1 INTRODUCTION

The federal "Airport Safety and Noise Abatement Act of 1979"¹ ("ASNA"), as amended, defines procedures under which the federal government, through the Federal Aviation Administration (FAA), will "provide assistance to airport operators to prepare and carry out noise compatibility programs."² The FAA assistance includes both regulatory guidance and financial support.

FAA has implemented the ASNA noise-related regulatory requirements in 14 C.F.R. (Code of Federal Regulations) Part 150, "Airport Noise Compatibility Planning," which defines standards for airport operators to use in documenting noise exposure in the airport environs and establishing programs to minimize noise-related land use incompatibilities. FAA provides funding support under the federal "Airport Improvement Program" (AIP).

A formal submission to the FAA under Part 150 includes two principal elements: (1) the Noise Exposure Maps (NEMs) and (2) the Noise Compatibility Program (NCP). While involvement is strictly voluntary, over 270 airports participated in the program. FAA has provided AIP grants for over \$95 million for Part 150 studies and for over \$5 billion for NCP implementation.

In August 2003, Los Angeles World Airports (LAWA), the operator of Van Nuys Airport (VNY), submitted Part 150 NEMs for calendar years 2001 and 2006, a proposed NCP, and associated documentation for the airport to the FAA.³ In 2008, LAWA certified that the NEMs were representative of 2008 and 2013 conditions. FAA found the NEMs in compliance on April 4, 2009 and executed a Record of Approval (ROA) for the proposed NCP actions effective October 16, 2009.

Appendix A presents a copy of the FAA letter accepting the NEMs, and related FAA and LAWA correspondence related to certification of the NEMs as representative of current and five-year forecast conditions at the time. Appendix B presents copies of the FAA ROA for the NCP, the FAA cover letter, and the related Federal Register Notice. The second paragraph of the ROA cover letter states the FAA "has concerns about the length of time since the NEMs were developed and the length of time since the general public was involved in the process" and concludes "we believe it would be appropriate to review and revise your NEMs under 14 C.F.R. 150.21 due to their age."

In response to the FAA's concerns regarding the age of the NEMs and its recommendation that it would be appropriate to review and revise them, this volume presents updated NEMs and associated documentation for Van Nuys Airport, for calendar years 2011 and 2016.

The balance of this chapter provides further introductory information. Section 1.1 discusses the VNY physical, operational, and historical setting. Section 1.2 presents an overview of prior and ongoing LAWA noise compatibility efforts at VNY. Section 1.3 provides a further introduction to Part 150. Section 1.4 provides a completed copy of the FAA NEMs review checklist.

¹ P.L 96-193, 96th Congress, HR 2440, February 5, 1980, effective February 18, 1980.

² Ibid., Preamble.

³ "Van Nuys Airport Part 150 Study, Noise Compatibility Program Report with Noise Exposure Maps (NEM) and Noise Compatibility Program (NCP) Mitigation Measures," prepared by Environmental Management Division, City of Los Angeles, Los Angeles World Airports, August, 2003.

1.1 VNY Physical, Operational, and Historical Setting

1.1.1 VNY Physical Setting

VNY is a 740-acre general aviation facility in the west-central portion of the City of Los Angeles, approximately 25 miles northwest of downtown Los Angeles in the center of the San Fernando Valley. Figure 1 depicts the VNY regional location.

The area surrounding VNY is largely built out – developed with a combination of residential, commercial, industrial, and public uses, with single-family residential being the predominant use.

Figure 2 depicts the generalized land uses in the immediate airport environs.

1.1.2 VNY Operational Setting

VNY is one of three airports operated by LAWA, including Los Angeles International Airport (LAX) and Ontario International Airport (ONT). LAWA operates under the direction of a policy-making Board of Airport Commissioners appointed by the Mayor of Los Angeles.

