

WELCOME
to the
NOISE COMPATIBILITY PROGRAM UPDATE
Public Information Meeting

March 16, 2022

- Introductions
- Part 150 Overview
- Existing Noise Exposure Map (NEM)
- Land Use Compatibility Guidelines
- Existing Noise Compatibility Program (NCP)





Diane Carter, Principal-in-Charge
Brianna Whiteman, Assistant Project Manager
Christina Mastrantonio, Consultant

Responsible for:

- Overall Project Management/Client/Agency Coordination
- Community Outreach
- Land Use Measures
- Noise Implementation Plan



Gene Reindel, Principal-in-Charge
Kate Larson, Project Manager
Dominic Scarano, Assistant Project Manager

Responsible for:

- Operational and Administrative Measures
- NCP Documentation
- Compliance with Federal Regulations

- Westfield-Barnes Regional Airport (BAF)
- Westfield Airport Commission
- City of Westfield
- Town of Southampton
- Army Aviation Support Facility (AASF)
- Air National Guard (ANG)
- Ross Aviation
- MassDOT Aeronautics
- Federal Aviation Administration (FAA) - *advisory*

City of Westfield

- As airport owner and operator, the City is responsible for conducting the Noise Compatibility Program (NCP) analysis, submitting the study for approval, and implementing approved measures
- Consulting team is retained to conduct technical work and prepare documentation related to the NCP process

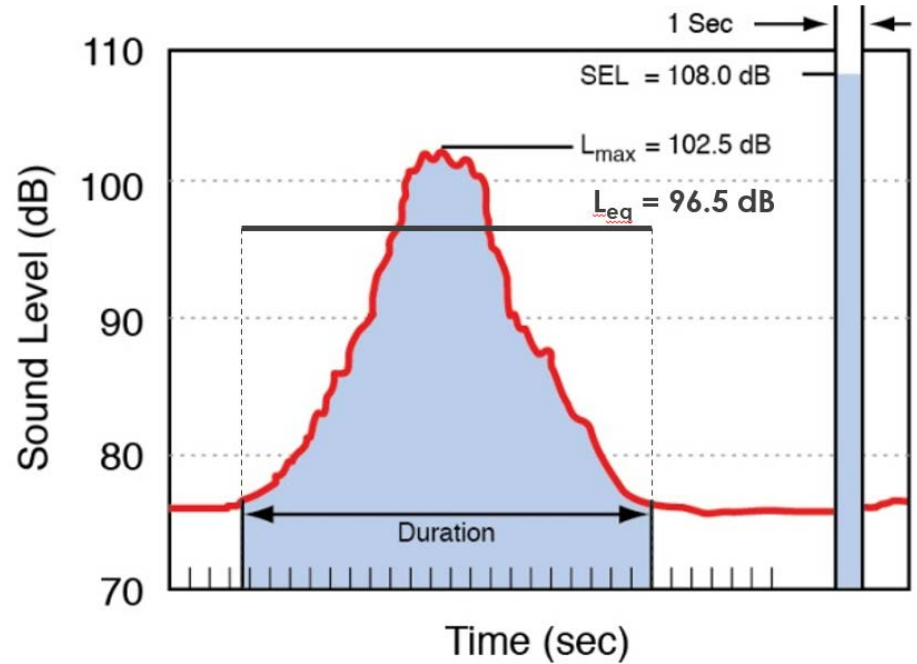
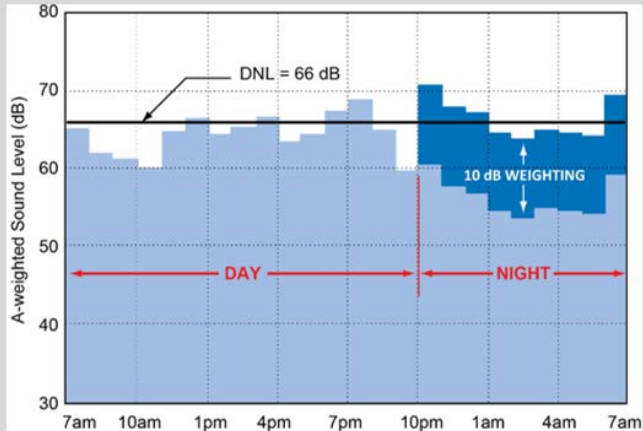
Federal Aviation Administration (FAA)

