

## CHAPTER 7

### AVIATION

#### I. OVERVIEW

All public-use and private airports in Kings County are used for General Aviation (i.e. smaller, recreational or business) aircraft. There is no commercial air 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 airports, Hanford Municipal Airport and Corcoran, and at a number of privately owned airstrips.

The past trends in aviation activity in Kings County reflect the changes within General Aviation as a whole over the past number of years. After the recreational flying "boom" in the 1960's and 70's, General Aviation activity decreased significantly during the 1980's and has maintained operations at reduced levels since. The Federal Aviation Administration (FAA) reported growth of 3.8 % in General Aviation hours flown nationwide since 2004.

Changes in population demographics regarding the number of people in younger age groups who might become involved in recreational flying, the need for commercial pilots in upcoming years, and the economics of small plane manufacturers will all figure in the amount of future General Aviation activity.

According to Kings County assessor's records for February 2010, there were 119 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 are necessary to serve the remaining agri-business and recreational aviation demand. (See Figure 7-1 and 7-2).
2. Most commercial air passenger demand by Kings County residents will be satisfied by the Fresno Yosemite International (FYI) airport that is served by eight airlines with destinations to ten cities, as of February 2010. The remaining need will be satisfied by the Visalia Airport, which provides daily service to Ontario International Airport, as well as charter flights to various destinations. The level and dependability of air passenger service from these airports have fluctuated as regional airlines end or begin service based on economic changes in the passenger airline industry. Many people are forced to drive to either Los Angeles or San Francisco to obtain direct air service to major cities. (See Figure 7-4 and 7-5)

3. The future of General Aviation activity in Kings County will be intricately linked to the expansion of the Hanford Municipal 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.

B. AIRPORT INVENTORY

1. Public Airports: Public Use

a. Hanford Municipal Airport

Serving the majority of aviation demand is the Hanford Municipal Airport. 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. There is one air charter service available and approximately 70 aircraft are based at the airport. 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 regarding chemical dumping.

