

Chapter 1 (Inventory) of the Noise Exposure Map Update for Camarillo Airport describes the roles and responsibilities of each level of government for noise and land use compatibility planning as it relates to this study. The specific Code of Federal Regulations (CFR) for Federal Aviation Administration (FAA) actions on noise matters are outlined in detail. State of California regulations granting authority and guidance to the county and city levels for off-airport land use planning are summarized. The specific zoning ordinances and general plan documents of each city and county with jurisdictional authority over the study area surrounding Camarillo Airport are included in this discussion. Analysis of existing land use and updated generalized maps at the appropriate scale are included as a baseline for the study, along with radar flight track data to illustrate typical overflight traffic patterns. Airport facility and operational information are also provided in detail to establish the existing conditions and constraints at Camarillo Airport. The background information contained herein will be used throughout later chapters of the Noise Exposure Map analysis as well as to inform any future Noise Compatibility Program measures.

ROLES AND RESPONSIBILITIES

Federal, state, and local governments each have a specific role in reducing or limiting aviation noise impacts. The following sections provide an overview of each level of government's role in airport land use compatibility planning. Additional information on this topic is included in the Federal Aviation Noise Regulations of the Resource Library, located in **Appendix C**.











FEDERAL GOVERNMENT

The Federal Aviation Administration (FAA) is the federal government's agency dedicated to civil aviation safety and tasked with providing for "the safe and efficient use of national airspace." The FAA was created on August 23, 1958, under the Federal Aviation Act.

The FAA has recognized the concern that aviation noise can cause for communities; therefore, the FAA has provided support for noise reduction within its authority, including by the following:

- Implementation and Enforcement of Aircraft Operational Procedures Where and how aircraft
 are operated is under the complete authority of the FAA. This includes pilot responsibilities,
 compliance with air traffic control instructions, flight restrictions, and monitoring compliance of
 aircraft operations and addressing careless and reckless operations of aircraft.
- Management of the Air Traffic Control System The FAA is responsible for the control of navigable airspace and review of any proposed alterations in flight procedures for noise abatement.
- Pilot Licensing Individuals licensed as pilots are trained under strict guidelines concentrating
 on safe and courteous aircraft operating procedures. For example, in recent years FAA Safety
 launched the ALC-500 course, a "Fly Neighborly" training program for helicopter operators, with
 the goal of educating pilots on noise-reducing solutions and effective communication with the
 community. The course is based on a 2017 focused FAA and NASA flight test program.²
- Certification of Aircraft The FAA requires the reduction of aircraft noise through certification, modification of engines, or aircraft replacement as defined in 14 Code of Federal Regulations (CFR) Part 36. Additionally, 14 CFR Part 91 outlines the phase-out of aircraft not meeting requirements under Part 36.
- Airport Noise Compatibility Planning The FAA collaborates with aircraft sponsors to fund and
 evaluate Noise Compatibility Planning Studies and Noise Exposure Map Updates in accordance
 with 14 CFR Part 150 regulations.
- Research and Technology In addition to providing 14 CFR Part 150 funding, the FAA funds numerous research efforts to investigate the impacts of aviation noise on communities and individuals. The establishment of the ASCENT Center of Excellence and Airport Cooperative Research Program are two such initiatives. The Continuous Lower Energy, Emissions and Noise (CLEEN) also drives the FAA's partnership with the private sector to incentivize improvements in aircraft technology to reduce noise.³ On January 13, 2021, the FAA released a summary of its research programs to the public in Federal Register Volume 86, Number 8. In February 2021, the FAA released a final report of its Neighborhood Environmental Survey (NES), a detailed analysis of over 10,000 survey responses from individual neighborhoods surrounding a sample of 20 commercial service airports across the country to create a dose-response curve of annoyance in response to aircraft noise exposure.⁴

¹ FAA Course Catalog, January 2023 (https://www.faasafety.gov/gslac/ALC/course_catalog.aspx)

² Page, J. A., Rapoza, A.S., and Jacobs, E. W. (2021) In Situ Development and Application of Fly Neighborly Noise Abatement Procedures for Helicopters (https://www.volpe.dot.gov)

³ FAA Noise & Research Programs, July 2022 (https://www.faa.gov/noise/research_programs)

Miller, N. P.; Czech, J.J.; Hellauer, K. M.; Nicholas, B. L.; Lohr, S.; Jodts, E.; Broene, P.; Morganstein, D.; Kali, J.; Zhu, X.; Cantor, D.; Hudnall, J.; Melia, K. DOT/FAA/TC-21/4_Analysis of NES (2021) (https://www.airporttech.tc.faa.gov)











Community Engagement – In addition to overseeing the community engagement requirements
of each Part 150 Study, the FAA engages directly with communities to address noise issues, hosts
a designated FAA Noise Obudsman at each of its nine regional offices that can be reached by
community members directly, and hosts an online FAA Noise Portal where complaints can be
submitted. The iFlyQuiet community engagement program published in 2021 is another example
of this effort.⁵

The FAA collaborates with other federal agencies such as the U.S. Department of Transportation Volpe Center and the National Aeronautics and Space Administration (NASA) in support of these efforts, along with contributing to the Federal Interagency Committee on Noise (FICON). The federal government has also begun tracking changes in transportation noise across modalities, including road and rail. A simplified version of noise modeling is used in the National Transportation Noise Map published for 2016 and 2018 by the Volpe National Transportation Systems Center. Airport contours, vehicle traffic, and noise generated by railroad operations are all contributing factors addressed in the federal government's multi-modal transportation noise model map.⁶ Facilities with military-only operations are excluded.

Due to Camarillo Airport's proximity to Port Mugu Naval Air Station, it is important to note that the FAA does not have authority over military aircraft. The military does, however, follow FAA regulations.

The specific FAA regulations related to aircraft noise are codified under several Code of Federal Regulations (CFR) titles, including the following:

14 CFR Part 36, Noise Standards: Aircraft Type and Airworthiness Certification

The FAA limits noise emitted from individual aircraft by regulations adopted under 14 CFR Part 36. Individual aircraft must be inspected and certified for airworthiness under one of four stages. Part 36 applies to small, piston-driven aircraft, civil turbojet, and transport aircraft and requires new aircraft types to be markedly quieter than earlier models by limiting the noise emissions allowed by newly certified aircraft. To achieve this, Part 36 has a four-stage certification process, each with a progressively more stringent noise level threshold. These regulations apply only to civilian fixed-wing aircraft and helicopters, and do not address noise generated by military aircraft or other non-stage aircraft (for example, former military aircraft, such as jet warbirds and other World War II-era aircraft). It should also be noted that Part 36 applies to aircraft certification requirement and not specific operations. Section 36.5 states that "no determination is made, under this part, that these noise levels are or should be acceptable or unacceptable for operation at, into, or out of, any airport."

The 1977 Amendment to Part 36 introduced a three-stage classification system to provide terminology that differentiates between the original and revised standards. The stages are classified as follows:

⁵ iFlyQuiet Community Engagement Guide, 2021 (https://rotor.org/wp-content/uploads/2021/07/iFlyQuiet-Community-Engagement-Guide.pdf)

⁶ U.S. Department of Transportation, Bureau of Transportation Statistics, National Transportation Noise Map Documentation (2020)











- Stage 1: aircraft have never been shown to meet any noise standards, either because they have never been tested, or because they have been tested and failed
- Stage 2: aircraft meet original noise limits, set in 1969
- Stage 3: aircraft meet more stringent limits, established in 1977

Amendments in 2005 created a fourth stage of certification. Stage 4 noise limits are defined as a cumulative 10 effective perceived noise level (EPNdB) less than those for Stage 3. Additionally, FAA published a Final Rule on November 3, 2017, which created Stage 5 noise standards, resulting in the most recent amendment to 14 CFR Part 36. Stage 5 noise standards apply to new aircraft designs with a maximum certified takeoff weight of 121,254 pounds (lbs) or more submitted on or after December 31, 2017, or with a maximum certified takeoff weight of less than 121,254 lbs on or after December 21, 2020. As noted in the Final Rule, the change sets a lower noise limit for these aircraft and does not affect either the operation of the current U.S. fleet or new type designs submitted before the applicable compliance date for Stage 5.7

Federal law required the phase-out of civil subsonic jet aircraft with a maximum weight of 75,000 lbs or less that do not comply with Stage 3 standards by December 31, 2015.8 Additional restrictions or phase-out dates have not been adopted for Stage 3, Stage 4, or Stage 5 aircraft.

Helicopter noise is also addressed within Part 36; however, these aircraft are only classified as Stage 1 and Stage 2. The Stage 2 certification date for helicopters was March 6, 1986. In contrast to fixed-wing aircraft, the Part 36 noise requirements for helicopters has not been reduced in a similar manner.

Propeller-driven small aircraft (i.e., less than 12,500 lbs) were added as a 1974 amendment to Part 36, which is prior to the creation of the aforementioned Stages 1-5 classification. These small aircraft, such as a Cessna 172 or PC 12 aircraft, are only termed certified or uncertified versus being assigned a noise stage. The noise standards for small aircraft are evaluated in terms of A-weighted decibel (dBA) limits for level flyover 1,000 feet above ground level (AGL).

14 CFR Part 91, Subpart I, Operating Noise Limits

14 CFR Part 91, Subpart I prescribes operating noise limits and related requirements to the operation of civilian aircraft in the United States. This section of the Federal Code ties back to 14 CFR Part 36, previously discussed, and specifically applies to civil subsonic jet (turbojet) aircraft with a maximum weight of 75,000 lbs operating within the U.S. Also known as the "Fleet Noise Rule," 14 CFR Part 91, Subpart I mandated that Stage 1 aircraft were to be retired, retrofitted with hush kits, or have engines replaced with quieter ones by January 1, 1988.

⁷ Federal Resister Vol. 82, No. 191, October 4, 2017, Pages 46123-46132 (https://www.federalregister.gov/documents/2017/10/04/2017-21092/stage-5-airplane-noise-standards); October 2019

^{8 49} USC §47534, February 14, 2012











Amendments passed in 1990 established a deadline of December 31, 1999, requiring Stage 2 aircraft exceeding 75,000 lbs to be discontinued from service. Per § 91.858 of 14 CFR Part 91,9 Stage 2 aircraft over 75,000 lbs may continue nonrevenue service under the following circumstances:

- Sell, lease, or scrap of the aircraft;
- modify aircraft to comply with Stage 3, Stage 4, or Stage 5 noise levels;
- obtain scheduled heavy maintenance or significant modifications;
- deliver the aircraft to a lessee or return to seller;
- to park or store aircraft;
- prepare the aircraft for any of the aforementioned events; and
- operate under an experimental airworthiness certificate.

A phase-out date of December 31, 2015, was established for Stage 2 aircraft weighing less than 75,000 lbs within the *FAA Modernization and Reform Act of 2012*. No additional restrictions or phase-out dates have been established for Stage 3 or Stage 4 aircraft.

Civil supersonic airplanes must comply with Stage 2 noise limits after October 13, 1977. In addition, overland supersonic flights over a speed of Mach 1 have been prohibited since 1973 under Section 91.817, Civil Aircraft Sonic Boom; however, due to an increased interest in development of supersonic aircraft, in January 2021 an amendment to § 91.817 streamlined and modernized the FAA's procedure for special flight authorizations.¹⁰

14 CFR Part 161, Notice and Approval of Airport Noise and Access Restrictions

The Airport Noise and Capacity Act of 1990 (ANCA) grants the FAA preemptive authority for setting noise restrictions at airports. Congress passed the act to address noise concerns at the federal level and provide a framework for addressing noise concerns at airports nationwide. Airports may not adopt noise restrictions that limit operations of Stage 2 or Stage 3 aircraft without following the regulations imposed in 14 CFR Part 161.

14 CFR Part 150, Airport Noise Compatibility Planning

A 14 CFR Part 150 Noise Compatibility Planning Study (Part 150 Study) is a voluntary process which results in the preparation of two official documents for participating airports: Noise Exposure Maps (NEM) and Noise Compatibility Program (NCP). The NEM document is the baseline analysis for the noise conditions at the airport and includes existing and forecast noise exposure contours. The NCP is the second phase of a complete Part 150 study that provides an analysis of alternatives to reduce or eliminate airport noise impacts identified in the NEM and concludes with a plan to effectively mitigate noise impacts. Additional information regarding the role of the airport operator and local, state, and federal governments to reduce airport impacts can be found in the Federal Aviation Noise Regulation section of the Resource Library, located in **Appendix C**.

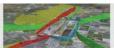
⁹ 14 CFR 91, Subpart I, § 91.858, Special Flight Authorizations for Non-Revenue Stage 2 Operations (July 15, 2002, amended October 4, 2017)

Federal Register Volume 86, Number 10 (2021), Special Flight Authorizations for Supersonic Aircraft (https://www.federalregister.gov/documents/2021/01/15/2021-00113/special-flight-authorizations-for-supersonic-aircraft)











Noise Exposure Maps

In addition to the baseline information included in this chapter, a Part 150 Study details the existing and projected noise conditions (i.e., the NEMs) based on operational variables discussed in Chapter Two. The scope of the noise environment at the airport is defined as those areas within the noise exposure maps for the existing condition and at least a five-year forecast. These noise contours are overlain on local land use maps to identify areas of existing or potential incompatible land uses. Supporting information is provided within the document to explain the methods used to develop noise exposure contours and land use analysis.

14 CFR Part 150 outlines the methodology and noise metrics to be used in analyzing and describing airport noise. It also establishes guidelines to identify land uses that are incompatible with varying noise levels. Airport proprietors are required to update noise exposure contours when changes in the operations at the airport would create any new, substantial, incompatible use. The most widely used measure to determine this change is an increase in the yearly day-night average sound level (DNL) of 1.5 decibels (dB), over incompatible land uses. In California, the Community Noise Equivalent Level (CNEL) metric is used in place of DNL.