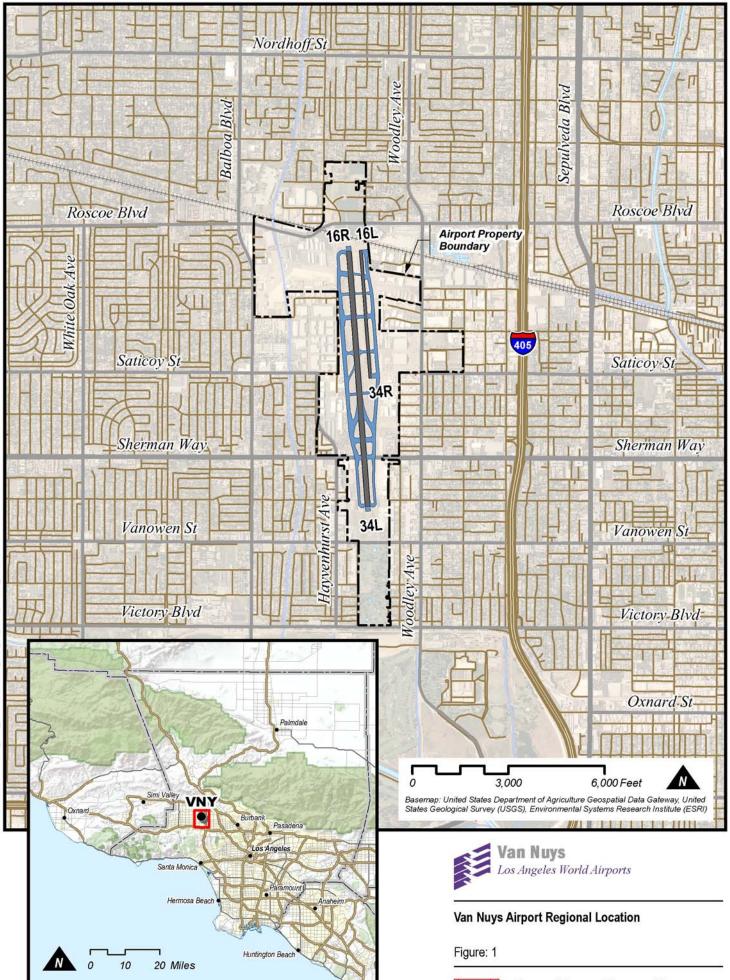
Major airport operational facilities include two runways – an 8,001-foot primary runway (Runway 16R-34L) and a 4,011-foot secondary runway (Runway 16L-34R).

VNY plays a crucial role in the Southern California airport system, serving a variety of private, corporate, and government aviation needs. By providing a place for general aviation, VNY enhances safety and efficiency at the region's commercial airports. The airport also provides a base and maintenance facilities for regional fire, police, air ambulance, search and rescue, and news media aircraft. As part of the regional approach to meeting passenger demand, VNY serves a vital purpose in reducing congestion and flight delays at Los Angeles International and other nearby airports.

LAWA estimates that VNY contributes more than \$1.3 billion each year to the Southern California economy, by creating jobs, supporting businesses, and providing critical general aviation and emergency services. Business travelers and tourists using private, corporate, and charter aircraft benefit from the airport's proximity to city business, recreation, and entertainment centers.

More than 100 businesses are located on the airport property, including five major fixed-base operators (FBOs) that provide aircraft storage and parking, aviation fuel, aircraft sales, flight instruction, aircraft charter and aircraft maintenance. Some of the FBOs also serve as major leaseholders of airport property, subletting land and buildings to other airport tenants. VNY also is home to numerous companies that provide aviation support activities such as aircraft repairs, avionics, interior work and other specialized functions.

From the mid-1960s until the late-2000s, LAWA records indicate annual operations ranged from just below 500,000 to just above 600,000. In many of those years, VNY was considered the busiest general aviation airport in the world. Due to the recent economic decline, annual operations have fallen more in the range of 400,000; however, even at this reduced activity level, VNY continues to be one of the busiest general aviation airports worldwide.



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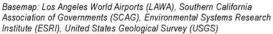
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Generalized Land Use Categories in the Airport Environs

Figure: 2 Airport Boundary Runways / Taxiways Residential (Non-Compatible) Residential (Compatible) Public Use Recreational / Open Space Commercial Use Manufacturing and Production Airport Property Vacant, Utility, Transportation Water River / Streams Roads -----Railroad





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1.1.3 VNY Historical Setting

On December 17, 1928 – the 25th anniversary of the Wright Brothers' first flight – VNY was incorporated as Metropolitan Airport by a small group of citizens. At the time, VNY was surrounded by agricultural land. Although the Great Depression put an end to the corporation, Hollywood film production and the associated movie stars who had enthusiastically embraced recreational flying found a home at the airport and helped save it. To this day, producers of movies, TV shows, videos, and commercials frequently use VNY for filming needs.

With the outbreak of World War II, the U.S. government purchased the airport, enlarged it, and converted it into a military base to help protect the west coast and train military pilots. The airport also became a vital defense-manufacturing center during the war.

In 1949, the City of Los Angeles purchased the airport from the U.S. War Assets Administration for the token fee of \$1, with the agreement that the California Air National Guard base continue to operate at the site. In the 1950s, the Air National Guard replaced its propeller fleet with F-86 jets, and built newer, more permanent facilities at the airport.

