workshop:

- Tuesday, December 8, 2020 from 6 7:30 p.m.
 - Virtual Zoom platform
 - o 30-minute video including information on:
 - the 14 CFR Part 150 process,
 - the NEM Update, and
 - details on the proposed amendments to the PTI NCP
 - Informal Question and Answer period with the study team

Public Hearing:

- Tuesday, December 8, 2020 from 7:30 8:30 p.m.
 - Virtual Zoom platform
- Advanced registration is required to attend workshop or to provide oral comments related to the NCP amendments
 - o To register: please email Part150@gsoair.org or call Suzanne Akkoush at 336.665.5664
- All comments (written and oral) will be included in the Final PTI NEM Update and NCP Amendment document





Draft Report: NEM Update and NCP Amendments





Overview of the Draft Report

Main Body

- Executive Summary
 - Sponsor's Certification (Executed in final submission)
 - FAA Checklist
 - Glossary
- 1. Introduction to Noise Compatibility Planning
- 2. Airport Background
- 3. Land Use
- 4. Existing Noise Compatibility Program
- 5. Noise Measurement Program
- 6. Development of Noise Exposure Contours
- 7. Noise Exposure Maps and Land Use Compatibility
- 8. Noise Compatibility Program Amendments
- 9. Stakeholder Engagement

Appendices

- A. Fundamentals of Characterizing Sound, Noise Effects and Metrics
- B. FAA Acceptance of Previous NEM and FAA Record of Approval for 2007 NCP
- C. Noise Monitoring Program
- D. Documentation of the Noise Modeling Process
- E. Advisory Committees
- F. Public Outreach
- G. Public Comments

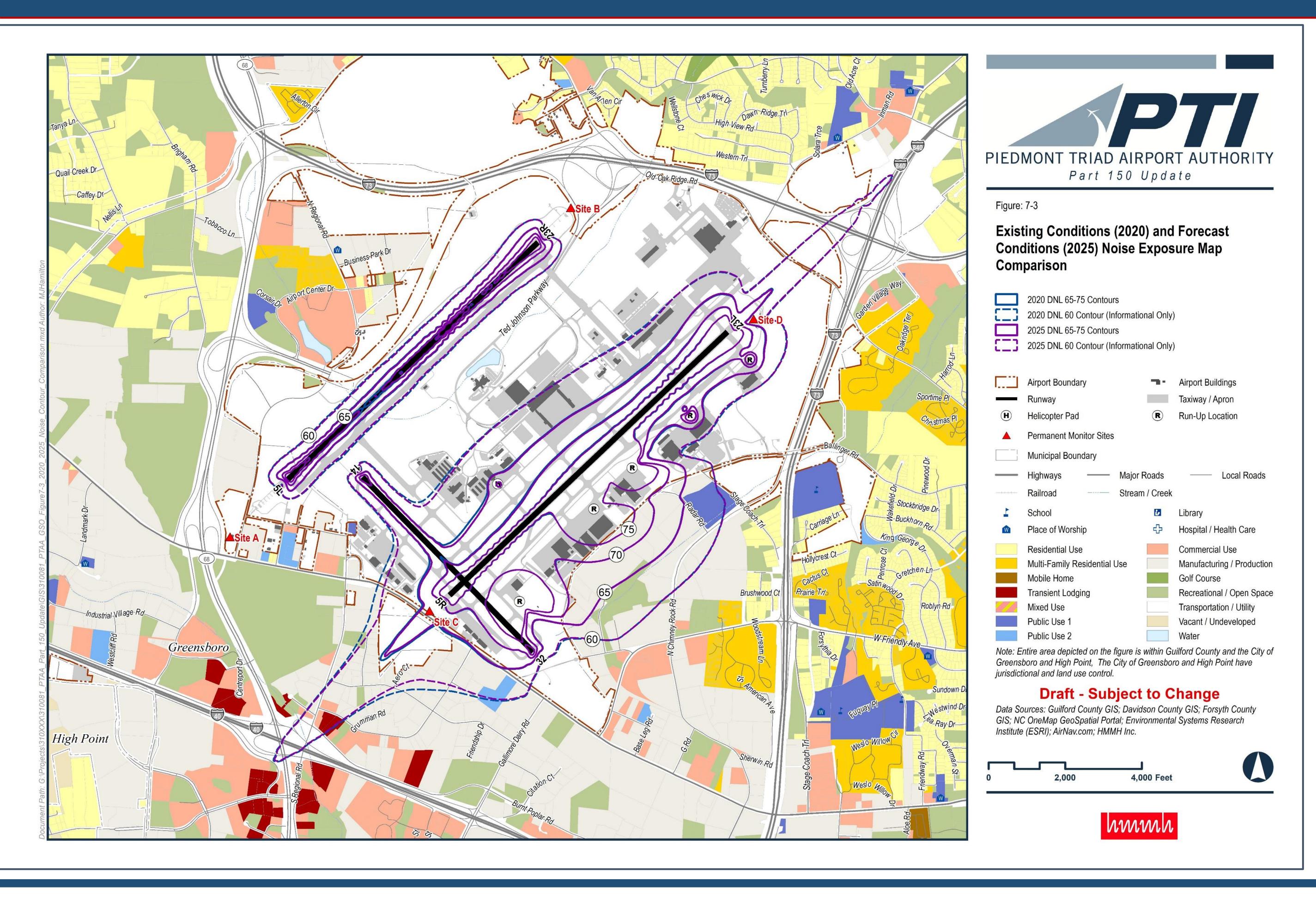
 (these will be included and addressed in the final submission to FAA)