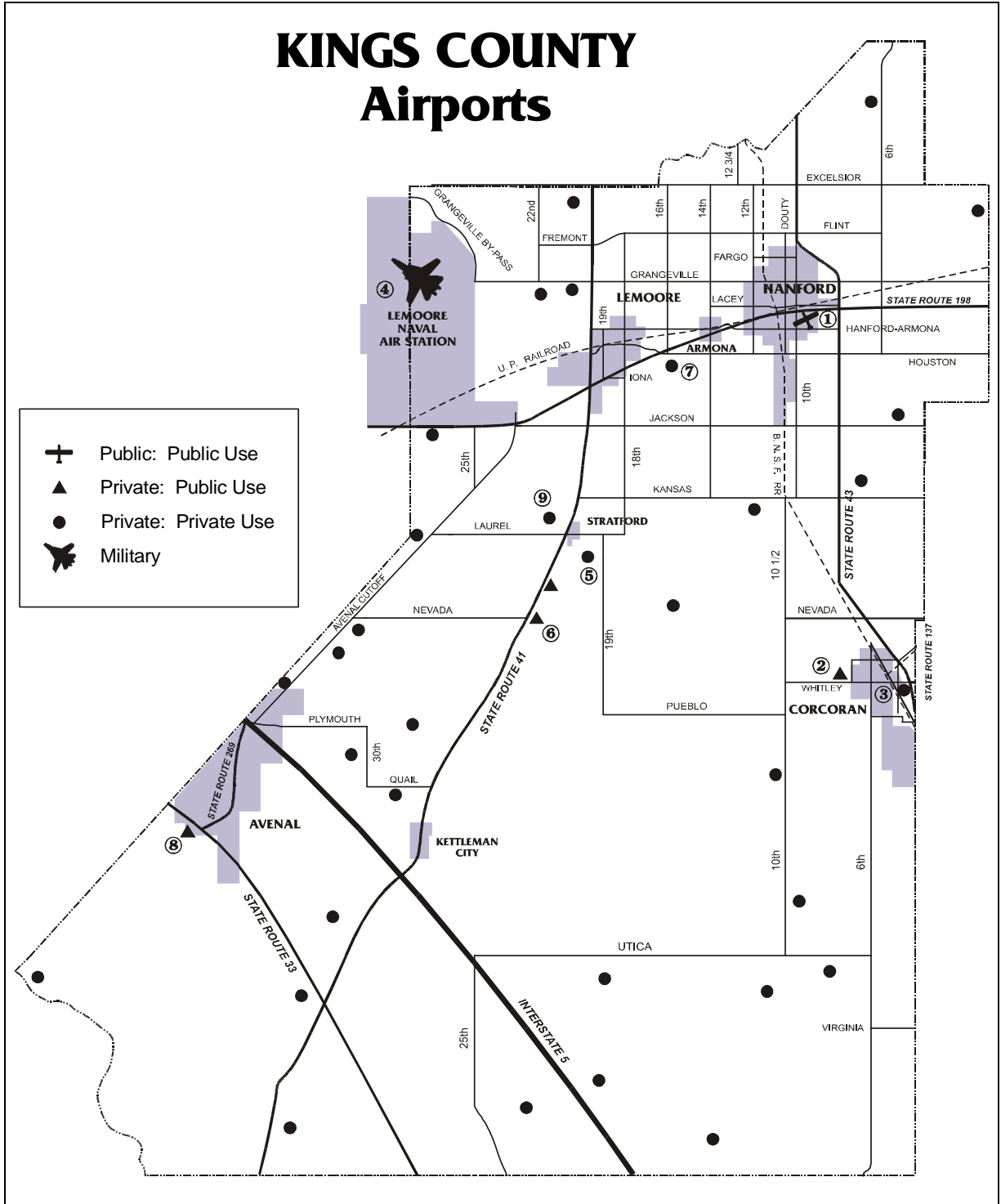
Hanford Municipal Airport is located on 295 acres at 9½ Avenue and Hanford Armona Road. The City of Hanford acquired the site in 1950 by using Federal Aviation Administration (FAA) and State Department of Airports grants, and developed the location as Hanford's airport. Today, the facility consists of one runway that is 5,180 feet in length; a 75-foot wide paved taxiway; several conventional hangers and tee shelters; and medium-intensity runway lights. All types of General Aviation aircraft use the facility including recreation and business aircraft. As of 2004, jet fuel is available. The average daily aircraft operations in 2010 was approximately 8,800 with 63% of those being single-engine propeller aircraft and 27% being itinerant operations. Annual operations are forecasted to be 13,800 and the number of based aircraft are expected to be 110 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 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. Two 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.