The postwar decades brought substantial growth to general aviation at the airport and local industries. Job growth in the valley and the Los Angeles region as a whole also brought residential development surrounding the airport. That development and introduction of jets to the general aviation fleet led to community concerns regarding airport noise, and a strong LAWA commitment to address those concerns. LAWA's commitment continues today, as reflected by this submission of updated NEMs.

1.2 Noise Compatibility Context at VNY

LAWA considers noise compatibility to be a high-priority, continuing process; over many decades of effort, it has established an extensive noise management program at VNY. The program – and LAWA's continuing commitment to its implementation and improvement – is recognized across the United States and internationally for its innovation and benefits. Major elements include:

- noise abatement measures to reduce noise exposure or shift it away from sensitive land uses
- remedial land use measures to address residual incompatible land uses
- preventive land use measures to deter introduction of new incompatible land uses

Sections 3.2 and 3.3 describe existing noise abatement and compatible land use elements of the noise management program. Section 3.4 summarizes recommendations of the 2003 NCP submission, the associated FAA Record of Approval, the current status of the each recommendation, and their relationship to corresponding VNY noise management program elements.

1.2.1 VNY Noise Management Program Staffing

The VNY noise management program elements are implemented by numerous LAWA staff, including the Noise Management Section staff based at LAWA Administrative offices at LAX and in the VNY Noise Management Office. Those Noise Management Section staff work closely with the VNY Airport Manager's Office, VNY Operations, and VNY Public and Community Relations as well as other LAWA and City of Los Angeles staff.

1.2.2 VNY Noise and Operations Monitoring

The Noise Management Section operates an extensive "Airport Noise and Operations Monitoring System" at VNY, LAX, and ONT. The system supports program monitoring and enforcement, pilot feedback, reporting, complaint analysis, and other implementation functions.

The only use of noise measurements in this study was to compare measured departure noise levels to Integrated Noise Model (INM) estimates as part of the process of obtaining FAA approval for use of "user-defined" modeling inputs, as discussed in Section 5.1.5.2. Those comparisons were made for only one measurement location. At the time the data were obtained, the site was numbered "V7." Subsequent to the use of the data, the site was renumbered to "VNY13." Consistent with the requirement set forth in Part 150 Part B §A150.1.1(e)(7) that the NEMs must "contain and identify [1]locations of any aircraft noise monitoring sites utilized for data acquisition and refinement purposes," that monitor location is depicted on the existing condition and five-year forecast condition NEM graphics (Figure 7 and Figure 8, respectively, in Section 4.2). To minimize clutter on and maximize clarity of the NEM graphics, other monitoring locations are not depicted, since they are not individually referenced in this report nor were they used for data acquisition or refinement or any other analytical purpose in the preparation of the noise contours or any other analytical purpose in the preparation of the noise contours or any other analyses presented in this submission.

1.3 14 CFR Part 150 Overview

In addition to its financial assistance elements, the previously introduced Aviation Safety and Noise Abatement Act of 1979 (ASNA) required the FAA to "(1) establish a single system of measuring noise ... (2) establish a single system for determining the exposure of individuals to noise resulting from airport operations ... and (3) identify land uses normally compatible with various exposures of individuals to noise."⁴

The FAA addressed these requirements in Part 150. For the measurement system, the FAA selected the A-weighted sound level (dBA),⁵ which describes noise exposure in the manner most consistent with human hearing.⁶ For evaluating exposure of individuals to noise from airport operations, FAA selected the Day-Night Average Sound Level (DNL or Ldn).⁷ To address the third requirement, Part 150 includes a table of land use compatibility as a function of yearly DNL.⁸ It should be noted that the table represents *guidelines* and does not present federally mandated standards; the federal government defers to local land use jurisdictions for determination of the level of noise exposure that is acceptable for given land uses. Part 150 expressly acknowledges that deference by stating:

The responsibility for determining the acceptable and permissible land uses and the relationship between specific properties and specific noise contours rests with the local

⁴ASNA as codified under 49 U.S.C. § 47502: "Noise measurement and exposure systems and identifying land use compatible with noise exposure."

⁵ Appendix C provides an introduction to decibels and other noise terminology used in this document.

⁶ 14 C.F.R. Part 150, Appendix A, Part B, § A150.3(a).

⁷ For the reasons discussed in Section 2, this document substitutes "Community Noise Equivalent Level" (CNEL) for DNL, consistent with the FAA practice of accepting that substitution in Part 150 submissions made by California airports. CNEL, DNL, and other noise metrics are described in Appendix C.

