

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION
RECORD OF APPROVAL
14 CFR PART 150
NOISE COMPATIBILITY PROGRAM



LAMBERT-ST. LOUIS INTERNATIONAL AIRPORT
ST. LOUIS, MISSOURI

[Signature]
for Regional Counsel, ACE-7

8-25-11
Date

☒ CONCUR

☐ NONCONCUR

[Signature]
Manager, Airports Division, ACE-600

8/26/11
Date

☒ APPROVED

☐ DISAPPROVED

Record of Approval

Lambert-St. Louis International Airport

Noise Compatibility Program

INTRODUCTION

The 2010 *Lambert-St. Louis International Airport*¹ *Noise Compatibility Program* (2010 NCP) describes the current and future incompatible land uses as set forth in Title 14, Code of Federal Regulations Part 150, *Airport Noise Compatibility Planning* (14 CFR Part 150). The 2010 NCP recommends 10 measures for noise abatement, 10 measures for land use planning policies and land use management, and 3 measures for oversight and implementation of the abatement and land use measures; a total of 23 measures.

- Noise Abatement Measures
 - Withdraw 1 of the previously approved measure
 - Continue the implementation of 9 previously approved measures
- Land Use Management Measures
 - Approve 5 new measures
 - Continue the implementation of 5 previously approved measures
- Program Management Measures
 - Continue the implementation of 3 previously approved measures updated for the current administrative and management conditions at Lambert Airport

These 23 measures are summarized in the 2010 NCP document in Table 4-1 *Noise Compatibility Program Recommendations* (pages 4-5 through 4-8); Table 4-4 *NCP General Implementation Schedule* (pages 4-19 through 4-22); and illustrated on Exhibit 4-1 *Future (2015) Noise Exposure Map/Noise Compatibility Program* (page 4-12).

The 2010 NCP is an update to the approved 1997 *Part 150 Noise Compatibility Study Update* (1997 NCP) that resulted in an FAA Record of Approval (ROA)² approving 20 out of the 21 measures submitted (10 noise abatement measures,³ 7 land use management measures, and 3 program management measures). The 1997 ROA is summarized in the 2010 NCP document in Appendix F, *1997 Noise Compatibility Program*.

The 2010 NCP evaluated the continued effectiveness of the 20 measures approved in the 1997 ROA. The evaluation resulted in three outcomes: (1) measures being maintained without change; (2) measures being modified/updated/revised; and, (3) measures being withdrawn from the approved NCP. The 1997 NCP measures that are included in the 2010 NCP were justified in the evaluation process as being noise beneficial. With the FAA approval of the recommended 2010 NCP it will, in its entirety, supersede the 1997 NCP.

¹ Lambert-St. Louis International Airport: also referred to as Lambert Airport or the airport.

² The FAA Record of Approval (ROA) for the 1997 *Part 150 Noise Compatibility Study Update* (1997 NCP) is dated January 10, 1997.

³ Eleven (11) noise abatement measures were submitted to the FAA for approval in the 1997 Part 150 NCP. One measure, related to flight procedures, "did not require approval or disapproval" within 180 days under Section 104(b) of the Aviation Safety and Noise Abatement Act of 1979, as amended, 49 USC 47504(b). The FAA determination was: No Action Required At This Time.

The approvals listed herein include approval of actions that Lambert Airport recommends be taken by the Federal Aviation Administration (FAA). It should be noted that these approvals indicate only that the actions would, if implemented, be consistent with the purposes of 14 CFR Part 150. The approvals do not constitute decisions to implement the proposed actions or a commitment by the FAA to provide federal financial assistance for these actions. Later decisions concerning possible implementation of these actions may be subject to applicable environmental or other procedures or requirements.

The recommendations below summarize, as closely as possible, the airport operator's (St. Louis Airport Authority (STLAA)) noise compatibility program recommendations and are cross-referenced to the applicable pages, tables, or exhibits in the program document.⁴ The statements contained within the summarized recommendations and before the indicated FAA approval, disapproval, or other determination, do not represent the opinions or decisions of the FAA.

NOISE ABATEMENT MEASURES

Noise abatement measures, for the purposes of 14 CFR Part 150, include aircraft operating procedures and use or disuse of certain runways or flight tracks. The following 10 measures describe the procedures and actions recommended to reduce the effect of aircraft noise at Lambert Airport.

