



# Welcome!

TAMPA INTERNATIONAL AIRPORT  
PART 150 NOISE EXPOSURE MAP UPDATE  
KICK-OFF PUBLIC WORKSHOPS

# Presentation Summary

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- Tampa International Airport (TPA) Overview
- 14 CFR Part 150 Overview
- Day-Night Average Sound Level (DNL)
- Land Use Compatibility
- DNL Contour Example
- Noise Modeling
- Existing Noise Program at TPA
- Stakeholder Outreach
- Project Schedule
- Official Public Comment



# TPA Overview

- TPA covers 3,300 acres at an elevation of 26 feet
- Consists of three runways:
  - Runway 1L/19R - 11,002' long by 150' wide
  - Runway 1R/19L - 8,300' long by 150' wide
  - Runway 10/28 - 6,999' long by 150' wide
- TPA is served by approximately 20 different airlines flying to more than 70 domestic and international destinations
- Amazon, FedEx, and UPS are the primary cargo carriers operating at TPA
- Air travel has decreased in 2020 due to COVID-19



# TPA Overview



Florida Department of Transportation (FDOT) estimates that TPA supports 80,000 direct and indirect jobs in the Tampa area



TPA served 217,502 operations and approximately 22.4 million passengers in 2019

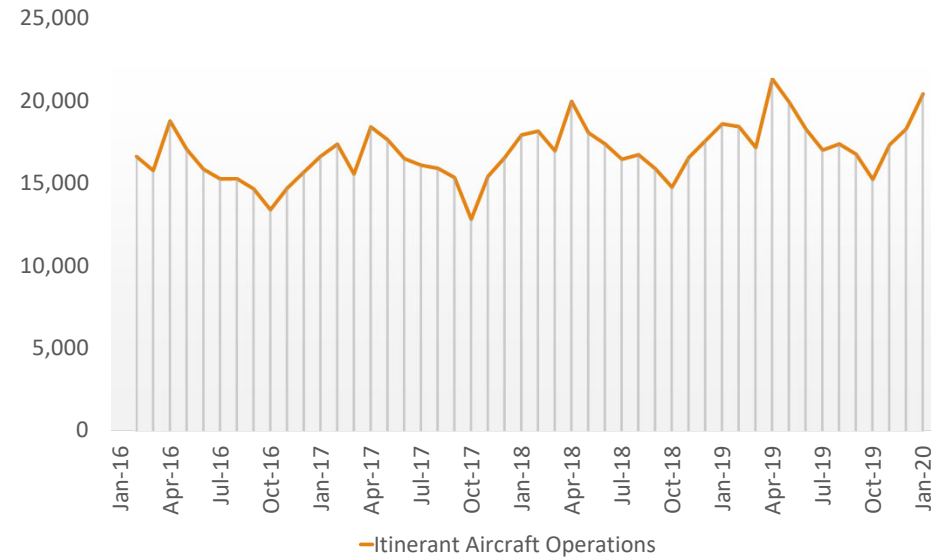


FDOT estimates that TPA has an economic impact of \$14.45 billion



Over 200,000 tons of cargo activity at TPA in 2018

### Monthly Activity Profile



# 14 CFR Part 150 Overview

- The Part 150 process is an Airport Sponsor's official mechanism to understand and improve land use compatibility
- Establishes methodology to prepare aircraft Noise Exposure Maps (NEMs) and Noise Compatibility Programs (NCPs)
- Noise studies must adhere to 14 CFR Part 150 guidelines to be accepted or approved by FAA
- Why conduct a Part 150 noise study?
  - Determine existing and future noise around an airport
  - Evaluate flight procedure/land use changes
  - Educate stakeholders about the process and what can and cannot be done to address aircraft noise concerns