⁸ Ibid., Appendix A, Part B, Table 1.

authorities. FAA determinations under Part 150 are not intended to substitute federally determined land uses for those determined to be appropriate by local authorities in response to locally determined needs and values in achieving noise compatible land uses.⁹

Section 2 discusses LAWA's locally established land use compatibility guidelines, which are the same as those utilized in the FAA-accepted 2003 Part 150 submission for VNY.

ASNA further provided for any airport operator to prepare and submit "a noise exposure map showing the noncompatible uses in each area of the map on the date the map is submitted, a description of estimated aircraft operations during a forecast period that is at least 5 years in the future and how those operations will affect the map."¹⁰ ASNA also provided for airport operators to provide revised maps if "a change in the operation of the airport would establish a substantial new noncompatible use, or would significantly reduce noise over existing noncompatible uses, that is not reflected in either the existing conditions map or forecast map currently on file with the [FAA]."¹¹

In summary, Part 150 sets forth a process for airport proprietors to follow in developing and obtaining FAA approval of programs to reduce or eliminate incompatibilities between aircraft noise and surrounding land uses. Part 150 prescribes specific standards and systems for:

- Measuring noise
- Estimating and describing cumulative noise exposure
- Coordinating NCP development with local land use officials and other interested parties
- Documenting the analytical process and development of the compatibility program
- Submitting documentation to the FAA
- FAA and public review processes
- FAA approval or disapproval of the submission

A full Part 150 submission to the FAA includes two elements: (1) the Noise Exposure Maps (NEMs) and (2) the Noise Compatibility Program (NCP). However, as discussed in Section 1, this document presents only an update to previously accepted NEMs, in response to an FAA recommendation.

1.3.1 Noise Exposure Maps

The NEMs describe the airport layout and operation, aircraft-related noise exposure, land uses in the airport environs, and the resulting noise/land use compatibility situation. The NEMs must address two time frames: (1) data representing the year of submission (the "existing conditions") and (2) the fifth calendar year or later following the year of submission (the "forecast conditions"). The NEMs also address how the forecast operations will affect the compatibility of the land uses depicted.

The year of submission for this update is 2011. Therefore, the existing conditions noise contours are for 2011 and the five-year forecast case contours are for 2016.

The primary objective is to describe the current and forecast conditions at the airport and the noise effects of the aircraft activity on the surrounding communities. While this description is normally

⁹ Ibid., Appendix A, Part B, introductory paragraph of "Notes for Table 1."

¹⁰ 49 U.S.C. § 47503: Noise exposure maps (ASNA as amended), § (a)

¹¹ Ibid., § (b).

processed into individual NEMs, Part 150 requires more than a simple "map" to provide all the necessary information. The development of the graphics includes such tasks as:

- Collecting historical aviation activity data such as aircraft fleet mix, number and type of operations, aircraft departure weights, runway utilization
- Developing a forecast aircraft activity for a period at least five years in the future from the year representing the existing conditions
- Determining aircraft flight tracks and usage based on radar data, if available, or other source data
- Creating the necessary inputs to the FAA Integrated Noise Model using the average annual input conditions to include airport configuration, meteorological data, operations, etc.
- Obtaining FAA approval for user-specified aircraft noise modeling profiles and non-standard aircraft type modeling substitutes
- Collecting data from local jurisdictions to establish detailed land use data in the airport environs
- Estimating population data within the local area

Therefore, in addition to the graphical elements, the NEMs submission must document, through tabulated information and text discussions, the full range of data collection and analyses undertaken to depict existing and future noise exposure resulting from aircraft operations, and the encompassed land uses in the airport environs. The NEMs development must include public consultation meeting Part 150 requirements, as discussed in Section 6. After considering and addressing all input received during that consultation, the airport operator submits the NEMs document to the FAA. Subsequent to a thorough review, the FAA "accepts" submissions it finds in conformance with Part 150.

1.3.2 Noise Compatibility Program

The NCP provides a planning process for evaluating aircraft noise impacts and the costs and benefits of alternative noise abatement measures. It also engages the local planning authorities to review the policies toward managing the noncompatible land uses now and in the future around the airport. By involving the public and local agencies, the NCP is essentially the total process used by the airport proprietor to propose a list of the actions to undertake to minimize existing and future noncompatible noise/land uses. These actions may involve:

- Changes to the physical layout of the airport
- Changes to airport and airspace use
- Changes to aircraft operations
- Review of land use administration practices for preventing noncompatible uses
- Review of noise management program practices

There are certain measures that must be considered for applicability and feasibility:

- Acquisition of land which includes overflight, easement, and development rights to ensure property use is compatible with airport operations
- Construction of barriers or shielding through sound insulating buildings
- Implementation of a preferential runway use

- Utilization of flight procedures to reduce noise from the source (aircraft) through actions such as flight track changes or aircraft performance profile adjustments
- Restriction of use of the airport by specific aircraft types, nighttime operations, etc.

