



LOUISVILLE
MUHAMMAD ALI
INTERNATIONAL AIRPORT

Noise Compatibility Program Update

Community Noise Forum Meeting
February 9, 2026



LOUISVILLE NCP UPDATE

Agenda

1

Airport Noise Compatibility Planning

2

Roles and Responsibilities

3

Louisville NCP Update Elements and Schedule

AIRPORT NOISE COMPATIBILITY PLANNING **OVERVIEW**

REGULATION

Title 14 of the Code of Federal Regulations Part 150 (14 CFR Part 150 or “Part 150”), “Airport Noise Compatibility Planning”

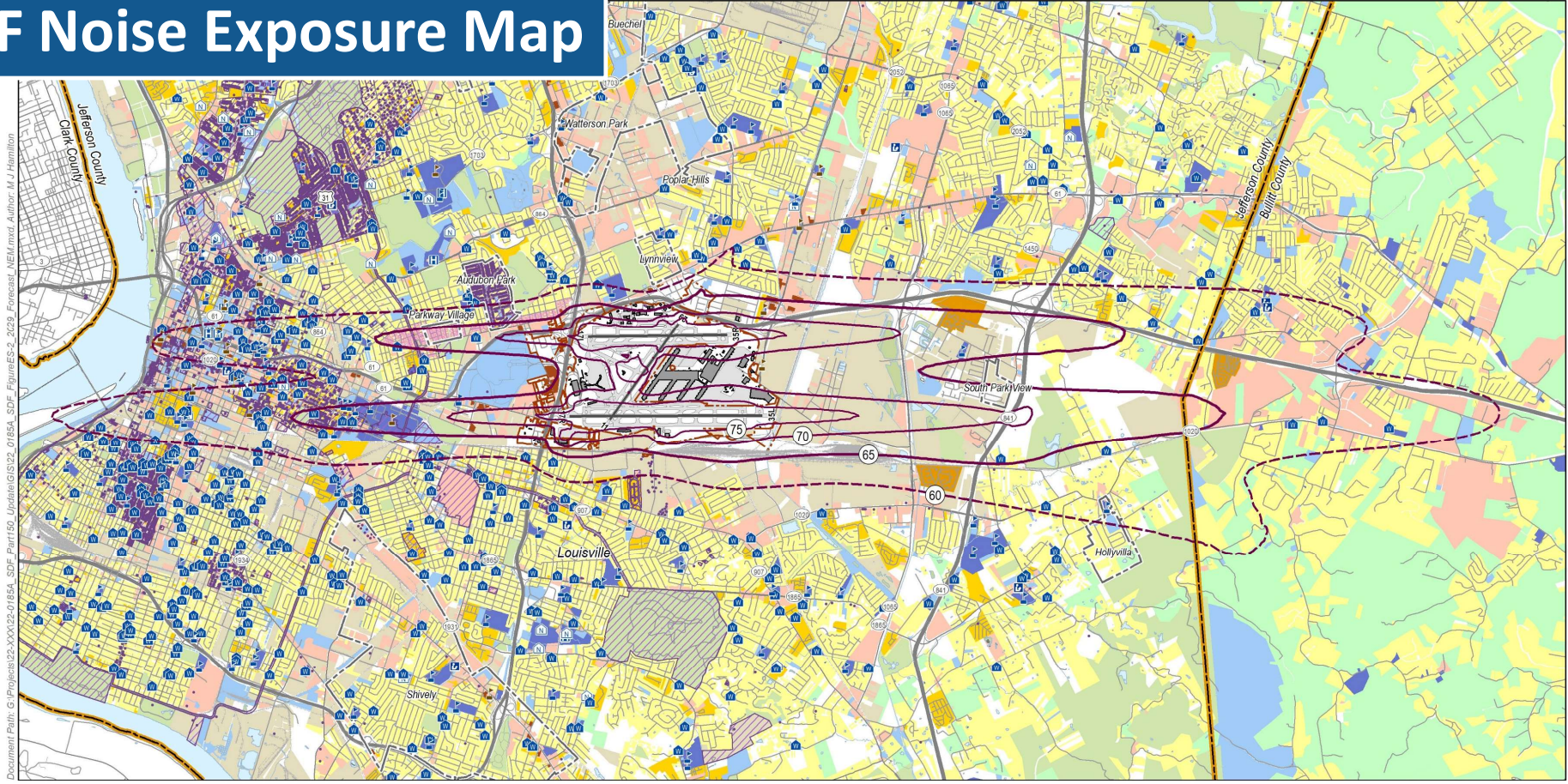
- Voluntary FAA-defined process for airport noise studies
 - Over 250 airports have participated
- Sets national standards for analysis
- Provides access to FAA funding of some approved measures