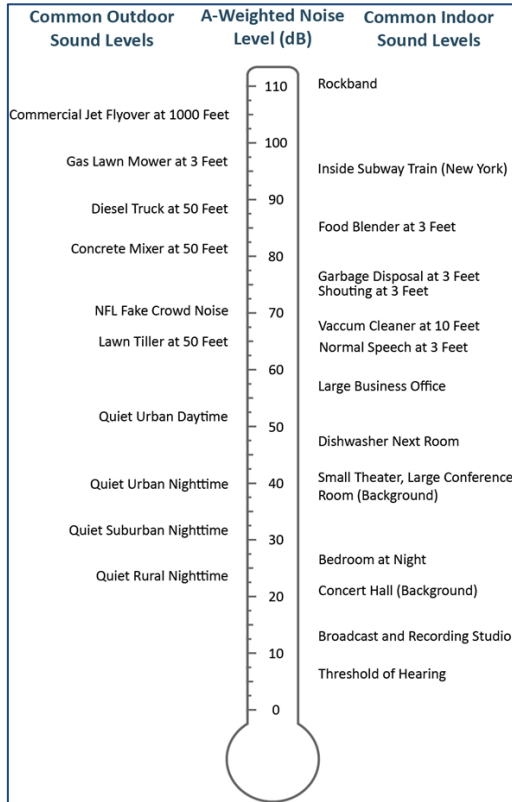
- Determines whether the NCP process has met Part 150 requirements and approves individual noise mitigation measures

Technical Advisory Committee (TAC)

- Provides representation for stakeholder organizations, including local jurisdictions, airlines, local business interests

- Maximum Noise Level (L_{max})
- Sound Exposure Level (SEL)
- Equivalent Sound Level (L_{eq})
- Hourly Noise Level (HNL or L_{eq1h})
- Day Night Average Sound Level (DNL)



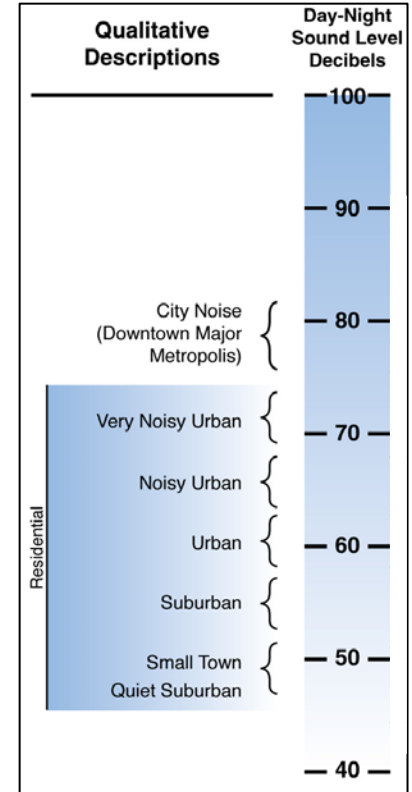


- **A-weighted decibel (dBA)**

- Reflects the manner humans hear different pitches of sound
- All federal agencies have adopted dBA for environmental studies
- dBA is the basis for different noise metrics, including maximum (Lmax) and energy averages

- **Day–Night Average Sound Level (DNL or Ldn)**

- Cumulative sound measure
- Applies a 10-fold weighting to nighttime noise (from 10pm to 7am)
- Used by all federal agencies that deal with aviation noise



The Federal Aviation Administration (FAA) developed the Part 150 Program in response to the federal Aviation Safety and Noise Abatement Act of 1979 (“ASNA”)

- Codified under Title 14 of the Code of Federal Regulations (CFR) Part 150
- Formal citation is “14 CFR Part 150,” informal is “Part 150”
- Formal title is “Airport Noise Compatibility Planning”

Voluntary FAA-defined process for airport noise studies

- 250+ airports have participated

Why do airports participate? Primary reasons include:

- Access to FAA funding of some approved measures
- Process is comprehensive, well-established, and understood

Part 150 prescribes standards and systems for:

- Measuring noise
- Estimating cumulative noise exposure using computer modeling
- Describing noise exposure
- Coordinating with local land use agencies
- Documenting the analytical process
- Submitting the documentation to FAA
- FAA and public review processes
- FAA approval or disapproval process

Consultation required with:

- All local, state, and federal entities with control over land use within DNL 65+ dB
- FAA regional officials
- Regular aeronautical users of the airport
- All parties interested in reviewing and commenting on the draft reports

Two primary elements:

- Noise Exposure Map (NEM)
- Noise Compatibility Program (NCP)

Detailed FAA guidance at:

www.faa.gov/airports/environmental/airport_noise/

BAF NEM Update completed in 2019

- 2019 (Existing Condition) and 2024 (Forecast) NEMs
- Within 65 dB DNL contour
 - Generalized land use categories
 - Historic properties, schools, places of worship, health care facilities, other “discrete” sensitive uses

DNL Band (dBA)	Program to date with 2024 NEM					2019 Newly Incompatible Properties*	GRAND TOTAL	Potential Properties to be Addressed **
	Acquired Properties	Avigation Easement	Sound Insulated Properties	Not Addressed	Total			
65-70	19	4	49	49	121	150	271	199
70-75	1	2	-	2	5	1	6	3
75+	-	-	-	-	-	-	-	-
Total ≥ 65	20	6	49	51	126	151	277	202

Notes: property was counted if any portion of the parcel is within the DNL band; Arbor Mobile Home Park located on Southampton Rd is excluded.

