

CFR, Title 14, Ch 1,
Sub-Ch 1,
Part 150



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The **Federal Aviation Administration's (FAA) mission** is to **provide the safest, most efficient aerospace system in the world**. The

FAA controls the **National Airspace System (NAS)** helping people and goods travel safely and freely. While there are many benefits to air travel, aviation noise can be a concern for communities. ***The FAA is limited by the simple reality that aircraft make noise***. Addressing this concern requires **collaboration** among the FAA, air carriers, airports, aircraft manufacturers, research universities, other stakeholders and industry partners, local communities, and elected officials. ***Decisions about flight times, number of operations, and aircraft type are in the scope of private industry***.

Airport location is a function of local land use planning, usually done decades ago. Runway alignment is determined by the prevailing winds at that specific location. The FAA strives to reduce noise in ways within its purview, including conducting noise research and working with aviation stakeholders and local communities.

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FAA Noise Certification Regulation



- FAA regulates the maximum noise level that an individual civil aircraft can emit by requiring aircraft to meet certain noise certification standards. Each noise certification standard is designated as a different stage in the U.S. Stages and noise standards are defined in the **Code of Federal Regulations, 14 CFR 36, Noise Standards: Aircraft Type and Airworthiness Certification**.
- Any aircraft that is certified for airworthiness in the U.S. needs to also comply with noise standard requirements to receive a noise certification. The purpose of the noise certification process is to ensure that the latest available safe and airworthy noise reduction technology is incorporated into aircraft design and enables the noise reductions offered by those technologies to be reflected in reductions of noise experienced by communities.

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- In 1985 the FAA established **FAR Part 150** which was a system to **measure aviation noise** in the community and provide information about **land uses that are normally compatible** with various levels of noise exposure.
- Approval of a noise compatibility program under Part 150 is neither a commitment by the FAA to financially assist in the implementation of the program, nor a determination that all measures covered by the program are eligible for grant-in-aid funding from the FAA.
- An approved Part 150 noise compatibility program clears the way for airports to obtain federal funding for noise abatement projects, primarily increased insulation and / or double paned windows.
- In 1990, the **Aircraft Noise & Capacity Act (ANCA)** was passed which required the establishment of a national aviation noise policy.

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Under 14 CFR Part 150, FAA has promulgated regulations that identify land uses that are 'normally compatible' with various noise exposure levels; however, these classifications were ***based on guidelines and research during the 1970s***. For aviation noise analyses, currently, the FAA uses a single-metric system to analyze aircraft noise exposure. The noise metric that is the heart of this single-metric system is called the ***Day-Night Average Sound Level (DNL)***. DNL is the FAA's core metric for decision making in situations involving aircraft noise exposure.