2020 and 2025 NEM



- No non-compatible land use within the 2020 or 2025 65 DNL contour
- No need for additional NCP measures

	Existing Contours (2020)		Forecast Contours (2025)	
Noise Level (DNL)		Estimated Number of Housing Units	Estimated Population	
65 – 70 dB	0	0	0	0
70 – 75 dB	0	0	0	0
75+ dB	0	0	0	0
Total	0	0	0	0





Proposed Amendments to the NCP





Review of Noise Compatibility Program (NCP)

The FAA approved, in whole or in part, all 20 PTAA-recommended NCP measures in the previous Part 150 Study.

Noise Abatement Measures

- 1. Evaluate Noise Barriers *
- 2. Preferred Night Runway Use **
- 3. Night Runway Use Assignments **
- Night Southbound Departure Corridor from Runway 23L **
- Night Departure Procedures from Runway 23R **
- Night Northbound Departure Corridor from Runway 23L **
- 8. Departures from Runway 05L **
- 9. Departures from Runway 05R **
- 10. Restrictions on Use of APUs
- 11. Noise Abatement Departure Profiles **
- 12. Noise Abatement Approach Procedure **
- 13. Altitude for Downwind Legs **

Land Use Measures

- Acquire Noise-Sensitive Properties where DNL Exceeds 70 dB
- 2. Sound Insulation of Noise-Sensitive Structures where DNL Exceeds 65 dB
- 3. Optional Acquisition of Avigation
 Easements for Noise-Sensitive
 Structures where DNL Exceeds 65 dB
- Other Assistance for Owners of Residential Property where DNL Exceeds 65 dB *
- 5. Pursue Compatible Use Zoning where DNL Exceeds 65 dB

Programmatic Measures

- L. Establish a Noise Monitoring Function at PTI
- Publish DNL Contours at 60 dB and Above
- Install and Operate an Aircraft Noise and Operations Monitoring System

Note: There is no Noise Abatement Measure number 7 since it was included in Noise Abatement Measure number 5 during the course of the original study.

^{** -} Approved as voluntary measures subject to traffic, weather, and airspace safety and efficiency.





^{* -} Approved for further study.

