

CHAPTER 7

AVIATION

I. OVERVIEW

General aviation aircraft and airports are essential to the viability and economy of communities and businesses in Kings County. Within Kings County, all public-use and private airports are utilized for General Aviation aircraft (i.e. smaller, recreational or business). There is no commercial airline passenger service within Kings County. Much of the flight activity in Kings County centers on the county's dominant farming economy where chemical application aircraft (crop dusters) make up a sizable portion of all business aircraft.

The majority of aircraft are based at the two largest Kings County facilities, Hanford Municipal Airport and Corcoran Airport, and at a number of privately owned airstrips. Whereas past trends in Kings County have reflected decreased levels of general aviation activity since the 1960's recreational flying "boom", the contribution by general aviation airports to regional growth is expected to increase. The Federal Aviation Administration (FAA) forecasts an average annual growth of 1.5 percent in General Aviation hours flown nationwide over the next 20 years, according to the *FAA Aerospace Forecast Fiscal Years 2013-2033*. The FAA predicts business usage to increase at a faster pace than that for personal and recreational use and increases in demand for agricultural use due to advancing turboprop aircraft in the industry. The forecast projects "light sport" aircraft (single propeller/two seater lightweight aircraft) used for recreation will impact the market with a 3.2 percent annual growth for 2013 and slow to 2 percent per year thereafter. A potential shift to transient corporate aircraft activities with future industrial and commercial uses and the economics of small plane manufacturers are anticipated to impact future growth in General Aviation activity within Kings County.

According to Kings County assessor's records and the California Department of Transportation Division of Aeronautics, there were approximately 109 to 114 General Aviation aircraft based in Kings County. Accommodating these aircraft are approximately 40 Basic Utility Airports and landing strips. Except for the Lemoore Naval Air Station (LNAS), these facilities generally belong to one of three classes: 1) publicly-owned airports, open for public use; 2) privately-owned airports, open for public use; and 3) privately-owned airports for private use only. This chapter examines the role of airports in each category, giving special attention to the role of public airports and how they fit into the larger picture of regional and community development.

II. ASSUMPTIONS AND INVENTORIES

A. ASSUMPTIONS

1. The Hanford Municipal Airport will continue to satisfy the largest single portion of General Aviation demand in Kings County. Private airports and airstrips serving the remaining agri-business and recreational aviation demand will continue to support the regional economy, making sustainability of general aviation airports increasingly important. Figure 7-1 indicates airport facilities within Kings County and Figure 7-2 provides descriptive data about several airports and airstrips within the region.

2. The future of General Aviation activity in Kings County will be intricately linked to the expansion of the Hanford Municipal Airport as the principal public-use airport serving the County. Figure 7-3 shows the majority of based airplanes within Kings County at Hanford Municipal Airport.
3. Most commercial air passenger demand by Kings County residents will be satisfied by the Fresno Yosemite International (FYI) Airport served by ten airlines with destinations to thirteen cities, as of July, 2013. The remaining need will be satisfied by the Visalia Municipal Airport, which provides daily service with one airline to Las Vegas, Los Angeles International Airport, and Merced, as well as charter flights to various destinations. The level and dependability of air passenger service from Fresno and Visalia airports have fluctuated as regional airlines end or begin service based on economic changes in the passenger airline industry. As a result, a majority of people are forced to drive to farther cities of Los Angeles or San Francisco to obtain direct air service to both domestic and international major cities. Figure 7-4 shows the number of revenue enplaned passengers for Visalia Municipal Airport over the past 20 years. A decrease in over 2,900 enplanements in 2008 was the result of the city's change in airline carriers from Air Midwest to Great Lakes Airlines. Enplanements have steadily risen since then. Figure 7-5 shows enplanements for Fresno-Yosemite International Airport over the past 23 years and a more recent record-breaking growth trend positioning the airport to outperform prior record years. This upward trend is the result of strong bookings occurring on each of the ten major airline operators based at the airport.
4. The Lemoore Naval Air Station (LNAS) will continue to play an important role in national defense. LNAS will continue to expand and remain the prominent military air base for the training of light attack aircraft and bomber pilots in the Western United States. An average of 210,000 flight operations occur annually at NAS Lemoore, making it one of the U.S. Navy's busiest airfields.

B. AIRPORT INVENTORY

1. Public Airports: Public Use

a. Hanford Municipal Airport

The Hanford Municipal Airport is situated one mile southeast of the central business district of the city of Hanford. Serving the majority of aviation demand, the Hanford Municipal Airport is the only city-owned air facility in the County and will remain the most active public use, public airport for the foreseeable future. As of 2013, there is one air charter service available and approximately 40 aircraft are based at the airport. All types of general aviation aircraft use the facility including recreation and business aircraft. Several crop dusters are also based at the airport though these planes cannot land at the airport while carrying chemicals used for agricultural spraying due to environmental restrictions to chemical dumping.

Hanford Municipal Airport is located on 295 acres at 9½ Avenue and Hanford Armona Road. The City of Hanford acquired the site in 1950 by using Hanford general funds and a Federal Aviation Administration (FAA) grant to develop the airport. Today, the facility consists of one runway that is 5,180 feet in length with a 75-foot wide paved taxiway, several conventional hangers and tee shelters, and medium-intensity runway lights. The airport includes a jet fuel facility, aircraft parking and storage areas, aircraft washrack. The airport also serves as a base for the National Weather Service to provide current and forecasted weather conditions.

According to the Hanford Municipal Airport Master Plan (adopted 2010), the average daily aircraft operations projected in 2015 will be 28 with 59% by single-engine propeller aircraft. Approximately 70% of the annual aircraft operations will consist of itinerant operations. Annual operations are forecasted to reach 10,250 by 2015 and 13,800 with 110 based aircraft by the year 2025.