A limited degree of legal protection can be afforded to the airport proprietor through the preparation of NEMs. The re-codified *Aviation Safety and Noise Abatement Act of 1979* (ASNA), provides that:

A person acquiring an interest in property...in an area surrounding an airport for which a noise exposure map has been submitted...and having actual or constructive knowledge of the existence of the map may recover damages for noise attributable to the airport only if, in addition to any other elements for recovery of damages, the person shows that:

- (1) after acquiring the interest, there was a significant
 - (A) change in the type or frequency of aircraft operations at the airport;
 - (B) change in the airport layout;
 - (C) change in flight patterns;
 - (D) increase in nighttime operations; and
- (2) the damages resulted from the change or increase. 11, 12

Additionally, Part 150 defines a change in the operation of an airport as an increase in the yearly DNL or 1.5 dB (or, in California, 1.5 CNEL) or greater in either a land area which was formerly compatible but is thereby made incompatible under 14 CFR Part 150 Appendix Table 1, or in a land area which was previously determined to be incompatible under that table and whose incompatibility is now significantly increased.¹³

[&]quot;Constructive knowledge" shall be attributed to any person if a copy of the noise exposure map was provided to him or her at the time of property acquisition, or notice of the existence of the noise exposure map was published three times in a newspaper of general circulation in the airport area.

^{12 49} USC §47506, the re-codified Aviation Safety and Noise Abatement Act of 1979 (ASNA)

¹³ 47 USC §47506











Upon completion of the NEM document and local adoption, it is submitted to the FAA for review. FAA review concludes with a determination as to whether the NEMs were prepared in a manner consistent with Part 150 regulations. The NEMs produced with this study will be the second iteration for Camarillo Airport. A previous NEM was completed in 1998.

Pursuant to FAA regulations, the revised NEM maps are subject to public review and comment. Public comments regarding this study are located in **Appendix B** and are on file with the FAA Western-Pacific Regional Director.

Noise Compatibility Program

A Noise Compatibility Program includes an evaluation of various noise abatement and land use alternatives. The result of this planning effort can include a plan with recommendations for the abatement of aircraft noise that would reduce the noise experienced by noise sensitive land uses within the 65 CNEL. Two criteria are of particular importance when considering noise abatement recommendations: the airport proprietor may take no action that imposes an undue burden on interstate or foreign commerce; nor may the proprietor unjustly discriminate between different categories of airport users. The plan may also include recommendations for land use compatibility planning and actions to mitigate the impact of noise on non-compatible land uses. Additionally, regulations state that the program should contain provisions for updates and periodic revisions.

In a similar process to the NEM document review, the NCP is submitted to the FAA for evaluation. The FAA responds with a Record of Approval stating which program measures comply with Part 150 criteria. In some cases, a Part 150 Study will not have qualified components due to a lack of impacts within federally prescribed noise thresholds, which has been the case in the past at Camarillo Airport. In these situations, measures may be recommended for adoption in an NCP to ensure future impacts do not occur. FAA may or may not accept the recommended measures. If impacts are found within the federally prescribed noise thresholds, an airport proprietor may become eligible for funding through the federal Airport Improvement Program (AIP) to implement the qualified components of the program.

FAA policy discourages development of new non-compatible land uses within the airport environs. The FAA will not approve Noise Compatibility Program measures proposing correcting noise mitigation actions for incompatible development that could occur in the vicinity of airports after October 1, 1998. Additionally, funding for these projects will not be available from the AIP noise set-aside fund.

The current NCP for Camarillo Airport was finalized and approved by the FAA in 2001.¹⁴ Airport operations at Camarillo Airport and advances in aircraft technology and land development surrounding the airport are factors that have changed significantly since the most recent NEM publication.

¹⁴ Coffman Associates, Inc. Camarillo Airport F.A.R. Part 150 Noise Compatibility Study: Noise Compatibility Program (November 1999)











STATE AND LOCAL LAND USE POLICIES

Control of land use in noise-impact areas around airports is a key tool in limiting the number of land uses exposed to noise. The federal government has no direct legal authority to regulate land use. This responsibility rests exclusively with state and local governments; however, as outlined in FAA Order 5190.6B, FAA Airport Compliance Manual, the airport sponsor's role with regard to noise abatement and land use planning is "to reduce the effect of noise on residents of the surrounding area. Such actions include optimal site location, improvements in airport design, noise abatement ground procedures, land acquisition, and restrictions on airport use that do not unjustly discriminate against any user, impede the federal interest in safety and management of the air navigation system, or unreasonably interfere with interstate or foreign commerce." Additionally, upon receipt of FAA grant funding, the airport sponsor agrees to take appropriate action, including the adoption of zoning laws, to the extent reasonable to restrict the use of land next to or near the airport to uses that are compatible with normal airport operations in accordance with FAA Grant Assurance 21, Compatible Land Use. 16

The State of California legislates the authority of land use regulation to local governments. This regulation is accomplished through zoning ordinances and General Plans. The state has also established airport noise standards, noise insulation standards, and requirements for the establishment of Airport Land Use Commissions (ALUCs).

Zoning Ordinance

The State of California gives local jurisdictions, such as cities and counties, the authority to regulate the use of buildings, structures, and land through the adoption and administration of a zoning ordinance or code. While land use plans, such as the General Plan, are intended to establish policies and goals to guide future development and land use, municipalities control land use through zoning ordinances and development codes.

Zoning helps control development in two primary land uses: residential and non-residential. Residential zoning classifications establish the number and type of dwelling units that can be constructed on a piece of land. Density, or the number of dwelling units per acre of land, is important in airport noise and land use compatibility planning. Increased density can increase the population in an area. If that area is exposed to airport noise above the 65 CNEL threshold, a greater number of impacted dwelling units can result. Limiting the density near an airport can help improve compatibility and limit the number of impacts on surrounding land uses. Two residential categories are used in the analysis: single-family residential and multi-family residential. As indicated by the classification name, each zone limits the number of residences allowed on a parcel.

Non-residential land use classifications, such as commercial and industrial, are typically considered to be compatible with airport operations because of their inherent noise characteristics. Commercial and

¹⁵ As noted in FAA Order 5190.6B, Section 13.2(2), sponsor actions are, "subject to constitutional prohibitions against creation of an undue burden on interstate and foreign commerce, and unreasonable, arbitrary, and unjust discriminatory rules that advance the local interest, other statutory requirements, and interference with exclusive federal regulatory responsibilities over safety and airspace management."

¹⁶ FAA Grant Assurances (https://www.faa.gov/sites/faa.gov/files/airports/new-england/airport compliance/assurances-airport-sponsors-2022-05.pdf); May 2022

¹⁷ California Government Code (GOV) Title 7, Division 1, Chapter 4 §65850











industrial categories include areas zoned for manufacturing, business parks, and retail services; however, some specific noise-sensitive non-residential land uses, such as hospitals, libraries, and childcare facilities, can be permitted in residentially zoned districts. On the other hand, residential type uses, such as senior living and group home facilities, can be permitted either by right or by conditional use in non-residential districts.

General Plan

The State of California requires each local jurisdiction to develop a "long-range General Plan for the development of the city or county" which "shall consist of a statement of development policies and shall include diagrams and text setting forth objectives, principles, standards, and plan proposals." Of the seven mandatory elements in the General Plan, two are especially important to the Part 150 Study – land use and noise. ¹⁸

The land use element of the General Plan typically designates the proposed general distribution and intensity of land uses. This element serves as a framework for the plan and is intended to correlate all land use issues into a set of development policies. The land use element must include standards of population density and building intensity.

The noise element identifies and evaluates the noise situation in the community. The projected noise levels are calculated and mapped for airports and other major noise sources, such as highways. Projected noise levels are used as a guide for establishing a pattern of land uses in the land use element that minimizes the exposure of residents to excessive noise.

Noise Insulation Standards

Part 2, Volume 1, Chapter 12, Section 1206.4 of the California Building Standards Code (Cal. Code Regs., Title 24) states that "interior noise levels attributable to exterior sources shall not exceed 45 dB in any habitable room." The California Code of Regulations uses a day-night average sound level (L_{dn}) or the Community Noise Equivalent Level (CNEL) to be consistent with the noise element of the local general plan. According to the *California Airport Land Use Planning Handbook* (handbook),¹⁹ the interior noise level resulting from exterior noise is equally important as exterior noise levels as a determinant of acceptable noise levels, which is subjective in nature. In residential circumstances, the determining factor is speech interference and sleep disruption.

The handbook states that while insulation methods are available, that should not be a mitigation measure for highly noise-impacted areas, and sound insulation should be reserved for existing land uses. For new development, the best form of noise mitigation is good land use planning and insulation measures should be used as a final course of action.

¹⁸ California Government Code (GOV) Title 7, Division 1, Chapter 3, Article 5 §65302

¹⁹ California Department of Transportation *California Airport Land Use Planning Handbook* (https://dot.ca.gov/programs/aeronautics/airport-land-use-planning).











Airport Land Use Commission

The establishment of an Airport Land Use Commission (ALUC) is required for any county containing a public use airport. The Ventura County Transportation Commission serves as the designated ALUC, as authorized and required by state law (Cal PUB, Division 9, Aviation Part 1, Chapter 4, Article 3.5, Section 21670 et seq.) The original statute was enacted in 1967 as part of the State Aeronautics Act to establish ALUCs for the purpose of promoting land use compatibility surrounding airports.²⁰ Although ALUCs do not have the authority to govern operations at any given airport, the ALUC is required to formulate a comprehensive plan that provides for the orderly growth at each public-use airport and the area surrounding the airport within the jurisdiction of the commission. 21 These plans are typically referred to as Comprehensive Land Use Plan (CLUPs) or Airport Land Use Compatibility Plans (ALUCPs). Once adopted, California statute stipulates that local agencies shall amend their General Plans, zoning ordinances, and other land use regulations to be consistent with the ALUCP or CLUP within 180 days as outlined in California Government Code §65302.3 and California Public Utility Code 21676. The ALUC also reviews and provides recommendations concerning certain projects within the ALUC planning area in accordance with the policies outlined within the CLUP or ALUCP. The ALUCs are directed to review projects in accordance with California Division of Aeronautics (Caltrans) handbook guidelines. The 20year forecast noise contour produced as part of this study can be utilized by the ALUC as supporting material during its ALUCP update process.

Joint Powers Agreement

On October 1, 1976, the City of Camarillo and the County of Ventura entered into the Camarillo Airport Joint Powers Agreement (JPA).²² The 1976 JPA is perpetual in nature and was originally created to establish mutually agreed upon limits for the newly commissioned general aviation airport. The JPA establishes the Camarillo Airport Authority and addresses factors such as airport noise, runway length, commercial and cargo operations, and aircraft weight. In addition, the county and city agree to exercise their police powers jointly to maintain aviation-compatible land uses in the Camarillo Airport Zone. Airport Authority review is required for all land use matters within the zone bordered by Highway 34 to the south, Carmen Drive to the east, Highway 101 to the north, and the western boundary of Camarillo's Sphere of Interest to the west.

The following restrictions are listed in the 1976 JPA:

- The airport shall be operated for general aviation purposes only.
 - o General aviation includes all business and commercial, training, personal transportation, proficiency, and sport flying not classified as air carrier.
 - General aviation also includes air taxi or charter for revenue on a non-schedule basis and interstate freight-carriers limited to 30 passengers and 7,500 lbs. cargo.
- The airport operating hours will be from 5:00 AM to 12:00 AM.²³

²⁰ California Public Utilities Code (PUC) §21670

²¹ California Public Utilities Code (PUC) §21675

²² Ventura County Board of Supervisors and City of Camarillo Agreement Between County of Ventura and City of Camarillo Pertaining to Camarillo Airport Development and Surrounding Land Use (1976)

²³ Ventura County Board of Supervisors, Ordinance 6506-17, Hours of Operation (November 1980; rev. 2006)











- The usable runway length shall not exceed 6,000 feet and shall be the most westerly 6,000 feet of the existing runway.
- An aircraft weight limitation of 115,000 lbs. (twin wheel) shall be in effect.
- The airport VFR traffic pattern shall be to the south of the airfield.
- Airport development shall be guided to ensure that residential areas are not exposed to noise levels greater than 60 CNEL average noise and 90 dBA single event noise.

LOCAL LAND USE PLANNING POLICIES AND REGULATIONS

The general location of Camarillo Airport within California's southern coastal region is depicted on **Exhibit 1A**. For the purpose of this study, zoning and general planning in the study area surrounding Camarillo Airport are the responsibility of the following jurisdictions: City of Oxnard, City of Camarillo, and Ventura County. The jurisdictional limits of each are depicted in **Exhibit 1B**. The detailed study area boundary indicates the extent of land use mapping gathered for this 2023 Part 150 Noise Exposure Map (NEM) based on the FAA-mandated NEM scale. The boundary does not represent the extent of aircraft operations or noise conditions.

It is important to note the distinction between primary land use concepts used in evaluating development with the airport environs and existing land use, comprehensive plan, and zoned land use. Existing land use refers to property improvements as they *exist today*.

Zoning identifies the type of land use <u>permitted</u> on a given piece of property, according to the city and county zoning ordinances and maps. Local governments are required to regulate the subdivision of all lands within their corporate limits. Zoning ordinances should be consistent with the General Plan, where one has been prepared. In some cases, the land use prescribed in the zoning ordinance or depicted in the general plan may differ from the existing land use.

The General Plan land use identifies the <u>projected or future</u> land use, according to the goals and policies established in the locally adopted General Plan. This document guides future development within the city and county planning area and provides the basis for zoning designations. In some cases, the land use allowed in the zoning ordinance or depicted on the General Plan may differ from the existing land use.

