



What is AICUZ?

The Air Installation Compatible Use Zone (AICUZ) Program concerns people and their comfort, safety, and protection. This pamphlet briefly summarizes the 2009 *Air Installation Compatible Use Zone Study for Scott Air Force Base*—an analysis of the effects of aircraft noise, accident potential, land use compatibility, and planning guidelines for adjacent development for present and future neighbors of Scott Air Force Base (AFB). As shown on **Figure 1**, MidAmerica St. Louis Airport is collocated with Scott AFB and shares airfield facilities under a joint-use agreement. Therefore, in the 2009 AICUZ Study, the entire airfield complex is referred to as Scott AFB/MidAmerica Airport.

Is there a problem?

Military airfields attract development to adjacent areas. In the absence of controls to ensure compatible land use, inappropriate uses may be made of property near or adjacent to an installation that may eventually cause conflicts between flight operations and surrounding landowners. Because land close to Scott AFB is subject to aircraft noise and the potential for aircraft accidents, certain types of development are not suitable.

What has been done?

Scott AFB strives to be a good neighbor by voluntarily restricting flying activities that could adversely affect the surrounding area. For example, training operations are normally conducted between the hours of 7:00 a.m. and 10:00 p.m. Practice approach and departure operations are normally conducted during the day when expected noise disruptions are less than they would be during the night. Flight pattern altitudes and the runway approach angles have been adjusted over the years in an effort to reduce noise impacts while maintaining safe operations. In addition, St. Clair County has established an Airport Overlay Zone to limit development near the runway approaches to the airfield. Continued cooperation between Scott AFB, local governments, and the local populace will further reduce potential land use conflicts.

What are the benefits?

In addition to protecting public safety and health, primary benefits of incorporating AICUZ guidelines include protecting the taxpayer's investment in national defense provided by Scott AFB and protecting economic benefits to the neighboring communities generated by installation activities and employment. The local economy benefits from Scott AFB expenditures for salaries, contracts, construction, retirement pay, Impact Aid to schools, health insurance payments, and off-base accommodations for travelers. Scott AFB employs 13,249 people, which includes Active-Duty, Reserve, and Guard members; civilians; and contractors, with a collective \$737,927,706 annual payroll. Scott AFB also supports 23,000 retirees. As the third largest employer in the St. Louis area, Scott AFB has a \$1.6 billion economic impact in this region.

Why AICUZ now?

The 2009 AICUZ Study addresses the changes that have occurred since the last AICUZ Study in 2001. Differences between the 2001 AICUZ Study and the 2009 AICUZ Study are attributable to the following:

- Changes in assigned and transient aircraft operations and flight profiles since the 2001 AICUZ Study
- The implementation of the 2005 Base Realignment and Closure actions at Scott AFB
- Modifications to the Department of Defense- (DOD) approved NOISEMAP software program made subsequent to the release of the 2001 AICUZ Study.

The area surrounding Scott AFB continues to experience growth. Information provided in the 2009 AICUZ Study is intended to offer assistance to those planning the future of the neighboring communities. By using the information provided in the AICUZ Study, neighboring communities are better equipped to make land use decisions and adopt land use controls that are compatible with the missions at Scott AFB.

What does AICUZ mean to me?

The purpose of the AICUZ Program is to protect public safety and health, as well as the national defense mission of the U.S. Air Force (USAF). The AICUZ Program consists of many factors including: day-night average sound level (DNL) metric, aircraft flight paths and altitudes, and accident potential zones (APZs). The civilian Runway Protection Zones (RPZs) at MidAmerica Airport are comparable to a military clear zone (CZ) and are established by the Federal Aviation Administration (FAA) to enhance the protection of people and property on the ground. Noise zones, APZs, and RPZs reflecting 2009 current conditions are displayed in **Figure 1**.

The AICUZ Program uses a DNL metric developed and approved in the early 1970s by the U.S. Environmental Protection Agency to describe the noise environment. The AICUZ Study contains noise zones plotted in increments of 5 A-weighted decibels (dBA), ranging from a DNL of 65 dBA up to 80+ dBA.

The APZs are based upon statistical analysis of past DOD aircraft accidents. APZs consists of a CZ, APZ I, and APZ II (see **Figure 1**). The CZ, the area closest to the runway end, is potentially the most hazardous. The overall risk is high enough that DOD generally acquires the land through purchase or easement to prevent development. APZ I is an area beyond the CZ that possesses a significant potential for accidents. APZ II is an area beyond APZ I having a lower, but still significant, potential for accidents. While the aircraft accident potential in APZs I and II does not warrant land acquisition by the USAF, land use planning and controls are strongly encouraged in these areas for the protection of the public. An additional constraint involves areas that the Federal Aviation Administration and DOD have identified for height limitations for structures. USAF obstruction criteria are based upon those contained in Federal Aviation Regulation Part 77, Subpart C, amended April 1971.

