BOB HOPE AIRPORT

14 CFR Part 150 Study
Noise Compatibility Program Revision #2

Final

Prepared for the
Burbank-Glendale-Pasadena
Airport Authority
Burbank, California
BOB HOPE AIRPORT

14 CFR Part 150
Noise Compatibility Study

FINAL
NOISE COMPATIBILITY PROGRAM REVISION #2

Prepared For The

Burbank-Glendale-Pasadena Airport Authority
Burbank, California

By

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In Association With

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INTRODUCTION

Bob Hope Airport’s Noise Compatibility Program (NCP) was originally approved by the Federal Aviation Administration (FAA) on November 27, 2000. The plan included 29 measures, listed below, and was subsequently revised in 2004. The 2004 revision focused on the addition of Land Use Measure Seven, which was to retain property located in the northeast quadrant of the Airport within the 2003 65 CNEL noise exposure contour. FAA’s record of approval (ROA) for the 2000 NCP and the 2004 NCP revision can be found in Appendix A. The elements of the 2004 revised NCP are divided as follows: Noise Abatement Measures; Noise Mitigation Measures; Land Use Measures; and Program Management Measures. Since the adoption and revision of the plan, several of the measures have been implemented and local regulations and policies have changed. Measures within an airport’s NCP, once approved by FAA, are then eligible for funding through the Airport Improvement Program (AIP).

Noise Abatement Element (2000)

1. Continue requiring all transport category and turbojet aircraft to comply with federal aircraft noise regulations. (FAA Approved) This measure recommends the continuation of an existing noise abatement rule. The rule states: “All subsonic transport category airplanes and all subsonic turbojet powered airplanes regardless of category operating at the Burbank airport shall be in compliance with all Federal Air Regulations respecting noise, as the same may be amended from time to time.” The applicable Federal aircraft noise rules are in Title 14 of the Code of Federal Regulations (14 CFR) Parts 36 and 91. This measure was previously approved by the FAA as an element of the 1989 NCP.

2. Continue requiring compliance with the Airport’s Engine Test Run-Up Policy. (FAA Approved) This measure recommends the continuation of an existing noise abatement rule. The rule states: “Each aircraft operator and maintenance and repair facility shall adhere to the Authority Engine Test Run Up Policy as contained in the Airport Operations Manual, as the same may be amended from time to time.” Among these policies are a prohibition on maintenance engine run-ups between 10:00 p.m. and 7:00 a.m., unless delay of the run-up would cause an aircraft to arrive or depart after 10:00 p.m. in the succeeding 24-hour period. In addition, specific run-up locations are designated at the run-up pad on the north edge of Taxiway D and in front of the Ameriflight hangar. The element of this measure related to the prohibition on maintenance engine run-ups between 10:00 p.m. and 7:00 a.m. was previously disapproved by the FAA pending the submittal of additional information. The element of this measure related to the designation of specific run-up locations was previously approved by the FAA as an element of the 1989 NCP.

3. Continue promoting use of AC 91-53A, Noise Abatement Departure Procedures, by air carrier jets. (FAA Approved as Voluntary Only) This measure recommends that the Airport Authority continue promoting the use of noise abatement departure procedures in Advisory Circular 91-53A by airlines operating jet aircraft over 75,000 pounds, certificated gross takeoff weight.
4. Continue promoting use of NBAA noise abatement procedures, or equivalent manufacturer procedures, by general aviation jet aircraft. (FAA Approved as Voluntary Only) This measure recommends that the Airport Authority continue to actively encourage jet operators to use the National Business Aviation Association (NBAA) Approach and Landing Procedure and Standard Noise Abatement Departure Procedures, or equivalent quiet flying procedures developed by aircraft manufacturer. This measure was previously approved by the FAA as an element of the 1989 NCP.

5. Continue working with the FAA Airport Traffic Control Tower to maintain the typical traffic pattern altitude of 1,800 feet MSL. (FAA Approved as Voluntary Only) This measure recommends that the Airport Authority continue to work with the FAA Airport Traffic Control Tower to maintain the typical traffic pattern altitude of 1,800 feet above mean sea level (MSL). This altitude corresponds to a typical traffic pattern altitude of 1,000 feet above ground level. A similar measure was previously approved by the FAA as an element of the 1989 NCP.

6. Continue the placement of new buildings on the airport north of Runway 8-26 to shield nearby neighborhoods from noise on the runway. (FAA Approved) This measure recommends new hangars and other aviation-related buildings constructed in the area north of Runway 8-26 and west of Runway 15-33 be positioned to attenuate some of the noise of aircraft on the ground, shielding nearby residential neighborhoods.

7. Designate Runway 26 as nighttime preferential departure runway. (FAA Approved as Voluntary Only) This measure recommends that Runway 26 be designated the preferential departure runway, weather and traffic permitting, after 10:00 p.m. and before 7:00 a.m. The primary effect of this policy would be to reduce noise exposure over the areas south of the airport exposed to noise from takeoffs on Runway 15. While aircraft noise would increase over areas west of the airport, most of the increase at levels above 65 CNEL would be confined to the commercial/industrial corridor along Sherman Way and the Southern Pacific Railroad tracks. This measure is proposed as an official, informal runway use program.

8. Establish noise abatement departure turn for jet takeoffs on Runway 26. (FAA No Action Required) This measure recommends a right turn to a heading of 275 degrees, beginning approximately 1,000 feet off the west end of Runway 26. Aircraft would continue to climb on this heading for at least three miles before turning to assigned headings. The intent is to confine departures to the Southern Pacific Railroad corridor extending west-northwest from the runway. By confining departing aircraft to this corridor, overflights of nearby residential neighborhoods can be reduced. It is recommended that this turn apply only to jet aircraft. This measure is recommended for implementation simultaneously with the nighttime preferential runway use program recommended in Measure 7 above.

9. Build extension of Taxiway D to promote nighttime general aviation departures on Runway 26. (FAA Approved and Completed) This measure recommends the extension of Taxiway D to promote nighttime general aviation departures on Runway 26. General
aviation departures on Runway 26 are limited due to a lack of taxiway access. This measure supports the proposed preferential use of Runway 26 (Measure 7 above) by improving general aviation aircraft access to Runway 26.

10. Build engine maintenance run-up enclosure. (FAA Approved) This measure recommends the construction of an engine run-up enclosure to attenuate noise from maintenance run-ups. This measure further recommends the Airport Authority establish policies governing the use of the run-up enclosure. Such policies may include the requirement that all maintenance run-ups done at more than idle power be required to use the facility. With the required use of the run-up enclosure, consideration may also be given to the removal of existing nighttime maintenance run-up restrictions (Measure 2) if it can be demonstrated that no adverse noise impacts will be caused in residential areas as a result of such action.

11. Phase-out operations by all Stage 2 jets. (FAA Disapproved) As recognized in the NCP, the proposed phase-out of Stage 2 aircraft with certificated gross takeoff weights under 75,000 pounds constitutes an airport noise and access restriction that could only be adopted after full compliance with the Airport Noise and Capacity Act of 1990 (ANCA), 49 USC 47524(b), and 14 CFR Part 161. Removal of this measure will be discussed in later sections of this report.

12. Establish a mandatory curfew on departures by all Stage 2 aircraft between 10:00 p.m. and 7:00 a.m., departures by all aircraft over 75,000 pounds between 10:30 p.m. and 6:30 a.m., and arrivals by all aircraft over 75,000 pounds between 11:00 p.m. and 6:00 a.m. (FAA Disapproved) This measure recommends that a mandatory curfew, as outlined above, be established subject to the requirements of 14 CFR Part 161. The NCP recognizes that the proposed curfew could be adopted only after the completion of a Part 161 Study and, in reference to restrictions on Stage 3 aircraft operations, after the FAA’s explicit approval of the Part 161 study and the proposed restriction. Removal of this measure will be discussed in later sections of this report.