Noise Abatement (NA) Measures

- Of the 12 original NA measures, it is recommended that:
 - o Six remain as written
 - o Three be amended
 - o Three be eliminated

Original Number	Noise Abatement Measure	Amended Number	Recommended Amendment
NA-1	Evaluate Noise Barriers	NA-1	No change
NA-2	Preferred Night Runway Use	NA-2	Clarify description
NA-3	Night Runway Use Assignments		Eliminate
NA-4	Night Southbound Departure Corridor from Runway 23L	NA-3	Include northeast destinations and initiate development of an RNAV procedure
NA-5	Night Departure Procedures from Runway 23R	NA-4	Incorporate NA-3, Item 5
NA-6	Night Northbound Departure Corridor from Runway 23L		Eliminate
NA-7	Not Applicable		
NA-8	Departures from Runway 5L	NA-5	No change
NA-9	Departures from Runway 5R	NA-6	No change
NA-10	Restrictions on Use of APUs	NA-7	No change
NA-11	Noise Abatement Departure Profiles		Eliminate
NA-12	Noise Abatement Approach Procedures	NA-8	No change
NA-13	Altitude for Downwind Legs	NA-9	No change





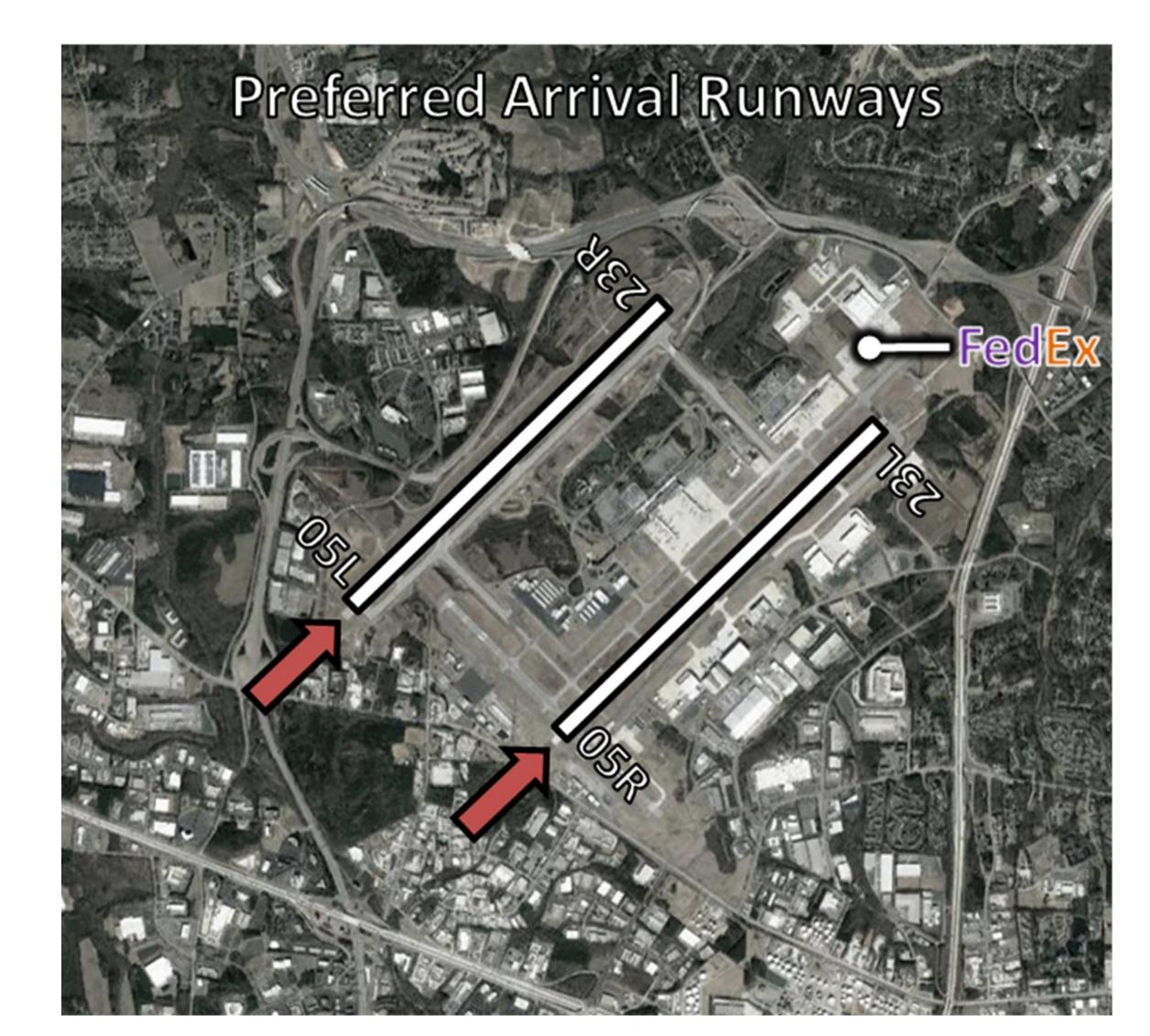
NA-2: Preferred Night Runway Use (Clarify description)

