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TABLE OF CONTENTS

PREFACE	Page vi
EXECUTIVE SUMMARY	1
	-
INTRODUCTION	5
Policy 1: AVIATION SYSTEM PLANNING.	6
Policy 2: INSTITUTIONAL RELATIONSHIPS	7
Policy 3: AIRSPACE.	8
Policy 4: AVIATION RESEARCH AND DEVELOPMENT.	9
Policy 5: REGULATORY AND SAFETY.	10
Policy 6: NOISE	11
Policy 7: CAPACITY AND EXPANSION OF AIRPORT FACILITIES	12
Policy 8: ENVIRONMENTAL.	13
Policy 9: LAND USE COMPATIBILITY.	14
Policy 10: AIRPORT GROUND ACCESS.	15
Policy 11: AIR SERVICE	16
Policy 12: FUNDING	17
Policy 13: CAPITAL IMPROVEMENT PLAN/PROGRAM.	18
Policy 14: LOCAL ASSISTANCE.	19
Policy 15: ECONOMICS	20
Policy 16: GOODS MOVEMENT.	21
Policy 17: SPACE AND TECHNOLOGY.	22
Policy 18: PERFORMANCE MEASURES.	23
GLOSSARY	24

THE CALIFORNIA AVIATION SYSTEM PLAN

		Page
APP	ENDICES	.28-57
A:	Policy Element Background	29
	Aviation System Planning	29
	California Aviation System Plan (CASP).	29
	Role of The California Department of Transportation.	30
	Role of Participants in the Air Transportation System.	30
	Status of Aviation System Planning Activities.	30
	Work Program for Continuous Aviation System Planning.	32
	Status of Implementing Actions	33
	Aviation Issues	34
B:	California Aviation System Plan	
	Policy 1 – 18: Background and Issues.	36-54
C.	Regional Transportation Planning Agency	
	Aviation System Planning Committee	55
D.	Technical Advisory Committee On Aeronautics	
	California Transportation Commission	56
	, A	
E.	Public Utilities Code Section 21701, et seq.	57
F.	Participants in Aviation	59
CRE	DITS	





As we enter the 21st Century it is increasingly evident that growth of the economy is directly linked to the strength of both passenger and cargo air transportation.

Aviation's escalating importance is based on many factors. Access to airports is critical to businesses that depend on the speed and flexibility that aviation offers. In the 1990s the most successful companies combined speed with technology and were able to minimize their inventories and quickly respond to their customer's needs worldwide. Companies created additional value by combining flexible production systems with information systems. In addition, connecting companies simultaneously with their suppliers and customers allowed reduced cycle time and customized products.

Increased use of the Internet in e-commerce is leading to a dramatic increase in the use of air cargo. For example, nearly two thirds of all U.S. air cargo is shipped via 24-48 hour door-to-door express shipments. Most of the predicted future growth is expected to be business-to-business (B2B): businesses supplying other businesses with materials and components, etc. B2B transactions are forecast to increase from \$500 million to \$3-\$6 trillion by 2005. Three million tons of cargo currently passes through southern California alone and nine million tons annually are expected there before 2020.

Growth in air cargo and passenger service is leading to a significant increase in aviation-related jobs. Los Angeles International Airport alone was responsible for over 400,00 jobs in 1999 and generates \$61 billion in regional economic activity.

Because of the importance of speed, many businesses are building distribution centers near airports. However, it is not only businesses dealing with time-sensitive goods that locate near airports, corporate headquarters and service-oriented businesses such as advertising, legal services, technology workers, etc. tend to locate near major airports also.

According to John D. Kasarda at the California Transportation Futures Conference held June 21, 2001, we are now in the fifth wave of transportation infrastructure in which airports are the primary drivers of urban growth and form. In fact, because speed and agility are so critical to the new economy, air commerce could be considered its backbone.