Existing Land Use

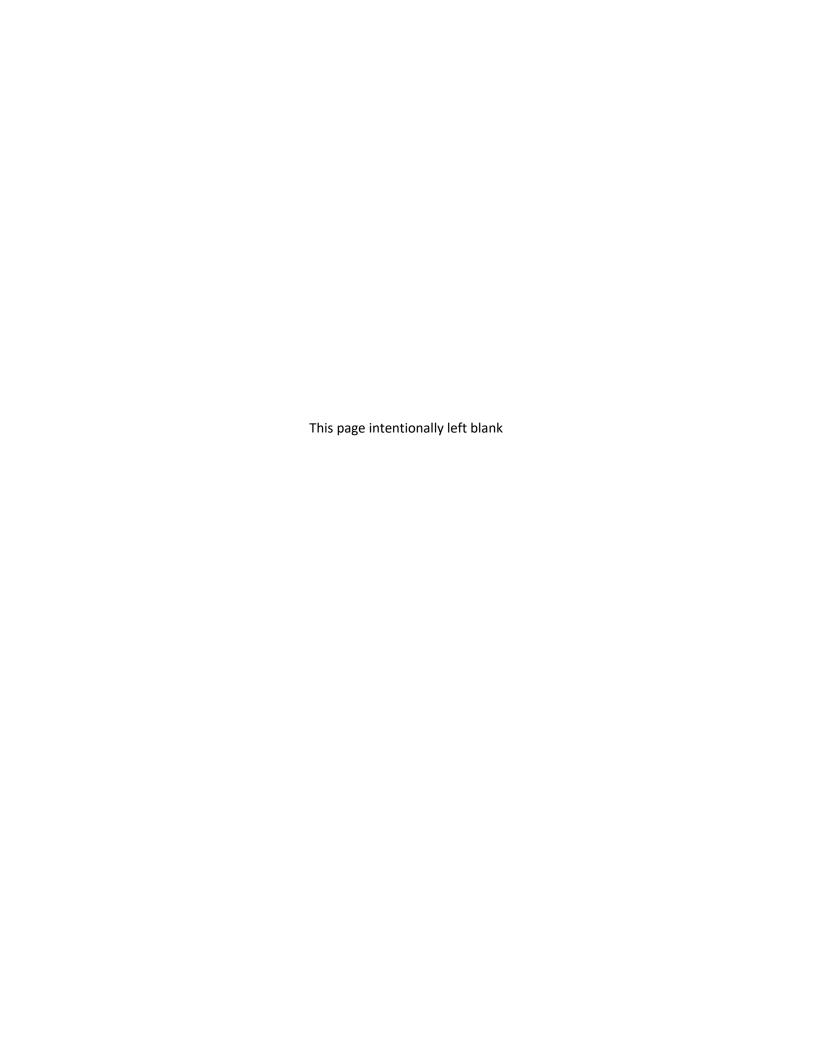
An evaluation of the existing land uses surrounding the airport is necessary to understand if impacts result from noise exposure per Part 150 guidelines. **Exhibit 1C** illustrates existing land uses within the study area, including noise sensitive uses such as schools, religious facilities, and hospitals. The study area, or the property near the airport where detailed land use information has been obtained, is comprised of all the land shown in **Exhibit 1C**. For comparative purposes, the total area for each land use category is presented in **Table 1A**. The areas of each land use category are based on parcels identified in **Exhibit 1C**.

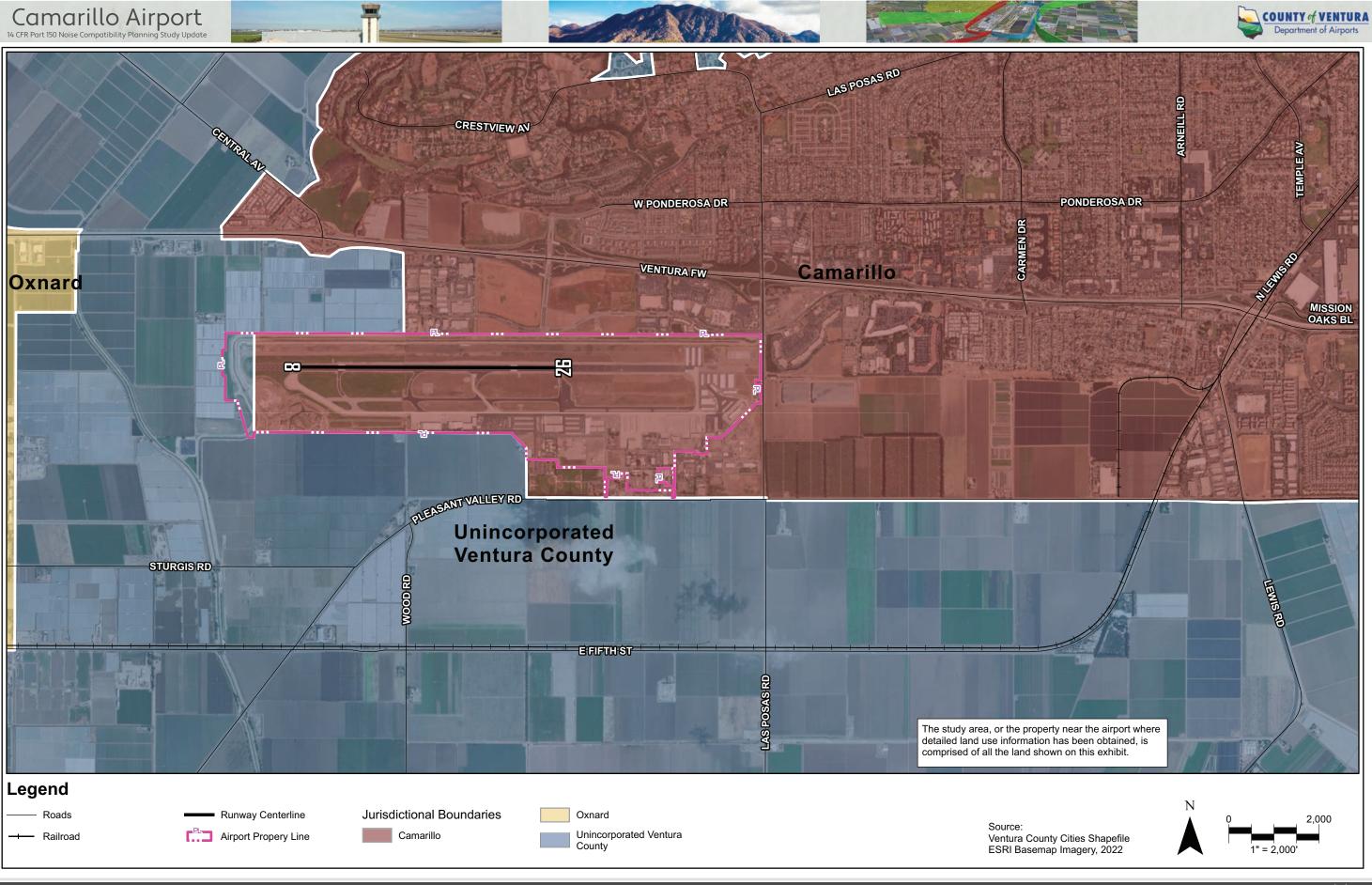
The study area, as identified in **Table 1A**, is approximately 16,911 acres, 657 acres of which belong to the airport (3.9 percent of the study area). Agricultural uses exist on a majority of land within the study

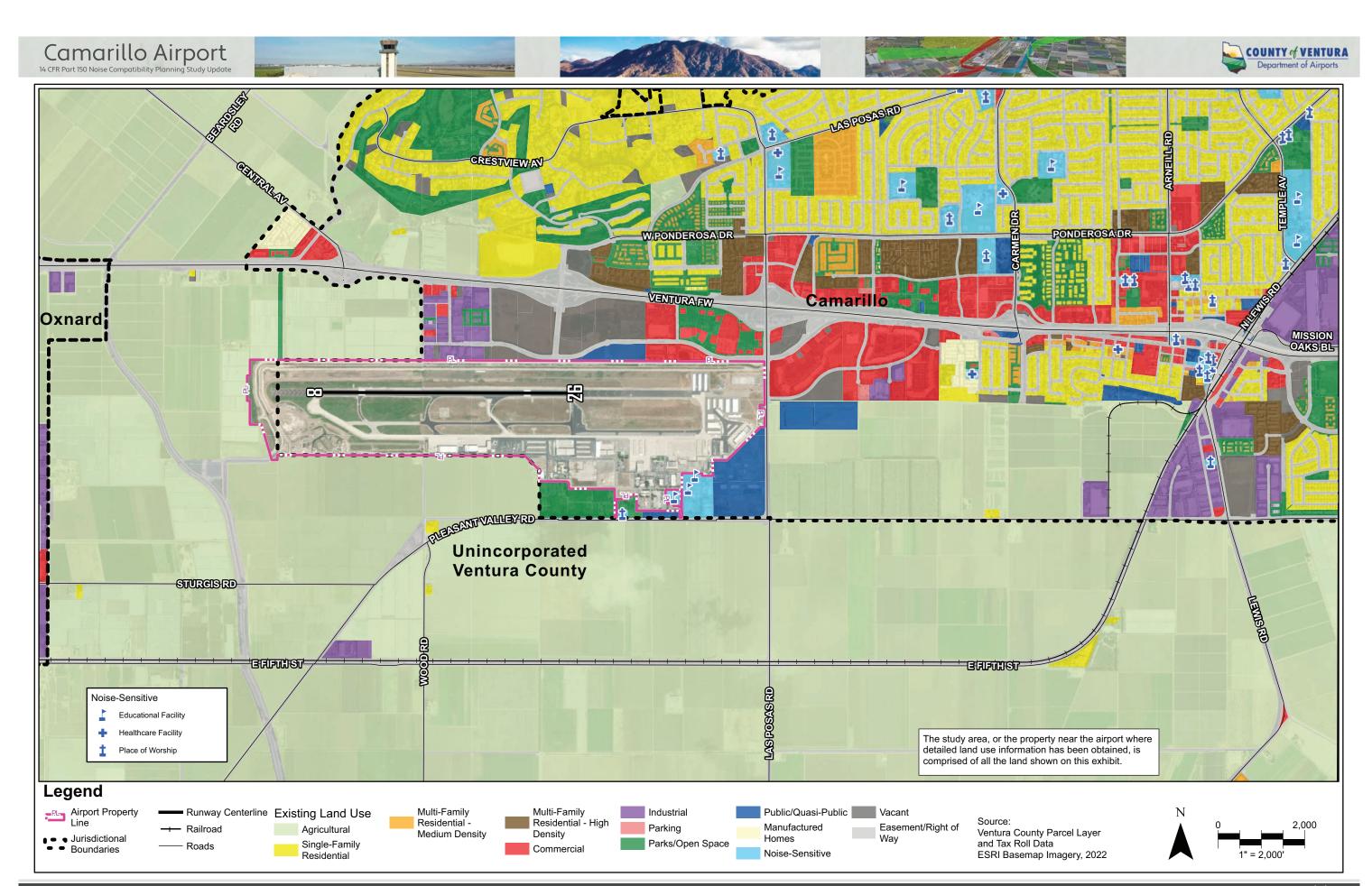


E 5th St

W 2nd St

















area of Camarillo Airport (55.4 percent). The second group of major land uses consists of single-family residential (10.6 percent); easements/right-of-way (10.3 percent) and commercial, industrial, and transportation and utilities (9.2 percent). These three land use categories combined account for over 30 percent of the study area and over 5,000 acres. Examples of uses within the commercial, industrial, and transportation category include local and regional shopping areas, office buildings, light manufacturing warehouses, and heavy industrial facilities. A significant portion of the easement/right-of-way category includes roads such as the Ventura Freeway as well as arterial, collector, and local roads, the railroad corridor parallel to E Fifth Street, and easements such as the United Water Conservation District reservoir and canal. Other existing uses in the study area include parks/open space (3.2 percent), vacant parcels (2.5 percent), multi-family residential (2.2 percent), public/quasi-public (1.2 percent), and manufactured homes (0.3 percent).

The non-residential noise-sensitive uses identified on Exhibit 1C account for 1.1 percent of the study area or 192 acres. These include three schools and once church located directly south of airport property and east of Las Posas Road, as well as several schools and places of worship located north of Ponderosa Drive.

TABLE 1A Existing Land Uses			
Land Use Type	Area (Acres)	Percentage of Study Area	
Airport Property	657	3.9%	
Agricultural	9,361	55.4%	
Single-Family Residential	1,797	10.6%	
Multi-Family Residential	375	2.2%	
Commercial, Industrial, Transportation, and Utilities	1,561	9.2%	
Mixed-Use	8	0.0%	
Parks/Open Space	538	3.2%	
Public/Quasi-Public	201	1.2%	
Manufactured Homes	45	0.3%	
Noise-Sensitive Uses	192	1.1%	
Undeveloped/Vacant Parcels	430	2.5%	
Right-of-Way	1,746	10.3%	
Total	16,911	100.0%	

Source: Ventura County Assessor's Office Local Tax Roll database (December 2022); ESRI Basemap Imagery (2022); Coffman Associates analysis and windshield survey from January 2023.

Historic Resources

According to the National Park Service's National Register of Historic Places (NRHP) database, there are no sites listed on the NRHP within the Part 150 Study area.²⁴ The nearest historic resource, Camarillo Ranch House, is located at 201 Camarillo Ranch Rd, which is just east of the defined study area boundary.

The State of California's State Park Office of Historic Preservation database was also consulted to determine if there are any California Historic Landmarks present within the Party 150 study area. No sites are listed as California Historical Landmarks or California Points of Historical Interest.

²⁴ National Park Service's National Register of Historic Places (https://www.nps.gov/subjects/nationalregister/database-research.htm); September 2020)











There is one site located within the study area that is protected under Section 4(f) as defined by FAA Order 1050.1F, which is a publicly owned park named Freedom Park. Freedom Park is located on Pleasant Valley Road adjacent to the airport's south property line.

Zoning

The City of Camarillo and City of Oxnard, as well as Ventura County, have authority over the land uses in the study area around Camarillo Airport and have adopted zoning ordinances which establish a variety of zones to control land use within all areas of their respective jurisdictions.

For the purpose of this Part 150 Study, the zoning districts have been generalized to provide a uniform display of the zoning districts from the communities affected by Camarillo Airport air traffic.

Table 1B represents the classification of zoning districts for each jurisdiction and how those zoning districts fit into a generalized zoning land use category.

