

**Air Installation Compatible
Land Use Zone**

**Beale Air Force Base
California
Citizen's Brochure**



What is AICUZ?

Air Installation Compatible Use Zone (AICUZ) is a program concerning people, their comfort, safety, and protection. This brochure briefly summarizes the AICUZ study - an extensive analysis of the effects of noise, aircraft accident potential, land use and development upon present and future neighbors of Beale Air Force Base. AICUZ seeks a cooperative understanding and a reasonable solution to this intricate issue.

What are the challenges?

Military airfields attract development to immediate surrounding areas. In the absence of compatible land use controls, certain uses of property near or adjacent to the installation may cause conflicts between flight operations and landowners. Because land close to Beale AFB is subject to high noise levels and aircraft accident potentials, certain types of development may not be suitable.

What has been done?

The AICUZ study was completed by the United States Air Force to promote land use development near Beale Air Force Base in a manner that will help protect the community from the noise and possible safety hazards associated with aircraft operations. This AICUZ Study for Beale Air Force Base is an update of the original AICUZ study dated May 1982. The update was initiated because of changes in aircraft types and numbers of operations at Beale AFB. It is a reevaluation of aircraft noise and accident potential related to Air Force flying operations. It is designed to aid in the development of local planning mechanisms which will protect the public safety and health, as well as preserve the operational capabilities of Beale AFB.

What are the benefits?

In addition to protecting the public safety and health, primary benefits include protecting the taxpayer's investment in national defense provided by Beale AFB and protecting economic benefits to the surrounding communities generated by base activities and employment. The local economy is enhanced by Beale AFB's expenditures for salaries, contracts, construction, retirement pay, tuition aid to schools, health insurance payments and off-base accommodations for travelers. Beale AFB employed over 9,000 people in fiscal year 2004 with an annual payroll of \$207 million. Furthermore, Beale AFB spent approximately \$145 million on construction and service, equipment and supply contracts. While shrinking budgets challenge the leadership at Beale AFB, the base continues to be a strong partner in the economic future of the region.

Why AICUZ now?

Land development in the vicinity of Beale AFB is ongoing and expected to accelerate. Modifications to flight operations at Beale AFB have resulted in changes to the noise contours. Information provided in the AICUZ report is intended to offer assistance to those planning the future of Yuba County and their communities. AICUZ is not the only planning tool that should be used when addressing land use around Beale AFB. However by using the updated AICUZ map and information provided in the AICUZ Study, neighboring communities are better equipped to make land use decisions and adopt land use controls which are compatible with Beale AFB, yet able to accommodate growth.

What does AICUZ mean to me?

AICUZ means protection of the public safety and health as well as protection of the Air Force's national defense mission. The AICUZ itself is a composite of many factors: average noise levels, accident potential and aircraft flight paths and altitudes. In the interest of preserving Beale's capability to accommodate future mission changes and growth and given that current mission noise contours are a snapshot in time, we have outlined contours based upon a hypothetical scenario. It is our hope that this information will be incorporated into your community plans, zoning ordinances, subdivision regulations, building codes and other related documents. Noise and accident potential zones reflecting current conditions and the hypothetical scenario are displayed on the contour maps shown on pages 5 & 6.

The numbers 65 dB through 80 dB indicate the average sound levels in decibels using the Community Noise Equivalent Level (CNEL) metric for describing the noise environment. CNEL is the energy-averaged sound level measured over 24 hours, with a 5 dB penalty applied to flights occurring between 7 p.m. and 10 p.m. and a 10 dB penalty applied to flights occurring between 10 p.m. to 7 a.m. to account for increased annoyance from evening and late night noise.

The clear zones and accident potential zones (APZs) are based upon statistical analysis of past DOD aircraft accidents. The clear zone, the area closest to the runway end, is the most hazardous. The overall risk is so high that DOD generally acquires the land through purchase or easement to prevent development. APZ I is an area beyond the clear zone 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 aircraft accident potential in APZs I and II does not warrant acquisition by the Air Force, land use planning and controls are strongly encouraged in these areas for the protection of the public. An additional constraint involves areas which the Federal Aviation Administration (FAA) and DOD have identified for height limitations. Air Force obstruction criteria are based upon those contained in Federal Aviation Regulation Part 77, Subpart C. The accompanying generalized land use charts and AICUZ map provide a quick reference to the various noise and accident potential zones around Beale AFB. More detailed information can be found in the Beale AFB 2005 AICUZ Study, Volume I.

