

# Solano County

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## Agenda Submittal

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<b>Agenda #:</b>	2	<b>Status:</b>	ALUC-Regular-NW
<b>Type:</b>	ALUC-Document	<b>Department:</b>	Airport Land Use Commission
<b>File #:</b>	AC 23-011	<b>Contact:</b>	Nedzlene Ferrario
<b>Agenda date:</b>	02/09/2023	<b>Final Action:</b>	
<b>Title:</b>	Receive a presentation from representatives from Travis Air Force Base regarding an update to the base's 2009 Airport Installation Compatibility Use Zone (AICUZ) Study		
<b>Governing body:</b>	Airport Land Use Commission		
<b>District:</b>			
<b>Attachments:</b>	A - PowerPoint		

Date:	Ver.	Action By:	Action:	Result:
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### **RECOMMENDATION:**

Receive a presentation from representatives from Travis Air Force Base regarding an update to the base's 2009 Airport Installation Compatibility Use Zone (AICUZ) Study.

### **DISCUSSION:**

Travis Air Force Base (Travis AFB) has embarked on an update to their 2009 Airport Installation Compatible Use Zone (AICUZ) Study. The AICUZ study will produce an advisory planning document that can assist the County and cities in their land-use planning and management of development near Travis AFB. The goal of the AICUZ is to protect the health, safety and welfare of civilians and military members by encouraging compatible land use nearby the base while helping ensure that incompatible development does not affect the defense mission. By utilizing the AICUZ, local jurisdictions can also reduce noise impacts caused by aircraft operations while ensuring the base can meet its operational, training and flight safety requirements, both on and near the base.

An update to the AICUZ is necessary to address changes in Travis AFB operations since 2009. On February 9, 2023, Travis AFB representatives will provide a presentation. A copy of the PowerPoint is attached.