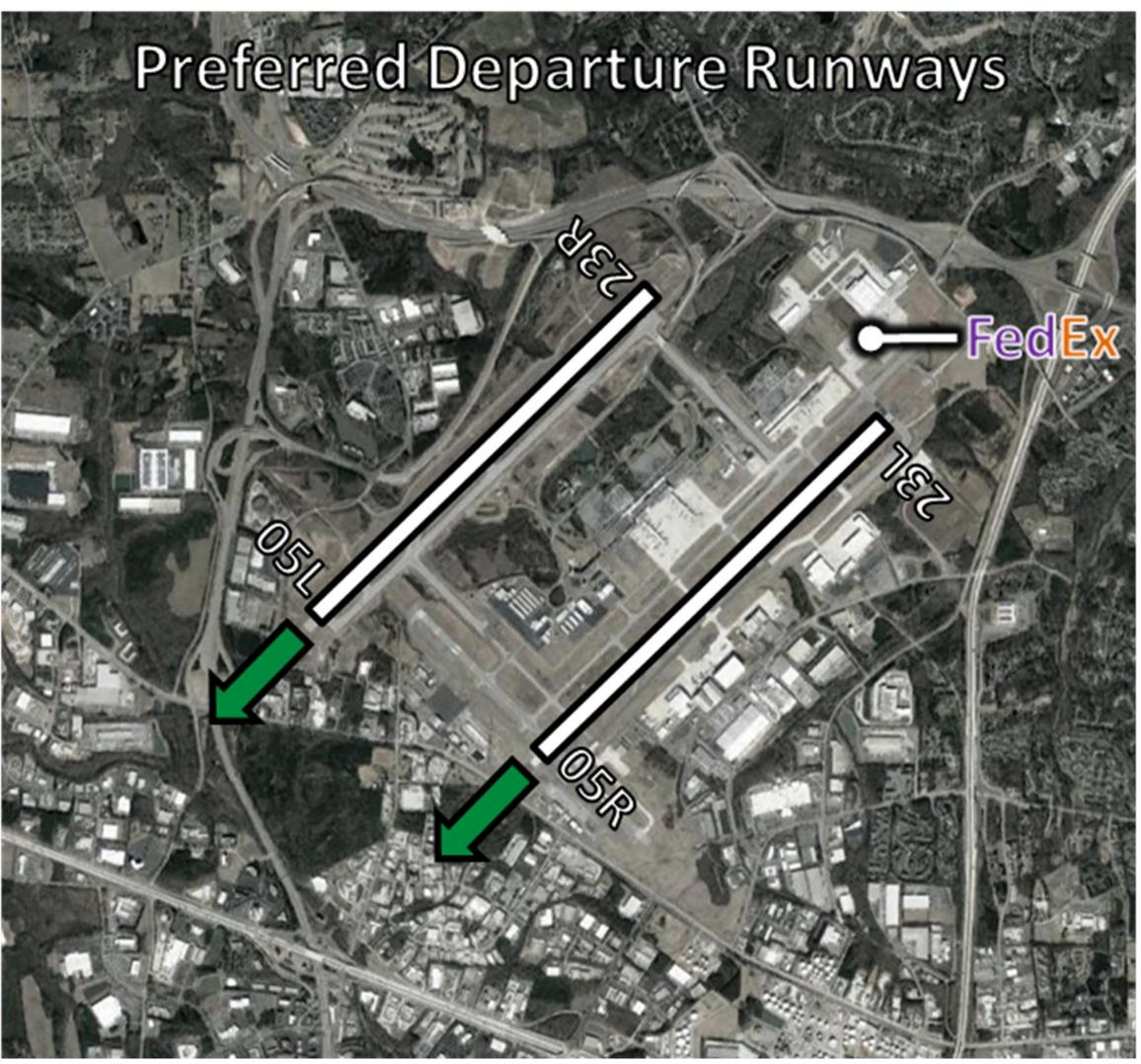
"When new runway 5L/23R is available for use during the nighttime hub operations, designate runways 23L and 23R as the preferred departure runways and runways 5L and 5R as the preferred arrival runways. ..."