2. Private Airports: Open to Public Use

a. Avenal Airport

Located adjacent to the city off of State Route 33, the Avenal Airport is privately operated by the Central Valley Soaring Club. Prior permission is required for public use of the facility. Avenal Airport encompasses 83 acres which includes one runway consisting of compacted earth with some stabilization in fair condition. Six planes are based at the airport as well as several gliders owned by members of the soaring club. Noise impacts are not considered a problem at Avenal Airport as daily aircraft operations are too infrequent to contribute significantly to any airport noise problems for residents in the area.

3. Private Airports: Private Use Only

There are approximately 21 other aircraft landing facilities in Kings County. The great majority of these smaller landing strips are used by crop dusters, although several are for the sole use of personal aircraft. These facilities range in size from 1,000-foot unnamed and unpaved landing strips, to somewhat larger airfields with asphalt and lighted runways. Among these, the Corcoran Airport is utilized for agricultural crop dusting by private companies. Other privately-owned airports include a few heliports utilized by private farms, local hospitals, and the County fire department for emergency response.

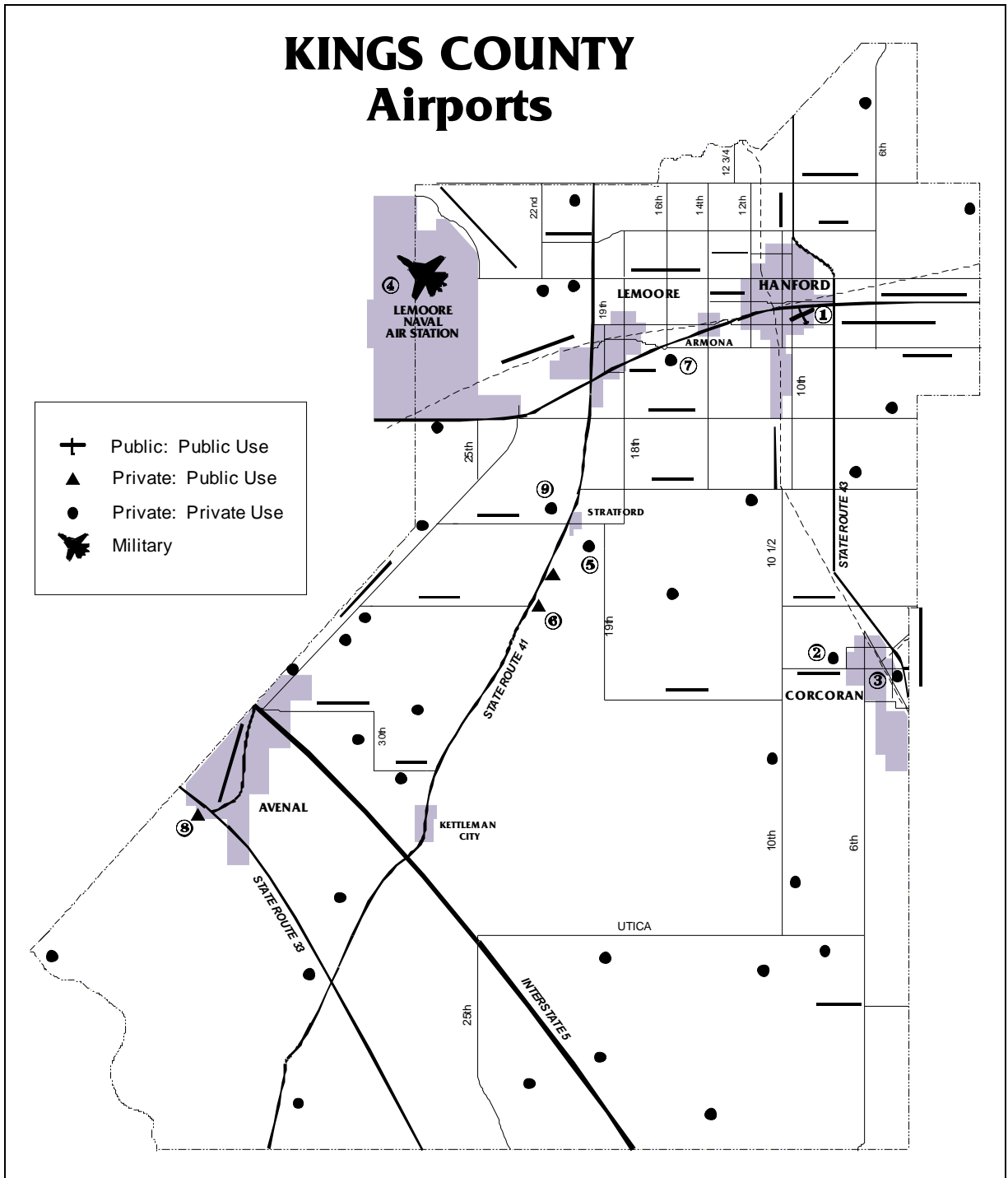
4. Military Air Facilities

a. Lemoore Naval Air Station

Commissioned in 1961, NAS Lemoore is the Navy's largest and only west coast Master Jet base. NAS Lemoore's mission is to support the US Navy fleet carrier strike fighter squadrons. The base hosts over 40 aviation tenants, including the Commander Strike Fighter Wing, US Pacific Fleet. NAS Lemoore hosts fifteen F/A-18 operation Strike-Fighter squadrons, one Strike-Fighter Fleet replacement squadron, and all four west coast Carrier Air Wing Commanders and their staffs. NAS Lemoore is home to 294 F/A 18 Hornets and Super Hornets and conducts approximately 210,000 flight operations each year.

The Installation proposes in 2015 to develop its facilities to support new F-35C aircraft in the Navy Pacific Fleet to replace aging aircraft. The F-35C Lightning II Joint Strike Fighter is a single-engine, technologically advanced, fifth-generation strike fighter designed to operate from conventional runways and nuclear-powered aircraft carriers.