1. NOISE ABATEMENT MEASURE NA-1: (Table 4-1 on Page 4-5, Exhibit 4-1 on Page 4-11, Table 4-4 on Page 4-19, and Page 4-27; and Appendix G)

Description: Runway 6-24 Daytime Use. Between the hours of 6:00 a.m. and 11:00 p.m., Runway 6-24 will be used as needed to prevent air traffic delays. This measure is intended to minimize aircraft noise off the ends of Runway 6-24 and has been implemented through the STL FAA ATCT Tower Order.

FAA Action: CONTINUE AS PREVIOUSLY APPROVED WITH TEXT UPDATE. This voluntary measure was implemented with the FAA approval of the Lambert 1997 Part 150 Study Update (1997 NCP) with reference to the Missouri Air National Guard (MoANG) operations. MoANG ceased its aircraft operations at Lambert in June 2009, therefore reference to MoANG operations will be removed from this measure. Measure NA-1 constitutes an integral part of the overall noise management program at Lambert and it is recommended to be continued. Because it is a continuing measure, it is not expected to result in changes to the management program.

2. NOISE ABATEMENT MEASURE NA-2 (Table 4-1 on Page 4-5, Exhibit 4-1 on Page 4-11, Table 4-4 on Page 4-19, and Page 4-28; and Appendix G)

Description: Daytime Departure Corridors. Between the hours of 6:00 a.m. and 11:00 p.m., commercial airline and military jets departing from runways 29, 30L, and 30R fly headings that align with 305-degrees or 335-degrees with turns at 2,500 feet MSL or five (5) nautical miles from the end of the runway.

Commercial airline and military jets departing from Runways 12L and 12R fly headings that align with 100 degrees or 120-degrees with turns at 2,500 feet MSL or five (5) nautical miles from the end of the runway.

⁴ The program document title is *Lambert-St. Louis International Airport 14 CFR Part 150 Noise Exposure Map Update and Noise Compatibility Program Update – Final Report*, November 2010. Prepared for: St. Louis Airport Authority Lambert-St. Louis International Airport. Prepared by: Landrum & Brown, Incorporated, Cincinnati, Ohio.

Commercial airline and military jets departing from Runway 11 fly headings that align with 100 degrees, 120 degrees, or 135 degrees with turns at 2,500 feet MSL or five (5) nautical miles from the end of the runway.

FAA Action: APPROVED. This voluntary measure was implemented with the FAA approval of the 1997 NCP to keep departures over compatible areas and minimize flight dispersion over incompatible areas adjacent to compatible corridors. This measure has been implemented through the STL FAA ATCT Tower Order for Runways 12L-30R and 12R-30L. The Tower Order should be modified to include the current departure headings for Runway 11-29. Measure NA-2 constitutes an integral part of the overall noise management program at Lambert and it is recommended to be continued. Because it is a continuing measure, it is not expected to result in changes to the management program.

Approval of specific language for inclusion or amendment to FAA tower procedures is subject to separate FAA approval, and implementation requires an environmental analysis.

3. NOISE ABATEMENT MEASURE NA-3 (Table 4-1 on Page 4-5, Exhibit 4-1 on Page 4-11, Table 4-4 on Page 4-19, and Page 4-29; and Appendix G)

Description: Prohibit Nighttime Full-Power Aircraft Engine Run-ups. Between the hours of 11:00 p.m. and 6:00 a.m. aircraft engine test run-ups are prohibited without prior authorization from the Airport Operations/Communications Center. When authorized, run-ups are to be conducted on Echo Pad. Aircraft will align on a heading of 135 degrees or into the prevailing wind direction. Maximum power run-ups are limited to duration of two minutes.

FAA Action: CONTINUE AS PREVIOUSLY APPROVED WITH TEXT UPDATE. This voluntary measure was implemented with the FAA approval of the 1997 NCP to limit and control high-power run-ups during nighttime hours. This measure has been implemented through the STL FAA ATCT Tower Order. The measure language should be reworded to match the Tower Order language and include the designated nighttime run-up pad (Echo Pad). Measure NA-3 constitutes an integral part of the overall noise management program at Lambert and it is recommended to be continued. Because it is a continuing measure, it is not expected to result in changes to the management program.

4. NOISE ABATEMENT MEASURE NA-4 (Table 4-1 on Page 4-5, Exhibit 4-1 on Page 4-11, Table 4-4 on Page 4-19, and Page 4-30; and Appendix G)

Description: Runway 6-24 Nighttime Use. Between the hours of 11:00 p.m. and 6:00 a.m., Runway 6-24 will not be used for commercial airline or military jet operations except under unusual or extraordinary circumstances.

