wyle

Memorandum

To: **City Of Westfield, Councilman** **Date:** June 1, 2016

From: Brian Barnes, Airport Manager, **Ext:** 413-572-6294
Jane Verbeck, Wyle 413-568-2320
Mel Baker, Wyle 413-568-2320

Subject: **Draft of the Westfield-Barnes Regional Airport's Noise Compatibility Program Update**

Dear Councilman,

Attached please find the copy of the Westfield-Barnes Regional Airport's Noise Compatibility Program Update for your review.

Brian Barnes, Airport Manager, Jane Verbeck, Wyle and Mel Baker, Wyle are available to answer any questions you may have.

Thank you for your attention to this matter.

Westfield-Barnes Regional Airport - Noise Compatibility Program Update

EXECUTIVE SUMMARY

What is an NCP?

An NCP consists of measures proposed to reduce noise exposure in the community to minimize land use considered incompatible with aircraft operations. NCPs typically consider 3 classes of measures:

- Noise Abatement
- Land Use Management
- Program Management

Terms

- Decibel (dB)
- Day-Night Average Sound Level (DNL)
- Noise Exposure Map

BAF's current NCP was approved in 2009

	2009 NCP Measure	Status: Approved by FAA? YES / no	Status: Implemented by BAF? YES / no
	Noise Abatement		
N1	Modification of Aircraft Departure Tracks (Continuation of 1990 Measures 2 & 4)	YES	Partially implemented
N2	Perform a Site Selection/Feasibility Study for a Noise Barrier south of Runway 02	YES	no
N3	Encourage the Use of GPS, RNAV, WAAS, and FMS Equipment to Enhance Noise Abatement Navigation	YES	YES
	Land Use Management		
L1	Voluntary Acquisition of Homes within DNL 70 dB Noise Contour	YES	Implemented (not completed)
L2	Acquire the Arbor Mobile Home Park and Relocate residents	YES	no
L3	Sound Insulate homes within the DNL 65 dB noise contour	YES	Implemented (not completed)
L4	Remedial Easement Acquisition	YES	YES
L5	Sound Insulate Educational Facilities and Places of Worship	no	no
L6	Preventive Easement Acquisition	YES	no
L7	Modify Existing Zoning	YES	no
L8	Acquire Undeveloped Land	YES	no
L9	Airport Noise Overlay District	YES	no
L10	Environmental Review	YES	Yes
L11	Real Estate Disclosure	YES	no
L12	Modify Subdivision Regulations	YES	no
L13	Recommend Building Code Modifications	YES	no
	Program Management		
P1	Establish a Noise Mitigation Advisory Committee	YES	YES
P2	Institute a Community Awareness Program	YES	YES
P3	Institute a Fly Quiet Program	YES	Partially implemented
P4	Periodic Evaluation of Noise Exposure	YES	YES

- **BAF's Noise Exposure Map (NEM) – See Figure 1 for comparison of CY14 (2009) and CY20/CY21[1] NEMs**

Non-compatible Properties for CY21 NEM

DNL Band (dBA)	Program To Date with 2021 NEM					2021 NEM Newly Incompatible Properties (1)	GRAND TOTAL	Potential Properties to be Addressed (2)
	Acquired Properties	Avigation Easement	Sound Insulated Properties	Not Addressed (1)	Total			
65-70	10	1	49	60	120	151	271	211
70-75	-	-	-	5	5	1	6	6
75+	-	-	-	-	-		-	-
Total (≥65)	10					152	277	217

Source: BAF 2015

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

(1) includes some parcels exposed to DNL less than 65 dB.

(2) equals those not addressed in the 2009 NCP plus those newly incompatible

- **NCP needs to be updated in order to reflect the new NEMs**

[1] Renamed to CY2021 NEM for the purpose of the NCP.

2016 NCP Overview

- **20 measures considered – 4 for NA, 12 for LU and 4 for PM**
  - All 2009 NCP's measures carried forward for continued consideration (for the most part), except:
    - N2 (barrier)
    - L2 (mobile home park acquisition)
  - Only 1 new measure (preferential runway system) re the 2009 NCP; FAA requirement
- **3 measures not recommended for inclusion in the 2016 NCP**
  - NA2 (noise abatement departure procedures for Runways 02 and 20)
    - Only a 6% (14) decrease in the number of homes potentially eligible for mitigation
    - Moves noise to 'new' areas
  - NA4 (preferential runway system; examined most closed patterns switching to Rwy 02 (vice Rwy 20)
    - Prevailing winds are out of the south
  - LU7 (voluntary acquisition of Undeveloped Land)
    - Financial impact to the City
- **Highlights of 17 measures recommended by BAF**

Recommended Measures	
Noise Abatement Alternatives	
NA1	Noise Abatement Departure Procedures for Runways 15 and 33
NA3	Continue to Encourage the Use of GPS, RNAV, WAAS, and FMS Equipment to Enhance Noise Abatement Navigation
Land Use Management Alternatives	
LU1	Voluntary Acquisition of Eligible Residential Structures
LU2	Residential Sound Insulation Program
LU3	Remedial Easement Acquisition
LU4	Sound Insulate Place of Worship
LU5	Preventive Easement Acquisition
LU6	Modify Existing Zoning
LU8	Airport Noise Overlay District
LU9	Environmental Review
LU10	Real Estate Disclosure
LU11	Modify Subdivision Regulations
LU12	Building Code Modifications
Program Management Alternatives	
P1	Re-Establish a Noise Mitigation Advisory Committee
P2	Community Awareness Program
P3	Expand the Fly Quiet Program
P4	Periodic Evaluation of Noise Exposure

LU1 – voluntary acquisition of eligible residential structures
- 25 identified within the 65 dB DNL contour (vice 70)
- Implement over next 3 years.
- Estimated Cost: $4.2M-$7.1M

LU2 – residential sound insulation program
- 181 homes within the 65 dB DNL contour
- Estimated Cost: $10.6M-$13.4M

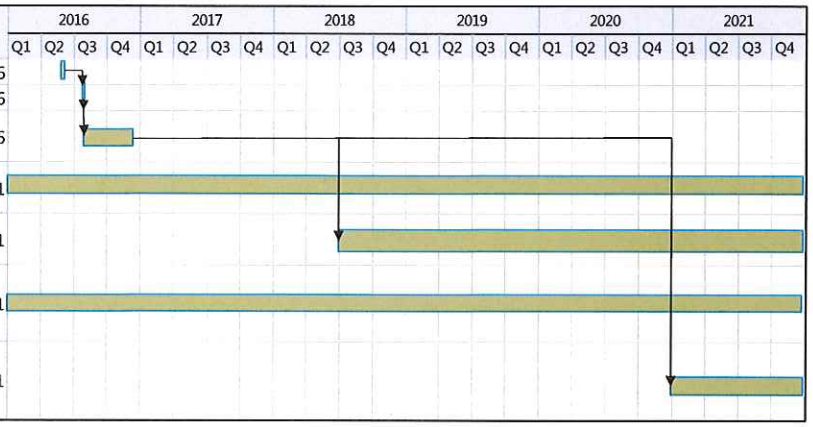
Candidate Properties for Acquisition and Sound Insulation are shown in Figure 2.

Next Steps

- Continue with implementation of acquisition program and other NCP measures not requiring FAA approval
- Present to City Council on June 16, 2016
- Submit to FAA by early July 2016
- FAA review period
- FAA approval
- Re-Launch implementation of sound insulation program
- Continue with implementation of other NCP measures not requiring FAA approval
- Launch measures requiring (and having obtained) FAA approval

Anticipated Schedule

Task Name	Start	Finish
Present to City Council	6/16/2016	6/16/2016
Submit to FAA	7/15/2016	7/15/2016
FAA approval (assuming 30-90 days approval period)	7/15/2016	11/17/2016
Continue with implementation of acquisition program	5/12/2016	8/16/2021
Re-Launch implementation of sound insulation program	5/21/2018	8/16/2021
Continue with implementation of other NCP measures not requiring FAA approval	5/12/2016	8/16/2021
Launch Items requiring FAA approval (sound insulate the place of worship)	1/1/2021	8/16/2021



For more information, please refer to the NCP document.

Prepared for:
Westfield-Barnes Airport Commission
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Westfield-Barnes REGIONAL AIRPORT

wyle

Prepared by:
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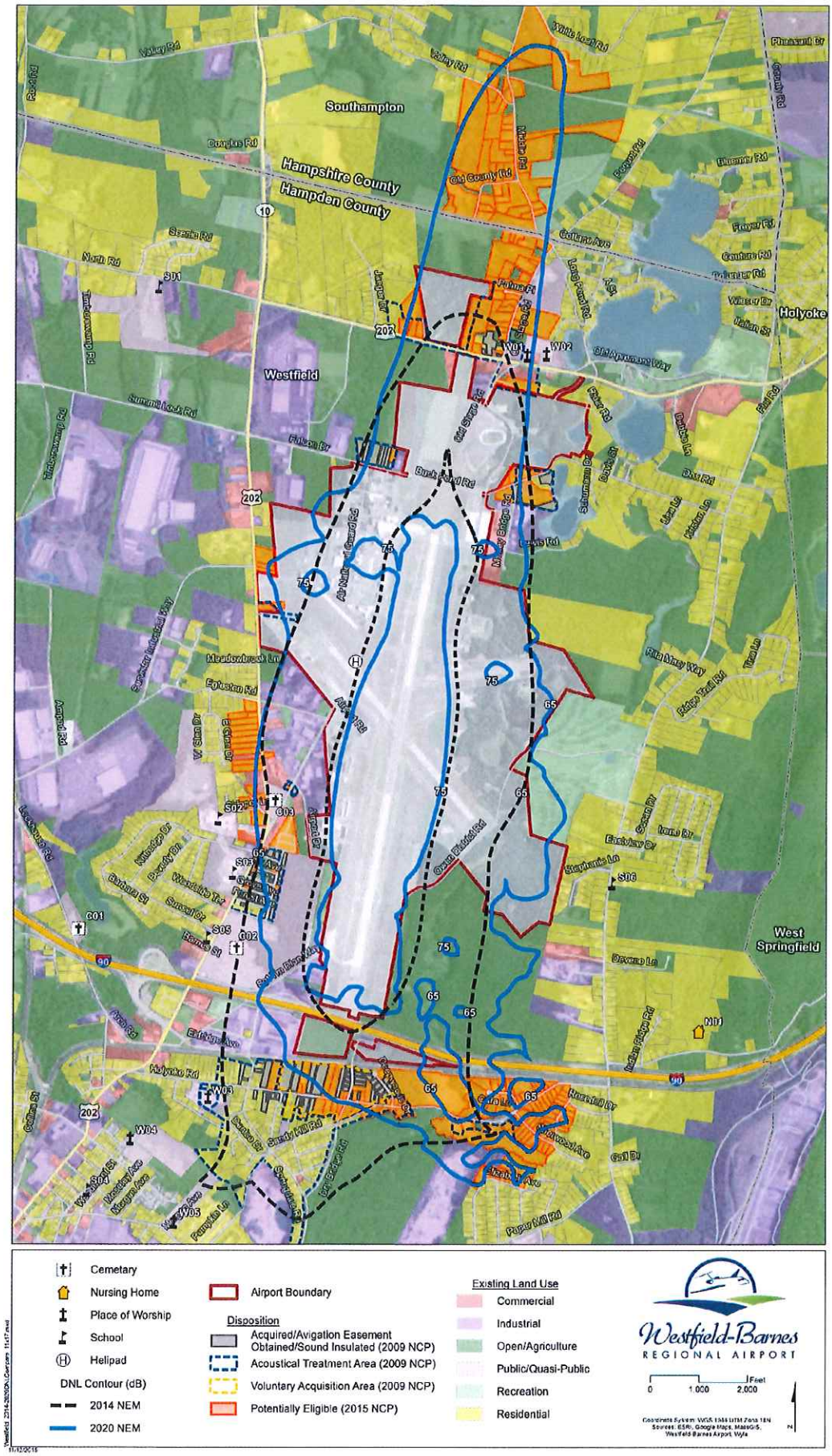

Figure 1. Comparison of Selected DNL Contours for 2014 NEM and CY2020 NEM

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Figure 2. Candidate Properties for Acquisition and Sound Insulation

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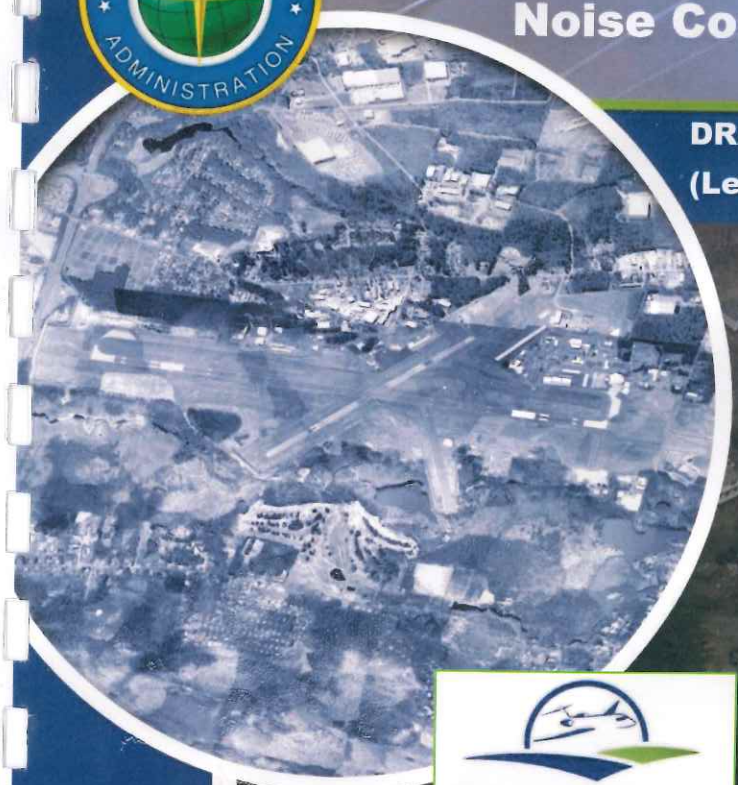
Westfield-Barnes Regional Airport Noise Compatibility Program Update

DRAFT - May 2016

(Legislative and Ordinance Subcommittee Version)



Prepared for:

Westfield-Barnes Regional Airport Legislative and Ordinance Subcommittee of the City Council

Prepared by:

Wyle Laboratories, Inc.

Westfield-Barnes Regional Airport
Noise Compatibility Program Update

DRAFT (City Council Version)

Wyle Report WR 16-04

Job No. A40058

May 2016

Prepared for:

Westfield-Barnes Regional Airport
Legislative and Ordinance Subcommittee of
the City Council
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CERTIFICATION

This is to certify the following:

(1) That the Noise Compatibility Program (NCP) Update, and associated documentation for Westfield-Barnes Regional Airport submitted in this volume to the Federal Aviation Administration under Federal Aviation Regulations Title 14, Part 150 are true and complete.

(2) Existing condition NEM represents conditions at the airport at the time of submittal of the NCP to the FAA.

(3) Forecast condition NEM represents conditions at the airport at least 5 years into the future from the date of submittal of the NCP to the FAA.

(4) All interested parties have been afforded opportunity to submit their views, data, and comments concerning the correctness and adequacy of the revised existing and forecast conditions noise exposure map, and of the descriptions of forecast aircraft operations.

By:

_____

Brian P. Barnes, Manager

Airport Name:	Westfield-Barnes Regional Airport
Airport Owner/Operator:	City of Westfield / Westfield-Barnes Airport Commission
Address:	110 Airport Drive Westfield, MA 01085

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Noise Compatibility Program Checklist

PROGRAM REQUIREMENT	YES	NO	Supporting Pages or Review Comments
I. SUBMITTING AND IDENTIFYING THE NCP:			
A. Submission is properly identified:			
1. 14 C.F.R. Part 150 NCP?	✓		
2. NEM and NCP together?		✓	NCP update only
3. Program revision? (To what extent has it been revised?)	✓		Relative to 2009 NCP
B. Airport and Airport sponsor's name are identified?	✓		Certification
C. NCP is transmitted by airport sponsor's cover letter?	✓		Certification
II. CONSULTATION (including public participation): [150.23]			
A. Documentation includes narrative of public participation and consultation process?	✓		Section 6
B. Identification of consulted parties:			
1. All parties in 150.23(c) consulted?	✓		
2. Public and planning agencies identified?	✓		
3. Agencies in 2., above, correspond to those affected by the NEM noise contours?	✓		
C. Satisfies 150.23(d) requirements by:			
1. Documentation shows active and direct participation of parties in B., above?	✓		
2. Active and direct participation of general public and opportunity to submit their views, data, and comments on the formulation and adequacy of the NCP?	✓		Section 6
3. Participation was prior to and during development of NCP and prior to submittal to FAA?	✓		Section 6
4. Indicates adequate opportunity afforded to all consulted parties to submit views, data, etc.?	✓		Section 7
D. Evidence is included there was notice and opportunity for a public hearing on the final NCP?		✓	The FAA and Airport agreed a public meeting not necessary
E. Documentation of comments:			
1. Includes summary of public hearing comments, if hearing was held?		✓	NA
2. Includes copy of all written material submitted to operator?		✓	NA
3. Includes operator's responses/disposition of written and verbal comments?		✓	NA
F. Is there written evidence from the appropriate office within the FAA that the sponsor received informal agreement to carry out proposed flight procedures?	✓		
III. NOISE EXPOSURE MAPS: [150.23, B150.3; 150.35(f)] (*This section of the checklist is not a substitute for the Noise Exposure Map checklist. It deals with maps in the context of the Noise Compatibility Program submission.*)			
A. Inclusion of NEMs and supporting documentation:			
1. Map documentation either included or incorporated by reference?	✓		Incorporated by Reference
2. Maps previously found in compliance by FAA?	✓		
3. FAA's compliance determination still valid?			
(a) Existing condition NEM represents conditions at the airport at the time of submittal of the NCP for FAA approval?	✓		Certification
(b) Forecast condition NEM represents conditions at the airport at least 5 years into the future from the date of submittal of the NCP to the FAA for approval?	✓		Certification
(c) Sponsor letter confirming elements (a) and (b), above, if date of submission is either different than the year of submittal of the previously approved NEMs or over 12 months from the date shown on the face of the NEM?	✓		Certification
(d) If (a) through (c) cannot be validated, the NEMs must be redone and resubmitted as per 150.21.			NA
4. Does 180-day period have to wait for map compliance finding?		✓	
B. Revised NEMs submitted with program: (Review using NEM checklist if map revisions included in NCP submittal. Report the applicable findings in the spaces below after a full review using the NEM checklist and narrative.)			
1. Revised NEMs included with program?	✓		Revised NEM submitted in 2015
2. Has airport sponsor requested in writing that FAA make a determination on the NEM(s), showing NCP measures in place, when NCP approval is made?		✓	NA
C. If program analysis uses noise modeling:			
1. INM, HNM, or FAA-approved equivalent?			NA
2. Monitoring in accordance with A150.5?			NA
D. One existing condition and one forecast-year map clearly identified as the official NEMs?	✓		We only included one forcast

2

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Noise Compatibility Program Checklist (*continued*)