1. Continue existing acoustical treatment program for single family homes. (FAA Approved) This measure recommends the Airport Authority continue the acoustical treatment program for all single-family homes within the 65 CNEL noise contour based on projected noise for the year 2000 developed in the 1989 Noise Compatibility Study. This measure was previously approved by the FAA as an element of the 1989 NCP.

2. Expand residential acoustical treatment program to include homes within the 65 CNEL contour based on the 2003 NEM. (FAA Approved) This measure recommends that the eligibility area for the residential acoustical treatment program be expanded to include homes within the 65 CNEL noise contour based on the 2003 NEM which are not eligible under the existing acoustical treatment program. Revision of this measure will be discussed in later sections of this report.
3. Establish acoustical treatment program for schools and preschools not previously treated within the 65 CNEL contour based on 2003 NEM. (FAA Approved) This measure recommends the acoustical treatment of two schools and two preschools within the 65 CNEL contour based on the 2003 NEM. The schools include the Roscoe Elementary School, the Dubnoff Center and School, and two preschools on Victory Boulevard. A similar measure was previously approved by the FAA as an element of the 1989 NCP. The subject schools were not included in the original acoustical treatment program. Removal of this measure will be discussed in later sections of this report.

4. Offer purchase assurance as an option for homeowners in the acoustical treatment eligibility area. (FAA Approved in Part) This measure recommends offering homeowners in the acoustical treatment eligibility area the option of a purchase assurance if they were more interested in moving out of the neighborhood than staying in an acoustically treated home. If the airport takes title to the home, it will acoustically treat it and resell it. If the home is in need of substantial repairs, the airport may demolish it and offer the lot for sale for construction of a new home, sale to an abutting property owner, or for development of an airport-compatible use. A similar measure was previously approved by the FAA as an element of the 1989 NCP. Removal of this measure will be discussed in later sections of this report.

Land Use Element (2000, revised 2004)

1. Use Baseline 2010 noise contours as the basis for noise compatibility planning (Burbank and Los Angeles). (FAA Approved) This measure recommends that the cities of Burbank and Los Angeles amend their general plans to show the updated noise contours for Burbank-Glendale-Pasadena Airport and that the 2010 noise contours be used as a basis for noise compatibility planning. Removal of this measure will be discussed in later sections of this report.

2. Establish noise compatibility guidelines for the review of development projects within the 65 CNEL contour (Burbank, Los Angeles). (FAA Approved) This measure recommends that the cities of Burbank and Los Angeles adopt special project review criteria for use in reviewing general plan amendments, planned development, rezoning, special use, conditional use and variance applications to ensure compatible land use. Removal of this measure will be discussed in later sections of this report.

3. Amend Sun Valley-La Tuna Canyon Community Plan to establish infill development standards for noise compatibility (Los Angeles). (FAA Approved) This measure recommends that the city of Los Angeles establish policies requiring sound insulation and recording of fair disclosure agreements and covenants for new noise-sensitive development within the 65 CNEL noise contour. A similar measure was previously approved by the FAA as an element of the 1989 NCP. Removal of this measure will be discussed in later sections of this report.

4. Amend North Hollywood-Valley Village Community Plan to establish land use policies promoting airport noise compatibility (Los Angeles). (FAA Approved) This measure recommends that the city of Los Angeles enact policies encouraging incompatible land uses
be made compatible, either through sound insulation or land use conversion, as appropriate. This measure also recommends that the city of Los Angeles enact policies requiring sound insulation and recording of fair disclosure agreements and covenants for new noise-sensitive development within the 65 CNEL noise contour. A similar measure was previously approved by the FAA as an element of the 1989 NCP. Removal of this measure will be discussed in later sections of this report.

5. Establish airport noise overlay zoning to implement infill development policies of local general plans (Burbank, Los Angeles). (FAA Approved) This measure recommends the cities of Burbank and Los Angeles establish airport noise overlay zoning policies. The recommended overlay zoning standards require any new noise-sensitive development within the 65 CNEL contour to be treated with sound insulation to achieve noise level reductions of 25 or 30 decibels, depending on the noise contour within which the new development lies. A similar measure was previously approved by the FAA as an element of the 1989 NCP. Removal of this measure will be discussed in later sections of this report.

6. Amend building codes to establish sound insulation construction standards to implement requirements of State law and infill development policies (Burbank, Los Angeles). (FAA Approved) This measure recommends the cities of Burbank and Los Angeles consider amending their building codes to establish construction standards to achieve noise level reduction of 25 decibels within the 65 to 70 CNEL contour range and 30 decibels within the 70 and 75 CNEL contours for any new noise-sensitive infill development. A similar measure was previously approved by the FAA as an element of the 1989 NCP. Removal of this measure will be discussed in later sections of this report.

7. Retain property in the northeast quadrant of the Airport within the 2003 65 CNEL noise exposure contour. (FAA Approved) The primary reason for retaining property impacted by high noise levels is to remove or prevent the development of noise-sensitive land uses on the subject property. The Burbank-Glendale-Pasadena Airport Authority does not have land use planning authority off airport property. Therefore, a potential exists for noise-sensitive development to occur on the subject property under the current zoning by the City of Burbank. This measure would ensure future land use compatibility within the 65 CNEL noise contour for Bob Hope Airport. Revision of this measure will be discussed in later sections of this report.

Program Management Element (2000)

1. Continue noise abatement information program. (FAA Approved) This measure recommends the Airport Authority continue use of the noise monitoring and flight track system to investigate violations of the nighttime weight restriction of Stage 2 business jet aircraft, aircraft noise complaints, and provide general information to the public and airport users upon request. This measure also recommends that the Airport Authority maintain the noise complaint phone number to log aircraft noise complaints and better respond to area residents.
2. Noise abatement information program. (FAA Approved) This measure recommends the Airport Authority continue use of the noise monitoring and flight track system to investigate aircraft noise complaints and provide general information to the public and airport users upon request. This measure also recommends that the Airport Authority maintain the noise complaint phone number to log aircraft noise complaints and better respond to area residents.

3. Monitor implementation of updated Noise Compatibility Program. (FAA Approved) This measure recommends that the Airport Authority monitor implementation and compliance with the Noise Abatement Element of the Noise Compatibility Plan through periodic communications with the FAA Airport Traffic Control Tower, airport users, and planning officials of the cities of Burbank and Los Angeles. This measure also recommends that the Airport Authority develop informational and promotional materials explaining the noise abatement program to pilots.

4. Update Noise Exposure Maps and Noise Compatibility Program. (FAA Approved) This measure recommends that the Airport Authority review the Noise Exposure Maps and the Noise Compatibility Program and consider revisions and refinements as necessary.

5. Expand noise monitoring system. (FAA Approved and Completed) This measure recommends that the Airport Authority expand the existing noise monitoring system by installing up to three additional permanent noise monitors.

6. Enhance Airport Authority’s geographic information system. (FAA Approved and Completed) This measure recommends that the Airport Authority expand its geographic information system to include all areas within the updated noise exposure contours. The geographic information system provides a detailed tool for managing the progress of the acoustical treatment program, tracking new development, and computation of an accurate noise impact area with population counts.

7. Maintain log of nighttime runway use and operations by aircraft type. (FAA Approved) This measure recommends that the Airport Authority standardize its nighttime operations log recording the date, time, aircraft identification number, aircraft type, operations type, runway used, and weather information for each operation.

The Airport’s Noise Exposure Maps (NEM) were updated in 2012 and submitted to FAA for review and were accepted on October 10, 2013. These factors necessitate revision of the NCP to reflect current conditions. The NCP revision process was initiated following preparation of the NEM Update and through coordination with the Airport Authority. A preliminary list of measures to be amended or added was prepared with the following provisions:

1. Continued FAA funding for the Residential Acoustic Treatment Program (RATP),
2. Inclusion of multi-family properties into the RATP,
3. Development of a noise easement purchase option, and
4. Elimination of certain items previously identified in the NCP as mitigation measures that have been completed or that are no longer applicable.
Using the above criteria, the following 16 measures were identified for revision or removal from the program. Also, two additional measures were recommended for inclusion in the program.
NOISE COMPATIBILITY PROGRAM MEASURE EVALUATION

Noise Abatement Measures to Be Removed

Measure 9: Build extension of Taxiway D to promote nighttime general aviation departures on Runway 26.