FIGURE 7-1



Source: KCAG

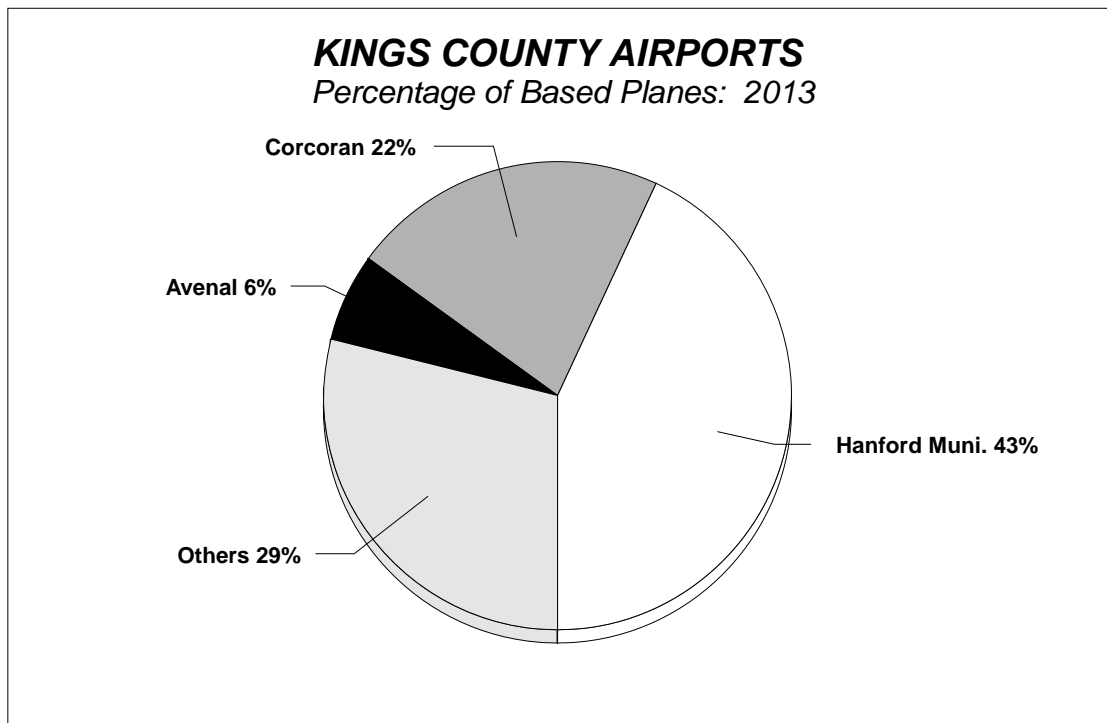
FIGURE 7-2

**KINGS COUNTY AVIATION FACILITIES
2013**

AIRPORT/OWNER NAME	ASSOCIATED CITY	TYPE OF USE	OPEN TO PUBLIC	RUNWAY DESCRIPTION			BASED PLANES
				LENGTH	WIDTH	SURFACE	
1. Hanford Municipal	Hanford	Public	Yes	5,180	75	Asphalt	40
2. Corcoran (Lakeland Dusters)	Corcoran	Private	No	3,800	50	Asphalt	18
3. Salyer Farms (J.G. Boswell)	Corcoran	Private	No	6,815	75	Asphalt	3
4. LNAS(Reeves Field)	Lemoore	Private	No	13,500	200	Concrete	N/A
5. Stone (Jack Stone)	Lemoore	Private	No	2,540	30	Asphalt	3
6. Machado Dusters	Lemoore	Private	No	2,600	60	Asphalt	5
7. Westlake Farms	Lemoore	Private	No	3,600	50	Asphalt	3
8. Blair Strip	Lemoore	Private	No	2,150	45	Asphalt	3
9. Avenal	Avenal	Private	No	2,880	100	Dirt	6
10. Jones Farms	Lemoore	Private	No	1,900	50	Asphalt	1
11. Others	---	---	---	---	---	---	12
TOTAL							94

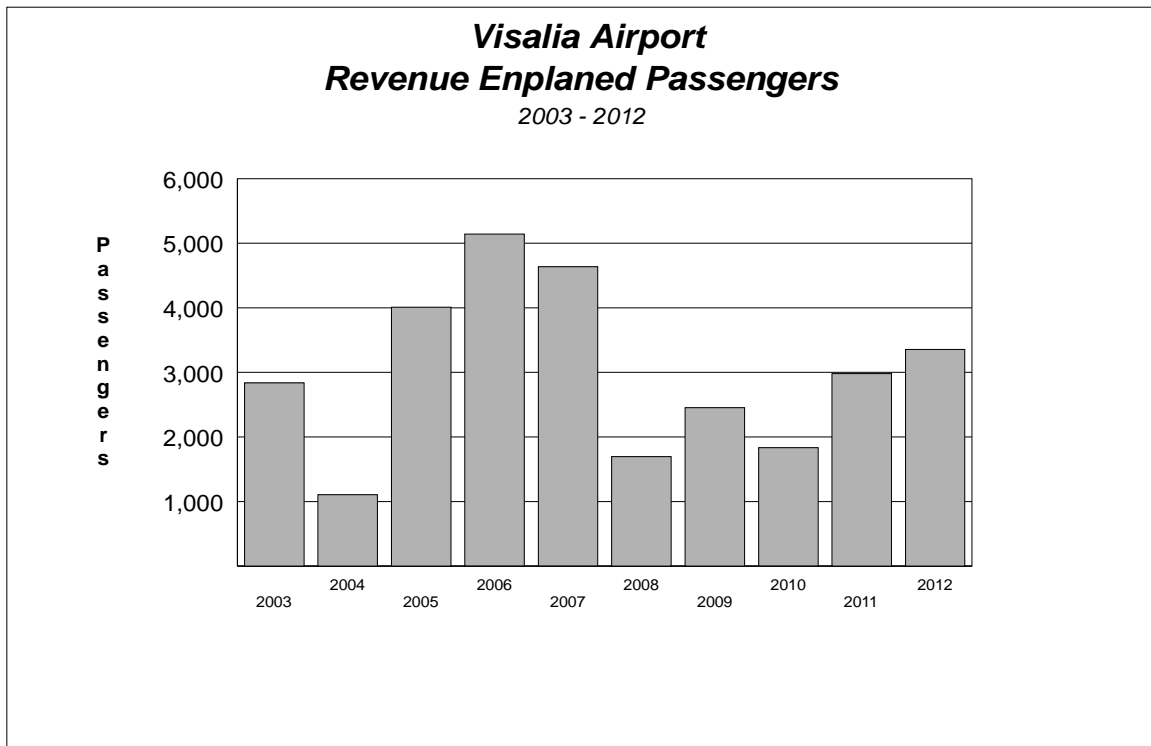
Source: FAA Aeronautical Information Services, Airport Facilities Directory (AFD), AirNav.com