FIGURE 7-1



Source: KCAG

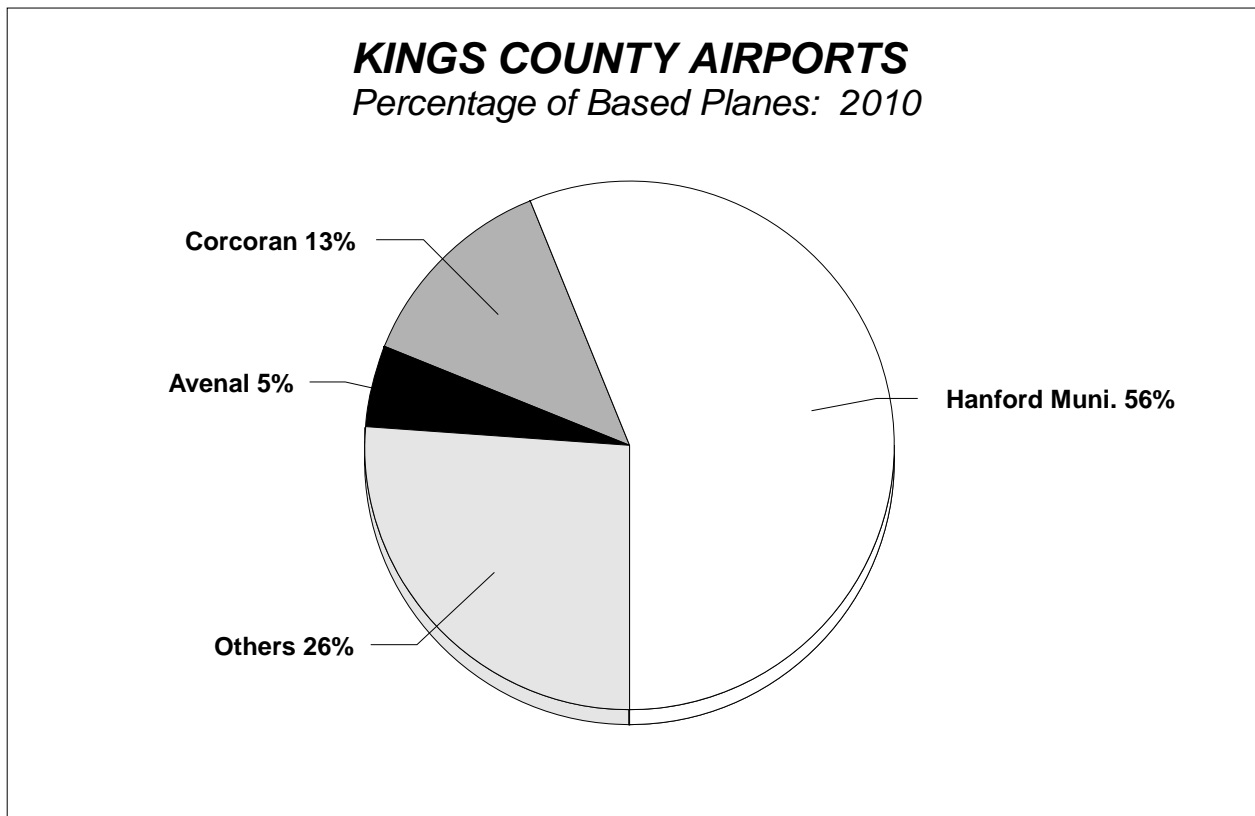
**FIGURE 7-2**

**KINGS COUNTY AVIATION FACILITIES  
2010**

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	67
2. Corcoran (Lakeland Dusters)	Corcoran	Public	Yes	3,800	50	Asphalt	16
3. Boswell/Salyer	Corcoran	Private	No	7,000	80	Asphalt	3
4. LNAS(Reeves Field)	Lemoore	Private	No	13,520	200	Concrete	0
5. Machado Field	Lemoore	Private	No	2,600	60	Asphalt	5
6. Westlake Farms	Lemoore	Private	No	3,600	50	Asphalt	3
7. Blair Strip/Hewitt	Lemoore	Private	No	2,150	45	Asphalt	3
8. Avenal	Avenal	Private	No	2,880	100	Dirt	6
9. Jones Farms	Lemoore	Private	No	1,900	50	Asphalt	1
10. Others	---	---	---	---	---	---	15
<b>TOTAL</b>							<b>119</b>

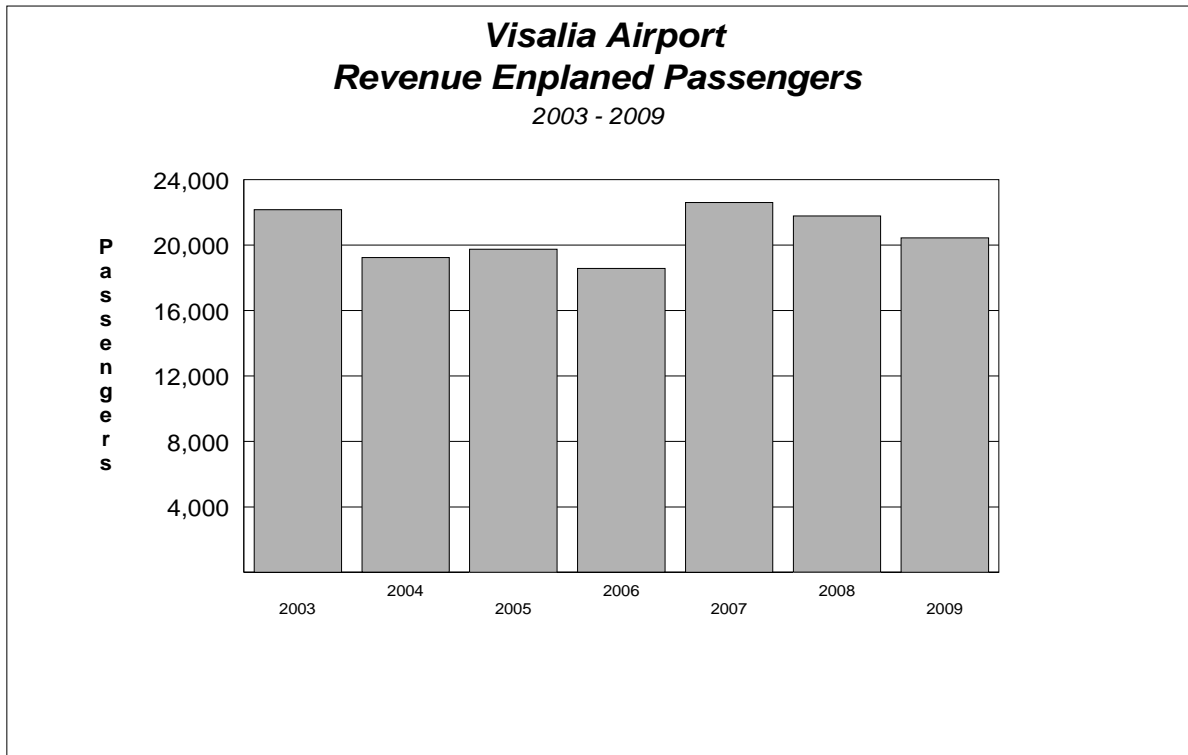
Source: FAA Aeronautical Information Services, Airport Facilities Directory (AFD)