TECHNICAL ELEMENTS

Part 150 has two technical elements:

1. Noise Exposure Map (NEM)
 - SDF NEM updated in 2024 and submitted to FAA December 23, 2024
 - Awaiting FAA acceptance
2. Noise Compatibility Program (NCP)
 - This project will update the existing 2003 SDF NCP

2029 SDF Noise Exposure Map



Document Path: G:\Projects\23-XX\23-0185A_SDF_Pref\50_100\GIS\23_0185A_SDF_Figures\2_2023_Forecast_NEMA.mxd, Author: M.J. Hamilton

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DNL 60 dB contour (dashed line) is shown for informational purposes only.
Land use compatibility analysis focuses on areas exposed to DNL greater than 65 dB




































<p>Legend</p> <ul style="list-style-type: none">  2029 Forecast DNL Contour (60 dB)  2029 Forecast DNL Contour (65-75 dB)  Sound Insulation Completed  Airport Boundary  Runway / Pavement  Buildings 	<ul style="list-style-type: none">  Municipal Boundary  County Boundary  Expressway  Arterial  Collector  Local  Railroad 	<ul style="list-style-type: none">  College/University  Schools  Hospital  Nursing Home  Library  Place of Worship  Historic District  Non-District Historic Site  Water / Wetland 	<ul style="list-style-type: none">  Single Family Residential  Multi-Family Residential  Mobile Home  Transient Lodging  Public Use 1 (Non-Compatible)  Public Use 2 (Compatible)  Agriculture  Open Space / Cemeteries / Recreation  Commercial Use  Manufacturing, Production and Utility  Vacant / Undefined
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Figure: ES-2

Forecast Condition (2029) Noise Exposure Map



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AIRPORT NOISE COMPATIBILITY PLANNING

Noise Compatibility Program Overview

Objectives of Noise Compatibility 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

Noise Abatement Strategies

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

Noise Mitigation Strategies

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

Program Management 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)

AIRPORT NOISE COMPATIBILITY PLANNING

Noise Compatibility Program Development

Step 1: Identify Incompatible Land Uses

Existing conditions Noise Exposure Map
Forecast conditions Noise Exposure Map

Completed in
Phase 1 - NEM

Step 2: Consider Noise Abatement Strategies

Reduce exposure over incompatible uses
Limit growth in exposure over incompatible uses

Step 3: Consider Land Use Strategies

Mitigate residual incompatible uses
Prevent introduction of new incompatible uses

Step 4: Consider Programmatic Strategies

Implement and promote measures
Monitor and report on effectiveness
Update NEMs and revise NCP as appropriate

ROLES AND RESPONSIBILITIES

FAA Aviation Noise Policy

Federal Government (FAA)

Regulates source noise emissions, air traffic control, funding, and safety oversight

State and Local Government

Compatible land use planning and control

Airport Operators

Plan and implement noise compatibility measures

Aircraft Operators

Develop noise-sensitive schedules, cockpit procedures, and fleet improvements

Air Travelers and Shippers

Bear the costs (through ticket fees)

