ILM

Wilmington International Airport

14 CFR Part 150 Noise Compatibility Study







Agenda

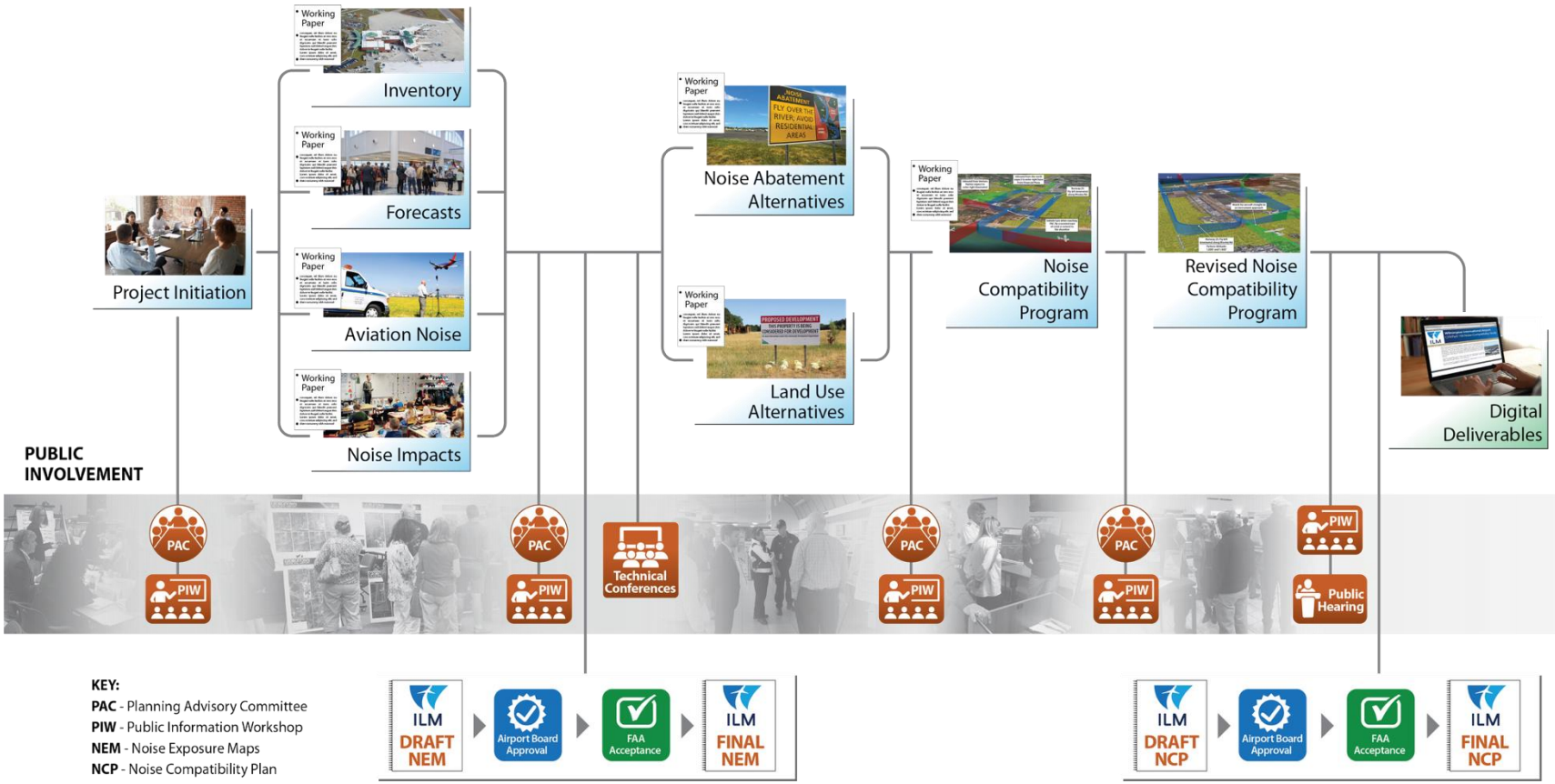
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2. Study Process
   - Kory Lewis, Coffman Associates
3. Review of Noise Impacts
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   - Sarah Ferrara, Compass Rose Communications