**Attachments:**  
A - PowerPoint

# Travis Air Force Base Air Installations Compatible Use Zones Study

Travis AFB, Solano County, California

Presentation to Solano County Airport Land Use Commission

February 2023



**U.S. AIR FORCE**



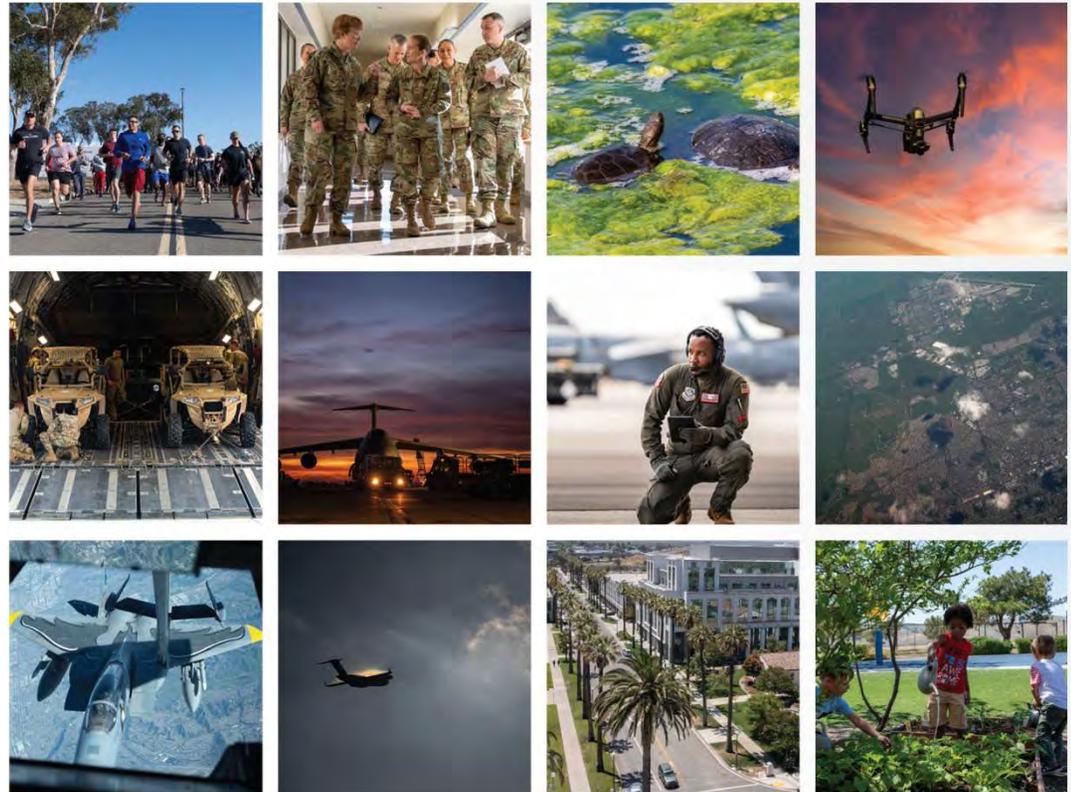
# Speaker Introductions

- **Mr. Aaron Febuary**, Portfolio Optimization Chief, 60th Air Mobility Wing, Travis Air Force Base (TAFB)
- **Mr. David Lin**, 60th Air Mobility Wing, TAFB
- **Jordan Mueth**, Air Force Civil Engineer Center (AFCEC)
- **Mike Kane**, Project Manager, Prospect Hill Consulting (PHC)

# Purpose of AICUZ Program

## THE AICUZ PROGRAM:

- Seeks to protect the health, safety, and welfare of those living and working near air installations while sustaining the Air Force's operational mission.
- Promoting proactive, collaborative planning for compatible development to sustain mission and community objectives.
- Recommends that local land use agencies incorporate noise zones, Clear Zones (CZs), Accident Potential Zones (APZs), and Hazards to Aircraft Flight Zones (HAFZs) associated with military operations into local community planning programs.



# Why was the AICUZ Study updated?

- The primary changes since the 2009 AICUZ Study that necessitate this update include:
  - Changes in off-installation land use and/or projected land use.
  - Updated noise contours.
  - Update of Air Force Instruction (AFI) 32-7063 to AFI 32-1015 (published in July 2019 and revised in January 2021).
  - Inclusion of the Hazards to Aircraft Flight Zones (HAFZ).

***AICUZ Studies have a 5-10 year planning horizon***

# The Planning Process

- The planning process for the AICUZ Study update included four major steps:
  - Data Gathering: Gathering data related to on- and off-base activities, to include:
    - ✓ general air operations,
    - ✓ noise abatement procedures,
    - ✓ land use and zoning, planned development, and
    - ✓ changes since the previous AICUZ Study
  - Analysis: Assessing land use compatibility within the AICUZ footprint (noise zones, Clear Zones, and Accident Potential Zones) based on Air Force land use compatibility recommendations
  - Review: Review by Air Force subject-matter experts
  - Public Outreach: Continuing public outreach via the AICUZ public release today, educational materials, and ongoing installation-community collaboration

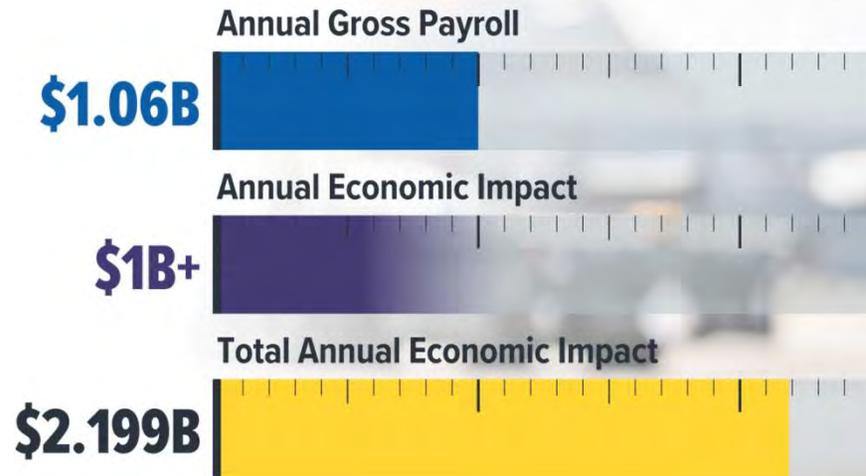
# Mission/Economic Impact

## TAFB MISSION

- Primary mission: global airlift
  - Provide rapid, responsive, reliable airlift of forces to any point on Earth in support of national objectives.
  - 60th AMW is the Host.

