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

Welcome to the Fort Lauderdale-Hollywood International Airport Public Information Workshop for the Part 150 Airport Noise Compatibility Planning Study

The Broward County Aviation Department (BCAD) welcomes and thanks you for attending this public workshop for the Part 150 Study for Fort Lauderdale-Hollywood International Airport (FLL).

BCAD is preparing a noise compatibility study for FLL in accordance with the provisions and methods prescribed in Title 14 Code of Federal Regulations Part 150, *Airport Noise Compatibility Planning*. As required by Part 150, BCAD has prepared Draft Noise Exposure Maps (NEMs) that depict the airport, its noise contours, and surrounding land uses. BCAD has made the Draft NEMs and supporting documentation available for public review and comment. After review and consideration of comments, BCAD will submit the NEMs to the Federal Aviation Administration for the agency's determination that the maps comply with applicable requirements.

Printed copies of the NEMs and NEM Report are available for review during normal business hours at the locations listed below. In addition, the NEMs and NEM Report are available for download from the project website at: http://www.fllpart150.com/resources/.

- **BCAD Administration Office**: 2200 SW 45th Street, Suite 101; Dania Beach, Florida 33312
- **Dania Beach-Paul DeMaio Library:** 1 Park Avenue East, Dania Beach, Florida 33004
- **West Regional Library:** 8601 W Broward Boulevard, Plantation, Florida 33324
- **Davie/Cooper City Branch Library:** 4600 SW 82nd Avenue, Davie, Florida 33328
- **Southwest Regional Library:** 16835 Sheridan Street, Fort Lauderdale, Florida, 33331
- **Riverland Branch Library:** 2710 W Davie Boulevard, Fort Lauderdale, Florida 33312

The workshop is an "open house" format and there will be no formal presentation. This will provide attendees with the maximum opportunity for one-on-one interaction and sharing of information and concerns. Topics include the Part 150 Study process, project schedule, and the next phase of the Study (the Noise Compatibility Program).

The following pages of this handout will guide you through each of the five stations available at tonight's workshop. We encourage you to visit each station and review the materials provided. Members of the study team are available to answer any questions you have.

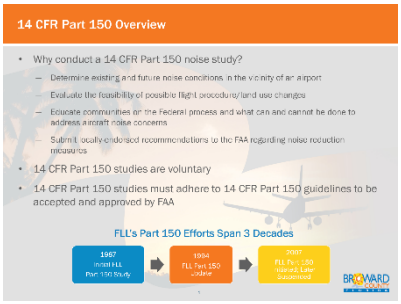
Comment forms are available at the workshop for those that wish to submit comments in writing and a court reporter is available for those that wish to submit comments verbally.

STATION 1: THE PART 150 STUDY PROCESS

This station will guide you through the study process prescribed by 14 CFR Part 150, the federal regulation that establishes the methodology to be followed when determining aircraft noise exposure and developing a program to ensure the compatibility of surrounding land uses with the anticipated noise exposure.

Summary of Presentation Boards at Station 1:

1. 14 CFR Part 150 Overview
2. Why Conduct a 14 CFR Part 150 Study
3. Key Issues for this Part 150 Study
4. Additional Part 150 Study Information
5. Regulatory Framework
6. Phases of a Part 150 Study
7. General Study Process
8. 14 CFR Part 150 Terminology

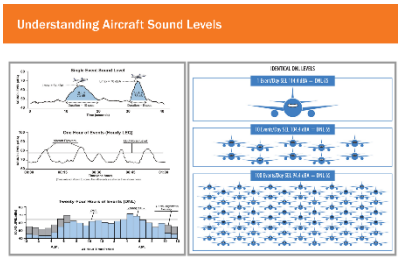


STATION 2: UNDERSTANDING NOISE AND SOUND LEVEL METRICS

Station 2 contains boards that explain the science behind acoustics and the various sound level metric used in a Part 150 Study (day-night average sound level (DNL)). It also provides information regarding various land uses and noise sensitive sites.

Summary of Presentation Boards at Station 2:

1. Aircraft Noise Compatibility Guidelines – Compatible land use
2. Day-Night Average Sound Level (DNL)
3. Understanding Aircraft Sound Levels

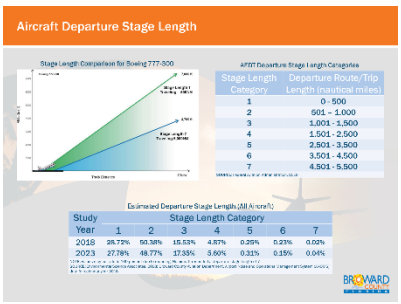


STATION 3: NOISE MODELING

This Station provides an introduction to the noise modeling process used in Part 150 studies including the data requirements and collection process. This study details modeling inputs such as annual aircraft operations and runway utilization for 2018 and 2023.

Summary of Presentation Boards at Station 3:

1. Noise Modeling
2. Model Inputs
3. Estimated Annual Aircraft Operations for 2018 and 2023
4. Aircraft Departure Stage Length
5. Runway Use Arrivals and Departures
6. Flight Tracks

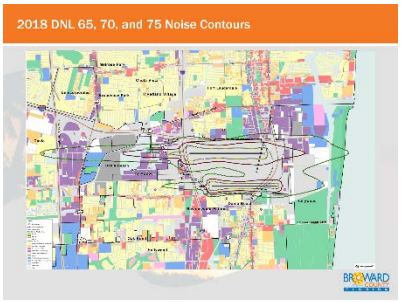


STATION 4: NOISE MODELING RESULTS

Station 4 provides the estimated noise exposure that would take place in the Part 150 Study Years, 2018 and 2023. The results provide DNL 65, 70, and 75 noise contour lines and estimated noise exposure.