**FIGURE 7-3**



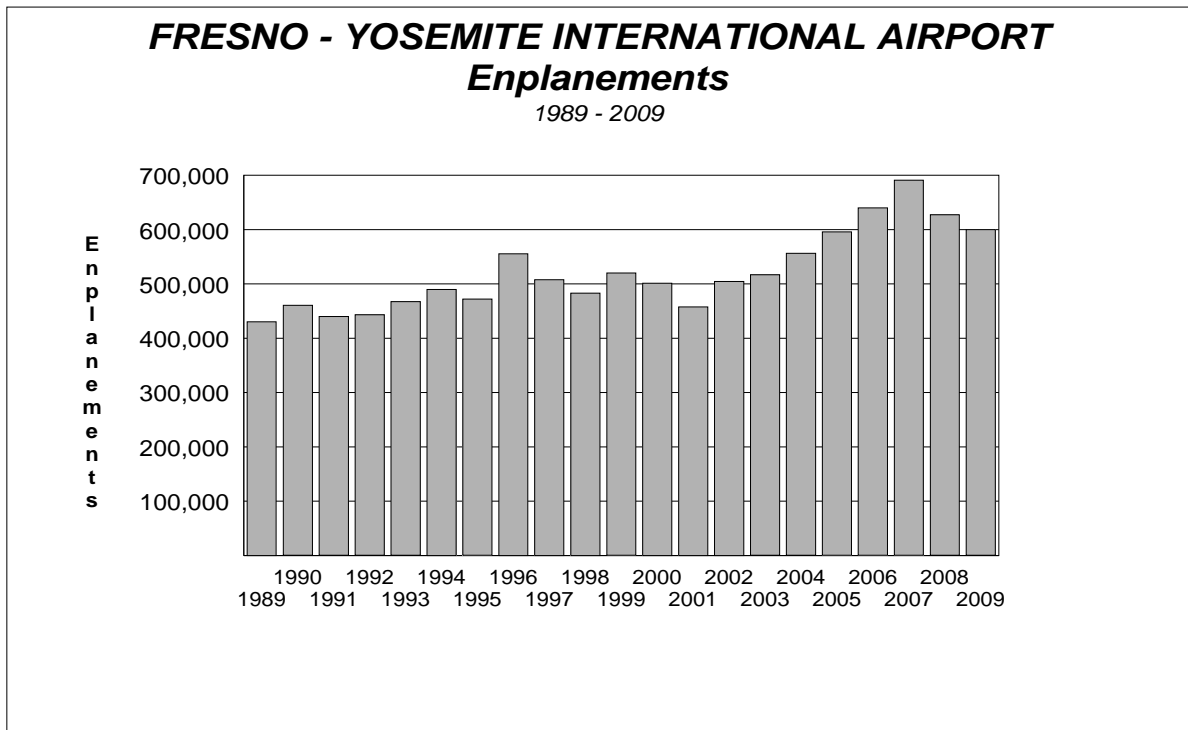
Source: Kings County Assessor, KCAG

**FIGURE 7-4**



Source: FAA, DOT, ACAIS Database

**FIGURE 7-5**



Source: Fresno Yosemite International Airport

b. Corcoran Airport

Serving as a basic utility airport with 16 based planes, Corcoran Airport is the second busiest public-use airport in Kings County. The airfield is located on the west side of the City of Corcoran on Whitley Avenue and occupies 220 acres which includes agricultural acreage. The airport has an asphalt runway with a parallel taxiway. Under private ownership of Lakeland Dusters Inc., the airfield is used primarily by a fleet of chemical application aircraft. Approximately 5,000 operations originate from the field at present. Single-engine propeller aircraft traffic will increase to 8,100 and the number of based aircraft are expected to be 33 by the year 2020, according to Caltrans' forecasts. The distribution of aircraft operations by aircraft type will be 50 percent crop dusters, 45 percent single-engine propeller aircraft and five percent twin-engine propeller aircraft by the year 2020. Low-intensity runway lighting is available upon request and all aircraft operate in daylight hours from 7:00 a.m. to 7:00 p.m. There are accommodations for a total of 20 aircraft to be parked at the airport.

3. Private Airports: Private Use Only

In addition to the two main public airports, there are approximately 40 other aircraft landing facilities in Kings County. The great majority of these smaller landing strips are used by crop dusters, though 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.

4. Military Air Facilities

Lemoore Naval Air Station

Commissioned in 1961, NAS Lemoore is the Navy's largest and only west coast Master Jet base. Its principal mission is to support the Strike-Fighter Wing of the U.S. Pacific Fleet, whose mission is to train, man, and equip the west coast Strike-Fighter squadrons. NAS Lemoore hosts fourteen F/A-18 operation Strike-Fighter squadrons, two Strike-Fighter Fleet replacement squadrons, and all four west coast Carrier Air Wing Commanders and their staffs. With the primary focus on offensive tactical strike-fighter operations, the 283 F/A 18 Hornets and Super Hornets stationed at NAS Lemoore flew approximately 250,000 flight operations last year. 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. In addition, the naval hospital on base serves over 17,249 active and retired military, military dependents and Department of Defense 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.

III. SUMMARY OF AVIATION ISSUES

A. PUBLIC AIRPORTS: PUBLIC USE

1. Hanford Municipal Airport