PROGRAM REQUIREMENT	YES	NO	Supporting Pages or Review Comments
IV. CONSIDERATION OF ALTERNATIVES: [B150.7, 150.23(e)(2)]			
A. At a minimum, were the alternatives below considered, or if they were rejected was the reason for rejection reasonable and based on accurate technical information and local circumstances?			
1. Land acquisition and interests therein, including air rights, easements, and development rights?	✓		Section 4
2. Barriers, acoustical shielding, public building soundproofing	✓		Sections 3 and 4
3. Preferential runway system	✓		
4. Voluntary flight procedures	✓		Section 4
5. Restrictions described in B150.7 (taking into account Part 161 requirements)	✓		
6. Other actions with beneficial impact not listed in the regulation	✓		Section 4
7. Other FAA recommendations (see D, below)		✓	
B. Responsible implementing authority identified for each considered alternative?	✓		Section 4
C. Analysis of alternative measures:			
1. Measures clearly described? 2. Measures adequately analyzed? 3. Adequate reasoning for rejecting alternatives?	✓		
D. Other actions recommended by the FAA: As the FAA staff person familiar with the local airport circumstances, determine whether other actions should be added? (*List separately, or on back, actions and describe discussions with airport sponsor to have them included prior to the start of the 180-day cycle. New measures recommended by the airport sponsor must meet applicable public participation and consultation with officials before they can be submitted to the FAA for action. See E., below.*)		✓	
V. ALTERNATIVES RECOMMENDED FOR IMPLEMENTATION: [150.23(e), B150.7(c); 150.35(b), B150.5]			
A. Document clearly indicates:			
1. Alternatives that are recommended for implementation?	✓		Section 4
2. Final recommendations are airport sponsor's, not those of consultant or third party?	✓		
B. Do all program recommendations:			
1. Relate directly or indirectly to reduction of noise and noncompatible land uses? (*Note: All program recommendations, regardless of whether previously approved by the FAA in an earlier Part 150 study, must demonstrate a noise benefit if the airport sponsor wants FAA to consider the measure for approval in a program update. See E., below.*)	✓		
2. Contain description of each measure's relative contribution to overall effectiveness of program?	✓		
3. Noise/land use benefits quantified to extent possible to be quantified? *(Note: some program management measures cannot be readily quantified and should be described in other terms to show their implementation contributes to overall effectiveness of the program.)*	✓		
4. Does each alternative include actual/anticipated effect on reducing noise exposure within noncompatible area shown on NEM?	✓		
5. Effects based on relevant and reasonable expressed assumptions?	✓		
6. Does the document have adequate supporting data that the measure contributes to noise/land use compatibility?	✓		
C. Analysis appears to support program standards set forth in 150.35(b) and B150.5?	✓		
D. When use restrictions are recommended for approval by the FAA:			
1. Does (or could) the restriction affect Stage 2 or Stage 3 aircraft operations (regardless of whether they presently operate at the airport)? (If the restriction affects Stage 2 helicopters, Part 161 also applies.)		✓	NA
2. If the answer to D.1 is yes, has the airport sponsor completed the Part 161 process and received FAA Part 161 approval for a restriction affecting Stage 3 aircraft? Is the FAA's approval documented? For restrictions affecting only Stage 2 aircraft, has the airport sponsor successfully completed the Stage 2 analysis and consultation process required by Part 161 and met the regulatory requirements, and is there evidenced by letter from FAA stating this fact?		✓	NA
3. Are non-restrictive alternatives with potentially significant noise/compatible land use benefits thoroughly analyzed so that appropriate comparisons and conclusions among all alternatives can be made?		✓	NA
4. Did the FAA regional or ADO reviewer coordinate the use restriction with APP-400 prior to making determination on start of 180-days?		✓	NA

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Noise Compatibility Program Checklist (*concluded*)

PROGRAM REQUIREMENT	YES	NO	Supporting Pages or Review Comments
V. ALTERNATIVES RECOMMENDED FOR IMPLEMENTATION: [150.23(e), B150.7(c); 150.35(b), B150.5]			
E. Do the following also meet Part 150 analytical standards?			
1. Recommendations that continue existing practices and that are submitted for FAA re-approval? *(Note: An airport sponsor doesnot have to request FAA re-approval if noise compatibility measures are in place from previously approved Part 150 studies. If the airport has implemented the measures as approved in the previous NCP, the measures may be reported and modeled as baseline conditions at the airport.)*	✓		
2. New recommendations or changes proposed at the end of the Part 150 process?		✓	
F. Documentation indicates how recommendations may change previously adopted noise compatibility plans, programs, or measures?		✓	
G. Documentation also:			
1. Identifies agencies that are responsible for implementing each recommendation?	✓		Section 4 and Table 5-2
2. Indicates whether those agencies have agreed to implement?		✓	
3. Indicates essential government actions necessary to implement recommendations?	✓		
H. Timeframe:			
1. Includes agreed-upon schedule to implement alternatives?	✓		Section 5
2. Indicates period covered by the program?	✓		Section 5
I. Funding/Costs:			
1. Includes costs to implement alternatives?	✓		Section 5
2. Includes anticipated funding sources?		✓	
VI. PROGRAM REVISION: [150.23(e)(9)] Supporting documentation includes provision for revision? *(Note: Revision should occur when it is likely a change has taken place at the airport that will cause a significant increase or decrease in the DNL noise contour of 1.5 dB or greater over noncompatible land uses. See §150.21(d))*			

Nomenclature

ID	Definition
AIP	Airport Improvement Program
ANOD	Airport Noise Overlay District
ATP	Acoustical Test Plan
BBRS	Building Regulations and Standards
CFR	Code of Federal Regulations
CY	Calendar Year
dB	Decibel
DNL	Day-Night Average Sound Level (U.S. cumulative noise metric)
FAA	Federal Aviation Administration (U.S.)
FAR	Federal Aviation Regulation
ICAO	International Civil Airport Organization
MAANG	Massachusetts Air National Guard
MGL	General Laws of Massachusetts
NA	Noise Abatement
NCP	Noise Compatibility Plan
NEM	Noise Exposure Map
NLR	Noise Level Reduction
NMAC	Noise Mitigation Advisory Committee
NPIAS	National Plan of Integrated Airport Systems
PGL	Program Guidance Letter
RR	Rural Residential
STC	Sound Transmission Class

1.0 Introduction

As part of its ongoing commitment to the community, Westfield-Barnes Regional Airport is voluntarily conducting an update to its Noise Compatibility Program (NCP). Ninety percent of the update is funded by the Federal Aviation Administration (FAA) and regulated under Chapter 14, Part 150 of the Code of Federal Regulations (CFR). The study is herein referred to as the "NCP Update".

A *full* study under Part 150 consists of two key components:

1. Noise Exposure Map (NEM) – shows contours of 65, 70, and 75 decibels (dB) of Aircraft Day-Night Average Sound Level (DNL) for a base year and a 5-year forecast and resulting non-compatible land uses
2. Noise Compatibility Program (NCP) -- consists of measures proposed to reduce noise exposure in the community to minimize land use considered incompatible with aircraft operations.

Westfield-Barnes Regional Airport's four-letter airport identifier given by the International Civil Aviation Organization (ICAO) is KBAF, shortened to BAF for brevity. "BAF" is used interchangeably with "Westfield-Barnes" throughout the document.

BAF's previous (full) Part 150 Study Update was submitted in 2009 and approved by the FAA on August 3, 2009. The 2009 document included an NEM for 2014 (2014 NEM).

In 2015, Wyle Laboratories, Inc. completed the NEM update and received FAA approval for it in December 22, 2015.

This document presents only the NCP component but is a companion document to the NEM document. Section 1.1 further describes the relationship of the NCP to the NEM and the applicability of the NEM to the NCP. Section 1.2 reviews the applicable land use compatibility guidelines. Section 1.3 lists the roles and responsibilities of the parties associated with this document while Section 1.4 outlines the rest of the document.

1.1 Relationship to the NEM Volume and its Applicability

Updated NEMs and associated documentation for 2015 existing conditions and 2020 future conditions were initially submitted on September 11, 2015. On December 22, 2015 the FAA determined that the NEMs complied with Part 150 and related statutory requirements and the NEM document was finalized in December 2015. Appendix A provides a copy of the December 22, 2015 letter from the FAA Airports District Office acknowledging this determination.

14 Part 150 of the CFRs requires that the NEM document and the NCP address an operational condition of the airport 5 years after the date of submission. Strictly speaking, since the NCP document is submitted in 2016, it should address the airport's operations in 2021. However, the NEM document, which was prepared and submitted in 2015, addresses the airport's operations in 2015 and 2020.

Per the Certification page in the front matter of this document, BAF certifies the NEMs for 2015/2020 are applicable and representative of the airport's operations for 2016 and 2021, respectively. Aircraft operations have not changed enough to make any noticeable changes to the DNL contours. Therefore, the 2015 DNL contours serve as a surrogate for the 2016 DNL contours and similarly, the 2020 NEM is a surrogate for the 2021 NEM.

Section 2 of this document contains a copy of the existing and forecast NEMs for 2016 and future 2021 conditions.

1.2 Land Use Compatibility Guidelines

Suggested land use compatibility guidelines for evaluating land use in areas surrounding public-use airports were developed by the FAA when the Part 150 regulations were promulgated. These guidelines, reproduced in Table 1-1, outline the recommended compatibility for common land uses in the vicinity of airports. Based on these federal guidelines, all land uses, including residential and noise-sensitive developments, are considered compatible at DNL less than 65 dB. At levels greater than or equal to 65 dB DNL, different land uses are either permitted outright, permitted with recommended sound attenuation materials incorporated into the construction, or not recommended.

The Federal government does not have jurisdiction in local land use decisions; thus, the land-use compatibility guidelines are recommendations for use by local planning jurisdictions, and form the basis for defining areas that may be eligible for federal funding assistance through the Airport Improvement Program (AIP). However, this does not preclude local jurisdictions from implementing local noise standards that are more stringent than those recommended by federal guidance.

The designations contained in Table 1-1 do not constitute a federal determination that any use of land covered by the program is acceptable or unacceptable under federal, state, or local law. The responsibility for determining acceptable and permissible land uses rests with local authorities.

1.3 Project Roles and Responsibilities

As the "airport operator", the City of Westfield (the City) has overall authority for all Part 150-related actions at BAF.

The City retained Wyle Laboratories, Inc. (Wyle) to conduct the technical work required to fulfill Part 150 analysis and documentation requirements.

No advisory committees were established.

1.4 Document Outline

Chapter 1 is an introduction to the document. Chapter 2 provides a summary of the NEM document and approved maps. Chapter 3 is an overview of the 2009 NCP measures and their standing. Chapter 4 analyzes each measure recommended for the current NCP. Chapter 5 includes the implementations process and summarizes the cost of the recommended measures. Chapter 6 describes the how the public was involved in this process.

Table 1-1. Land Use Compatibility with Yearly Day-Night Average Sound Levels

Land Use	Band of DNL (dB)					
	Less than 65	65 - 70	70 - 75	75 - 80	80 - 85	Greater than or equal to 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
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

Key:

- *Y (Yes) - Land Use and related structures compatible without restrictions.*
- *N (No) - Land Use and related structures are not compatible and should be prohibited.*
- *NLR - Noise Level Reduction (outdoor to indoor) to be achieved through incorporation of noise attenuation into the design and construction of the structure.*
- *25, 30, or 35 - Land use and related structures generally compatible; measures to achieve NLR of 25, 30, or 35 Db must be incorporated into design and construction of structure.*

Notes:

1 *- Where the community determines that residential or school uses must be allowed, measures to achieve outdoor to indoor Noise Level Reduction (NLR) of at least 25 dB and 30 dB should be incorporated into building codes and be considered in individual approvals. Normal residential construction can be expected to provide a NLR of 20 dB, thus, the reduction requirements are often stated as 5, 10 or 15 dB over standard construction and normally assume mechanical ventilation and closed windows year round. However, the use of NLR criteria will not eliminate outdoor noise problems.*

2 *- Measures to achieve NLR 25 dB must be incorporated into the design and construction of portions of these buildings where the public is received, office areas, noise sensitive areas or where the normal noise level is low.*

3 *- Measures to achieve NLR of 30 dB must be incorporated into the design and construction of portions of these buildings where the public is received, office areas, noise sensitive areas or where the normal noise level is low.*

4 *- Measures to achieve NLR 35 dB must be incorporated into the design and construction of portions of these buildings where the public is received, office areas, noise sensitive areas or where the normal level is low.*

5 *- Land use compatible provided special sound reinforcement systems are installed.*

6 *- Residential buildings require an NLR of 25.*

7 *- Residential buildings require an NLR of 30.*

8 *- Residential buildings not permitted.*

Source: FAR Part 150 Airport Noise Compatibility Planning, Appendix A, Table 1.

2.0 Approved Noise Exposure Map

This NCP study has been built upon the approved 2021 NEM in the NEM document (BAF 2015). Only information necessary for keeping this document clear has been repeated from the NEM document.

DNL contours, in 5 dB increments, are shown in Figure 2-1 for Calendar Year (CY) 2016 (CY16) and in Figure 2-2 for CY21, for the annual average daily aircraft operations for each CY. Figures 2-1 and 2-2 are Figures 3-9 and 4-1 from the NEM document, respectively.

In Figure 2-1, the 65 dB DNL contour extends off-airport by: one mile to the north along the heading of Runway 02, 600 feet to the south (south of Penn Central Railroad) along the heading of Runway 20, 0.3 mile to the west and 0.5 mile to the east. The primary area where the 70 dB DNL contour extends off-airport is south of Runway 15/33 where it extends to the east off-airport by approximately 2,000 feet. The 75 dB DNL contour extends from the airport boundary by no more than 400 feet. There is a relatively small area of land exposed to DNL between 75 dB and 80 dB located approximately 1,200 feet east of the airport boundary, south of Runway 15/33.

In Figure 2-2, representing CY21, the DNL contours are nearly identical to those of Figure 2-1 (CY16). The contours are nearly identical because of the aircraft operations being very similar. The operations for CY21 are forecast to increases by only 1%, relative to CY16 operations, with minor changes in aircraft distribution (BAF 2015).

Additionally, in accordance with Part 150 regulations, Figure 2-2 shows noise-sensitive public buildings, e.g., schools, hospitals, and health care facilities listed in Table 2-1. There would be no properties on or eligible for inclusion in the National Register of Historic Places in the map extent. As shown in Figure 2-2, no noise-sensitive public buildings would be affected by 65 dB DNL or greater.

Table 2-2, an excerpt of Table 4-5 from the NEM document, shows an estimated 431 people would be exposed to at least 65 dB DNL in 2021. Fourteen of the 431 people would be exposed to DNL between 70 dB and 75 dB DNL. No one would be exposed to DNL greater than or equal to 75 dB.

Using the land use compatibility matrix in Table 1-1, Table 2-3 shows 294 of the 885 acres exposed to DNL greater than or equal to 65 dB would be incompatible with aircraft noise as they would be residential in their use. Table 2-3 is an excerpt of Table 4-6 from the NEM document.

Table 4-7 from the NEM document, reproduced here as Table 2-4, details the disposition of the newly or formerly non-compatible properties for the 2021 NEM scenario. The total number of parcels exposed to DNL greater than or equal to 65 dB would be 277. Of the 277 parcels, 60 parcels (or 22%) were addressed by the 2009 NCP and 65 parcels (or 23%) are planned to be addressed by the current (2016) NCP. Appendix B contains a detailed listing of the properties used to generate Table 2-4.

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Existing Conditions (2016) Noise Exposure Map

Cemetary
Nursing Home
Place of Worship
School
Helipad
DNL Contour (dB)

Airport Boundary

Disposition
Acquired (2009 NCP)
Avigation Easement Obtained (2009 NCP)
Sound Insulated (2009 NCP)
Acoustical Treatment Area (2009 NCP)
Voluntary Acquisition Area (2009 NCP)

Existing Land Use
Commercial
Industrial
Open/Agriculture
Public/Quasi-Public
Recreation
Residential

Westfield-Barnes REGIONAL AIRPORT

0 1,000 2,000 Feet

Coordinate System: WGS 1984 UTM Zone 18N
Sources: ESRI, Google Maps, MassGIS, Westfield-Barnes Airport, Wyle

Westfield_2016DNL_11x17.mxd
4/26/2016

Figure 2-1. DNL Contours for Average Daily Aircraft Operations for CY2016

1

2

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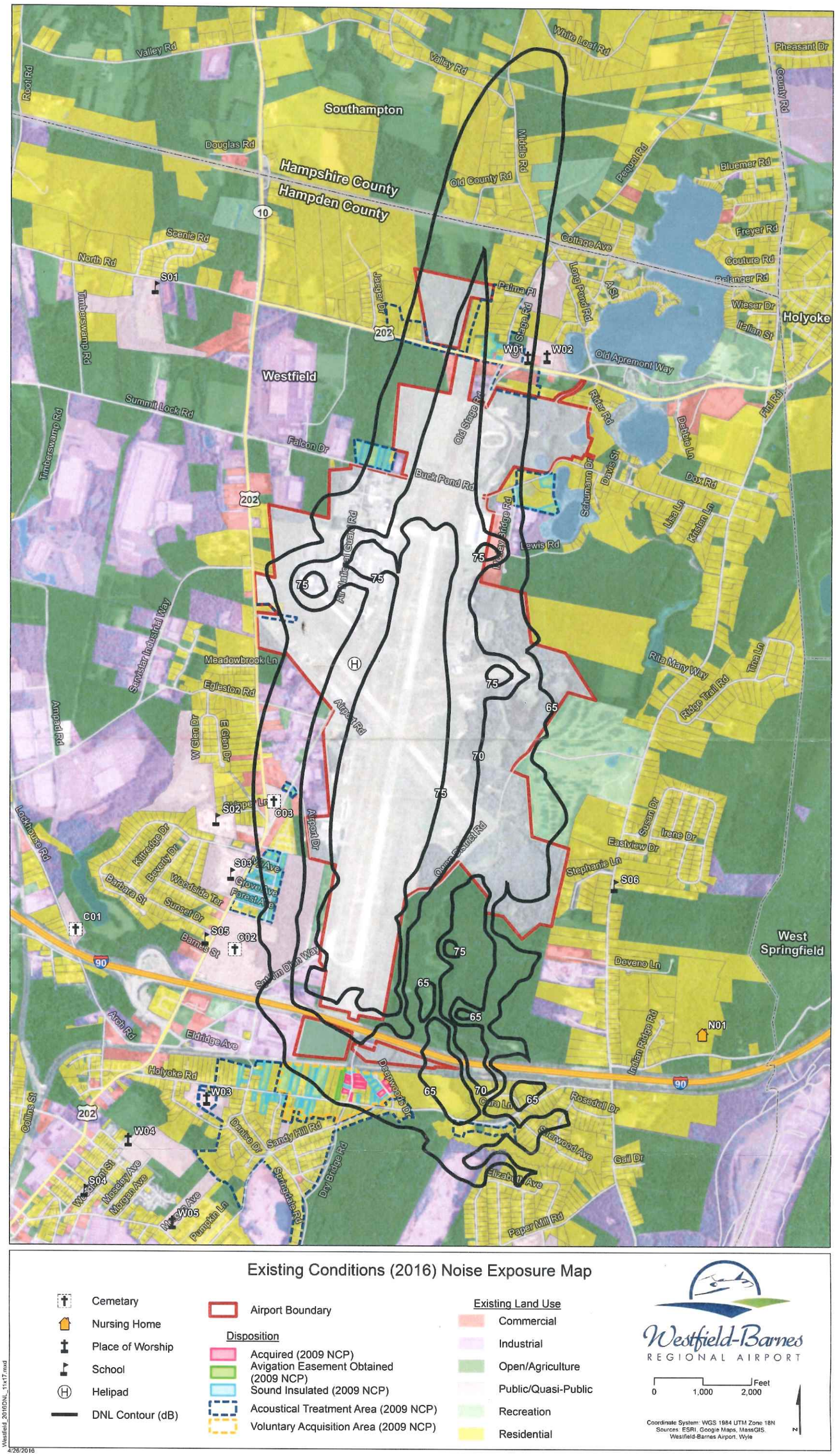