## ECONOMIC IMPACT

- Provides direct, indirect, and induced economic benefits to local communities.
- One of the larger single-site employers in the State of California - 18,439 total personnel directly and indirectly employed in 2019.
- \$2.199 billion in total annual economic impact.



# Air Operations and Flight Tracks

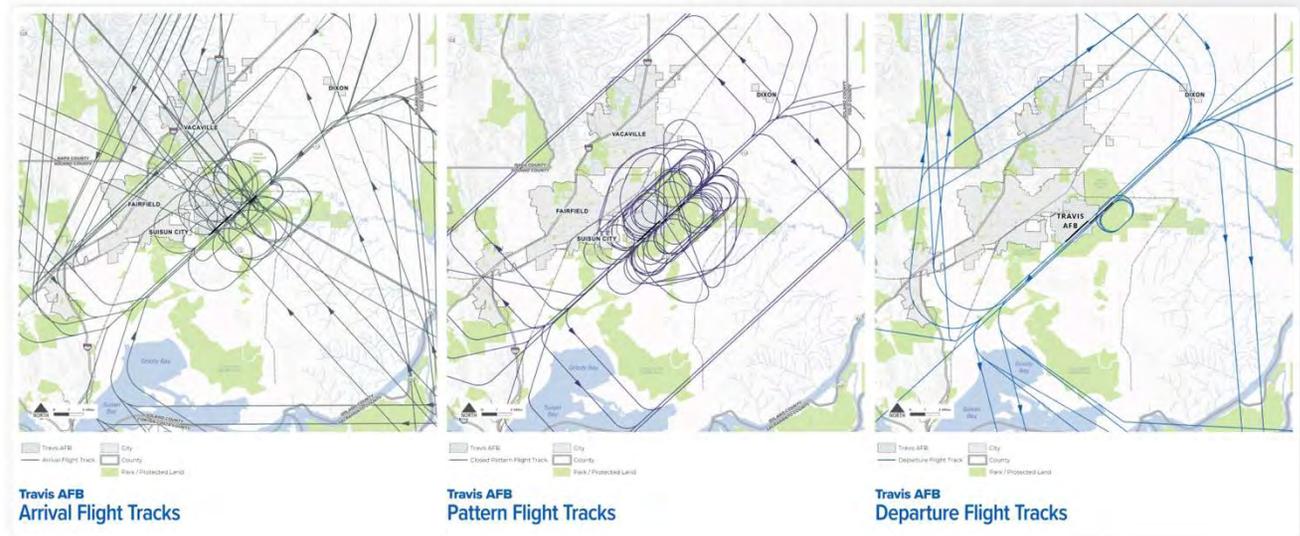
**ANNUAL AIRCRAFT OPERATIONS.** The following table summarizes the existing annual aircraft flight operations at TAFB.

Estimated Annual Aircraft Flight Operations at TAFB, 2022 AICUZ

	Arrivals	Departures	Pattern Operations <sup>1</sup>	Totals
<b>BASED AIRCRAFT</b>				
C-17	706	706	5,307	6,719
C-5	674	674	12,286	13,634
KC-10	1,637	1,637	7,214	10,488
E-6	313	313	1,773	2,399
<b>TRANSIENT AIRCRAFT</b>				
Attack/Fighter	147	147	737	1,032
Bomber/Transport	36	36	504	576
Helicopter Operations	0	0	0	0
Miscellaneous Aircraft	611	611	0	1,222
<b>Grand Total</b>	<b>4,124</b>	<b>4,124</b>	<b>27,821</b>	<b>36,069</b>

Note: <sup>1</sup>Each "closed pattern operation" consists of two total operations: one arrival and one departure.

**FLIGHT TRACKS.** Flight tracks depict where aircraft fly in relation to an airfield and are designed for departures, arrivals, and for pattern work procedures.