• Implementation status: implemented head-to-head operations;

equal runway use for arrivals not implemented because simultaneous use of the parallel runways not required by hub activity levels

- Compliance: 75% of hub arrivals and 92% of hub departures
- Recommendation: Modify by rewording the description. The wording describing balanced use of the parallel runways will be removed to allow the tower the flexibility to assign runways at night.









NA-3: Night Runway Use Assignments (Eliminate)

"When new runway 5L/23R is available for use during the nighttime hub operations, designate the following pattern of runway use..."

- Note: the measure included six parts to differentiate between retrofitted Stage 3 aircraft and the rest of the fleet. Retrofitted Stage 3 commercial aircraft no longer operate in the U.S.
- Implementation status:
 - o Parts 1, 3 and 6 apply to retrofitted Stage 3 aircraft not applicable
 - o Parts 2 and 4 apply to simultaneous use of the parallel runways not applicable
 - Part 5 applies to aircraft departing Runway 23R will be addressed with NA-5
- Compliance: not applicable
- Recommendation: Eliminate this measure because:
 - o It has not been implemented
 - There are no retrofitted Stage 3 aircraft operating in the current US commercial fleet
 - Agreements with air carriers (described in the FAA's ROA) have not been developed; tower provides runway assignments
 - PTAA and the tower prefer to retain runway use flexibility





NA-4: Night Southbound Departure Corridor from Runway 23L (Modify description)

"... establish a new nighttime departure procedure for aircraft departing runway 23L for southern destinations so that the initial flightpath is in a southerly direction, east of and parallel to NC Highway 68. ... Aircraft may make a transition to another heading after reaching 4,000 feet MSL."

- Implementation status: implemented
- Compliance: 79% of all Runway 23L nighttime southbound departures make the initial turn; 93% of these reach 4,000 feet MSL before transitioning to another heading
- Recommendation: Modify the measure by rewording the description to include northeast destinations and development of an RNAV procedure. This will reflect how the measure was implemented by FAA. Adding an RNAV would potentially increase compliance.







NA-5: Night Departure Procedures from Runway 23R (Modify description)

NA-5: "Aircraft departing runway 23R at night and turning right shall initiate the right departure turn as soon as practicable."

NA-3, Part 5: "Aircraft departing on runway 23R and needing to make a transition to a more southerly heading should delay the transition until they have reached an altitude of 4,000 MSL"

- Implementation status: implemented (NA-5); not implemented (NA-3, Part 5)
- Compliance: 100% (NA-5); 0% (NA-3, Part 5)
- Recommendation: Modify NA-5 by incorporating NA-3, Part 5, combining all Runway 23R departure procedures in one measure.