FIGURE 7-3



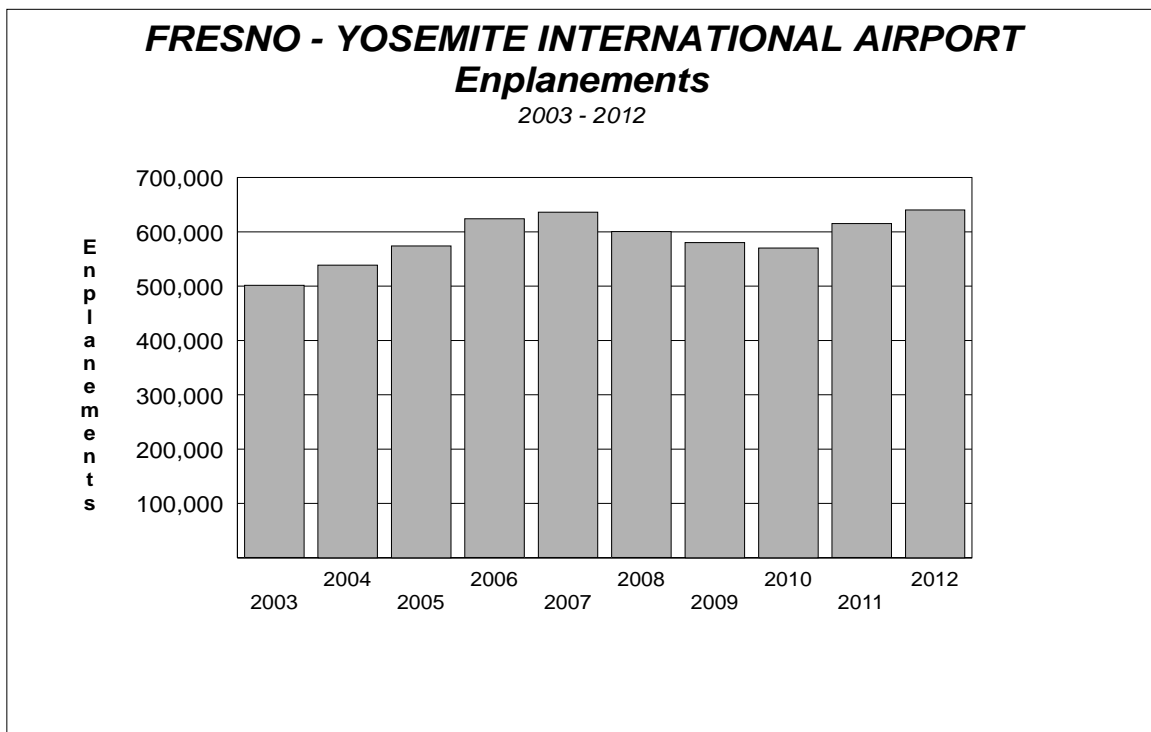
Source: Kings County Assessor, KCAG

FIGURE 7-4



Source: FAA, DOT, ACAIS Database

FIGURE 7-5



Source: FAA, ACAIS Database

III. SUMMARY OF AVIATION ISSUES

A. PUBLIC AIRPORTS: PUBLIC USE

1. Hanford Municipal Airport

Regional Economic Importance. The Central California Aviation System Plan (CCASP) identifies airport system requirements based on forecasted operations and number of based planes, and presents an action plan to implement the system improvements (discussed below in Section IV, Action Element). The improvements to Hanford Municipal Airport facilities are tied to the airport's role as a beneficiary to Kings County's projected population and employment growth. Any improvements for Hanford Municipal Airport should be implemented for Kings County's economic benefit.

Area of Influence. It is the primary responsibility of County Airport Land Use Commissions (ALUCs) to ensure that proposed land uses in the vicinity of airports are compatible with airport operations. The three primary concerns for the ALUC are height restrictions to protect airspace around airports, reducing risk to the public from airport operation and accidents, and minimizing the effects of noise in the surrounding communities. Any project that falls within the boundaries of the airports safety zone must be reviewed and approved by the Commission. The Federal Aviation Administration (FAA) makes determinations regarding potential height and safety violations, and the California Code Regulations (CCR's) contain noise standards governing airports and the operation of aircraft and aircraft engines. Planning airport improvement projects must comply with all regulations in addition to local zoning. With the changing of state law in 1993, county ALUCs were deemed optional, and Kings County decided that local zoning policies could adequately address airport/land use compatibility issues without an ALUC.

