

Lehigh Valley International Airport 14 CFR Part 150 Noise Compatibility Study Update

Community Advisory Committee Meeting #1

LNAA Boardroom
Allentown, PA



Presented by:
Wyle Laboratories, Inc.

January 28, 2015

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Agenda

- Staff and Committee Introductions
- Part 150 Study Overview/Purpose
- Study Process and Timeline
- NEM Status
- Supplemental Noise Measurements
- Existing and Future NCP
- Sound Insulation Considerations
- CAC Action Items

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Wyle Introduction



Lehigh Northampton Airport Authority
Lehigh Valley International Airport



Joe Czech
Project Manager



Joanna Norris
Co-PM; Public Outreach



Chris Hobbs
Noise Measurements & Radar Processing



Eric Smith
GIS



Ben Manning
Modeling



Vanessa Thompkins
Production Manager



Ferdows Fazeli
Public Outreach

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CAC Introduction

- Paul Anthony, Hanover-Northampton (unable to attend today)
- Christine Brader, Whitehall
- Dan Hoffman, Hanover-Northampton
- Kathy Ibrahim, Whitehall
- Mary Jo Johnson, Bethlehem
- Jose Silva/Elsie Perez, Hanover-Northampton
- Catasauqua Representative to be determined

Technical Advisory Committee

- **Hanover-Northampton Board of Supervisors:** Chairman John Diacogiannis
- **FAA:** John Herber, Tower Operations
- **Township of Whitehall:** Mayor Ed Hozza, Jr.
- **Delta Airlines:** John Nieman
- **Borough of Catasauqua:** Mayor Barbara Schlegel
- **East Coast Jets:** Ryan Snyder, Pilot
- **FedEx:** Mike Wakely, Ramp Operations Manager
- **New World Aviation:** Randall Wood, Chief Pilot
- **Lehigh Valley Aviation Services (LVAS):** Joan Zandarski, Operational Duty Manager

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Part 150 Study Overview

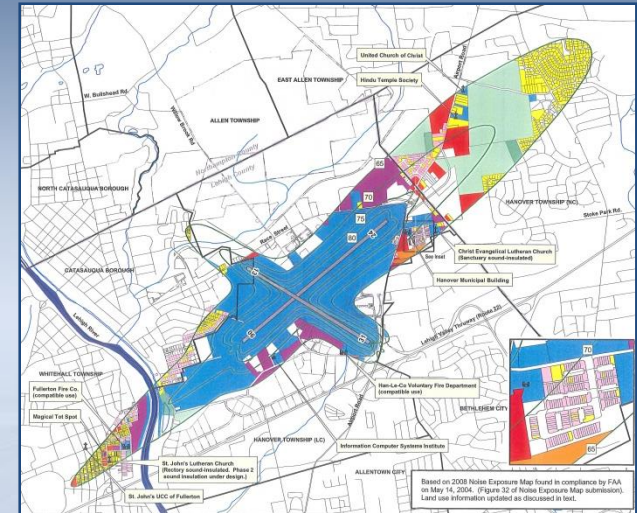
A 14 CFR Part 150 Aircraft Noise Compatibility Study identifies incompatible land use around airports and recommends measures to (a) mitigate existing problems and (b) prevent future ones.

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Project Purpose

To update LVIA's Noise Compatibility Program, we are developing:

- ❑ Noise Exposure Map (NEM)
 - To show where aircraft noise exposure occurs today and a five year forecast
- ❑ Noise Compatibility Program (NCP)
 - Measures/recommendations proposed to reduce noise exposure in the community



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Advisory Committees Public Participation

Technical Advisory Committee

- ✓ LVIA staff
- ✓ FAA Reps
- ✓ PennDOT Reps
- ✓ Community Reps
- ✓ Airport tenants