Regional Economic Importance. The Central California Aviation System Plan (CCASP) identified airport system requirements based on forecasted operations and number of based planes, and presented an action plan to implement the system improvements. 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. The 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) make determinations regarding potential height and safety violations and California Code Regulations determine noise level violations. With the changing of state law in 1993 that made the creation of county ALUCs optional, Kings County decided that local zoning policies could adequately address airport/land use compatibility issues without an ALUC.

Both the City of Hanford and Kings County have utilized policies found in the Kings County Airport Land Use Compatibility Plan regarding land uses surrounding Hanford Municipal Airport. The City of Hanford land use ordinance is the mechanism by which inappropriate or potentially dangerous land uses are prohibited from Airport Clear Zones A & B. 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 and the Airport Land Use Commission in order to develop further consistency in developing City and County land areas affected by the Hanford Municipal Airport.

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 airport is considered in the Avenal General Plan sections covering 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 and the City of Avenal and Kings County will continue to monitor any changes in land uses in the proximity of the airport.

2. Corcoran Airport

Possible Public Ownership. Although the idea of public ownership of Corcoran Airport has been considered in past planning documents, there are no plans by either Lakeland Dusters or the City of Corcoran for the public purchase of the airport. In addition, there is no long range master plan that has been prepared regarding future use and development of Corcoran Airport. The Capital Improvement Program (CIP) for Corcoran Airport is the implementation tool used by Lakeland Dusters Inc. for any future facility improvements.

Area of Influence. The 1996 Corcoran General Plan established an area of airport influence extending one-quarter mile from the sides of the runway and one-half mile from the ends. The southern runway protection zone extends 1,000 feet and the northern protection zone extends 1,250 feet. There are scattered residences in this area, especially in the area immediately south of the runway. The area has been zoned AG (agriculture) and VLD (very low-density) residential uses. The zone of high noise exposure surrounds the airport at approximately 4,750 feet from the runway. To the east of the airport, and within this zone, are low, medium and high residential uses as well as some commercial and public uses. Approaching aircraft are required to maintain 1,000 feet above airport elevation to minimize overflight of the City of Corcoran in order to comply with noise abatement procedures.