FAA Action: CONTINUE AS PREVIOUSLY APPROVED. This voluntary measure was implemented with the FAA approval of the 1997 NCP to minimize nighttime noise off the ends of Runway 6-24. This measure has been implemented through the STL FAA ATCT Tower Order. Measure NA-4 constitutes an integral part of the overall noise management program at Lambert and it is recommended to be continued. Because it is a continuing measure, it is not expected to result in changes to the management program.

5. NOISE ABATEMENT MEASURE NA-5 (Table 4-1 on Page 4-5, Exhibit 4-1 on Page 4-11, Table 4-4 on Page 4-19, and Page 4-31; and Appendix G)

Description: Nighttime Departure Corridors. Between the hours of 11:00 p.m. and 6:00 a.m. commercial airline and military jets departing from runways 11, 12L, 12R, and

30R fly headings that align with runway headings with turns at 4,000 feet MSL or three (3) nautical miles from the end of runway.

Commercial airline and military jets departing from Runways 30L and 29 fly headings that align with 305-degrees with turns at 4,000 feet MSL or three (3) nautical miles from the end of the runway.

FAA Action: APPROVED. This voluntary measure was originally implemented with the FAA approval of the 1997 NCP to keep nighttime departures on Runways 12L-30R and 12R-30L over compatible areas until reaching higher altitudes before turns. The measure has been modified to include the current departure headings used for Runway 11-29. The STL FAA ATCT Tower Order should be revised to include the Runway 11-29 departure headings. Measure NA-5 constitutes an integral part of the overall noise management program at Lambert and it is recommended to be continued. Because it is a continuing measure, it is not expected to result in changes to the management program.

Approval of specific language for inclusion or amendment to FAA tower procedures is subject to separate FAA approval, and implementation requires an environmental analysis.

6. NOISE ABATEMENT MEASURE NA-6 (Table 4-1 on Page 4-5, Exhibit 4-1 on Page 4-11, Table 4-4 on Page 4-20, and Page 4-32; and Appendix G)

Description: Distant Noise Abatement Departure Procedures. Commercial airline jets will follow Distant Noise Abatement Departure Procedures as outlined in FAA Advisory Circular 91-53A.

FAA Action: CONTINUE AS PREVIOUSLY APPROVED. This voluntary measure was implemented with the FAA approval of the 1997 NCP to minimize noise at some distance from the airport since most areas immediately off the runway ends are now compatible land uses. This measure has been implemented at STL by the air carriers. This measure has been implemented through the STL FAA ATCT Tower Order. Measure NA-6 constitutes an integral part of the overall noise management program at Lambert and it is recommended to be continued. Because it is a continuing measure, it is not expected to result in changes to the management program.

7. NOISE ABATEMENT MEASURE NA-7 (Table 4-1 on Page 4-6, Exhibit 4-1 on Page 4-11, Table 4-4 on Page 4-20, and Page 4-33; and Appendix G)

Description: Quiet Push-back Procedures. Commercial airline jets will be pushed back from the terminal gates using aircraft tractors. Power backs using aircraft engines are not permitted.

FAA Action: CONTINUE AS PREVIOUSLY APPROVED. This voluntary measure was implemented with the FAA approval of the 1997 NCP to minimize ground noise effects in the residential areas adjacent to the terminal area. This measure has been implemented at STL by the air carriers. Measure NA-7 constitutes an integral part of the overall noise management program at Lambert and it is recommended to be continued. Because it is a continuing measure, it is not expected to result in changes to the management program.

8. NOISE ABATEMENT MEASURE NA-8 (Table 4-1 on Page 4-6, Exhibit 4-1 on Page 4-11, Table 4-4 on Page 4-20, and Page 4-34; and Appendix G)

Description: Commercial Jet Aircraft Intercept Final Approach No Closer Than Four (4) Nautical Miles From Arrival Runway End. Arriving commercial jet aircraft intercept final approach no closer than four (4) nautical miles from arrival runway end.

FAA Action: CONTINUE AS PREVIOUSLY APPROVED. This voluntary measure was implemented with the FAA approval of the 1997 NCP to minimize short approaches and early turn-ins over residential areas adjacent to the final approach course. This measure has been implemented in a more restrictive form (5 nautical mile intercept) in the STL FAA ATCT Tower Order. Measure NA-8 constitutes an integral part of the overall noise management program at Lambert and it is recommended to be continued. Because it is a continuing measure, it is not expected to result in changes to the management program.

9. NOISE ABATEMENT MEASURE NA-9 (Table 4-1 on Page 4-6, Exhibit 4-1 on Page 4-11, Table 4-4 on Page 4-20, and Page 4-35; and Appendix G)

Description: Airline Notification. The St. Louis Airport Authority (STLAA) will provide information concerning the existing practices for full power maintenance run-ups and terminal pushbacks to the air carriers with scheduled service at Lambert Airport. The STLAA will also encourage the use of the distant noise abatement departure procedure.