Welcome and Introductions

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Study Process



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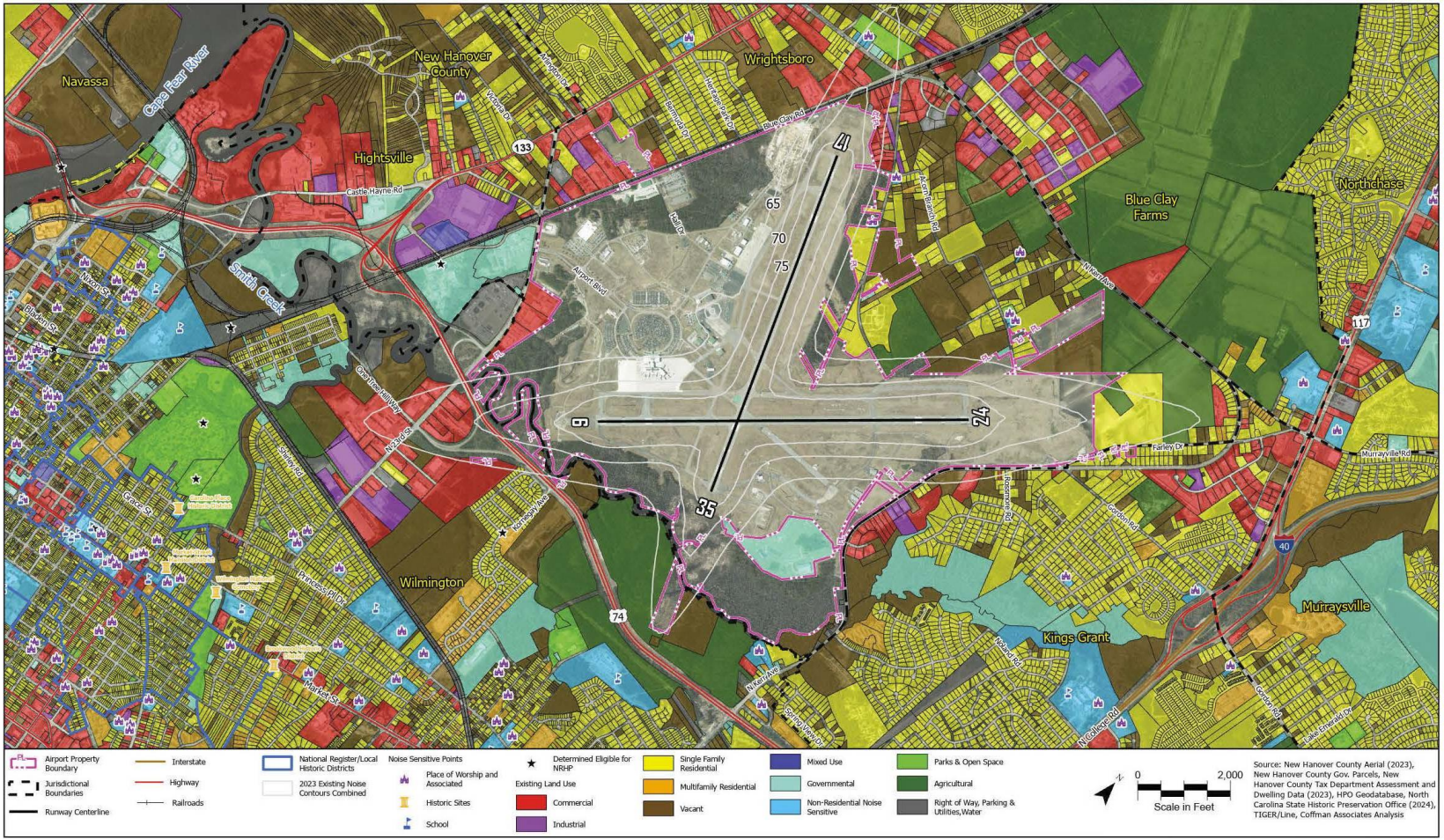
14 CFR Part 150 Noise Compatibility Guidelines

LAND USE	Yearly Day-Night Average Sound Level (DNL) in Decibels					
	Below 65	65-70	70-75	75-80	80-85	Over 85
Residential						
Residential, other than mobile homes and transient lodgings	Y	N[1]	N[1]	N	N	N
Mobile home parks	Y	N	N	N	N	N
Transient lodgings	Y	N[1]	N[1]	N[1]	N	N
Public Use						
Schools	Y	N[1]	N[1]	N	N	N
Hospitals and nursing homes	Y	25	30	N	N	N
Churches, auditoriums, and concert halls	Y	25	30	N	N	N
Government services	Y	Y	25	30	N	N
Transportation	Y	Y	Y[2]	Y[3]	Y[4]	Y[4]
Parking	Y	Y	Y[2]	Y[3]	Y[4]	N
Commercial Use						
Offices, business and professional	Y	Y	25	30	N	N
Wholesale and retail-building materials, hardware and farm equipment	Y	Y	Y[2]	Y[3]	Y[4]	N
Retail trade-general	Y	Y	25	30	N	N
Utilities	Y	Y	Y[2]	Y[3]	Y[4]	N
Communication	Y	Y	25	30	N	N