* includes some parcels located outside of the DNL 65 dB.

** equals those not addressed in the current Program plus those newly incompatible

Land Use	DNL <65 dB	DNL 65-70 dB	DNL 70-75 dB	DNL > 75 dB
Residential	Compatible	Incompatible ⁽¹⁾	Incompatible ⁽¹⁾	Incompatible
Mobile home park	Compatible	Incompatible	Incompatible	Incompatible
Transient lodgings	Compatible	Incompatible ⁽²⁾	Incompatible ⁽²⁾	Incompatible ⁽²⁾
Schools	Compatible	Incompatible ⁽³⁾	Incompatible ⁽³⁾	Incompatible
Hospitals and nursing homes	Compatible	25 ⁽⁴⁾	30 ⁽⁴⁾	Incompatible
Churches, auditoriums and concert halls	Compatible	25 ⁽⁴⁾	30 ⁽⁴⁾	Incompatible

⁽¹⁾ Measures are required to achieve 25 to 30 dB of noise level reduction for aircraft noise from outside to inside.

⁽²⁾“Transient lodgings” include, but are not limited to, hotels and motels

⁽³⁾Measures are required to achieve 25 to 30 dB of noise level reduction for aircraft noise from outside to inside.

⁽⁴⁾ The measures to achieve NLR of 25 or 30 dB must be incorporated into design and construction of structure

• Airport recommends NCP measures

• FAA approves or disapproves each recommended measure

Objectives of proposed measures:

- **Reduce** exposure over incompatible uses
- **Mitigate** exposure where it cannot be reduced to compatible levels
- **Limit** growth in exposure over incompatible uses
- **Prevent** introduction of new incompatible uses

Land Use strategies

- Land acquisition
- Sound insulation
- Avigation easements
- Prevention
- Land use controls
- Real estate disclosures

Noise Abatement strategies

- Flight tracks
- Preferential runway use
- Arrival/departure procedures
- Airport layout modifications
- Use restrictions

Programmatic measures

- Implementation
- Promotion
- Monitoring
- Reporting
- NEM updating
- NCP revision

Analysis and Selection Process

- 1) Evaluate effectiveness in addressing objectives
- 2) Evaluate feasibility (economic, operational, safety, etc.)
- 3) Select most effective “package” of measures
- 4) Identify implementation responsibilities, schedule, etc.
- 5) If not recommended, document reason(s)

1990 – NEM & NCP are Produced by the City,
Receive FAA Approval

2009 – The City Updates the NEM & NCP

2015 – NEM is Updated and Receives FAA
Approval

2016 – NCP is Updated; Receives FAA
Approval in 2017

2019 – NEM is Updated to Model Civilian
Aircraft with AEDT, Receives FAA Approval

2019 – NEM is Updated to Model Civilian
Aircraft with AEDT, Receives FAA Approval

Noise Abatement Measures*:

- Runway 15/33 Departure Procedures
- Runway 02/20 Departure Procedures
- Encourage Equipment-Guided Navigation

* Implemented but not an FAA approved measure

Administrative Measures:

- Noise Advisory Committee
- Periodic Evaluation of NEM/NCP
- Fly Quiet Program
- Community Awareness Program

Land Use Measures:

- Land Acquisition
- Residential Sound Insulation
- Place of Worship Sound Insulation
- Remedial Easement Acquisition
- Land Use Zoning
- Airport Noise Overlay District
- Building Code Modifications



	2022												2023						
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul
1 Public Information Meeting			◆																
2 Evaluate & Recommend Compatibility Measures	■																		
3 Advisory Committee Meetings			◆	◆	◆	◆													
4 Prepare Draft NCP						■													
5 FAA & City Review							■												
6 Prepare Public Draft NCP								■											
7 Publish/Distribute Draft NCP									■										
8 Public Review Period										■									
9 Public Hearing											◆								
10 Respond to Comments & Finalize NCP											■		■						
11 Submit Final NCP / Public Comments to FAA													◆						
12 FAA Review Period													■						
Legend:																			
■ Consultant Task													■ Public Involvement						
													■ FAA Review						

Public Involvement

- Public Informational Meeting
- Advisory Committee (local jurisdictions, neighborhood organizations, etc.)
- Public Hearing and Comment Period

TAC Meeting 2

Wednesday April 27, 2022

- Airport Operational Measures

TAC Meeting 3

Wednesday May 25, 2022

- Land Use Measures
- Administrative Measures

TAC Meeting 4

Wednesday June 29, 2022

- Finalize Recommendations

Questions?



Should you have any additional questions, please contact:

Brianna Whiteman
(617) 790-3747 ext. 2221
bwhiteman@jonespayne.com

Thank you again for participating and we look forward to continuing the conversation.