Both the City of Hanford and the County of Kings have utilized policies found in the Kings County Airport Land Use Compatibility Plan (KCALUCP) regarding land uses surrounding Hanford Municipal Airport. The KCALUCP provides airport zone designations for compatibility with land use development and establishes Compatibility Zones A, B1, B2, C and D to distinguish definitive zone dimensions and airfield criteria. Compatibility airport policies are used by the City of Hanford as the land use element of the Hanford Municipal Airport master plan to provide guidance for planning purposes. No new residential construction, including schools, churches, libraries, hospitals, or other facilities which accommodate large groups of people are to be developed in Clear Zone A (closest to the runway), no new structures may be built within 300 feet of the center line of the runway or 1,000 feet from the ends of the runway, and height limitations of structures shall be in conformance with federal regulations. Residential lot development is prohibited in Clear Zone B (adjacent and further out from Clear Zone A), however single family homes may be built on existing lots in Clear Zone B once an evaluation of hazard risk is completed.

Kings County and KCAG will continue to coordinate with the City of Hanford in order to promote further consistency in developing City and County land areas potentially affected by the Hanford Municipal Airport operations.

B. PRIVATE AIRPORTS OPEN TO PUBLIC USE

1. Avenal Airport

There are no facility changes or improvements to Avenal Airport planned in the foreseeable future. The privately-owned airport is considered in the City of Avenal General Plan for aircraft noise and public safety. There are scattered residences in the airport sphere of influence, especially in the area immediately south of the runway. This area has been zoned agricultural and very low-density residential uses. However, there is presently no threat to these residences by aircraft operations with very light air traffic and glider activities. The City of Avenal and Kings County will continue to monitor any changes in land uses in the proximity of the airport.

C. PRIVATE AIRPORTS: PRIVATE USE ONLY

1. Corcoran Airport

Public Ownership. Previously under consideration for public ownership, there are no plans by either Lakeland Dusters Aviation Inc. or the City of Corcoran for the public purchase of the Corcoran Airport. Lakeland Dusters operates pistachio groves around the airport which at full growth would interfere with FAA regulations for public use, and Lakeland Dusters has no future plans to open to the public. Nearly all of Corcoran's airport activity is by agricultural aircraft, and there is no long range master plan that has been prepared regarding future use and development of Corcoran Airport.

Area of Influence. Adopted in 2007, the Corcoran General Plan establishes that residential development within the southeasterly approach zone is to be restricted within a horizontal distance extending approximately 3,000 to 4,000 feet southeast of the end of the runway. The City of Corcoran's land use element and zoning ordinance restrict potentially hazardous land uses within Compatibility Zones A and B1/B2. Compatibility Zone A (area nearest the airport runway) prohibits new residential construction, new schools, churches or other large group facilities, restricts height of structures, and restricts new structures within 300 feet of the center line of the runway or 1,000 feet from the ends of the runway. The area immediately adjacent to Zone A is Compatibility Zone B1/B2 which prohibits new residential lots, limits new single family residential construction to a case-by-case basis after evaluation for potential hazards, and prohibits new schools, churches, or other large group facilities.

2. Planning Considerations. Kings County's exceptionally high ratio of aircraft to population is due to the intensive use of aircraft in the agricultural industry for aerial spraying and for business accounts. The land use discussions herein are meant to support local planning efforts and not usurp the authority of local jurisdictions. Land use planning for agricultural airports must be concerned with a number of factors:

- a. The need to prohibit new air facilities where there is a danger to neighboring land uses. In Kings County's agricultural zone districts, developers of new private airports must obtain Conditional Use Permits. Aircraft crash potential, night operations, and the use of toxic chemicals have constituted the principal issues of debate in county zoning cases.
- b. Noise impacts from crop dusters cannot be measured accurately due to the seasonal and varying nature of chemical application spraying. Noise

impacts are greatest in the vicinity of agricultural fields and not necessarily in the immediate area of airports. These impacts should be considered in local government's land use and public safety planning on a case-by-case basis.

- c. Consideration of interference with other air facilities, especially Lemoore Naval Air Station military air operations.
- d. The need to provide agricultural airstrips in close proximity to intensive farming areas, such as the Tulare Lake Basin.

D. MILITARY AIR FACILITIES

1. Lemoore Naval Air Station

Area of Influence:

The NAS Lemoore airfield is configured by the Navy into three zones with varying hazardous potential. Extending 3,000 feet immediately beyond the runway is the Clear Zone, which has the highest potential for accidents. The Clear Zone is required for all active runways and should remain undeveloped. The Navy's policy regarding the Clear Zone is to acquire sufficient real property interests in land within the Clear Zone to prohibit incompatible development with military aircraft operations. Outside of the Clear Zone lies the "accident potential zones" (APZs) and noise zones. The area for flight tracks that experience 5,000 or more annual operations for departures or approaches is designated APZ 1. The area extending 7,000 feet beyond APZ1 or the Clear Zone, with a width of 3,000 feet, is designated APZ 2. APZs extend from the end of the runway in the direction of each flight track if more than one flight track is used by aircraft. Zones APZ 1 and 2 prohibit noise-sensitive land uses (i.e. - homes, churches) and high occupance-intensive uses (i.e. - food stores, shopping centers).

Air Installations Compatible Use Zones Study:

To help ensure compatible development near its airfields, in 1978, NAS Lemoore prepared its Air Installations Compatible Use Zones Study (AICUZ). In 2010, NAS Lemoore updated its 1993 AICUZ Program to a 2020 Plan to support Federal, State, and local planning efforts seeking smart growth and land use compatibility initiatives, and to consider expected changes in mission, aircraft, operational levels, and other aspects within the ten year horizon. The AICUZ Program is important as it outlines current and foreseeable issues with land use compatibility with the Lemoore naval airfield operations with both Fresno and Kings Counties. The AICUZ offers recommended strategies for land use compatibility pertaining to noise levels, accident potential, and flight clearance requirements associated with military airfield operations. The 2010 update reflects changes in the ground-controlled approach flight track which was lengthened by approximately 1 mile to the south to avoid flights over the community of Stratford. Additionally, NAS Lemoore homebased the F/A-18 E/F Super Hornet in the late 1990's and may potentially increase squadrons and operations; the Installation anticipates homebasing the F-35C Lightning II Joint Strike Fighter; and the Ground Control Approach flight pattern may change.