TABLE 1B Classification of Zoning Districts				
Generalized Zoning Category	City of Camarillo	City of Oxnard	Ventura County	
Agricultural	AE	-	AE, RA, TP, CA	
Single-Family Residential	R-E, R-1, MHPD	R-1, R-B-1, R-W-1,	RE, RO, R1, RES	
(Low-Density)	K E, K I, WIIII D	MHP-C, R-BF	CR, CRE, CR1, RB, RBH	
Multi-Family Residential	_	R-2, R-3,	R2, CR2	
(Medium-Density)	_	R-W-2, R-2-C, R-3-C	NZ, CNZ	
Multi-family Residential –				
Apartment/Condo Residential	-	R-4	RHD	
(High-Density)				
Commercial (including Office and	R-C, P-O, C-N, COT, SC	C-O, C-1, C-2, CBD	CO, C1, CC	
Professional)	K-C, F-O, C-N, CO1, 3C	CNC, CVC, HCI	co, c1, cc	
Mixed-Use	CCM, CMU	CPC	R/MU, TC	
Planned Development	RPD, CPD	MH-PD, P-D	RPD, CPD, CRPD	
Industrial	L-M, M-1, M-2	C-M, BRP, M-L, M-1, M-2	M1, M2, M3, IND, CI	
	L-1V1, 1V1-1, 1V1-2	CDI, EC, COD		
Parks/Open Space	O-S	C-R, RC, RP	COS	

Sources: City of Oxnard Planning Division; City of Camarillo Planning Division; Ventura County Planning Division; Coffman Associates analysis.

Table 1C and **Exhibit 1D** present the generalized zoning districts in the study area.

As shown in Table 1C, over half of the study area surrounding Camarillo Airport is zoned agricultural (54.5 percent). Other predominant zoning districts within the study area include single-family residential (18.1 percent), and industrial (10.5 percent). These three zoning areas, together with airport property (3.9 percent) and right-of-way (8.6 percent), account for over 95 percent of the study area. The remaining five percent is zoned either commercial (3.5 percent), multi-family residential (0.5 percent), mixed-use (0.4 percent), or parks/open space (0.2 percent). Note that there are no areas zoned to be vacant.











TABLE 1C Generalized Zoning Within the Study Area			
Land Use Type	Acreage	Percentage of Study Area	
Camarillo Airport Property	657	3.9%	
Agricultural	9,212	54.5%	
Single-Family Residential	3,059	18.1%	
Multi-Family Residential	78	0.5%	
Commercial	584	3.5%	
Mixed-Use	63	0.4%	
Industrial	1,770	10.5%	
Parks/Open Space	39	0.2%	
Right-of-Way	1,449	8.6%	
Total	16,911	100.0%	

Sources: Ventura County Assessor's Office Local Tax Roll database (December 2022), City of Camarillo Planning Division; City of Oxnard Planning Division; Ventura County Planning Division; Coffman Associates analysis

General Plan

The land use element of a General Plan designates the proposed general land use distribution and intensity in a jurisdiction. The land use element serves as a framework for the plan and is intended to correlate all land use issues into a set of development policies. The land use element should reflect the community's vision on the distribution of land use and align with other general plan elements.²⁵

The future land use designations from the following sources are identified on **Exhibit 1E** with the total area for each land use category presented in **Table 1D**.

- City of Camarillo City of Camarillo 2021 General Plan Progress Report (published April 2022)
- City of Oxnard City of Oxnard 2030 General Plan (published October 2011; amended December 2016)
- Ventura County Ventura County 2040 General Plan (adopted September 15, 2020; updated October 12, 2021)

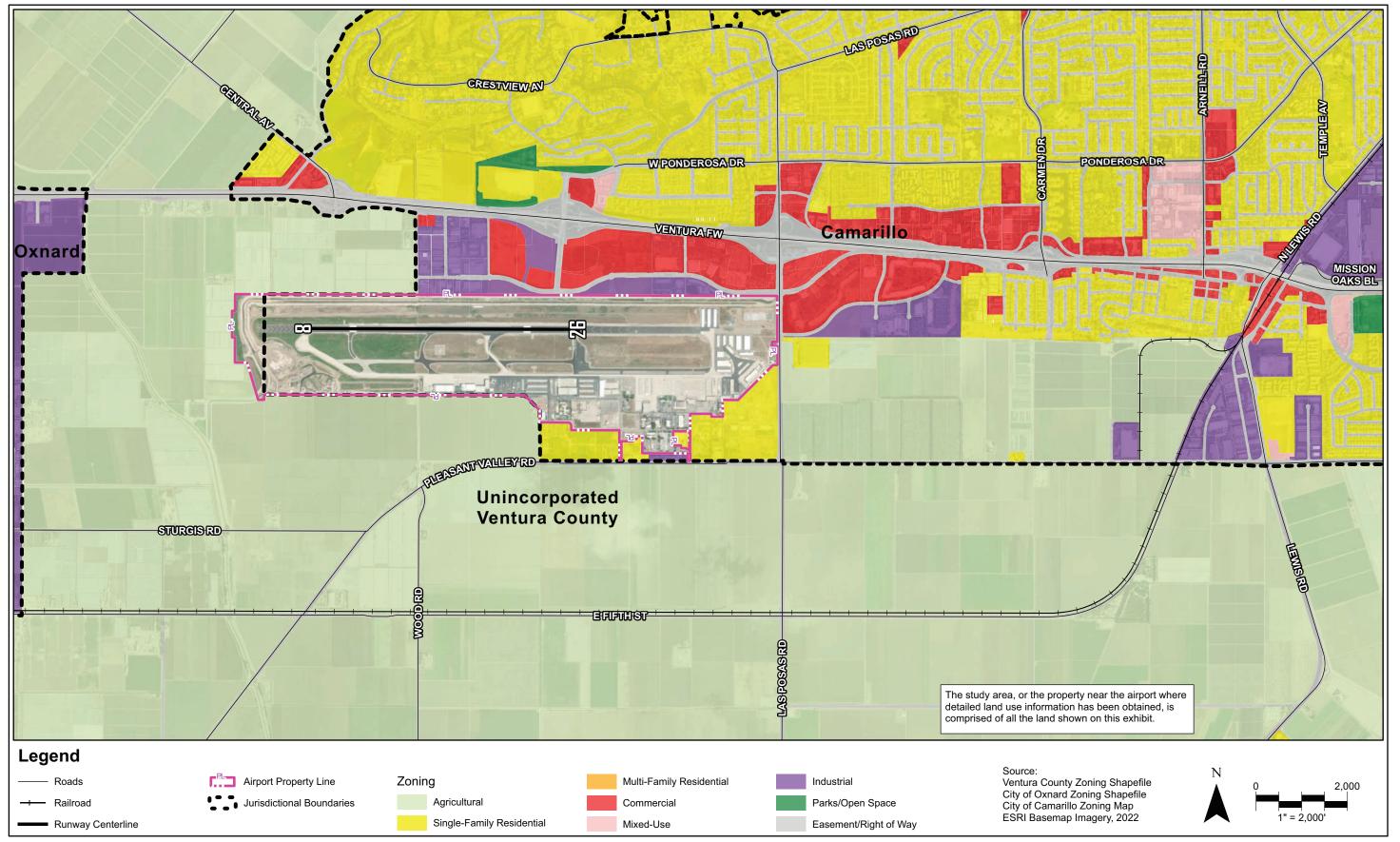
In the General Plan land use designations of the above jurisdictions, similar to the existing zoning, agricultural land use accounts for over half of the study area (55.2 percent). Single-family residential (11.7 percent) and industrial (8.9 percent) are the other predominant planned land use types. The right-of-way accounts for an additional 8.5 percent of planned land use. The airport (3.9 percent) is not anticipated to change in acreage in the general plan land use designation. Commercial land use planned acreage only slightly increases to 3.5 percent in the General Plan; however, note that additional areas near the airport currently zoned commercial are reflected as mixed-use in the general plan, and some industrial areas are changed to commercial in the general plan. The above designations combined account for over 90 percent of the planned future land use within the study area surrounding Camarillo Airport. The remaining land use types, including multi-family residential (3.7 percent), mixed-use (1.6 percent), parks/open space (1.0 percent), and planned development (0.4 percent), do show an increase in acreage of planned land area from existing zoning, offset by a decrease in single-family residential acreage. The additional general plan category of public/quasi-public (1.4 percent) reflects a change in

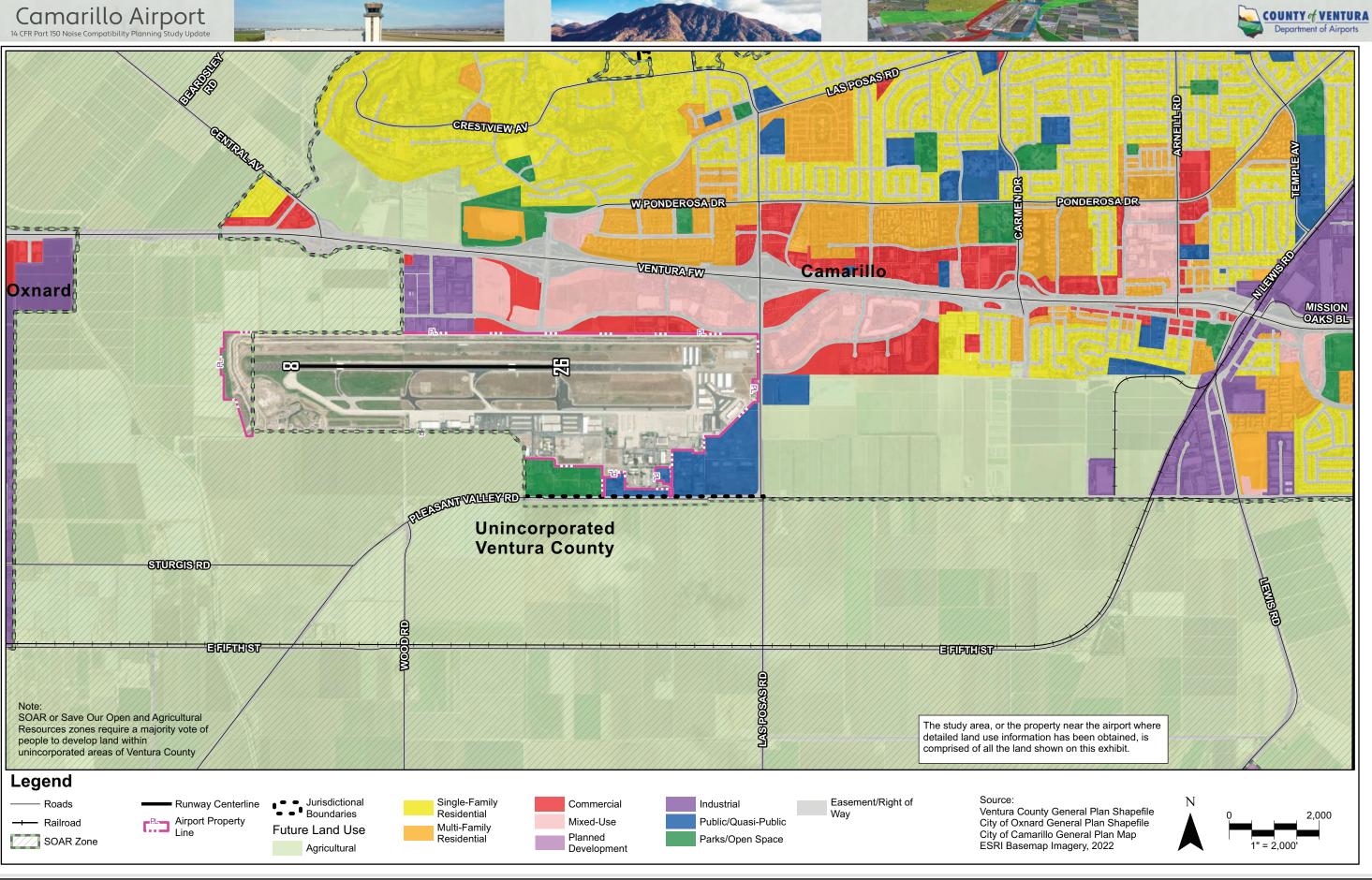
²⁵ State of California General Plan Guidelines 2017 (Rev 2020), Chapter 4, State of California Governor's Office of Planning and Research (http://www.opr.ca.gov/planning/general-plan/guidelines.html).

Camarillo Airport
14 CFR Part 150 Noise Compatibility Planning Study Update



















land use of the area south of Camarillo Airport, along with other areas within the City of Camarillo, currently zoned single-family residential to planned as public/quasi-public. Note that no areas are planned to be vacant.

TABLE 1D General Plan Land Use			
Land Use Type	Acreage	Percentage of Study Area	
Airport Property	657	3.9%	
Agricultural	9,332	55.2%	
Single-Family Residential	1,987	11.7%	
Multi-Family Residential	622	3.7%	
Commercial	616	3.6%	
Mixed-Use	277	1.6%	
Planned Development	68	0.4%	
Industrial	1,504	8.9%	
Public/Quasi-Public	244	1.4%	
Parks/Open Space	166	1.0%	
Right-of-Way	1,438	8.5%	
Total	16,911	100.0%	

Sources: Ventura County Assessor's Office Local Tax Roll database (December 2022), City of Camarillo Planning Division; City of Oxnard Planning Division; Ventura County Planning Division; Coffman Associates analysis.

Study Area General Plans

In 1976, the State of California required a noise element addressing specific guidelines to be incorporated into local general plans. These guidelines are outlined in Appendix D of the *State of California General Plan Guidelines*²⁶, issued by the Governor's Office of Planning and Research (OPR). The essential goals of the noise element outlined in Appendix D of OPR's *General Plan Guidelines* are:

- To provide sufficient information concerning the community noise environment so that noise may be effectively considered in the land use planning process, therefore lending a foundation for a community noise ordinance to address noise complaints.
- To develop strategies for abating excessive noise exposure through cost-effective mitigation techniques combined with zoning ordinances to avoid incompatible land uses.
- To protect existing regions of a planning area where the noise environment is determined to be acceptable, while also protecting those locations determined to be "noise sensitive."
- To utilize the definition of the CNEL or L_{dn} noise contour for local compliance with the State Noise Insulation Standards, which require specified levels of outdoor-to-indoor noise reduction for new multi-family residential construction in locations where the outdoor noise exposure exceeds CNEL 60 dB.²⁷

According to the OPR *General Plan Guidelines*, the noise element of a general plan should apply the most up-to-date and detailed information available to reflect that community's noise environment, including stationary sources, predicted levels of noise, and the impacts of noise to local residents.