Figure 2-1. DNL Contours for Average Daily Aircraft Operations for CY2016

1

2

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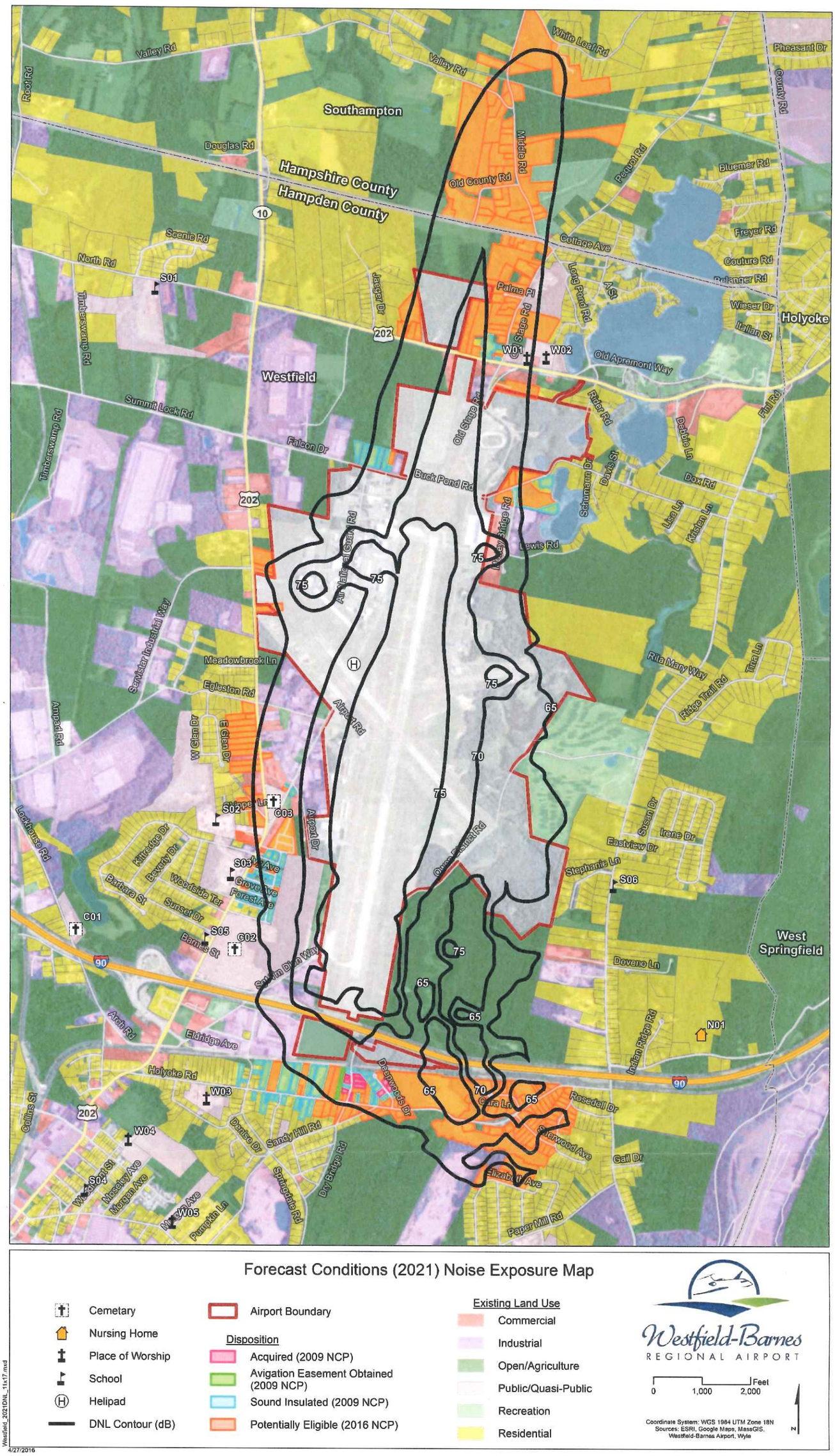

Figure 2-2. DNL Contours for Average Daily Aircraft Operations for CY2021 NEM

1

2

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Table 2-1. List of Mapped Points of Interest/Noise-sensitive Facilities

ID	Type	Name
C01	Cemetery	St John Lutheran Cemetery
C02		Saint Marys Cemetery
C03		Saint Josephs Cemetery
N01	Nursing Home	Westfield Meadows
W01	Place Of Worship	Word of Grace Church
W02		Russian Evangelical Baptist Church
W03		Our Lady of Blessed Sacrament
W04		Westfield Assembly of God Church
W05		Full Gospel Church
S01	School	White Oak School
S02		North Middle School
S03		Southhampton Rd Elementary School
S04		Moseley School
S05		The Kids Place
S06		Creative Kids

Table 2-2. Acreage and Population within Bands of DNL for 2021

DNL Band (dBA)	2021 NEM	
	Acreage (1)	Population (2)
65-70	764	417
70-75	178	14
75+	17	-
Total (≥65)	**959**	**431**

Source: BAF 2015

Notes:

1) off-airport; rounded to nearest acre; includes area of streets/roadways

2) estimated from 2010 Census

Table 2-3. Land Use Acreage within Bands of DNL for CY2021 NEM

Generalized Land Use	Band of DNL (dBA) 2021 NEM			
	65-70	70-75	75+	Total (≥65)
Commercial	25	8	1	34
Industrial	77	30	4	111
Open/Agriculture	247	90	11	348
Public/ Quasi-Public	46	16	-	62
Recreation	36	-	-	36
Residential	281	13	-	294
Total	**712**	**157**	**16**	**885**

Source: BAF 2015

Note: rounded to nearest acre; excludes areas of streets/roadways.

Table 2-4. Categorization of Non-Compatible Properties for 2021 NEM

DNL Band (dBA)	Program To Date with 2021 NEM					2021 NEM Newly Incompatible Properties (1)	GRAND TOTAL	Properties to be Addressed (2)
	Acquired Properties	Avigation Easement	Sound Insulated Properties	Not Addressed (1)	Total			
65-70	10	1	49	60	120	151	271	211
70-75	-	-	-	5	5	1	6	6
75+	-	-	-	-	-		-	-
Total (≥65)	10	1	49	65	125	152	277	217

Source: BAF 2015

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

(1) includes some parcels exposed to DNL less than 65 dB.

(2) equals those not addressed in the 2009 NCP plus those newly incompatible

In addition to depicting the parcels addressed by the 2009 NCP, Figure 2-2 shows the parcels potentially eligible for mitigation in the proposed 2016 NCP, as agreed upon with the FAA (Doucette 2015). The potentially eligible parcels are residential ones exposed to 65 dB DNL or greater (2021 NEM) or are part of a community block exposed to 65 dB DNL or greater. The latter criterion is known as 'block rounding'. As listed in Table 2-3, a revised NCP based on this 2021 NEM would include the 65 parcels not yet addressed by the 2009 NCP plus 152 parcels covered by the 65 dB contour area of the 2021 NEM, for a total of 217 potentially eligible parcels. Six of these 217 would be exposed to DNL between 70 and 75 dB. None would be exposed to DNL greater than or equal to 75 dB.

3.0 2009 Recommended Noise Compatibility Program

3.1 Summary of 2009 Measures

Table 3-1 provides a summary of the 2009 measures which were divided into three groups: Noise Abatement, Land Use Management and Program Management. All 20 recommended measures submitted to the FAA were approved except one, a Land Use Management measure: Sound Insulate Educational Facilities and Places of Worship (L5). From the 19 approved measures by FAA, eight have been either fully or partially implemented, and the remaining 11 have not been implemented. Section 3.2 addresses each measure and its status in detail.

Table 3-1. Status of 2009 NCP Measures

2009 NCP Measure		Status	
		Approved by FAA? YES / no	Implemented by BAF? YES / no
Noise Abatement			
N1	Modification of Aircraft Departure Tracks (Continuation of 1990 Measures 2 & 4)	YES	Partially implemented
N2	Perform a Site Selection/Feasibility Study for a Noise Barrier south of Runway 02	YES	no
N3	Encourage the Use of GPS, RNAV, WAAS, and FMS Equipment to Enhance Noise Abatement Navigation	YES	YES
Land Use Management			
L1	Voluntary Acquisition of Homes within DNL 70 dB Noise Contour	YES	Implemented (not completed)
L2	Acquire the Arbor Mobile Home Park and Relocate residents	YES	no
L3	Sound Insulate homes within the DNL 65 dB noise contour	YES	Implemented (not completed)
L4	Remedial Easement Acquisition	YES	YES
L5	Sound Insulate Educational Facilities and Places of Worship	no	no
L6	Preventive Easement Acquisition	YES	no
L7	Modify Existing Zoning	YES	no
L8	Acquire Undeveloped Land	YES	no
L9	Airport Noise Overlay District	YES	no
L10	Environmental Review	YES	Yes
L11	Real Estate Disclosure	YES	no
L12	Modify Subdivision Regulations	YES	no
L13	Recommend Building Code Modifications	YES	no
Program Management			
P1	Establish a Noise Mitigation Advisory Committee	YES	YES
P2	Institute a Community Awareness Program	YES	YES
P3	Institute a Fly Quiet Program	YES	Partially implemented
P4	Periodic Evaluation of Noise Exposure	YES	YES

3.2 Status of 2009 Measures

3.2.1 Noise Abatement

Modification of Aircraft Departure Tracks

Noise Abatement Measure 1 (N1) recommended modifying the location and altitude of aircraft departure tracks utilizing each of the airport's four runways in order to minimize the level of noise caused by aircraft and helicopter overflights on the noise-sensitive population surrounding the airport. Specifically, N1 called for noise abatement departure procedure to direct aircraft on Runway 02 to turn left to a 360-degree heading upon crossing the airport boundary until clear of noise-sensitive facilities, after which the aircraft can proceed on course. From Runway 20, noise abatement departure flight tracks specified a left turn to a 180-degree heading upon crossing the airport boundary. Runway 33 departures are prohibited from making intersection departures, in order to maximize the height of aircraft above the Arbor Mobile Home Park along the extended runway centerline. Runway 15 VFR departures are currently directed to maintain the runway heading until crossing the ridge line (unless otherwise directed by ATC).

N1 was approved by the FAA, and partially implemented by BAF. The procedures for Runways 15 and 33 are in effect.

Perform a Site Selection/Feasibility Study for a Noise Barrier south of Runway 02

Noise Abatement Measure 2 (N2) recommended the construction of a noise barrier on the south side of the airport near the Runway 02 threshold to attempt to provide relief to airport neighbors from noise created by aircraft while on the ground, such as the use of reverse thrust and initial departure roll.

N2 was approved by the FAA, but not implemented by BAF. Numerous sites were evaluated but no appropriate site deemed appropriate for construction of a barrier. Therefore, N2 will not be analyzed further in this study.

Encourage the Use of GPS, RNAV, WAAS, and FMS Equipment to Enhance Noise Abatement Navigation

Noise Abatement Measure 3 (N3) was recommended as a policy statement encouraging the creation and continued use of advanced navigation techniques such as Global Positioning System (GPS), Area Navigation (RNAV), Wide Area Augmentation System (WAAS) and Flight Management Systems (FMS) for implementation at the airport. The collective use of RNAV, GPS, FMS, and WAAS allow the better utilization of noise abatement departure procedures as well as more accurate approaches, with the benefit of reducing noise exposure over noise-sensitive land uses around the airport.

N3 was approved by the FAA and implemented by BAF.

3.2.2 Land Use Management

Voluntary Acquisition of Homes within DNL 70 dB Noise Contour

Land Use Management Measure 1 (L1) offered voluntary acquisition to the residential land uses located exposed to minimum of 70 dB DNL (or those immediately contiguous to the 70 dB DNL contour). The 2009 NCP anticipated approximately 52 parcels would be affected by L1 in the residential area south of the Massachusetts Turnpike.

L1 was approved by the FAA and implemented by BAF. Of the 52 homes, 10 homes were acquired, 20 have been sound insulated since 2009, and 1 home was paid a one-time fee for an avigation easement.

Acquire the Arbor Mobile Home Park and Relocate Residents

Land Use Management Measure 2 (L2) recommended the City of Westfield acquire the property of the Arbor Mobile Home Park and facilitate the relocation of its homeowners and rental tenants. The park is on the corner of Klondike Ave and Southampton Road and was exposed to DNL greater than or equal to 65 dB per the 2014 NEM. Typically, non-compatible land uses exposed to DNL greater than or equal to 65 dB are offered participation in sound insulation programs; however, mobile homes are not eligible for sound insulation under current AIP guidelines.

L2 was approved by the FAA but not implemented by BAF because of the objections of the park's homeowners and tenants. Therefore, further analysis and inclusion of L2 would not be necessary in this NCP.

Sound Insulate Homes within the 65 dB DNL Noise Contour

Through Land Use Management Measure 3 (L3), a total of 364 residences (including those identified for voluntary acquisition in Measure L1) were identified as being potentially eligible for participation in a sound insulation program. The goal of a sound insulation project is to effectively reduce the noise that enters the living spaces of homes or other sensitive receptors in eligible areas.

A residence was considered potentially eligible for inclusion in the sound insulation program if its parcel boundary was exposed to a DNL greater than or equal to 65 dB. Additionally, properties that comprise a contiguous residential area, part of which are parcels exposed to 65 dB DNL or greater, are also included as potentially eligible. A total of 52 properties were estimated to be exposed to DNL greater than or equal to 70 dB (or comprise a contiguous area), while the remaining 312 residences were exposed to DNL greater than or equal to 65 dB (but less than 70 dB) or represent contiguous areas adjacent to the 65 dB DNL contour.

L3 was approved by the FAA and partially implemented by BAF. As of the date of this writing, a total of 84 homes were sound insulated through this program, 20 of which were exposed to DNL greater than equal to 70 dB and 64 exposed to DNL between 65 and 70 dB.

Remedial Easement Acquisition

Land Use Management Measure 4 (L4) recommended that in exchange for participation in the sound insulation program, homeowners provide the airport with an easement guaranteeing the airport the right of flight over their residence. However, due to the voluntary nature of the sound insulation program, property owners may elect to decline participation for various reasons, such as having previously performed home renovations. In such cases, an airport sponsor may elect to offer the property owner a one-time fee in exchange for an avigation easement.

L4 was approved by the FAA and implemented by BAF for one property located at 342 Holyoke Road. Additionally, another property located at 27 Deepwoods has applied for remedial easement and approved in the grant (AIP #48 for 2016-2017) as of August 19, 2015

Sound Insulate Educational Facilities and Places of Worship

Land Use Management Measure 5 (L5) recommended the airport investigate the feasibility of sound insulating educational facilities and places of worship that were immediately adjacent to the 65 dB DNL contour. Five noise-sensitive facilities as listed below were preliminarily identified as potential candidates for sound insulation, based on their proximity to the 2014 NEM.

1. Westfield North Middle School (S02), located to the west of the airport.
2. Southampton Road Elementary School (S03), located to the west of the airport.
3. World of Grace Church (W01), located to the north of the airport along North Road.
4. Russian Evangelical Church (W02), located to the north of the airport along North Road.
5. Our Lady of Blessed Sacrament Church (W03), located along Holyoke Road south of the airport.

FAA did not approve L5 because the candidate properties were not exposed to DNL greater than or equal to 65 dB. Therefore, L5 was not implemented by BAF.

Preventive Easement Acquisition

Acquiring easements for future incompatible development in specified areas was recommended through Land Use Management Measure 6 (L6). Similar to the acquisition of easements through sound insulation programs (L4), easements can be acquired in order to prevent *future* incompatible development in specified areas. In the case of easement acquisition of undeveloped or compatible land uses, they can act as a deterrent for future incompatible development. The implementation of L6 could have prevented the future incompatible development within or adjacent to the 65 dB DNL contour.

L6 was approved by the FAA, but not implemented by BAF.

Modify Existing Zoning

Land Use Management Measure 7 (L7) recommended modifying the existing zoning code of undeveloped land exposed to DNL of at least 65 dB to ensure compatible development.

A zoning code establishes permitted and non-permitted uses in geographic areas surrounding an airport, and includes regulations pertaining to elements such as height, density, and siting of buildings. A community relies on its zoning code to promote orderly growth and safe separation of many differing types of land uses. When considering airport noise issues, various approaches to conventional zoning are often considered. Zoning for compatible land uses within a specified boundary, such as the areas exposed to DNL greater than or equal to 65 dB, entails eliminating zoning designations that would allow for non-compatible development, such as residential districts. Changing these zoning designations from an incompatible land use to a compatible land use, such as commercial or industrial, would promote compatible land uses in noise sensitive areas. Alternatively, a jurisdiction may not desire to eliminate the feasibility of incompatible development, but may rather reduce the density of permitted residential units or to increase the size of residential lots in areas near the airport. Modifying zoning code is a very common and effective method for reducing both existing and potential noise-sensitive development in the vicinity of airports.

L7 element was approved, but not implemented by BAF.

Acquire Undeveloped Land

In order to prevent future incompatible development, Land Use Management Measure 8 (L8) recommended undeveloped land, zoned to allow potentially incompatible land uses exposed to DNL of at least 65 dB, be voluntarily acquired by the airport. Land acquisition works in a manner similar to preventive easement acquisition, and the two are often paired prior to resale or development of potentially incompatible land.

L8 was approved by the FAA, but not implemented by BAF due to lack of available funding from the City.

Airport Noise Overlay District (ANOD)

Land Use Management Measure 9 (L9) recommended a comprehensive zoning overlay district be included in the City of Westfield's zoning ordinance. An ANOD can require noise-level disclosure in real estate transactions, and could also require specified Noise Level Reduction (NLR) in the construction of new structures or the modification of existing structures. An ANOD can also prohibit non-compatible development within a specified boundary, such as the 65 dB DNL contour, or establish "buffer zones" that impose restrictions on noise-sensitive development in the area between the non-compatible area and the fully compatible areas beyond.

The Northside Rezoning Ordinance, drafted by the City of Westfield in 1984, included an Airport Noise Overlay Zone prescribing various levels of restriction on noise-sensitive development within the Part 150 Study's DNL contours. The draft Ordinance recommended residential development be prohibited if exposed to DNL of at least 65 dB, and specific NLR goals be met for other non-compatible development. Noise disclosure notices and easement acquisitions were recommended for all types of development exposed to DNL of at least 65 dB. The Northside Rezoning Ordinance has not been finalized and there are no plans for its implementation in the foreseeable future.

L9 was approved by the FAA, but not implemented by BAF.

Environmental Review

Land Use Management Measure 10 (L10) recommended the City of Westfield include airport staff during the course of administrative review of proposals for land use development in areas either exposed to DNL greater than or equal to 65 dB or in another defined boundary, such as an ANOD.

L10 was approved by the FAA and implemented by BAF. As is currently the practice in the City of Westfield, the airport manager participates in a weekly roundtable discussion of development located in the vicinity of the airport, and may be affected by aircraft overflights.