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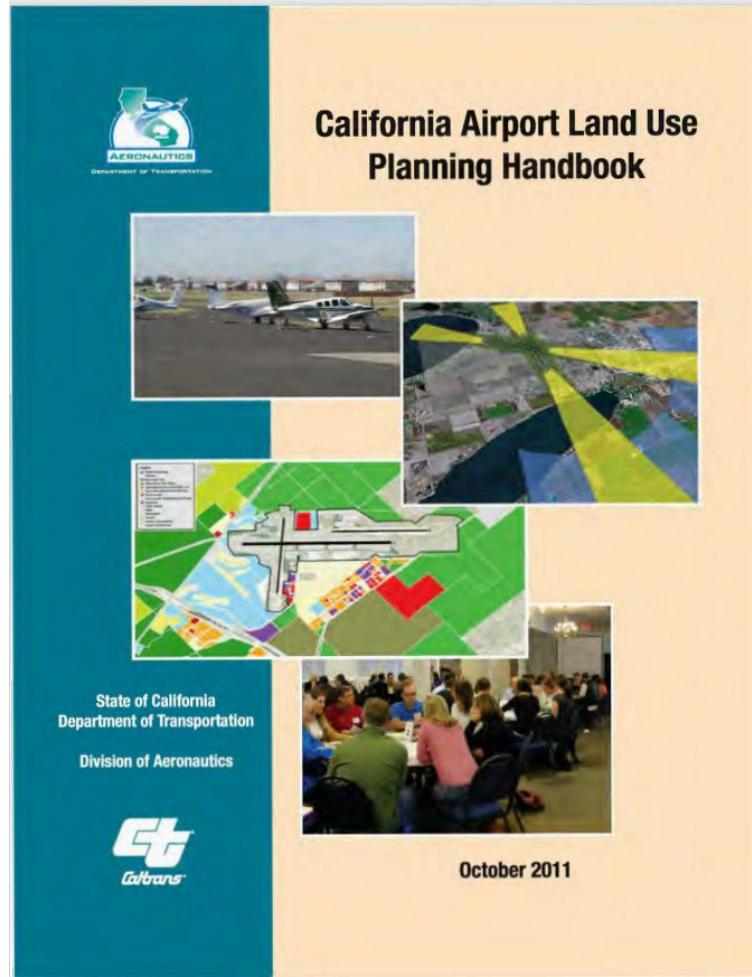
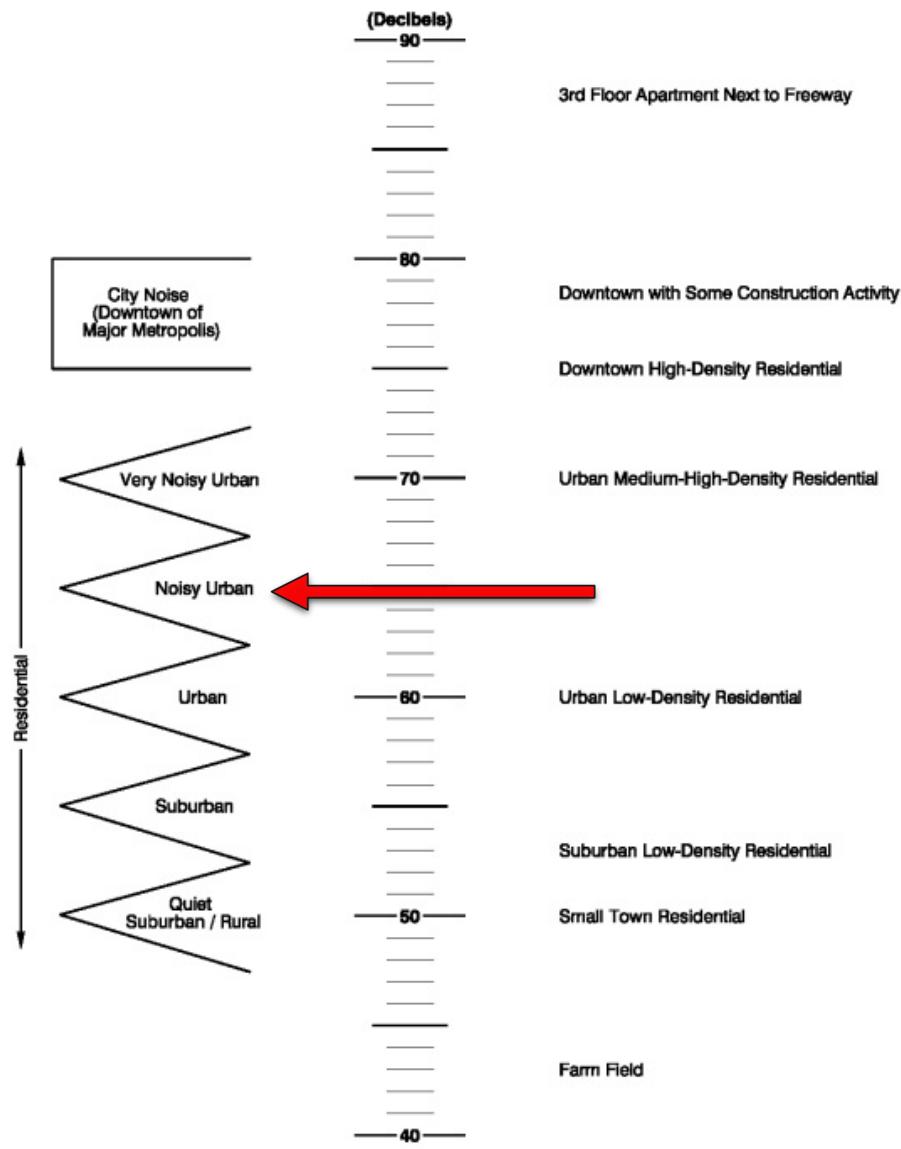
A noise sensitive area, as defined in Paragraph 11-5.b(8) of

FAA Order 1050.1F, Environmental Impacts: Policies and Procedures, is:

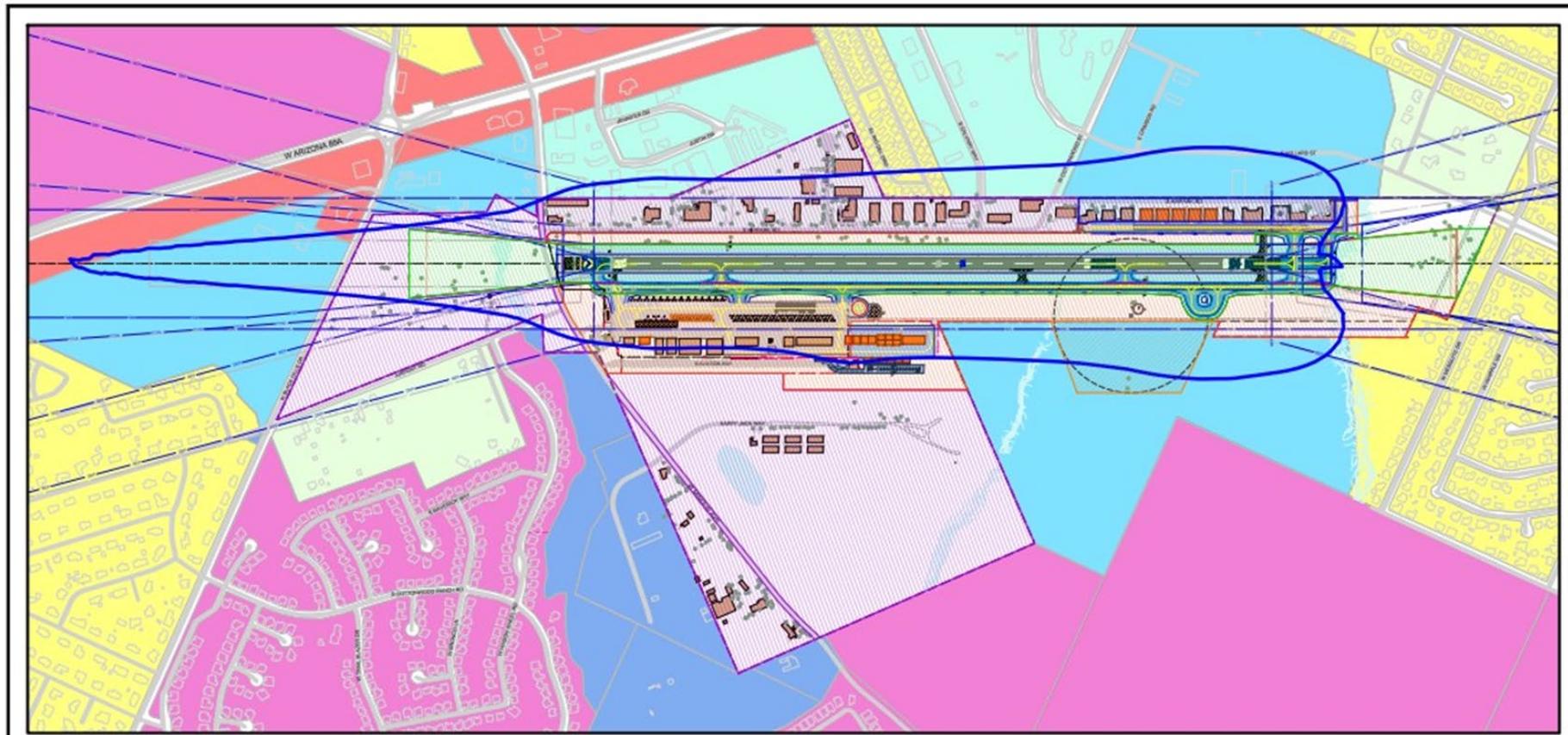
“[a]n area where noise interferes with normal activities associated with its use. Normally, noise sensitive areas include residential, educational, health, and religious structures and sites, and parks, recreational areas, areas with wilderness characteristics, wildlife refuges, and cultural and historical sites. For example, *in the context of noise from airplanes and helicopters, noise sensitive areas include such areas within the **DNL 65 dB** noise contour.*