The first wave of transportation infrastructure was seaports, the second was river and canal based development, with the third wave came the railroads, followed by the fourth wave, highways. The fifth wave was led by the development of the following: the availability of large jet aircraft; advanced telecommunications; globalization; new supply chain systems; time-based competition; production flexibility and mass customization; perishibility; and the survival of the fastest and most agile companies.

Businesses clustering near airports lead to the development of the "aerotropolis", a new multimodal airport-driven urban form, which is based on low density, wide street and highway lanes, and fast movements. Ontario International Airport, with twelve million square feet of warehouse and distribution space radiating out from the airport, is an example of an evolving aerotropolis.



PREFACE

Since so much of the economy rests on the success of aerotropoli and other types of aviation commerce, it is important to plan wisely. Dedicated expressway links; high-speed rail (aerotrains) connecting airports to business and residential centers; and truck-only lanes will help to prevent the bottlenecks that occur with ground access at existing airports.¹

Large urban airports are not the only generators of significant economic activity. Small and medium sized communities also receive a welcome economic boost from their airports and the jobs and services they provide. In addition to providing a link to the nation's commercial airports, these airports also provide air cargo, medical, recreational, law enforcement, and firefighting services, and many airports act as a magnet to attract new business to the community. Businesses are increasing their use of private airplanes because they are often more convenient and cost-effective.

It is important to design and build transportation infrastructure and facilities based on their economic contribution. The intent of the California Aviation System Plan (CASP) Policy Element is to provide guidance for the development and maintenance of the aviation transportation system so that it continues to, first, support and, second foster California's economic growth. Finally, airports are not simply a transportation resource, but generators for growth for the local, regional and state economy. We need to recognize aviation transportation's growing importance by increasing investment in aviation infrastructure, both the airports themselves as well as the means of moving people and goods to and from an airport, and by protecting land near airports so that inappropriate development does not adversely affect an airport's ability to contribute to the economy.

¹ Kasarda, John D., *Transportation and Business Forces Shaping Urban Development: The Rise of Aerotropolis.* Presented at California Transportation Futures Conference sponsored by the California Department of Transportation, June 21, 2001, UCLA Extension Public Policy Program, Los Angeles California



EXECUTIVE SUMMARY

The Policy Element guides the development of the California Aviation System Plan (CASP) which helps direct improvement of the California aviation system. The Policy Element also directs the California Department of Transportation's (Department) Division of Aeronautics and serves as a resource guide for those outside of the Department. For example, the Policy Element discusses the Department's funding programs and the type of technical assistance the Department can provide to airports and Regional Transportation Planning Agencies (RTPAs.) In sum, the Policy Element provides a written directive for planning, programming and coordinating aviation activities.

SUMMARY OF POLICIES

Each policy provides guidance and direction in the following areas:

- **Policy 1:** Aviation System Planning determines if the existing or planned future system is adequate to meet projected demand. Policy 1 guides the Department's development of the **California Aviation System Plan** to meet air transportation needs.
- **Policy 2:** Federal, state and local governments all have a part in making necessary decisions in providing an adequate air transportation system in California. New emphasis is placed on developing relationships between public and private sectors. Within the Department, better coordination between the modes is emphasized to keep each informed on the project status. Policy 2 guides the Department's **institutional relationships** concerning aviation system development.
- **Policy 3:** Although airspace use is the exclusive jurisdiction of the Federal Aviation Administration (FAA), working groups exist to study airspace use and related safety issues. The Division of Aeronautics participates in working groups which make formal recommendations regarding airspace issues to the FAA. Policy 3 directs the Department's involvement in the **safe, efficient, and effective use of airspace** in California.
- **Policy 4**: Aviation research and development offers opportunities to improve efficient and effective airport use and improve the overall aviation system through new technology and improved operational procedures. The Department and other aviation partners help sponsor the National Center of Excellence for Aviation Operations Research (**NEXTOR**) at the Institute of Transportation Studies (ITS) at the University of California at Berkeley. Policy 4 guides the Department's involvement in **aviation research and development**.
- **Policy 5:** The Department has several aviation regulatory and safety functions. The Department issues a permit before airports or heliports are constructed or expanded. In addition, the Division of Aeronautics regularly conducts safety/permit compliance inspections at public and special-use facilities to ensure permit safety standards are met. Aeronautics staff also works with helicopter operators, school



PREFACE

officials, and public safety agencies to determine whether proposed helicopter operations can be conducted near schools. Policy 5 guides the Department's involvement in **aviation safety**.

