



Memorandum

U.S. Department of
Transportation

Office of the Secretary
Of Transportation

Office of Inspector General

Subject: ACTION: Report on Audit of the Airport Noise
Compatibility Program
AV-2001-012

Date: December 14, 2000

From: Alexis M. Stefani 
Assistant Inspector General for Auditing

Reply to
Attn of: JA-10

To: Federal Aviation Administrator

Introduction

This report presents the results of our audit of the Federal Aviation Administration's (FAA) Airport Noise Compatibility Program. The goal of the Noise Compatibility Program is to reduce existing noncompatible¹ land uses around airports and to prevent the introduction of additional noncompatible land uses. We met with your staff to discuss our results, and their comments were incorporated into this report where appropriate.

The General Accounting Office (GAO) issued a report on "FAA's Role in Major Airport Noise Programs" in April 2000. The report addressed types of projects eligible for FAA noise grants, methods for measuring aircraft noise, noise standards for commercial aircraft, and FAA's Land Use Planning Initiative. The GAO report provides an overview of noise issues affecting airports and complements our report. GAO made no recommendations to FAA.

Objective and Scope

The objective of our audit was to determine if Airport Improvement Program funds were used for the highest priority Noise Compatibility Program projects. Exhibit A describes the scope of our review and the methodology we used to conduct the audit. Exhibit B discusses FAA's environmental goals in the Department of Transportation's Performance Plan for fiscal year 2000.

¹ Noncompatible land use is use that FAA has determined is not suitable at a location based on aircraft noise levels.

Background

The continued growth in air travel will require airport and air traffic control officials to find ways to increase capacity through building new or expanding existing runways and redesigning the Nation's airspace. These capacity increases may increase noise around the airport, and airports must take measures to mitigate noise resulting from new construction. Accordingly, with the need to meet growing capacity demands, maintain current facilities and mitigate noise associated with both current and new projects, FAA must ensure that Airport Improvement Program grants are awarded to projects with the highest need.

Federal Aviation Regulations Part 150 established FAA's Noise Compatibility Program. Under its Noise Compatibility Program, FAA awards Airport Improvement Program grants to airports to acquire land and sound-insulate homes and public buildings in areas already exposed to significant aircraft noise. FAA considers yearly day-night average sound levels of 65 decibels² and above to be significant. Under the Airport Improvement Program, FAA also provides airport system capacity grants to mitigate noise associated with airfield construction, such as a new runway.

FAA's Noise Compatibility Program is a voluntary program open to both commercial service and general aviation airports. As of September 30, 2000, 247 airports participated in the Noise Compatibility Program. FAA awarded noise grants of \$212 million in fiscal year 1998, \$241 million in fiscal year 1999, and \$212 million in fiscal year 2000. Under the Wendell H. Ford Aviation Investment and Reform Act for the 21st Century (AIR-21) the authorized funding level for noise compatibility grants increases to \$313 million in fiscal year 2001. Also, under AIR-21 the percentage of total Airport Improvement Program funds set aside for noise projects increases from 31 to 34 percent. FAA funds 80 percent of the cost of noise projects for large airports and 90 percent of the cost for small airports, with the local airport sponsor providing the remaining share.

Results-in-Brief

FAA awards grants for noise compatibility projects based on a national priority system. FAA's priority system assigns points to noise projects (land acquisition, sound insulation, and planning) based on such factors as airport size, severity of noise, and type of project. Those projects with the highest numerical ranking receive first consideration for funding. The intent of FAA's national priority

² A decibel is a measure of the intensity of sound heard by the human ear.

system is to provide a framework for ensuring that the most critical noise project needs are met nationwide and assist airports in addressing local mitigation needs.

AIR-21 increased Airport Improvement Program funding set aside for noise projects, but according to FAA officials, needs still exceed available funding. FAA's National Plan of Integrated Airport Systems (NPIAS) identified \$1.7 billion in noise projects eligible for grant funds at U. S. airports from 2000 through 2010. FAA considers this figure to be a partial estimate of total funding needs for noise mitigation since additional new projects will be identified over the ensuing years. Noise projects represent about 5 percent of the total infrastructure development costs at airports identified in the NPIAS. There are also limited grant funds for airport capacity projects like new runways and projects to reduce noise associated with new runways. With limited funding available, it is critical that FAA fund noise projects that provide the most benefit nationwide.