COMPATIBILITY CHART* LAND USE/AIRCRAFT NOISE

CNEL NOISE CONTOURS

Generalized Land Use	65-69 dB	70-74 dB	75-79 dB	80+ dB
Residential	No ¹	No ¹	No	No
Manufacturing	Yes	Yes	Yes	Yes
Transportation, Communications, and Utilities	Yes	Yes	Yes	No
Trade, Business and Offices	Yes	Yes	Yes	No
Shopping Districts	Yes	Yes	Yes	No
Public and Quasi-Public Service	Yes	No ¹	No ¹	No
Recreation	Yes	Yes	No	No
Public Assembly	Yes	No	No	No
Agriculture and Mining	Yes	Yes	Yes	Yes

¹Unless sound attenuation materials are installed.

*This chart is for general information. Refer to Volume I, Figure 8 for specific land uses and guidelines.

COMPATIBILITY CHART*
LAND USE/ACCIDENT POTENTIAL ZONES

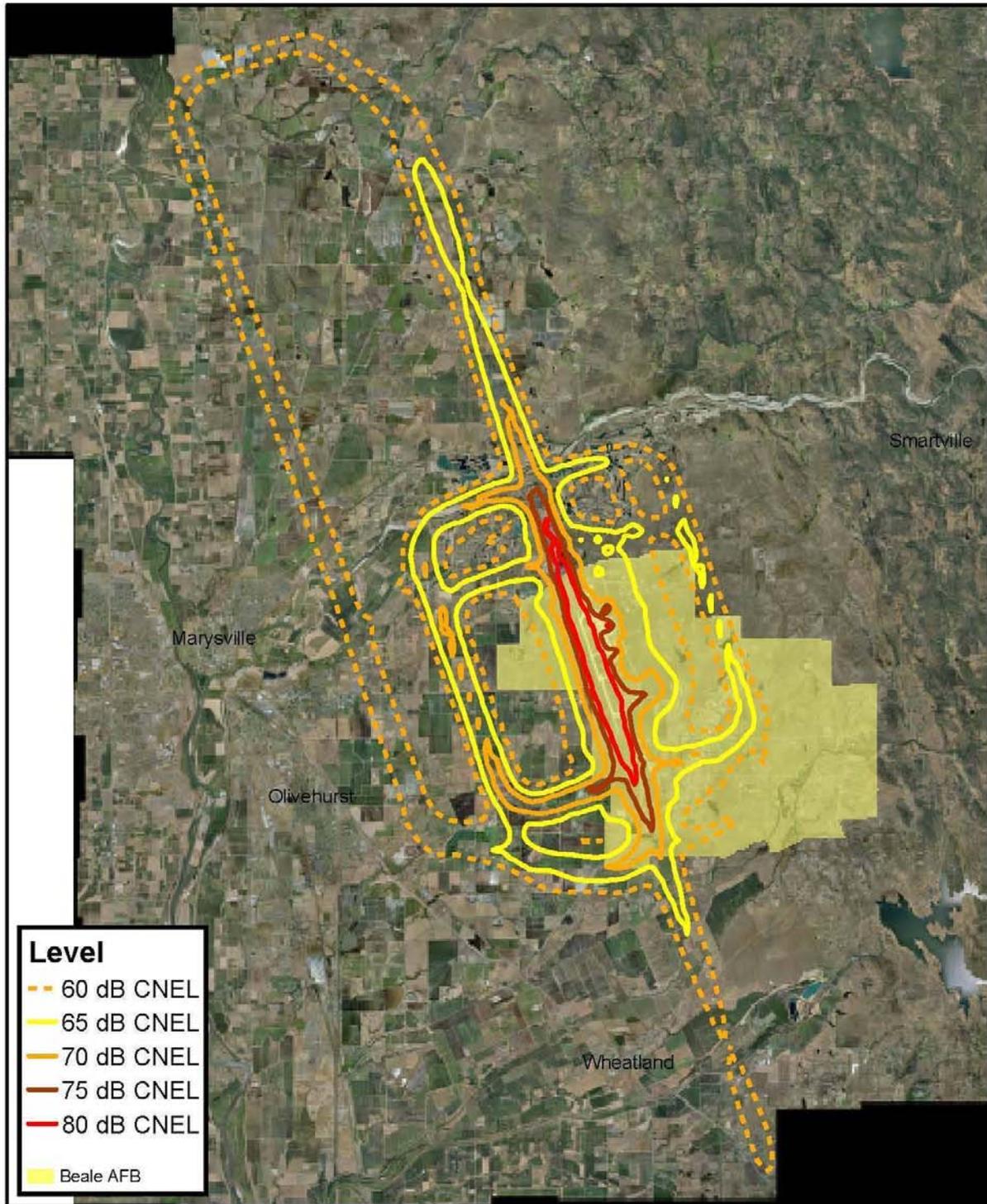
Generalized Land Use	ACCIDENT POTENTIAL ZONES		
	Clear Zone	APZ I	APZ II
Residential	No	No	Yes ¹
Manufacturing	No	Yes ²	Yes ²
Transportation, Communications and Utilities	No	Yes ²	Yes ²
Trade, Business and Offices	No	Yes ²	Yes ²
Shopping Districts	No	No	Yes ²
Public and Quasi-Public Service	No	No	Yes ²
Recreation	No	Yes ²	Yes ²
Public Assembly	No	No	No
Agriculture and Mining	No ³	Yes ²	Yes ²