**BASED AIRCRAFT**



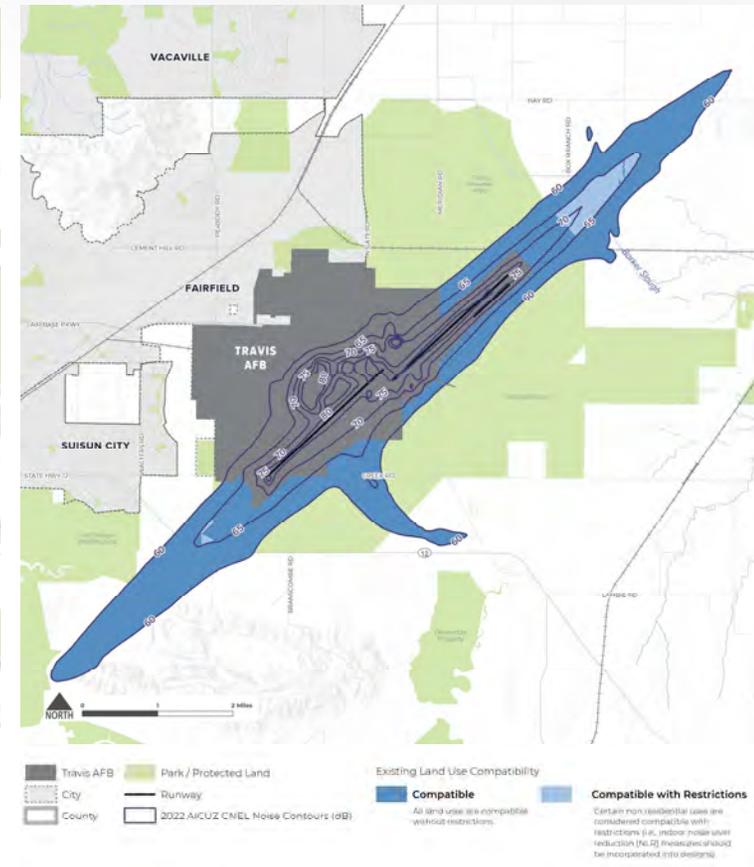
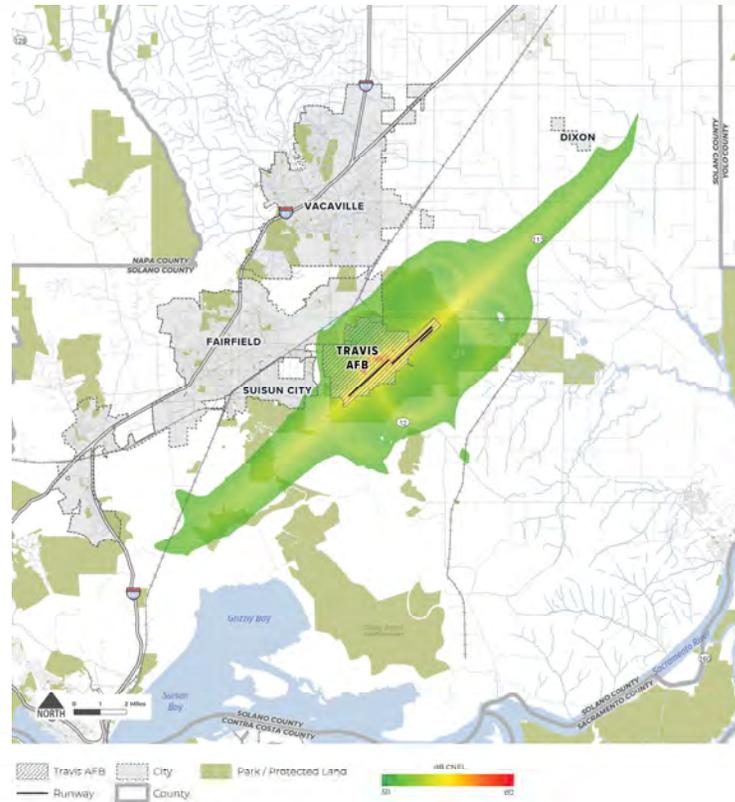
**TRANSIENT AIRCRAFT**



# Noise

## TAFB 2022 NOISE METRICS AND CONTOURS

- AICUZ provides modeled noise contours to define aircraft noise exposure
- TAFB presents noise contours using the Community Noise Equivalent Level (CNEL) metric
- TAFB's 2022 AICUZ Noise Contours reflect current operational scenario and are driven by KC-10 and C-5 operations