The responsibility for land use and air base development decisions is shared between NAS Lemoore and local governments. Historically, military air facilities have attracted development to their surrounding areas, generally housing and service establishments for military personnel and their families, and for civilian employees. Without adequate land-use controls, such development is

incompatible with the mission of the air base with living conditions subject to high noise levels and potential aircraft accidents. Within Kings County, specific current and potential land use compatibility concerns identified by the AICUZ are as follows:

- a. Development of West Hills Community College, located west of State Highway 41 and placed under the Ground Control Approach Box Pattern area for flight track 4LG1/2RGI;
- b. Large acreage dairy farms located north and northeast of NAS Lemoore within Noise Zone 3;
- c. A residential parcel located north of Runway 14L within Noise Zone 3 and APZ 2;
- d. The prevalence of “Resource Production and Extraction” land use in Noise Zones 2 and 3.

The Navy intends to continue to disseminate relevant material and educate the public, stakeholders, planning agencies, and other local government entities through community outreach and project planning reviews as development occurs, including intergovernmental agency reviews, about the AICUZ Program to help preserve the defense mission while improving the quality of life of those living around the installation.

Joint Land Use Study:

A Final Joint Land Use Study (JLUS), released August 2011, was completed by local government partners in Fresno County, Kings County, and City of Lemoore, including NAS Lemoore, KCAG, and other agencies and interested parties, for use by local governments as a planning document to promote compatible land use around the NAS Lemoore base. Similar to the AICUZ but civilian-based in scope and application, the JLUS identifies current and foreseeable encroachment issues and provides recommendations for consideration and implementation in each jurisdiction’s general plan and the local planning process for land use development to promote compatibility between the civilian community and the military installation.

For Kings County, the JLUS identifies land use objectives in the 2035 Kings County General Plan, Open Space Element, and Health and Safety Element. Primarily, the goal is to maintain open space areas near NAS Lemoore and underlying low level military airspace corridors and ranges to prevent significant impacts to residents by mission activities. Potential impacts of noise, smoke, and dust generated by ground and air operations, and by aircraft crashes or other operational accidents at or near the airfield, exist and can negatively affect the quality of life for people living near an airfield. This goal is met with objectives and policies to maintain a restricted land use buffer around the naval air station to prevent encroachment of incompatible land uses and engage in coordinated efforts to plan for long term operations and safety. By designating, as Exclusive Agriculture, a 3-mile buffer surrounding the NAS Lemoore installation, applied as “Agriculture for Public Safety” territory, the potential risk to public safety is preserved over the long term and limits encroachment concerns. This zoning classification prohibits the creation of homesites on smaller (less than 40 acres) lots, agricultural production is protected, and the operational integrity of the strategic installation is preserved.

The City of Lemoore, located east of the NAS Lemoore installation, has no areas within the 3-mile perimeter of the base installation. There are currently no land use compatibility issues associated with development near the boundary of NAS Lemoore. The city has both Agriculture and Light Industrial zones within the high aircraft noise contour, however both zone designations are compatible with conditions.

NAS Lemoore complies with stringent non-attainment air quality regulations administered by the San Joaquin Valley Air Pollution Control District. The compliance program annually undergoes mandated federal, state, and local air district inspection in order for NAS Lemoore to continue operations.

NAS Lemoore's Economic Impact

According to the JLUS, 751 military and contractor/civilian personnel are projected at NAS Lemoore, increasing Lemoore's population by approximately 2,320 persons by 2028. NAS Lemoore employs approximately 11,700 military and civilian personnel and contributes an estimated \$900 million to the local economy.

Additionally, the base generates about 13,500 jobs for the county, which includes military personnel, Department of Defense civilians and contractors, contracts, payroll employees, transient personnel, and retirees/veterans. The naval hospital on base serves over 17,249 active and retired military, military dependents and personnel in the county. The installation feeds about 2,000 students to local college campuses and 1,600 students to the area's Central Union School District.

The base also contributes to the economy through on-going construction projects, which currently total about \$72 million in economic activity. The retirement community associated with NAS Lemoore contributes \$176 million to the local economy. Expenditures from 2010 to 2035 by NAS Lemoore are projected to exceed \$443 million to the surrounding counties.

E. HELIPORTS

There are five heliport-helipads located in Kings County for private use only, and include the following:

- landing pad at JG Boswell Company in Corcoran;
- helistop at the Hanford Community Hospital;
- heliport at the Adventist Health Medical Center in Hanford;
- landing pad at Westlake Farms airfield in Stratford; and
- heliport for Kings County Fire Department at Houston Avenue.

Hanford Municipal Airport does not have a separate helipad for helicopter operations. However, helicopters are used for chemical applications, air ambulance service, and for private use. The annual aircraft operations of helicopters utilizing Hanford Municipal Airport facilities is currently about 1,240 and projected to be 2,000 in 2025.

There are also three HH-1N type Search and Rescue Helicopters based at Lemoore NAS.

IV. ACTION ELEMENT

A. CENTRAL CALIFORNIA AVIATION SYSTEM PLAN

Kings County participated in a demonstration project to coordinate regional, state and federal aviation system planning with the development of the Central California Aviation System Plan (CCASP) in 2008. This was a departure from previous airport planning that was done primarily between the federal and state aviation authorities and local airports.