- **Policy 6:** The Division of Aeronautics' regulatory role assures accuracy and standardization in noise monitoring programs and balances the conflicting needs of the general public in the noise variance process. The California Noise Standards are designed to bring cooperation of airport proprietors, air carriers, pilots, local governments, the general public, and the Department. Policy 6 guides the Department's involvement in **aviation noise issues**.
- **Policy 7:** Forecasts indicate aviation passenger traffic will more than double in the next twenty years. Even though many airports are now at or near capacity, expansion for airports is difficult. Alternatives must be considered such as diverting short-haul trips, peak-hour pricing, or converting surplus military facilities to civilian airports. Policy 7 guides the Department's involvement in **airport capacity**.
- **Policy 8:** The Department's Division of Aeronautics reviews and comments (to local agencies) on proposed land development compatibility near airports. The Department's goal is ensuring land use compatibility is considered in environmental analyses. The Department's comments provide a statewide perspective missing from regional and local review. Policy 8 guides the Department's involvement in aviation **environmental** review of land use compatibility.
- The purpose of airport land use planning is insuring there are compatible uses Policy 9: around airports which protect the community, its local residents, and the airport itself. California law requires the creation of Airport Land Use Commissions (ALUC) or as an alternative a countywide jurisdiction functioning in lieu of an ALUC. The ALUC's overall purpose is providing for orderly development of public airports and ensuring compatible land uses in the vicinity of airports. The Department has several roles regarding land use compatibility near airports. One is commenting on environmental documents for projects within an ALUC's established airport planning boundary or within two miles of an airport if no ALUC exists. Another role is encouraging local governments to comply with the ALUC's land use plans to preclude new incompatible land uses around public-use airports The Department also investigates and makes recommendations and heliports. regarding compatibility of new school sites and state buildings within two miles of an airport. Policy 9 guides the Department's involvement in land use compatibility surrounding airports.
- **Policy 10:** Ground access problems affect many airports in California. In addition to affecting passenger service, ground access delays significantly impact the air cargo industry, making it difficult to pick up or deliver cargo on schedule. Planning ground access improvements requires a comprehensive approach. Transportation agencies need improved ground access data and improved methods to analyze projects for hidden



impacts or to propose possible modifications that would improve airport ground access. Policy 10 guides the Department's involvement in developing improved **ground access** to airports.

- **Policy 11:** Certain areas in California lack satisfactory air access, especially to commercial service airports. In some remote areas general aviation airports are the only facilities available, but they do provide these areas with a connection to the national commercial aviation system. Policy 11 guides the Department's involvement in **promoting access to the aviation system** for all state residents.
- **Policy 12:** The nation's air transportation system's future and the country's economic well being depend on stable and reliable funding sources for aviation development. The needs of airports far exceed available resources; the State offers funding programs to make the most of limited dollars. Because federal, state, and local revenue sources are inadequate to meet identified needs, new sources of funding must be identified. Policy 12 guides the Department's involvement in **funding** aviation projects identified in the CASP.
- **Policy 13:** The goal of the California Aviation System Plan's Capital Improvement Program (CIP) is: providing a statewide assessment of needs; fostering intermodal planning; and building partnerships. The CIP is a 10-year list of projects by region divided into two 5-year phases. The project listings are developed from local, regional, state and federal sources and include all public-use, publicly owned airport capital needs in the State, regardless of funding source. Policy 13 guides the Department's role in the development of a **statewide assessment of needs**.
- **Policy 14:** Many state and federal mandates require expertise many airports lack. The Department's Division of Aeronautics staff provides engineering services that include technical assistance to airports in the design, construction, and maintenance of capital projects. Division of Aeronautics staff is also available to provide technical assistance during the permit inspection process. In addition, staff provides guidance to Airport Land Use Commissions (ALUCs) in the performance of their duties. Policy 14 guides the Department's role in providing technical aviation expertise to airport management and other aviation partners.
- **Policy 15:** Maintaining an aviation infrastructure is critical to the economic health of the State. It is important that the public and their representatives appreciate the economic significance of airports if they are to continue supporting airports and aviation. Although some benefits that aviation provides a community are fairly obvious, other benefits are not. For example, the presence of an airport and the types of service it provides are important considerations in siting community business and industrial facilities. Policy 15 guides the Department's role in the economic development of airports.