Current and Potential Residents

Seek to act in an informed manner

ROLES AND RESPONSIBILITIES

Louisville NCP Update

LRAA

- Project sponsor
- Contracts with consultant team
- Recommends NCP measures
- Submits NCP to the FAA for approval
- Implements NCP measures

FAA

- Provides federal funding for NCP Update
- Approves NCP measures
- Certifies that the documentation meets federal regulations and guidelines

Consultant Team

- Leads documentation, public outreach, and stakeholder engagement
- Conducts technical analyses to develop and evaluate alternatives to improve land use compatibility with aircraft noise

Community Noise Forum

- Provides input related to recommended NCP measures
- Encourages stakeholder participation in the NCP update

Public

- Reviews public draft documents
- Provides input on NCP measures during comment period and public hearing

Technical Advisory Committee

- Provides input and technical guidance on potential NCP measures
- Evaluates feasibility of implementation of NCP measures
- Distributes NCP information to their constituencies and organizations

ROLES AND RESPONSIBILITIES

Consultant Project Team



- Project Management
- Land use GIS analysis and reporting
- NCP measure development and noise analysis
- Documentation
- Public outreach and stakeholder engagement



- Support NCP land use measure analysis
- Documentation
- Public outreach and stakeholder engagement



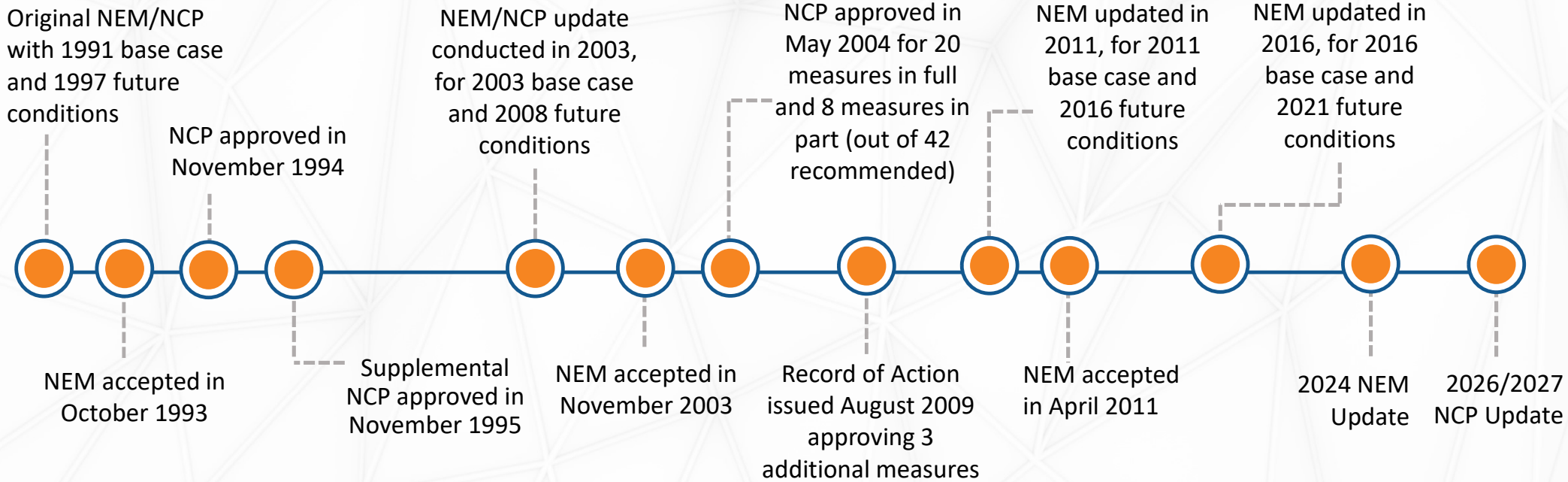
- Support NCP noise abatement measure analysis for consistency with SDF Master Plan
- Documentation
- Public outreach and stakeholder engagement



- Production of documentation
- Public outreach and stakeholder engagement

LOUISVILLE NCP UPDATE

History of Part 150 at SDF



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Summary of Existing 2003 NCP Measures