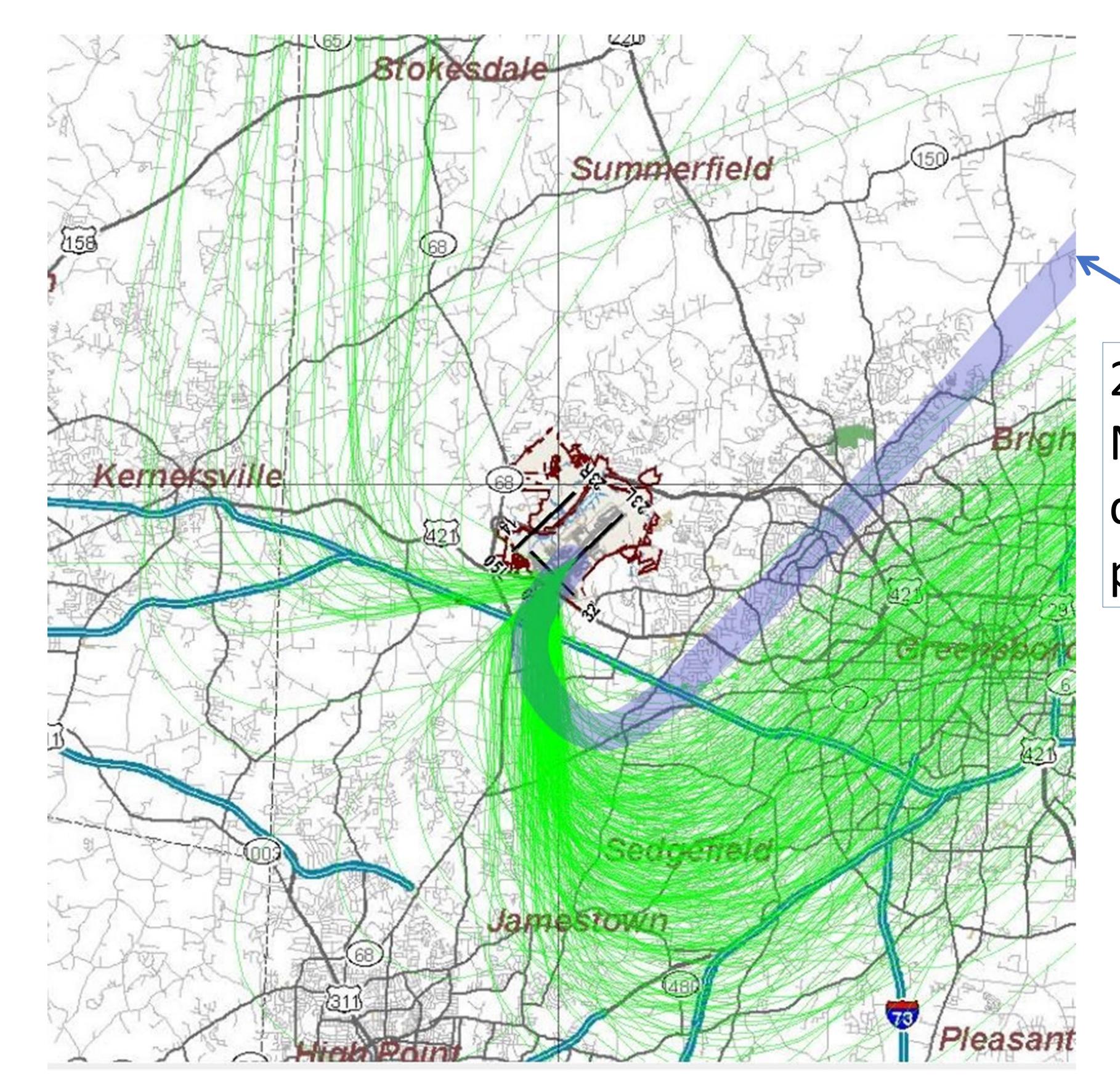


NA-6: Night Northbound Departure Corridor from Runway 23L (Eliminate)

"...establish a new nighttime departure procedure for aircraft departing from runway 23L to northern destinations to initiate a left departure turn to a northeasterly heading as soon as practicable."

- Implementation status: not implemented
- Compliance: not applicable

 Of the operations that turned left, the majority follow the initial flight path parallel to and east of NC Highway 68, as prescribed in NA-4, not executing an immediate turn to a northeasterly heading.
- Recommendation: Eliminate this measure because it has not been implemented as written. FAA incorporated the northbound Runway 23L departures into the NA-4 measure.