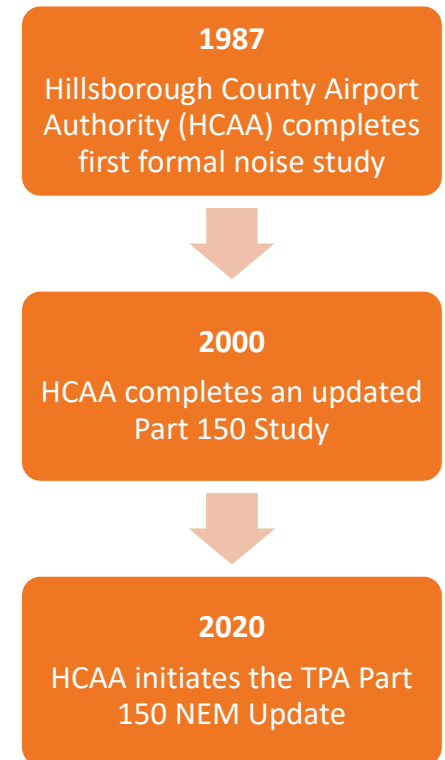


This Part 150 study involves an update to the TPA Part 150 Noise Exposure Maps

# 14 CFR Part 150 Overview

## Key Considerations for this Part 150 NEM Update

- Aircraft technology has improved and aircraft are quieter; however, noise concerns continue
- Existing NEMs are nearly 20 years old
- Increased nighttime cargo operations since the 2000 Part 150 Study; likely to decrease once Amazon moves its cargo operations from TPA to Lakeland Linder in 2021
- Aircraft upgauging (utilizing larger aircraft) has offset the increase in passenger activity, but larger aircraft are perceived as flying lower, which raises community concerns
- Community concerns related to air emissions, soot, oily substances, fuel, safety, and health impacts are often contributing factors to concerns about noise, but are outside of the Part 150 Study process