Summary of Presentation Boards at Station 4:

1. 2018 DNL 65, 70, and 75 Noise Contours
2. Noise Exposure within the 2018 DNL 65, 70, and 75 Contours
3. 2023 DNL 65, 70, and 75 Noise Contours
4. Noise Exposure within the 2023 DNL 65, 70, and 75 Contours
5. 2018 and 2023 Noise Contours with Sound Insulation Program
6. Comparison of 2018 and 2023 Noise Exposure

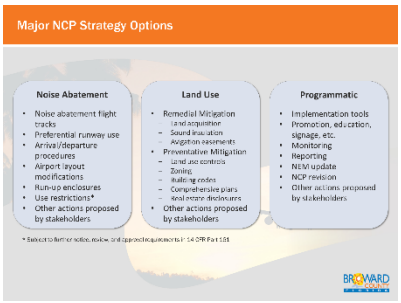


STATION 5: Noise Compatibility Program and Schedule

This Station provides the next steps to take place for the Noise Compatibility Program. The FAA is incorporated in many areas during these stages. Taking everything into consideration there is a project schedule in place to finish around Spring 2020

Summary of Presentation Boards at Station 5:

1. Required Elements of a Noise Compatibility Program (NCP)
2. Distinction Between Noise Abatement and Noise Mitigation
3. Major NCP Strategy Options
4. Review of NCP Measures
5. Project Schedule



Thank you for attending this workshop.
You may provide written comments during this public workshop
via the available comment forms, or you can submit comments by mail
to the following address:

Aviation Department
C/O FLL Part 150 Study
2200 SW 45th Street, Suite 101
Dania Beach, FL 33312

Please provide comments by January23, 2019.
Part 150 Study updates are provided on the Project Website at
www.fllpart150study.com

Thank You for Your Participation!

Frequently Asked Questions

What is a 14 CFR Part 150 Study?
The Federal Aviation Administration (FAA) issued Title 14 Code of Federal Regulations (CFR) Part 150, *Airport Noise Compatibility Planning*, in January 1985. 14 CFR Part 150 provides airport operators with a formal process for addressing airport noise and noncompatible land uses. A "noncompatible land use" is a land use exposed to aircraft noise in excess of the thresholds established in 14 CFR Part 150. Part 150 studies are voluntary; typically prepared by airports interested in improving compatibility with local communities.

Why is Broward County preparing a Part 150 Study for Fort Lauderdale-Hollywood International Airport (FLL)?
Airport operations have changed since the last Part 150 Study Update; in particular, Runway 10R/28L has been expanded to serve larger aircraft. These changes warrant updates to the airport noise maps and noise compatibility program

What does the FLL Part 150 Study provide?
The FLL Part 150 Study Noise Exposure Map (NEM) Report shows existing (year 2018) and future (2023) aircraft sound exposure levels. The Report also explains how these levels were determined. A Final NEM Report will be submitted to the FAA, and the FAA will review and accept NEMs, in accordance with the regulations. After the FLL NEMs are completed, the Noise Compatibility Program (NCP) process is initiated. An NCP includes measures for addressing noncompatible land uses. Measures may involve sound insulation, zoning, changes in aircraft operations, and other topics. The FAA must review each measure in the NCP. Measures approved by the FAA may be eligible for federal funding.

What is DNL?
"DNL" stands for Day-Night Average Sound Level. DNL is an average of sound levels that occur in a 24-hour period, expressed in decibels (dB). Sound events that happen between 10 P.M. and 7 A.M. receive an additional weight of 10 dB. The additional 10 db weight means that every nighttime sound event is counted the same as 10 daytime events. This extra weight represents the greater annoyance that nighttime sounds typically cause for most people.

How are sound levels and exposure determined?
The FAA's Aviation Environmental Design Tool (AEDT) is a computer model that calculates aircraft sound levels. AEDT uses data on flight paths, aircraft types, numbers of operations, and other factors. To determine sound exposure for this Part 150 Study, AEDT calculated DNL values for the years 2018 and 2023.

What is a noncompatible land use?
A noncompatible land use means that the sound exposure is normally not compatible because the DNL is above the levels identified in Part 150, Appendix A, Table 1. The thresholds for land use compatibility vary depending on the use of the land. For example, the threshold for residential land use is DNL 65; but the threshold is DNL 70 for commercial land use (offices, business and professional buildings).

Why is my property considered compatible when I am bothered by the noise?
While a single overflight may be annoying, DNL reflects the cumulative noise exposure resulting from a series of events for the purposes of determining what land uses are compatible with a given level of noise exposure. The DNL 65 contour is the federally-accepted level at which residential and other noise sensitive land uses are considered non-compatible with aircraft noise. The compatibility of various land uses with noise above DNL 65 dB has been based on scientific research concerning public reaction to noise exposure.

Annoyance is difficult to describe because it can vary widely between individuals. What one person considers tolerable may be unbearable to someone else. How much someone is annoyed also depends on numerous characteristics such as how often the sound is heard, and how long the sound lasts, the time of day, and what the person was doing when the sound was heard (e.g., sleep interruption causes greater annoyance). As a cumulative measure that factors in time of day, DNL represents a combination these considerations for the purposes of determining compatibility. Improving compatibility, thereby reducing annoyance, is the primary focus of a Part 150 Study.