FAA's national priority system for awarding grants provided a systematic approach to evaluating the merits of noise projects. However, the system was not achieving its full benefits, and limited grant funds were not used for only the highest priority noise projects. Specifically, we found:

- FAA awarded grants to airports with old noise exposure maps that did not reflect current noise levels at the airports. Due to the introduction of quieter aircraft, four of the five airports we visited had sizable reductions over the past decade in areas exposed to significant noise. These reductions ranged from 25 to 62 percent at the four airports. At the time of our visits, two of the four airports had not updated their noise exposure maps to reflect current conditions.

In total, 19 of the Nation's largest airports with active noise programs have not updated their maps to reflect reductions in noise levels from the transition to quieter aircraft. As a result, FAA is at risk of funding projects in areas that are no longer significantly affected by noise, while not funding projects in areas that are significantly affected. The NPIAS shows that these airports will need \$159 million in Airport Improvement Program grant funds for noise projects in the next 5 years (2001 through 2005). In fiscal year 2001, the airports will need \$48 million in noise grant funds. Accordingly, FAA could put up to \$48 million to better use this fiscal year at airports with updated noise exposure maps. FAA should require that airports with substantial reductions in noise exposure update their maps prior to receiving additional noise grants.

- FAA awarded new noise grants to two airports even though the airports were not disposing of unneeded land previously purchased with noise grants. FAA orders and grant assurances require airports to dispose of land acquired with noise grants when the land is no longer needed for noise purposes or airport expansion. The unneeded land is to be sold for compatible uses (such as industrial or commercial development) and the proceeds used for other noise projects at the airport, thereby reducing the need for additional Federal grant funds. FAA should enforce its orders and grant assurances by requiring the two airports to dispose of the unneeded land prior to receiving new noise grants.
- FAA awarded new grants to local jurisdictions at one airport that had not spent funds from previous grants. In 1999, one jurisdiction received \$17.3 million in grant funds to sound-insulate homes, although \$14.6 million received in fiscal years 1996 and 1998 for the same purpose had not been spent. FAA should not provide additional grant funds to these jurisdictions until adequate progress has been made in spending funds already received.
- FAA awarded \$328,000 in grant funds to one airport for ineligible noise projects. The homes were not within the noise impacted areas on the FAA-accepted noise exposure map. FAA staff did not check the map to ensure the property was within the area eligible for grant funds. FAA needs to recover the \$328,000 expended for the ineligible projects.

Findings and Recommendations

FAA Should Require Airports to Update Old Noise Exposure Maps

Noise exposure maps prepared by airports and accepted by FAA identify noise projects eligible for Airport Improvement Program grants. FAA's Noise Compatibility Program regulations require that noise exposure maps be updated when there is a substantial increase in aircraft noise levels around the airport. *However, the regulations do not require airports to revise their noise exposure maps when there is a decrease in aircraft noise.*

The Airport Noise and Capacity Act of 1990, as implemented by Federal Aviation Regulations Part 91, required the phase-out of older aircraft (referred to as Stage 2 aircraft) and the introduction of newer and quieter aircraft (referred to as Stage 3 aircraft). The transition to Stage 3 aircraft was completed December 31, 1999. Approximately 3,000 Stage 2 aircraft were removed from service or modified to meet Stage 3 noise levels. The principal benefit of quieter

aircraft was a reduction in the number of people significantly impacted by aircraft noise. FAA estimated in its fiscal year 2000 Performance Plan that the number of people exposed to significant aircraft noise would decrease from a 1995 baseline figure of 1.7 million to about 600,000 by the end of 2000 as a result of quieter aircraft.

For a number of years, FAA has been aware that new regulations were needed to require airports to submit updated noise exposure maps to reflect shrinking noise contours as a result of the transition to Stage 3 aircraft. In a September 1994 letter to the Office of Inspector General, FAA’s Assistant Administrator for Budget and Accounting stated: “Existing noise contours are going to shrink dramatically over the next 6 years with the transition to Stage 3 aircraft, resulting in more and more land being outside of significant airport noise impact areas.” Also, in Annual Reports to Congress on Accomplishments Under the Airport Improvement Program dating back to 1994, FAA has stated that revised Part 150 Noise Compatibility Program regulations will require airports to take into account the effect of quieter aircraft on noise levels around airports. Yet, FAA has not issued the revised regulation or taken action to require that airports update their noise exposure maps when noise levels decreased.

At 4 of 5 airports visited (Cleveland-Hopkins, Lambert-St. Louis, Los Angeles, and Memphis International Airports), the areas around the airports exposed to significant aircraft noise substantially decreased in the 1990’s due to the phase-out of Stage 2 aircraft and the introduction of Stage 3 aircraft by commercial airlines. The following table shows the effect of quieter aircraft on airport noise.

