



14 CFR Part 150 Airport Noise and Land Use Compatibility Study Lantana Airport (LNA) 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 1985. [14 CFR Part 150](#) describes a formal process for airport operators to address airport noise and noncompatible land uses. The regulation establishes thresholds for aircraft noise and designates compatible and noncompatible land uses. Noncompatible land use is defined as certain categories of land use exposed to noise in excess of the threshold set by 14 CFR Part 150. Appendix A, Table 1 of 14 CFR Part 150 lists the noise thresholds for various categories of land uses, and the thresholds vary depending on the type of land use (for example the threshold for residential uses and schools is lower than the threshold for industrial uses).

The two main components of a Part 150 Study include the development of a Noise Exposure Map (NEM) and a Noise Compatibility Program (NCP). Part 150 studies are voluntary and allow airports to apply for federal funding for noise mitigation, abatement and management measures included in an FAA-approved NCP.

The Part 150 Study is a noise study only – it does not include consideration of other environmental impacts such as air quality, nor does it address safety issues.

Why is the Palm Beach County Department of Airports (PBCDOA) undertaking a Part 150 Study?

The PBCDOA strives to be a good neighbor to the communities surrounding its airports, including Lantana Airport. The PBCDOA is undertaking this study to develop an accurate NEM that reflects current and future airport operations, to communicate noise levels to the surrounding communities, and collaboratively develop noise mitigation, abatement and management measures through an NCP.

Who is doing the study?

The PBCDOA is the sponsor of the study and has contracted with the aviation noise and environmental firm Harris Miller Miller and Hanson Inc. (HMMH) to conduct the study. The study team is led by HMMH and includes noise and community engagement experts working closely with PBCDOA staff.

What will be the outcome of the LNA Part 150 Study?

The study will produce two reports: The Noise Exposure Map (NEM) and the Noise Compatibility Program (NCP). The Lantana Airport NEM will depict existing (2021) aircraft sound exposure levels (called noise contours) and a five-year forecast (2026) set of contours. The NEM Report will include an explanation of how the levels / contours were developed. After a public comment period (including a Public Workshop), the NEM will be submitted to the FAA. The FAA reviews the NEM Report and accepts it in accordance with 14 CFR Part 150 regulations.

While the FAA reviews the NEM, the study team will begin development of the NCP. The NCP includes measures for addressing noncompatible land uses around the airport. The NCP may include measures to mitigate, abate, or manage noise – for example sound insulating structures, zoning, changes in aircraft operations, modifications to flight procedures, and other measures. These measures will be evaluated by the study team, the Technical Advisory Committee and the Community Advisory Committee. After a public comment period (including a Public Workshop and Hearing) on the draft NCP, it will be submitted to the FAA for review. The FAA will evaluate and review each measure in the NCP and either approve or disapprove the measures for the purposes of Part 150. FAA approved measures may be eligible for federal funding to be implemented.

How is the study funded?

The FAA provided funding for the study from an Airport Improvement Program (AIP) grant. The AIP grants come from the [Airport and Airway Trust Fund](#). The Trust Fund was established by Congress in 1970 to provide a dedicated funding source for the U.S. aviation system, and it helps finance the FAA's investment in the nation's airports and airways. The Trust Fund receives funding from taxes on aviation fuel and on commercial airline tickets. The LNA Part 150 Study is not funded with local taxpayer dollars.

How is noise exposure quantified?

The FAA requires the use of the noise metric Day-Night Average Sound Level (DNL) to quantify noise exposure. DNL uses an average number of operations over a 24-hour period based on one year of aircraft operations data. The sound levels are then averaged (with nighttime noise weighted with an additional 10 decibels [dB]). Nighttime operations are weighted to represent the greater sensitivity for most people by nighttime sounds.

How is noise exposure determined for the study?

The Part 150 regulations require the use of a computer model to determine noise exposure, specifically the FAA-developed Aviation Environmental Design Tool (AEDT) model. This model allows the calculation of noise exposure at many points around the airport and determines future predicted noise levels based on anticipated changes in aircraft activity. AEDT uses data on flight paths, aircraft fleet information, number and type of operations to determine noise exposure and develop contour maps.