Status: Using funds provided under FAA Grant # 3-06-0031-43, Taxiway D was extended to the end of Runway 26. This project, the location of which is depicted on Exhibit 1A, was completed in December 2008. Based on information collected from the Airport’s flight track monitoring system, general aviation departures from Runway 26 have increased from 3.6 percent in 1998 to 4.75 percent in 2012.

Recommendation: As discussed above, this measure has been fully implemented as of December 2008. Therefore, the measure is no longer necessary and should be removed from the program.


Measure 11: Phase-out operations by all Stage 2 jets.

Status: Pursuant to the Congressional mandate outlined in the Airport Noise and Capacity Act of 1990 (ANCA), the FAA established amendments to Part 91 by setting December 31, 1999, as the date for discontinuing use of all Stage 2 aircraft exceeding 75,000 pounds. The Authority’s voluntary elimination of Stage 2 aircraft occurred some 13 years before the mandatory phase-out established by ANCA. The FAA Modernization and Reform Act of 2012 establishes December 31, 2015 as the phase-out date for Stage 2 aircraft weighing less than 75,000 pounds. An excerpt of the Act pertaining to this phase-out is included in Appendix A. Based on FAA’s Enhanced Traffic Management System Counts for calendar year 2011, which were used to prepare the NEMs, there were a total of 264 operations conducted at this airport with Stage 2 business jet aircraft.

FAA Decision Action from 2000 Review: Disapproved pending submission of additional information and compliance with Part 161.

Recommendation: Federal law now prohibits operation of Stage 2 aircraft in the continental United States. 49 United States Code (USC) § 47354 completed the full phase-out of operations by Stage 2 jets as of December 31, 2015. As this measure is superseded by federal law, it is no longer necessary and should be removed.

Measure 12: Establish a mandatory curfew on departures by all Stage 2 aircraft between 10:00 p.m. and 7:00 a.m., departures by all aircraft over 75,000 pounds between 10:30 p.m. and 6:30 a.m., and arrivals by all aircraft over 75,000 pounds between 11:00 p.m. and 6:00 a.m.
Status: The FAA Modernization and Reform Act of 2012 completed the full phase-out of operations by Stage 2 jets as of December 31, 2015. Therefore, Stage 2 aircraft will not be allowed to operate in the United States. In addition, the Authority prepared a Part 161 Study to establish a mandatory curfew on all aircraft, including Stage 3 aircraft, subject to certain exceptions, on operations at Bob Hope Airport from 10:00 p.m. through 6:59 a.m. The study began in 2000 and was completed in October 2009 at a cost of more than $7 million and submitted to FAA. It was the first Part 161 Study for Stage III access restrictions to be accepted as “complete” by the FAA, a landmark accomplishment that attests to the difficulty involved in this type of study. In November 2009, the FAA issued its finding that the study did not justify the imposition of the mandatory curfew.

Recommendation: The FAA Modernization and Reform Act of 2012 completed the full phase-out of operations by Stage 2 jets as of December 31, 2015. Stage 2 jets weighing more than 75,000 pounds were previously phased-out on December 31, 1999. As this measure will be superseded by federal law, a curfew on Stage 2 aircraft is no longer necessary and should be removed from the program. Through the Part 161 process, at significant cost, the Authority exhausted all options pursuant to the Airport Noise and Capacity Act of 1990 to pursue a mandatory nighttime curfew on all Stage II and Stage III aircraft. Although the Authority’s application under Part 161 was found to be complete, FAA concluded that the curfew on all aircraft over 75,000 pounds was not justified. The Airport Authority continues to support the restriction sought in its Part 161 Study for a mandatory curfew on Stage 3 aircraft and will enact the curfew studied in its previous Part 161 study if the United States Congress amends the Airport Noise and Capacity Act of 1990 to make this curfew legally permissible.

Noise Mitigation Measures to Be Revised or Removed

Measure 2: Expand residential acoustical treatment program to include homes within 65 CNEL contour based on the 2003 NEM.

Status: The residential acoustical treatment program area boundary was expanded in February 2001 to include homes within the 65 CNEL noise contour based on the 2003 NEM to include homes which were previously not eligible under the initial treatment program.


Recommendation: Based on the 2012 and 2017 Noise Exposure Maps (NEM) accepted by the FAA on October 13, 2013, this measure is to be removed and replaced with an acoustical treatment program based upon the updated 2017 NEM. This measure is identified as Noise Mitigation Measure 2 in the revised noise compatibility program. In accordance with federal law, the NEMs for Bob Hope Airport were updated in December 2012. On December 12, 2003, the President signed Vision 100. Section 324 of Vision 100 amended 49 U.S. C.§ 47503 to clarify the forecast time period for NEMs and to require revised NEMs in certain new circumstances, as follows: "Section 47503 is amended-(1) in subsection (a) by striking '1985,' and inserting 'a forecast period that is at least 5 years in the future'; and (2) by striking subsection (b) and inserting the following: ‘(b) REVISED MAPS.’ If, in an area surrounding an airport, 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, the airport operator shall submit a revised noise exposure map to the Secretary showing the new noncompatible use or noise reduction. Based on the updated NEMs, it is recommended that the RATP program boundary be revised to reflect the current noise conditions at the airport. As shown on Exhibit 1B, the proposed RATP program boundary encompasses fewer parcels in the areas north and south of the airport, while the area west of the airport encompasses parcels previously not included within the program. It is recommended that the title of this measure be changed to, “Revise residential acoustical treatment program to include homes within 65 CNEL contour based on 2017 NEM.” Based on Authority records, this revision would result in 144 single family residences within the boundary that have not been sound-insulated. The location of these residences is depicted on Exhibit 1C.

FAA provides specific guidance for sound insulation programs, as outlined in FAA Order 5100-38D, Airport Improvement Program Handbook, September 2014. For sound insulation programs, a two-step eligibility requirement for such programs applies: first, the noise-impacted, non-compatible structures must be located within an airport’s FAA program boundary which is based on the existing or future 65 CNEL noise contour; and secondly, the structure must have an existing interior noise level of 45 CNEL or greater as measured with the windows closed to be eligible.

As each phase is initiated, FAA requires pre-construction acoustical testing for 10 to 30 percent of the homes of each category of home within the phase. The testing is conducted in all habitable spaces of the home with the windows and doors closed. As previously mentioned, the average measurement for the category of home must be 45 dB CNEL or greater for the category of home to qualify for the full sound insulation treatment package. For neighborhood equity purposes, FAA policy states that a lesser noise reduction package may be available if interior noise levels do not exceed the stated 45 dB CNEL threshold. The number of lesser packages is not to exceed 10 percent of eligible homes in a phase or 20 homes in a phase. The FAA notes that in situations where a residence does not have an existing ventilation system, but relies on open windows for ventilation, the windows closed measurement may not be applicable. Therefore, an option is made available by FAA to provide a ventilation system-only package as mitigation.

The estimated cost to sound-insulate the 144 remaining single family residential properties is $6,552,000, assuming that all eligible homes participate at a cost of $45,500 per single family dwelling unit. Based upon the historical implementation rate of the RATP program, it is anticipated that it will be complete in three to five years. Following completion of the RATP, a complete review of the NCP should be conducted as described in Program Management Measure 2.
RATP Status Parcels Units

Existing Boundary
Not Interested/Non-Responsive 546 946
Not Sound Insulated 339 1250
Sound Insulated 2182 2446
Total 3067 4642

Proposed Boundary
Not Interested/Non-Responsive 98 173
Not Sound Insulated 76 158
Sound Insulated 489 630
Total 663 961

Legend:
- City Boundaries
- Airport Boundary
- Proposed RATP Boundary
- FAA Approved Program Boundary
- 2017 Noise Exposure Contours
- Schools
- Places of Worship
- Hospitals
- Railroad
- Runway

RATP Status Parcels:
- Sound Insulated
- Not Sound Insulated
- Not Interested/Non-Responsive

Map Sources:
Los Angeles County-Local Tax Roll, 2011
Coffman Associates and VICO Systems Analysis

NOTE: The RATP is an ongoing program. RATP totals are current as of June 30, 2014 and may not be consistent with the totals summarized in the NEM document dated December 2012.