# Noise

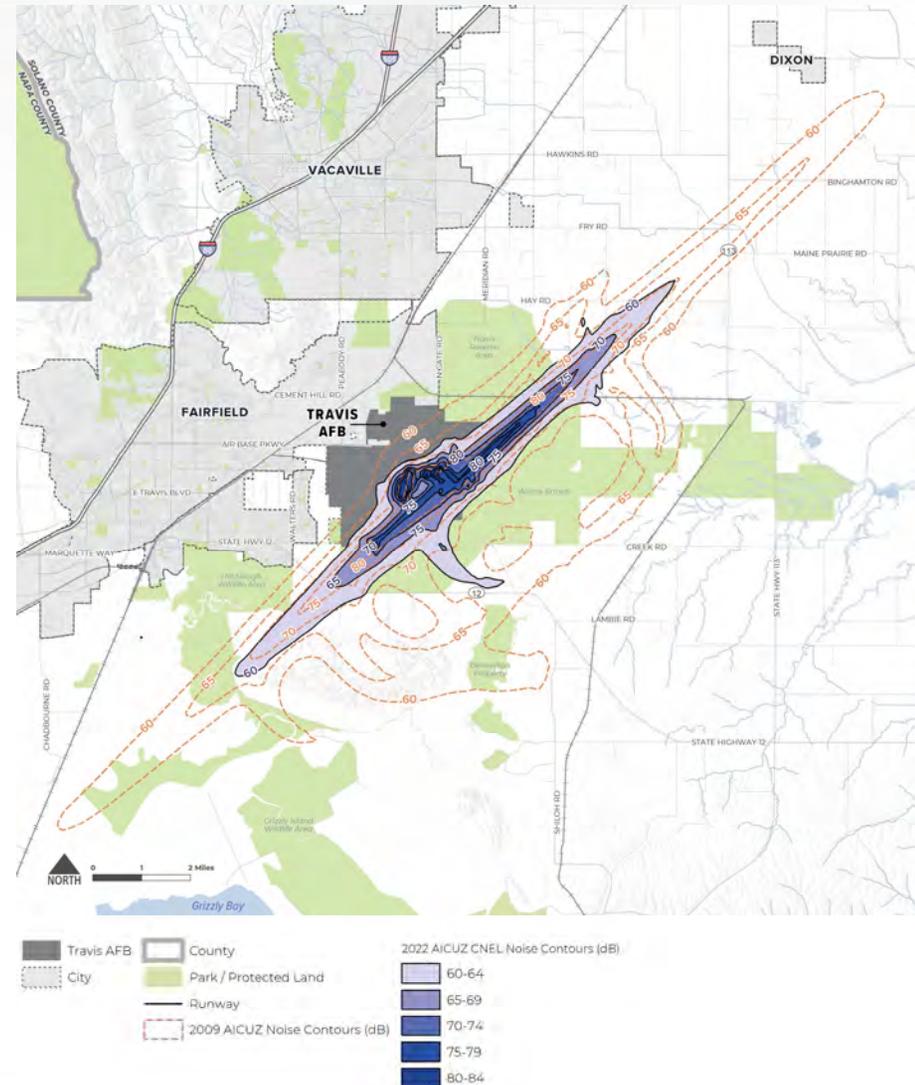
## COMPARISON OF 2009 AND 2022 CONTOURS

- Total off-base area exposed to a minimum of 60 dB CNEL for 2022 contours totals 4,299 acres.
- The noise contours do not extend out of Solano County
- The 2022 planning contours do not extend as far to the north, south, east, and west as the 2009 AICUZ noise contours.
- KC -10 and based heavy cargo aircraft (C-5) contribute the most to the noise levels at TAFB.