²⁶ State of California General Plan Guidelines 2017, Chapter 4, State of California Governor's Office of Planning and Research (http://www.opr.ca.gov/planning/general-plan/guidelines.html); November 2019

²⁷ Title 24, California Code of Regulations and Chapter 35 of the Uniform Building Code











California Government Code (CGC) $\S65302(f)(1)^{28}$ requires a noise element to "identify and appraise noise problems in the community and shall analyze and quantify, to the extent practicable, as determined by the legislative body, current and projected noise levels..." for several sources outlined in the code, including "commercial, general aviation, heliport, helistop, and military airport operations, aircraft overflights, jet engine test standards, and all other ground facilities and maintenance functions related to airport operations" (CGC $\S65302(f)(1)(F)$).

The following sections provide excerpts from the previously discussed planning documents that offer land use planning guidance addressing noise for areas around the airport.

City of Camarillo General Plan

The City of Camarillo General Plan Elements relevant to this study are as follows: Circulation (adopted in 1984, last updated in 2014), Safety (adopted in 1989, last updated in 2013) and Noise (adopted in 1979, last updated in 2015).²⁹

- Circulation Element: Goal 7 Maintain and ensure land use compatibility with the Camarillo Airport.
- Circulation Element: Goal 10 Provide safe, reliable, and efficient utility service, while minimizing utility impacts and hazards.

<u>Utilities (Air Transportation).</u> Adopted in July 2000, the Airport Comprehensive Land Use Plan for Ventura County is intended to protect and promote the safety and welfare of residents near the military and public-use airports in the County, as well as airport users, while promoting the continued operation of those airports. Specifically, the plan seeks to protect the public from the adverse effects of aircraft noise, to ensure that people and facilities are not concentrated in areas susceptible to aircraft accidents, and to ensure that no structures or activities encroach upon or adversely affect the use of navigable airspace. Projects are reviewed for consistency with the Airport Comprehensive Land Use Plan, prior to review by the Planning Commission and/or City Council.

• Safety Element: Goal SAF-6 – Aircraft Hazards

Goal SAF-6 calls for facilitating safe development within the vicinity of the Camarillo Airport. The City coordinates with the Ventura County Department of Airports and the Airport Land Use Commission on future development projects associated with or located in the vicinity of the airport. Projects are reviewed for consistency with the Ventura County Airport Comprehensive Land Use Plan (ACLUP). Development projects within the Airport Hazard Zones are required to comply with Part 77 of the Federal Aviation Administration Regulations (objects affecting navigable airspace). The City also ensures that private airstrips and agricultural landing fields are sited outside of areas that would present significant hazards or annoyance to existing or planned land uses and would not conflict with the flight paths of existing airports. The hotels and

²⁸ California Government Code Title 7, Division 1, Chapter 3, Article 5 Authority for and Scope of General Plans (https://leginfo.legislature.ca.gov);
November 2019

²⁹ City of Camarillo 2021 General Plan Annual Progress report
(https://www.ci.camarillo.ca.us/departments/community_development/general_plan.php); April 2022











conference center currently under construction at the northeast corner of Las Posas Road and Ventura Boulevard has been reviewed by the Camarillo Airport and conditioned appropriately to ensure compliance with these regulations.

 Noise Element: Goal 1 – Camarillo's Land Use Pattern is compatible with current and future noise levels.

The City has adopted appropriate noise limits for various land use classifications throughout the community.

The City requires developers to submit noise assessment reports with mitigation measures during the project planning process to identify and address potential noise impacts to their own developments and on nearby residential and noise-sensitive land uses.

The City, through the Department of Building and Safety, requires that new, single-family, and multifamily structures comply with the State's noise insulation standards for exterior-to-interior party walls, and that floor/ceiling noise control be applied.

 Noise Element: Goal 2 – Noise impacts affecting noise-sensitive land uses from transportation sources are minimized.

The City works closely with the Ventura County Department of Airports, which operates Camarillo Airport, to keep pilots informed of the guidelines for noise reduction, including identification of "noise-sensitive areas" where over-flight should be avoided, as well as the avoidance of flights between 10 p.m. and 7 a.m. The City also coordinates the review of all development projects with the Ventura County Department of Airports to ensure proper and effective mitigation of airport-related noises relevant to development projects.

• Noise Element: Goal 4 – The quality of life in the community is improved through efforts on the part of the city to reduce noise impacts.

The City coordinates among the appropriate agencies involved in noise abatement, including the Camarillo Airport.

The City observes all state and federal occupational safety and health noise standards.

• Recommended Noise Element Implementation Measures

Table 12 lists the measures contained in the Noise Element for implementation of the goals and policies, and the status of implementation.

Chapter 3 of the Camarillo General Plan also identifies the Camarillo Urban Restriction Boundary (CURB), which restricts the City of Camarillo from allowing urban services and urbanized uses of land outside of the CURB line to help prevent urban sprawl. The CURB was first adopted in 1998, amended in 2016 and is in effect through December 31, 2050.











City of Oxnard General Plan

Goals and policies relevant to this Camarillo Airport Part 150 study are referenced in Chapter 3 – Community Development, Chapter 4 – Infrastructure and Community Services, and Chapter 6 – Safety & Hazards, of the City of Oxnard General Plan published in October 2011.³⁰

- Goal CD-5 Appropriate Industrial Development
 - CD-5.2 Compatible Land Use: Ensure adequate separation between sensitive land uses (residential, educational, open space, healthcare) to minimize land use incompatibility associated with noise, odors, and air pollutant emissions.
- Goal CD-8 Growth Management
 - CD-8.5 Impact Mitigation: Ensure that new development avoids or mitigates impacts on air quality, traffic congestion, noise, and environmental resources to the maximum extent feasible.
- Goal ICS-10 Air Transportation
 - ICS-10.1 Support Oxnard Airport: Continue to support commercial air service at Oxnard Airport as outlined in the Oxnard Airport Master Plan.
 - ICS-10.2 Oxnard Airport Compatible Land Use: Continue to ensure that the land use and zoning adjacent to Oxnard Airport is compatible in order to minimize potential noise and safety problems.
 - ICS 10.3 Airport Operations Monitoring: Monitor impacts, such as vehicle congestion, overflight noise, and air pollution, from operations at the Oxnard Airport and work with the County Department of Airports to reduce these impacts if they are excessive.
- Goal ER-6 Aesthetic, Scenic, and Landscape Resources
 - ER-6.6 New Development Private Open Space: Ensure that new development incorporates open space areas that provide community and neighborhood identity, private quality exterior private open space for each housing unit, and minimize conflicting land uses and noise generators.
- Goal SH-5 Noise Safe Residential and Working Environments
 - SH-5.1 Noise Abatement Programs: Promote intergovernmental noise abatement coordination and public information programs.
 - SH-5.2 State Noise Insulation Standards: Continue to enforce State Noise Insulation Standards for projects in high noise environments and require developers to comply with the noise mitigation measures, designed by an acoustical engineer.

(https://www.oxnard.org/wp-content/uploads/2017/06/Oxnard-2030-General-Plan-Amend-06.2017-SM.pdf); October 2011

³⁰ City of Oxnard, California 2030 General Plan, Goals & Policies











SH-5.3 Sound Attenuation Measures: Promote, where feasible, alternative sound attenuation measures such as berms, heavy landscaping, resurfacing of noise walls to promote noise absorption as well as deflection, berms and landscaping, or location of buildings away from the roadway and other noise sources.

SH-5.6 Compatibility with Oxnard Airport: Work with the Oxnard Airport in revising flight paths to minimize flyovers of residential areas, especially "touch and go" pattern flying at low altitude and at relatively high frequency.

Goal SH-6 Noise Consideration in Development Review

SH-6.5 Land Use Compatibility with Noise: Encourage non-noise sensitive land uses to locate in areas that are permanently committed to noise producing land uses, such as transportation corridors and industrial zones.

SH-6.6 Locating Education Institutions to Avoid Noise Disruption: Locate educational institutions in areas where students and teachers can perform both inside and outside activities without excessive distraction from noise.

SH-6.8 Noise Contour Maps: Utilize, and periodically update, noise contour maps as a guide to land use decisions and utilize noise compatibility analyses prepared by the County Airports Department and the U.S. Navy.

SH-6.9 Minimize Noise Exposure to Sensitive Receptors Prohibit the development of new commercial, industrial, or other noise generating land uses adjacent to existing residential uses, and other sensitive noise receptors such as schools, child and daycare facilities, health care facilities, libraries, and churches if noise levels are expected to exceed 70 dBA.

SH-6.12 Noise Abatement Programs: Promote intergovernmental noise abatement coordination and public information programs.

SH-6.13 Noise Acceptable for Open Windows and Patios: Continue to require noise analysis of proposed development projects as part of the environmental review process and then require mitigation measures to reduce noise impacts to acceptable levels within outside activity areas and within residential structures without relying on mechanical ventilation, if feasible.

Ventura County 2040 General Plan

The first Ventura County General Plan was adopted in 1988. A comprehensive update to the General Plan was recently completed for the first time in 30 years and the updated Ventura County 2040 General Plan was adopted on September 15, 2020.³¹

³¹ Ventura County 2040 General Plan (<u>https://vc2040.org/review/documents</u>); September 2020











In the Ventura County 2040 General Plan, noise is addressed within the state-mandated Hazards and Safety Element in Chapter 7, Section 7.9. According to Section 7.9, aircraft is considered one of the predominant sources of noise in the county, along with traffic, transit and freight trains. The section lists noise-sensitive land uses and includes noise compatibility standards.

- HAZ-9: To protect the health, safety, and general welfare of county residents by striving to eliminate or avoid the adverse noise impacts on existing and future noise sensitive uses.
 - HAZ-9.1 Limiting Unwanted Noise: The County shall prohibit discretionary development which would be impacted by noise or generate project-related noise which cannot be reduced to meet the standards prescribed in Policy Haz-9.2. This policy does not apply to noise generated during the construction phase of a project.
 - HAZ-9.2 Noise Compatibility Standards: The County shall review discretionary development for noise compatibility with surrounding uses. The County shall determine noise based on the following standards:
 - [...]3. New noise sensitive uses proposed to be located near airports:
 - a. Shall be prohibited if they are in a Community Noise Equivalent Level (CNEL) 65 dB or greater, noise contour; or
 - b. Shall be permitted in the Community Noise Equivalent Level (CNEL) 60 dB to CNEL 65 dB noise contour area only if means will be taken to ensure interior noise levels of CNEL 45 dB or less.

HAZ-9.6 Airport Noise Compatibility: The County shall use the aircraft noise analysis prepared for local airports or the noise contours from the current NBVC-Point Mugu Air Installations Compatible Use Zones (AICUZ) study, as most appropriate for a project location, as an accurate mapping of the long-term noise impact of the airport's aviation activity. The County shall restrict new discretionary residential land uses to areas outside of the 60 decibel Community Noise Equivalence Level (dB CNEL) aircraft noise contour unless interior noise levels can be mitigated to meet a maximum 45 dB CNEL.

HAZ-9.7 Noise Control Priorities: The priorities for noise control for discretionary development shall be as follows:

- 1. Reduction of noise emissions at the source.
- 2. Attenuation of sound transmission along its path, using barriers, landform modification, dense plantings, building orientation and placement, and the like.
- 3. Rejection of noise at the reception point using noise control building construction, hearing protection or other means.











Ventura County's Save Open Space and Agricultural Resources (SOAR)

SOAR is a county-wide initiative organized by voters in Ventura County, California, with the purpose of protecting the natural and agricultural resources of the county by addressing development pressure and urban sprawl. The Ventura County SOAR ballot measure petition was approved in November 1998 by 63 percent of voters of the general public. In November 2016, a measure to extend the original SOAR expiration date in Ventura County from 2020 to 2050 was approved by 59 percent of voters. The initiative establishes City Urban Restriction Boundary (CURB) lines around the cities in the county, protecting unincorporated Ventura County land from annexation by the cities of Oxnard or Camarillo. Approval for development of agricultural land outside the CURB line requires a majority vote of the citizens countywide.³² The SOAR boundary is shown on the future land use map in **Exhibit 1E**.

Ventura County Airports Comprehensive Use Plan

The Ventura County Transportation Commission serves as the designated Airport Land Use Commission (ALUC) as authorized and required by state law (Cal PUB, Division 9, Aviation Part 1, Chapter 4, Article 3.5, Section 21670 et seq.) The ALUC is responsible for preparing a comprehensive airport land use plan for each public use airport in the county. Ventura County's Airports Comprehensive Land Use Plan for the county's three public use airports and one military airport was adopted in 1991 and updated in 2000.³³

Area Specific Plans

City of Camarillo Heritage Zone

Within the Community Design Element of the City of Camarillo's General Plan is also designated a Heritage Zone. The Heritage Zone encompasses all development within 500 feet of the freeway corridor or within 1,000 feet of a freeway interchange, both of which are found in the northern portion of the study area for this Part 150 study. The Heritage Zone designates specific styles, materials, colors, textures, and scale of architectural elements within the zone.

City of Camarillo Airport North Specific Plan

The City of Camarillo has adopted various specific area plans, and the Airport North Specific Plan boundaries fall within this Part 150 study area. The Airport North Specific Plan was adopted in 1986 and was last updated comprehensively in 2016.³⁴ The purpose of the plan is to guide physical and economic development within the identified 337-acre area in accordance with the City's General Plan. Compatibility with the Camarillo Airport is a key component of the Airport North Specific Plan, with the constraint of building height restrictions due to navigational easements associated with the airport considered as well as the opportunity. The location of Camarillo Airport North Specific Plan is shown on **Exhibit 1F**.