Incompatible land uses, which would diminish the existing operation and the future expansion of the Corcoran Airport, shall be prohibited according to Corcoran's land use policies. Any development along Orange Avenue, north of the airport runway and Whitley Avenue must be in compliance with the Kings County Airport Land Use Compatibility Plan (KCALUCP). The Corcoran Area Plan includes a land use policy to create a buffer along 7th Avenue between the airport and intensive residential development to protect residences from hazards associated with the airport in the approach zone south of Whitley Avenue. Kings County, the City of Corcoran and KCAG will carefully monitor future land use changes near the airport in order to forestall any threat to the viability of the airport and its impacts on nearby residences.

C. PRIVATE AIRPORTS: PRIVATE USE ONLY

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. Land-use planning for agricultural airports must be concerned with a number of factors:

- 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.
- 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.
- Consideration of interference with other air facilities, especially LNAS military air operations.

- 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

Land Use Compatibility:

The responsibility for land use and air base development decisions is shared between Lemoore NAS 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 can be incompatible with the mission of the air base. The land around air bases is subject to high noise levels and potential aircraft accidents.

Air Installation Compatible Use Zone Study (AICUZ):

To help ensure compatible development near its airfields, in 1993 Lemoore NAS prepared its AICUZ. To assist the Installation and local municipality in mitigating encroachment on the installation while simultaneously allow for smart growth, the Installation is in the process of updating its AICUZ study. The updated study will support Federal, State, and local planning efforts and land use compatibility initiatives. Results of the Study are expected in mid 2010.

Joint Land Use Study:

In partnership with Kings County, Fresno County and the City of Lemoore, KCAG submitted a grant application to the Office of Economic Adjustment to prepare a Joint Land Use Study (JLUS) for the Lemoore NAS. A Joint Land Use Study is a basic planning process designed to identify encroachment issues confronting both the civilian community and the military installation and to recommend strategies to address the issues in the context of the local general plan process. The Lemoore NAS military installation will be an important partner in the study, with administrative oversight provided by Kings County Association of Governments.

The Joint Land Use Study will be conducted in a collaborative manner involving a variety of stakeholders, including the local elected officials, planning commissioners, the Lemoore NAS military base command staff, community business leaders, land owners, natural resource groups, the development community, and chambers of commerce or other redevelopment agencies. Several public meetings will be conducted throughout the study so that interested members of the public can have the opportunity to learn about the project and provide comments.

The Lemoore NAS Joint Land Use Study will have two primary goals; to encourage cooperative land use planning between the military installation and the surrounding jurisdictions so that future civilian growth and development are compatible with the training or operational missions of the installations and to find strategies to reduce the operation impacts on the adjacent lands. This study will examine the land use planning concerns from both the jurisdictions and Lemoore NAS perspectives. The recommendations that emerge from this JLUS will be used to guide the local jurisdictions in the development and implementation of land use and related policies.

West Coast Basing of F/A-18E/F Aircraft:

Lemoore NAS is the home base to 6 F/A-18E/F Squadrons “Super Hornet” and one Fleet Replacement Squadron. The super hornet is expected to stay in service for another twenty years.

West Coast Basing of JSF-35 Lighting II “AKA Joint Strike Fighter” Aircraft:

The Department of the Navy mandated a replacement of its F/A-18C/D Hornets aging legacy jets. NAS Lemoore is one of several installations being considered for basing of the JSF-35 Strike Fighter. The Navy’s first F-35C squadron could be operational by September 2014.

E. HELIPORTS

There are three heliports (helipads) located in Kings County for private use only. These are located at the JG Boswell Company in Corcoran, the Helistop at the Hanford Community Hospital, and a landing pad at the Westlake Farms airfield.