Real Estate Disclosure

Land Use Management Measure 11 (L11) directed the Airport Manager to continue pursuing the implementation of real estate disclosure through both coordination with local real estate professionals to include information about airport noise and overflights, and through the inclusion of a noise disclosure ordinance attached to a property deed. While L11 would not prohibit development within specified DNL contours, it would provide limited protection to the airport in cases where property owners are located within a predefined boundary of noise exposure. Currently, no aircraft noise real estate disclosure notices are included in Massachusetts law, and no specific voluntary disclosure practices are in place in the City of Westfield.

L11 was approved by the FAA and would have been a part of the Northside Rezoning Ordinance, which has not been implemented (see L9).

Modify Subdivision Regulations

Land Use Management Measure 12 (L12) directed the Airport Manager to pursue the inclusion of methods such as the incorporation of noise attenuating standards, noise disclosure, or the dedication of easements in the regulation of proposed subdivisions that may be affected by aircraft noise as promulgated by the City of Westfield.

Subdivision regulations apply to large areas of compatibly-zoned land that have yet to been subdivided or that may be changed from one zoning category to another to permit development. The City of Westfield Planning Board administers the Rules and Regulations Governing the Subdivision of Land in Westfield, in accordance with the General Laws of Massachusetts (M.G.L.) Chapter 41, Section 81K to GG, often referred to as the "Subdivision Control Law." These regulations ensure the proper arrangement of roads, establish open space guidelines, ensure adequate public utilities such as water and sewer service, conformance with applicable City of Westfield zoning ordinances, and ensure an orderly and efficient layout of the subdivision.

L12 was approved by the FAA, but not yet implemented by BAF.

Recommend Building Code Modifications

Land Use Management Measure 13 (L13) directed the Airport Manager to continue to engage the Board of Building Regulations and Standards (BBRS) to encourage changes in the state building code that include requirements to address noise exposure from aircraft sources.

The City of Westfield, in accord with all other jurisdictions in Massachusetts, adheres to the current Massachusetts Building Code as its guiding document. All construction and renovation of detached one- and two-family homes are regulated by the BBRS. As such, any changes designed to address airport noise would require modifications to the state code.

L13 was approved by the FAA, but not yet implemented by BAF.

3.2.3 Program Management

Establish a Noise Mitigation Advisory Committee

Program Management Measure 1 (P1) recommended that the Noise Mitigation Committee, a group of individuals comprising of the Airport Manager or designee, personnel from various airport tenants, including staff from the Massachusetts Air National Guard (MAANG), City of Westfield Planning Department staff, elected officials, and representatives from neighborhood groups or subdivisions, to be established to provide information to the community, monitor the implementation of various mitigation measures and link the City of Westfield and surrounding communities with BAF.

P1 was approved by the FAA, and implemented by BAF. The MAANG worked with BAF to establish an MC3 Council, which met twice per year. The public was regularly invited to attend and discuss any items impacting the local community and were invited to offer solutions in conjunction with the MAANG and BAF. The past three meetings yielded nearly no public participation, therefore the Council was discontinued.

BAF has maintained an 'open door' policy allowing the public to have access to, meet and work one-on-one with BAF staff and their consultants to resolve any issues they may have with the noise mitigation programs. BAF estimates this direct approach, given the airport's size and relatively small-town environment, has been more effective than the MC3 Council and has yielded better communication and improved BAF's public outreach.

Institute a Community Awareness Program

Program Management Measure 2 (P2) recommended establishment of a community awareness program consisting of educational materials designed to help members of the public understand the characteristics of operations at the airport.

P2 was approved by the FAA and implemented by BAF via the airport's website [www.barnesairport.com].

Institute a Fly Quiet Program

Program Management Measure 3 (P3) recommended that BAF create and institute a Fly Quiet Program which would build upon the existing noise abatement departure procedures already in place. The recommended Fly Quiet Program included installation of signage at each runway end reminding pilots about the noise abatement procedures, the creation of a color-coded map that identifies noise-sensitive land uses in the airport environs, and brochures keeping airport tenants aware of noise-related community concerns, as well as encouraging the use of both NBAA noise abatement procedures and AOPA Noise Awareness Steps.

One of the largest obstacles to airport growth and development is a lack of understanding of the type of operations at an airport. A community awareness program provides details about airport tenants, the types of operations flown, and the times of days operations are flown. Additionally, these programs share the pilot's and airport tenant's perspectives, information regarding planning and development, and any temporary construction projects that would change the typical operating conditions at the airport. This type of program could also provide detail on various noise and land use mitigation projects undertaken by the airport.

P3 was approved by the FAA and partially implemented by BAF. The current Fly Quiet Program encourages the use of both NBAA noise abatement procedures and AOPA Noise Awareness Steps.

Periodic Evaluation of Noise Exposure

Program Management Measure 4 (P4) directed the Westfield Airport Commission to periodically update the NEMs either within a five-year time frame or when operating conditions at the airport change.

P4 was approved by the FAA and implemented by BAF (evidenced by the 2015 NEM update).

4.0 Recommended Noise Compatibility Program

Implemented and non-implemented measures from the 2009 NCP (Section 3) were re-evaluated for applicability in the current NCP. Table 4-1 lists the measures analyzed and whether they are recommended for the 2016 NCP. All measures from the 2009 NCP are carried forward except for measures N2 (barrier), and L2 (mobile home park acquisition). Consistent with the NCP Checklist (FAA regulations), the 2016 NCP also considers a preferential runway system. Other than the preferential runway system, no new measures were identified, relative to the 2009 NCP.

Table 4-1. Measures Analyzed for 2016 NCP

Analyzed Measures		Recommended for 2016 NCP? (YES or no)
Noise Abatement Alternatives		
NA1	Noise Abatement Departure Procedures for Runways 15 and 33	YES
NA2	Noise Abatement Departure Procedures for Runways 02 and 20	no
NA3	Continue to Encourage the Use of GPS, RNAV, WAAS, and FMS Equipment to Enhance Noise Abatement Navigation	YES
NA4	Preferential Runway System for Arrivals and Closed Patterns	no
Land Use Management Alternatives		
LU1	Voluntary Acquisition of Eligible Residential Structures	YES
LU2	Residential Sound Insulation Program	YES
LU3	Remedial Easement Acquisition	YES
LU4	Sound Insulate Place of Worship	YES
LU5	Preventive Easement Acquisition	YES
LU6	Modify Existing Zoning	YES
LU7	Voluntary Acquisition of Undeveloped Land	no
LU8	Airport Noise Overlay District	YES
LU9	Environmental Review	YES
LU10	Real Estate Disclosure	YES
LU11	Modify Subdivision Regulations	YES
LU12	Building Code Modifications	YES
Program Management Alternatives		
P1	Re-Establish a Noise Mitigation Advisory Committee	YES
P2	Community Awareness Program	YES
P3	Expand the Fly Quiet Program	YES
P4	Periodic Evaluation of Noise Exposure	YES

4.1 Noise Abatement Measures

Measure NA1 –Noise Abatement Departure Procedures for Runways 15 and 33

Description: NA1 continues the portion of Measure N1 from the 2009 NCP which dealt with departure procedures for Runways 15 and 33. Measure NA1 calls for:

- VFR departures on Runway 15 to be directed to maintain runway heading until crossing the ridgeline (unless otherwise directed by ATC), and
- Departures on Runway 33 to be prohibited from beginning their takeoff roll at the intersection of Runways 02/20 and 33, in order to maximize aircraft altitudes at the Arbor Mobile Home Park located along the extended centerline of Runway 33.

Benefits: NA1 provides single-event noise benefits to dwellings immediately adjacent to the airport and along the extended runway centerlines.

Disadvantages: NA1 does not provide measurable DNL benefit. Furthermore, in some cases, the use of noise abatement departure procedures can slightly increase aircraft travel time and fuel costs. Based on ATC workload, some aircraft may not utilize the voluntary procedures of NA1. Additionally, military aircraft are not subject to the specified procedures.

Costs: There are no additional costs to the airport, Air Traffic Control Tower (ATCT) or City of Westfield involved with the continued implementation of NA1. Minor costs associated with additional fuel burn may be experienced by airport users.

Schedule of implementation: As NA1 is an existing condition for general aviation operations, it may continue prior to FAA approval of the NCP.

Responsible party: The ATCT and individual pilots have the ultimate responsibility for the safe operation of aircraft. BAF can continue to facilitate the use of NA1 through the use of informal agreements with airport users as well as through the Fly Quiet Program.

Recommendation: NA1 is recommended for the NCP.

Measure NA2 –Noise Abatement Departure Procedures for Runways 02 and 20

Description: Similar to measure N1 from the 2009 NCP, measure NA2 calls for the modification of departure procedures for Runways 02 and 20. Measure NA2 calls for:

- Departures on Runway 02 to be directed to turn left to a 360-degree (magnetic) heading upon crossing the airport's northern boundary, until clear of noise-sensitive facilities, after which the aircraft can proceed on-course (unless otherwise directed by ATC), and
- Departures on Runway 20 to be directed to maintain runway heading until 3 miles south of the southern airport boundary (unless otherwise directed by ATC).

Figure 4-1 shows the average daily flight tracks modeled for the 2021 NEM and the tracks considered for NA2, including military aircraft. Figure 4-2 shows the 65 dB DNL contour from the 2021 NEM and the 65 dB DNL contour for 100% compliance of NA2, including military aircraft. The change in DNL only occurs north of the airport. The proposed measure would decrease the number of affected homes potentially eligible for mitigation by 14, or 6%.

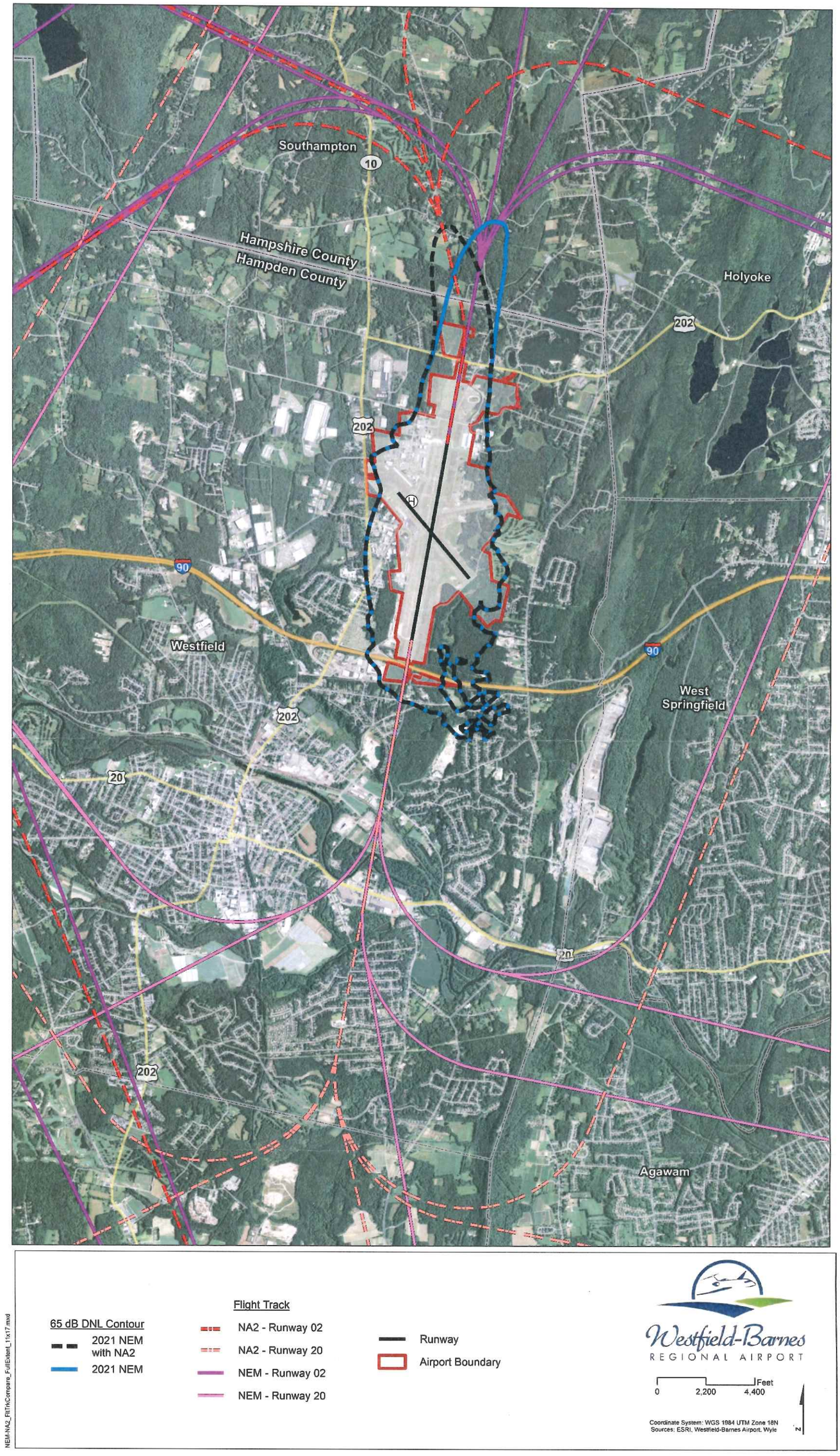

Figure 4-1. Flight Tracks for 2021 NEM and Measure NA2 and Its Effect on DNL Contours

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Figure 4-2. Effect of Measure NA2 on DNL Contours North of Airport

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Benefits: NA2 decreases the number of dwelling units exposed to DNL of at least 65 dB, albeit a relatively small decrease. The measure would also have single-event noise benefits to currently affected dwellings.

Disadvantages: NA2 would slightly increase aircraft travel time and fuel costs for most destinations. Based on ATC workload and since NA2 is voluntary, some aircraft may not utilize NA2.

Costs: There are no additional costs to the airport, ATCT or City of Westfield involved with the implementation of NA2. Minor costs associated with additional fuel burn may be experienced by airport users.

Schedule of implementation: As NA2 involves no cost to the FAA or the City, it may be implemented prior to FAA approval of the NCP.

Responsible party: The ATCT and individual pilots have the ultimate responsibility for the safe operation of aircraft. BAF can facilitate the use of NA2 through the use of informal agreements with airport users as well as through the Fly Quiet Program.

Recommendation: Because NA2 moves noise from one part of the community without a significant reduction of affected dwellings, NA2 is not recommended for the NCP.

Measure NA3 – Continue to Encourage the Use of GPS, RNAV, WAAS, and FMS Equipment to Enhance Noise Abatement Navigation

Description: NA3 is a continuation of measure N3 from the 2009 NCP and recommends continued use of advanced navigation techniques already in place at BAF. The use of RNAV, GPS, FMS, and WAAS systems collectively allow the better utilization of noise abatement departure procedures and more accurate approaches, with the benefit of reducing noise exposure over noise-sensitive land uses around an airport. No further action would be required[1], and the recommendation of NA3 would be a policy statement as opposed to a statement of immediate action.

Benefits: The use of the advanced navigation techniques has the potential to more accurately define arrival and departure procedures at the airport, while the compatible land use corridor to the north of the airport would be maximized, thereby minimizing the level of noise exposure in the more densely populated residential areas immediately south of Runway 20.

Disadvantages: Improvements in the availability of advanced avionics in aircraft may be slow and occur over a period of many years. However, it is assumed that a portion of the aircraft fleet mix may be able to utilize new procedures as they are developed and approved. Each new procedure may be subject to review by FAA Flight Standards and is also subject to environmental approval.

Costs: There are no immediate costs to the airport, ATCT, or the City of Westfield involved with the implementation of NA3. Aircraft owners would bear the costs of new navigation equipment in aircraft. As the possibility of developing new procedures is realized, each may be subject to environmental approval and coordination with the ATCT and FAA, as well as aircraft users. ATCT staff may incur costs for training for implementation of new procedures.

Schedule of implementation: As NA3 is an existing condition for general aviation operations, it may continue prior to FAA approval of the NCP.

[1] Adding an Instrument Landing System (ILS) to Runway 02 has been denied by the FAA. Runway 02 does have a Global Positioning System (GPS) approach.

Responsible party: The airport, airport users, or the ATCT may identify potential new procedures at any time.

Recommendation: NA3 is recommended for implementation in the NCP.

Measure NA4 – Preferential Runway System for Arrivals and Closed Patterns

Description: NA4 recommends a preferential runway use system favoring the use of Runway 02 for both arrivals and departures for the noisiest of aircraft. The noisiest aircraft are the F-15 aircraft from the 104th FW, on a single-event basis and on a DNL basis. Currently, a preferential runway system is implemented (and modeled for the 2016/2021 NEMs) for departures as 90% of the F-15 departures utilize Runway 02.

For arrivals and closed patterns, 90% of F-15 operations (were modeled to) utilize Runway 20. These operations are more sensitive to prevailing winds, from a safety of flight perspective, which means ATC cannot switch them to Runway 02. Prevailing winds are out of the south/southwest most of the time.

If NA4 was further focused to target times of calm wind, calm wind does not apply to more than 25% of the operations, thus, NA4 would not make a significant difference in the DNL.

Benefits: NA4 would provide single-event noise benefits to dwellings immediately adjacent to the airport and along the extended runway centerlines. NA4 has the potential of providing a decrease in DNL if closed patterns could apply.

Disadvantages: In some cases, the use of Runway 02 for arrivals and closed patterns can slightly increase aircraft travel time and fuel costs. Based on ATC workload, some aircraft may not utilize the voluntary procedures of NA4.

Costs: There are no additional costs to the airport, ATCT or City of Westfield involved with the implementation of NA4. Minor costs associated with additional fuel burn may be experienced by the 104th FW (Federal government).

Schedule of implementation: As NA4 is not dependent on the FAA, it could be implemented prior to FAA approval of the NCP.

Responsible party: The ATCT and individual pilots have the ultimate responsibility for the safe operation of aircraft. BAF can continue to facilitate the reduction of aircraft noise through the use of informal agreements with airport users as well as through the Fly Quiet Program.

Recommendation: NA4 is not recommended for the NCP because of prevailing winds.

4.2 Land Use Mitigation Measures

Measure LU1 –Voluntary Acquisition of Eligible Residential Structures

Description: LU1 would offer voluntary acquisition to the residential land uses exposed to 65 dB DNL or greater (or in an area contiguous with parcels affected by said DNL). As illustrated in Figure 4-3, there are approximately 25 parcels eligible for acquisition. Six of these dwellings are exposed to DNL of 70 dB or greater. The remaining 19 are exposed to DNL between 65 and 70 dB. The program is voluntary, and would be subject to the provisions set forth in the Uniform Relocation Assistance and Real Property Acquisition Policies Act (49 CFR Part 24) (Uniform Act).

Figure 4-3. Candidate Properties for Acquisition and Sound Insulation

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LU1 is an expansion of the 2009 NCP's Measure L1. The 2009 NCP, like most airports' acquisition programs, sought to acquire parcels exposed to 70 dB DNL or greater. LU1 is offering the acquisition program to residences exposed to at least 65 dB DNL.

Federal funding for noise compatibility projects undertaken by airports is eligible only after an airport has completed and approved a NCP. Property can be acquired by an airport either through condemnation (eminent domain) or through voluntary means, such as easements or fee simple purchase. A general outline of the procedures involved in the implementation of LU1 follows.