FAA Action: CONTINUE AS PREVIOUSLY APPROVED. This voluntary measure was implemented with the FAA approval of the 1997 NCP to notify and encourage airlines to comply with STL run-up and noise abatement departure procedures. Updated notifications should be prepared with the approval of the 2010 NCP. Measure NA-9 constitutes an integral part of the overall noise management program at Lambert and it is recommended to be continued. Because it is a continuing measure, it is not expected to result in changes to the management program.

10. NOISE ABATEMENT MEASURE NA-10 (Table 4-1 on Page 4-6, Exhibit 4-1 on Page 4-11, Table 4-4 on Page 4-20, and Page 4-36; and Appendix G)

Description: Maximize West Flow – Withdraw Measure. Withdraw measure to maximize west flow operations.

FAA Action: APPROVED. Historically the Lambert Airport operated in west flow about 60 percent of the time and in east flow about 40 percent of the time. By maximizing west flow, departures were concentrated over areas of lower population density to the west of the Lambert Airport. Since the phase-out of Stage 2 aircraft, average departure noise has decreased. Furthermore, with the opening of Runway 11-29, the STL FAA ATCT has found there are some operational efficiencies associated with the east-flow configuration as compared to the west-flow configuration. The split of operations between east flow and west flow has evolved into an approximately 50/50 split.

Measure NA-10 was implemented with the FAA approval of the 1997 NCP; however, due to operational changes at Lambert Airport over time, the amount of time west flow operations occur has been reduced. Based on the 2010 NCP analysis provided in Appendix G, *Noise Abatement Alternatives*, the current operating conditions yields optimal results for noise compatibility (approximate 50/50 split of west flow versus east flow operations). It is recommended that Measure NA-10 be withdrawn.

LAND USE MANAGEMENT MEASURES

FUTURE LAND USE CONTROL RECOMMENDATIONS INTRODUCTION:

The land use management measures recommended in this 2010 Part 150 Study Update (2010 NCP) are based, in part, on the previously approved land use management measures contained in Lambert's *1997 Part 150 Study Update* (1997 NCP) and an assessment of the implementation of the previously approved mitigation programs. The 65 Day-Night Average Sound Level (DNL) noise exposure contour has decreased in size since the approval of the 1997 NCP and the airport operator, the St. Louis Airport Authority (STLAA), has been successful in its implementation of a voluntary acquisition program, sound insulation program, and limited aviation easement program. Therefore, it is practical to recommend an all-encompassing set of preventative land use measures to address potential future development in areas inside and outside of the 65 DNL noise exposure contour where aircraft overflights will continue.

The responsibility for controlling and managing the development and redevelopment of land outside the airport boundary is the responsibility of the surrounding local jurisdictions. As such, it is incumbent upon the local planning and elected officials to monitor and plan for new development in a manner that is compatible with aircraft operations. The STLAA remains committed to providing assistance to the local jurisdictions that wish to undertake compatible land use planning.

1. LAND USE MANAGEMENT MEASURE LU-5 (Table 4-1 on Page 4-6, Exhibit 4-1 on Page 4-11, Table 4-4 on Page 4-20, and Page 4-44; and Appendix H)

Description: Comprehensive Planning. This voluntary measure was approved for implementation in the FAA ROA for the 1997 NCP. The purpose of Measure LU-5 is for the St. Louis Airport Authority to assist, as appropriate, the local jurisdictions to pursue the development and adoption of comprehensive planning policies. These policies would ensure that incompatible land use does not develop within areas exposed to significant levels of aircraft noise, as outlined in Appendix A to 14 CFR Part 150—Noise Exposure Maps, Table 1—Land Use Compatibility With Yearly Day-Night Average Sound Levels.

Land use plans provide the underlying framework and policy guidance for future development. A local land use plan identifies the uses that are compatible to their environment and prescribes the location for future development. For the jurisdictions surrounding Lambert, the areas affected by aircraft noise and the types of noise-sensitive land uses would be identified and the local land use plan could identify strategies for preventing the development of future incompatible land use and mitigation techniques that may appropriate for the existing incompatible land uses.

Because the adoption and implementation of local comprehensive land use policy measures would contribute to the development of compatible land uses within the airport environs, it is recommended that this measure be continued. Examples of compatible land use strategies are provided in Appendix K, Land Use Policies and Controls, of the *2010 Lambert-St. Louis International Airport⁵ Noise Compatibility Program* (2010 NCP) to assist local communities in developing policies.