# 14 CFR Part 150 Overview

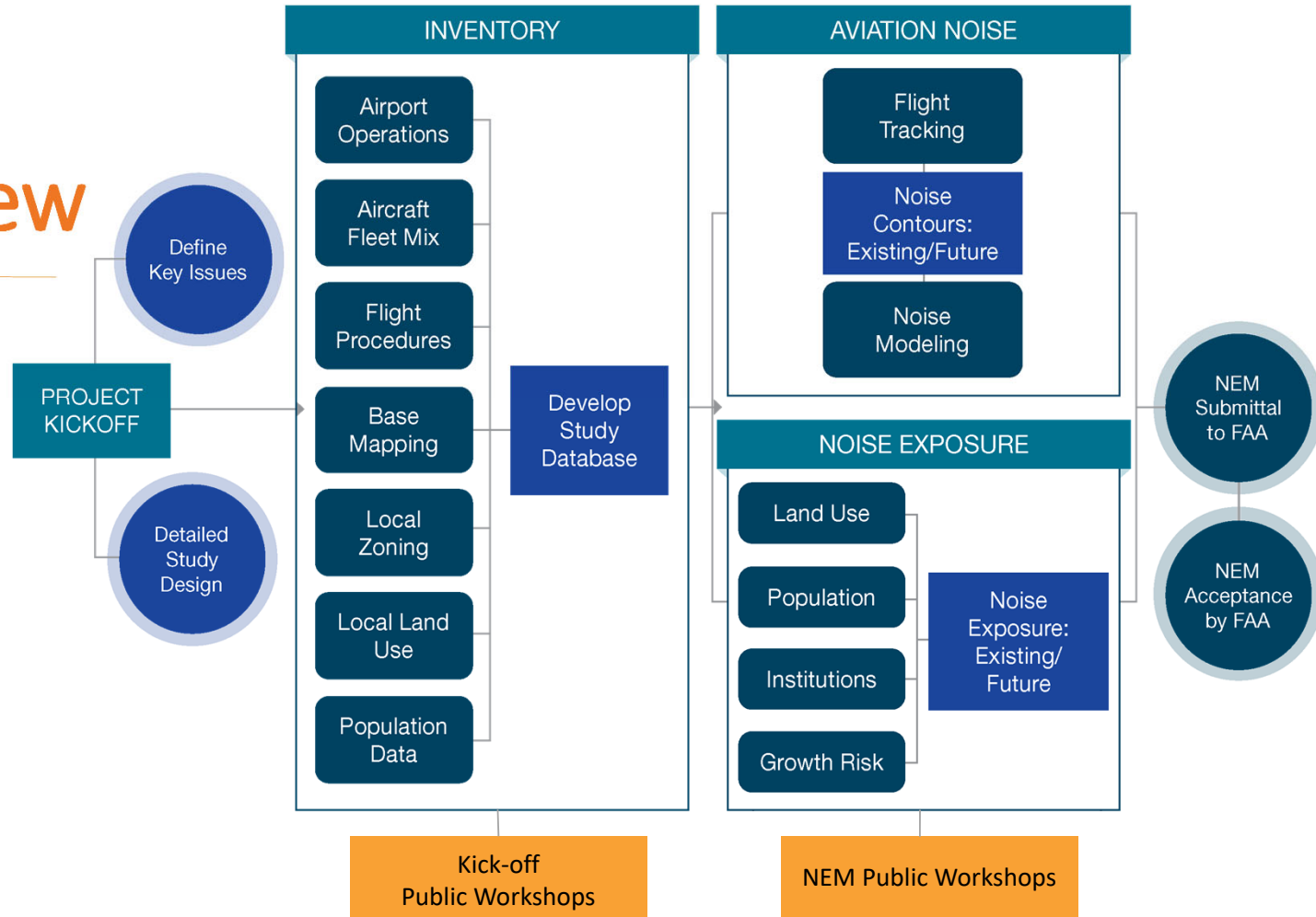
## Regulatory Framework

- Federal law sets aircraft noise standards, operating rules, the compatibility planning process, and limits an airport's ability to restrict aircraft operations
- State law sets forth zoning compatibility planning guidelines
- Local noise ordinances set noise standards, but aircraft are exempt

## Who Can Regulate Airport Noise?

- Federal Aviation Administration
  - Controls aircraft while in flight
  - Controls noise at its source (i.e., aircraft engines)
  - Certifies aircraft and pilots
- Airport Proprietors/HCAA
  - Very limited authority to adopt local restrictions
  - Responsible for airport infrastructure
- Local Governments and States
  - Promote compatible land use through zoning
  - Require real estate disclosure
  - Mandate sound-insulating building materials

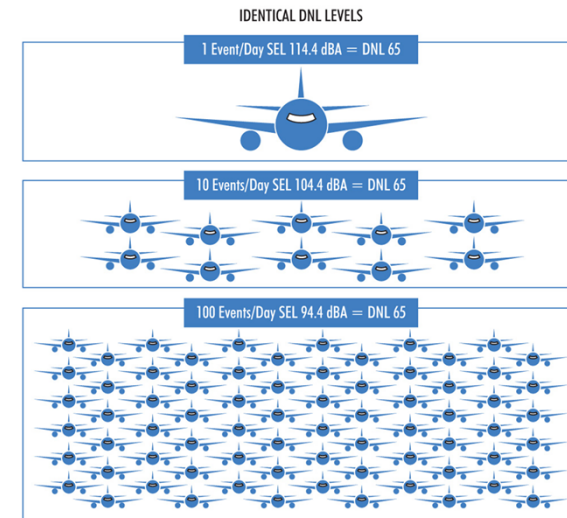
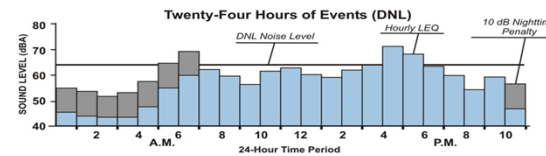
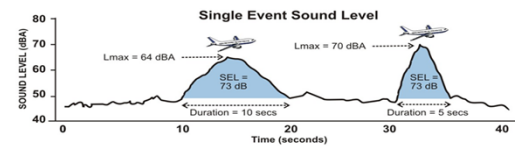
# 14 CFR Part 150 Overview





# Day-Night Average Sound Level (DNL)

- 24-hour time weighted energy average noise level based on A-weighted decibels (dBA)
- Noise occurring between 10 p.m. to 7 a.m. is adjusted by 10 dB to account for the higher sensitivity to noise during nighttime hours
- Average Annual Day aircraft noise exposure is calculated over a broad area and then depicted using contour lines of equal noise levels
- FAA requires the use of DNL for all airport noise assessments and environmental studies conducted nationally