14 CFR Part 150
RATP Boundary Comparison
Bob Hope Airport
2017 CNEL Contours
Status as of June 30, 2014
Measure 3: Establish acoustical treatment programs for schools and preschools not previously treated within the 65 CNEL contour based on 2003 NEM.

Status: Within the RATP boundary, there are two schools, Roscoe Elementary and Dubnoff Center and School, that have not received acoustic treatment. Coordination with the owners of these two properties was undertaken as part of the Authority’s outreach efforts and the property owners declined to participate in the program. The remaining schools and preschools within the RATP program area participated in the program.


Recommendation: Similar to Noise Mitigation Measure 2, it was the intent that this measure be amended to employ the 2017 NEM. However, based on the revised boundary depicted on Exhibit 1B, Roscoe Elementary School and the Dubnoff Center and School would no longer be located within the program boundary. It is recommended that this measure be removed from the NCP as all of the schools within the proposed program boundary have been acoustically treated with assistance from the Authority.

Measure 4: Offer purchase assurance as an option for homeowners in the acoustical treatment eligibility area.

Status: Based on the overall success of the RATP, the Authority has concluded that a purchase assurance program is not necessary. This measure was originally intended as a companion program to the RATP. The purpose was to provide purchase assurance to property owners within the RATP boundary wishing to sell their homes rather than stay in an acoustically treated home but are unable to do so. Homeowners within the RATP have not reported to the Authority difficulties in selling their homes; therefore, the program has not been initiated.


Recommendation: During more than 17 years of operating the RATP, the Authority has not identified a demand for this type of program. Given consistent participation in the RATP and stability in the local real estate market, it is recommended that this measure be removed from the NCP.
**Land Use Management Measure to be Modified and Retained**

Measure 7: Retain property in the northeast quadrant of the Airport within the 2003 65 CNEL noise exposure contour.

Status: Measure 7 was the subject of the 2004 Revision #1 to the NCP. As described in that revision, the purpose of this measure is to identify Airport land to be retained as airport property given the Authority’s lack of land use planning authority outside the airport boundary and the potential for noise-sensitive development to occur under the current zoning of the property.


Recommendation: Measure 7 of the NCP Revision #1 is based on 2003 contours adopted as the five-year forecast contour of the 2000 Noise Exposure Maps document. As discussed in Appendix B of the 2013 Noise Exposure Maps document, changes in the operational characteristics of the airport resulted in smaller noise contours. To reflect current conditions at the Airport, it is recommended that the noise contour used for this measure be updated from the 2003 condition to the 2017 Noise Exposure Maps. In addition, the language for this measure should be changed to, “Provision for retention or an easement preventing noise-sensitive land uses of property located in the northeast quadrant of the Airport within the 2017 65 CNEL noise exposure contour.” **Exhibit 1D** depicts the area to be retained.

**Land Use Management Measures to be Removed**

Measure 1: Use Baseline 2010 noise contours as basis for noise compatibility planning (Burbank and Los Angeles).

Status: The Burbank 2035 General Plan noise element includes noise contours from the Los Angeles County Airport Land Use Plan, which was amended in December 2004. The contours, which are undated, are different in shape and extent than the 2010 Baseline Contours included as Exhibit 4F of the Airport’s 1998 Noise Exposure Maps report. The Noise Element of the City of Los Angeles General Plan, February 1999, includes contours dated 1996 from the Bob Hope Airport 1996 Quarterly Noise Monitoring Report and 2010 from the Environmental Impact Statement for Land Acquisition and Replacement Terminal Project, August 1995. These contours also differ in shape and extent from the 2010 Baseline Contours depicted in the Airport’s 1998 Noise Exposure Maps report.


Recommendation: The Authority does not have land use planning authority for the areas affected by this Measure, and therefore can only provide advisory comments regarding which noise contours should be used for land use planning. In accordance with 14 CFR Part 150, local jurisdictions were involved and notified of the preparation of updated NEMs for the airport and are, therefore, aware that the Authority has
official contours dated 2012 and 2017. Through the Part 150 process, the cities of Burbank and Los Angeles will continue to be involved in airport noise compatibility planning with the Authority, which will provide copies of the official contours to each entity. It is recommended that this measure be removed from the program as the Authority cannot compel the cities to change their land use plans. However, the Authority will continue to provide the most recent official noise contours with the intent that they will be used for land use compatibility planning.

Measure 2: Establish noise compatibility guidelines for the review of development projects within the 65 CNEL contour (Burbank, Los Angeles).

Status: The City of Burbank and the City of Los Angeles have not adopted specific project review criteria for use in reviewing general plan amendments, planned development, rezoning, special use, conditional use, and variance applications to ensure compatible land use. However, these actions, which affect land within the airport influence area, are reviewed by the Los Angeles County Airport Land Use Commission for a consistency determination with the Los Angeles County Airport Land Use Compatibility Plan.


Recommendation: As the above-referenced land use actions are considered by the Los Angeles ALUC, this measure is no longer needed and should, therefore, be removed from the NCP. Retaining this measure is redundant and may cause confusion for the public regarding implementation of two similar policies.

Measure 3: Amend Sun Valley-La Tuna Canyon Community Plan to establish infill development standards for noise compatibility (Los Angeles).

Status: The policies within the Sun Valley-La Tuna Canyon Community Plan promote participation in the Airport’s RATP and also encourage the phase-out of incompatible land uses through amendments to the plan, zone changes, and redevelopment. This does not include policies requiring sound insulation and recording of fair disclosure agreements and covenants for new noise-sensitive development within the 65 CNEL noise contour.

Recommendation: The Authority does not have land use planning jurisdiction over the area affected by this measure and does not have the power to change the Sun Valley-La Tuna Canyon Community Plan. Despite Airport Authority staff efforts, this measure has not been implemented. It is recommended that the measure be removed from the NCP.

Status: North Hollywood-Valley Village Community Plan “supports the continued effort to reduce noise emanating from airport operations at the Burbank-Glendale-Pasadena Airport” and also states that the City of Los Angeles shall ensure compliance with the State of California’s noise insulation standards. The plan also recommends that Bob Hope Airport flight patterns should be restricted from residential areas to the maximum extent possible. There are no specific policies within the plan regarding disclosure agreements or covenants for new noise-sensitive development within the 65 CNEL noise contour.

Recommendation: The Authority does not have land use planning jurisdiction over the area affected by this measure and does not have the power to change the North Hollywood-Valley Village Community Plan. Despite Airport Authority staff efforts, this measure has not been implemented. It is recommended that the measure be removed from the NCP.

Measure 5: Establish airport noise overlay zoning to implement infill development policies of local General Plans (Burbank, Los Angeles).

Status: Neither the City of Burbank nor the City of Los Angeles has adopted overlay zoning to implement infill development policies of their respective General Plans.

Recommendation: The Authority does not have land use planning jurisdiction over the area affected by this measure and does not have the power to establish airport overlay zoning within the cities of Burbank and Los Angeles. Despite Airport Authority staff efforts, this measure has not been implemented. It is recommended that the measure be removed from the NCP.

Measure 6: Amend building codes to establish sound insulation construction standards to implement requirements of state law and infill development policies (Burbank, Los Angeles).