FAA Action: CONTINUE AS PREVIOUSLY APPROVED. The local jurisdictions have the authority to implement this measure. The Federal government has no authority to control

⁵ Lambert-St. Louis International Airport: also referred to as Lambert Airport or the airport.

local land uses. This approval is limited to potential noncompatible land uses within the 65 DNL and higher noise exposure contours. The local jurisdictions have the authority to pursue proposed land use planning for areas below the 65 DNL noise contour.

2. LAND USE MANAGEMENT MEASURE LU-6 (Table 4-1 on Page 4-6, Exhibit 4-1 on Page 4-11, Table 4-4 on Page 4-20, and Page 4-45; and Appendix H)

Description: Discretionary Review. This voluntary measure was approved for implementation in the FAA ROA for the 1997 NCP. The purpose of Measure LU-6 is for coordination between the St. Louis Airport Authority and local jurisdictions to ensure that optimal development can occur in a manner that is compatible with airport and aircraft operations. A process for the coordinated review of potentially noise-sensitive developments should be developed to facilitate communication among the local jurisdictions surrounding the Lambert-St. Louis International Airport and the City of St. Louis Airport Planning and Development Office.

Proposed development projects are subject to local review as part of zoning, subdivision, and building permit processes. Some of these regulations address the approval of proposed developments within areas exposed to aircraft noise levels of 60 DNL, 65 DNL, and greater; some do not. A discretionary review process would provide for a coordinated effort among the local planning staff(s) who undertakes the various review processes and the Airport Planning and Development Office. A discussion of the discretionary review process is provided in Appendix K, Land Use Policies and Controls (Section K.1.4) of the 2010 NCP to assist local communities in understanding discretionary review and how to implement its use in their jurisdiction.

FAA Action: CONTINUE AS PREVIOUSLY APPROVED. The local jurisdictions have the authority to implement this measure. The Federal government has no authority to control local planning agency review processes. This approval is limited to potential noncompatible land uses within the 65 DNL and higher noise exposure contours. The local jurisdictions have the authority to pursue discretionary reviews with City of St. Louis Airport Planning and Development Office for areas below the 65 DNL noise contour.

3. LAND USE MANAGEMENT MEASURE LU-7 (Table 4-1 on Page 4-6, Exhibit 4-1 on Page 4-11, Table 4-4 on Page 4-21, and Page 4-47; and Appendix H)

Description: General Purpose/Compatible Use Zoning. This voluntary measure was approved for implementation in the FAA ROA for the 1997 NCP. The purpose of Measure LU-7 is for coordination between the St. Louis Airport Authority and local jurisdictions to assist in the development and adoption of general purpose/compatible use zoning to provide a process, rules, and regulations that allows for implementation and enforcement of the land use plan for the purpose of achieving optimal development that promotes public health, safety, and welfare through compatibility with aircraft noise levels.

Zoning is one of the primary tools available to local communities to ensure land use compatibility with an airport and its operations. Zoning ordinances and regulations are intended to promote public health, safety, and welfare by regulating the use of the land within a jurisdiction based on factors such as existing and expected socioeconomic conditions, environmental constraints, appropriate population densities, aesthetics, and the availability of public infrastructure.

FAA Action: CONTINUE AS PREVIOUSLY APPROVED. The local jurisdictions have the authority to implement this measure. The Federal government has no authority to control local zoning adoption or enforcement. This approval is limited to potential noncompatible

land uses within the 65 DNL and higher noise exposure contours. The local jurisdictions have the authority to pursue general purpose/compatible use zoning for compatibility with airport and aircraft operations for areas below the 65 DNL noise contour.

4. LAND USE MANAGEMENT MEASURE LU-8 (Table 4-1 on Page 4-7, Exhibit 4-1 on Page 4-11, Table 4-4 on Page 4-21, and Page 4-49; and Appendix H)

Description: Noise Overlay Zoning. This voluntary measure was approved for implementation in the FAA ROA for the 1997 NCP. The purpose of Measure LU-8 is for coordination between the St. Louis Airport Authority and local jurisdictions to implement noise overlay zoning as appropriate. General purpose/compatible use zoning provides a process, rules, and regulations that allows for implementation and enforcement of the land use plan for the purpose of achieving optimal development that promotes public health, safety, and welfare through compatibility with aircraft noise levels.