# Land Use Compatibility

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Table 1 in Appendix A of 14 CFR Part 150 provides regulatory guidelines for noise and land use compatibility

Deems levels below DNL 65 to be compatible with all land uses

Allows for the adoption of appropriate local land use standards for land use compatibility planning purposes

**The 14 CFR Part 150 process is the Airport's mechanism to improve the compatibility between the Airport and surrounding communities**

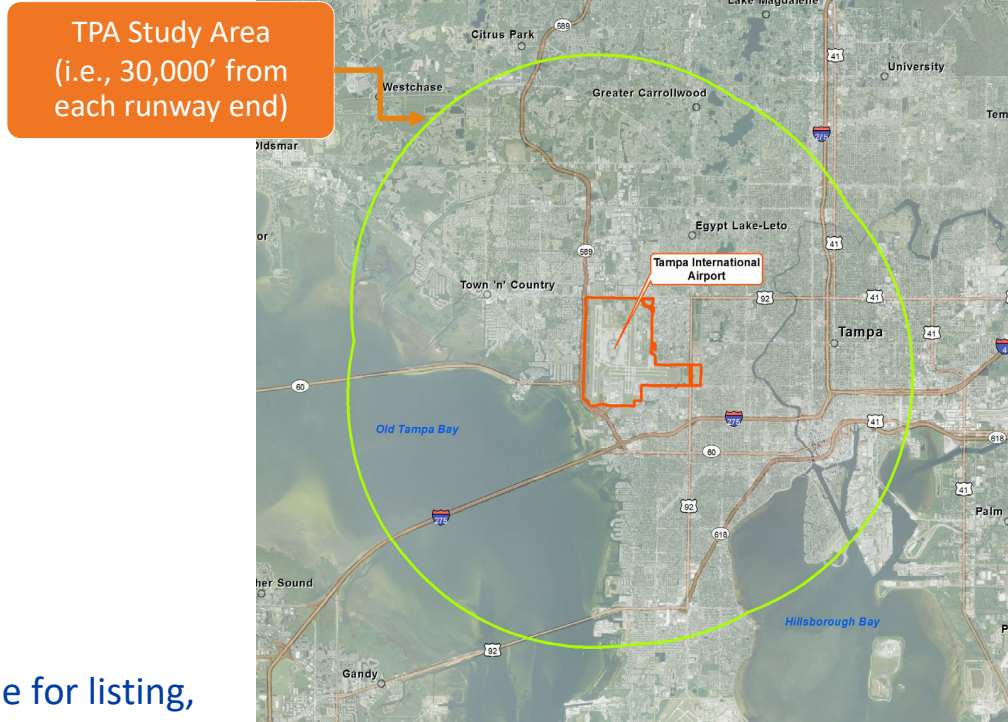
# Land Use Compatibility

## Existing and Future Land Uses

- Parcel data (if different from land use)
- Zoning
- Jurisdictional boundaries and neighborhoods