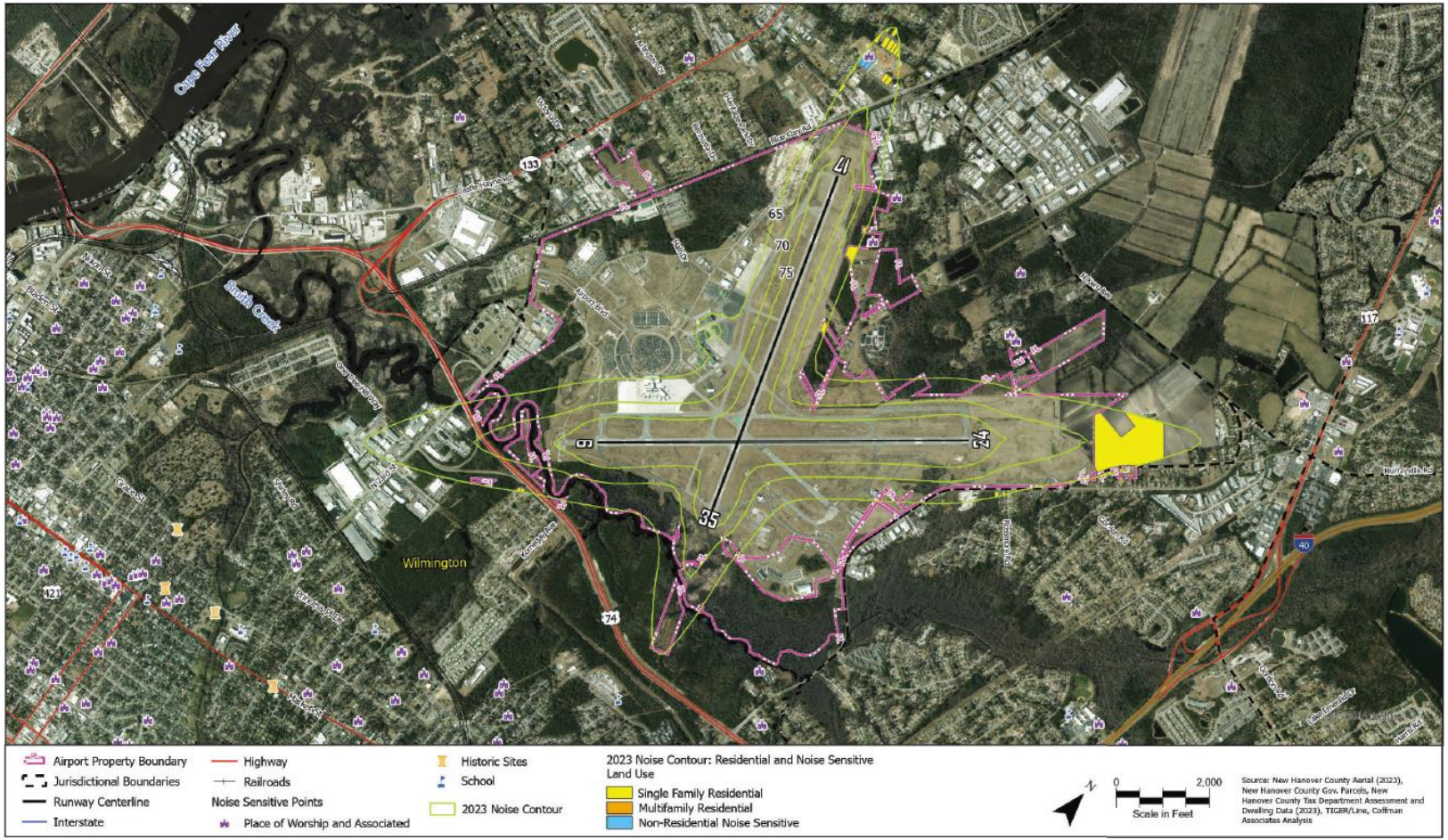
LAND USE	Yearly Day-Night Average Sound Level (DNL) in Decibels					
	Below 65	65-70	70-75	75-80	80-85	Over 85
Manufacturing and Production						
Manufacturing, general	Y	Y	Y[2]	Y[3]	Y[4]	N
Photographic and optical	Y	Y	25	30	N	N
Agriculture (except livestock) and forestry	Y	Y[6]	Y[7]	Y[8]	Y[8]	Y[8]
Livestock farming and breeding	Y	Y[6]	Y[7]	N	N	N
Mining and fishing, resource production and extraction	Y	Y	Y	Y	Y	Y
Recreational						
Outdoor sports arenas and spectator sports	Y	Y[5]	Y[5]	N	N	N
Outdoor music shells, amphitheaters	Y	N	N	N	N	N
Nature exhibits and zoos	Y	Y	N	N	N	N
Amusements, parks, resorts, and camps	Y	Y	Y	N	N	N
Golf courses, riding stables, and water recreation	Y	Y	25	30	N	N

The designations contained in this table do not constitute a federal determination that any use of land covered by the program is acceptable under federal, state, or local law. The responsibility for determining the acceptable and permissible land uses and the relationship between specific properties and specific noise contours rests with the local authorities. FAA determinations under Part 150 are not intended to substitute federally-determined land uses for those determined to be appropriate by local authorities in response to locally-determined needs and values in achieving noise compatible land uses.