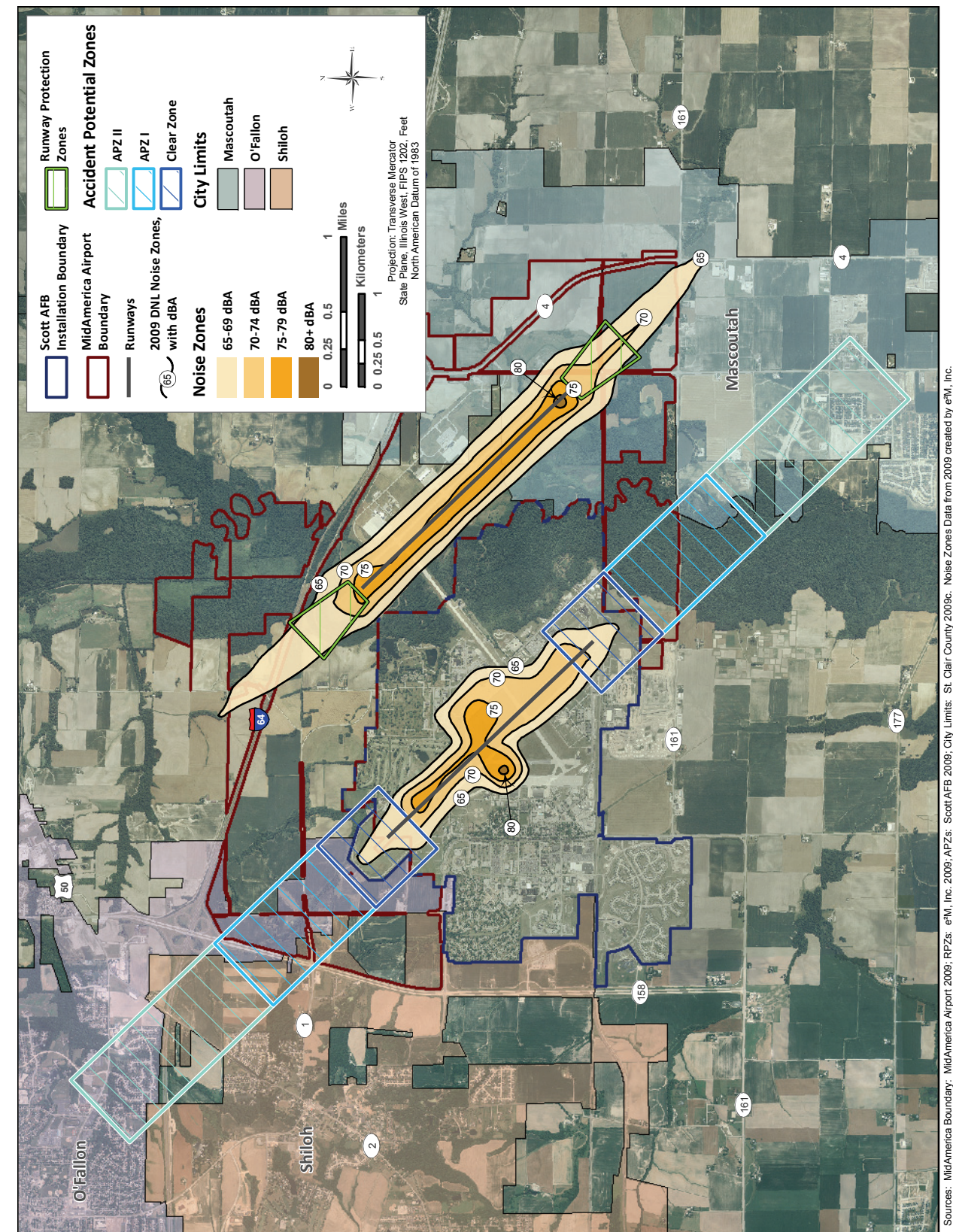


Figure 1. 2009 DNL Noise Zones and Safety Areas at Scott AFB/MidAmerica Airport



Table 1 provides a quick reference of compatible land uses within the various noise zones and APZs around Scott AFB. For additional details on the land use compatibility guidelines presented in this table, please refer to **Section 3** of the 2009 AICUZ Study for Scott AFB, which includes a more comprehensive summary of land use compatibility with respect to aircraft noise and accident potential.

How can I help?