³² Save Open Space & Agricultural Resources (2018) https://www.soarvc.org/communities/ventura-county/

³³ Coffman Associates, Inc. Airport Comprehensive Land Use Plan for Ventura County (July 2000)

³⁴ City of Camarillo Airport North Specific Plan (September 2016)











EXISTING FACILITIES

Airport facilities can be categorized into two separate classifications: airside facilities and landside facilities. The airside facilities are directly associated with aircraft operations. These facilities may include, but are not limited to, runways, taxiways, airport lighting, and navigational aids. Landside facilities pertain to facilities necessary to provide safe and efficient transition from surface transportation to air transportation, as well as support aircraft servicing, storage, maintenance, and safe operations. The existing airside and landside facilities are presented on **Exhibit 1G**.

AIRSIDE FACILITIES

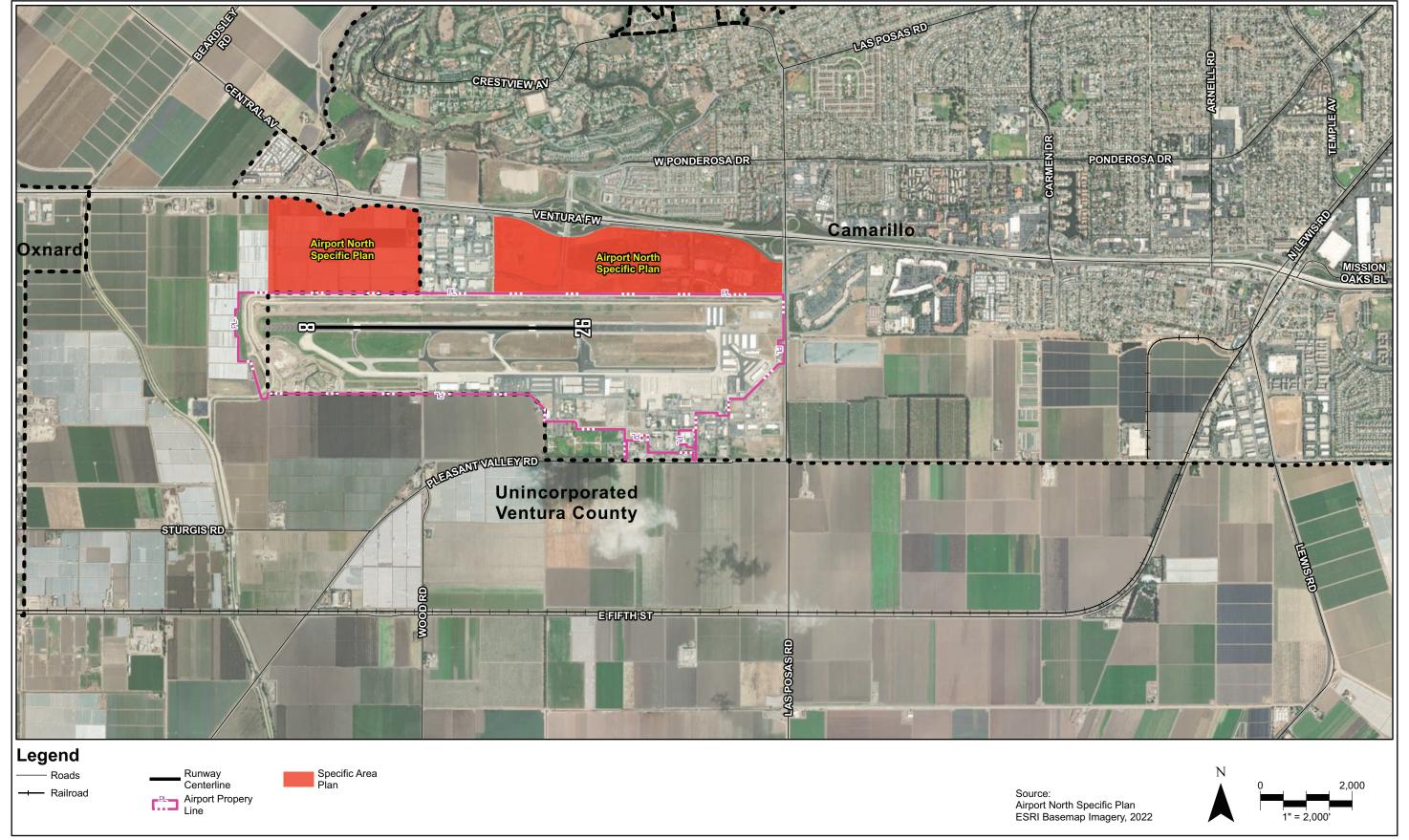
CMA is served by a single runway (8-26) configuration oriented in an east-west manner. Runway 8-26 is 6,013 feet long by 150 feet wide. The runway is marked as a non-precision instrument runway, which includes landing designation, centerline dash, threshold markings, aiming point, and edge markings. The runway pavement is constructed of asphalt, and it has a rubberized friction seal coat. Runway 8-26 has a gradient of 0.22 percent, sloping upward from west to east. The pavement strength rating for Runway 8-26 is published as 50,000 pounds single wheel gear (S), 80,000 pounds dual wheel gear (D), and 125,000 pounds double dual wheel gear (DD). Runway 8-26 is equipped with medium intensity runway lighting (MIRL), runway end identifier lights (REILs), a medium intensity approach lighting system with sequenced flashing lights (MALSF) serving Runway 26, and a 4-box precision approach path indicator (PAPI4) system serving both ends of the runway. Runway 8-26 is served by a full-length parallel taxiway (Taxiway H) with a separation of 700 feet from runway centerline to taxiway centerline. Taxiway H was constructed in 2013. Taxiway F is also a parallel taxiway that is 300 feet from Taxiway H and 1,000 feet from the runway. Taxiway F extends from the intersection with Taxiway E to the east for 8,000 feet. Taxiways A, B, C, D, and E are connecting taxiways to the runway. Taxiway G is parallel to the eastern portion of Taxiway F and is separated from Taxiway F by 130 feet. Taxiway G serves as a bypass taxiway increasing the efficiency of movement to and from the east hangar areas. Taxiway G1 extends from the east end of Taxiways F and G, north to the east hangar areas. Taxiways G2 and G3 connect Taxiways G and F.

The airport has a wide mix of aircraft hangars including large conventional hangars, box hangars, and Thangars. A portion of the northeast side of the airfield was recently redeveloped with 120,000 square feet of new hangar space. Aircraft apron parking is provided in multiple locations around the airfield totaling approximately 106,000 square yards.

Table 1E summarizes the airside facilities data available at CMA. Navigational aids (NAVAIDS) include three lighted wind cones, an Automated Surface Observing System (ASOS), a segmented circle, a ground-based very high frequency omni-directional range (VOR), and a satellite-based global positioning system (GPS).













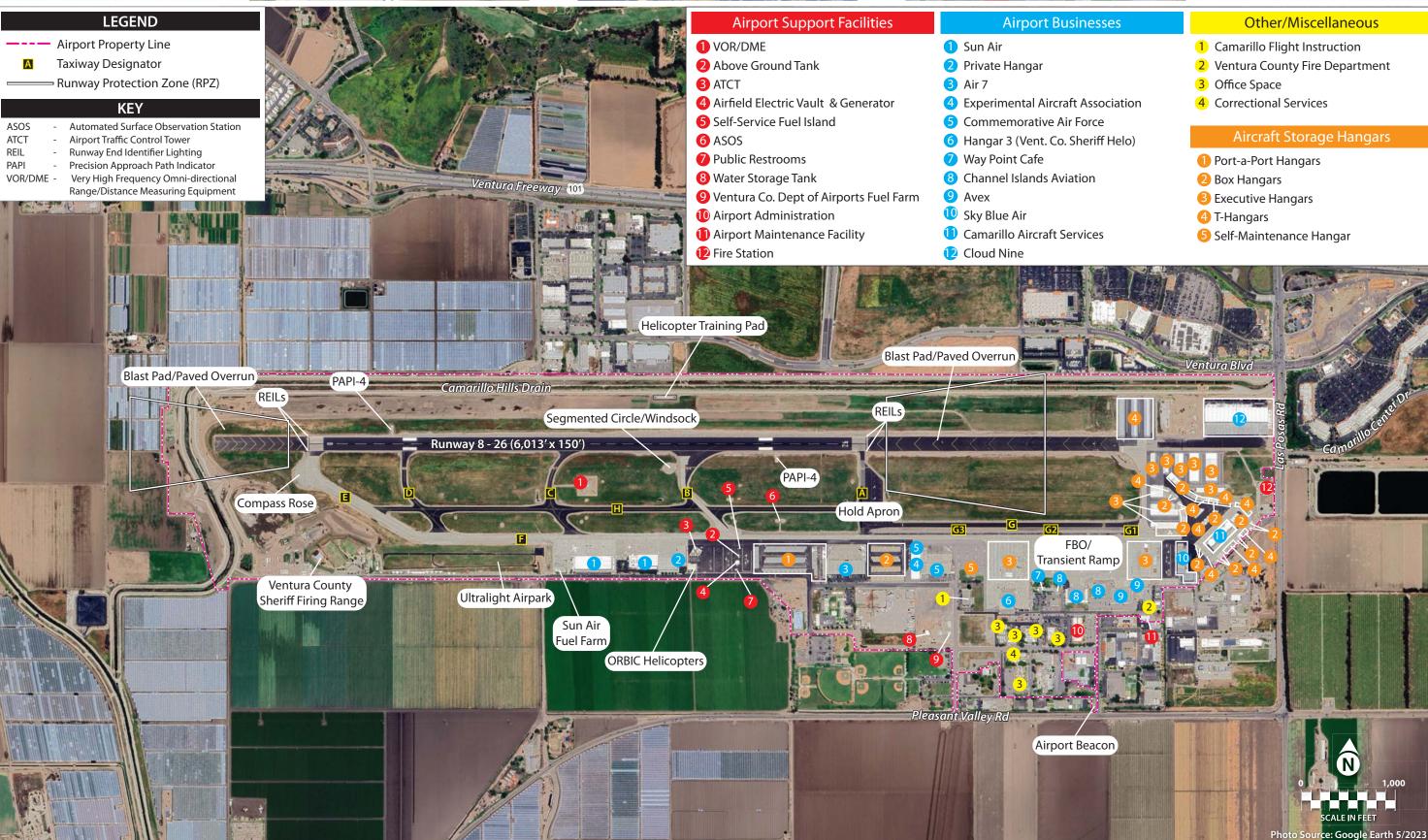












TABLE 1E Airside Facilities Data - Camarillo Airport			
	Runway 8	Runway 26	
Length (ft)	6,013	6,013	
Width (ft)	150	150	
Displaced Thresholds (ft)	0	0	
Pavement Surface	Asphalt, Concrete, Rubberized Friction Seal Coat	Asphalt, Concrete, Rubberized Friction Seal Coat	
Pavement Condition	Fair	Fair	
Pavement Strength (lbs)			
Single-Wheel Loading	50,000	50,000	
Dual-Wheel Loading	80,000	80,000	
Dual Tandem	125,000	125,000	
Edge Lighting	MIRL	MIRL	
Pavement Markings	Non-Precision	Non-Precision	
Visual Approach Aids	MIRL, REIL, PAPI (P4L)	MIRL, REIL, PAPI (P4L)	
Instrument Approach Procedures	RNAV (GPS)	VOR, RNAV (GPS)	
Air Traffic Control	ATCT (7:00 a.m. – 9:00 p.m.)		
Weather Reporting	ASOS ASOS		
Fixed-Wing Aircraft Traffic Pattern	Right	Left	
Acronyms:			

ASOS - Automated Surface Observation Station

ATCT - Air Traffic Control Tower

GPS - Global Positioning System

LOC - Localizer
MIRL - Medium Intensity Runway Lighting

ODALS - Omni-Directional Approach Lighting Systems

REILS - Runway End Identifier Lights

RNAV - Area Navigation

VASI - Visual Approach Slope Indicators

VOR - Very High-Frequency Omni-Directional Range

Source: U.S. Chart Supplement (Effective Feb. 23 2023); Airport Environmental Data Report (2016-2017)

LANDSIDE FACILITIES

Landside facilities include all airport elements inaccessible to aircraft. These facilities include office buildings, vehicle parking lots, and fuel farms.

The Ventura County Department of Airports has developed an industrial/business park on the non-aviation portions of the deactivated air base property.

Ventura County also maintains two public safety facilities on the airport, including facilities utilized by the Ventura County Fire Department and Ventura County Sheriff's Department. The first station serves the needs of the surrounding community as well as the airport. The county Fire Department leases space in the industrial/business park for a dispatch center and administrative offices. The Ventura County Sheriff's Department also utilizes hangar and apron space for its search and rescue helicopter unit. A Sheriff's training academy is also located on the airport. In the southwestern corner of airport property is a bermed pistol range used by the Sheriff's Department for firearms training.

AIRPORT OPERATIONS

Camarillo Airport is situated at 76.8 feet MSL. The traffic pattern altitude for all single engine aircraft is 800 feet AGL (875 feet MSL) and 1,000-feet AGL (1,075 feet MSL) for multi and turbine engine aircraft. The airport utilizes a non-standard right-hand traffic pattern for Runway 8 and standard left-hand traffic











pattern for Runway 26. When departing Runway 8 to the east, a non-standard right-hand turn on takeoff results in traffic pattern activity south of the runway. The non-standard right hand traffic pattern for Runway 8 is intended to avoid traffic pattern congestion over the City of Camarillo to the north.

Runway use is dictated by prevailing wind conditions. Ideally, it is desirable for aircraft to land directly into the wind. The prevailing wind condition favors Runway 26 the majority of the time. Runway 8 is favored during Santa Ana winds.

ATC authorization for instrument approach procedures and IFR visual approaches, as well as weather conditions, dictate operating procedures for aircraft arriving at Runway 26. These conditions often result in arrival overflights east of Runway 26 on approach.