PREFACE

- **Policy 16:** Air cargo has grown rapidly and is a positive impact on California's economy. Factors include: growth in e-commerce; just-in-time businesses; and growth in international trade, especially in the Pacific Rim. California's airports will continue to benefit from this air cargo growth. To stay competitive, California needs a coordinated approach to remove obstacles and to look for solutions such as: improving customs clearance; improving ground access; using airports outside metropolitan areas; and converting closed military facilities. Policy 16 guides the Department's role in developing efficient and effective **air cargo** movement.
- **Policy 17:** The rebirth of California's aerospace industry involves aircraft and satellite manufacturing, spaceports, and related electronics. The development and operation of Reusable Launch Vehicles (RLVs) will bring new challenges. Existing space launch facilities are at Vandenberg Air Force Base on the Central Coast, Edwards Air Force Base in Central Southern California, and Sea Launch out of the Port of Long Beach. Emerging issues, related to how space transportation will interact with the rest of the transportation system, need to be identified and addressed, if California is to remain competitive with other states. Policy 17 guides the Department's role in the promotion of **space technology** in California.
- **Policy 18:** Efficient and effective transportation is directly linked to economic growth and quality of life. Consequently, decision-makers need to know which transportation investments yield the best return, while avoiding undesirable consequences. Performance measures tell us where we are in relation to our goals and allow us to compare performance, identify opportunities for improvement, and guide the allocation of resources. It is important that these measures/indicators are easy to understand, based on readily attained data, and reported regularly so we understand how previous investments contributed to system performance. Policy 18 guides the department's involvement in the development of **performance measures** for the aviation transportation mode.

INTRODUCTION

INTRODUCTION

The California Aviation System Plan (CASP) Policy Element provides guidance to the Department's Division of Aeronautics for fulfilling the Department's mission, vision, and goals within the context of the aviation transportation mode. The Policy Element consists of eighteen policies; each policy has several implementing actions. In order to make the connection clear between the CASP Policy Element and the Department's mission, vision, and goals, noted in *italics*, in the left-hand margin of each page, is the appropriate mission, vision, or goal that corresponds to the adjacent policy or implementing action.

Also in the left-hand margin, noted in **bold**, are policies contained in the 1993 California Transportation Plan (CTP) which correspond to policies and implementing actions of the CASP Policy Element. The Department's vision for transportation is refined in the CTP; it provides direction for planning, developing, operating, and maintaining California's transportation system and includes the major policies and objectives for the future transportation system.

Although much of the State's involvement in aviation is specified in law, CASP policies provide more specific direction for satisfying legislative intent. <u>Underlined</u> in the left margin of the following policies and implementing actions are the statutes that give the Department the authority to carry out specific activities within the Division of Aeronautics.

The CASP Policy Element also supports the role and direction of the Department identified in the Department's Strategic Plan by emphasizing:

- Coordination in planning;
- Interregional and intermodal needs;
- A statewide transportation perspective; and
- The need to improve infrastructure for expanded goods movement.

More specifically, this Policy Element fulfills the objectives of the Division of Aeronautics' 1999-2000 Business Plan, which identifies long-range Division goals and priority objectives, and establishes Division performance measures. In addition, the business plan links resource requests to objectives, goals, and performance measures.