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QUALITATIVE DESCRIPTIONS CNEL COMMUNITY SETTING EXAMPLES

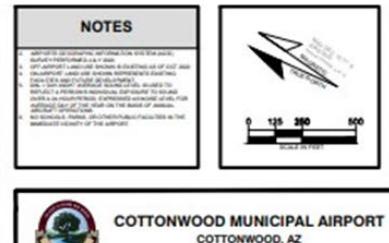


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Facilities Legend									
Description	Existing	Future	Description	Existing	Future	Description	Existing	Future	
AIRPORT REFERENCED POINT (ARP)			GROUND CONTOURS			TAIRPORT / TAILBLADE OBJECT FREE AREA (TOFA)			
WINDSOCK			HEAD-ON			HELICOPTER OPERATING AREA / SAFETY AREA			
WINDSOCK END IDENTIFIER LIGHTS (WELIL)			BUILDING RESTRICTION LINE (BRL)			AIRFIELD OPERATING ZONE (TOF) / BLAST PAD			
PRECISION APPROACH PATH INDICATOR (PAPI 2U)			THRESHOLD METING APPROACH SURFACE			ROADWAY / VEHICLE PARALLEL / PARSED			
TAI POWER CONTROL UNIT (TCU)			THRESHOLD METING: DISPARATE GURANTEE			ROADWAY / VEHICLE PARALLEL / UNPARSED			
AIRCRAFT TOWER(S) (STANDARD)			RAFT TO APPROACH SURFACE			PAVEMENT / CONCRETE / MUDFLAT / MUDFLAT			
AIRCRAFT TOWER(S) (TRANSIENT)			RAILS OF PROTECTION ZONE (PZ)			ON-APPROX BUILDINGS / STRUCTURES			
AIRCRAFT TOWER(S) (ELECTRIC CHARGING STATION)			RAFT OF SAFETY AREA (RSA)			OFF-APPROX BUILDINGS / STRUCTURES			
AIRCRAFT PROPERTY LINE			RAFT OF OBJECT FREE AREA (OFA)			COTTONWOOD BIRCH PARK			
AIR OPERATIONS AREA (AOP) / PERIMETER FENCE			RAFT OF CRITICAL FREE AREA (CFA)			CFA / BASEMENT FOR AIRPORT CRITICAL AREA			
AOP PERIMETER / FENCE / RAILINGS			RAFT OF MARCHING			WATER BODY / FEATURE			
AOP ACCESS GATE			TAIRPORT / TAILBLADE SAFETY AREA (TSA)			WATER BODY / FEATURE			
AOP ACCESS GATE FRONTRIM									

LAND USE LEGEND	
DESCRIPTION	STANDARD COLOR
FLYOVER/NORTH CONTOUR - GENERAL	Blue
CITY-APPORT - AIRFIELD OPERATIONS	Red
CITY-APPORT - GENERAL AVIATION	Green
CITY-APPORT - AVIATION BUSINESS	Yellow
CITY-APPORT - FUTURE ELEMENT (INCLUDE CRITICAL AREA)	Purple
CITY-APPORT - NON-AERONAUTICAL DEVELOPMENT	Black
CITY-APPORT - RESIDENTIAL/GENERAL LOW DENSITY	Light Green
CITY-APPORT - RESIDENTIAL/LOW DENSITY	Light Green
CITY-APPORT - PLANNED DEVELOPMENT	Light Yellow
CITY-APPORT - GENERAL CERAMIC/IND	Light Purple
CITY-APPORT - COMMERCIAL/INDUSTRIAL	Light Blue
CITY-APPORT - INDUSTRIAL	Light Teal
CITY-APPORT - PUBLIC/RECREATIONAL/INSTITUTIONAL	Dark Teal



COTTONWOOD MUNICIPAL AIRPORT
COTTONWOOD, AZ



FAA DISCLAIMER
THE CONTENTS OF THIS PLAN DO NOT NECESSARILY REFLECT THE OFFICIAL VIEWS OR POLICIES OF THE FEDERAL AVIATION ADMINISTRATION (FAA). ACCEPTANCE OF THIS DOCUMENT BY THE FA