Community Advisory Committee

- ✓ Residents who live in impacted communities near the airport



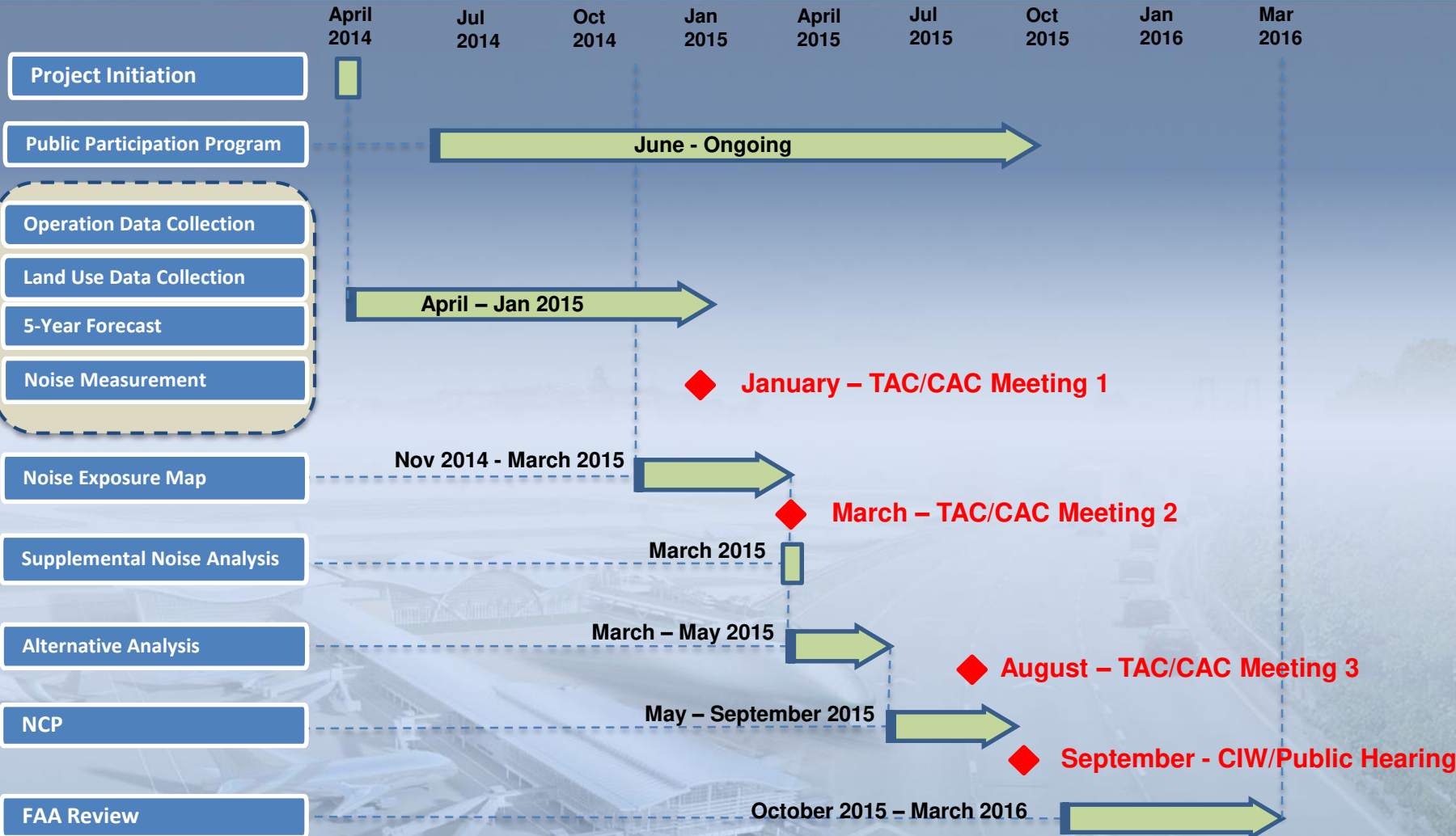
Community

- ✓ Public Workshops
- ✓ Public Hearing
- ✓ Project website
- ✓ Mailing list
- ✓ Social media
- ✓ Project staff

Media

- ✓ Project Website:
www.flylvvia.com
- ✓ Social Media
<http://facebook.com/flylvvia>
<http://twitter.com/flylvvia>
- ✓ Project staff
jinorris@lvvia.org