The current update represents a new format for the Policy Element. The following pages contain the policies and implementing actions only. For information on the following please see **Appendix A**: The background of the development of the California Aviation System Plan; status of Aviation System Planning Activities; and the work program for continuous aviation system planning. **Appendix B** summarizes the background and issues of each policy.



AVIATION SYSTEM PLANNING Policy 1

CALTRANS' MISSION

The Department improves mobility across California.

CALTRANS' VISION

We anticipate and plan for changes.

CALTRANS' GOALS

Be good stewards of the public's resources and transportation investments.

Continue to improve the effectiveness of our products, information and services.

PUC Sec. 21002(d), 21241 and 21701, et seq.

PUC Sec. 21002(d).

The Department will develop and maintain a California Aviation System Plan (CASP) to meet the State's immediate and future air transportation needs and to promote development and maintenance of the aviation system.

- A. Work with the Regional Transportation Planning Agencies (RTPAs), and all segments of the aviation community, to maintain a CASP in accordance with Section 21701 of the Public Utilities Code (PUC).
- B. Provide a baseline forecast of demand for the CASP to guide preparation of the Forecast Element, Regional Aviation System Plans (RASPs), and other documents.
- C. Recommend RTPAs prepare RASPs to include the following information in those plans: information on passenger and cargo growth; expansion of new or existing passenger and cargo facilities; and future passenger and cargo needs.
- D. Maintain a relational database, including physical and operational airport inventory information, to support Aviation System Planning and other related activities such as the California Transportation Plan and regional plans.



INSTITUTIONAL RELATIONSHIPS Policy 2

CALTRANS' MISSION

The Department improves mobility across California.

CALTRANS' VISION

We anticipate and plan for changes.

CALTRANS' GOALS

Be good stewards of the public's resources and transportation investments.

PUC Sections 21002 (f), 21241.

The Department will coordinate statewide aviation system planning through continuous and active participation in federal, state, regional, and local activities related to aviation.

- A. Coordinate statewide system planning with the FAA, RTPAs, and Metropolitan Planning Organizations (MPOs) to achieve consistency among regional, state and federal transportation plans and forecasts.
- B. Continue developing a list of aviation system planning projects for federal aviation planning funds based on priorities established in consultation with airports and RTPAs.
- C. Recommend development of system planning at the local level including development and updates of Airport Master Plans, or Airport Layout Plans. Recommend incorporating plans into Regional Transportation Plans (RTPs); the CASP; and the National Plan of Integrated Airport Systems (NPIAS).
- D. Notify interested parties of state and federal legislation and federal notices of proposed rulemaking related to aviation.
- E. Facilitate partnerships with the private sector, other governmental agencies, and other states regarding aviation issues and activities.
- F. Expand and enhance a Division of Aeronautics Home Page on the Internet to disseminate information to our partners.



AIRSPACE Policy 3

CALTRANS' VISION

The public will appreciate the quality of our products and services and the participation that they have had in our decision-making.

CALTRANS' GOALS

Demonstrate leadership and integrity in everything we do.

Be good stewards of the public's resources and transportation investments.

Transportation decisions will provide all Californians with a safe, convenient, reliable transportation system.

PUC Section 21002 (b) and (f).

The Department will participate in airspace planning efforts with the FAA, RTPAs, the military, and other airspace users to achieve efficient and safe use of airspace in California.

- A. Provide technical assistance to the Airspace Users Working Groups.
- B. Promote knowledge of laws that address navigable airspace in the vicinity of airports.



AVIATION RESEARCH AND DEVELOPMENT Policy 4

CALTRANS' VISION

We will use the latest research and technology to improve mobility for people, goods and information.

We anticipate and plan for changes.

CALTRANS' GOALS

Demonstrate leadership and integrity in everything we do.

Be good stewards of the public's resources and transportation investments.

Focus transportation investments in job creation, access to jobs and training of Californians for new employment opportunities.