- 18 Noise Abatement
- 19 Noise Mitigation
- 5 Program Management



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Noise Abatement Measures

Number	Measure	FAA Response	Status
NA-1	Maintain South Flow Runway Preference	Approved as Voluntary	Implemented
NA-2	Reverse East-West Preference (Day and Night)	No action/ Disapproved	Not Implemented
NA-3	Morning North Flow Preference	No action/ Disapproved	Implemented Locally
NA-4	South Divergence According to Destination	Approved as Voluntary	Implemented
NA-5	Maintain Contraflow Program	Approved as Voluntary	Implemented
NA-6	Reduce Exceptions to Contraflow	Disapproved	Implemented
NA-7	Use an Offset Departure from Runway 35L and Offset Approach to Runway 17R	No action/ Disapproved	Partially Implemented
NA-8	Designate Departure and Arrival Flight Tracks to be Used by All Turboprop Aircraft Weighing Over 12,500 lbs.	Approved In Part, As Voluntary	Partially Implemented

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Noise Abatement Measures

Number	Measure	FAA Response	Status
NA-9	Assign GPS/FMS or RNAV Equipped Aircraft to Defined FMS/GPS Departure and Arrival Flight Tracks for Turbojet and Military Aircraft	Approved in Part, As Voluntary	Partially Implemented
NA-10	FMS/GPS Departure and Arrival Flight Tracks for Turboprop Aircraft Over 12,500 lbs.	Approved In Part, As Voluntary	Partially Implemented
NA-11	Request FAA ATCT to Require All Aircraft to Intercept the Runway Centerline at or Beyond the Initial Approach Fix	No Action	Implemented Locally
NA-12	Request FAA to Publish a Standard Instrument Departure (SID) Procedure for Each Runway to be Used in All Weather Conditions Including VFR Conditions	No Action	Implemented
NA-13	Request FAA to publish a Standard Terminal Arrival Route (STAR) for each runway to be used in all weather conditions including VFR conditions – No action	No Action	Implemented

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Noise Abatement Measures, continued

Number	Measure	FAA Response	Status
NA-14	As Part of an Ongoing Noise Management Program, Extend Noise Abatement Flight Tracks Beyond Those Identified in Measure NA-8 through NA-11	No Action	Partially Implemented
NA-15	Elimination of Early Descent	Disapproved	Not Implemented
NA-16	Request the Airlines Serving the Airport to Use the FAA Distant Noise Abatement Departure Procedure in Advisory Circular (AC) 91-53A, Noise Abatement Departure Procedure	Approved as Voluntary	Implemented
NA-17	Continue Airport Regulation Restricting Aircraft Engine Run-Ups to Certain Hours and Locations	Approved	Implemented
NA-18	Limit the Use of North Runway Extension to Aircraft Needing Full Runway Length and South Extension for Departures to the North	Disapproved	Not Implemented

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Noise Mitigation Measures

Number	Measure	FAA Response	Status
M-1	Continue the Current Voluntary Residential Acquisition Program Including the Innovative Housing Program	Approved	Implemented
M-2	Expanded Voluntary Residential Acquisition Program Within the DNL 65 dB Contour to the South of the Airport That Will Continue to be Exposed to Significant Noise levels in 2008	Approved	Implemented
M-3	Provide Soundproofing in Residential Areas Within the DNL 65 dB Contour to the North of the Airport	Approved	Implemented
M-4	Offer Sound Insulation for Non-Compatible Institutional Areas Within DNL 65	Approved	In Progress
M-5	Residential Sales Assistance Program Within DNL 65 dB	Approved	Not Implemented
M-6	Construct an Earth Berm Along the Northwest Side of the Airfield to Reduce Ground Noise Associated with Aircraft Takeoffs on Runway 17R	Approved	Implemented
M-7	Study Potential Noise Barrier for Preston Park Neighborhood	Approved	Not Implemented