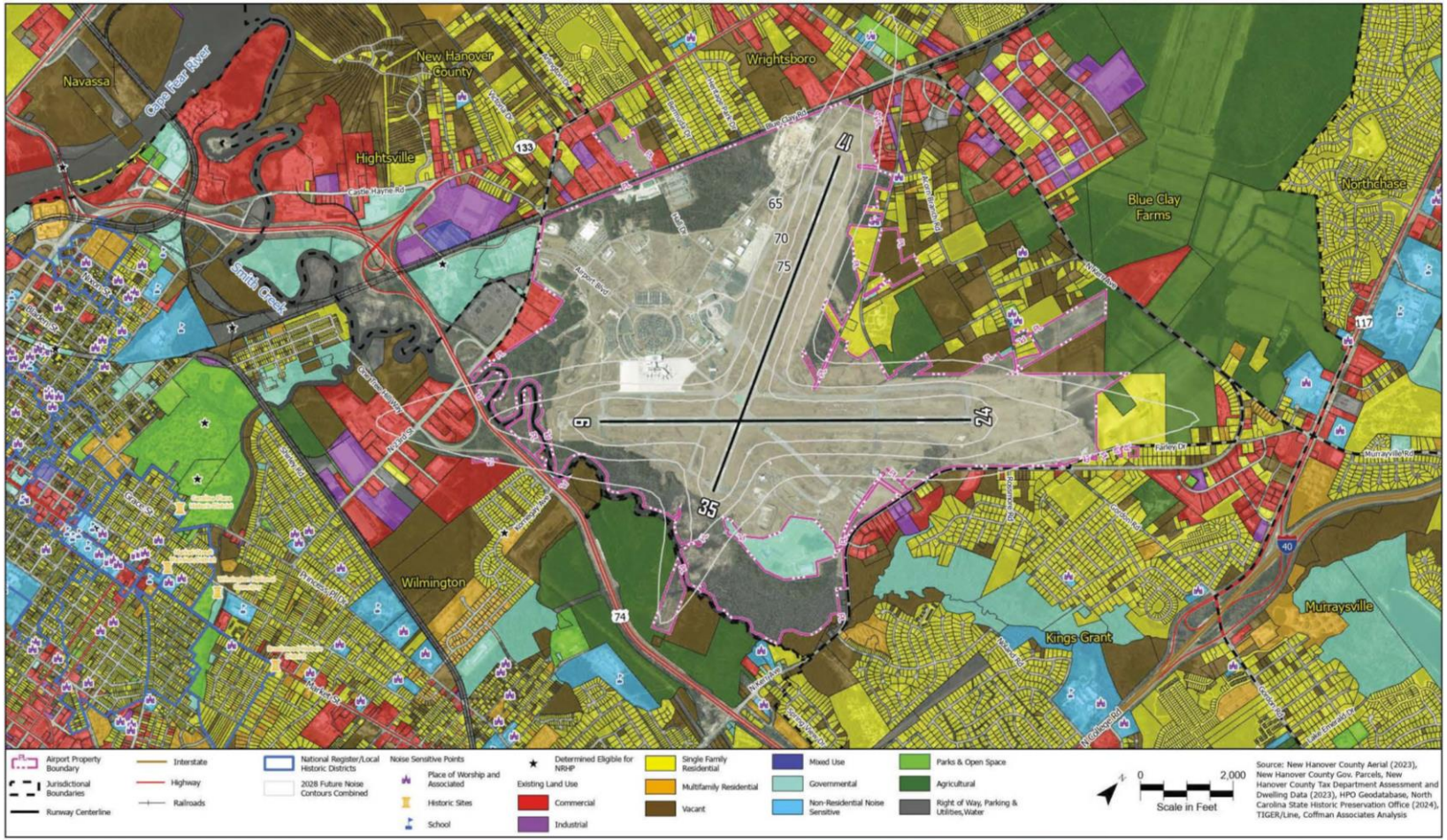
2023 Noise Contours



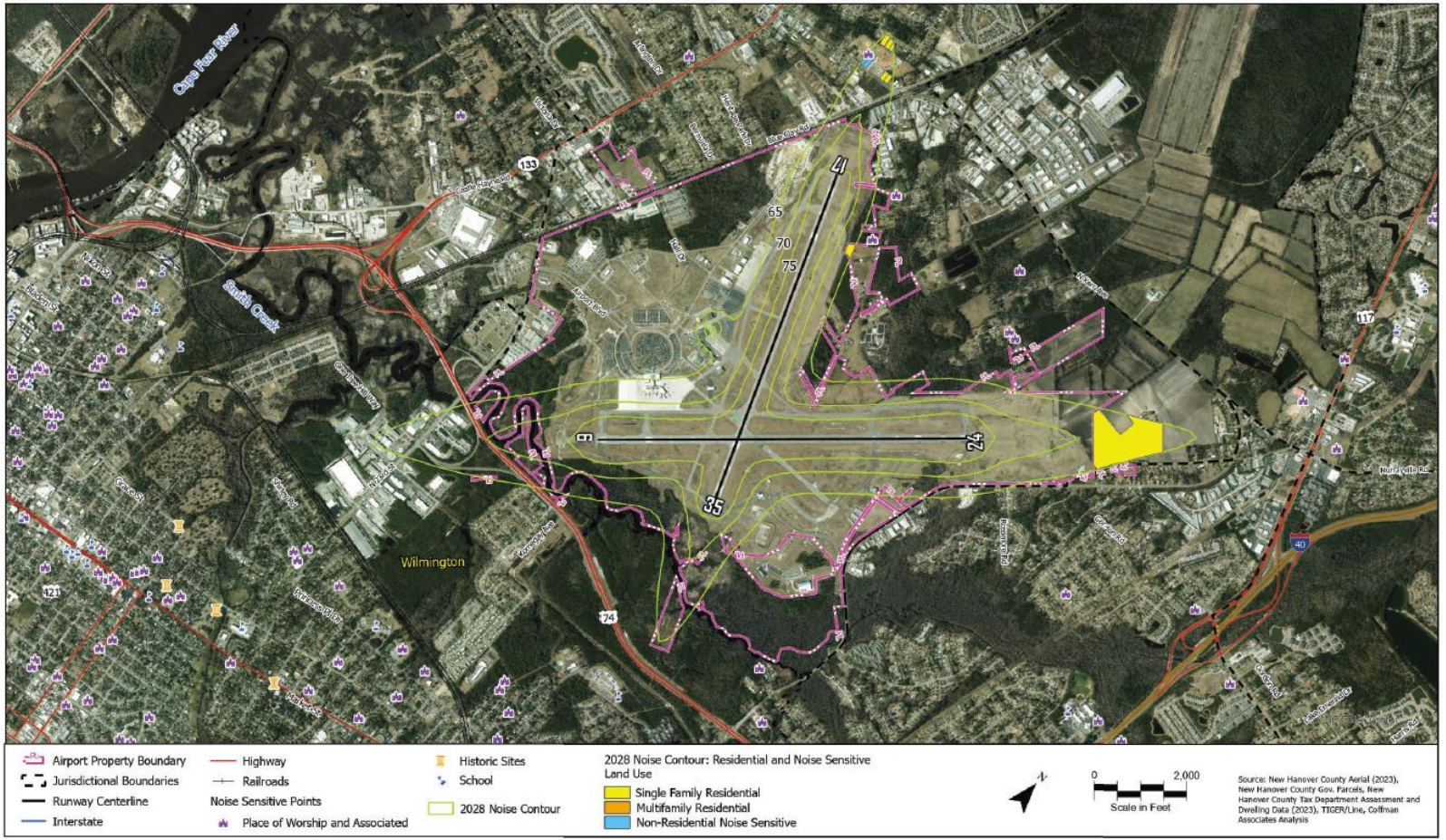
2023 Noise Impacts



2028 Noise Contours



2028 Noise Impacts



Summary of Noise Impacts

TABLE 4J | ILM Noise-Sensitive Land Use Impact Summary

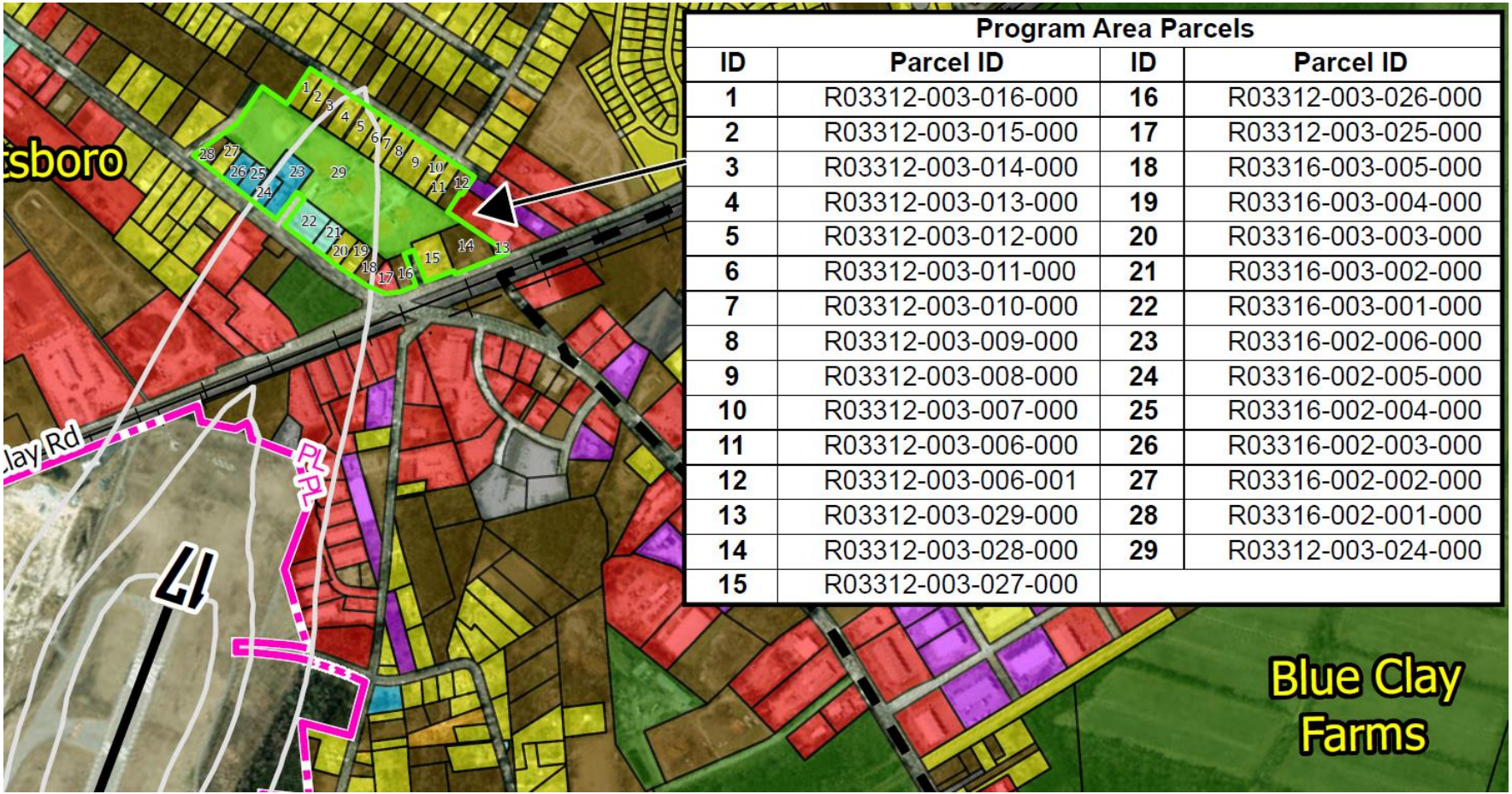
	65-70 DNL	70-75 DNL	75+ DNL
Noise-Sensitive Parcels/Dwelling Units (d.u.)			
Existing (2023)	46.96 acres/14 d.u.	–	–
Future (2028)	37.14 acres/2 d.u.	–	–
Estimated Population			
Existing (2023)	31 people	–	–
Future (2028)	5 people	–	–
Growth Risk for Noise-Sensitive Land Uses			