The NCP documentation must recount the development of the program, including a description of all measures considered, the reasons that individual measures were accepted or rejected, how measures will be implemented and funded, and the predicted effectiveness of individual measures and the overall program. As in the case of the NEMs, public participation is a vital part of developing a program that will promote understanding, awareness, and an opportunity for involving the perspectives of the different jurisdictions and their constituents on the role of the airport and the community.

Upon completion of the analyses and coordination, the NCP is submitted to the FAA for review and approval. The FAA reviews the NCP and may approve or disapprove each measure on its merits and adherence to the national aviation policy. Upon approval, the airport will begin its implementation schedule based on the availability of federal funding and local resources.

1.4 FAA Noise Exposure Maps Checklist

The FAA provides advice to airports and other interested parties to consider in conducting Part 150 studies, in Advisory Circular (AC) 150/5020, "Airport Noise and Land Use Compatibility Planning." The AC includes a checklist for FAA's use in reviewing NEMs submissions. The FAA prefers that Part 150 documentation include a copy of the current version of the checklist, with appropriate page number or other references, and other notes or comments to assist in the document's review, as presented in Table 1.

Table 1 Part 150 Noise Exposure Maps Checklist

Source: http://www.faa.gov/airports/environmental/airport_noise/part_150/checklists/, 2011

14 CFR PART 150 NOISE EXPOSURE MAPS CHECKLIST-PART I				
	PROGRAM REQUIREMENT	Yes/No	Supporting section, page, or other reference and comments	
I.	Submitting and Identifying the NEMs:			
	A. Submission properly identified:			
	1. 14 C.F.R. Part 150 NEMs?	Yes	Cover letter, cover, and Section 1.	
	2. NEMs and NCP together?	No	NEMs update only.	
	Revision to NEMs FAA previously determined to be in compliance with Part 150?	Yes	Cover letter and Section 1.	
	B. Airport and Airport Operator's name are identified?	Yes	Cover letter and Certification (page iii).	
	C. NCP is transmitted by operator's dated cover letter, describing it as a Part 150 submittal and requesting appropriate FAA determination?		Not applicable.	
II.	Consultation: [150.21(b), A150.105(a)]			
	A. Is there a narrative description of the consultation accomplished, including opportunities for public review and comment during map development?	Yes	Section 6.	
	B. Identification of consulted parties:			
	1. Are the consulted parties identified?	Yes	Sections 6.1 and 6.2.	
	 Do they include all those required by 150.21(b) and A150.105 (a)? 	Yes	Section 6.2.	
	Agencies in 2., above, correspond to those indicated on the NEM?	Yes	Section 6.2.	
	C. Does the documentation include the airport operator's certification, and evidence to support it, that interested persons have been afforded adequate opportunity to submit their views, data, and comments during map development and in accordance with 150.21(b)?	Yes	Certification (page iii) and Section 6.	
	D. Does the document indicate whether written comments were received during consultation and, if there were comments that they are on file with the FAA regional airports division manager?	Yes	Section 6.4 lists the parties submitting comments. Appendix L provides copies of the comments, which by submission of this document are on file with the FAA's Regional Airports Division Manager.	
III.	General Requirements: [150.21]			
	A. Are there two maps, each clearly labeled on the face with year (existing condition year and one that is at least 5 years into the future)?	Yes	"2011 Existing Condition Noise Exposure Map" (Figure 7 on page 55) and "2016 Five-Year Forecast Condition Noise Exposure Map" (Figure 8 on page 56).	
	B. Map currency:			
	 Does the year on the face of the existing condition map graphic match the year on the airport operator's NEM submittal letter? 	Yes	"2011 Existing Condition Noise Exposure Map" (Figure 7 on page 55)	
_	2. Is the forecast year map based on reasonable forecasts and other planning assumptions and is it for at least the fifth calendar year after the year of submission?	Yes	Section 5.1.4 discusses the 2011 and 2016 forecasts. Appendix I presents copies of documentation related to FAA review and approval, including the March 13, 2011 FAA approval letter.	
	3. If the answer to 1 and 2 above is no, the airport operator must verify in writing that data in the documentation are representative of existing condition and at least 5 years' forecast conditions as of the date of submission?	N.A.	Not applicable.	