NOISE ABATEMENT PROCEDURES

Due to the proximity of noise-sensitive land uses to Camarillo Airport, voluntary Fly Friendly Ventura County (VC) procedures have been established to provide several recommended noise abatement measures. According to the 1976 JPA with the City of Camarillo, the visual flight rules (VFR) traffic pattern shall be to the south of the airfield. The airport operating hours are from 7:00 AM to 10:00 PM in accordance with Board of Supervisors Ordinance 6506-17. The Fly Friendly program further elaborates.

For all aircraft arriving and departing, voluntary noise abatement measures include:

- No aircraft departures between 12:00 AM to 5:00 AM, without prior permission from the Airport Director.
- Remain as high as practical over residential areas during overflight, approaches, and departures.
- Use best rate of climb when departing runways.
- No formation takeoffs or landings without prior permission from Airport Director.
- Utilize low energy approaches.
- North traffic fly downward over U.S. Highway 101.

For Runway 26 touch and go pattern:

- Published Traffic Pattern Altitudes of 875' MSL for single engine aircraft and 1,075' MSL for multi and turbine engine aircraft.
- Utilize best rate of climb, conditions permitting, turn crosswind when reaching 700' AGL or the airport boundary, whichever comes first.
- Maintain pattern altitude until turning base leg.
- Keep pattern inside Las Posas Rd.

For Runway 26 arrival:

- Right or left traffic during hours the ATCT is in operation should commence with a 45-degree entry to the downwind and base leg turn at or before reaching Las Posas Rd.
- Fly at or above PAPI glidescope during approach.
- Straight in VFR approaches prohibited when ATCT is closed.











For Runway 26 departure:

- When departing the airport traffic area use best rate of climb, remain on runway heading until beyond the departure end of the runway and reaching 700' AGL.
- If heading northwest initially, remain south of Central Ave.

For Runway 8 touch and go pattern:

- Published Traffic Pattern Altitudes of 875' MSL for single engine aircraft and 1,075' MSL for multi and turbine engine aircraft.
- Utilize best rate of climb, conditions permitting, turn crosswind when reaching 700' AGL or the airport boundary, whichever comes first.
- Maintain pattern altitude until turning base leg.

For Runway 8 arrival:

• Avoid overflight of City of Camarillo during approach.

For Runway 8 departure:

- When departing the airport traffic area use best rate of climb and (when altitude permits) turn to avoid residential overflight before proceeding on course.
- Exercise extreme caution due to opposite direction instrument approach traffic flying into Oxnard Airport.

Helicopter traffic pattern:

- Avoid noise sensitive areas.
- Fly at 500' AGL.
- Fly normal cruising speed or slower.
- Avoid sharp maneuvers.
- Use steep take-off/descent profiles.

Helicopter arrival from east:

Follow major roads when flying over the City of Camarillo.

Additional flight pattern information is provided on a pilot guide available in print and online by the airport (Exhibit 1H). The pilot guide also outlines the procedures previously listed. The airport recommends that all pilots adhere to the noise abatement procedures outlined in Fly Friendly VC. The flight schools at the airport adhere to a flight schedule to ensure no early or late flights impact neighboring noise-sensitive uses. The voluntary noise abatement procedures are published both in print and on the county's website at https://vcairports.org. Pilots are routinely directed to both resources and requested to abide by them whenever possible consistent with safety. The noise abatement program at Camarillo Airport is voluntary, not mandatory, due to implications of ANCA which establishes precedent of national aviation noise policies over local policies under 14 CFR Part 161.

Ventura County Department of Airports has also established a noise complaint form so that complaints can be filed, logged, and tracked online at https://vcairports.org.











INSTRUMENT APPROACH PROCEDURES

Instrument approach procedures are a series of predetermined maneuvers established by the FAA using electronic navigational aids to assist pilots in locating and landing at an airport. The capability of an instrument approach is defined by the visibility and cloud ceiling minimums associated with the approach. Visibility minimums define the horizontal distance that the pilot must be able to see to initiate the approach. Cloud ceilings, in some cases, define the lowest level a cloud layer (defined in feet above the ground) can be situated for a pilot to initiate the approach.

Instrument approach procedures are only available to Runway 26, the details of which are shown in **Table 1G**. The most sophisticated instrument approach procedure at CMA is the RNAV (GPS) Z to Runway 26 which provides for a localizer performance with vertical guidance (LPV) approach. This LPV instrument approach allows for visibility minimums of ¾-mile and cloud ceilings of 250 feet. This instrument approach provides very low minimums, and only an ILS approach (which typically can provide ½-mile visibility and 200-foot cloud ceilings) may have lower minimums. LPV approaches are categorized by the FAA as a non-precision approach, even though it provides vertical guidance. There are several other GPS based instrument approaches available including an approach to Runway 8.

TABLE 1F Instrument Approach Data					
	WEATHER MINIMUMS BY AIRCRAFT APPROACH CATEGORY				
	Category A	Category B	Category C	Category D	
RNAV (GPS) Z Rwy 26	RNAV (GPS) Z Rwy 26				
LPV-DA Straight-In 26	250'/%-mile				
RNAV (GPS) Y Rwy 26					
LNAV - MDA	543'/1-mile		543'/1½-mile	543'/1¾-mile	
Circling	543'/1-mile		563'/1½-mile	1023'/3-mile	
RNAV (GPS) Rwy 8					
LNAV MDA	772'/1-mile	772'/1¼-mile	772'/2½-mile		
Circling	763'/1-mile	763'/1¼-mile	763'/2½-mile	1023'/3-mile	
VOR Rwy 26					
Straight-In 26	1023'/1¼-mile	1023'/1½-mile	1023'/3-mile	NA	
Circling	1023'/1¼-mile	1023'/1½-mile	1023'/3-mile	NA	

Aircraft categories are based on the approach speed of aircraft, which is determined as 1.3 times the stall speed in landing configuration. The approach categories are as follows:

Category A: 0-90 knots (e.g., Cessna 172)

Category B: 91-120 knots (e.g., Beechcraft KingAir)

Category C: 121-140 knots (e.g., B-737, Regional Jets, Canadair Challenger)

Category D: 141-166 knots (e.g., B-747, Gulfstream IV)

Category E: greater than 166 knots (e.g., certain large military or cargo aircraft)

Abbreviations:

LPV - Localizer Performance with Vertical Guidance

VOR - Very High Frequency Omnirange Station

GPS - Global Positioning System

LNAV/RNAV/VNAV - A technical variant of GPS (Lateral, Area, Vertical Navigation)

DA - Decision Altitude (Used for vertically guided approaches)

MDA - Minimum Descent Altitude (Used for non-precision approaches)

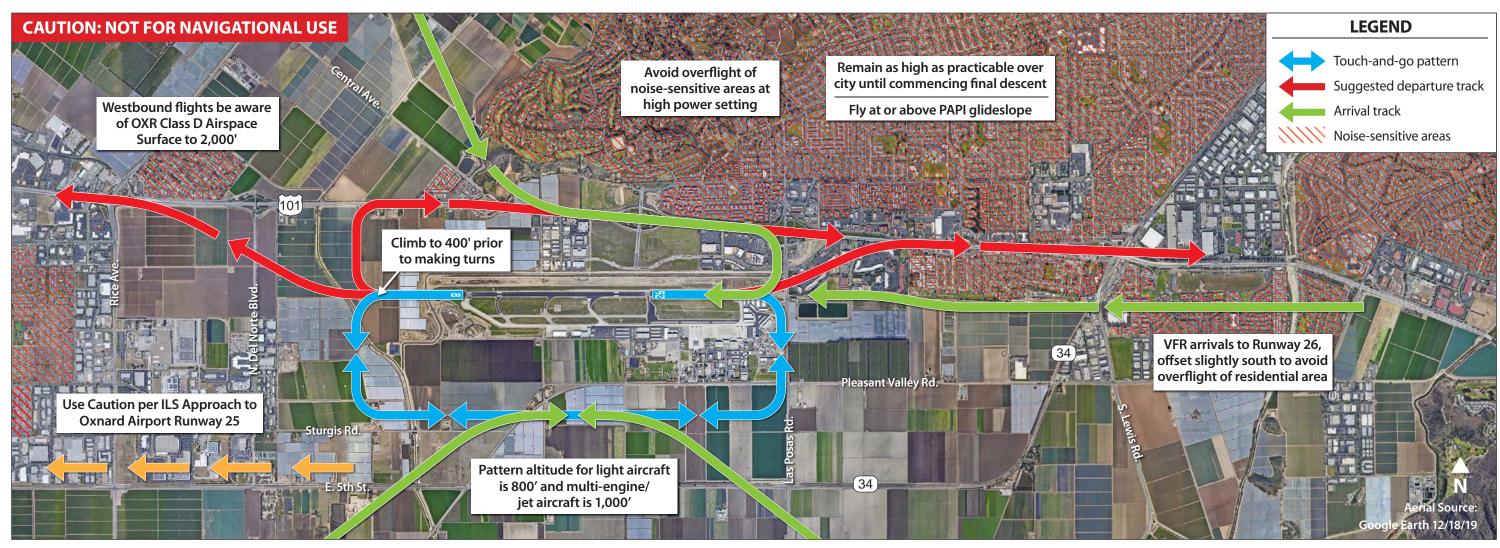
Note: (xxx'/ x-mile) = visibility (in feet)/cloud ceiling height (in miles)

Source: U.S. Terminal Procedures (effective November. 3, 2022)









RECOMMENDED VOLUNTARY NOISE ABATEMENT PROCEDURES:

The airport environs are noise-sensitive in all quadrants. Aircraft operators are requested to practice noise abatement fly quiet procedures whenever possible consistent with safety.

- No aircraft departures between 0000-0500 without prior approval from the Airport Director.
- Remain as high as practicable over residential areas during overflight, approaches, and departures.
- Use best rate of climb when departing any runway.
- No formation takeoffs or landings without prior permission from the Airport Director.
- Utilize low energy approaches.
- North traffic fly downwind over Highway U.S. 101.

- Fly at or above PAPI glide slope on final approach.
- When departing Runway 8, use best rate of climb and when altitude permits turn so as to avoid residential overflight before proceeding on course.
- When the control tower is closed, arrivals to Runway 8 should plan RIGHT downwind to avoid overflight of city.
- Exercise extreme caution when departing Runway 8 due to opposite direction instrument approach traffic.
- Runway 8 arrivals use RIGHT traffic to avoid overflight of the City.
- Late night arrivals use GPS Runway 8 approach when wind, weather, and safety permit.
- Runway 8 departure to the east fly over Highway U.S. 101.
- When departing Runway 26, remain on runway heading until beyond the departure end of runway and reaching 400' before proceeding on course.

- When flying straight-in visual approaches to Runway 26, remain at or above PAPI glide path and avoid overflight of noise-sensitive areas north of extended centerline.
- Aircraft should depart on Runway 26 when practicable.
- · Follow all ATC instructions.
- Aircraft over published runway weight limit shall contact airport administration for approval and instructions.
- No aircraft operations allowed by aircraft weighing over 115,000 pounds except for emergencies.

Compliance with recommended noise abatement procedures is encouraged. No procedure should be allowed to compromise flight safety.







LOCATION:

FAA Identification: CMA

Lat/Long: 34-12.825000N 119-05.661667W Proximity to Camarillo: 3 miles west of city

Field elevation: 77'

Runway 08-26: 6,010' x 150'

TRAFFIC PATTERN ALTITUDES:

Light Aircraft - 800'

Multi-engine/Jet Aircraft - 1,000'

COMMUNICATIONS:

CTAF: 128.20 (Pilot Controlled Lighting)

ATIS: 126.02

Camarillo Ground Control: 121.8

Camarillo Tower: 128.20 (7:00 a.m. - 9:00 p.m.)

Point Mugu App/Dep Control: 124.7

Los Angeles Center: 135.5 Santa Barbara RCAG: 327.1 ASOS: 126.025 (ATIS freq.) CMA VOR (on field): 115.8

LANDING FEE:

Landing fees apply to aircraft over 12,500 lbs.

AIRPORT SERVICES:

Full Service FBOs:

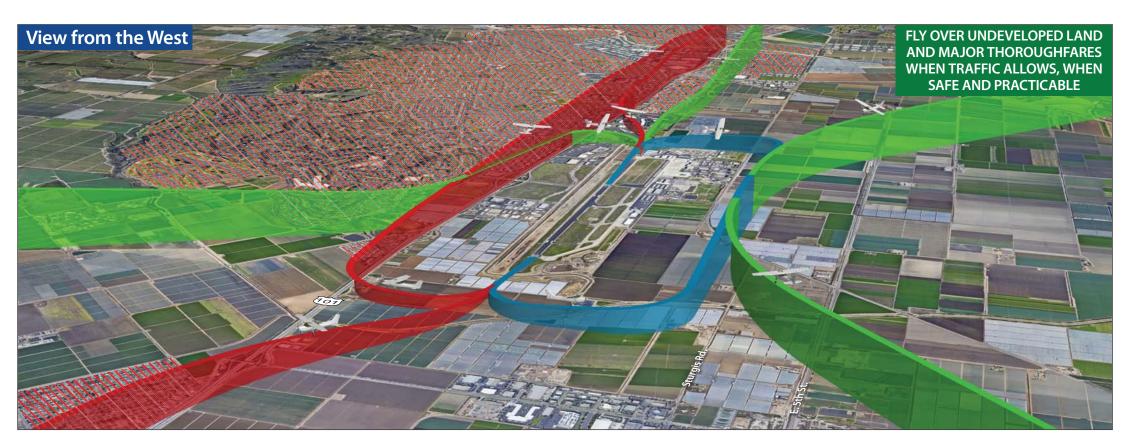
• Avex Aviation (805) 603-4799 AVFuel: 100LL and Jet A

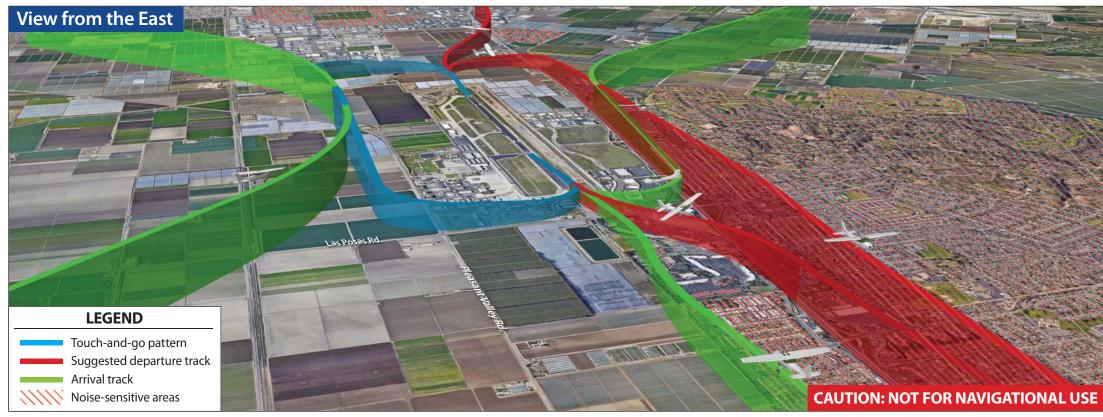
• AIR 7 (805) 383-1100 AVFuel: 100LL and Jet A

• Channel Islands Aviation (805) 987-1301

AVFuel: 100LL and Jet A
• Sun Air Jets (805) 389-9301
AVFuel: 100LL, Jet A, and SA

















AIRSPACE AND AIR TRAFFIC CONTROL

The Federal Aviation Administration Act of 1958 established the FAA as the responsible agency for the control and use of navigable airspace within the United States. The FAA has established the National Airspace System (NAS) to protect persons and property on the ground and to establish a safe and efficient airspace environment for civil, commercial, and military aviation. The NAS covers the common network of U.S. airspace, including air navigation facilities; airports and landing areas; aeronautical charts; associated rules, regulations, and procedures; technical information; and personnel and material. Camarillo Airport has no direct control over airspace management or ATCT for aircraft operating at the airport. These functions are handled by the FAA and the local ATCT staff.