Following the approval by the FAA of this NCP, and assuming AIP grant funding is available, the City of Westfield will, either through its own administrative means or by soliciting bids for professional services, begin the acquisition process. The City's designated party will hire a qualified professional, independent appraiser in order to initially identify a property's fair market value. The property owner is encouraged to attend the initial appraisal. Following the appraisal, the Uniform Act specifies that the appraisal must be reviewed by a qualified review appraiser, whose purpose is to comprehensively assess the validity and reasonableness of the final valuation conclusion. This appraisal will be used to identify the fair market value of a residence, which is the basis for the City's offer. The determined fair market value is considered 'just compensation' and does not include relocation costs, which are discussed later in the process. Following the appraisal of the property the airport will begin negotiations with the property owner, with an offer that it believes is just compensation for the property, but not less than the appraised fair market value. The initiation of negotiations officially begins with the City's submission of a written offer to the property owner.

The sale of the property to the City would be similar to the sale of the property to a private seller, and includes the completion of a sales contract, transfer of title, and an executed deed. Following the closure of the sale, the airport owner or designee will provide written notice 90 days in advance of the moving date.

Participation in the acquisition program as offered in this NCP would be voluntary, and participation in the program will qualify a homeowner for the benefits outlined in the Uniform Act and implementing regulations (49 CFR Part 24). The Uniform Act addresses both land acquisition and the relocation of displaced persons. Two types of relocation costs may be offered: moving and relocation expenses and/or relocation assistance. The types of payments that may be offered are related to the owner/occupancy or tenant classification and the period of occupancy, which ranges from one to 180 days. The length of time of occupancy time periods determine the level of payments involved. Both owners and tenants are eligible for relocation costs under the Uniform Act.

An important consideration in the Uniform Act is the requirement that comparable replacement housing exist. This includes considerations such as the replacement housing being decent, safe, and sanitary; functionally equivalent to the previously occupied dwelling; within financial means; reasonably accessible to the resident's place of employment; and within reasonable comparison in terms of access to public utilities and commercial and public facilities. The acquisition and relocation program offered by the airport will include assistance in finding sufficient replacement dwellings.

Airports who utilize AIP grants for the funding of acquisition of land for noise compatibility purposes must prepare a written plan documenting a reuse plan for acquired land. Once the procedure is completed and the City is in possession of the property, it is compelled to convert the property to a compatible land use, or maintain it for continued noise compatibility purposes. Funds earned in the sale,

lease, or exchange of the property would then be returned to the AIP program or maintained for use in further approved noise compatibility projects.

Benefits: An acquisition program would result in the compatible reuse of residences exposed to DNL greater than or equal to 65 dB. As such, the land uses would be considered compatible with aircraft noise.

Disadvantages: The voluntary participation of homeowners exposed to 65 dB DNL or greater, or contiguous to the criterion contour, would result in the removal of those properties from the local tax roll. Additionally, it is expected that not all homeowners would participate in the acquisition program, thus contiguous neighborhoods may be broken up resulting in vacated space. The City of Westfield would be responsible for the maintenance of the properties acquired under this program.

Costs: The costs associated with LU1 include the appraisals, relocation and moving expenses, demolition costs, and administrative expenses. While some of these costs are fixed, others, such as the costs of acquisition of individual properties, could cause the overall cost of LU1 to fluctuate. Appraisals may cost $450 per residence. An initial analysis of assessed value according to the City of Westfield Assessor's Office indicated that the homes in this area have assessed values ranging from $170,000 to $285,000, with an average assessed value of just under $230,000. Table 4-2 shows the breakdown of the cost and the total cost for acquiring 25 homes. These costs should be considered preliminary in nature, and should be further evaluated prior to the implementation of LU1.

Table 4-2. Preliminary Acquisition Costs

Acquisition Cost per Dwelling					Eligible Dwellings	Total Cost for all Dwelings
Market Value	Relocation	Demolition	Administrative	Total per Dwelling		
$230,000	$25,000	$40,000	$15,000	$310,000	25	**$7,750,000**

Schedule of implementation: The voluntary acquisition program could continue upon approval of the NCP by the FAA and the availability of funding. The priority will be given to the six dwellings exposed to DNL between 70 and 75 dB (Table 2-3).

Responsible party: The City of Westfield and airport are responsible for the implementation of LU1.

Recommendation: LU1 is recommended for implementation in the NCP.

Measure LU2 –Residential Sound Insulation Program

Description: AIP Handbook (FAA 2014), and Program Guidance Letter (PGL) 12-09 (FAA 2012), requires that eligible properties must be (1) built prior to October 1, 1998, and (2) be exposed to DNL of at least 65 dB, with an interior noise level equal to or greater than 45 dB DNL. Determining the interior noise level of a structure would require additional steps, in addition to locating a parcel on a noise contour map, as explained in the following paragraph. The FAA also requires that noise insulation efforts be designed to achieve interior noise levels of 45 dB in habitable rooms, with a minimum increase in NLR of 5 dB. Generally, only those structures exposed to DNL greater than or equal to 65 dB are eligible; however, the FAA allows for a 'humanizing' of the sound insulation boundaries to avoid the disruption of contiguous neighborhoods.

Incorporating the recent FAA guidelines (FAA 2012 & FAA 2014), the sound insulation program will follow the seven tasks described in the BAF Acoustical Test Plan (BAF 2016). These tasks include:

1) Windshield Survey -- to inventory and categorize the buildings based on acoustically significant physical elements;
2) Site Assessment -- to assess existing conditions;
3) Acoustical Testing -- to quantify the acoustic environment of structures;
4) Acoustical Analysis -- to determine the level of interior noise of structures;
5) Determining Eligibility -- as recommended by the FAA guidelines;
6) Design for Eligible Dwellings and
7) Determining Secondary Treatments -- if the acoustical testing deemed the structures not qualified to receive the standard sound insulation package.

Using the FAA's guidelines, Figure 4-3 depicts the 217 units potentially eligible for sound insulation. A total of 6 properties are expected to be affected by noise levels of 70 dB DNL or greater (or comprise a contiguous area), while the remaining residences are expected to be affected by DNL between 65 and 70 dB or represent contiguous areas adjacent to the 65 dB DNL contour. Although attempts have been made through the Part 150 process to identify all residential structures exposed to DNL greater than or equal to 65 dB, it is possible that some may not have been identified.

LU2 is a continuation of measure L3 from the 2009 NCP.

Benefits: Property owners benefit by reduced aircraft noise levels inside their residence. Additionally, acoustic treatments have the potential to increase the value of the residence, as compared to similar structures which have not been treated.

Disadvantages: Following completion of the program, aircraft may be audible inside the structure, even after meeting FAA guidelines. Sound insulation modifications are not very effective if windows are opened during periods of pleasant weather, nor does sound insulation mitigate *outdoor* noise levels. Individuals who are particularly sensitive to aircraft noise may still experience annoying levels after their home has been treated. In cases where air conditioning units are installed, the recipients are responsible for any increased utility costs, as well as potentially increased costs associated with an increase in assessed value and taxes associated with the improvements.

Schedule of implementation: The sound insulation program could continue, subject to funding availability, following approval of the NCP by the FAA, and would be anticipated to be continued in phases over the course of five or more years. Subject to the funding availability, the priority will be:

1) Offering acquisition to the estimated 25 dwellings listed in measure LU1,
2) Offering sound insulation to eligible dwellings exposed to DNL of 65 dB and greater that were in the old 70-75 dB, and
3) Offering sound insulation to eligible dwellings exposed to DNL of at least 65 dB in this NCP.

Responsible party: The implementation of LU2 would be the responsibility of the airport and the City.

Costs: Based on the 49 homes already sound insulated in the vicinity of BAF, an average of $70,000 per home has been spent for sound insulation with a maximum of $85,000 and a minimum of $60,000. The range of cost has depended upon the types of modifications required to meet FAA requirements. Increases to the types of modifications offered or required, such as modifications to walls or roof structures, could increase the cost per home.

The total estimated cost of LU2, assuming 85% participation and an average cost of $70,000 per home for 192[2] homes, is approximately $11.5 million over the next five years. Costs for the sound insulation of the 25 homes identified as potentially eligible for acquisition in LU1 are not included in this estimate. These costs should be considered preliminary in nature, and should be further evaluated prior to the implementation of LU2.

Recommendation: LU2 is recommended for implementation in the NCP.

Measure LU3 –Remedial Easement Acquisition

Description: Easements are typically acquired during sound insulation programs, but in some cases, as described in Section 3, easements are also purchased from homeowners in lieu of other forms of mitigation. With the signing of an avigation easement, a property owner gives the airport the right of flight over the property, and also, in some cases, a property owner agrees to a restriction of future modifications or changes of land use. An airport will then hold the easement until sold or released. The avigation easement, as a legal document, would be attached to the property deed and, in the case of sale of the property, would be transferred to any future owners.

LU3 is a continuation of measure L4 from the 2009 NCP.

Benefits: Avigation easements can assist in the reduction and prevention of existing and future incompatible development surrounding the airport. Although not a preferred method of mitigation by itself, easements can be effective when combined with other recommended mitigation options.

LU3 is a continuation of measure L4 from the 2009 NCP.

Disadvantages: An easement does not offer actual mitigation for homeowners from noise of aircraft overflights.

Costs: As part of the sound insulation program, avigation easements would be acquired during the process of acoustically treating each home, and would not result in additional costs to the airport. In cases where homeowners decline participation in the program, an avigation easement may be offered as a last resort. The cost for acquiring easements is often difficult to determine. The FAA offers guidance for acceptable appraisal methodology in FAA Order 5100.37B – *Land Acquisition and Relocation Assistance for Airport Projects* and in the FAA AC 150/5100-17 - *Land Acquisition And Relocation Assistance For Airport Improvement Program Assisted Projects*. For the purposes of this NCP, avigation easements are anticipated to cost approximately 10-15% of the value of the home. Assuming an average value of $230,000 per home, easement acquisition costs are anticipated to range from $23,000 to $35,000 per home. For planning purposes, BAF estimates that less than 15% of homeowners would decline participation, which would equate to 28 homes. An estimated 5 to 26 homes might participate in LU3, with program costs ranging between $150,000 and $780,000 assuming an average of $30,000 per easement.

Schedule of implementation: LU3 will continue following approval of the NCP by the FAA and the availability of funding.

Responsible party: The airport would be responsible for the implementation and management of LU3 through the implementation of the NCP.

Recommendation: LU3 is recommended for implementation in the NCP.

[2] 217 dwellings (potentially eligible) minus 25 dwellings (listed under measure LU1) = 192 dwellings

Measure LU4 – Sound Insulate Place of Worship

Description: Eligibility for sound insulation of noise sensitive facilities is determined not only by the building being exposed to DNL of at least 65 dB, but also on the use of the facility. Usually, schools and places of worship are eligible for sound insulation treatments. In this NCP, one place of worship, World of Grace Church, located to the north of BAF along North Road, is exposed to DNL greater than 65 dB as shown on Figure 4-3. There is no school associated with this place of worship. The design phase, which identifies the type of modifications needed to meet FAA guidelines, would begin after initial acoustical testing and would be followed by construction and post-construction/modification acoustical testing.

LU4 is a continuation of measure L5 from the 2009 NCP but without educational facilities.

Benefits: Sound insulation could provide relief from the noise of aircraft overflights inside the Church.

Disadvantages: May be subject to limited availability of funds, based on the timing of other mitigation programs. Sound insulation materials do not mitigate outdoor sound levels.

Costs: An approximate cost of sound insulation including the fellowship hall could be approximately $500,000.

Schedule of implementation: LU4 could begin following approval of the NCP by the FAA if funds are available. Priority for the allocation of the available funds will be given to the residential dwellings.

Responsible party: The airport would be responsible for the implementation and management of LU4.

Recommendation: LU4 is recommended for implementation in the NCP.

Measure LU5 - Preventive Easement Acquisition

Description: As explained in Section 3, easements can be acquired in order to prevent future incompatible development in specified areas. LU5 would allow BAF and the City of Westfield to prevent future incompatible development for lands exposed to DNL greater than or equal to 65 dB without proper sound attenuation materials or other development controls.

LU5 is a continuation of measure L6 from the 2009 NCP. The limited undeveloped residential land exposed to DNL of at least 65 dB was a factor in BAF not being able to implement L6.

Benefits: Preventive easement acquisition would allow BAF to ensure some level of compatibility for development in potentially noise-sensitive areas.

Disadvantages: The acquisition of easements may be subject to limited availability of funding, based on the priority of previously mentioned mitigation programs.

Costs: Easement acquisition costs may range from $20,000 to $35,000, depending on the size, zoning, and value of the property in question.

Schedule of implementation: LU5 could begin at any time and BAF expects implementation in 2017.

Responsible party: The City of Westfield, with input and assistance from BAF staff, would be responsible for the implementation and management of LU5.

Recommendation: LU5 is recommended for implementation in the NCP.

Measure LU6 – Modify Existing Zoning

Description: LU6 is a continuation of 2009 measure L7 which recommended modifying the existing zoning code of undeveloped land exposed to DNL of at least 65 dB to ensure compatible development in areas of significant noise exposure.

Table 4-3 outlines the zoning classifications and acres located in each noise zone for the 2021 NEM. There are approximately 491 acres of incompatibly-zoned land. Recall from Table 2-2 there are only 294 acres of residential land use for the 2021 NEM. Figure 4-4 depicts generalized zoning in the Cities of Westfield and Southampton. The City of Westfield and the Pioneer Valley Planning Commission provided zoning data which was generalized into the categories shown in the table and on the figure. Appendix A shows the assignment of the more detailed zoning categories into the generalized categories.

Table 4-3. Zoning Classifications and the Incompatible Acreage for the 2021 NEM

Generalized Zoning Category	Band of DNL (dBA)			
	65-70	70-75	75+	Total
Airport District	351	293	386	**1,030**
Business	113	20	1	**134**
Commercial	-	-	-	**-**
Industrial	231	168	16	**415**
Residential	461	30	-	**491**
Total	**1,156**	**511**	**403**	**2,070**

Note: Zoning acrages are only approximate due to overlaps and gaps in zoning data sets.

Analysis of the land use and zoning data revealed there are 46 acres of developable[3] residentially-zoned land exposed to DNL of at least 65 dB. A majority of the incompatibly zoned land is already developed, and is being addressed by the mitigation plan in the NCP.

Following the completion of the NCP, the City of Westfield should evaluate those parcels of land which, although currently undeveloped, have the potential to be developed as a non-compatible land use exposed to DNL of at least 65 dB. Where the possibility of development exists, the City should attempt to work with the landowner to change the zoning of the land to avoid future incompatibilities. Alternatively, the City could evaluate the zoning requirements of the Rural Residential (RR) district in order to address the potential impact of aircraft overflights and noise.

LU6 is a continuation of measure L7 from the 2009 NCP.

Benefits: Modifying the zoning of undeveloped land exposed to DNL of at least 65 dB would ensure future compatible development in areas of significant noise exposure.

Disadvantages: Landowners subject to zoning changes may dispute the issue with the City.

Costs: There are administrative costs associated with the implementation of LU6 which are not known at this time.

Schedule of implementation: The City of Westfield may evaluate land uses and zoning of property at any time, including prior to the implementation of the NCP. BAF anticipates charting a path for implementation in the latter months of 2016.

[3] "developable residential and *potentially* developable residential, from detailed land use data.

Responsible party: The City of Westfield and airport manager would be responsible for implementation of LU6. Recent conversations between BAF and the City's Planning Commission indicate the Commission is willing to hear BAF's proposals.

Recommendation: LU6 is recommended for implementation in the NCP.

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Cemetary
Nursing Home
Place of Worship
School
Helipad

DNL Contour (dB)
Airport Boundary

Generalized Zoning
Airport District
Business
Commercial
Industrial
Residential
No Data

Westfield-Barnes Regional Airport

0 1,000 2,000 Feet

Coordinate System: WGS 1984 UTM Zone 18N
Sources: City of Westfield, ESRI, Google Maps, MassGIS, Pioneer Valley Planning Commission, Westfield-Barnes Airport, Wyle

Westfield_2020DNL_OverlZoning_11x17.mxd
4/25/2016

Figure 4-4. Generalized Zoning and the 2021 NEM

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Measure LU7- Voluntary Acquisition of Undeveloped Land

Description: Preventive land acquisition works in a manner similar to preventive easement acquisition (LU5), and the two are often paired prior to resale or development of potentially incompatible land. Most of the undeveloped land is in Southampton Massachusetts in the county of Hampshire and the City of Westfield cannot acquire these properties. In some instances, land may become available (for example Falcon Drive) for purchase in a noise-sensitive area, and in order to prevent future incompatible development, an airport or sponsor may choose to purchase the land and apply land use controls designed to discourage incompatible development. Factors to consider in LU7 include the amount of available land, the ability of an airport or jurisdiction to make available the funds required to purchase the land, and the development potential of the land in question. Land uses that are generally compatible with airport options may not need to be purchased, as their non-compatible development potential is low.

Generally, these types of purchases are eligible for AIP funding; however, the airport may be obligated to utilize the funds resulting from the sale of the land for other noise mitigation purposes or return the funds to the Aviation Trust Fund.

LU7 is a continuation of 2009 NCP measure L8.

Benefits: Preventive undeveloped land acquisition would allow the airport and City of Westfield to ensure some level of compatibility for development in potentially noise-sensitive areas, assuming the proper development controls (such as zoning) are instituted.

Disadvantages: The acquisition of undeveloped property may be subject to limited availability of funding, based on the priority of previously mentioned mitigation measures.

Costs: Undeveloped land acquisition costs are dependent on assessed value and market conditions at any given time, and are therefore difficult to quantify.

Schedule of implementation: LU7 could begin at any time using City of Westfield funding sources. The ability to utilize AIP funding is contingent upon FAA approval of the NCP.

Responsible party: The City of Westfield, with input and assistance from airport staff, would be responsible for the implementation and management of LU7.

Recommendation: LU7 is not recommended for implementation in the NCP because of the measure's financial impact to the City.

Measure LU8 - Airport Noise Overlay District

Description: LU8 recommends that the City of Westfield pursue the development of an ANOD based on the 2021 NEM. Typical elements of an ANOD include a statement of purpose and intent, definitions of common terms, applicability, permitted uses as well as exemptions and nonconforming structures, a permitted use table, and NLR requirements.

The Westfield Airport Commission (WAC) and Airport Staff will need to work in conjunction with City of Westfield officials and staff, and ultimately, the public in order to define the goals, restrictions, and boundaries of an ANOD.

First, the Boundaries of an ANOD will be defined either by:

- Consensus on the boundary of an overlay district as the 65 dB DNL of the 2021 NEM, or
- A geographic boundary that encompasses areas considered by the City of Westfield to be noise sensitive land uses.

Following that determination, various types of land use restrictions need to be evaluated, including:

- Potential restrictions on new non-compatible development,
- Noise disclosure,
- Acquisition of easements, and
- Limitations on modifications to existing structures.

Finally, the issue of identifying a buffer zone beyond the limits of areas considered to be impacted by noise exposure should be considered.

Ultimately, the recommendations of the WAC can be presented to City of Westfield officials, at which time the ANOD would be subject to the standard public process of all changes to the City of Westfield zoning regulations.

LU8 is a continuation of measure L7 from the 2009 NCP.

Benefits: The implementation of an ANOD can provide an additional land use control for potentially incompatible development within a specified boundary around the airport.