Changes in Area Exposed to Significant Aircraft Noise at Airports Visited

Airport	Old Maps	Acres Exposed to Significant Noise	Most Recent Maps	Acres Exposed to Significant Noise	Percentage Change
Cleveland-Hopkins	1981	10,880	1999	6,400	-41%
Indianapolis*	1987	11,059	1997	10,944	-1%
Lambert-St. Louis	1986	19,462	1999	7,398	-62%
Los Angeles	1987	2,769	1998	2,068	-25%
Memphis	1985	20,670	1997	12,800	-38%

*Reductions in noise levels at Indianapolis International Airport from Stage 3 aircraft were offset by major expansion of Federal Express and U.S. Postal Service cargo operations in the early 1990’s and construction of a new primary runway in the mid-1990s.

Two of the airports visited, Cleveland-Hopkins and Los Angeles International Airports, had not submitted updated noise exposure maps for the Noise Compatibility Program. The FAA-accepted noise map³ for Cleveland-Hopkins depicted noise in 1981 and the map for Los Angeles depicted noise in 1987. If updated maps were submitted to FAA, the areas around Cleveland-Hopkins and Los Angeles International Airports eligible for grant funds would be substantially reduced.

Cleveland-Hopkins International Airport. The 1981 FAA-accepted noise exposure map for Cleveland-Hopkins International Airport showed 10,880 acres of land around the Airport significantly impacted by noise. However, a 1999 map, included in an environmental assessment for a new runway, showed 6,400 acres of land significantly impacted by noise. This newer map was not submitted to FAA for use in the Noise Compatibility Program.

At the time of our audit, the 4,480 acres of land no longer exposed to significant noise (10,880 acres less 6,400 acres) would not have been eligible for grant funds if the updated 1999 map was submitted to FAA. Approximately 1,400 housing units are situated on the 4,480 acres. As of June 1, 2000, Cleveland-Hopkins International Airport spent approximately \$753,000 in Airport Improvement Program funds to sound-insulate 38 of the houses not in the 1999 noise contour.

During our visit, FAA officials told us that Cleveland-Hopkins International Airport was in the process of updating its 1981 noise exposure map. Subsequent to our visit, FAA accepted an updated map in February 2000. In August 2000, FAA approved a revised noise compatibility program for Cleveland-Hopkins International Airport, using the February map. However, the Cleveland-Hopkins International Airport's revised program allows noise mitigation in residential areas to the 60-decibel level instead of the standard 65-decibel level. In other words, FAA accepted a noise program, which expanded the area eligible for noise grants. This expansion of areas eligible for funding (60-decibel level) is offsetting the shrinkage in the Airport's noise contour from quieter aircraft. As a result, the majority of the 1,400 housing units are still eligible for grant funds. By FAA's own standards the houses are not significantly impacted by noise; however, the Noise Compatibility Program allows FAA to approve airport programs that include areas outside the 65-decibel level based on local requirements or determinations. Once in an airport's approved noise program, a project (i.e., soundproofing a house) is eligible for grant funding. We did not evaluate the impact of this decision on FAA's national priority system, but it

³ Airports also prepare noise exposure maps for other purposes such as updated airport layout plans and major airfield construction projects. These maps are not submitted to FAA for the Noise Compatibility Program.

could create an uneven playing field and raises questions as to whether noise grants are being awarded to the best projects.

Los Angeles International Airport. The 1987 FAA-accepted noise exposure map for Los Angeles International Airport showed 2,769 acres of land being significantly impacted by noise. However, a 1998 map, prepared as part of an airport master plan update, showed 2,068 acres of land significantly impacted by noise. The newer map was not submitted to FAA for the Noise Compatibility Program.

Information was not readily available at the Airport sponsor's office on the actual number of housing units that would no longer be eligible for noise grant funds if the Airport submitted an updated noise exposure map to FAA. FAA did not require airport sponsors to develop this information. However, the reductions would be substantial because of the size of the area no longer significantly impacted by noise and the high population density around the Airport.

Other Airports With Old Maps. Other airports around the Nation have FAA-accepted noise exposure maps that do not reflect reductions in noise levels from the transition to Stage 3 aircraft. Fifty-one of the 250 largest airports have FAA-accepted noise exposure maps depicting noise levels prior to the 1995 baseline. The NPIAS identified \$191 million in noise projects eligible for noise compatibility grants at 19 of the airports⁴ during 2001 through 2005. The Federal share for these projects is \$159 million. (See exhibit C for a list of the 19 airports.)