The boundaries of a noise overlay zone are usually based on the noise exposure contour that is considered locally as the critical level, often the 65 DNL noise exposure contour, or it can be based on geographic and topographic boundaries, e.g., nearby streets, property lines (legal descriptions), or other natural features. An example of a noise overlay zoning ordinance is provided in Appendix K, Land Use Policies and Controls (Section K.2.1), of this Part 150 Study Update.

FAA Action: CONTINUE AS PREVIOUSLY APPROVED. The local jurisdictions have the authority to implement this measure. The Federal government has no authority to control local zoning adoption or enforcement. This approval is limited to potential noncompatible land uses within the 65 DNL and higher noise exposure contours. The local jurisdictions have the authority to implement noise overlay zoning for compatibility with airport and aircraft operations for areas below the 65 DNL noise contour.

5. LAND USE MANAGEMENT MEASURE LU-9 (Table 4-1 on Page 4-7, Exhibit 4-1 on Page 4-11, Table 4-4 on Page 4-21, and Page 4-50; and Appendix H)

Description: Building Codes. This voluntary measure was approved for implementation in the FAA ROA for the 1997 NCP. The purpose of Measure LU-9 is for coordination between the St. Louis Airport Authority and local jurisdictions to adopt building codes for noise compatibility as appropriate. Building codes regulate the construction of structures ensuring that each is built to safe standards. Sound insulation may be required in new homes, offices, and institutional public buildings to mitigate for the effects of high aircraft noise levels. Building code requirements intended for energy efficiency may often provide acoustical insulation benefits.

Implementation is generally accomplished through amendment of the local building codes to require performance standards for exterior to interior noise level reduction (NLR) levels, which meet set decibel levels within given DNL noise exposure contours. Given the absence of new residential development within the 65 DNL noise exposure contour, the effectiveness of this measure may be limited. Nevertheless, an NLR of 20 decibels might be required in newly developed areas or areas of redevelopment exposed to 65 DNL; a reduction that should be achieved with normal energy insulation measures. An example of building code regulations is provided in Appendix K, Land Use Policies and Controls (Section K.2.4), of this Part 150 Study Update.

FAA Action: CONTINUE AS PREVIOUSLY APPROVED. The local jurisdictions have the authority to implement this measure. The Federal government has no authority to control amendments to or the enforcement of local building codes. This approval is limited to

potential noncompatible land uses within the 65 DNL and higher noise exposure contours. The local jurisdictions have the authority to develop local building codes for compatibility with airport and aircraft operations for areas below the 65 DNL noise contour.

6. LAND USE MANAGEMENT MEASURE LU-10 (Table 4-1 on Page 4-7, Exhibit 4-1 on Page 4-11, Table 4-4 on Page 4-21, and Page 4-51; and Appendix H)

Description: Advanced Land Acquisition. This voluntary measure was approved for implementation in the FAA ROA for the 1997 NCP (1997 NCP). The purpose of Measure LU-10 is for the St. Louis Airport Authority to work cooperatively with the local jurisdictions to identify parcels zoned residential where incompatible development is being proposed. Per Measure 5.3 in the 1997 NCP: "Advanced land acquisition is a process in which an airport acquires land to preclude future incompatible development. This measure is to be implemented by the Airport when there is no other course of action to ensure that incompatible residential uses do not continue to develop within the DNL 65 dB or greater contour."

The STLAA has not yet found it necessary to implement this measure due to the recent downturn in the local economy (2008-2010) and the lack of new proposed development occurring in North St. Louis County. However, as the economy improves it is in the airport's best interest to continue monitoring for new proposed development. It may be necessary in the future to implement this measure to ensure that new proposed development is compatible with the airport and aircraft operations and overflights.

If implemented, this measure would prevent the development of incompatible land uses from occurring on land that is currently zoned residential and would enhance the compatibility of land uses surrounding the airport.

FAA Action: CONTINUE AS PREVIOUSLY APPROVED.

7. LAND USE MANAGEMENT MEASURE LU-11 (Table 4-1 on Page 4-7, Exhibit 4-1 on Page 4-11, Table 4-4 on Page 4-21, and Page 4-52; and Appendix H)

Description: Noise Disclosure. The purpose of Measure LU-11 is for the St. Louis Airport Authority to cooperatively engage in a dialogue with area realtors and local jurisdictions to jointly develop a regulatory process to provide full disclosure of airport noise. A noise disclosure program would ensure that potential purchasers of property are fully informed about noise-related issues resulting from proximity to the airport and areas of aircraft noise exposure and overflight.