The CCASP was developed over a four year period and included several elements. Issues impacting the aviation community and how they impacted each airport were identified; aviation goals, objectives and policies were summarized; aviation funding resources and needs were described; airport profiles were developed to identify existing facilities and the role each airport had in the community or region; forecasts of based planes, flight operations, commercial service passengers and cargo were developed; needs were identified to accommodate the forecasts; and, an action plan was developed to meet those needs. Airport projects included in future Capital Improvement Programs will reflect a more focused and accurate view of the airport's role to the community it serves.

B. HANFORD MUNICIPAL AIRPORT

1. Recent Projects

The City of Hanford has secured federal grants over the last few years for several projects to install runway signs, airport beacons, fencing and gates; rehabilitate the runway, taxiway, and parking areas; and acquire land for runway expansion. The City of Hanford purchased 114 acres for expanding the runway approach protection zone in anticipation of future airport improvements.

2. Airport Master Plan

The Hanford Municipal Airport will continue to upgrade its facilities as outlined in the Airport Master Plan prepared in 1994. An update of the master plan was completed in early 2010. The primary objective of the plan was to provide upgraded aviation facilities in order to reasonably accommodate anticipated increases in aviation demand, improve the airport's operational efficiency, and enhance safety. The highlight of the 2010 plan was a proposal to maintain the extended existing runway. The runway extension was necessary to upgrade the airport's operational capacity, provide access to more diverse jet aircraft, and provide greater aviation safety by allowing aircraft to more easily execute the right-turn upon departure from Runway 14-32 and to avoid lower flight occurrences over residential and commercial areas within the city and county.

Other improvements included in the plan that have recently been completed are the replacement of the Visual Approach Slope Indicator (VASI) with the Precision Approach Path Indicator (PAPI) to make landing safer, a new Runway End Identifier Light (REIL) placed at the end of the runway, and an Automated Surface Observing System (ASOS) that was installed and commissioned on February 18, 1998 to disseminate weather information. It is recommended that the Master Plan and Layout Plan illustrate land use and surface transportation impacts and changes which may occur as a result. The following table lists the capital improvements proposed in the 2010 Airport Master Plan.

FIGURE 7-6

HANFORD MUNICIPAL AIRPORT MASTER PLAN PROGRAM

Short Range (within 5 years)
Underground utility poles at Runway 32 end Environmental Assessment (Acquisition 45 acres) Land Acquisition (45 Acres and 8 residential properties) Appraisal of land and property ALP Update Install MALSR approach light system Environmental Assessment (Acquisition of 108 acres) Land acquisition of 108 acres Appraisal for purchase of farmland FBO site infrastructure Rehabilitate runway, aprons and hangar taxilanes
Mid Range (within 6-10 years)
Box Hangar Area (39,000 square feet new pavement) Overlay runway and taxiway
Long Range (within 11-20 years)
Box Hangar Area (38,000 square feet new pavement) Slurry seal runway and taxiway, overlay apron

Source: 2010 Hanford Municipal Airport Master Plan

C. LEMOORE NAVAL AIR STATION

Completed projects within the past several years include new housing units, air terminal, offices, veterinary clinic and a car wash, and the assignment of 92 new F/A-18E/F aircraft and 1,550 personnel and their families to LNAS, which necessitated additional operational, training, maintenance, storage, administrative, housing, community, and utility facilities. Because F/A-18s are currently stationed at LNAS, most of the facilities for the additional aircraft were available and required only renovation or adaptation.

New construction or large-scale expansion will be required for some aircraft facilities and for associated personnel buildings with the anticipated homebasing of the F-35C aircraft. Seven Pacific Fleet squadrons (70 total F-18 aircraft) currently based at NAS Lemoore would progressively transition to the new F-35C aircraft beginning in 2015 to be completely transitioned by 2028. Establishing no earlier than 2017, Lemoore NAS would have a F-35C Fleet Replacement Squadron consisting of approx 30 F-35C aircraft to meet the requirements for training Navy pilots, and 100 F-35C aircraft by 2028 (increase of 100 F-35C aircraft and decrease of 70 F-18 aircraft). Homebasing the F-35C at Lemoore NAS will result in an increase of approximately 68,400 operations and approximately 800 offsite operations at the Naval Air Facility El Centro in Imperial County. Additional facilities and infrastructure for training, operations and maintenance, and personnel support would be required at NAS Lemoore. Sixteen projects would be proposed to provide this, including two projects for interior hangar renovations and a Special Access Program Facility. Lemoore NAS' estimated homebasing the F-35C aircraft would cost approximately \$242 million.

D. CAPITAL IMPROVEMENT PROGRAMS

The California Aviation System Plan (CASP) is a multi-element plan prepared by the California Department of Transportation (Caltrans), Division of Aeronautics, to develop and preserve a system of airports responsive to the needs of the State. The Capital Improvement Program (CIP) is a ten-year capital improvement program that serves as a guide for future public-use airport development. The CIP is included as an element of the CASP as required by the State Aeronautics Act. The CIP is required to be based upon each airport's Master Plan and is to be prepared in cooperation with the airport and the regional transportation planning agency for submittal to Caltrans every two years. Only projects included in the CIP are eligible for state aeronautics funds. Projects are selected by Caltrans based on a priority matrix. Projects included in the CIP are adopted by the California Transportation Commission (CTC) for the upcoming three-year fiscal Aeronautics Program every even year, while the CIP is published every odd year.

The following are projects included in the CIP for the two public use airports, Hanford Municipal Airport and the Corcoran Airport.