LAND USE DRAWING

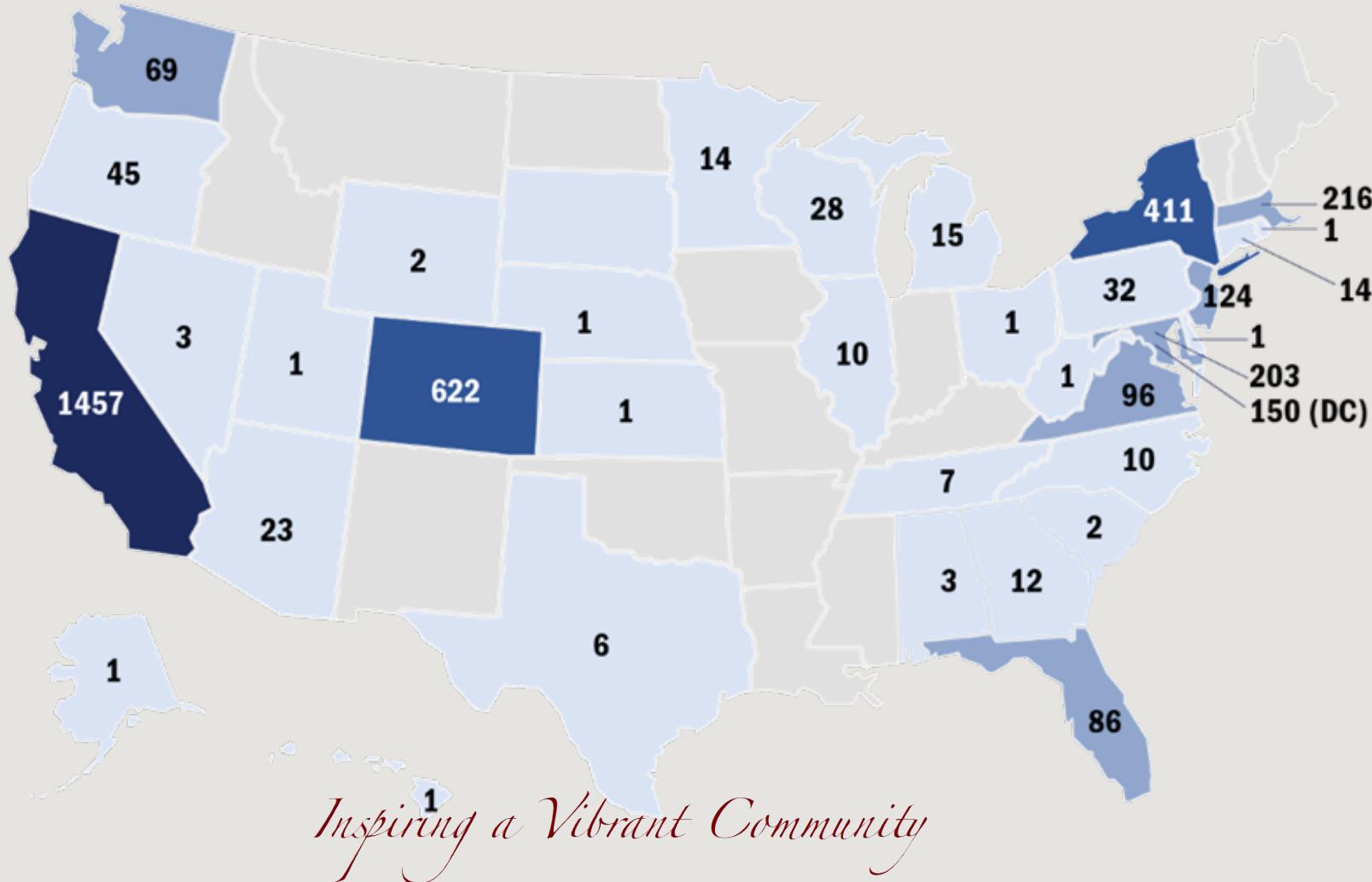
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- In January 2021, FAA released long-awaited results from the '**Neighborhood Environmental Survey**' (NES), which demonstrated a substantially higher percentage of people highly annoyed by the entire range of aircraft noise levels in comparison to the last study completed in 1992.
- The FAA issued a Federal Register Notice on May 1, 2023, **seeking public comment on the FAA Noise Policy Review**. The comment period for the Federal Register Notice was open from May 1, 2023, until September 29, 2023, and is now closed. The FAA received 4,857 comments in response to the Federal Register notice. Key topics included overflight effects on residential communities affecting the quality of life in neighborhoods well outside DNL 65. Should FAA's noise policy address both close-in and overflight communities.
- Of the 4,857 comments received **only 23 comments from Arizona** were received to the above Federal Register Notice.

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The graphic below shows the distribution by State for comments received from individuals who listed State information (about 75% of all comments).



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- Congress passed the ***FAA Reauthorization Act of 2024***, on May 16, 2024, and pursuant to Section 792 of the Act, the FAA was required to form an **Aircraft Noise Advisory Committee (ANAC)**. The ANAC is to be comprised of representatives from stakeholders across the aviation industry, institutions of higher education, and community representatives. ***The ANAC was intended to advise the FAA on issues facing the aviation community that are related to aircraft noise exposure and existing FAA noise policies and regulations.*** In order to follow this direction from Congress, the FAA has revised its Noise Policy Review (NPR) approach and timelines to allow the ANAC to complete its work and issue its report before FAA makes any decisions on possible noise policy updates.
- Additionally, Section 786 of the Act directs FAA to ***update the Airport Noise Compatibility Program regulations (14 C.F.R. part 150)***. These regulations identify those land uses which are normally compatible with various levels of exposure to aviation noise by individuals as well as prescribing a system for measuring noise at airports and surrounding areas.