A method would be developed to insure that the buyers of residential property within the airport environs receive full disclosure of the location of the property relative to the airport as a potential noise source. This would require that sellers of residential property in the airport environs deliver to buyers a disclosure notice consisting of a copy of the Noise Overlay District Ordinance and Map or the local land use map showing the airport's DNL noise exposure contours. An example of a local noise disclosure ordinance is provided in Appendix K, Land Use Policies and Controls (Section K.2.2), of this Part 150 Study Update.

FAA Action: APPROVED. The local jurisdictions have the authority to implement this measure as a local regulation. The Federal government has no authority to control the adoption or enforcement of a noise disclosure policy or regulation. This approval is limited to potential noncompatible land uses within the 65 DNL and higher noise exposure contours. The local jurisdictions have the authority to pursue this method of disclosure for compatibility with airport and aircraft operations for areas below the 65 DNL noise contour.

8. LAND USE MANAGEMENT MEASURE LU-12 (Table 4-1 on Page 4-7, Exhibit 4-1 on Page 4-11, Table 4-4 on Page 4-21, and Page 4-46; and Appendix H)

Description: Subdivision Regulations. The purpose of Measure LU-12 is to amend, as necessary, the local subdivision regulations to ensure that land is platted and developed to minimize noise impacts or reduce noise-sensitivity of new development.

Subdivision regulations can be used to enhance noise-compatible land development and to protect the airport proprietor from litigation for noise impacts at a later date. The most common requirement is the dedication of a noise or aviation easement to the local government by the land developer as a condition of subdivision approval. The easement authorizes overflights of the property, with the noise levels attendant to such operations. It may also require the developer to provide noise insulation in the construction of the building if threshold noise levels are exceeded.

While not many areas of open, undeveloped land currently exists in the communities surrounding Lambert Airport, it is likely, within the imminent 20-year planning period, that infill development and redevelopment could occur. Therefore, the local jurisdictions should ensure that further subdivision developments are compatible with airport and aircraft operations. An example of subdivision regulations is provided in Appendix K, Land Use Policies and Controls (Section K.2.3), of this Part 150 Study Update.

FAA Action: APPROVED. The local jurisdictions have the authority to implement this measure. The Federal government has no authority to control the adoption or enforcement of local subdivision regulations. This approval is limited to potential noncompatible land uses within the 65 DNL and higher noise exposure contours. The local jurisdictions have the authority to pursue this method of land use control for compatibility with airport and aircraft operations for areas below the 65 DNL noise contour.

9. LAND USE MANAGEMENT MEASURE LU-13 (Table 4-1 on Page 4-7, Exhibit 4-1 on Page 4-11, Table 4-4 on Page 4-21, and Page 4-54; and Appendix H)

Description: Transfer of Development Rights. The purpose of Measure LU-13 is for the local jurisdictions to encourage the use of Transfer of Development Rights (TDR) where appropriate to benefit land use compatibility. TDR is a land use regulatory tool under which development rights can be transferred from one tract of land and sold in a market transaction. Future development of the parcel from which the rights are transferred is then permanently restricted, and the purchaser of the development rights may assign them to a different parcel to gain additional density.

A Transfer of Development Rights (TDR) program allows landowners in a designated "sending" area to transfer the development rights assigned to their property to a landowner in a designated "receiving" area where the community would like to concentrate development. In this case, the designated "sending" district would be residentially zoned land located in aircraft-related noise impacted areas. The designated "receiving" district would be in a location not impacted by airport noise. The designated "receiving" area would be allowed to develop at a higher density than would be permitted by the underlying zoning. Though the community defines the requirements and parameters associated with establishing the sending and receiving districts, any actual transfer is negotiated between the landowner in the sending district and landowner in the receiving district."

Implementation of a TDR program is problematic in that the potential utility of different properties are seldom equal and the assessment of equality between "sending" and "receiving" parcels is difficult to establish, regardless of parcel size. No successful TDR is known to have occurred in the jurisdictions surrounding Lambert Airport. However, this tool

would make it possible to transfer the development density from one parcel to another elsewhere in the jurisdiction. In theory, it would be possible to keep areas that may be sensitive to aircraft noise from developing in an incompatible use or density and thus allow for new development to occur in North St. Louis County without creating new incompatible land uses.

FAA Action: APPROVED. The local jurisdictions have the authority to implement this measure. The Federal government has no authority to control how local jurisdictions use the Transfer of Development Rights. This approval is limited to potential noncompatible land uses within the 65 DNL and higher noise exposure contours. The local jurisdictions have the authority to pursue this method of land use control for compatibility with airport and aircraft operations for areas below the 65 DNL noise contour.