The Camarillo ATCT is located south of Runway 8-26, near midfield. The tower is open 16 hours daily, from 7:00 a.m. – 9:00 p.m. Operating conditions for aircraft at Camarillo Airport are also influenced by aircraft at other airports, most notably Oxnard Airport and Naval Air Station Point Magu. **Exhibit 1J** shows radar flight track data collected by Vector for arrivals (shown in red) and departures (shown in blue) over a 24-hour period at Camarillo Airport. Activity is widespread throughout the study area during the 24-hour period depicted, with more arrivals from the east and departures to the north. The traffic pattern for arrivals is concentrated south of Runway 26 to E Fifth Street. Departure activity generally flows northwest of Runway 26.

AIRSPACE STRUCTURE

FAA has established a standardized airspace system to regulate the use of airspace for all airports within the U.S. Within the FAA's system, airspace is broadly classified as either controlled or uncontrolled. The difference between controlled and uncontrolled airspace relates primarily to requirements for pilot qualifications, ground-to-air communications, navigation and air traffic services, and weather conditions.

Six classes of airspace have been designated in the U.S. **Exhibit 1K** shows the airspace structure classifications and terminology established by the FAA. Airspace designated as Classes A, B, C, D, or E is considered controlled airspace. Aircraft operating within controlled airspace are subject to varying requirements for positive air traffic control. **Exhibit 1L** illustrates the airspace surrounding Camarillo Airport.

- Class A airspace is controlled airspace and includes all airspace from 18,000 feet mean sea level (MSL) to Flight Level 600 (approximately 60,000 feet MSL).
- Class B airspace is controlled airspace surrounding high activity commercial service airports, such
 as Los Angeles International Airport. Class B airspace is individually tailored and consists of a
 surface area and two or more layers.
- Class C airspace is airspace that is within 30 nautical miles (nm) of primary airports of Class B
 airspace and within 10 nm of designated airports. The normal radius of the outer limits of Class
 C airspace is 10 nm.











- Class D airspace is controlled airspace surrounding low-activity commercial service or general aviation airports with an ATCT. Camarillo Airport airspace is classified as Class D from the surface to 2,500 feet MSL for approximately five nautical miles to the west and south of the airport. The Class D airspace extends to a five nautical mile radius from the tower except to the west and south where it is interrupted by the Oxnard Airport and NAS Point Mugu Class D airspaces. Class D airspace is only effective during the time that the ATCT is operational (7:00 a.m. to 9:00 p.m.).
- Class E airspace is controlled airspace surrounding an airport that encompasses all instrument approach procedures and low altitude federal airways. Only aircraft conducting instrument flights are required to be in contact with air traffic control when operating in Class E airspace. While aircraft conducting visual flights in Class E airspace are not required to be in radio contact with air traffic control, visual flight can only be conducted if minimum visibility and cloud ceilings exist. When the tower is closed, the Class D airspace reverts to Class E airspace. The airport operates in Class E airspace with a floor of 700 feet AGL and extending to 18,000 feet MSL.
- Class G airspace is uncontrolled airspace that does not require communication with an ATCT. Class G airspace extends from the surface to the overlying Class E airspace.

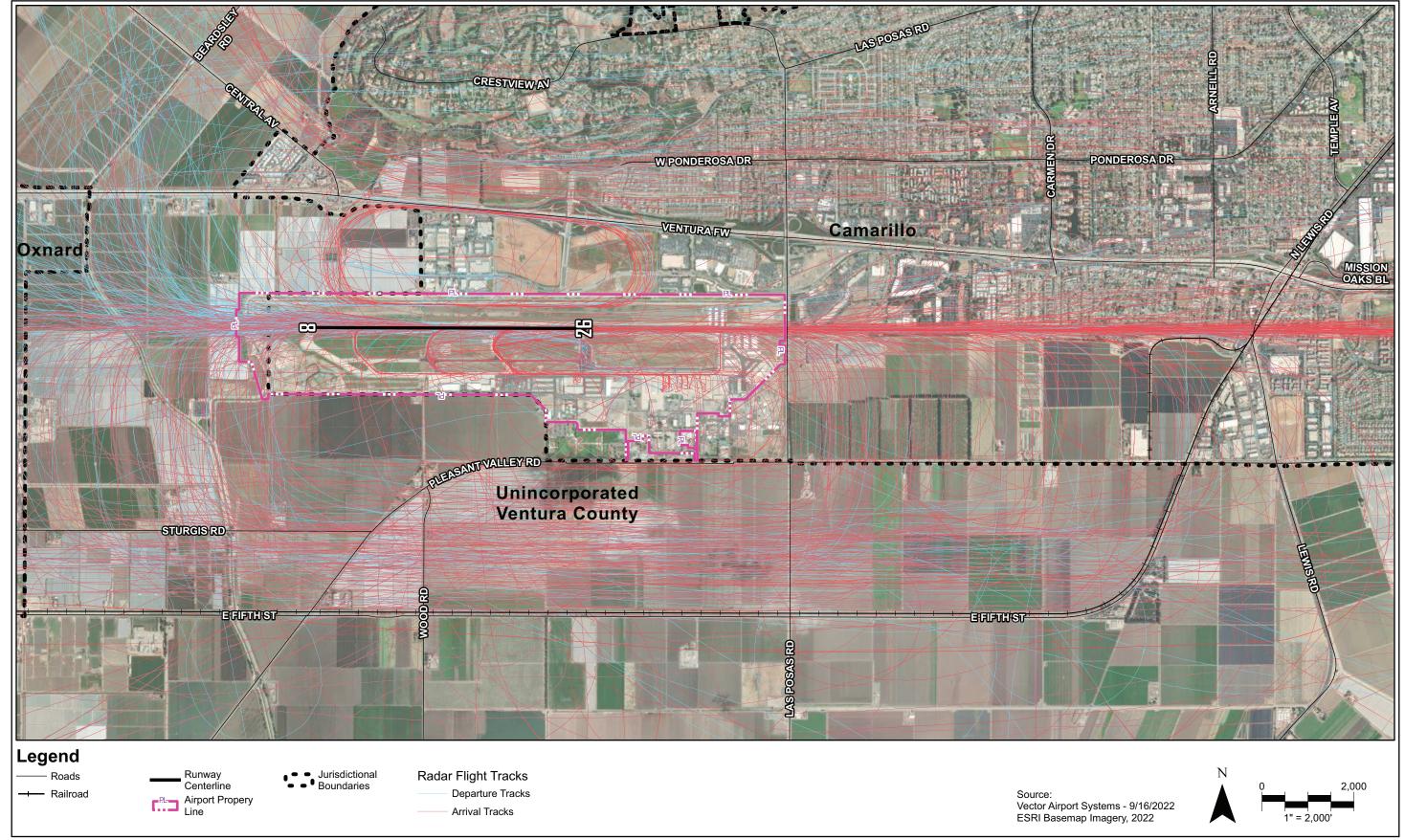
SUMMARY

The information presented in this chapter provides a foundation upon which the remaining elements of the planning process will be constructed. Information on current airport facilities and utilization serves as a basis for the development of the aircraft noise analysis during the next phase of the study. The information found on the airport environs in this inventory section will allow the assessment of airport noise impacts.

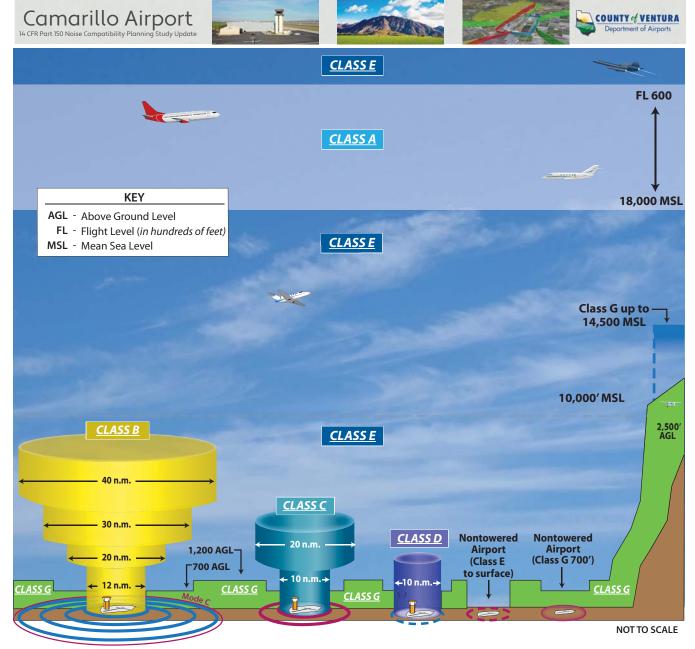








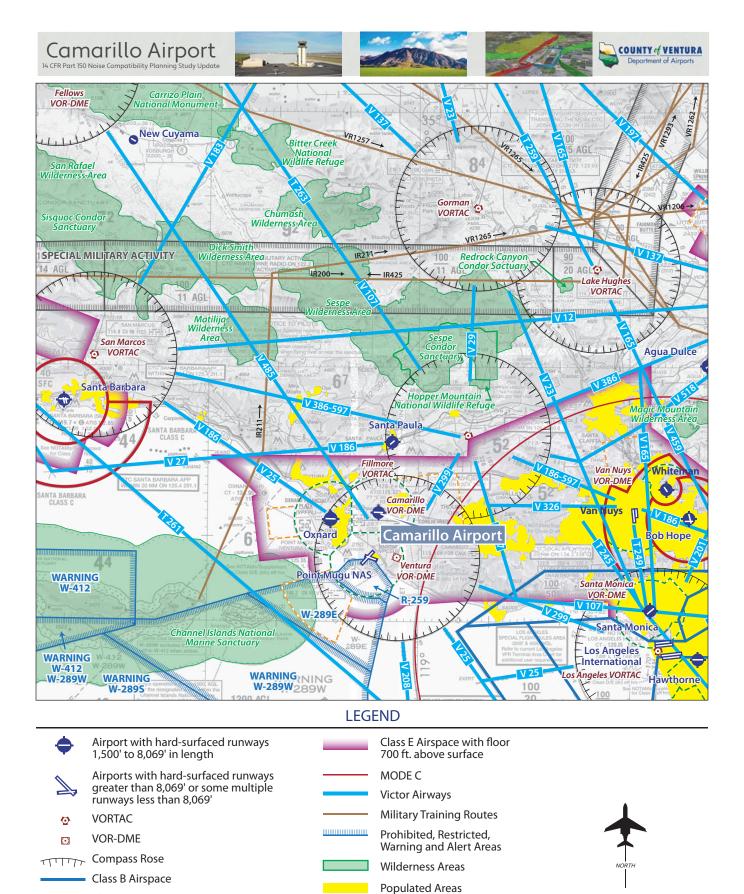




DEFINITION OF AIRSPACE CLASSIFICATIONS

- Think A Altitude. Airspace above 18,000 feet MSL up to and including FL 600. Instrument Flight Rule (IFR) flights only, ADS-B 1090 ES transponder required, ATC clearance required.
- Think B <u>Busy</u>. Multi-layered airspace from the surface up to 10,000 feet MSL surrounding the nation's busiest airports. ADS-B 1090 ES transponder required, ATC clearance required.
- Think C Mode <u>C</u>. Mode C transponder required. ATC communication required. Generally airspace from the surface to 4,000 feet AGL surrounding towered airports with service by radar approach control.
- Think D <u>Dialogue</u>. Pilot must establish dialogue with tower. Generally airspace from the surface to minimum 2,500 feet AGL surrounding towered airports.
- **CLASS E** Think E Everywhere. Controlled airspace that is not designated as any other Class of airspace.
- Think G Ground. Uncontrolled airspace. From surface to a 1,200 AGL (in mountainous areas 2,500 AGL) Exceptions: near airports it lowers to 700' AGL; some airports have Class E to the surface. Visual Flight Rules (VFR) minimums apply.

Source: www.faa.gov/regulations_policies/handbooks_manuals/aviation/phak/media/15_phak_ch15.pdf



Class C AirspaceClass D Airspace

--- Class E Airspace

Source: US Department of Commerce, National Oceanic and Atmospheric Administration Los Angeles Sectional Charts, December 5, 2019