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- The FAA proposed to:
- Look at the current use of **DNL or Day-Night Average Sound Level** as the primary noise metric for assessing cumulative aircraft noise exposure.
- Review whether to **continue to use the *DNL 65 dB level* as the metric and threshold for determining significant noise impacts** in environmental reviews under the National Environmental Policy Act or the ***definition of the limit of residential land use compatibility***.
- **Consider if and how alternative noise metrics may be used** in lieu of or in addition to DNL to better inform agency decisions and improve FAA's disclosure of noise impacts.

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- As of March of 2025, the **FAA has not solicited membership for the ANAC even though Congress imposed a November 12, 2024, deadline for its formation.** When recently asked about the committee's progress, the FAA responded, "We do not have an update." At this time, **it remains unclear whether development of the ANAC will move forward** or be stymied if the new administration does not want revisions of FAA's aviation noise policy to be considered.
- The FY 2026 President's Budget Request of \$22.0 billion for FAA is an investment in the future of the National Airspace System (NAS). The request holds safety as FAA's highest priority, boosting resources to grow our air traffic controller workforce and improve aviation safety oversight. **There is no mention of the ANAC.**

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- A FAR Part 150 study can lead to a **FAR Part 161, Notice & Approval of Airport Noise & Access Restriction.**
- This is a process for airport operators to restrict the operation of certain aircraft that have a significant adverse noise impact on the surrounding community.
- Currently noise is measured in a “manner” so as to develop a noise exposure forecast (NEF), using a community noise equivalent level (CNEL), or a day/night average sound level (Ldn).
- The airport operator shall acquire the aviation operations data necessary to develop noise exposure contours using an FAA approved methodology or computer program, such as the **Integrated Noise Model (INM)** for airports.
- ***The FAA has suggested that land use guidelines be established for compatible land uses surrounding airports.*** Compatible land uses are based on noise contours. *Inspiring a Vibrant Community*