Disadvantages: Noise contours at an airport change over time. As such, the boundaries of an ANOD may, if directly tied to the Airport's current NEMs, be subject to revision when new noise contours are identified. Homeowners and developers may challenge the implementation of additional development controls during or after the administrative process. Additionally, an ANOD may have the potential to discourage some types of growth in areas that, depending on the boundaries of the district, may not be significantly affected by noise or direct aircraft overflights.

Costs: Costs associated with LU8 include staff resources to develop the language and boundaries of the district by the City of Westfield. The airport and City may choose to hire an outside consulting firm to assist with the development of an ANOD.

Schedule of implementation: Based on coordination between the City of Westfield staff and the airport, the boundaries of an ANOD could be developed at any time following WAC approval of the NEMs. LU8 could begin at any time using City of Westfield funding sources. BAF anticipates charting a path for implementation in the latter months of 2016.

Responsible party: The City of Westfield, with input and assistance from airport staff, would be responsible for the implementation and management of LU8. Recent conversations between BAF and the City's Planning Commission indicate the Commission is willing to hear BAF's proposals.

Recommendation: LU8 is recommended for implementation in the NCP.

Measure LU9 – Environmental Review

Description: LU9 recommends the City of Westfield continue including airport staff during the course of administrative review of proposals for land use development in areas either exposed to DNL of at least 65 dB or in another defined boundary, such as an ANOD. As is currently the practice in the City of Westfield, the airport manager participates in a weekly round table discussion of development that is located in the vicinity of the airport, and may be affected by aircraft overflights.

LU9 is a continuation of measure L10 from the 2009 NCP.

Benefits: Participation by airport staff in the administrative review of development proposals in the vicinity of the airport is one method of minimizing the potential of incompatible land uses which may be subject to aircraft overflights.

Disadvantages: The identification of potential compatibility issues by airport staff may be only one consideration in the decision to grant development approvals, and is not a guarantee that proper noise level reduction or appropriate mitigation would be required. The implementation of other recommended measures may assist in the effectiveness of LU9.

Costs: There are no additional costs associated with LU9.

Schedule of implementation: LU9 is currently implemented, and is expected to continue throughout the duration of the NCP.

Responsible party: The City of Westfield and airport staff are responsible for the continued implementation of LU9.

Recommendation: LU9 is recommended for implementation in the NCP.

Measure LU10 - Real Estate Disclosure

Description: Measure LU10 is a continuation of measure L11 from the 2009 NCP. LU10 directs the Airport Manager to continue pursuing the implementation of real estate disclosure through both coordination with local real estate professionals to include information about airport noise and overflights, and through the inclusion of a noise disclosure ordinance attached to a property deed.

Real estate notices are an effective means of acknowledgement of potential effects of aircraft overflights in an area surrounding an airport to perspective property owners. Real estate disclosure notices, if implemented by local or State real estate associations, can effectively incorporate information about aircraft overflights, the location of the property in relation to the airport or flight patterns, and potential effects in either a legal document (through an easement) or in real estate marketing materials.

Noise disclosure ordinances typically address property either exposed to DNL greater than or equal to 65 dB, which is considered incompatible with airport operations according to Federal guidelines, or in other predefined boundaries around an airport. At the City of Westfield discretion, the disclosure ordinance should be expanded to include properties the proposed ANOD.

Benefits: Real estate disclosure notices, conveyed either through disclosure by real estate professionals or legal notice attached to property deeds, can provide an effective means of potential aircraft overflight disclosure.

Disadvantages: Real estate professionals may be hesitant to include additional information that may be viewed as potentially negative. Without a legal requirement on behalf of the Commonwealth of Massachusetts, it may be difficult to achieve voluntary compliance.

Costs: There are administrative costs associated with the implementation of LU10 which are not known at this time.

Schedule of implementation: Portions of LU10 are currently underway, as the Airport Manager is engaged in discussions with local real estate professionals to include real estate disclosure in property transactions. Approval of LU10 by the FAA is not required for its continued implementation.

Responsible party: The Commonwealth of Massachusetts, City of Westfield, airport staff, and local real estate professional would be involved in the implementation of LU10.

Recommendation: LU10 is recommended for implementation in the NCP.

Measure LU11 – Modify Subdivision Regulation

Description: As described in Section 3, the Rules and Regulations Governing the Subdivision of Land in Westfield ensure an orderly and efficient layout of the subdivision. LU11 directs the Airport Manager to continue pursuing the inclusion of methods such as the incorporation of noise attenuating standards, noise disclosure, or the dedication of easements in the regulation of proposed subdivisions that may be affected by aircraft noise as promulgated by the City of Westfield.

LU11 is a continuation of measure L12 from the 2009 NCP.

Benefits: LU11 could reduce the potential for incompatible land use development approved as a new subdivision in the vicinity of the airport.

Disadvantages: This type of regulation is only effective in cases where land may be re-platted or not yet developed.

Costs: There are administrative costs associated with the implementation of LU11 which are not known at this time.

Schedule of implementation: The pursuit of the incorporation of modifications to subdivisions can begin prior to the approval of the NCP by the FAA.

Responsible party: The City of Westfield and airport staff would be responsible for implementation of LU11.

Recommendation: LU11 is recommended for implementation in the NCP.

Measure LU12 – Building Code Modifications

Description: Modifications to building codes can include elements to address the inclusion of sound insulation materials, such as windows and doors with higher Sound Transmission Class (STC) ratings and other elements designed to reduce the transmission of sound from the exterior environment to the interior of a structure. Building code revisions only address new construction and significant modifications to existing structures.

LU12 directs the Airport Manager to engage the BBRS to encourage changes in the Commonwealth building code that include requirements to address noise effects from aircraft sources. While changes to the Commonwealth building code are outside of the scope of Part 150, it is recommended that the airport, in conjunction with other airports around the Commonwealth, further investigate the feasibility and practicality of suggesting these revisions.

LU12 is a continuation of measure L13 from the 2009 NCP.

Benefits: LU12 could reduce the potential for incompatible land use development in the vicinity of the airport.

Disadvantages: LU12 would require a statewide change in the building code, which may be beyond the ability of the Airport Manager to address.

Costs: There are administrative costs associated with the implementation of LU12 which are not known at this time.

Schedule of implementation: The pursuit of changes to the state building code can begin prior to the approval of the NCP by the FAA.

Responsible party: The Airport Manager would be responsible for implementation of LU12.

Recommendation: LU12 is recommended for implementation in the NCP.

4.3 Program Management Measures

Measure P1 – Re-Establish a Noise Mitigation Advisory Committee

Description: P1 encourages the airport and WAC to re-establish a Noise Mitigation Advisory Committee (NMAC) to assist with the management and communication of noise issues. NMAC is proposed to be consisting of the Airport Manager, the Airport's Acoustical Consultants, the City Councilor from Ward 6, and an Airport Commissioner to meet twice a year.

NMAC will provide an ongoing dialog that links the City of Westfield and surrounding communities with BAF. It is anticipated that the NMAC would meet twice per year, depending on the implementation of the mitigation measures recommended in the NCP.

P1 is carried over from the 2009 NCP. Recall from Section 2 that the past three meetings of the MC3 Council (the noise advisory committee) yielded nearly no public participation and the MC3 Council was discontinued.

Benefits: The establishment of an advisory committee would assist in the facilitation of information regarding the NCP and additional airport initiatives to elected officials, airport tenants, and members of the public who are interested or may be eligible for mitigation programs. The NMAC would be charged with assisting in the distribution of information regarding the NCP.

Disadvantages: There are no major disadvantages to P1. The establishment of an NMAC is contingent upon the participation of interested parties from the community and airport tenants.

Costs: There are minimal costs associated with P1, including staff time dedicated to facilitating the meeting of the NMAC.

Schedule of implementation: P1 may begin following the submission of the NCP to the FAA.

Responsible party: Airport and City of Westfield staff would be responsible for the implementation of P1.

Recommendation: P1 is recommended for implementation in the NCP. Establishing a NMAC can enhance the dissemination of information to the community along with the established social media outreach, the BAF website and their 'open door' policy (see section 2).

Measure P2 – Community Awareness Program

Description: BAF began a Community Awareness Program via their website [www.barnesairport.com]. It is recommended BAF update the website regularly to communicate various Airport-related facts such as the types of operations flown, and the times of days operations are flown, various noise and land use mitigation projects undertaken by the airport, any anticipated operational changes, information regarding

planning and development, and any temporary construction projects that would change the typical operating conditions at the airport.

Social media is an extremely effective tool for communication and reaching out to broad range of users. In addition to its website, BAF has established a Facebook page (https://www.facebook.com/pages/Westfield-Barnes-Regional-Airport) which is active in communicating the necessary information. Taking advantage of other media outlets, such as Twitter, is also recommended.

P2 directs the Airport Manager to transmit information, as provided in Measure P1, to the larger public in the City of Westfield.

Benefits: A community awareness program, combined with Measure P1 (NMAC), would assist in the facilitation of information to the public regarding the ongoing mitigation efforts of the airport.

Disadvantages: There are no major disadvantages associated with the implementation of P2.

Costs: There are minimal costs associated with P2, including staff time dedicated to creating, designing, and distributing information associated with the Community Awareness Program. Costs are not expected to be eligible for AIP grant funding. The airport would bear the cost.

Schedule of implementation: Most of P2 is currently implemented. It is expected to continue and expand throughout the duration of the NCP.

Responsible party: Airport staff would be responsible for the implementation of P2.

Recommendation: P2 is recommended for implementation in the NCP.

Measure P3 – Expand the Fly Quiet Program

Description: P3 builds upon measure P3 from the 2009 NCP, recommending the airport expand its Fly Quiet Program to better educate pilots and other aircraft tenants about noise sensitive issues. In addition to BAF continuing to encourage the use of both NBAA noise abatement procedures and AOPA Noise Awareness Steps, a more comprehensive Fly Quiet Program would include:

- Installation of signage at each runway end reminding pilots about the noise abatement procedures,
- The creation of a color-coded map that identifies noise-sensitive land uses in the airport environs, and
- Brochures keeping airport tenants aware of noise-related community concerns.

Benefits: The implementation of P3 would assist in ensuring that the airport tenants maintain awareness regarding the noise-sensitive land uses surrounding the airport.

Disadvantages: There are no major disadvantages associated with the implementation of P3.

Costs: Minimal administrative costs are associated with P3 for the creation and production of graphics and brochures for distribution to airport tenants.

Schedule of implementation: Expanding the Fly Quiet Program is expected to continue throughout the duration of the NCP.

Responsible party: The airport and City of Westfield are responsible for NEM and NCP.

Recommendation: P3 is recommended for implementation in the NCP.

Measure P4 – Periodic Evaluation of Noise Exposure and NCP

Description: Continuing from the 2009 NCP's measure P4 with a slight modification, the 2016 NCP's P4 would direct the WAC to continue updating the NEMs and/or NCP at the airport either within a five-year time frame or when operating conditions at the airport change (such as the addition of air carrier operations or a further change in mission or operating characteristics of the 104th FW). The implementation of P4 would ensure a continuation of the evaluation of noise exposure, and would also allow for modifications to the boundaries of various land use mitigation programs should the need arise.

Benefits: P4 would ensure that the noise environment surrounding the airport is regularly evaluated, either within a five-year timeframe or when significant changes at the airport occur.

Disadvantages: If noise exposure increases, there are no major disadvantages with the implementation of P4. If noise exposure decreases, reevaluating the NCP could result in less homes being eligible for acquisition or sound insulation. This could be viewed as a disadvantage from the public's perspective but an advantage from the FAA's perspective.

Costs: Should the WAC or airport decide to update the NEMs, costs would be shared between the City of Westfield, Commonwealth of Massachusetts, and FAA. Based on the cost of the 2015 NEM Update, an update in 5 years could range from $50,000 to $100,000, while costs for reevaluation of the recommended NCP could range from $100,000 to $150,000 depending on the scope. Therefore, total cost of an NEM and NCP update would range from $150,000 to $250,000.

Schedule of implementation: P4 is currently implemented, and is expected to continue throughout the duration of the NCP at any time that the airport determines significant changes exist, or within five years of the approval of the NCP.

Responsible party: The airport and WAC are responsible for updating the NEM and/or NCP.

Recommendation: P4 is recommended for implementation in the NCP.

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5.0 NCP Implementation

The NCP must be approved by the FAA prior to implementation of measures requiring AIP funding. The AIP program provides funding assistance for airport planning projects, including projects relating to noise exposure. The AIP program includes a requirement for grant sponsors (in this case, the WAC) to assist in providing a local funding match, the amount of which is dependent on the airport's classification in the National Plan of Integrated Airport Systems (NPIAS).

Section 4 included, for each recommended measure, a discussion on the implementation steps. Some measures, such as local zoning changes, establishment of a noise abatement advisory committee, and the expansion of the Fly Quiet Program, may not require FAA approval in the review of the NCP. Further, these measures may not qualify for AIP funding, which is generally not an issue for measures that are inexpensive to implement. In many cases, an airport can begin to implement some of these measures at any time. Other measures, such as sound insulation and voluntary land acquisition, require approval by the FAA to gain access to AIP funds for implementation, by way of a separate grant application. FAA approval of the measures submitted in the NCP does not guarantee that the measures will be implemented, or that funding will be available.

The recommended NCP, if approved by the FAA, will be in effect for at least five years or until the next NEM /NCP update occurs.

Sub-sections 5.1 and 5.2 discuss priority, scheduling and cost of the implementation of the recommended NCP, respectively.

5.1 Implementation Priority

Table 5-1 shows a summary of the implementation schedule along with the priority rating of the recommended measures. The remedial land use management measures LU1 and LU2 are among the highest priority measures for implementation by BAF. These measures would require the use of AIP funds for implementation. Taking into account the funding history since 2009, it is estimated that BAF would acquire 25 dwellings through 2018, and sound insulate 181 units. No funds are expected to remain for sound insulating the church. However, upon availability of additional funds and FAA approval, the sound insulation of the church can be implemented.

Noise abatement measures involve no FAA or City cost, and may be implemented prior to FAA approval of the NCP. The preventive land use mitigation measures as well as the program management measures also can be either continued or implemented when needed.

The implementation of the recommended NCP is dependent on FAA's approval and the availability of the funding within AIP, the City of Westfield, and Massachusetts Aeronautics Commission.

1

Table 5-1. Implementation Schedule

Recommended Measures		Year						Priority
		2016	2017	2018	2019	2020	2021	
Noise Abatement Alternatives								
NA1	Noise Abatement Departure Procedures for Runways 15 and 33	Ongoing - No additional action is required						NA
NA3	Continue to Encourage the Use of GPS, RNAV, WAAS, and FMS Equipment to Enhance Noise Abatement Navigation	Ongoing - No additional action is required						NA
Land Use Management Alternatives								
LU1	Voluntary Acquisition of Eligible Residential Structures	10	10	5	TBD	TBD	TBD	1
LU2	Residential Sound Insulation Program	0	0	16	55	55	55	2
LU3	Remedial Easement Acquisition	Paired with Sound Insulation						2
LU4	Sound Insulate Place of Worship						Implementation	4
LU5	Preventive Easement Acquisition		Implementation					2
LU6	Modify Existing Zoning	Implementation						2
LU8	Airport Noise Overlay District	Implementation						2
LU9	Environmental Review	Ongoing - No additional action is required						NA
LU10	Real Estate Disclosure	Implementation						2
LU11	Modify Subdivision Regulations						Implementation	4
LU12	Building Code Modifications							1
Program Management Alternatives								
P1	Re-Establish a Noise Mitigation Advisory Committee	Implementation						1
P2	Community Awareness Program	Ongoing - No additional action is required						NA
P3	Expand the Fly Quiet Program	Implementation						1
P4	Periodic Evaluation of Noise Exposure						Implementation	4

Note:

(1) 217 units are exposed to DNL of 65 db or greater. 25 dwellings are expected to be acquired. Therefore, potentially 196 units are eligible for sound insulation. At 85 percent expected participation, there would be enough funding to determine the eligibility of the remaining dwellings and either provide standard sound insulation treatment or a secondary package of treatments as determined by FAA.

2

5.2 Implementation Cost

This NCP has identified preliminary costs for the full implementation of the recommended NCP to be in the range of $16 million to $22 million. Table 5-2 shows the details of the cost in both low and high assumptions for reach measure, and identifies the agencies that are responsible for implementing each measure. This range of costs includes many variables, such as the average costs to sound insulate each home, participation levels, and the costs associated with voluntary acquisition per home as well as the number of homes deemed eligible under the new two-step program introduced and implemented by FAA through PGL 12-09. The phasing of the land use mitigation measures will depend on the amount of available AIP funding provided to the airport, as well as the availability of the Commonwealth of Massachusetts and City of Westfield matching funding.

Table 5-2. Estimated Cost

Recommended Measures		Cost Low	Cost High	Responsible Party	Notes
Noise Abatement Alternatives					
NA1	Noise Abatement Departure Procedures for Runways 15 and 33	-	-	ATCT, City of Westfield, Airport Tenants	Existing procedure; no additional costs
NA3	Continue to Encourage the Use of GPS, RNAV, WAAS, and FMS Equipment to Enhance Noise Abatement Navigation	-	-	ATCT, City of Westfield, Airport Tenants	Existing procedure; no additional costs
Land Use Management Alternatives					
LU1	Voluntary Acquisition of Eligible Residential Structures	$ 4,250,000	$ 7,125,000	City of Westfield	Low cost assumes acquiring 25 homes at 170K. High cost assumes acquiring 25 homes at 285K.
LU2	Residential Sound Insulation Program	$ 10,608,000	$ 13,440,000	City of Westfield	Low cost assumes 85% participation at 70k/dwelling High cost assumes 100% participation at 65k/dwelling
LU3	Remedial Easement Acquisition	$ 150,000	$ 750,000	City of Westfield	Low cost assumes 5 participant at 30k/dwelling High cost assumes 15% participation at 30k/dwelling
LU4	Sound Insulate Place of Worship	$ 500,000	$ 700,000	City of Westfield	
LU5	Preventive Easement Acquisition	-	-	City of Westfield	None identified; eligibility dependent on potential incompatible development.
LU6	Modify Existing Zoning	-	-	City of Westfield	No additional cost
LU8	Airport Noise Overlay District	-	-	City of Westfield	No additional cost
LU9	Environmental Review	-	-	City of Westfield	No additional cost
LU10	Real Estate Disclosure	-	-	City of Westfield	No additional cost
LU11	Modify Subdivision Regulations	-	-	City of Westfield	No additional cost
LU12	Building Code Modifications	-	-	City of Westfield	No additional cost
Program Management Alternatives					
P1	Re-Establish a Noise Mitigation Advisory Committee	-	-	City of Westfield	Normal administrative costs, plus costs to produce materials
P2	Community Awareness Program	-	-	City of Westfield	Existing procedure; no additional costs
P3	Expand the Fly Quiet Program	-	-	City of Westfield	Existing procedure; no additional costs
P4	Periodic Evaluation of Noise Exposure	$ 200,000	$ 300	City of Westfield	Costs assume full Part 150 Update Study
Total Estimated Cost for 5 Years		$ 15,708,000	$ 22,015,300		
Average Annual Funding		$ 3,141,600	$ 4,403,060		

6.0 Public Involvement

Public coordination and stakeholder consultation is a key part of the NCP Update and requires a concerted communication effort for the purposes of both collecting important input for the study and providing information about the noise analysis and the Part 150 process. The NCP included public outreach components consisting of a social media outreach, the airport website and presenting the NCP on two occasions of the Airport's Commission and City Council meeting. Both these meetings were open to public participation.