14 CFR PART 150 NOISE EXPOSURE MAPS CHECKLIST-PART I				
PROGRAM REQUIREMENT	Yes/No	Supporting section, page, or other reference and comments		
C. If the NEMs and NCP are submitted together:				
 Has the airport operator indicated whether the forecast year ma is based on either forecast conditions without the program or forecast conditions if the program is implemented? 	N.A.	Not applicable.		
2. If the forecast year map is based on program implementation:	N.A.			
a. Are the specific program measures that are reflected on the map identified?	N.A.	Note: The "2011 Existing Condition Noise Exposure Map" (Figure 7 on page 55) and "2016 Five-Year Forecast Condition Noise Exposure Map" (Figure 8 on page 56) reflect objective data analysis reflecting the current implementation of the existing, FAA- approved NCP elements summarized in Section 3.4.		
b. Does the documentation specifically describe how these measures affect land use compatibilities depicted on the map?	N.A.			
3. If the forecast year NEM does not model program implementation, the airport operator must either submit a revise forecast NEM showing program implementation conditions [B150.3 (b), 150.35 (f)] or the sponsor must demonstrate the adopted forecast year NEM with approved NCP measures wou not change by plus/minus 1.5 CNEL? ¹² [150.21(d)]	N.A.			
IV. MAP SCALE, GRAPHICS, AND DATA REQUIREMENTS: [A150.101 A150.103, A150.105, 150.21(a)]	,			
 A. Are the maps of sufficient scale to be clear and readable (they must be not be less than 1" to 2,000'), and is the scale indicated on the maps? (Note (1) if the submittal uses separate graphics to depict flight tracks and/or noise monitoring sites, these must be of the same scale, because they are part of the documentation required for NEMs.) 	Yes	The "2011 Existing Condition Noise Exposure Map" (Figure 7 on page 55) and "2016 Five-Year Forecast Condition Noise Exposure Map" (Figure 8 on page 56) are presented at 1" to 2,000'. As discussed in Section 5.1.7, unbound flight track figures are provided at this scale, as permitted by FAA.		
(Note (2) supplemental graphics that are not required by the regulation do not need to be at the 1" to 2,000' scale)				
B. Is the quality of the graphics such that required information is clear and readable? (Refer to C. through G., below, for specific graphic depictions that must be clear and readable)				
C. Depiction of the airport and its environs.				
 Is the following graphically depicted to scale on both the existin condition and forecast year maps: 	g Yes	"2011 Existing Condition Noise Exposure Map" (Figure 7 on page 55) and "2016 Five-Year Forecast Condition Noise Exposure Map" (Figure 8 on page 56).		
a. Airport boundaries	Yes			
b. Runway configurations with runway end numbers	Yes			
2. Does the depiction of the off-airport data include?				
 A land use base map depicting streets and other identifiable geographic features 	e Yes	Land uses on the NEMs are "clipped" at the 65 dB CNEL contour for clarity. Streets and other features shown over the entire mapped area. Extended land use coverage is shown in Figure 2 for informational purposes.		
b. The area within the CNEL 65 dB (or beyond, at local discretion)	Yes			
c. Clear delineation of geographic boundaries and the names all jurisdictions with planning and land use control authority within the CNEL 65 dB (or beyond, at local discretion)		As noted directly on the map portion of the NEM figures (which extends well beyond 65 dB CNEL contour), the entire mapped area is within the jurisdictional boundaries of both the City of Los Angeles and Los Angeles County. The flight track figures provide the required boundaries and labels.		

¹² The version of the FAA's checklist presented in this document substitutes "CNEL" (Community Noise Equivalent Level) where the standard version of the checklist uses "DNL" or "Ldn," consistent with the FAA-accepted practice of using CNEL as a substitute for DNL in Part 150 submissions made by California airports, for reasons discussed in Section 2. Appendix C introduces CNEL, DNL, and other noise metrics.