Arizona Airport Land Use Manual



Arizona Airport Land Use Manual

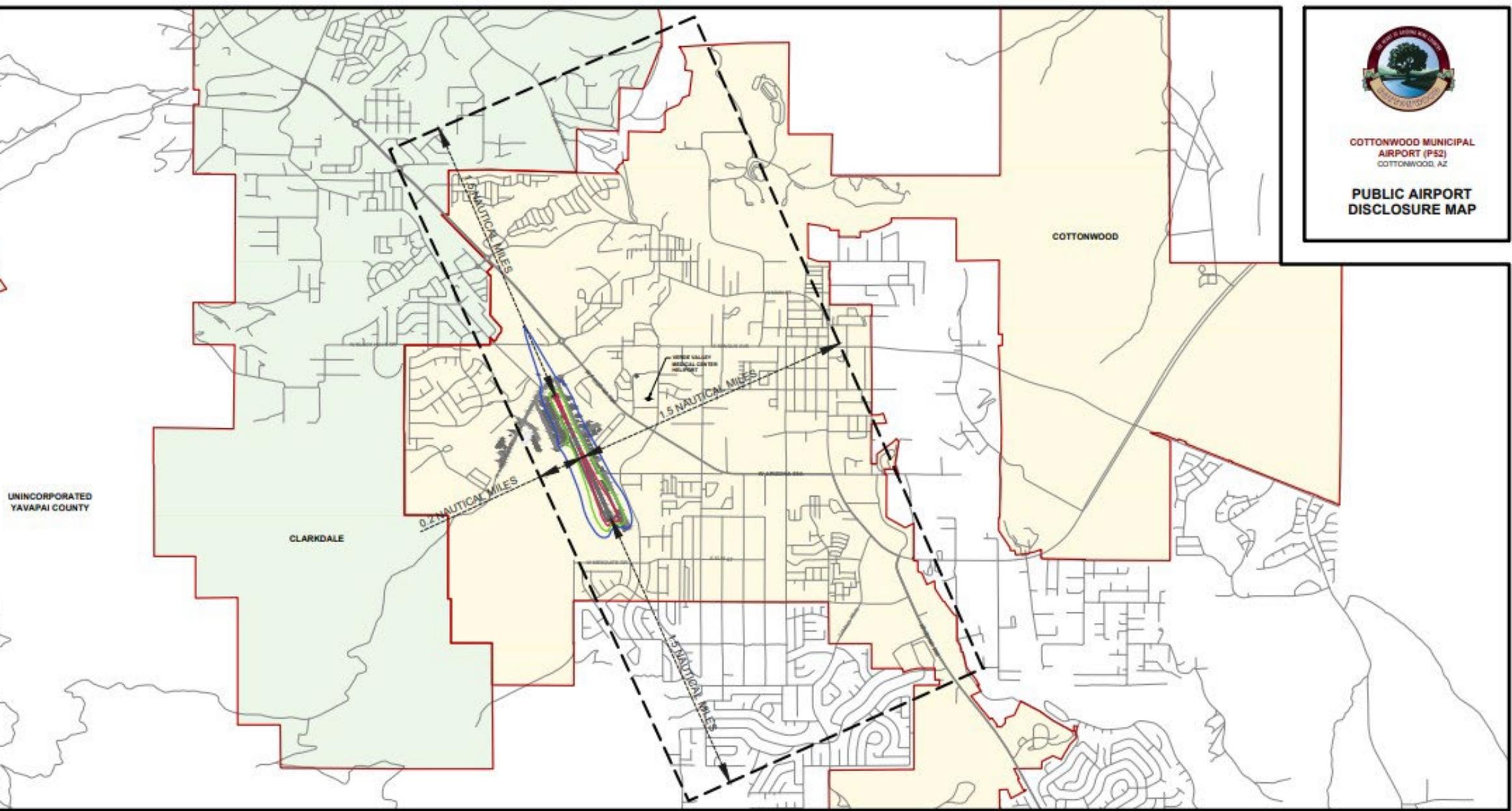


- As the state agency responsible for airports' safe and continued operation, ADOT Aeronautics sponsored this Arizona Airport Land Use Manual (Manual) to provide guidance for airports and their communities to proactively plan for growth and development that is compatible with nearby airports. The intent of this Manual is to be a statewide resource for a variety of interested parties, including airport sponsors, local planning agencies, developers, real estate professionals and others on the topic of airport land use compatibility.
- The State of Arizona enacted two pieces of legislation, **A.R.S 28-8485. Airport Influence Areas** and **A.R.S 28-8486. Public Airport Disclosure**. These statutes do not prescribe any design standards or development policies for communities to implement. Instead, the purpose of A.R.S 28-8485 and 24-8486 is to **provide land buyers with notice of the potential for overflights and noise from a nearby airport**. The intent of these notification policies is to reduce complaints from buyers about the noise impacts or other factors associated with living, working, or recreating near an airport.

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Cottonwood Airport Disclosure Map

MAP EFFECTIVE DATE:
SEPTEMBER 1, 2022.



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The process by which communities can attempt to get more local control over activities at their airport — the Federal Aviation Regulation ***Part 161 study and approval process — was intended to be a challenge.***

The FAA has continuously, consistently, and actively encouraged a balanced approach to address noise problems and discouraged unreasonable and unwarranted airport use restrictions. That policy remains unchanged. ***A restriction should be considered only as a last resort*** when all other mitigation measures are inadequate to satisfactorily address the problem and **a restriction is the only remaining option that could provide noise relief.**

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The Airport Noise and Capacity Act of 1990 (ANCA), established a national aviation noise policy, which by regulation established a national program for reviewing airport noise and access restrictions for aircraft. The provisions of ANCA prohibit airport sponsors from imposing access restrictions without determining if the restriction(s) meet six (6) criteria via a Part 161 study:

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1. The restriction is reasonable, nonarbitrary, and nondiscriminatory;
2. The restriction does not create an unreasonable burden on interstate or foreign commerce;
3. The restriction is not inconsistent with maintaining the safe and efficient use of the navigable airspace;
4. The restriction does not conflict with a law or regulation of the United States;
5. An adequate opportunity has been provided for public comment on the restriction; and
6. The restriction does not create an unreasonable burden on the national aviation system.