The public outreach process allowed for the dissemination and presentation of information about current Part 150 guidelines and NCP process.

6.1 Airport Authority Briefings

The results of the NCP Update analysis presented to BAF on two occasions as described below. These presentations were concurrent with Airport Commission and/or City Council meetings.

Briefing #1

The draft NCP was presented by BAF to the Airport Commission on May 12, 2016 at 7:30 PM at the Airport Administration Building Conference Room located at 110 Airport Road, Westfield. The electronic notice of the meeting Agenda, including the presentation of the Draft NCP, was placed under the Agenda Center of the City at http://www.cityofwestfield.org/AgendaCenter. A copy of the notice is included in Appendix C.

The Airport Manager, Airport Commissioners, Wyle staff, and four people representing other contractor were present at this meeting. In the beginning of the meeting, Wyle staff presented a summary of the Part 150 studies including the status of the suggested/approved measures of the previous NCP (CY2009) as well as the measures analyzed and recommended for the current NCP (CY2021). The meeting continued with more in-depth discussions about the two major remedial Land Use measures LU1 (Voluntary Acquisition of Homes) and LU2 (Sound Insulation), including the number of affected homes in each measure, anticipated implementation schedule and associated cost. The presentation was closed with a discussion of the expected steps for finalizing the NCP along with the anticipated timeline.

The commission requested a list of addresses that were eligible for either acquisition or sound insulation treatment during the previous NCP (CY 2009), their current status and whether or not they are still eligible for remedial action under new contours if not yet treated. In addition they requested a list of all newly eligible dwellings. The meeting minutes are included in Appendix C.

Briefing #2

The draft NCP will be presented by BAF to the Legislative and Ordinance (L&O) subcommittee of the City Council on June 14, 2016.

Note to reviewer: This section will be completed after the Council meeting and may mention that the meeting was open to the public, when and where it was advertised, the meeting's location, duration, attendees, format and comments.

6.2 Website and Social Media

The airport's website [www.barnesairport.com] was u was originally set up in December 2009. It was regularly updated to provide the most current information and progress on the NEM and NCP. The website explains the purpose and background of the studies, alerts people to upcoming meeting dates, presents study findings, and serves as a vehicle for people to add themselves to the project mailing list and submit comments. Documents, such as study newsletters, technical documents and the draft NCP are posted on the website. The comments received on NEM have been addressed in the NEM document. Any NCP related comments which have been received and responded during the development of NEM are listed again in Appendix B.

Note to Commission and Council reviewer: The Draft NCP will be posted on the website when the document is approved by the council concurrent with the FAA submission.

Social media is an extremely effective tool for communication and reaching out to broad range of users in order to provide updates regarding the study. BAF is taking advantage of this tool in order to share updates on the study through BAF's Facebook page (https://www.facebook.com/pages/Westfield-Barnes-Regional-Airport).

7.0 References

BAF 2015. Westfield-Barnes Regional Airport 2015/2016 Noise Exposure Map Update. Wyle, December 2015.

BAF 2016. Acoustical Test Plan – Westfield-Barnes Regional Airport (BAF) Residential Sound Insulation Program. Memorandum, Wyle, April 2016.

Doucette 2015. Meeting with Richard Doucette, FAA, Jane Verbeck, Wyle Laboratories, Inc. and Mel Baker, Wyle Laboratories, Inc., October 7, 2015.

FAA 2012. FAA Program Guidance Letter12-09, AIP Eligibility and Justification Requirements for Noise Insulation Projects. August 17 2012.

FAA 2014. FAA Order 5100.38D, *Airport Improvement Program (AIP) Handbook*, Appendix R, September 30, 2014.

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Appendix A - Signed Federal Register Notice

4910-13

DEPARTMENT OF TRANSPORTATION

FEDERAL AVIATION ADMINISTRATION

Noise Exposure Map Notice

Westfield-Barnes Regional Airport

Westfield, Massachusetts

AGENCY: Federal Aviation Administration, DOT.

ACTION: Notice.

SUMMARY: The Federal Aviation Administration (FAA) announces its determination that the noise exposure maps for Westfield-Barnes Regional Airport, as submitted by the City of Westfield, Massachusetts, under the provisions of Title I of the Aviation Safety and Noise Abatement Act of 1979 (Pub. L. 96-193) and 14 CFR Part 150, are in compliance with applicable requirements.

EFFECTIVE DATE: The effective date of the FAA's determination on the noise exposure maps is December 22, 2015.

FOR FURTHER INFORMATION CONTACT: Richard Doucette, Federal Aviation Administration, New England Region, Airports Division, 12 New England Executive Park, Burlington, Massachusetts 01803.

SUPPLEMENTARY INFORMATION: This notice announces that the FAA finds that the noise exposure maps submitted for Westfield-Barnes Regional Airport are in compliance with applicable requirements of Part 150, effective December 22, 2015.

Under Section 103 of Title I of the Aviation Safety and Noise Abatement Act of 1979 (hereinafter referred to as "the Act"), an airport operator may submit to the FAA noise exposure maps that meet applicable regulations and that depict non-compatible land uses as of the date of submission of such maps, a description of projected aircraft operations, and the ways in which such operations will affect such maps. The Act requires such maps to be developed in consultation with interested and affected parties in the local community, government agencies, and persons using the airport.

An airport operator who has submitted such noise exposure maps that are found by FAA to be in compliance with the requirements of Federal Aviation Regulation (FAR) Part 150, promulgated pursuant to Title I of the Act, may submit a noise compatibility program for FAA approval that sets forth the measures the operator has taken, or proposes, for the introduction of additional non-compatible uses.

The FAA has completed its review of the noise exposure map and related descriptions submitted by Westfield, Massachusetts. The specific maps under consideration were "Figure 3-9. DNL Contours for Average Daily Aircraft Operations for CY2015" and "Figure 4-1. DNL Contours for Average Daily Aircraft Operations for CY2020 NEM" in the submission. The FAA has determined that these maps for Westfield-Barnes Regional Airport are in compliance with applicable requirements. This determination is effective on December 22, 2015.

2

FAA's determination on an airport operator's noise exposure maps is limited to a finding that the maps were developed in accordance with the procedures contained in Appendix A of FAR Part 150. Such determination does not constitute approval of the applicant's data, information or plans, or a commitment to approve a noise compatibility program or to fund the implementation of that program.

If questions arise concerning the precise relationship of specific properties to noise exposure contours depicted on a noise exposure map submitted under Section 103 of the Act, it should be noted that the FAA is not involved in any way in determining the relative locations of specific properties with regard to the depicted noise contours, or in interpreting the noise exposure maps to resolve questions concerning, for example, which properties should be covered by the provisions of Section 107 of the Act. These functions are inseparable from the ultimate land use control and planning responsibilities of local government. These local responsibilities are not changed in any way under Part 150 or through FAA's review of a noise exposure map. Therefore, the responsibility for the detailed overlaying of noise exposure contours onto the map depicting properties on the surface rests exclusively with the airport operator that submitted the map or with those public agencies and planning agencies with which consultation is required under Section 103 of the Act. The FAA has relied on the certification by the airport operator, under Section 150.21 of FAR Part 150, that the statutorily required consultation has been accomplished.

Copies of the noise exposure maps and of the FAA's evaluation of the maps are available for examination at the following locations:

Westfield-Barnes Regional Airport
110 Airport Drive

2

Westfield MA 01085

Federal Aviation Administration

New England Region, Airports Division

12 New England Executive Park

Burlington, Massachusetts 01803

Questions may be directed to the individual named above under the heading:

FOR FURTHER INFORMATION CONTACT

Issued in Burlington, Massachusetts on December 22, 2015.

R. Doucette

Richard P. Doucette

Environmental Program Manager

FAA New England Region, Airports Division

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Appendix B – Summary of Treatment Status for Affected Dwellings (TBD)

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Appendix C – Public Participation

Commission Meeting C-2
Electronic Notice C-2
Comment Response Matrix C-3
Attendance C-5
Meeting Handout C-6
Meeting Minutes C-12
Legislative and Ordinance Subcommittee Meeting C-15
Legal Notice C-15
Electronic Notice C-15
Meeting Attendance C-15
Comment Response Matrix C-15
Presentation C-15
Display Boards C-15

Commission Meeting

Electronic Notice

RECEIVED
2:01 PM
MAY 10 2016
WESTFIELD CITY CLERK

Westfield-Barnes
REGIONAL AIRPORT

COMMISSION MEETING

Thursday, May 12th, 2016 – 6:00PM

Airport Administration Building Conference Room
110 Airport Road, Westfield, MA 01085

AGENDA

I. ***Approve:*** ***Any Outstanding Regular/ Special Minutes***

II. ***Public Participation*** ***– 3 minute time limit per item unless extended by Commission***

III. ***Airport Activities***

A. Runway 2/20 Update
B. NCP Draft Submittal To Commission (conference call with Mr Joe Czech)
C. Whip City Update
D. Advancement Office Solar Update
E. Cersosimo Land Update
F. Rental Car Space Update
G. Airport Master Plan
H. Fireworks
I. Security System Update
J. HVAC Update
K. Snow Blower Auction
L. Tax Validation Process
M. Finance Committee Briefing Review (Tax Revenue / Part 139 Costs)
N. Vote on MassDOT Assurances and State Grant for Security Upgrades to Gates
O. FAA Inspection Reminder (May 18-19, 0900 In-brief, 1:00PM Out-brief)
P. Rectrix Update
Q. Legal Update
R. Manager PSA and Action Plan

IV. ***Capital Improvement / Airfield Construction / Land***

A. Electrical Vault / Drainage Assessment / Underdrain Project

VI. ***Fiscal and Airport Use Reports***

A. Air Traffic
B. Revenue / Expenses / Budget / Taxes
C. Insurance Claim Status
D. Equipment / Lighting
E. Leases

VII. ***Executive Session*** (If Required for legal or lease discussions)

Comment Response Matrix

The following table lists the NCP related questions received during the NEM preparation period and the responses provided. The list will be updated upon receipt of additional comments.

Idea Response Matrix BAF Part 150 Update, 2015/2020 NEMs (02Sep2015 Public Meeting)			
Idea #	**Idea Provider**	**Idea / Comment**	**Response**
2	Porter	We are interested in finding out time frame for noise mitigation. We have an 11 yr old son who has special needs and hearing issues and is frightened by loud noises. Please let us know if there is anything you can do for us soon.	The implementation of the Noise Compatibility Program (NCP) is dependent on many factors, such as FAA approval, availability of funding, etc. FAA approval is not likely in the near future.
4	Gauthier	Why are homes on the sides of our house being done over and we get skipped over? [sketched a map stating homes along Holyoke Rd were done and homes along Springdale Rd were done]	Eligibility is primarily dependent upon the cumulative noise exposure expressed in terms of Day-Night Average Sound Level (DNL) at your residence.
5	Pettengill	1) Why can't the outside of the house be soundproofed and re-sided instead of sheetrocking the inside? 2) Why can't we get paid for us to hire our own contractors?	1) In most cases, modifications cannot be installed to exteriors because of existing construction conditions. Roof overhangs do not allow for components to be installed properly. The FAA will not pay to re-roof an entire building. 2) Federal funding requires the airport control the process.
6	Matos	I live in the trailer park and have no help with noise reduction.	Please contact the owner of the traler park as he must first apply for modifications. However, the trailer park would need to meet all local building codes and currently there are not any sound mitigation products which mobile homes can structurally accomodate.
7	Circe, C.	Why were homeowners not notified if they were on the list by a confirmation letter?	In 2009, all eligible homeowners were sent a postcard notifying them of a public meeting to be held at the Middle School. The meeting was also advertised in two local newspapers.
8	Torres	I'm in line with the flight runway. Planes fly very low.	Aircraft operating into and out of BAF fly in accordance with FAA procedures and usually under the direction of FAA's Air Traffic Control.
9	Brunges	1) Can we see the result of the noise test done January 2015? 2) Do we still fit into the map for consideration?	1) Please contact Brian Barnes for results of the January 2015 noise testing. 2) From inspection of the Final NEM document, your address would not be eligible. In the 2009 NCP, your address was eligible.
10	Lohnes	We just want a list of who is on the list. That's all.	See the final NEM document for maps of the noise contours and potentially eligible properties. The Noise Compatibility Program (NCP) and FAA's approval thereof will determine which properties get addressed.
11	Hall	Have a meeting by neighborhood - several here are outside the map and want to debate it or are at the mobile park. If someone has questions similar to my location, few are getting a chance to ask. Thank you! I love the planes.	Thank you for your comment.

Idea Response Matrix BAF Part 150 Update, 2015/2020 NEMs (02Sep2015 Public Meeting)			
Idea #	**Idea Provider**	**Idea / Comment**	**Response**
15	Krause	I live directly under the flight path on take off. Decibel level is 116 on take off. I want my house to be fixed so I can live there peacefully. Thank you.	See Responses to Comments #4 and #10. The FAA does not consider single-event sound levels for noise mitigation.
20	Haber	Denise Dr. used to be in qualified area - no longer is. The noise levels have not changed all that much and my windows still shake!!!	See Responses to Comments #4 and #10.
21	Doake, S.	Noise is unbeaerable at time when the F15s fly over us. Things rattle on the walls, you can feel the vibrations while sitting on the couch. We NEED some sort of noise mitigation.	See Responses to Comments #4 and #10. The FAA does not consider single-event sound levels for noise mitigation.
22	Doake, D & S	We are in the 65 decibel area and the F15s are awful! The house shakes, we can hear them with the windows shut and TV on, we have a crack in the ceiling from vibration.	See Responses to Comments #4 and #10. The FAA does not consider single-event sound levels for noise mitigation.
25	Circe, R.	1) Why can't the outside of the house be soundproofed and re-sided instead of sheetrocking the inside reducing square footage? 2) Why can't homeowners get paid for hiring our own contractors to soundproof house? 3) Why were homeowners not sent confirmation letters about applications being received? 4) What is the margin of error on the formula used to calculate the contour lines for sound? 5) What are the marked points for the decibel recordings that were taken?	1, 2 and 3: See Response to Comment #7. 4) Industry practice recognizes that noise modeling is up to ±3 dB relative to measured levels. However, this is difficult to assess. 5) Your question is not understood. Please contact Brian Barnes for questions you may have regarding noise testing.
26	Benoit	When the planes take off they travel right up Pequot Road, and they are quite noisy. When they land they come right over my house. I think the decibel level is over 4500 or whatever the allowance is. Has anyone checked the noise on Pequot Rd in the past couple of years? Thank you for your time, and service.	See Responses to Comments #4 and #10. The FAA does not consider single-event sound levels for noise mitigation.
29	Zecca	Wants to know if eligible	See Responses to Comments #4 and #10.
31	Stark	Eligibility	See Responses to Comments #4 and #10.
32	Adams	Eligibility	See Responses to Comments #4 and #10.
34	Lisce	Wants to know if the property is in the new contours	See Responses to Comments #4 and #10.
35	Cooper	Eligibility	See Responses to Comments #4 and #10.

1 ***Attendance***

Westfield-Barnes
REGIONAL AIRPORT

Meeting Sign-In

Date / Time: ***May 12th @ 7:00***

Type of Meeting: ***Monthly Commission***

Name	Address	Phone / Email
Brian P. Barnes	67 Farnham Lane Westfield, Ma 01085	(413) 563-8979 Cell brianbarnes@barnesairport.com
Peter Emzier	Albany NY	518-423-3863 pete.emzier@stantec.com
ALEX BERNIER	NEW YORK, NY	917-861-6268 alex.bernier@stantec.com
David Dargie	Scarborough, ME	207-887-3627 dave.dargie@stantec.com
CODY MILLER	ALBANY NY	518-424-8126 CODY.MILLER@STANTEC.COM
Mel Baker		413-246-6262 Wyle
Jane Verbeck	110 Airport Rd. Suite 218 Westfield-Barnes Reg. Airport	413.568.2320(o) 413.388.5077(c) jane.verbeck@wyle.com
Joe Mitchell	City of Westfield	
Bill Onyski	" " "	
Dwight Klapaki		

Via Conference Call:

Joseph J. Czech, PE, Wyle Laboratories. Inc.

Ferdows Fazeli, Architect, Wyle Laboratories Inc.

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1 ***Meeting Handout***

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Westfield-Barnes Regional Airport - Noise Compatibility Program Update

EXECUTIVE SUMMARY

What is an NCP?

An NCP consists of measures proposed to reduce noise exposure in the community to minimize land use considered incompatible with aircraft operations. NCPs typically consider 3 classes of measures:

- Noise Abatement
- Land Use Management
- Program Management

Terms

- Decibel (dB)
- Day-Night Average Sound Level (DNL)
- Noise Exposure Map

BAF's current NCP was approved in 2009

2009 NCP Measure		Status: Approved by FAA? YES / no	Status: Implemented by BAF? YES / no
Noise Abatement			
N1	Modification of Aircraft Departure Tracks (Continuation of 1990 Measures 2 & 4)	YES	Partially implemented
N2	Perform a Site Selection/Feasibility Study for a Noise Barrier south of Runway 02	YES	no
N3	Encourage the Use of GPS, RNAV, WAAS, and FMS Equipment to Enhance Noise Abatement Navigation	YES	YES
Land Use Management			
L1	Voluntary Acquisition of Homes within DNL 70 dB Noise Contour	YES	Implemented (not completed)
L2	Acquire the Arbor Mobile Home Park and Relocate residents	YES	no
L3	Sound Insulate homes within the DNL 65 dB noise contour	YES	Implemented (not completed)
L4	Remedial Easement Acquisition	YES	YES
L5	Sound Insulate Educational Facilities and Places of Worship	no	no
L6	Preventive Easement Acquisition	YES	no
L7	Modify Existing Zoning	YES	no
L8	Acquire Undeveloped Land	YES	no
L9	Airport Noise Overlay District	YES	no
L10	Environmental Review	YES	Yes
L11	Real Estate Disclosure	YES	no
L12	Modify Subdivision Regulations	YES	no
L13	Recommend Building Code Modifications	YES	no
Program Management			
P1	Establish a Noise Mitigation Advisory Committee	YES	YES
P2	Institute a Community Awareness Program	YES	YES
P3	Institute a Fly Quiet Program	YES	Partially implemented
P4	Periodic Evaluation of Noise Exposure	YES	YES

May 12, 2016

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- **BAF's Noise Exposure Map (NEM) – See Figure 1 for comparison of CY14 (2009) and CY20/CY21[1] NEMs**

Non-compatible Properties for CY21 NEM

DNL Band (dBA)	Program To Date with 2021 NEM					2021 NEM Newly Incompatible Properties (1)	GRAND TOTAL	Potential Properties to be Addressed (2)
	Acquired Properties	Avigation Easement	Sound Insulated Properties	Not Addressed (1)	Total			
65-70	10	1	49	60	120	151	271	211
70-75	-	-	-	5	5	1	6	6
75+	-	-	-	-	-		-	-
Total (≥65)	10	1	49	65	125	152	277	217

Source: BAF 2015

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

(1) Includes some parcels exposed to DNL less than 65 dB.

(2) equals those not addressed in the 2009 NCP plus those newly incompatible

- **NCP needs to be updated in order to reflect the new NEMs**

[1] Renamed to CY2021 NEM for the purpose of the NCP.