Status: Title 9, Building Regulations of the Burbank Municipal Code, includes sound transmission standards “to protect persons within hotels, motels, dormitories, apartment houses and dwellings, including detached single family dwellings, from the effects of excessive noise.” These regulations specify sound insulation standards for new construction within the 60-65, 65-70, 70-75, and 75-80 dB day-night level (DNL) contour ranges. Additionally, the City of Los Angeles has adopted an ordinance which states that all residential structures and all other structures identified in Section 91.1207.1, located where the annual Ldn or CNEL (as defined in Title 21, Division 2.5, Chapter 6, Section 5001, California Code of Regulations) exceeds 60 dB, shall require an acoustical analysis showing that the proposed design will achieve the prescribed allowable interior level. The ordinance provides an exception for new single family detached dwellings and all nonresidential noise-sensitive structures located outside the noise impact boundary of 65 dB CNEL.
Recommendation: The building code sound insulation standards promoted by this measure are implemented at the state level within the California Building Code at Title 24, Part 2, Section 1207 – Sound Transmission and also through the locally adopted ordinances discussed above. This measure has been implemented and is no longer needed as part of the NCP and should therefore be removed.

**Program Management Measures to be Modified and Retained**

Measure 1: Continue noise abatement information program. This measure recommends the Airport Authority continue use of the noise monitoring and flight track system to investigate violations of the nighttime weight restriction of Stage 2 business jet aircraft, aircraft noise complaints, and provide general information to the public and airport users upon request. This measure also recommends that the Airport Authority maintain the noise complaint phone number to log aircraft noise complaints and better respond to area residents.

Status: The Airport Authority uses its noise monitoring system to investigate aircraft operations, respond to aircraft noise complaints, and provide general information to the public and airport users upon request. The Airport Authority maintains a noise complaint line and logs noise complaints.

FAA Decision Action from 2000 Review: Approved

Recommendation: The following text of this measure: “violations of the nighttime weight restriction of Stage 2 business jet aircraft” should be removed to be consistent with federal law. Federal law now prohibits operation of Stage 2 aircraft in the continental United States. 49 United States Code (USC) §47354 completed the full phase-out of operations by Stage 2 jets as of December 31, 2015.

**Program Management Measures to Be Removed**

Measure 4: Expand noise monitoring system.

Status: In accordance with the State of California noise standards, Bob Hope Airport maintains a permanent noise monitoring system, from which a 65 dB CNEL noise contour, used as the basis of the noise impact boundary, is developed.

Recommendation: This system was upgraded in 2012 and includes a total of 20 permanent noise monitoring locations which continuously monitor aircraft noise. With this system, the Authority is able to provide information regarding aircraft noise to concerned residents. The system, which has been in place for many years, has been expanded in accordance with this measure. No additional expansions are planned; therefore, this measure should be removed from the NCP.
Measure 5: Enhance Airport Authority’s geographic information system.

Status: GIS coverage has been expanded and is used to monitor the status of the acoustical treatment program.

Recommendation: The Authority’s GIS is used to produce quarterly reports for the RATP and includes information regarding outreach efforts to eligible property owners that have elected not to participate, as well as detailed information where sound insulation has been installed. The GIS fully meets the needs of airport staff and will only require minor revisions if the RATP boundary is changed. This measure should be removed from the NCP.

Noise Mitigation Measures to Be Added

New Measure 3 (Noise Mitigation): Establish acoustical treatment program for multi-family dwelling units within the 2017 acoustical treatment eligibility area.

Description: Through the RATP, which was initiated in 1997, the Authority has provided sound insulation for over 2,000 dwelling units. As part of an earlier phase of the RATP, 363 multi-family residential dwelling units were insulated. However, through coordination with FAA, it was determined that sound insulation for multi-family dwellings, although allowable by Part 150 regulations, was not eligible for federal funding since the Authority’s 2000 NCP did not specify multi-family dwellings within its Noise Mitigation measure or NCP. Since the inception of the RATP, it has been the Authority’s intent to pursue sound insulation for multi-family parcels where practical.

Based on the proposed boundary revision depicted on Exhibit 1E, a total of 30 multi-family parcels with 187 dwelling units would be located within the program boundary.

It is important to note that FAA provides specific guidance for sound insulation programs, as outlined in FAA Order 5100-38D, Airport Improvement Program Handbook, September 2014. As previously discussed, based on FAA guidance, a two-step eligibility requirement for sound insulation program applies: first, the noise-impacted, non-compatible structures must be located within an airport’s existing or future 65 CNEL contour; and secondly, the structure must have an existing interior noise level of 45 CNEL or greater as measured with the windows closed to be eligible.

Relationship to 2000 NCP. This measure was not included in the 2000 NCP.

Implementation Actions. As previously discussed, the Authority has managed the RATP since 1997. The multi-family sound insulation component would be implemented as an extension of the existing RATP.

---

1 Residential Acoustical Treatment Program Status Map, 4th Quarter 2013, Status as of December 31, 2013
Exhibit 1E
Multi Family Residential - Non Insulated Parcels

<table>
<thead>
<tr>
<th>RATP Status</th>
<th>MFR Parcels</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proposed Boundary Not Sound Insulated</td>
<td>17</td>
<td>99</td>
</tr>
<tr>
<td>Not Interested/Non-Responsive</td>
<td>13</td>
<td>88</td>
</tr>
<tr>
<td>Total</td>
<td>30</td>
<td>187</td>
</tr>
</tbody>
</table>

NOTE: The RATP is an ongoing program. RATP totals are current as of June 30, 2014 and may not be consistent with the totals summarized in the NEM document dated December 2012.
**Costs and Funding.** Based on the number of multi-family dwelling units within the program boundary (187) shown on Exhibit 1E, the estimated cost to add multi-family residential properties to the program is $5,610,000, assuming that all eligible multi-family dwellings participate and a cost of $30,000 per multi-family dwelling unit.

**Timing.** Implementing a sound insulation program is a multi-year process; this process is anticipated to continue in 2016.

**New Measure 4 (Noise Mitigation):** For otherwise qualified property owners who have been unable to participate in the RATP program due to building code deficiencies, offer to purchase a noise easement as an option for owners of single family and multi-family properties in the 2017 acoustical treatment eligibility area that have not been treated.

**Description:** An easement is a right held by one person to make use of the land of another for a limited purpose. For the purposes of noise compatibility at Bob Hope Airport, the easement would include the right for aircraft to emit sound and noise over and through all airspace above the subject property. These easements run with the land and serve as a limited means of notifying prospective property owners of the impact of airport noise. The purchase of noise easements within the 65 CNEL noise contour or program boundary is eligible for federal funding assistance through the noise set-aside of the Airport Improvement Program.

Noise easements for the purpose of the NCP would be offered only after the following conditions are met: 1) the property owner enrolls in and is within the RATP boundary, 2) the property has an existing interior noise level of 45 CNEL or greater as measured with the windows closed, and 3) the property has code violation issues that the homeowner is unwilling/unable to remedy and is, therefore, unable to fully participate in the sound insulation program. It is important to note that FAA provides specific guidance for sound insulation programs, as outlined in FAA Order 5100-38D, *Airport Improvement Program Handbook*, September 2014.

**Relationship to 2000 NCP.** This measure was not included in the 2000 NCP.

**Implementation Actions.** The noise easement component would be implemented as an extension of the existing RATP.

**Costs and Funding.** As outlined in FAA AC 150/5100-17 - *Land Acquisition and Relocation Assistance for Airport Improvement Program Assisted Projects*, compensation payments for the outright acquisition of easements from noise-impacted property shall be based on the Fair Market Value (FMV) standard. Generally, the airport acquisition of an easement from noise-impacted property does not significantly impact the current Fair Market Value of the property and, therefore, the easement compensation owed participating property owners is nominal. FAA-suggested appraisal methods to value noise easements are provided in FAA AC 150-15100-17. Where compensation payments are in a nominal range, the airport may waive the “parcel-by-parcel” appraisal process and apply a minimum payment procedure for easement acquisition offers.
A minimum payment procedure provides an equal monetary offer to all similarly affected property owners participating in the airport’s NCP easement measure. This procedure recognizes that given the nominal value appraisal waiver, it is also unnecessary to establish an exact just compensation amount specific to each property. Therefore, a single amount may be established from the market or project analysis to be offered as just compensation for similar nominal acquisitions. This procedure is an expedited negotiations process to efficiently provide payment of the indicated nominal compensation. It is FAA policy, however, that just compensation may only include FMV considerations, and the project cost savings secured by this procedure may not be added to the just compensation amount offered to property owners.