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Studies to Date

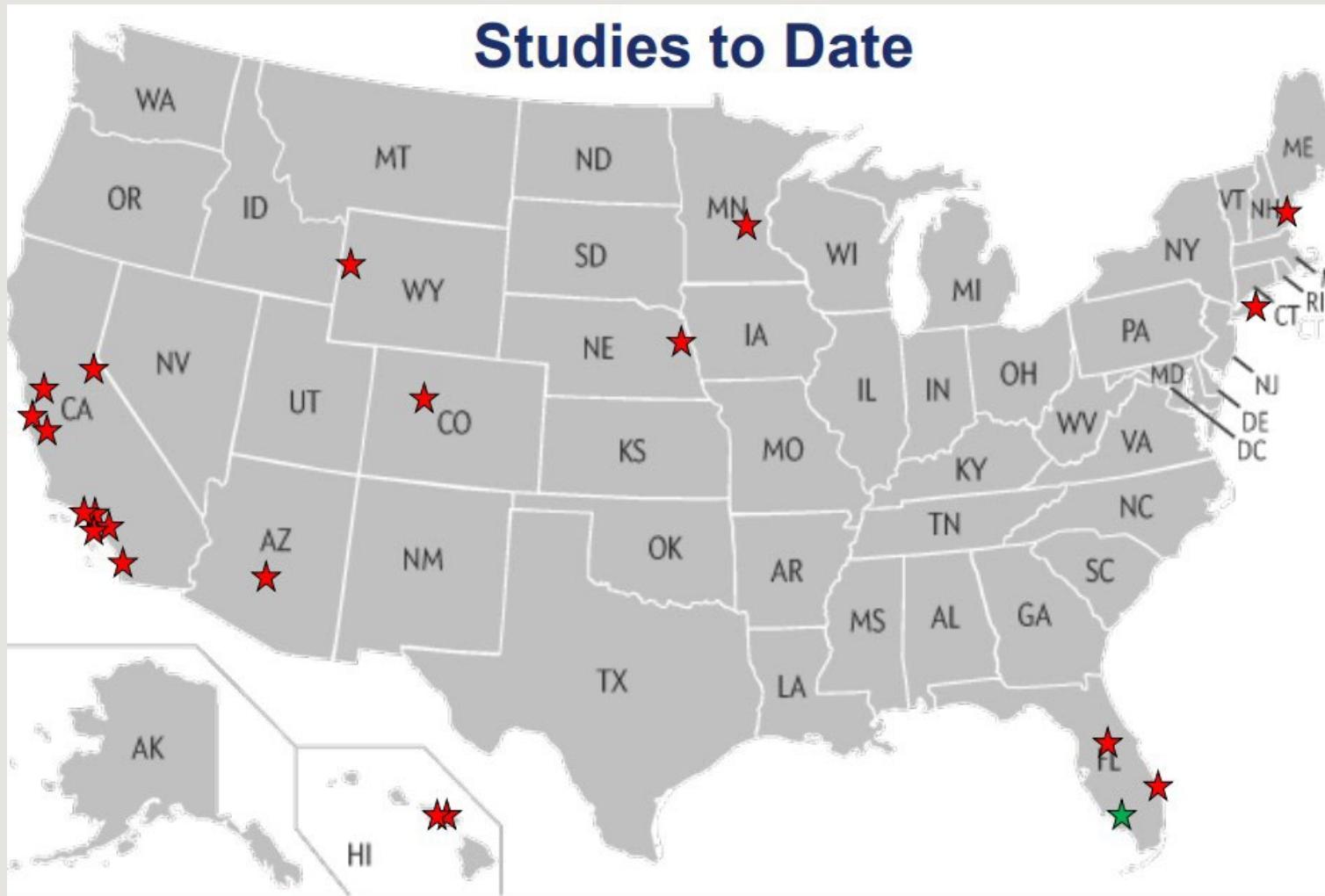
- Twenty-four Part 161 Studies under ANCA have been developed at 21 airports
- Only one successfully achieved an Access Restriction after a legal challenge:
 - Naples, FL restricted Stage 2 Aircraft < 75,000 lbs
 - Since then, FAA Modernization Act of 2012 implemented a nationwide phase out of Stage 2 (as of December 31, 2015)
- Part 161 Determinations can be found at:
[https://www.faa.gov/airports/environmental/airport_noise/part 161](https://www.faa.gov/airports/environmental/airport_noise/part_161)

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Studies to Date



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- The Cottonwood Airport is surrounded by noise sensitive areas. The City of Cottonwood's noise abatement practices, updated and adopted at the May 4, 2022 Airport Commission meeting, are **voluntary** - no noise abatement practice shall supersede safety. However, voluntary compliance with the requested noise abatement practices is greatly appreciated.
- The Noise Abatement recommendations for the Sedona Airport are often mentioned, however, those recommendations are **also voluntary**, with compliance at the pilot's discretion and should be exercised only when consistent with safety.

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References:



- https://www.faa.gov/airports/resources/advisory_circulars/index.cfm/go/document.current/documentNumber/150_5020-1
- https://www.faa.gov/airports/environmental/airport_noise
- <https://www.ecfr.gov/current/title-14/chapter-I/subchapter-I/part-161>
- Code of Federal Regulations, 14 CFR 36, Noise Standards: Aircraft Type and Airworthiness Certification
- <https://cottonwoodaz.gov/663/Airport-Noise-Mitigation>
- <https://azdot.gov/planning/airport-development/arizona-land-use-manual>
- <https://dot.ca.gov/-/media/dot-media/programs/aeronautics/documents/californiaairportlanduseplanninghandbook-a11y.pdf>

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A follow up meeting will be held
on August 26th @ 6:00 p.m. in
the Council Chambers.

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QUESTIONS?



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