Single-Family Residential	22.47 acres	0.82 acres	–
Manufactured Housing	13.81 acres	–	–
Places of Worship	22.47 acres	0.82 acres	–
Hospitals	7.49 acres	0.82 acres	–
Schools	1.17 acres	–	–

Sources: New Hanover County Tax Department (2024); Coffman Associates analysis

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Potential Program Area



Program Area Parcels			
ID	Parcel ID	ID	Parcel ID
1	R03312-003-016-000	16	R03312-003-026-000
2	R03312-003-015-000	17	R03312-003-025-000
3	R03312-003-014-000	18	R03316-003-005-000
4	R03312-003-013-000	19	R03316-003-004-000
5	R03312-003-012-000	20	R03316-003-003-000
6	R03312-003-011-000	21	R03316-003-002-000
7	R03312-003-010-000	22	R03316-003-001-000
8	R03312-003-009-000	23	R03316-002-006-000
9	R03312-003-008-000	24	R03316-002-005-000
10	R03312-003-007-000	25	R03316-002-004-000
11	R03312-003-006-000	26	R03316-002-003-000
12	R03312-003-006-001	27	R03316-002-002-000
13	R03312-003-029-000	28	R03316-002-001-000
14	R03312-003-028-000	29	R03312-003-024-000
15	R03312-003-027-000		

Table 7B – 14 CFR Part 150 Measures

TABLE 7B | Summary of Noise Compatibility Program Measures for Review Under 14 CFR Part 150