¹Suggested maximum density 1 dwelling unit per acre.

²Only limited low-density, low-intensity uses recommended.

³Except limited agricultural uses are permitted.

*This chart is for general information. Refer to Volume I, Figure 8 for specific land uses and guidelines.



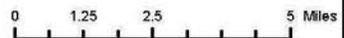
Level	
--- (dashed orange)	60 dB CNEL
— (solid yellow)	65 dB CNEL
— (solid orange)	70 dB CNEL
— (solid brown)	75 dB CNEL
— (solid red)	80 dB CNEL
■ (yellow shaded)	Beale AFB

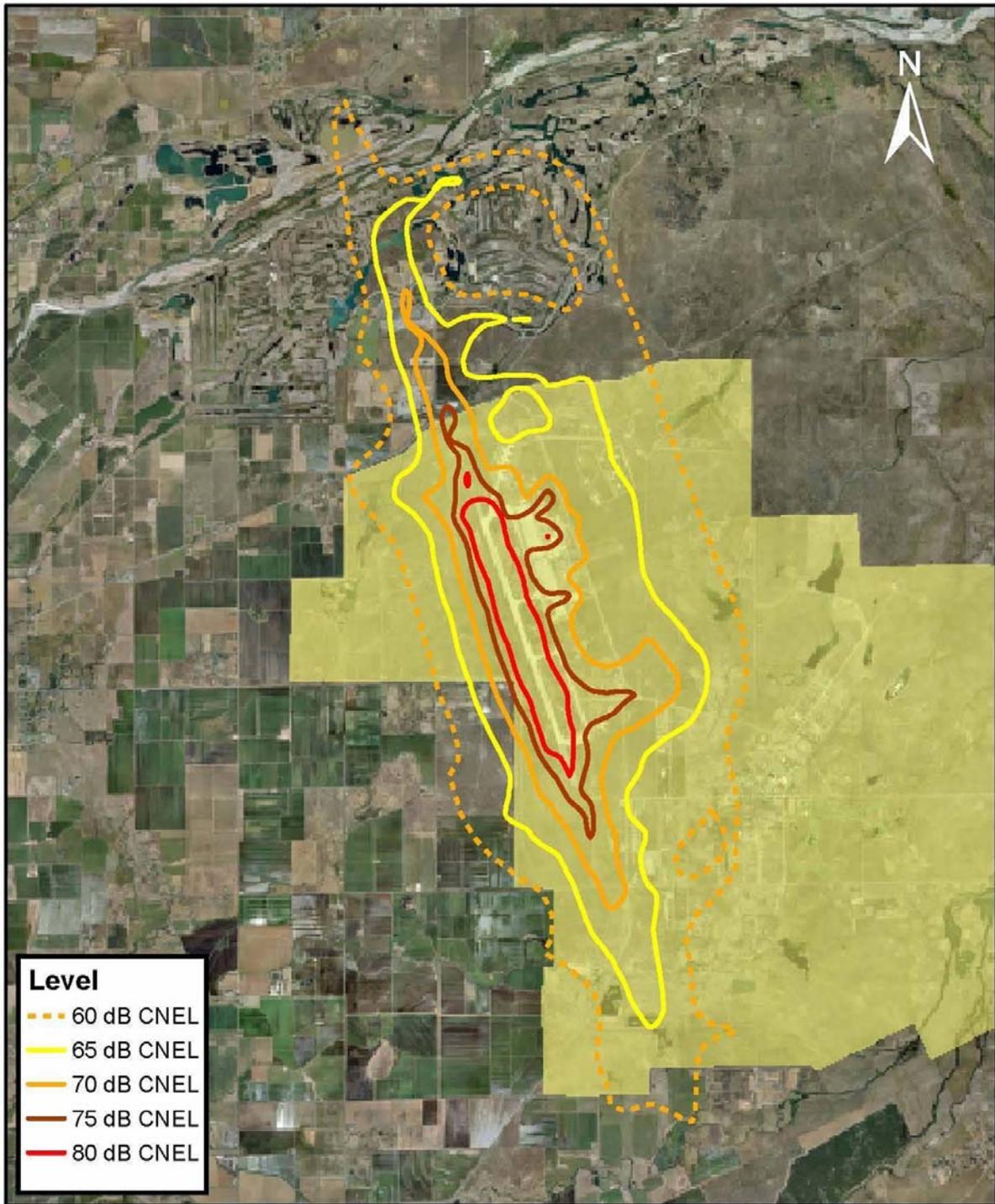
NOTE: THIS MAP IS FOR REFERENCE ONLY.
 THE AIR NOISE LEVELS SHOWN ON THIS MAP ARE BASED ON THE DATA PROVIDED BY THE OPERATOR AND ARE SUBJECT TO CHANGE. THE OPERATOR IS NOT RESPONSIBLE FOR THE ACCURACY OF THE DATA PROVIDED.
 Prepared 22 FEB 2006
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Hypothetical CNEL Noise Contours