## Noise Sensitive Uses

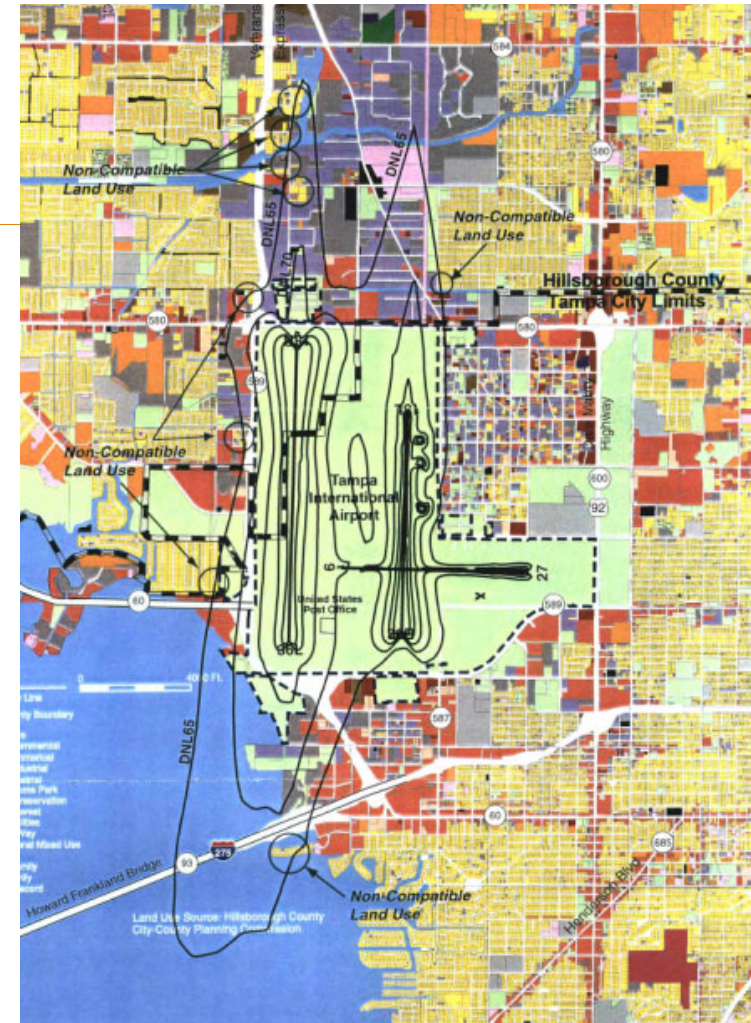
- Residential
- Places of worship
- Schools, colleges and universities
- Libraries/cultural institutions
- Hospitals and residential healthcare facilities
- Daycare and assisted living facilities
- Historic properties (i.e., properties listed, or eligible for listing, in the National Register of Historic Places)



# DNL Noise Contour Example

## Official Noise Exposure Maps for TPA

- Base year (existing condition) and future conditions 5 years in the future
- Year of submittal must be consistent with base year
- Existing Condition: 2021
- Future Condition: 2026
- Existing Condition based on recent 12 months of operational data applied to 2021 projected activity level



# Modeling

## Noise Modeling

- Aircraft noise modeling allows:
  - Calculation of noise exposure at any point
  - Depicting annual average aircraft noise exposure
  - Predicting future aircraft noise exposure
  - Assessing changes in fleet mix and/or operations
  - Evaluating operational procedures
  - FAA's Aviation Environmental Design Tool (AEDT) Version 3C will be used for the Part 150 Study



## Model Inputs

- The Amount of Noise Exposure is determined by:
  - Aircraft types
  - Stage length
  - Number of average annual day operations
  - Nighttime weighting (1 nighttime operation is equivalent to 10 daytime operations)
- The Noise Exposure Distribution is determined by:
  - Runway configuration and use
  - Flight track locations
  - Flight track use
- Other Factors
  - Meteorological conditions



# Existing Noise Program

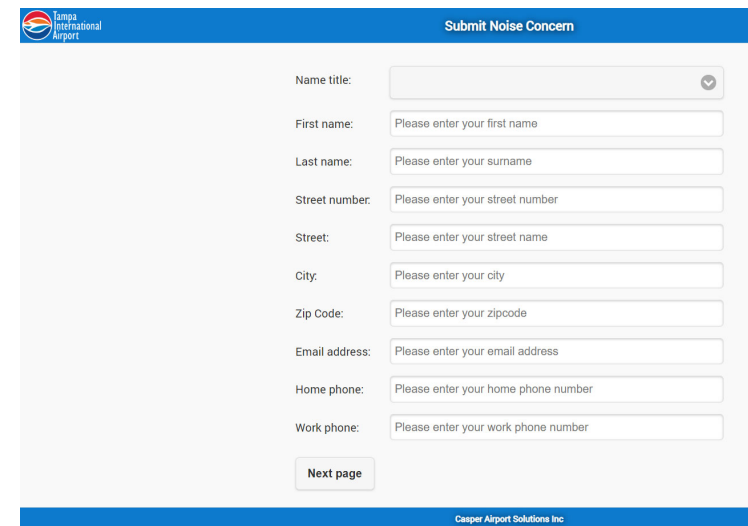
## Voluntary Noise Abatement Program Measures