Measure	Cost to Airport or Government	Direct Cost to Users	Timing	Lead Responsibility	Potential Funding Sources
LAND USE MANAGEMENT ELEMENT					
1. Amend comprehensive plans to amend comprehensive plan maps to establish an aviation noise threshold for land use compatibility.	Administrative	None	2036	City of Wilmington and New Hanover County	City and county operating budgets
2. Adopt formal project review guidelines that address noise compatibility issues.	Administrative	None	2028	City of Wilmington and New Hanover County	City and county operating budgets
3. Implement a fair disclosure policy for residential property within the 65 DNL noise contours.	Administrative and Legal	None	2028	City of Wilmington and New Hanover County	City and county operating budgets
NOISE MITIGATION ELEMENT					
1. Offer to provide sound insulation for the 14 dwelling units located in the program area on a voluntary basis.	$960,000	None	2028	New Hanover County Airport Authority	FAA, New Hanover County Airport Authority
2. Offer to purchase avigation easements for the 14 dwelling units located in the program area on a voluntary basis.	$70,000	None	2028	New Hanover County Airport Authority	FAA, New Hanover County Airport Authority
PROGRAM MANAGEMENT ELEMENT					
1. Update the airport's noise exposure maps and Noise Compatibility Program.	$600,000	None	2036	New Hanover County Airport Authority	FAA, New Hanover County Airport Authority
2. Monitor implementation of the Part 150 Noise Compatibility Program.	Administrative	None	Ongoing	New Hanover County Airport Authority	New Hanover County Airport Authority Operating Budget

Total Cost and Funding Source		
Funding Source	**Amount**	**Percent of Project**
FAA	$1,467,000	90.0%
New Hanover County Airport Authority Budget	$163,000	10.0%
Total Cost:	**$1,630,000**	**100.0%**

Table 7B – 14 CFR Part 150 Measures (Revised)

TABLE 7B | Summary of Noise Compatibility Program Measures for Review Under 14 CFR Part 150

Measure	Cost to Airport or Government	Direct Cost to Users	Timing	Lead Responsibility	Potential Funding Sources
LAND USE MANAGEMENT ELEMENT					
1. Amend comprehensive plans to amend comprehensive plan maps to establish an aviation noise threshold for land use compatibility.	Administrative	None	2036	City of Wilmington and New Hanover County	City and county operating budgets
2. Adopt formal project review guidelines that address noise compatibility issues.	Administrative	None	2028	City of Wilmington and New Hanover County	City and county operating budgets
3. Implement a fair disclosure policy for residential property within the 65 DNL noise contours.	Administrative and Legal	None	2028	City of Wilmington and New Hanover County	City and county operating budgets
NOISE MITIGATION ELEMENT					
1. Offer to provide sound insulation for the 14 dwelling units located in the program area on a voluntary basis.	$960,000	None	TBD	New Hanover County Airport Authority	FAA, New Hanover County Airport Authority
2. Offer to purchase avigation easements for the 14 dwelling units located in the program area on a voluntary basis.	$70,000	None	TBD	New Hanover County Airport Authority	FAA, New Hanover County Airport Authority
PROGRAM MANAGEMENT ELEMENT					
1. Update the airport's noise exposure maps and Noise Compatibility Program.	$600,000	None	2036	New Hanover County Airport Authority	FAA, New Hanover County Airport Authority
2. Monitor implementation of the Part 150 Noise Compatibility Program.	Administrative	None	Ongoing	New Hanover County Airport Authority	New Hanover County Airport Authority Operating Budget

Total Cost and Funding Source		
Funding Source	**Amount**	**Percent of Project**
FAA	$1,467,000	90.0%
New Hanover County Airport Authority Budget	$163,000	10.0%
Total Cost:	**$1,630,000**	**100.0%**

Sound Insulation Alternative

Estimated Cost: $960,000

Implementation Actions:

- Establish residential sound insulation program boundary (RSIP) and submit to FAA for approval.
- Coordinate with FAA regarding grant funding.
- Select consultant to manage and implement RSIP
- Adopt RSIP policies and procedures manual, submit to FAA for review.
- Conduct public outreach with affected property owners.
- Conduct inventory of structures within RSIP boundary.
- Establish categories of structures based on their construction type and conduct pre-construction measurements.
    - As noted previously, eligibility for inclusion in RSIP is a two-step process. First, the home must be within a program boundary based on a Part 150 65 DNL noise contour, and second, the structures must have an interior noise measurement of 45 DNL or greater when considering all habitable spaces.
- Design a sound insulation package for each housing category.
- Following approval by FAA, commence sound insulation improvements.

Additional Information:

FAA Advisory Circular 150/5000-9B, Guidelines for Sound Insulation of Structures Exposed to Aircraft Noise (2022).