14 CFR PART 150 NOISE EXPOSURE MAPS CHECKLIST-PART I				
	PROGRAM REQUIREMENT	Yes/No	Supporting section, page, or other reference and comments	
D. 1	1. Continuous contours for at least CNEL 65, 70, and 75 dB?	Yes		
	 Has the local land use jurisdiction(s) adopted a lower local standard and, if so, has the sponsor depicted this on the NEMs? 	No	The Section 2 discussion of City of Los Angeles, Los Angeles County, and State of California standards explains their consistency with FAA guidelines presented in Part 150 Appendix A, Table 1, with the exception that CNEL is substituted for DNL, for the reasons discussed in Section 2.	
	3. Based on current airport and operational data for the existing condition year NEM, and forecast data representative of the selected year for the forecast NEM?	Yes	See the Section 5 discussion of the 2011 and 2016 noise modeling data.	
	Flight tracks for the existing condition and forecast year timeframes (these may be on supplemental graphics which must use the same land use base map and scale as the existing condition and forecast year NEM), which are numbered to correspond to accompanying narrative?	Yes	See the Section 5.1.7 discussion, and related figures and tables, including unbound flight track figures at the 1" to 2,000' scale of the NEMs.	
:	Locations of any noise monitoring sites (these may be on supplemental graphics which must use the same land use base map and scale as the official NEMs)	Yes	The 2011 and 2016 NEM (Figure 7 on page 55 and Figure 8 on page 56, respectively) depict a noise monitoring site used in preparation of the contours, as discussed in Section 1.2.2.	
G. I	Noncompatible land use identification:	Yes		
	 Are noncompatible land uses within at least the CNEL 65 dB noise contour depicted on the map graphics? 	Yes	Noncompatible uses within 65 dB CNEL are depicted, as required	
	 Are noise sensitive public buildings and historic properties identified? (Note: If none are within the depicted NEM noise contours, this should be stated in the accompanying narrative text.) 	Yes	As discussed in Section 4.3, neither the 2011 nor the 2016 NEM contours encompass any noise sensitive public buildings or historic properties.	
	3. Are the noncompatible uses and noise sensitive public buildings readily identifiable and explained on the map legend?	Yes	Legends identify non-compatible land uses.	
	4. Are compatible land uses, which would normally be considered noncompatible, explained in the accompanying narrative?	Yes	As discussed in Sections 3.3.1 and 4.3, the NEMs identify residential properties within 65 dB CNEL that are covered by the LAWA sound-insulation program as compatible, consistent with FAA, City, County, State, and LAWA policies.	
	RRATIVE SUPPORT OF MAP DATA: [150.21(a), A150.1, 0.101, A150.103]			
Α.	 Are the technical data and data sources on which the NEMs are based adequately described in the narrative? 	Yes	Section 5	
2	Are the underlying technical data and planning assumptions reasonable?	Yes	Section 5	
В.	Calculation of Noise Contours:		Section 5	
	1. Is the methodology indicated?	Yes		
	a. Is it FAA approved?	Yes	As discussed in Section 5, The CNEL	
	b. Was the same model used for both maps? (Note: The same model also must be used for NCP submittals associated with NEM determinations already issued by FAA where the NCP is submitted later, unless the airport sponsor submits a combined NEMs/NCP submittal as a replacement, in which case the model used must be the most recent version at the time the update was started.)	Yes	contours contained in these NEMs were prepared using the most recent release of the FAA's Integrated Noise Model (INM) available at the time the NEMs were prepared; i.e., "Version 7.0b."	
	c. Has AEE approval been obtained for use of a model other than those that have previous blanket FAA approval?	N.A.	Not applicable.	
F. 1 G. 1 V. NAF A15 A. 2 B. 0	 selected year for the forecast NEM? Flight tracks for the existing condition and forecast year timeframes (these may be on supplemental graphics which must use the same land use base map and scale as the existing condition and forecast year NEM), which are numbered to correspond to accompanying narrative? Locations of any noise monitoring sites (these may be on supplemental graphics which must use the same land use base map and scale as the official NEMs) Noncompatible land use identification: Are noncompatible land uses within at least the CNEL 65 dB noise contour depicted on the map graphics? Are noise sensitive public buildings and historic properties identified? (<i>Note: Th can ere within the depicted NEM noise contours, this should be stated in the accompanying narrative text.</i>) Are the noncompatible uses and noise sensitive public buildings readily identifiable and explained on the map legend? Are compatible land uses, which would normally be considered noncompatible, explained in the accompanying narrative? RRATIVE SUPPORT OF MAP DATA: [150.21(a), A150.1, 0.101, A150.103] Are the underlying technical data and planning assumptions reasonable? Calculation of Noise Contours: Is the methodology indicated? Is it FAA approved? Was the same model used for both maps? (<i>Note: The same model also must be used for NCP submittal associated with NEM determinations already issued by FAA where the NCP is submitted later, unless the airport sponsor submits a combined NEMs/NCP submittal as a replacement, in which case the model used must be the most recent version at the time the update was started.) </i> 	Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes	See the Section 5.1.7 discussion, related figures and tables, includ unbound flight track figures at the 2,000' scale of the NEMs. The 2011 and 2016 NEM (Figure page 55 and Figure 8 on page 8 respectively) depict a noise monit site used in preparation of the com as discussed in Section 1.2.2 Noncompatible uses within 65 of CNEL are depicted, as require As discussed in Section 4.3, neithe 2011 nor the 2016 NEM contou encompass any noise sensitive p buildings or historic properties Legends identify non-compatible uses. As discussed in Sections 3.3.1 and the NEMs identify residential prop- within 65 dB CNEL that are covered the LAWA sound-insulation progra compatible, consistent with FAA, County, State, and LAWA polici Section 5 Section 5 As discussed in Section 5, The C contours contained in these NEI were prepared using the most rea- release of the FAA's Integrated N Model (INM) available at the time NEMs were prepared; i.e., "Vers 7.0b."	