As stated earlier in this report, there was a large reduction (as much as 62 percent) in the area exposed to significant noise due to quieter aircraft at four of the five airports we visited. It is therefore reasonable to expect that quieter aircraft have also reduced the area impacted by significant noise at the 19 airports with old maps and active noise compatibility programs. In our view, many areas at these airports would not be eligible for noise grants if noise exposure maps were updated to reflect the transition to quieter aircraft.

For fiscal year 2001, these airports estimate they will need \$58 million (\$48 million Federal share) for noise projects. However, without updated maps, FAA does not know whether it is using its limited resources to only mitigate areas significantly impacted by noise. Accordingly, FAA could put up to \$48 million to better use in this fiscal year at airports with current noise exposure maps. The 19 airports received about \$179 million in noise grants during

⁴ The other 32 airports with old maps did not have active noise compatibility programs.

fiscal years 1996 through 2000. FAA should therefore require the 19 airports to update their noise exposure maps prior to awarding additional noise grants.

A draft notice of proposed rulemaking for the Noise Compatibility Program prepared by FAA in 1999 includes a requirement for airports to revise their noise exposure maps when there is a substantial reduction in noise around the airports. However, a senior official in FAA's Office of Environment and Energy told us that no date has been set for releasing the draft regulation for public comment.

Information is readily available to airports to update their noise exposure maps. Airports routinely produce new maps as part of a revised airport master plan and/or an environmental impact study for new airport construction. By requiring updated maps, FAA will prevent grant funds from being used in areas around airports that are no longer significantly impacted by aircraft noise. These funds can be used for higher priority noise projects in more significantly impacted areas. Since noise mitigation is a key factor in airport expansion and other capacity initiatives such as redesigning airspace around airports, it is important that the highest priority noise projects be funded.

FAA Awarded New Noise Grants to Memphis and Lambert-St. Louis International Airports Even Though the Airports Had Not Disposed of Unneeded Land Previously Purchased With Noise Grants

The Airport Improvement Program Handbook and Noise Compatibility Program guidance require that airports dispose of land acquired with noise grants when the land is no longer needed for noise purposes or airport expansion. The land is to be sold for compatible uses (such as industrial or commercial development), and the proceeds are to be used for other noise projects, thereby reducing the need for grant funds. Also, Grant Assurance Number 31⁵ states that airports will dispose of land purchased under a noise grant at the earliest practical time when the land is no longer needed. If an airport does not dispose of unneeded land, it is in noncompliance with grant assurances, and FAA can withhold future grant funds until the land is sold.

Memphis and Lambert-St. Louis International Airports did not dispose of land purchased with noise grants although the land was no longer needed for noise purposes or airport expansion. Memphis International Airport acquired 1,305 parcels of land between 1988 and August 1999 under its Noise Compatibility Program. The Airport spent \$106 million for the acquisitions, which included \$87 million in Airport Improvement Program funds. In

⁵ As required by law, airport sponsors must agree to comply with specific Federal regulations and policies in order to receive airport improvement grants. These assurances are part of the grant agreement signed by FAA and the airport sponsor.

June 2000, Airport officials told us that they estimate that about 640 of the 1,305 parcels were no longer needed for noise or expansion, and the property could be sold. Airport officials have known that they should dispose of the land since a December 1996 GAO report on Aircraft Noise at Memphis International Airport commented on the delays in disposing of unneeded land acquired for noise compatibility purposes.

Lambert-St. Louis International Airport acquired about 3,400 parcels of land between 1987 and 1998 for noise purposes, using \$144 million in Airport Improvement Program grant funds. Based on Airport records, about 2,500 parcels north and east of the Airport were not needed for noise compatibility purposes or planned Airport expansion and therefore could be sold. The Airport's Program Executive for Planning and Development told us that no action had been taken by the Airport to dispose of land because of uncertainty in the location of a new runway. However, the location of the new runway west of the Airport (referred to as W-1W) was decided in September 1998 when FAA issued a Record of Decision. As of June 2000, none of the land north and east of the Airport had been sold. FAA officials said that the Airport has delayed action on disposing of land because of lawsuits affecting the new runway.