Avigation Easement Alternative

Estimated Cost: $70,000

Implementation Actions:

- Conduct public outreach with affected property owners.
- Determine eligibility based on residential sound insulation participation program area.
- Conduct an appraisal, if required.
- Conduct a title search to determine current deed ownership individuals listed.
- Obtain signatures from all individuals listed on the deed and the airport.
- Record avigation easement with New Hanover County Register of Deeds concurrently with payment delivery.

Additional Information:

FAA Advisory Circular 150/5100-17 - Land Acquisition and Relocation Assistance for Airport Improvement Program Assisted Projects (Consolidated through Change 7) (2017).

Table 7C – Local Measures

TABLE 7C | Summary of Local Noise Compatibility Measures Not Submitted for Review Under 14 CFR Part 150

Measure	Cost to Airport or Government	Direct Cost to Users	Timing	Lead Responsibility
LOCAL NOISE COMPATIBILITY MEASURES				
1. Evaluate departures to avoid Historic Downtown Wilmington.	$100,000	None	2028	New Hanover County Airport Authority
2. Evaluate an alternative visual approach to Runway 24 over the Cape Fear River.	$50,000	None	2028	New Hanover County Airport Authority
3. Continue noise abatement procedures as agreed upon with 2nd MAW, USMC.	Administrative	None	Ongoing	FAA
Funding Source			**Total Cost**	**Percent Funding**
New Hanover County Airport Authority			$150,000	100.0%

Table 7C – Local Measures (Revised)

TABLE 7C | Summary of Local Noise Compatibility Measures Not Submitted for Review Under 14 CFR Part 150

Measure	Cost to Airport or Government	Direct Cost to Users	Timing	Lead Responsibility
LOCAL NOISE COMPATIBILITY MEASURES				
1. Explore new departure procedures with a particular focus on establishing heading changes for departures from Runway 24 that achieves both noise abatement and aircraft separation.	Administrative	None	TBD	FAA
2. Explore a Charted Visual Flight Procedure (CVFP) for Runway 6 arrivals, using the Cape Fear River railroad bridge as the visual reference point.	Administrative	None	TBD	FAA
3. Continue noise abatement procedures as published for flight planning in the ILM Chart Supplement and military Flight Information Program (FLIP) publications.	Administrative	None	Ongoing	FAA
Funding Source			**Total Cost**	**Percent Funding**
New Hanover County Airport Authority			$0	100.0%

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Next Steps

Conduct public hearing and respond to comments

- A public hearing to receive comments on the Draft NCP is scheduled for next week
- Responses to public hearing comments will be provided in the Draft Final NCP

Submit Draft Final NCP for Review

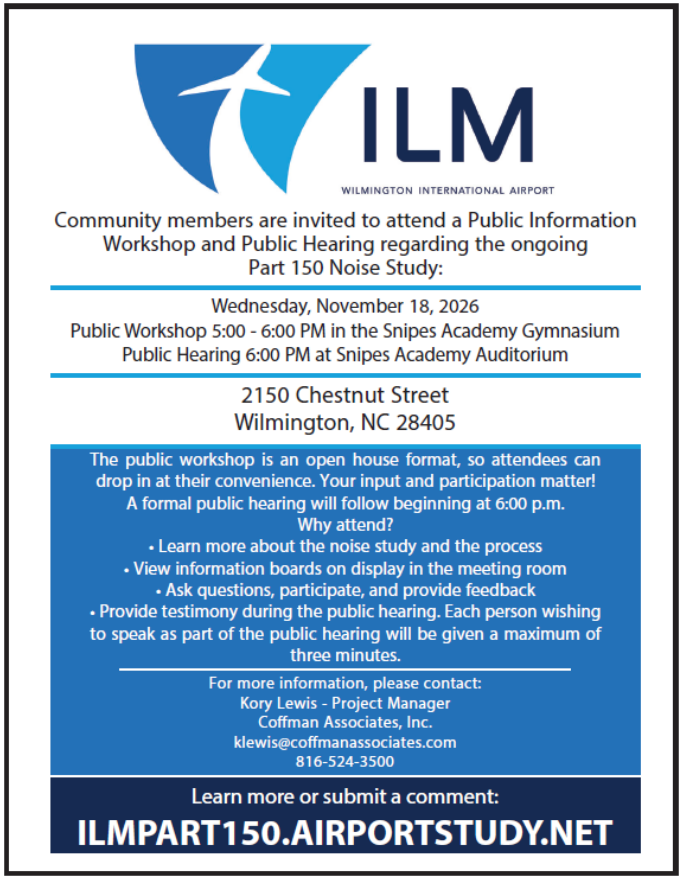
- New Hanover County Airport Authority will review the Draft Final NCP
- Draft Final NCP will be submitted to FAA for review
- Formal review period begins when FAA issues Notice of Receipt and Request for Review
- The Federal Register notification triggers a 60-day public comment period
- FAA formal review will conclude within a maximum of 180 days

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Public Involvement

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Thank You!