14 CFR PART 150 NOISE EXPOSURE MAPS CHECKLIST-PART I				
PROGRAM REQUIREMENT	Yes/No	Supporting section, page, or other reference and comments		
2. Correct use of noise models:	Yes	As discussed in Section 5.1.5, FAA		
a. Does the documentation indicate, or is there evidence, the airport operator (or its consultant) has adjusted or calibrated FAA-approved noise models or substituted one aircraft type for another that was not included on the FAA's pre-approved list of aircraft substitutions?	Yes	approval was received for three "non- standard" INM applications, with associated documentation and FAA approvals discussed in that section and presented in Appendix F, Appendix G, and Appendix H. Section 6.1 lists each piece of correspondence with the FAA and its location in this document,		
b. If so, does this have written approval from AEE, and is that written approval included in the submitted document?	Yes			
3. If noise monitoring was used, does the narrative indicate that Part 150 guidelines were followed?	Yes	See discussion in Section 1.2.2.		
4. For noise contours below CNEL 65 dB, does the supporting documentation include an explanation of local reasons? (Note: A narrative explanation, including evidence the local jurisdiction(s) have adopted a noise level less than CNEL 65 dB as sensitive for the local community(ies), and including a table or other depiction of the differences from the Federal table, is highly desirable but not specifically required by the rule. However, if the airport sponsor submits NCP measures within the locally significant noise contour, an explanation must be included if it wants the FAA to consider the measure(s) for approval for purposes of eligibility for Federal aid.)		Not applicable, since no contours below CNEL 65 dB provided.		
C. Noncompatible Land Use Information:				
 Does the narrative (or map graphics) give estimates of the number of people residing in each of the contours (CNEL 65, 70 and 75, at a minimum) for both the existing condition and forecast year maps? 	Yes	See Section 4.3 and Table 3.		
Does the documentation indicate whether the airport operator used Table 1 of Part 150?	Yes	The Section 2 discussion of City, County, and State standards explains their consistency with FAA guidelines in Part 150 Table 1 (reproduced as Table 2 in this document), with the exception that CNEL is substituted for DNL, for reasons discussed in Sections 2.2 and 2.3.		
a. If a local variation to table 1 was used:	Yes			
(1) Does the narrative clearly indicate which adjustments were made and the local reasons for doing so?	Yes			
(2) Does the narrative include the airport operator's complete substitution for table 1?	Yes			
3. Does the narrative include information on self-generated or ambient noise where compatible or noncompatible land use identifications consider non-airport and non-aircraft noise sources?	No			
4. Where normally noncompatible land uses are not depicted as such on the NEMs, does the narrative satisfactorily explain why, with reference to the specific geographic areas?	Yes	As discussed in Sections 3.3.1 and 4.3, the NEMs identify residential properties within 65 dB CNEL that are covered by the LAWA sound-insulation program as compatible, consistent with FAA, City, County, State, and LAWA policies.		
5. Does the narrative describe how forecast aircraft operations, forecast airport layout changes, and forecast land use changes will affect land use compatibility in the future?	Yes	See Section 4.4.		
VI. MAP CERTIFICATIONS: [150.21(b), 150.21(e)]				
A. Has the operator certified in writing that interested persons have been afforded adequate opportunity to submit views, data, and comments concerning the correctness and adequacy of the draft maps and forecasts?	Yes	See certification (on page iii) and Section 6.		
B. Has the operator certified in writing that each map and description of consultation and opportunity for public comment are true and complete under penalty of 18 U.S.C. Section 1001?	Yes			

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