10. LAND USE MANAGEMENT MEASURE LU-14 (Table 4-1 on Page 4-7, Exhibit 4-1 on Page 4-11, Table 4-4 on Page 4-22, and Page 4-55; and Appendix H)

Description: Capital Improvement Programming. The purpose of Measure LU-14 is for local jurisdictions to consider the compatibility between airport noise and potential development of new land uses when sizing and locating future infrastructure improvements within a capital improvements planning process to avoid the development of services that could lead to the development of incompatible uses.

Typically, capital improvement programs have no direct bearing on noise compatibility because few municipal capital improvements are noise-sensitive. The obvious exceptions are schools and, in certain circumstances, libraries, medical facilities, and cultural/recreational facilities above the 65 DNL noise threshold. And some capital improvements may have an indirect, but more profound relationship to noise compatibility such as, sewer and water facilities that may open up large vacant areas for the private development of noise-sensitive residential uses; in contrast, the same types of facilities sized for industrial users could commit an otherwise noise-impacted area for industrial development.

FAA Action: APPROVED. The local jurisdictions have the authority to implement this measure. The Federal government has no authority to control how local jurisdictions develop and review their capital improvement programs. This approval is limited to potential noncompatible land uses within the 65 DNL and higher noise exposure contours. The local jurisdictions have the authority to pursue this method of land use control for compatibility with airport and aircraft operations for areas below the 65 DNL noise contour.

PROGRAM MANAGEMENT MEASURES

Program management measures are included in a 14 CFR Part 150 Study to provide for the oversight, management, and implementation of the approved noise abatement and land use management measures, as necessary.

1. PROGRAM MANAGEMENT MEASURE PM-1 (Table 4-1 on Page 4-8, Table 4-4 on Page 4-22, and Page 4-59; and Appendix I)

Description: Aircraft Monitoring System. The purpose of Measure PM-1 is to implement upgrades to the Lambert Airport aircraft monitoring system. The current aircraft monitoring system at Lambert is an integrated system combining noise measurements and flight track surveying to assist airport and STL FAA ATCT personnel implement operational procedures and provide information to the public. This system needs additional software and hardware enhancements so Lambert staff can obtain flight tracking data and prepare reports in response to community questions. In addition, selected permanent noise

monitors should be relocated to sites that are closer to the existing 65 DNL noise exposure contour.

FAA Action: APPROVED.

2. PROGRAM MANAGEMENT MEASURE PM-2 (Table 4-1 on Page 4-8, Table 4-4 on Page 4-22, and Page 4-60; and Appendix I)

Description: Community Forum. The purpose of Measure PM-2 is for the St. Louis Airport Authority (STLAA) to reinstate a community outreach program through a Community Forum. As originally recommended and approved in the 1997 NCP, Measure PM-2 was for STLAA staff to convene regularly scheduled meetings with an Airport Neighborhood Committee. While this Committee process never fully materialized, staff continue to address community concerns about airport operations and aircraft noise by providing technical assistance to local jurisdictions for land use management measures as relates to aircraft noise, and providing community outreach through periodic news releases/newsletters and community meetings.

FAA Action: APPROVED. While Measure PM-2 would not specifically improve land use compatibility, it would provide a forum for the exchange of information and ideas regarding noise and other airport issues.

3. PROGRAM MANAGEMENT MEASURE PM-3 (Table 4-1 on Page 4-8, Table 4-4 on Page 4-22, and Page 4-61; and Appendix I)

Description: Noise Compatibility Program Update. The purpose of Measure PM-3 is for the St. Louis Airport Authority (STLAA) to update the Noise Exposure Maps (NEMs) or prepare an update to the Noise Compatibility Program when appropriate.

Over the course of the five-year Part 150 planning period, the NEMs are likely to become outdated and will need to be periodically updated. The NEMs should be updated every five years or when there are significant changes in operating levels and patterns. In addition, the NEMs should be updated in accordance with the FAA's guidelines for determining what constitutes a potentially significant increase in operations (17 percent increase in the area impacted by 65+ DNL).

The NCP should be updated every five years, or as necessary, to reflect any broader changes in the nature of aircraft noise surrounding the airport. Should any on-airport development, such as runway realignments or significant modifications to ground facilities, enlarge the area of incompatible use exposed to aircraft noise above 65 Day-Night Average Sound Level (DNL), the NCP should be updated prior to the implementation of those improvements. A full update may not be required, but rather, a targeted assessment of the changes occasioned by specific development projects may suffice to bring the NCP to conformity and to qualify additional areas for NCP programs, if appropriate.

FAA Action: APPROVED. Measure PM-3 provides for continuing planning and care in assuring the greatest compatibility between the airport and its environs.