2007 NCP
NA-6
departure
path

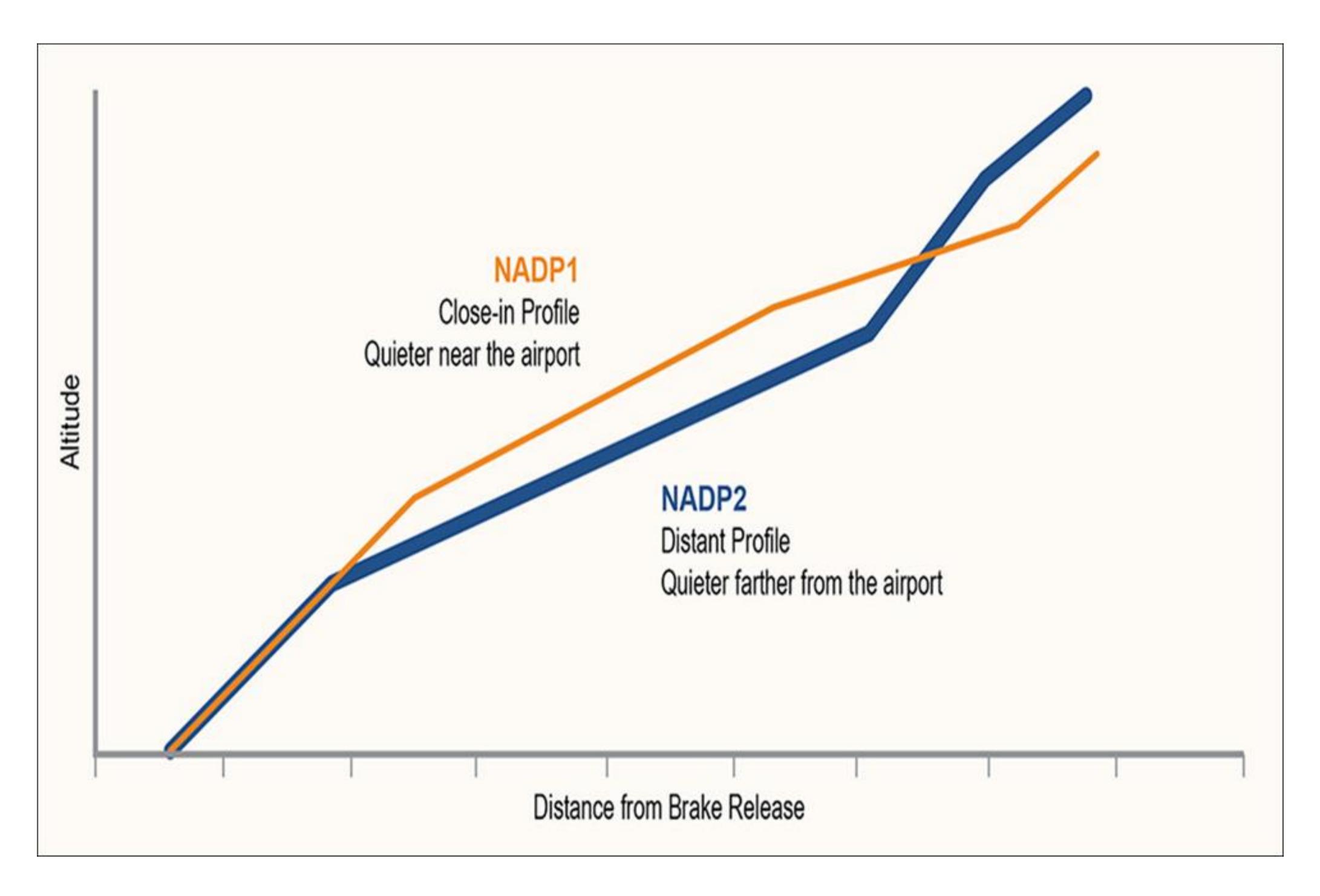




NA-11: Noise Abatement Departure Profiles (Eliminate)

"Under this measure, the Piedmont Triad Airport Authority (PTAA) designates the Close-in Noise Abatement Departure Profile (NADP) for jet departures on runways 5L and 5R beginning with the opening for use of new runway 5L/23R."

- Implementation status: not implemented; likely not as effective with the newer generation aircraft
- Compliance: not applicable
- Recommendation: Eliminate this measure because it has not been implemented, jet aircraft operators are likely using their standard departure procedures rather than the NADP-1 procedure to depart PTI, and NADP-1 is likely not as effective with the newer generation aircraft in operation at PTI today.