Part 150 Process and Timeline



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NEM Development

- Flight Operations
 - FAA Air Traffic Activity and Display System (ATADS)
 - FAA Terminal Area Forecast (TAF)
 - Bureau of Transportation Statistics (BTS) T-100 (CY13)
 - Landing Fee Reports
 - Air Traffic Control Tower (ATCT) input
- Flight tracks – based on radar data
- Technical work nearly ready for LVIA/TAC review

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2020 Forecast Flight Operations - draft

Category or Group	Departure		Arrival		Closed Pattern (1)		Total		
	Day (7 am- 10 pm)	Night (10 pm- 7 am)	Day (7 am- 10 pm)	Night (10 pm- 7 am)	Day (7 am- 10 pm)	Night (10 pm- 7 am)	Day (7 am- 10 pm)	Night (10 pm- 7 am)	Total
Subtotal by ATAR Category									
Air Carrier	1,198	23	1,209	12	-	-	2,407	35	2,442
Cargo	469	764	94	1,139	-	-	563	1,903	2,466
Air Taxi	5,293	1,178	5,133	1,338	-	-	10,426	2,516	12,942
GA	36,364	3,376	36,752	2,987	9,098	418	82,214	6,781	88,995
Military	294	-	294	-	-	-	588	-	588
Subtotal by Group									
Heavy Jet	35	471	31	475	-	-	66	946	1,012
Large Jet	1,429	294	1,265	458	-	-	2,694	752	3,446
Regional Jet	4,761	1,024	4,677	1,108	-	-	9,438	2,132	11,570
Business Jet	19,397	2,355	19,643	2,109	1,110	189	40,150	4,653	44,803
Turboprop	7,334	844	7,497	681	-	-	14,831	1,525	16,356
Piston Prop	10,382	329	10,080	631	7,988	229	28,450	1,189	29,639
Helicopter	280	24	289	14	-	-	569	38	607
TOTAL	43,618	5,341	43,482	5,476	9,098	418	96,198	11,235	107,433

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Supplemental Noise Measurements



Site	Overall Measured DNL ⁽¹⁾	Primary Noise Source (estimated)
1	61.7	Aircraft slightly more than church bells
2	61.0	Aircraft
3	59.3	Aircraft are likely a secondary source
4	60.1	Aircraft on par with other sources
5	60.0	Aircraft
6	61.0	Aircraft
7	63.3	Aircraft
8	60.1	Road traffic

Notes:
 (1) average of 15 days per site; includes airshow w weekend.
 (2) average of 4 hours of manned observation per site