- To reduce noise from jet aircraft:
  - South operations depart 19R preferred
  - North operations arrive 1L preferred
- Prevent overflight of residential areas – jet aircraft are vectored south of MacDill’s Runway 4
- Initial headings for jet aircraft: 1L/1R: 360°, 19R: 200°, 19L: 210°, 28: 280°, and 10: 100°
- Turboprop aircraft:
  - Departing 1L/1R not permitted to turn more than 20-degrees from the runway heading (7 p.m.–7 a.m.) until 3NM
  - Corporate jet departures may depart 19L at any time, emulating 19R departure path
- Staffing of an airport noise office
- Bi-monthly Community Noise Forum meetings and a “Noise Abatement 101” presentation
- Regular meetings with homeowner’s associations, airlines, fixed based operators (FBOs), and private jet operators

HCAA has a comprehensive and proactive noise management program with very high compliance

# Existing Noise Program

- Meetings with other airport noise offices on best management practices
- Handouts for FBOs and pilots about the program
- Publicly released monthly Noise Monitoring Office Report and monthly Community Noise Monitoring Report
- Review and categorization of every deviation from the preferential runway use program
- Reporting of program (runway use) deviation information on TPA's website daily
- Airport noise monitoring system and flight tracking website
- Online noise complaint portal
- Website updates containing scheduled runway closure information



The screenshot shows a web form titled "Submit Noise Concern" with the Tampa International Airport logo in the top left corner. The form contains the following fields:

- Name title: A dropdown menu with a downward arrow.
- First name: A text input field with the placeholder "Please enter your first name".
- Last name: A text input field with the placeholder "Please enter your surname".
- Street number: A text input field with the placeholder "Please enter your street number".
- Street: A text input field with the placeholder "Please enter your street name".
- City: A text input field with the placeholder "Please enter your city".
- Zip Code: A text input field with the placeholder "Please enter your zipcode".
- Email address: A text input field with the placeholder "Please enter your email address".
- Home phone: A text input field with the placeholder "Please enter your home phone number".
- Work phone: A text input field with the placeholder "Please enter your work phone number".

A "Next page" button is located below the "Work phone" field. At the bottom of the form, the text "Casper Airport Solutions Inc" is visible.

# Stakeholder Outreach

## Public Outreach

### Initial Public Workshops

October 5-8, 2020

(Three workshops: Two virtual and one in-person by appointment)

### Community Noise Forum Presentation

TBD

(Four briefings)

### Small Community Meetings

TBD

(Four meetings)

### Draft NEM Report Public Workshop

TBD

(Four workshops)

*At key points during the project, newsletters will provide updates on study progress, and will be posted on the project website:*

***[www.tampaairport.com/part-150-study](http://www.tampaairport.com/part-150-study)***

HCAA will also host additional outreach to provide future opportunities for input. HCAA encourages all interested parties to monitor the project website for the latest study information and announcements.



To maintain public safety, HCAA will be holding public workshops according to guidelines issued by the CDC.

# Project Schedule\*

- Fall 2020 - Develop Noise Contours
- Spring 2021 – Complete Draft NEM Report and Public Outreach
- Spring 2021 – Respond to Comments on Draft NEM Report
- Late Spring 2021 – Complete Final Draft NEM Report
- Summer 2021 – FAA Completes Review
- Summer 2021 – Complete Final NEM Report
- Late Summer 2021 – FAA Acceptance of NEM Report

*\*Project Schedule Subject to Change*

HCAA encourages interested parties to use the project website for project updates, study announcements, and educational material

Project Website

[www.tampaairport.com  
/part-150-study](http://www.tampaairport.com/part-150-study)

# How to Provide Official Public Comments

Questions submitted via the Q&A feature are not considered official public comments. If you would like to submit an official comment, please send your written comments by email to

[AirportMeeting@qcausa.com](mailto:AirportMeeting@qcausa.com) or by mail to:

Tampa International Airport  
C/O Part 150 Study - Airport Operations  
PO Box 22287  
Tampa, FL 34622

Please submit your comments by 5PM on October 16, 2020.

## Thank You for Your Participation!