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Noise Mitigation Measures

Number	Measure	FAA Response	Status
M-8	Construct Ground Run-Up Enclosure if Required to Reduce Noise from Maintenance Run-Up Activity	Disapproved	Not Implemented
M-9	Residential Sound Insulation for Areas Between DNL 60 dB and DNL 65 dB that Would Experience a 3 dB increase in Noise Levels as a Result of Recommended Noise Abatement Measures	Disapproved	Not Implemented
M-10	Offer Sound Insulation to Non-Compatible Institutional Land Uses Between DNL 60 dB to DNL 65 dB that Would Experience a 3 dB increase in Noise levels from the Noise Abatement Measures	Disapproved	Not Implemented
M-11	Compatible Land Use Planning	Approved In Part	Partially Implemented
M-12	LRAA Would Coordinate with the Planning Commission to Adopt a Policy Concerning Rezoning from Compatible to Non-Compatible Uses in the Airport Environs	Approved	Not Implemented
M-13	Subdivision Regulations	Approved In Part	Not Implemented

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Noise Mitigation Measures, continued

Number	Measure	FAA Response	Status
M-14	LRAA Would Consider Participation in a Redevelopment Program Initiative	Approved In Part	Implemented
M-15	LRAA Would Work with the Planning Commission to Develop an Overlay Zone, to Supplement Other Land Use Planning Techniques	Approved In Part	Not Implemented
M-16	Building Code Revision	Approved In Part	Not Implemented
M-17	Consider Disclosure Ordinances	Approved	Not Implemented
M-18	Avigation Easement Purchase Within DNL 65 dB	Approved	In Progress
M-19	Avigation Easement Purchase Within DNL 60 dB to DNL 65 dB	Disapproved	Not Implemented

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Program Management Measures

Number	Measure	FAA Response	Status
PM-1	Establish New LRAA Staff Position Dedicated to Management of Noise Compatibility Program	Approved	Implemented
PM-2	Establish Advisory Committee	Approved	Implemented
PM-3	Acquire Portable Noise Monitoring Equipment	Approved	Implemented
PM-4	Acquire Equipment to Monitor Aircraft Operations	Approved	Implemented
PM-5	Airport Noise Office to Collect and Disseminate Information	Approved	Implemented

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CNF Input

- Opportunity to comment on NCP process and existing measures
- Share ideas and suggestions for development of potential NCP measures



Set Up Technical Advisory Committee

- The purpose of the TAC will be to bring a broad range of stakeholder perspectives and technical expertise to the development of the NCP.
- The TAC's role will be advisory in nature; members do not have decision-making authority as to which measures to recommend in the NCP.
- TAC Membership is expected to include representatives from:
 - LRAA
 - FAA Airport District Office (ADO)
 - FAA air traffic control tower (ATCT)
 - UPS
 - Kentucky Air National Guard (KYANG)
 - Community Noise Forum (CNF)
 - Airlines
 - Other Airport tenants, users, operators
 - Local land use jurisdictions
 - Others?

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Public Participation Opportunities

Three public open houses throughout the NCP development process

Public review period for the Draft NCP Update and associated documentation

Public hearing

Public comments on Draft NCP Update to inform Final NCP

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Preliminary Schedule

Meetings/Milestone	Topic	Expected Timeframe
CNF Meeting 1	NCP Kickoff	February 2026
CNF Meeting 2, TAC Meeting 1 & Public Open House 1	Noise Abatement Strategies	April 2026
CNF Meeting 3, TAC Meeting 2 & Public Open House 2	Noise Mitigation Strategies	July 2026
CNF Meeting 4 and TAC Meeting 3	LRAA-Recommended Measures	September 2026
Submit Preliminary Draft NCP to FAA		October 2026
CNF Meeting 5, TAC Meeting 4 & Public Open House 3	Draft NCP	October 2026
NCP Public Comment Period and NCP Public Hearing		December 2026
Submit Final NCP to FAA		January 2027



Thank you!

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