Coordination was undertaken with FAA regarding the estimated value of a noise easement. For the purposes of this project, FAA provided an average estimate of $2,500 per dwelling unit for a noise easement. The methodology described above will be used to establish the final equal monetary offer to all property owners participating in the program established by this measure. Additionally, the cost of preparing a project appraisal is estimated to be $30,000. It should be noted that for the multi-family parcels, the easement payment would go to the property owner and not be distributed to the residents of the dwelling units.

Implementation of this measure is dependent on the outcome of RATP participation; therefore, a specific cost cannot be estimated at this time. It should be noted that any property owner defaulting into this option will decrease the overall cost of the RATP program.

**Timing.** Implementation of the noise easement program would occur through the duration of the remaining phases of the NCP.
Section 2

Revised Noise Compatibility Program

Based on the recommendations presented above and the 2004 NCP revision, the following table updates Table 7E of the 2000 NCP.

<table>
<thead>
<tr>
<th>Measure</th>
<th>Cost to Airport or Government</th>
<th>Direct Cost to Users</th>
<th>Timing</th>
<th>Lead Responsible Agency</th>
<th>Potential Funding Sources</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>None</td>
<td>None</td>
<td>Ongoing</td>
<td>Airport Authority</td>
<td>N.A.</td>
<td>Retain. This is a continuation of an existing noise abatement rule.</td>
</tr>
<tr>
<td>2.</td>
<td>Administrative^3</td>
<td>None</td>
<td>Ongoing</td>
<td>Airport Authority</td>
<td>N.A.</td>
<td>Retain. Continuation of this measure reduces noise of residents northwest, southwest, and northeast of the airport.</td>
</tr>
<tr>
<td>3.</td>
<td>Administrative^3</td>
<td>None</td>
<td>Ongoing</td>
<td>Airport Authority</td>
<td>N.A.</td>
<td>Retain. Promotes use of AC 91-53A procedures for aircraft over 75,000 pounds.</td>
</tr>
<tr>
<td>4.</td>
<td>Administrative^3</td>
<td>Negligible</td>
<td>Ongoing</td>
<td>Airport Authority</td>
<td>N.A.</td>
<td>Retain. Promotes use of NBAA or equivalent noise abatement procedures for business jet aircraft.</td>
</tr>
<tr>
<td>5.</td>
<td>Administrative^3</td>
<td>None</td>
<td>Ongoing</td>
<td>Airport Authority (FAA Airport Traffic Control)</td>
<td>N.A.</td>
<td>Retain. Continue to work with the FAA Airport Traffic Control Tower to maintain the typical traffic pattern altitude of 1,800 feet MSL.</td>
</tr>
</tbody>
</table>

^1 Slack or cost to users is negligible
^2 Lead Responsible Agency
^3 Administrative
<table>
<thead>
<tr>
<th>Measure</th>
<th>Cost to Airport or Government</th>
<th>Direct Cost to Users(^1)</th>
<th>Timing</th>
<th>Lead Responsible Agency(^2)</th>
<th>Potential Funding Sources</th>
<th>Status(^6)</th>
</tr>
</thead>
<tbody>
<tr>
<td>6. Continue the placement of new buildings on the airport north of Runway 8-26 to shield nearby neighborhood from noise on runway.</td>
<td>Administrative(^3)</td>
<td>None</td>
<td>Ongoing</td>
<td>Airport Authority</td>
<td>N.A.</td>
<td>Retain. Position aviation related buildings to attenuate some of the noise of aircraft on the ground by shielding nearby residential neighborhoods.</td>
</tr>
<tr>
<td>7. Designate Runway 26 as nighttime preferential departure runway.</td>
<td>Administrative(^3)</td>
<td>Negligible</td>
<td>2016</td>
<td>Airport Authority, FAA Airport Traffic Control Tower</td>
<td>N.A.</td>
<td>Retain. The primary effect of this policy would be to reduce noise exposure over the areas south of the airport exposed to noise from takeoffs on Runway 15.</td>
</tr>
<tr>
<td>8. Establish noise abatement departure turn for jet takeoffs on Runway 26.</td>
<td>Administrative(^3)</td>
<td>Negligible</td>
<td>2016</td>
<td>Airport Authority, FAA Airport Traffic Control Tower</td>
<td>N.A.</td>
<td>Retain. The intent of this measure is to confine departures to the Southern Pacific Railroad corridor extending west-northwest from the runway.</td>
</tr>
<tr>
<td>9. Build extension of Taxiway D to promote nighttime general aviation departures on Runway 26.</td>
<td>$3,500,000</td>
<td>None</td>
<td></td>
<td>Airport Authority</td>
<td>FAA (80%) Airport capital budget (20%)</td>
<td>Remove</td>
</tr>
<tr>
<td>9. Build engine maintenance run-up enclosure. (Previously Measure 10)</td>
<td>$2,000,000</td>
<td>None</td>
<td>2018</td>
<td>Airport Authority</td>
<td>FAA (80%) Airport capital budget (20%)</td>
<td>Retain. This measure recommends the construction of an engine run-up enclosure to attenuate noise from maintenance run-up.</td>
</tr>
</tbody>
</table>
### TABLE 7E (Continued)

<table>
<thead>
<tr>
<th>Measure</th>
<th>Cost to Airport or Government</th>
<th>Direct Cost to Users</th>
<th>Timing</th>
<th>Lead Responsible Agency</th>
<th>Potential Funding Sources</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>11. Phase-out operations by all Stage-2 jets.*</td>
<td>$1,500,000 (for Part 161 study)</td>
<td>Potentially high cost to replace—or hush kit aircraft—or use alternative airports.</td>
<td>2001-2010</td>
<td>Airport Authority</td>
<td>Airport Operating Budget</td>
<td>Remove</td>
</tr>
<tr>
<td>12. Establish a mandatory curfew on departures by all Stage-2 aircraft between 10:00 p.m. and 7:00 a.m., departures by all aircraft over 75,000 pounds between 10:30 p.m. and 6:30 a.m., and arrivals by all aircraft over 75,000 pounds between 11:00 p.m. and 6:00 a.m.*</td>
<td>$1,500,000 (included in Measure 11)</td>
<td>Cost to reschedule flights, use alternative airports. Possibility of lost revenue if flights are canceled.</td>
<td>2001</td>
<td>Airport Authority, FAA</td>
<td>Operating Budget</td>
<td>Remove</td>
</tr>
</tbody>
</table>