FIGURE 7-7

**CAPITAL IMPROVEMENT PROGRAM
HANFORD MUNICIPAL AIRPORT
2014-2018**

PROJECT	COST	STATE	FAA	LOCAL	YEAR
ALP Update	\$25,000	X	X	X	2014
Rehabilitate Hangar taxilane – design only	\$142,600	X	X	X	2013
Rehabilitate Hangar Taxilane – construction only	\$1,640,000	X	X	X	2014
Rehabilitate Runway Apron – design only	\$44,000	X	X	X	2014
Rehabilitate Runway Apron – construction only	\$430,500	X	X	X	2015
Rehabilitate TWA – design only	\$18,000	X	X	X	2015
Rehabilitate TWA – construction only	\$204,500	X	X	X	2016
Design New Hangars and taxilane	\$130,000	X	X	X	2017
Construct New Hangars and taxilane	\$1,620,000	X	X	X	2018
Rehabilitate Runway 14-32 – design only	\$50,000	X	X	X	2018
Pavement Management Plan Update	\$10,000	X	X	X	2018
Replace Existing Fuel Tanks	\$150,000	X	X	X	2018
TOTAL	\$4,464,600				

Source: City of Hanford, Hanford Municipal Airport

V. FINANCIAL ELEMENT

A. FEDERAL SOURCES

General Aviation airport development grants, known as Airport Improvement Program (AIP) grants, are available through the Federal Aviation Administration (FAA). These grants are derived from aviation fuel taxes, aircraft fees, and air passenger fare surcharges. Congress must approve funding for the grants each year.

The FAA's AIP has a number of funding categories. Airports near major airports are normally designated "reliever airports" and are funded from the reliever airport funding category. Airports in Kings County are funded from the General Aviation category and do not compete with the larger, urban airports. From 1988 to 1993, primary airports made up the largest segment of those airports receiving AIP grants (54 percent), followed by General Aviation airports (42 percent), and reliever airports (4 percent).

Hanford Municipal Airport qualifies for \$150,000 per year in AIP funds that can be used for environmental studies; pavement rehabilitation; installation of signs, beacons, fencing; acquisition of land for the runway protection zone; and extension of the runway.

B. STATE SOURCES

The majority of the revenues for the Aeronautics Program are derived from an 18-cent per gallon tax on aviation gas and a 2-cent per gallon tax on jet fuel. The tax is levied on general aviation aircraft only. Revenues generated from aviation gasoline are expected to gradually decline as the industry moves to jet fuel-powered aircraft. As it stands, the request for funding by General Aviation airports in the CIP is some 30 times greater than funding availability in the California Aid to Airports Program (CAAP).

The California Aid to Airports Program (CAAP) encompasses four categories of state aeronautics funding.

1. Annual Grants

Annual grants of \$10,000 are awarded to public-use, publicly-operated airports which are neither Reliever nor Commercial Service Airports, as designated by the FAA. The funds can be accumulated for up to five years. The funds are to be used for airport development, operation, and maintenance and may also be used to match FAA money. No local match is required for an Annual Grant.

2. AIP Matching Program

This program involves state funds used specifically for local matching requirements of the federal AIP grant. The local match rate is currently 5 percent for an AIP grant. The project must be included in the Capital Improvement Program (CIP) to be eligible for match funding. These funds are subject to allocation by the California Transportation Commission.

3. Acquisition and Development (A&D) Grants

Acquisition and Development program grant funds are allocated by the California Transportation Commission (CTC). The CIP is used as the basis for programming these funds. With over 250 publicly operated airports in California desiring a portion of the available funds, competition is keen. The local match requirement can vary from 10 to 50 percent of the project's total cost as determined by the CTC. However, a 10 percent match percentage has been generally adhered to over the past 10 years of the program. Caltrans uses a rating and ranking system for grant applications which gives priority to those projects that:

- are requested by airports with high levels of air traffic;
- enhance the safe operation of the airport;
- confer environmental benefits;
- help maintain existing facilities;
- improve the efficient operation of the airport; and
- complement the California Aviation System Plan.

4. California Airport Loan Program

This local airport loan program provides financial assistance in the form of loans repayable over a period not to exceed 25 years. Interest rates are based on the latest state bonds issued prior to granting the loan. These loans can be used by general aviation airports for most facility improvements and land acquisitions. There are two types of airport loans available: 1) loans for matching FAA grants, and 2) revenue-generating loans for demonstrated project needs.

C. LOCAL SOURCES

Local funding has been an increasingly important source of revenues for General Aviation airports. Two categories of local funding are available for airports. One of the most important is lease income from hangar fees from operators of flight service facilities, or fixed-base operators (FBO's), and from other enterprises located at the airport. The Hanford Flight Center is an FBO providing fuel, aircraft maintenance, services and supplies, generating lease income for the Hanford Municipal Airport. Lease income also includes revenues generated from airport-owned land not relating to aircraft operations. At Hanford Municipal Airport, 60 acres are leased for agricultural production, which generates approximately \$2,400 per year. The Hanford City Council establishes charges for the use of specific airport facilities such as tie downs, shelters, and hangar space. Planned increases in hangar spaces will provide additional airport funds. Lease fees in 2013 were increased approximately 5% for aircraft tie-downs, hangar spaces, portable toilets, and ground leases to preserve the airport rate structure and avoid large increases in any single year. The anticipated revenue generated by the fee increases will be approximately \$3,500 per year.

The second source of revenues is funds collected in the City of Hanford's general fund. The general fund revenues are normally used to supply matching funds for CAAP grants.

FIGURE 7-8

**ANTICIPATED HANFORD MUNICIPAL AIRPORT REVENUES
2014-2025**

REVENUE CATEGORY	TOTAL \$
HANGAR RENT/TIEDOWNS	\$400,000
BUILDING RENTALS	\$586,300
LAND LEASES	\$257,700
GENERAL FUND	\$61,000
OTHER AIRPORT REVENUES	\$5,700
CAAP	\$100,000
TOTAL	\$1,410,700

Source: City of Hanford

FIGURE 7-9

ANTICIPATED HANFORD MUNICIPAL AIRPORT EXPENDITURES 2014-2025

EXPENSE CATEGORY	TOTAL
OPERATIONS	\$350,000
MAINTENANCE	\$490,000
CAPITAL	\$570,700
TOTAL	\$1,410,700

Source: KCAG, City of Hanford