Will actual noise measurements be taken, and how will that data be used?

The study team will take actual noise measures from several locations around the airport. While the noise measurements will not be used to develop or adjust the noise contours, they will be used to compare to the results of the modeling and to provide the public with information regarding actual noise levels experienced on the ground. The measurements will take place during two time periods during the study.

Why is DNL used to develop noise contours rather than the sound level I hear when planes are overhead?

The FAA requires the Noise Exposure Map noise contours to be based on DNL, and for DNL to be used to assess land use compatibility. The advantage of DNL is that it reflects cumulative noise exposure and not just the noise level at a specific moment in time.

How are the Temporary Flight Restrictions (TFRs) during Presidential visits factored into the Study?

The Noise Exposure Maps for the Study are developed using the FAA's AEDT model, which uses flight paths, aircraft fleet information, and the number and type of operations and forecasted future demand to determine future exposure levels. Because TFRs are temporary, unpredictable events, they are not factored into the noise model to develop future exposure level forecasts.

Will the Lantana Airport Voluntary Noise Abatement Procedures be revised as a result of the Study?

During the Noise Compatibility Program development, the Study team will (with input from the Technical and Community Advisory Committees) consider options to manage and mitigate noise including evaluating the [existing Voluntary Noise Abatement Procedures](#) for potential revisions. Such procedures will be evaluated on the likelihood that they will reduce noncompatible land use and on the operational capabilities of aircraft using the airport.

Will the airport be expanded as a result of the study?

No, airport expansion is not considered during the Part 150 Study. Future development needs are based on activity levels and forecasted future demand, as described in the Lantana Airport Master Plan documents posted here: <http://www.pbia.org/business/master-plans/>. According to the ongoing Master Plan update forecast, airport activity has been growing at an annual rate of approximately 1.8%, and the airfield is not expected to reach capacity during the planning horizon. Therefore, expansion of airport capacity is not considered in the Master Plan 2019 update.

How long will the study take?

The Study kicked off in late 2019 and is anticipated to take two years to complete (in mid-late 2021). This timeline is necessary to gather and analyze data, collect public input and allow time for FAA review and approval processes.



Will the public have input?

Public engagement is a critical component to the Part 150 Study process. The study team has established two committees to provide input into the study, the Technical Advisory Committee (TAC) and the Community Advisory Committee (CAC). The TAC is comprised of airport users, operators, jurisdictions with land-use authority around the airport, and other stakeholders (including representatives from the CAC). The CAC is comprised of residents from the towns, communities and other organizations (for example Palm Beach State College) surrounding the airport. The FAA serves in an advisory capacity to the TAC. The TAC and CAC will each meet six times during the study to receive updates and provide input into the NEM and NCP. All CAC and TAC meetings are open to the public and will be announced in advance in the local newspaper and on the Study website at www.LNAPart150.com/LNAPart150. In addition, there will be a public comment period for draft NEM and NCP report, a public workshop for the NEM and a public workshop and hearing for the NCP. The workshops will provide an opportunity for members of the public to learn about the NEM and NCP and the NCP hearing will allow the public to provide official comments for the record.

Comment forms for the study are available on the Part 150 study website and can be submitted at any time during the course of the study. Each NEM and NCP report will document all comments received by the public.

How do I submit a noise complaint?

You can fill out a form on the PBCDOA's noise website here: <http://www.pbia.org/guide/-contact-us-noise-comments/> , call the noise office at (561) 471-7468 or write the Noise Office at:

Noise Comments
Department of Airports
846 Palm Beach International Airport
West Palm Beach, FL 33406

Want more information or have a comment on the Part 150 Study?

Specific information on the LNA Part 150 Study can be found on the Study's website at: www.LNAPart150.com/LNAPart150, and questions and comments can be emailed at any time to LNAPart150@hmmh.com.