Beale AFB
 Yuba County, CA





NOTE: THIS MAP IS FOR REFERENCE ONLY.
THIS MAP IS NOT A GUARANTEE OF THE ACCURACY OF THE INFORMATION SHOWN ON THIS MAP. THE INFORMATION SHOWN ON THIS MAP IS BASED ON THE BEST AVAILABLE DATA AND IS SUBJECT TO CHANGE WITHOUT NOTICE. THE INFORMATION SHOWN ON THIS MAP IS NOT TO BE USED FOR ANY PURPOSE OTHER THAN THAT FOR WHICH IT WAS PREPARED. THE INFORMATION SHOWN ON THIS MAP IS NOT TO BE USED FOR ANY PURPOSE OTHER THAN THAT FOR WHICH IT WAS PREPARED. THE INFORMATION SHOWN ON THIS MAP IS NOT TO BE USED FOR ANY PURPOSE OTHER THAN THAT FOR WHICH IT WAS PREPARED.

CNEL Noise Contours

 **Beale AFB**
Yuba County, CA 

0 0.45 0.9 1.8 Miles

The AICUZ report includes the following recommendations:

- Incorporate AICUZ policies and guidelines into the comprehensive plans of Marysville, Wheatland, Yuba County and Sacramento Area Council of Governments. Use overlay maps of the AICUZ noise contours and Air Force Land Use Compatibility Guidelines to evaluate existing and future land use proposals.
- Utilize the hypothetical contours developed in the AICUZ study in order to ensure the continued viability of Beale Air Force Base and the potential for new missions.
- Modify existing zoning ordinances and subdivision regulations to support the compatible land uses outlined in this study.
- Ensure height and obstruction ordinances reflect current Air Force and Federal Aviation Administration (FAA) Part 77 requirements.
- Modify building codes to ensure that new construction within the AICUZ area has the recommended noise level reductions incorporated into its design and construction.
- Continue to coordinate with Beale AFB for planning and zoning actions that have the potential of affecting base operations.
- The Joint Land Use Study (JLUS) should be completed, approved, and applied in all future land use decisions within areas affected by operations at Beale AFB.

How can I help?

Historically, the citizens of Yuba County, Marysville, Wheatland and the personnel of Beale AFB have worked together in cooperative and harmonious efforts to better serve the needs and desires of all concerned. We have collectively found solutions which have maximized the benefits of Beale AFB while minimizing annoyances. If the future of Beale AFB is to be as bright as it's past, we need the help of the citizens of Yuba County. We request your careful and considered review of the recommendations contained in Beale AFB's AICUZ report.

Who prepared the AICUZ Study?

The AICUZ report was developed by many concerned people at Beale AFB under supervision of Headquarters United States Air Force and Air Combat Command. The complete report is available on the Beale AFB web page at <http://www.beale.af.mil> under links. Copies have been placed in local public libraries and are on file with the Yuba County Recorder. Only the major points of the complete AICUZ report are included in this brochure.