The value of land to be disposed of at Memphis and Lambert-St. Louis International Airports has not yet been determined by the Airports. However, the proceeds from sale of unneeded land at Memphis and Lambert-St. Louis International Airports can fund other noise projects at the Airports and reduce future needs for grant funds at these airports. FAA's National Plan of Integrated Airport Systems shows \$37 million in projects at Memphis International Airport and \$113 million in projects at Lambert-St. Louis International Airport eligible for noise grants during 2000 through 2010. FAA should therefore require that Memphis and Lambert-St. Louis International Airports dispose of unneeded land as a condition for receiving new grants.

FAA Awarded New Grants Even Though Funds From Previous Grants Were Unspent

FAA awarded noise grants to local jurisdictions near Los Angeles International Airport, even though the jurisdictions were not spending the funds in a timely manner. We did not identify similar situations at any of the other airports visited.

FAA published guidance on factors affecting the award of Airport Improvement Program grants in a Federal Register notice dated June 9, 1999. The guidance listed factors that weigh against the award of new grants. These factors include

the grantee's inability to begin or complete work under an approved grant in a timely manner and the grantee having several open and uncompleted grants. The purpose of the guidance was to reinforce FAA's policy that grant funds should not remain idle after being obligated.

FAA did not adhere to its guidance when awarding grants to jurisdictions near Los Angeles International Airport. As of July 2000, the cities of Los Angeles, El Segundo, and Inglewood and the County of Los Angeles received \$74.3 million in Airport Improvement Program grants for noise projects in fiscal years 1992 through 2000, but had spent only \$19.8 million of the funds (27 percent). For example, in September 1999, the City of Inglewood received \$17.3 million in Airport Improvement Program grant funds for sound insulation of homes. However, \$14.6 million received in fiscal years 1996 and 1998 for the same purpose had not been spent. As a result, the expected benefits from the grants were not being achieved, and the grant funds should have been used for other priority noise projects.

While jurisdictions around Los Angeles International Airport were not using their grant funds, Indianapolis International Airport was spending its own funds to complete noise projects, while waiting for additional grant funds as reimbursement. We found that Indianapolis International Airport spent \$27.4 million of its own funds, from 1990 to 1998, for property acquisition that was eligible for noise grants. Indianapolis International Airport had not received reimbursement because Airport Improvement Program funds were not sufficient to meet all needs nationwide.

FAA Awarded Grant Funds for Ineligible Noise Projects

FAA awarded grants to Cleveland-Hopkins International Airport for ineligible noise projects. Cleveland-Hopkins International Airport used \$722,000 in noise grant funds to sound-insulate 34 residences outside noise impacted areas on the 1981 FAA-accepted noise exposure map. The Airport selected properties for sound insulation using a map prepared in 1990 at the start of the Airport's sound insulation program. This map incorporated an area east of the Airport that was outside the noise contour on the FAA-accepted map at the time. FAA did not check the locations of dwellings designated for sound insulation to ensure the property was eligible for grant funds. As a result, grant funds were used for ineligible noise mitigation at Cleveland-Hopkins International Airport.

As previously stated, FAA approved a revised Noise Compatibility Program for Cleveland-Hopkins International Airport in August 2000. Based on this revised program, 13 residences sound-insulated with \$328,000 in grant funds would still be ineligible.

Officials in FAA's Detroit Airport District Office told us they were not aware Cleveland-Hopkins International Airport was not using the FAA-accepted map for its sound insulation program. Further, the officials did not review the parcel locations to ensure the property was eligible for grant funds.

Recommendations

We recommend that FAA:

1. Require that airports with substantial reductions in noise submit updated noise exposure maps to FAA prior to receiving noise grants, thereby ensuring an estimated \$48 million in Airport Improvement Program noise funds are put to better use.
2. Publish revised Part 150 regulations requiring airports to submit updated noise exposure maps whenever noise levels substantially decrease.
3. Require that Memphis and Lambert-St. Louis International Airports develop and implement plans for disposing of unneeded land acquired under their noise compatibility programs prior to awarding these airports new grants.
4. Delay awarding grants to jurisdictions at Los Angeles International Airport until the jurisdictions have made adequate progress in spending available grant funds.
5. Recover \$328,000 in grant funds expended for ineligible projects at Cleveland-Hopkins International Airport.

Management Position

We discussed the report with FAA officials in the Office of Airport Planning and Programming. Comments by the officials were considered in preparing this report. FAA officials agreed that updated noise exposure maps would ensure that limited Airport Improvement Program grant funds are used in the most severely noise impacted areas. They also agreed that airports should dispose of unneeded property acquired with noise grants but stated that legal challenges to expansion at Lambert-St. Louis International Airport have prevented timely disposal.