Historically, the citizens in the communities surrounding Scott AFB have worked together with the USAF and local municipalities in cooperative efforts to plan land use to better serve the community and the installation. If Scott AFB's future is to be as bright as its past, continued involvement by the citizens from the surrounding communities is needed to ensure solutions best address mutual concerns. In brief, the following recommendations are contained in the 2009 AICUZ Study:

- (a) Continue to inform Scott AFB/MidAmerica Airport of planning and zoning actions that have the potential of affecting installation operations. Develop a working group representing city, village, county, and installation planners to meet, quarterly at a minimum, to discuss AICUZ concerns and major development proposals that could affect airfield operations.
- (b) Local governments should implement height and obstruction ordinances that reflect current USAF and 14 CFR Part 77 requirements.

- (c) The airport overlay zone regulations implemented by the local municipalities and St. Clair County should continue to be applied and enforced in order to regulate potential development within the AICUZ environs.
- (d) Several of the future land use and transportation projects discussed in the AICUZ Study include potential development within the Scott AFB/MidAmerica Airport noise zones and safety areas. If development is proposed within the noise zones, it is recommended that noise level reduction measures be incorporated into the design and construction of the structures. Development within the APZs might also be subject to restrictions depending on the type of development and the location. In addition, if the development is proposed within the RPZs, FAA land use and height restriction guidelines should be referenced.
- (e) Modify building codes to ensure that new construction within the AICUZ environs has the recommended noise level reductions incorporated into its design and construction.

Who prepared the AICUZ Study?

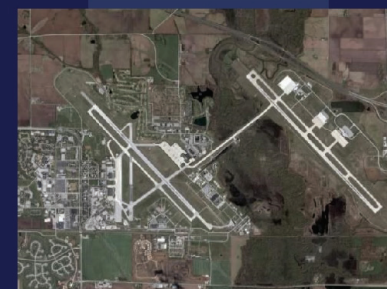
The AICUZ Study was developed by many people at Scott AFB under the guidance of Headquarters USAF, Headquarters Air Mobility Command, and the Air Force Center for Engineering and the Environment within the USAF. The complete AICUZ Study is available at the Scott AFB Public Affairs Office or by calling 618-256-4241.

Table 1. Land Use Compatibility Guidelines

General Land Use	Accident Potential Zones			DNL Noise Zones			
	CZ	APZ I	APZ II	65-69 dBA	70-74 dBA	75-79 dBA	80+ dBA
Residential	No	No	Yes ¹	No ¹⁰	No ¹⁰	No	No
Industrial	No	No ²	Yes ²	Yes	Yes ¹¹	Yes ¹¹	Yes ¹¹
Commercial	No	Yes ⁶	Yes ⁶	Yes	Yes ¹¹	Yes ¹¹	No
Public/Semi-Public Services	No	No	Yes ⁵	Yes ¹¹	Yes ¹¹	Yes ¹¹	No
Recreational	No	Yes ^{6,7,8}	Yes	Yes	Yes ¹¹	Yes ¹¹	No
Open Space/Low Density	Yes ⁹	Yes ⁹	Yes	Yes	Yes	Yes	Yes
Transportation (no structures)	Yes ³	Yes ⁴	Yes	Yes	Yes	Yes	Yes

For additional details on the land use compatibility guidelines presented in this table, please refer to the 2009 AICUZ Study for Scott AFB, which includes a more comprehensive summary of land use compatibility with respect to aircraft noise and accident potential.

- Notes:
1. Suggested maximum density of 1 to 2 dwelling units per acre, possibly increased under a Planned Unit Development where maximum lot coverage is less than 20 percent.
 2. Within each land use category, uses exist where further deliberating by local authorities could be needed due to the variation of densities in people and structures. Shopping malls and shopping centers are considered incompatible use in any accident potential zone (CZs, APZ I, or APZ II).
 3. The placement of structures, buildings, or aboveground utility lines in the CZs is subject to severe restrictions. In a majority of the CZs, these items are prohibited. See Air Force Instruction 32-7063, *Air Installation Compatible Use Zone Program*, and Unified Facilities Criteria 3-260-01, *Airfield and Heliport Planning and Design*, for specific guidance.
 4. No passenger terminals and no major aboveground transmission lines in APZ I.
 5. Low-intensity office uses only. Meeting places, auditoriums, and the like are not recommended.
 6. Facilities must be low-intensity.
 7. Clubhouse not recommended.
 8. Areas for gatherings of people are not recommended.
 9. Factors to be considered: labor intensity, structural coverage, explosive characteristics, and air pollution.
 10. Unless sound attenuation materials are installed.
 11. Measures to achieve noise level reduction need to be incorporated into the construction of the portions of these buildings where there are public facilities, office areas, or noise-sensitive areas.



CITIZEN'S BROCHURE for the Scott Air Force Base Air Installation Compatible Use Zone (AICUZ) Study

Headquarters Air Mobility Command



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