Source: Civil Air Navigation Services Organization and Airports Council International, "Managing the Impacts of Aviation Noise - A Guide for Airport Operators and Air Navigation Service Providers," September 2015





Land Use (LU) Measures

- Of the 5 original LU measures, it is recommended that:
 - o Four be eliminated
 - o One remain as written

Program Management (PM) Measures

- Of the 3 original PM measures, it is recommended that:
 - o All three remain as written

Original Number	Land Use Measures	Amended Number	Recommended Amendment
LU-1	Acquire Noise-Sensitive Properties where DNL Exceeds 70 dB		Eliminate as this measure is complete
LU-2	Sound Insulation of Noise-Sensitive Structures where DNL Exceeds 65 dB		Eliminate as this measure is nearly complete
LU-3	Optional Acquisition of Avigation Easements for Noise-Sensitive Structures where DNL Exceeds 65 dB		Eliminate as this measured was not required to eliminate noncompatible land use
LU-4	Other Assistance for Owners of Residential Property where DNL Exceeds 65 dB		Eliminate as this measured was not required to eliminate noncompatible land use
LU-5	Pursue Compatible Use Zoning where DNL Exceeds 65 dB	LU-1	No change

Original Number	Program Management Measures	Amended Number	Recommended Amendment
PM-1	Maintain a Noise Monitoring Function at PTI	PM-1	No change
PM-2	Publish DNL Contours for 60 DNL and Above	PM-2	No change
PM-3	Operate and Maintain an Aircraft Noise and Operations Monitoring System	PM-3	No change





LU-1: Acquire Noise-Sensitive Properties where DNL Exceeds 70 dB (Eliminate)

- Implementation status: Fully implemented and complete as required by the FAA EIS ROD
- Recommendation: Eliminate this measure because PTAA has fully implemented it and there are no residential units/noise sensitive land uses within the 2020 or 2025 70 DNL contours.

LU-2: Sound Insulation of Noise-Sensitive Structures where DNL Exceeds 65 dB (Eliminate)

- Implementation status: Fully implemented and nearly complete, as required by the FAA EIS ROD
- Recommendation: Eliminate this measure because PTAA has accepted the final grant for this program; PTAA prefers to eliminate the NCP measure under Part 150 because there are no residential units within the 2020 or 2025 65 DNL contours





LU-3: Optional Acquisition of Avigation Easements for Noise-Sensitive Structures where DNL Exceeds 65 dB (Eliminate)

- Implementation status: Not implemented
- **Recommendation:** Eliminate this measure because PTAA has not implemented it; PTAA preferred to either acquire the land or sound insulate the structures instead. There are no residential units within the 2020 or 2025 65 DNL contours.

LU-4: Other Assistance for Owners of Residential Property where DNL Exceeds 65 dB (Eliminate)

- Implementation status: Not implemented
- Recommendation: Eliminate this measure because PTAA has not studied these options further; PTAA preferred to either acquire the land or sound insulate the structures over pursuing this measure. There are no residential units within the 2020 or 2025 65 DNL contours.





Next Steps





Schedule of TAC Meetings & Public Workshops

Meeting	Date	Topic	
TAC Meeting #1	June 27, 2019	Introduction to the Part 150 process	
Public Information Workshop #1	June 27, 2019	Introduction to the Part 150 study	
TAC Meeting #2	October 2, 2019	Noise modeling inputs	
TAC Meeting #3	May 20, 2020	Noise modeling results and review of NCP measures	
TAC Meeting #4	December 3, 2020 (Today) Presentation of the Part 150 Report		
Public Information Workshop #2 and Public Hearing on NCP Amendments	December 8, 2020	Presentation of the study results and receive public comments	





Next Steps

- Public Workshop and Hearing on December 8th
 - Note: PTAA is amending the NCP no new measures needed
- Public comment period ends December 17th
- Responses to all comments received on or before December 17th will be included in the final report
- The final report to be submitted to FAA by the end of 2020
 - FAA will publish a record of acceptance of the NEMs and Report in the Federal Register
 - FAA will then have 180 days to approve or deny the PTAArecommended NCP amendments









TAC Member Discussion





Adjournment

- Thank you for your participation in this process!
- Project contacts and websites
 - Suzanne Akkoush, Project Manager Part 150 Study
 - Address emails to Part150@gsoair.org
 - o Part 150 Website (PTIPart150Update.com) provides most relevant information
 - Will be updated regularly for public outreach purposes
 - o PTAA noise information website provides broader information
 - https://flyfrompti.com/noise-information/

Thanks for participating and attending!