PUC Section 21002.

The Department will promote and participate in research and development that will benefit aviation.

- A. Implement demonstration projects of applied aviation research.
- B. Through the National Center of Excellence for Aviation Research (NEXTOR), identify and promote a research program.
- C. Promote the use of traveler information systems and other technologies to promote improved mobility to airports.



REGULATORY AND SAFETY Policy 5

CALTRANS' VISION

California will have the safest, best-managed, seamless transportation system in the world.

CALTRANS' GOALS

Demonstrate leadership and integrity in everything we do.

Be good stewards of the public's resources and transportation investments.

Provide safety and security for all transportation system users.

PUC Sec. 21002 (b), 21662 and 21662.5.

The Department will strive for the safest aviation system as is reasonably possible.

- A. Conduct biennial safety/permit compliance inspections of eligible airports/heliports and medical facility/hospital heliports.
- B. Ensure FAA design standards are met in permitting new or expanded airports and heliports.
- C. Ensure structure-free Runway Protection Zones and other safety areas and imaginary surfaces consistent with FAA guidelines for existing, expanded, and new airports and heliports.
- D. Comment to FAA on proposed off-airport construction that may obstruct FAR Part 77 Approach and Transitional Surfaces at public-use airports and heliports.
- E. Authorize helicopter landings within 1,000 feet of any school.
- F. Train public safety agency personnel to conduct Helicopter Landing Authorizations to augment Division of Aeronautics staff for events within 1,000 feet of any K-12 school.
- G. Facilitate resolution of potential wire-strike hazards.
- H. Issue recommendations as to noise and safety considerations for acquisition of sites for public schools, community colleges and state facilities proposed to be within two miles of an existing or planned runway.
- I. Recommend maintaining compatible land uses within the airport environs consistent with the Department's Airport Land Use Planning Handbook guidance.



NOISE Policy 6

CALTRANS' VISION

We will work in partnership with other agencies and the public to assure that our work is done in a way that is sensitive to the needs of the environment and communities.

We will use the latest research and technology to improve mobility for people, goods and information.

We anticipate and plan for changes.

The public will appreciate the quality of our products and services and the participation they have had in our decision-making.

CALTRANS' GOALS

Communicate effectively internally and externally. Be good stewards of the public's resources and transportation investments.

Transportation decisions respect community values.

Balance transportation, energy, economic and environmental goals.

<u>PUC Section 21002(g), and</u> 21669. The Department will support and encourage the development of programs that are designed to: reduce noise impact areas around airports to zero over a reasonable period of time, and to prevent the development of new noise problems.

- A. Implement noise standards to reduce incompatible land uses.
- B. Participate in local land use planning activities that prevent noise problems and recommend appropriate land use compatibility measures (such as avigation easements and acoustical treatment of incompatible structures) where appropriate.
- C. Monitor progress by airports to reduce their noise impact areas.



CAPACITY AND EXPANSION OF AIRPORT FACILITIES Policy 7

CALTRANS' VISION

We will work in partnership with other agencies and the public to assure that our work is done in a way that is sensitive to the needs of the environment and communities.

CALTRANS' GOALS

Continue to improve the effectiveness of our products, information and services.

Demonstrate leadership and integrity in everything we do.

Be good stewards of the public's resources and transportation investments.

Maintain transportation systems to preserve investments and serve the public.

Manage transportation network as a seamless intermodal system.

Transportation decisions respect community values.

PUC Sec. 21002(d) and (h).

The Department will seek to develop an integrated airport system that: meets demand as identified in the CASP; complements the overall state transportation system; maximizes the use of existing facilities; and is compatible with the environment.

- A. Continue updating and refining the Department's Airport Classification System.
- B. Encourage development of new environmentally compatible airport and heliport facilities to serve demand and relieve urban congestion.
- C. Promote joint use of military airport facilities where the CASP identifies an aviation need.
- D. Recommend converting surplus military aviation bases to civilian use where the CASP identifies an aviation need.
- E. Develop strategies for state assistance for continued operation and expansion of public-use airports identified in the CASP to be of local, regional or statewide significance.