### NOISE MITIGATION ELEMENT

<table>
<thead>
<tr>
<th>Measure</th>
<th>Cost</th>
<th>Direct Cost to Users</th>
<th>Timing</th>
<th>Lead Responsible Agency</th>
<th>Potential Funding Sources</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Continue existing acoustical treatment program for single-family homes.</td>
<td>Administrative</td>
<td>None</td>
<td>Ongoing</td>
<td>Airport Authority</td>
<td>N.A.</td>
<td>Retain</td>
</tr>
<tr>
<td>2. Expand residential acoustical treatment program to include homes within 65 CNEL contour based on 2003 NEM.</td>
<td>$32,000,000</td>
<td>None</td>
<td>Airpor Authority</td>
<td>FAA (80%)</td>
<td>Airport capital budget (20%)</td>
<td>Remove</td>
</tr>
<tr>
<td>2. Revise residential acoustical treatment program to include single family homes within 65 CNEL contour based on 2017 NEM. (Previously Measure 2)</td>
<td>$6,552,000</td>
<td>None</td>
<td>2016</td>
<td>Airport Authority</td>
<td>FAA (80%) Airport capital budget (20%)</td>
<td>Add</td>
</tr>
<tr>
<td>3. Establish acoustical treatment program for schools and preschools not previously treated within the 65 CNEL contour based on 2003 NEM.</td>
<td>$0,140,000</td>
<td>None</td>
<td>Airpor Authority</td>
<td>FAA (80%)</td>
<td>Airport capital budget (20%)</td>
<td>Remove</td>
</tr>
<tr>
<td>Measure</td>
<td>Cost to Airport or Government</td>
<td>Direct Cost to Users&lt;sup&gt;1&lt;/sup&gt;</td>
<td>Timing</td>
<td>Lead Responsible Agency&lt;sup&gt;2&lt;/sup&gt;</td>
<td>Potential Funding Sources</td>
<td>Status&lt;sup&gt;5&lt;/sup&gt;</td>
</tr>
<tr>
<td>---------</td>
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<td>---------------------</td>
</tr>
<tr>
<td>4. Offer purchase assurance as an option for homeowners in the acoustical treatment eligibility area.</td>
<td>$5,610,000</td>
<td>None</td>
<td>2016</td>
<td>FAA (80%) Airport capital budget (20%)</td>
<td>Add</td>
<td></td>
</tr>
<tr>
<td>3. New Measure - Establish acoustical treatment program for multi-family dwelling units within the 2017 acoustical treatment eligibility area.</td>
<td>None</td>
<td>Administrative</td>
<td>2016</td>
<td>FAA (80%) Airport capital budget (20%)</td>
<td>Add</td>
<td></td>
</tr>
<tr>
<td>4. New Measure - For otherwise qualified property owners who have been unable to participate in the RATP program due to building code deficiencies, offer to purchase a noise easement as an option for owners of single family and multi-family properties in the 2017 acoustical treatment eligibility area that have not been treated.</td>
<td>None</td>
<td>Administrative</td>
<td>2016</td>
<td>FAA (80%) Airport capital budget (20%)</td>
<td>Add</td>
<td></td>
</tr>
</tbody>
</table>

**LAND USE ELEMENT**

<table>
<thead>
<tr>
<th>Measure</th>
<th>Cost to Airport or Government</th>
<th>Direct Cost to Users&lt;sup&gt;1&lt;/sup&gt;</th>
<th>Timing</th>
<th>Lead Responsible Agency&lt;sup&gt;2&lt;/sup&gt;</th>
<th>Potential Funding Sources</th>
<th>Status&lt;sup&gt;5&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Provision for retention or an easement preventing noise-sensitive land uses of property located in the northeast quadrant of the Airport within the 2017 65 CNEL noise exposure contour. (Previously Measure 7)</td>
<td>None</td>
<td>Administrative</td>
<td>Ongoing</td>
<td>Airport Authority</td>
<td>N.A.</td>
<td>Revise</td>
</tr>
<tr>
<td>2. Use Baseline 2010 noise contours as basis for noise compatibility planning (Burbank and Los Angeles).</td>
<td>None</td>
<td>Administrative</td>
<td>2000-2002</td>
<td>Cities of Burbank and Los Angeles</td>
<td>N.A.</td>
<td>Remove</td>
</tr>
<tr>
<td>Measure</td>
<td>Cost to Airport or Government</td>
<td>Direct Cost to Users¹</td>
<td>Timing</td>
<td>Lead Responsible Agency²</td>
<td>Potential Funding Sources</td>
<td>Status³</td>
</tr>
<tr>
<td>------------------------------------------------------------------------</td>
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<td>----------</td>
</tr>
<tr>
<td>2. Establish noise compatibility guidelines for the review of develop-</td>
<td>Administrative</td>
<td>None</td>
<td>2000-2001</td>
<td>Cities of Burbank and Los</td>
<td>N.A.</td>
<td>Remove</td>
</tr>
<tr>
<td>ment—projects within the 65 CNEL contour—(Burbank, Los Angeles).</td>
<td></td>
<td></td>
<td></td>
<td>Angeles</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Amend Sun Valley-La Tuna Canyon Community Plan to establish infill</td>
<td>Administrative</td>
<td>None</td>
<td>2000-2001</td>
<td>City of Los Angeles</td>
<td>N.A.</td>
<td>Remove</td>
</tr>
<tr>
<td>development standards for noise compatibility—(Los Angeles).</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>land use policies promoting airport noise compatibility (Los Angeles).</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Establish airport noise overlay zoning to implement infill—development</td>
<td>Administrative</td>
<td>None</td>
<td>2000-2002</td>
<td>Cities of Burbank and Los</td>
<td>N.A.</td>
<td>Remove</td>
</tr>
<tr>
<td>policies of local General Plans (Burbank, Los Angeles).</td>
<td></td>
<td></td>
<td></td>
<td>Angeles</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Amend building codes to establish sound insulation construction</td>
<td>Administrative</td>
<td>None</td>
<td>2000-2002</td>
<td>Cities of Burbank and Los</td>
<td>N.A.</td>
<td>Remove</td>
</tr>
<tr>
<td>standards to implement requirements of State law and infill</td>
<td></td>
<td></td>
<td></td>
<td>Angeles</td>
<td></td>
<td></td>
</tr>
<tr>
<td>development policies (Burbank, Los Angeles).</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Retain property in the northeast quadrant of the airport within the</td>
<td>Administrative</td>
<td>None</td>
<td>2003</td>
<td>Airport Authority</td>
<td>N.A.</td>
<td>Remove</td>
</tr>
<tr>
<td>2003 65 CNEL noise exposure contour.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**PROGRAM MANAGEMENT ELEMENT**

<table>
<thead>
<tr>
<th>Measure</th>
<th>Cost to Airport or Government</th>
<th>Direct Cost to Users¹</th>
<th>Timing</th>
<th>Lead Responsible Agency²</th>
<th>Potential Funding Sources</th>
<th>Status³</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Continue noise abatement information program.</td>
<td>Administrative</td>
<td>None</td>
<td>Ongoing</td>
<td>Airport Authority</td>
<td>N.A.</td>
<td>Revise</td>
</tr>
<tr>
<td>Measure</td>
<td>Cost to Airport or Government</td>
<td>Direct Cost to Users¹</td>
<td>Timing</td>
<td>Lead Responsible Agency²</td>
<td>Potential Funding Sources</td>
<td>Status⁵</td>
</tr>
<tr>
<td>------------------------------------------------------------------------</td>
<td>-------------------------------</td>
<td>-----------------------</td>
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<td>--------------------------</td>
<td>-------------------------------------------------</td>
<td>---------</td>
</tr>
<tr>
<td>2. Monitor implementation of updated Noise Compatibility Program.</td>
<td>$90,000 ($30,000 every 3 years)</td>
<td>None</td>
<td>Ongoing</td>
<td>Airport Authority</td>
<td>Operating budget</td>
<td>Retain</td>
</tr>
<tr>
<td>3. Update Noise Exposure Maps and Noise Compatibility Program.</td>
<td>$525,000</td>
<td>None</td>
<td>As defined by 49 U.S.C, §47504</td>
<td>Airport Authority</td>
<td>FAA (80%) Airport capital budget (20%)</td>
<td>Retain</td>
</tr>
<tr>
<td>4. Expand noise monitoring system.</td>
<td>$75,000</td>
<td>None</td>
<td>2001</td>
<td>Airport Authority</td>
<td>FAA (80%) Airport capital budget (20%)</td>
<td>Remove</td>
</tr>
<tr>
<td>5. Enhance Airport Authority’s geographic information system.</td>
<td>$15,000</td>
<td>None</td>
<td>1999</td>
<td>Airport Authority</td>
<td>Airport Operating Budget</td>
<td>Remove</td>
</tr>
<tr>
<td>4. Maintain log of nighttime runway use and operations by aircraft type. (Previously Measure 6)</td>
<td>Administrative³</td>
<td>None</td>
<td>Ongoing</td>
<td>Airport Authority</td>
<td>N.A.</td>
<td>Retain</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Funding Source</th>
<th>Amount</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>FAA</td>
<td>$11,749,600</td>
<td>79.51</td>
</tr>
<tr>
<td>Airport operating budget</td>
<td>$90,000</td>
<td>0.61</td>
</tr>
<tr>
<td>Airport capital budget</td>
<td>$2,937,400</td>
<td>19.88</td>
</tr>
<tr>
<td>Total</td>
<td>$14,777,000</td>
<td></td>
</tr>
</tbody>
</table>