**Table 4-3 Off-Installation Land Area and Estimated Population Within Noise Zones for the 2022 AICUZ Noise Contours at Travis AFB**

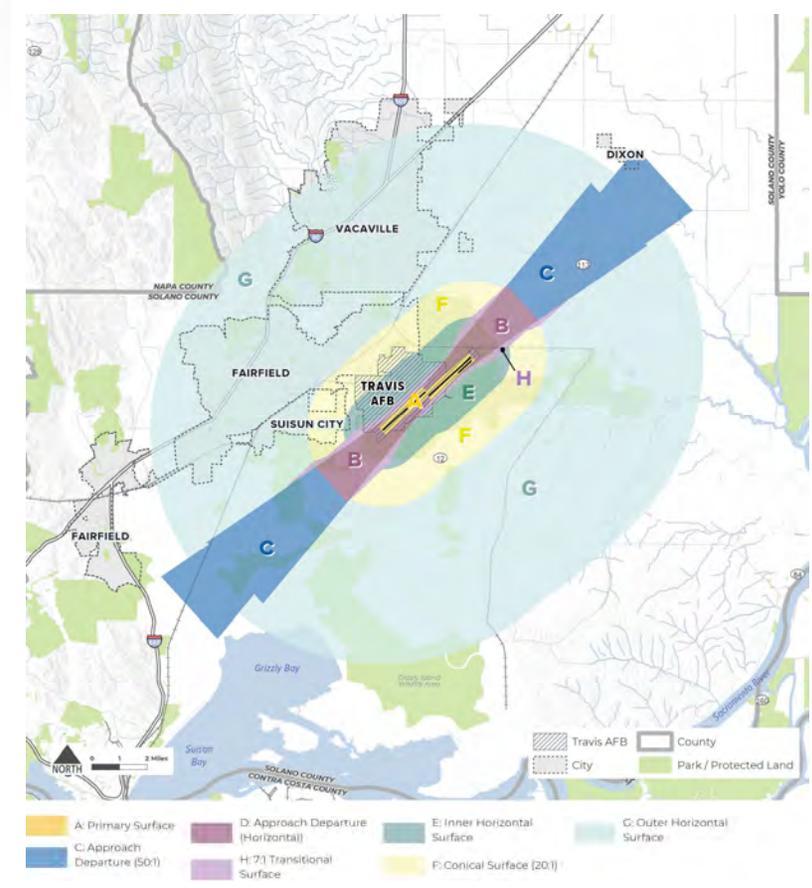
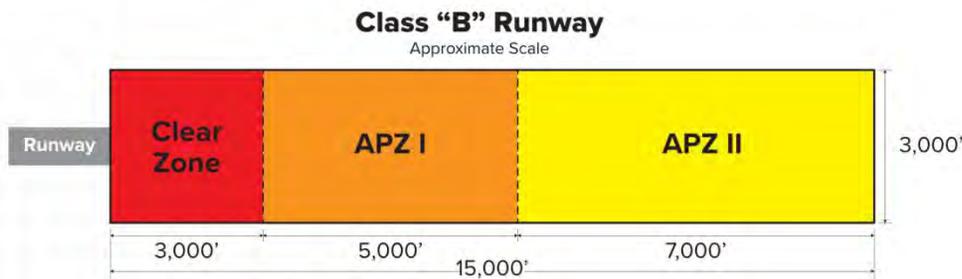
NOISE ZONE (DB CNEL)	ACREAGES	2021 TOTAL POPULATION
60-64	3388.5	21
65-69	804.3	8
70-74	106.9	0
<b>Total</b>	<b>4299.7</b>	<b>29</b>

Source: 2022 Noise Contour Layer and Travis AFB Installation.



# Safety

- HAZARDS TO AIRCRAFT FLIGHT ZONE (HAFZ).** The HAFZ is a consultation zone within which the Air Force requests that project applicants and local planning bodies consult with the Air Force to ensure the project is compatible with installation operations relative to these concerns.
- CLEAR ZONES AND ACCIDENT POTENTIAL ZONES.** The DoD provides Clear Zones (CZs) and Accident Potential Zones (APZs) for Class A and Class B Runways as planning tools for local agencies. CZs and APZs define the areas where an aircraft accident is likely to occur, if an accident occurs.



# Composite AICUZ Map



Travis AFB
  County
  Runway

City
  Park / Protected Land
  2022 AICUZ CNEL Noise Contours (dB)



Travis AFB
  County
  Runway

City
  Park / Protected Land
  Clear Zone (CZ)
  Accident Potential Zone I (APZ I)
  Accident Potential Zone II (APZ II)
  Assault Landing Zone (ALZ) Safety Area