2016 NCP Overview

- **20 measures considered – 4 for NA, 12 for LU and 4 for PM**
  - All 2009 NCP's measures carried forward for continued consideration (for the most part), except:
    - N2 (barrier)
    - L2 (mobile home park acquisition)
  - Only 1 new measure (preferential runway system) re the 2009 NCP; FAA requirement
- **3 measures not recommended for inclusion in the 2016 NCP**
  - NA2 (noise abatement departure procedures for Runways 02 and 20)
    - Only a 6% (14) decrease in the number of homes potentially eligible for mitigation
    - Moves noise to 'new' areas
  - NA4 (preferential runway system; examined most closed patterns switching to Rwy 02 (vice Rwy 20)
    - Prevailing winds are out of the south
  - LU7 (voluntary acquisition of Undeveloped Land)
    - Financial impact to the City
- **Highlights of 17 measures recommended by BAF**

Recommended Measures	
Noise Abatement Alternatives	
NA1	Noise Abatement Departure Procedures for Runways 15 and 33
NA3	Continue to Encourage the Use of GPS, RNAV, WAAS, and FMS Equipment to Enhance Noise Abatement Navigation
Land Use Management Alternatives	
LU1	Voluntary Acquisition of Eligible Residential Structures
LU2	Residential Sound Insulation Program
LU3	Remedial Easement Acquisition
LU4	Sound Insulate Place of Worship
LU5	Preventive Easement Acquisition
LU6	Modify Existing Zoning
LU8	Airport Noise Overlay District
LU9	Environmental Review
LU10	Real Estate Disclosure
LU11	Modify Subdivision Regulations
LU12	Building Code Modifications
Program Management Alternatives	
P1	Re-Establish a Noise Mitigation Advisory Committee
P2	Community Awareness Program
P3	Expand the Fly Quiet Program
P4	Periodic Evaluation of Noise Exposure

LU1 – voluntary acquisition of eligible residential structures
- 25 identified within the 65 dB DNL contour (vice 70)
- Implement over next 3 years.
- Estimated Cost: $4.2M-$7.1M

LU2 – residential sound insulation program
- 181 homes within the 65 dB DNL contour
- Estimated Cost: $10.6M-$13.4M

Candidate Properties for Acquisition and Sound Insulation are shown in Figure 2.

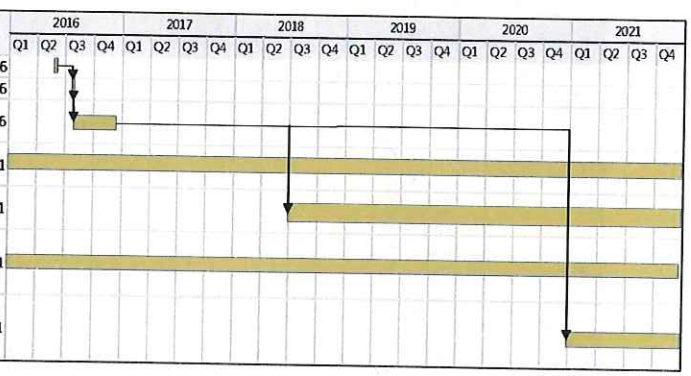
1

Next Steps

- Continue with implementation of acquisition program and other NCP measures not requiring FAA approval
- Present to City Council on June 16, 2016
- Submit to FAA by early July 2016
- FAA review period
- FAA approval
- Re-Launch implementation of sound insulation program
- Continue with implementation of other NCP measures not requiring FAA approval
- Launch measures requiring (and having obtained) FAA approval

Anticipated Schedule

Task Name	Start	Finish
Present to City Council	6/16/2016	6/16/2016
Submit to FAA	7/15/2016	7/15/2016
FAA approval (assuming 30-90 days approval period)	7/15/2016	11/17/2016
Continue with implementation of acquisition program	5/12/2016	8/16/2021
Re-Launch implementation of sound insulation program	5/21/2018	8/16/2021
Continue with implementation of other NCP measures not requiring FAA approval	5/12/2016	8/16/2021
Launch Items requiring FAA approval (sound insulate the place of worship)	1/1/2021	8/16/2021



For more information, please refer to the NCP document.

Prepared for:
Westfield-Barnes Airport Commission
59 Court Street
Westfield, MA

Westfield-Barnes REGIONAL AIRPORT

wyle

Prepared by:
Wyle Laboratories, Inc.
179 Bungalow Drive
El Segundo, CA 90245

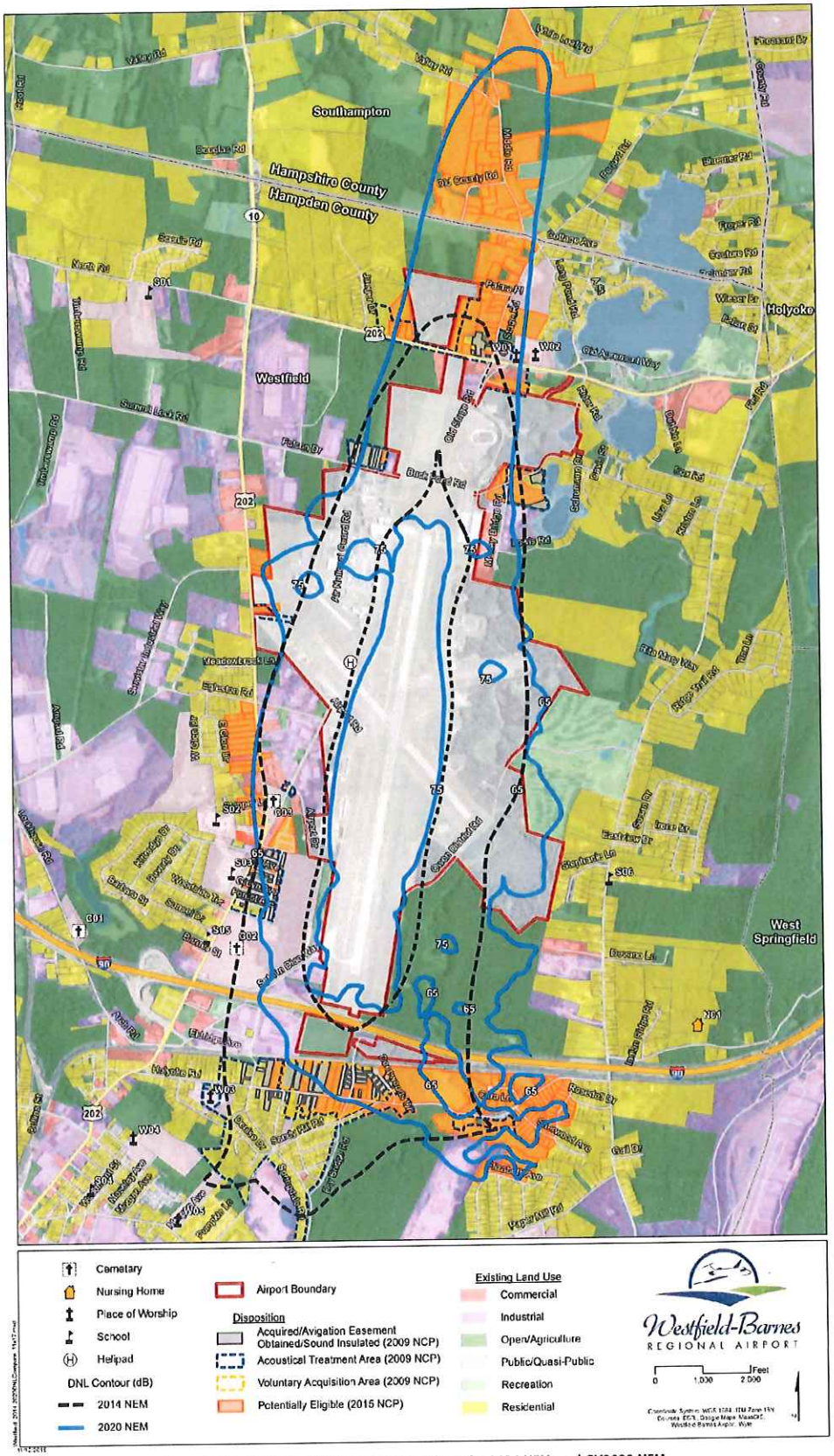


Figure 1. Comparison of Selected DNL Contours for 2014 NEM and CY2020 NEM

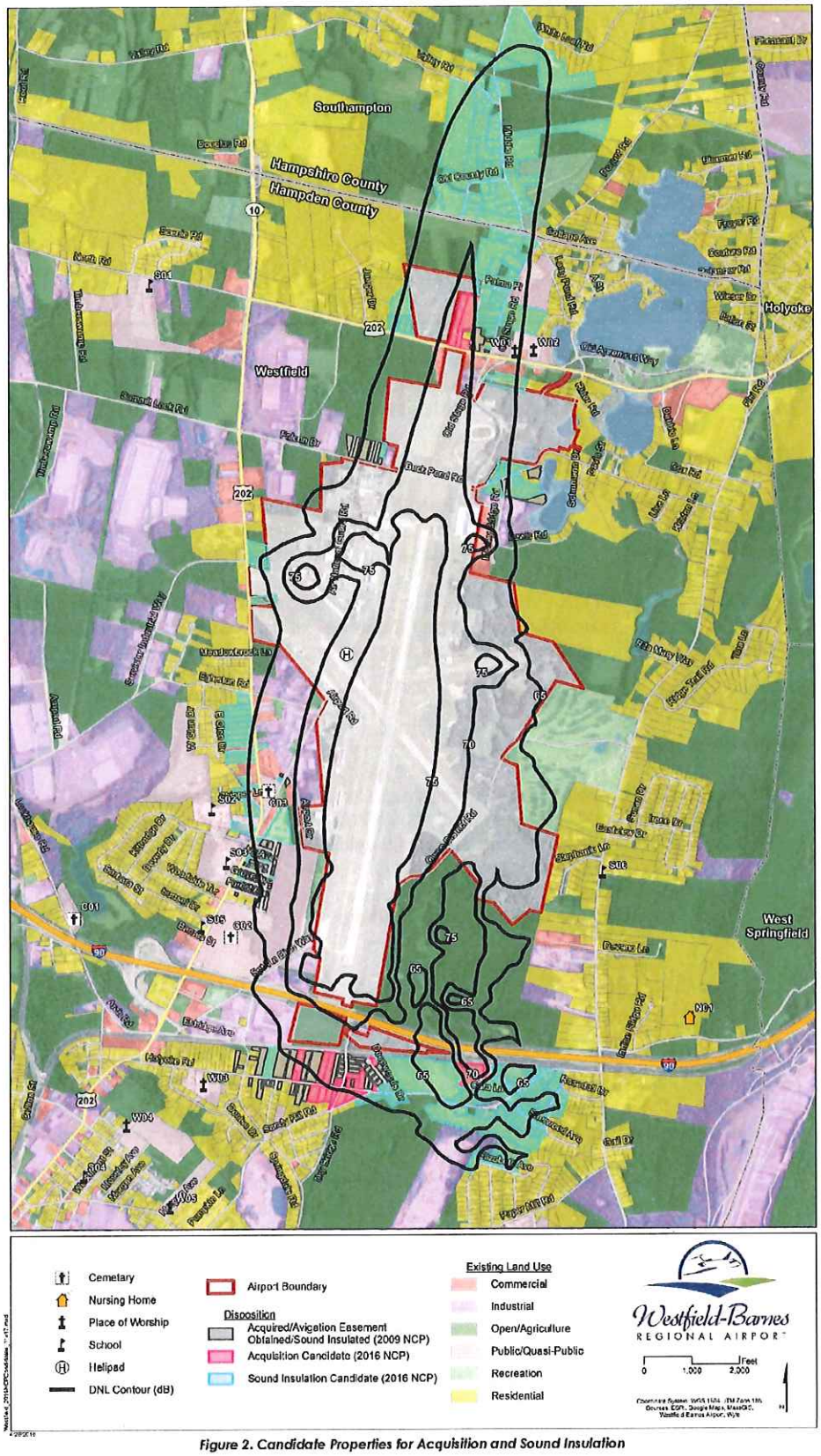


Figure 2. Candidate Properties for Acquisition and Sound Insulation

Westfield-Barnes
REGIONAL AIRPORT

Commission Meeting Minutes

Commission

Kimberly S. Cameron, Chair
Donald J. Nicoletti
William P. Gonet

The regular meeting of the Westfield Barnes Regional Airport Commission of Thursday, May 12, 2016 was held in the Airport Administration Building Conference Room, Westfield, MA. Chairman Cameron called the meeting to order at 6:21 p.m.

ATTENDANCE:

Commissioner Cameron	Airport Manager - Brian Barnes
Commissioner Nicoletti	Operations Facility Coordinator - Mike Shearer
Commissioner Gonet	Principal Clerk- Amanda LeClair

APPROVAL OF MEETING MINUTES: Commissioner Cameron made a motion to approve the April 14th, regular meeting minutes with the removal of the Noise Compatibility schedule, seconded by Commissioner Nicoletti, so voted 3/0.

PUBLIC PARTICIPATION: None

AIRPORT ACTIVITIES:

A. *Runway 2/20 Update-* Stantec Engineering Consultants Peter Enzien, Cody Miller, Alex Bernier and David Dargie, provided a PowerPoint presentation regarding the runway 2/20 rehabilitation project. The presentation highlighted the following topics:
   a. Pre-Construction Runway Conditions/Needs
   b. Project/Funding Overview
   c. Design Considerations/Pavement Design
   d. Current Findings
   e. Technical Pavement Discussion
   f. Recommendations
   g. Overview of Future Improvement Projects

   Stantec Engineers took the Commission on a site visit to give them a firsthand look at the cracks. The Engineers concluded the presentation with answering questions and explained the cracks are forming due to lack of drainage. Stantec Engineers recommended the following maintenance actions be taken to mitigate distress to the runway:
   - *Crack Sealing-* Stops Penetration of Water into Pavement Structure
   - *Under drain-* Removes Water that has Penetrated Pavement Structure
   - *Positive Drainage Slopes in Shoulder Turf Areas-* Prevents Surface Water from Penetrating Pavement Structure

B. *NCP Draft Submittal to Commission-* Jane Verbeck (Wyle Project Manager) arranged a conference call with Joe Czech (Senior Engineer for Wyle) and Ferdows K. Fazeli, (Wyle, LEED GA, Architect) to present the changes to the 2016 NCP verses the 2009 NCP. The Airport Commission and Airport Manager: Ms. Verbeck provided the Commission and Airport Manager with a Draft of the 2016 NCP, consisting of the

measures and maps for the NCP. These packets demonstrate all measures and changes of eligibility to the NCP (Noise Compatibility Program). Mr. Joe Czech explained the NCP updated draft and NEM (Noise Exposure Map) update. Commissioner Cameron requested Ms. Verbeck provide the commission with an outline of the old eligible homes vs. the new eligible homes and what's currently underway. Ms. Verbeck expects to submit detailed documentation of home addressed that were eligible, homes that are still eligible and homes that are newly eligible. Mr. Joe Mitchell suggested that the presentation of the NCP to the City Council be brought before the Legislature and Ordinance Sub-Committee before being brought to the City Council.

C. *Whip City Aviation-* Dwight Klepacki informed the Commission as of April 8th he became the sole proprietor of Whip City Aviation. Mr. Klepacki explained his plans to replace all 30 hangar doors starting this week as well as plans to build a second hangar within the next few years. Commissioner Cameron requested Mr. Klepacki come before the Commission with a plan for approval, prior to building the second hangar in a different location then originally intended.

D. *Advancement Office Solar Update-* FAA will be reviewing the Grant Assurances for Amersco Solar (leasing 18 acres of 35 acres available of airport property on North Road) for approval. It is anticipated the airport will be collecting $69,000 annually in revenue.

E. *Cersosimo Land Update-* There are currently no updates at this time.

F. *Rental Car Space Update-* The RFP evaluation has been completed and legal is currently reviewing the existing Enterprise lease agreement as well as negotiations have been initiated with Sarat Ford.

G. *Airport Master Plan-* Commissioner Gonet was enlightened on plans to modernize the AMP. Stantec Consulting (Airport Engineers) will be revising the Master Plan within the next two years, fully funded by FAA.

H. *Fireworks-* Fourth of July fireworks display regularly held at Stanley Park each year will no longer be an option for the airport to hold this event given that the airport is located on an aquifer.

I. *Security System Update-* The installation of the updated security system has began and will be completed by the end of next week.

J. *HVAC Update-* A new sensor was installed this week causing an error message to occur and will be repaired tomorrow.

K. *Snow Blower Auction-* The auction has been closed and no bids were accepted. The highest bid was $31,000 and the reserve required was $100,000. The Airport Manager explained two potential options would be to put the Kodiak out to auction again in the fall or have the front end put on the current snow blower.

L. *Tax Validation Process-* The Commission was provided with a quarterly tax report of tenants on the airport.

M. *Finance Committee Briefing Review (Tax Revenue/Part 139 Costs)* - The Commission reviewed and discussed operating costs for the airport to present to the finance committee on May 19th. Commissioner Gonet proposed the idea of the City providing a self serve fuel station to generate more revenue for the airport.

N. *Vote on MassDOT Assurances and State Grant for Security Updates to the Gates-* Commissioner Nicoletti made a motion to grant the Chair, Commissioner Cameron, the Authority to sign the MassDOT Grant Assurances for the project #2016-BAF-25-ASMP, State Grant No. BAFECEQP, followed by a roll call vote:

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Commissioner Cameron-yes
Commissioner Nicoletti-yes
Commissioner Gonet-yes

O. *FAA Inspection Reminder (May 18-19,0900 In-brief. 1:00PM Out-brief)*- Commissioner Nicoletti will be attending the FAA Inspection out-brief on May 19th.

P. *Rectrix Update*- The Airport Manger explained that Kevin Bradley (Rectrix VP of Operations) informed that Rectrix would like to replace the carpeting in the FBO area and repair/repaint the existing Five Star hangar. The rest of the discussion will be discussed in the legal update item.

Q. *Legal Update*-

a. *Rectrix*- The Commission requested the Airport Manger respond to Mr. Kevin Bradley's request and inform that he come before the Commission for approval to proceed in the above mentioned repairs.

b. *Minimum Standards*- The license agreements and application have been updated. The Commission requested an outside entity review the current Master Airport Lease template.

The following items were discussed and referred to legal:

- Rectrix/AirFlyte

R. *Manager PSA and Action Plan*- Commissioner Cameron and Airport Manager Brian Barnes finalized the Managers review and are waiting on signatures from Commissioner Nicoletti and Commissioner Gonet as Commissioner Gonet requested to review before signing.

IV. CAPITAL IMPROVEMENT PROJECTS:

A. *Electrical Vault/ Drainage Assessment/ Under Drain Project*- The electrical vault project has been completed and electricity is in service.

FISCAL AND AIRPORT USE REPORTS: The Commission decided not to review the reports tonight.

There being no other business to come before the Commission, Commissioner Cameron motioned to adjourn the meeting, seconded by Commissioner Nicoletti, so voted 3/0.

The Chairman adjourned the meeting at 10:00 p.m.

Respectfully submitted,

Brian P. Barnes, Airport Manager
(413) 572-6275 (413) 572-6296 Fax
E-mail: brianbarnes@barnesairport.com

Approved:

Kimberly S. Cameron, Chair
Westfield Airport Commission

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Legislative and Ordinance Subcommittee Meeting

Legal Notice

Electronic Notice

Meeting Attendance

Comment Response Matrix

Presentation

Display Boards

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