NOTES:
N.A. -- Not applicable.
1. Airport users will be indirectly responsible for at least part of the Airport Authority’s share of funding through lease payments and user fees.
2. Where the Airport Authority does not have direct responsibility for implementing a given measure, it will encourage the listed jurisdictions to implement measures as described.
3. Administrative costs are assumed to be covered through the normal operating budgets of the implementing agency. No additional staff or expenditures are expected.
4. The costs to users and other economic impacts must be analyzed in detail in the 14 CFR Part 161 Study before these measures can be implemented.
5. Status of existing measure to be retained as defined by FAA Record of Approval issued on November 27, 2000.
Section 3

NCP Revision Noise Impacts

The recommended NCP revision does not include measures that will change the shape or size of the noise exposure contours for Bob Hope Airport. Therefore, the number of dwelling units encompassed by the 2017 65 CNEL noise exposure contour will remain the same with and without implementation of the program. Table 1 includes a summary of the parcels and dwelling units within the proposed RATP. While the revised NCP does not reduce the number of dwelling units encompassed by the 2017 65 CNEL noise exposure contour, continuation of the RATP will mitigate the aircraft noise impacts of these dwelling units.

<table>
<thead>
<tr>
<th>Parcel Category</th>
<th>Parcels</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single Family Summary - Parcels within Proposed RATP</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Within 2017 Noise Contours (65-70 CNEL)</td>
<td>482</td>
<td>482</td>
</tr>
<tr>
<td>Within 2017 Noise Contours (70-75 CNEL)</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Outside 2017 Contours, Within Proposed RATP*</td>
<td>101</td>
<td>101</td>
</tr>
<tr>
<td>Single Family Total</td>
<td>586</td>
<td>586</td>
</tr>
<tr>
<td>Single Family Summary - Treated vs. Untreated within Proposed RATP</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Within 2017 Noise Contours, Treated</td>
<td>374</td>
<td>374</td>
</tr>
<tr>
<td>Outside 2017 Noise Contours, Within Proposed RATP, Treated</td>
<td>68</td>
<td>68</td>
</tr>
<tr>
<td>Single Family Treated Subtotal</td>
<td>442</td>
<td>442</td>
</tr>
<tr>
<td>Within 2017 Noise Contours, Not Insulated</td>
<td>32</td>
<td>32</td>
</tr>
<tr>
<td>Within 2017 Noise Contours, Not-Interested/Not-Responsive</td>
<td>79</td>
<td>79</td>
</tr>
<tr>
<td>Outside 2017 Noise Contours, Within Proposed RATP, Not Insulated*</td>
<td>27</td>
<td>27</td>
</tr>
<tr>
<td>Outside 2017 Noise Contours, Within Proposed RATP, Not Interested/Not Responsive*</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Single Family Untreated Subtotal</td>
<td>144</td>
<td>144</td>
</tr>
<tr>
<td>Single Family Total (Treated + Untreated)</td>
<td>586</td>
<td>586</td>
</tr>
</tbody>
</table>

* - Parcels located outside 2017 noise contours, but within the proposed RATP boundary are included based on FAA’s block rounding guidance provided in FAA Order 5100-38D, September 2014.
### Proposed RATP Parcel and Dwelling Unit Summary

#### RATP Status as of 6/30/14

**Bob Hope Airport**

<table>
<thead>
<tr>
<th>Parcel Category</th>
<th>Parcels</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Within 2017 Noise Contours, Multi-Family Residential (65-70 CNEL)</td>
<td>69</td>
<td>351</td>
</tr>
<tr>
<td>Outside 2017 Noise Contours, Within Proposed RATP, Multi-Family Residential</td>
<td>8</td>
<td>24</td>
</tr>
<tr>
<td><strong>Multi-Family Total</strong></td>
<td><strong>77</strong></td>
<td><strong>375</strong></td>
</tr>
</tbody>
</table>

#### Multi-Family Summary - Treated vs. Untreated within Proposed RATP

<table>
<thead>
<tr>
<th></th>
<th>Treated</th>
<th>Untreated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Within 2017 Noise Contours, Treated</td>
<td>41</td>
<td>173</td>
</tr>
<tr>
<td>Outside 2017 Noise Contours, Within Proposed RATP, Treated</td>
<td>6</td>
<td>15</td>
</tr>
<tr>
<td><strong>Multi-Family Treated Subtotal</strong></td>
<td><strong>47</strong></td>
<td><strong>188</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Insulated</th>
<th>Not Insulated/Not Responsive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Within 2017 Noise Contours, Not Insulated</td>
<td>16</td>
<td>97</td>
</tr>
<tr>
<td>Within 2017 Noise Contours, Not-Interested/Not-Responsive</td>
<td>12</td>
<td>81</td>
</tr>
<tr>
<td>Outside 2017 Noise Contours, Within Proposed RATP, Not Insulated*</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Outside 2017 Noise Contours, Within Proposed RATP, Not Interested/Not Responsive*</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td><strong>Multi-Family Untreated Subtotal</strong></td>
<td><strong>30</strong></td>
<td><strong>187</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Treated + Untreated</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Multi-Family Total</strong></td>
<td><strong>77</strong></td>
</tr>
</tbody>
</table>

* - Parcels located outside 2017 noise contours, but within the proposed RATP boundary are included based on FAA’s block rounding guidance provided in FAA Order 5100-38D, September 2014.
Section 4

Noise Contour Validation

As outlined in 14 CFR Part 150, § 150.21(d), an airport operator must submit a revised noise exposure map if,

A) any change in the operation of the airport would create any substantial, new noncompatible use in any area depicted on the map beyond that which is forecast for a period of at least five years after the date of submission; or,

B) any change in the operation of the airport would significantly reduce noise over existing noncompatible uses that is not reflected in either the existing conditions or forecast noise exposure map on file with the FAA.

A change in the operation of the airport creates a significant reduction in noise over existing noncompatible uses if that change results in a decrease in the yearly day-night average sound level of 1.5 dB or greater in a land area which was formerly noncompatible, but is thereby made compatible under Table A of Appendix A, 14 CFR Part 150.

Regarding Item A above, the forecasts used for the 2017 NEM were determined by FAA to be consistent with FAA’s Terminal Area Forecast (TAF) on September 24, 2012. Documentation of this approval is included in Appendix F of the Noise Exposure Maps document. The comparison was based on the January 2012 TAF which forecast 130,584 operations for 2017. Since that time, FAA has published a subsequent edition of the TAF (dated January 2013) which forecast 141,820 operations for 2017. In comparison, the 2017 NEM is based on a locally developed 2017 forecast of 141,540. This forecast remains consistent with FAA’s statement that the forecasts are within 10 percent of the TAF at five years. Additionally, the proposed revisions to the plan will not change the location where, or manner in which, aircraft operate at Bob Hope Airport. Therefore, a substantial new noncompatible land use will not be created and the 2017 noise contours are still valid.

Regarding Item B above, the Airport’s 2012 NEM is based on calendar year 2011 operations (123,092). In comparison, based on FAA’s Air Traffic Activity System (ATADS) during the most recent 12 months (September 2013-August 2014), the Burbank tower recorded 120,503 operations. As a result of this slight decrease, there will be a minimal reduction in noise over existing noncompatible uses in the existing (2012) NEM. Additionally, the proposed revisions to the plan will not change the location where, or manner in which, aircraft operate at Bob Hope Airport. Therefore, a substantial new noncompatible land use will not be created and the 2012 noise contours are still valid.

The 2012 and 2017 NEM maps are included for reference as Exhibits 1F and 1G. FAA accepted these NEMs as compliant with 14 CFR Part 150 on October 10, 2013.