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 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). 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) 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**

<b>Short Range (within 5 years)</b>
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 hanger taxilanes
<b>Mid Range (within 6-10 years)</b>
Box Hangar Area (39,000 square feet new pavement) Overlay runway and taxiway
<b>Long Range (within 11-20 years)</b>
Box Hangar Area (38,000 square feet new pavement) Slurry seal runway and taxiway, overlay apron

Source: 2010 Hanford Municipal Airport Master Plan

**C. CORCORAN AIRPORT**

Since Corcoran Airport is privately owned, most federal funding grants cannot be used for airport improvements. Corcoran Airport is listed in the National Plan of Integrated Airport Systems (NPIAS) and is eligible for funding under the Federal Airport Improvement Program (AIP), but does not receive AIP grants. Lakeland Dusters could apply for California Aid to Airports Program (CAAP) funding to purchase land for extension of the runway protection zone if required for future airport expansion. Corcoran Airport is also eligible for annual state grants of \$10,000/year, which can be used for smaller projects or for operations and maintenance. The City of Corcoran is eligible for Acquisition & Development (A & D) grant through the state's Aeronautic Program for the airport's capital improvements. Essentially, Lakeland Dusters, through revenues acquired through its chemical application services, is responsible for its own facility improvement financing. The airport does not meet minimum requirements for Longest Runway Weight Rating. The city should take advantage of grants to make improvements to the airport to rectify this safety situation. 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.

**D. LEMOORE NAVAL AIR STATION**

Recently completed projects include new housing units, air terminal, offices, veterinary clinic and a car wash. The assignment of 92 new F/A-18E/F aircraft and 1,550 personnel and their families to LNAS will necessitate additional operational, training, maintenance, storage, administrative, housing, community, and utility facilities. Because F/A-18s are currently stationed at LNAS, most of the facilities necessary for the new aircraft are available and would require only renovation or adaptation. New construction or large-scale expansion would be required for some aircraft facilities and for associated personnel buildings.

E. CAPITAL IMPROVEMENT PROGRAMS

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 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. 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  
2010 - 2015**

PROJECT	COST	STATE	FAA	LOCAL	YEAR
Complete Environmental Assessment	\$160,000	X	X	X	2010
Purchase Land	\$1,650,000	X	X	X	2010
FBO site infrastructure	\$450,000	X	X	X	2011
Rehabilitate runway	\$750,000	X	X	X	2010
Box Hangar area pavement	\$420,000	X	X	X	2013
Overlay Runway	\$1,825,000	X	X	X	2015
<b>TOTAL</b>	<b>\$5,255,000</b>				

Source: KCAG, Hanford Municipal Airport

**FIGURE 7-8**

**CAPITAL IMPROVEMENT PROGRAM  
CORCORAN AIRPORT  
2010-2014**

ID	PROJECT	COST	STATE	FAA	YEAR	COMMENTS
F-Kin-4-01	Maintenance	\$5,000	X	X	2010-11	Cost estimate based on other similar projects
F-Kin-4-03	Maintenance	\$5,000	X	X	2011-12	Cost estimate based on other similar projects
F-Kin-4-04	Maintenance	\$5,000	X	X	2012-13	Cost estimate based on other similar projects
F-Kin-4-02	Maintenance	\$5,000	X	X	2013-14	Cost estimate based on other similar projects
<b>TOTAL</b>		<b>\$20,000</b>				

Source: KCAG, Corcoran 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. 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 California Transportation Commission (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 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 hanger space. The planned increase in hanger spaces will provide additional airport funds.

The second source of revenues are 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 7-9**

**ANTICIPATED HANFORD MUNICIPAL AIRPORT REVENUES  
2010-2020**

<b>REVENUE CATEGORY</b>	<b>TOTAL \$</b>
HANGER RENT/TIEDOWNS	\$417,473
BUILDING RENTALS	\$230,258
LAND LEASES	\$139,837
GENERAL FUND	\$57,189
OTHER AIRPORT REVENUES	\$61,314
CAAP	\$110,000
<b>TOTAL</b>	<b>\$1,016,072</b>

Source: KCAG, City of Hanford

**FIGURE 7-10**

**ANTICIPATED HANFORD MUNICIPAL AIRPORT EXPENDITURES  
2010-2020**

<b>EXPENSE CATEGORY</b>	<b>TOTAL</b>
OPERATIONS	\$252,797
MAINTENANCE	\$357,095
CAPITAL	\$406,180
<b>TOTAL</b>	<b>\$1,016,072</b>

Source: KCAG, City of Hanford