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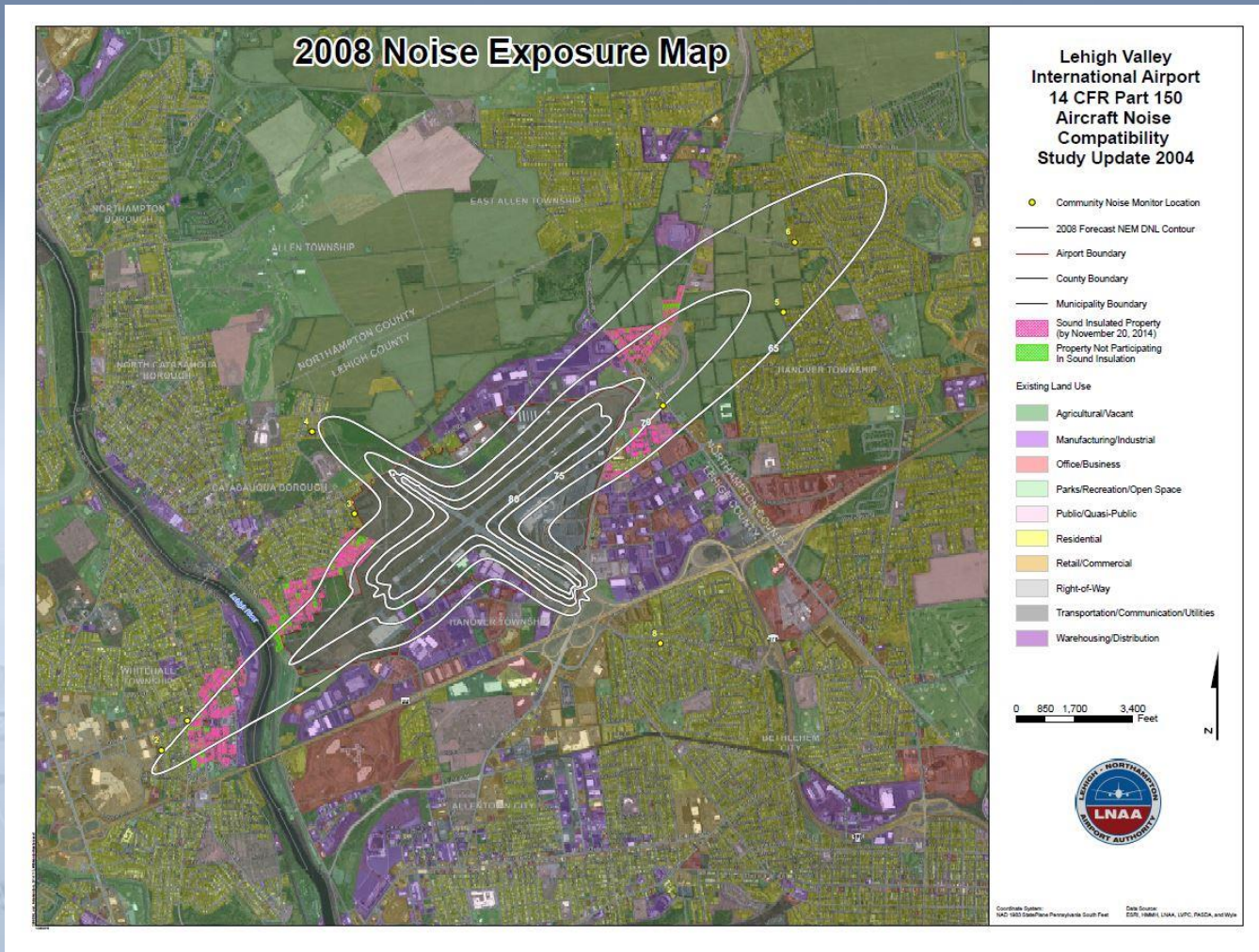
2008 NCP Recommended Measures



Implemented measures:

- Sound insulation of non-compatible properties located within 65 DNL of the 2008 Noise Exposure Map:
 - 632 residential properties, 3 churches sound insulated to date
- Acquisition of Avigation Easements for sound insulated properties
 - Avigation Easement: A property right acquired from a land owner for the use of the airspace above the property in regards to all impacts (noise, exhaust, lights, height restrictions). Protects the safety of the Airport and Property Owner.
- Continuation of Noise/Sound Insulation Program office
 - Closed in 2013; Local staff available on-call
- Continuation of Noise Monitoring System
 - System shut down in January, 2013 due to reduced noise impacts; will be reevaluated as part of Study Update

Sound Insulation – Progress to date



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Sound Insulation Eligibility Criteria

- Sound insulation goals: 5 dB noise level reduction and interior noise level below 45 DNL post-construction
- Prior to 2012, eligibility requirements:
 - Residential or noise-sensitive structure (churches, hospitals, schools, daycares) located within the 65 dB DNL
 - Built prior to October 1, 1998
- 2012 FAA Program Guidance Letter (PGL)
 - Structures must also have an interior noise level greater than 45 dB DNL
 - Programs must be fully compliant by September 2015
- HVAC (cooling and ventilation systems) may be available for homes that have interior noise levels below 45 dB DNL

CAC Action Items

- Provide input and feedback on Study information and potential noise mitigation measures;
- Talk to neighbors and community members regarding the Study;
- Encourage interested parties to submit questions and/or attend the Community Informational Workshop and Public Hearing.

TAC Input/Discussion



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