Action Required

In accordance with Department of Transportation Order 8000.1C, please provide your written comments to this report within 30 days. Please indicate concurrence or nonconcurrence with each recommendation. For concurrence, indicate the actions taken or planned, and estimated completion dates. For nonconcurrence, we would appreciate an explanation of your position. Please feel free to propose alternative courses of action to correct the finding in an effective manner. For the recommendations with dollar amounts, we request that you indicate your agreement or disagreement with the amount.

We appreciate the courtesies and cooperation of FAA officials during the audit. If I can answer any questions or be of further assistance, please contact me at (202) 366-1992, or David A. Dobbs, Deputy Assistant Inspector General for Aviation, at (202) 366-0500.

cc: Carl E. Burleson, AOA-2
Donna R. McLean, ABA-1
Ronald L. Page, ABU-100

Audit Methodology and Scope

We conducted the audit in accordance with Government Auditing Standards prescribed by the Comptroller General of the United States and included such tests as were considered necessary under the circumstances. We designed the audit steps to provide reasonable assurance of detecting abuse or illegal acts.

The audit was performed during May through October 1999 at FAA's Office of Airport Planning and Programming and Office of Environment and Energy in Washington, DC; four Regional Airport Division Offices; and four Airport District Offices. Pertinent information was updated through September 2000. We visited Los Angeles, Lambert-St. Louis, Memphis, Indianapolis, and Cleveland-Hopkins International Airports. These airports were judgmentally selected because they had large noise compatibility programs. They received a total of \$76.5 million in Airport Improvement Program funds in fiscal years 1998 and 1999 for noise compatibility projects.

We reviewed FAA policies and procedures for administering the Noise Compatibility Program. At the airports visited, we obtained data on Airport Improvement Program grants for noise projects and reviewed the airports' noise compatibility programs and noise exposure maps. We also toured the areas around the airports exposed to significant aircraft noise to observe the extent of property acquisition and sound insulation projects.

During the audit we met with industry officials representing the Air Transport Association of America, Airports Council International-North America, and Wyle Laboratories. We also met with the Federal Interagency Committee on Aviation Noise. Additionally, we met with air traffic controllers at the airports we visited to discuss aircraft noise reduction measures implemented at the airports.

As part of the audit we reviewed FAA's implementation of its April 3, 1998 final policy on Use of Federal Grants for Noise Projects. The policy provided that FAA would no longer approve grants to mitigate noise for new noncompatible development around airports occurring after October 1, 1998. None of the airports we visited applied for noise grants for noncompatible development occurring after October 1, 1998. We therefore curtailed our review in this area.

The Office of Inspector General has not conducted prior audits of the Airport Noise Compatibility Program during the past 5 years.

Government Performance and Results Act

As part of our continuing coverage of the Department of Transportation's conformance with the Government Performance and Results Act of 1993, we reviewed FAA's portion of the Department's Performance Plan related to environmental programs. One environmental goal stated in FAA's fiscal year 2000 Performance Plan was to reduce the number of people exposed to significant aircraft noise from a 1995 baseline of 1.7 million to 600,000 at the end of fiscal year 2000. The goal was based on the expected benefits from the transition to quieter aircraft operating at commercial airports in the United States. No specific goal was established to measure benefits from the Noise Compatibility Program.

**Airports with Old Noise Exposure Maps⁶
and Active Noise Programs in 2001 through 2005**

1. William B. Hartsfield International Airport (Atlanta, Georgia)
2. Birmingham International Airport (Alabama)
3. Burlington International Airport (Vermont)
4. Central Illinois Regional Airport (Bloomington, Illinois)
5. Fresno Yosemite International Airport (California)
6. Greater Peoria Regional Airport (Illinois)
7. Honolulu International Airport (Hawaii)
8. Huntsville International Airport (Alabama)
9. Los Angeles International Airport (California)
10. Mobile Regional Airport (Alabama)
11. New Orleans International Airport (Louisiana)
12. Metropolitan Oakland International Airport (California)
13. Ontario International Airport (California)
14. San Diego International Airport (California)
15. San Jose International Airport (California)
16. Syracuse-Hancock International Airport (New York)
17. Toledo Express Airport (Ohio)
18. Tucson International Airport (Arizona)
19. Will Rogers World Airport (Oklahoma City, Oklahoma)

⁶ Maps depicting airport noise contours in 1995 and earlier.