ENVIRONMENTAL Policy 8

CALTRANS' VISION

We will be responsive and accountable.

We will work in partnership with other agencies and the public to assure that our work is done in a way that is sensitive to the needs of the environment and communities.

We anticipate and plan for changes.

CALTRANS' GOALS

Communicate effectively externally and internally.

Demonstrate leadership and integrity in everything we do.

Be good stewards of the public's resources and transportation investments.

Transportation decisions will protect the environment and promote energy efficiency while improving mobility.

PUC 21002(d), 21002(f), 21241, 21242, and 21670.

The Department will be a partner to the development of solutions to environmental problems* proportional to aviation's contribution to those problems.

- A. Recommend airports work with Regional Transportation Planning Agencies (RTPAs) and Air Quality Districts to include projects in Air Quality Maintenance Plans and the State Implementation Plan (SIP).
- B. Comment on environmental studies of projects, especially those having adverse impacts on airport operations, to the Federal Aviation Administration (FAA); RTPAs; the Department's district offices; and Airport Land Use Commissions (ALUCs).
- C. Recommend local planning agencies provide airports with environmental documents for projects within the airport's planning boundary, or "sphere of influence."
- * In addition to noise problems stated in Policy 6



LAND USE COMPATIBILITY Policy 9

CALTRANS' MISSION

The Department improves mobility across California.

CALTRANS' VISION

We will work in partnership with other agencies and the public to assure that our work is sensitive to the needs of the environment and communities.

We anticipate and plan for changes.

The public will appreciate the quality of our products and services and the participation that they have had in our decisionmaking.

CALTRANS' GOALS

Communicate effectively internally and externally.

Demonstrate leadership and integrity in everything we do.

Be good stewards of the public's resources and transportation investments.

Balance transportation, energy, economic and environmental goals.

Transportation decisions respect community values.

PUC Sections 21670(a)(1) and (2)

PUC Sections 21655 through 21659.

Education Code 17215,

The Department will promote and assist in ensuring compatibility between airports and surrounding land uses.

- A. Assist local agencies and airports to maintain Airport Land Use Commissions (ALUCs) to assure compatibility between airports and surrounding land uses.
- B. Recommend counties create and maintain ALUCs and enforce existing ALUC laws.
- C. Ensure zoning authorities and school districts notify airports, ALUCs, and the Department, of all proposed general and specific plans, zoning and land use changes within airport planning boundaries.
- D. Maintain ALUC guidelines and provide training for ALUC staff, and local planning agencies, to assure consistency with federal assurances and to increase their understanding of ALUC capabilities.
- E. When reviewing Regional Transportation Plans, recommend conformity of Comprehensive Land Use Plans and RTPs to Airport Master Plans/Airport Layout Plans.
- F. Recommend ALUCs utilize and incorporate Air Installation Compatible Use Zones (AICUZ), where one exists, and local governments incorporate these into General Plans and immediately prepare a CLUP if a military base will be acquired.
- G. Fund periodic updates of CLUPs.
- H. Recommend planning documents identify runways eligible for future instrument approaches, including Global Positioning Systems (GPS), and recommend their protection from incompatible land uses.
- I. Recommend local governments require real estate disclosure notices when development is permitted near airports to alert potential buyers and protect airport operations.



AIRPORT GROUND ACCESS Policy 10

CALTRANS VISION

The Department will have the safest, best managed seamless transportation system in the world. We will use the latest research and technology to improve mobility for people, goods and information. We anticipate and plan for changes.

CALTRANS' GOALS

Continue to improve the effectiveness of our products, information and services. Be good stewards of the public's resources and transportation investments.

PUC Section 21702.

The Department will participate in the development of ground access to public-use airports for both passengers and cargo.

- A. Work with the public and private sector to address airport ground access transportation needs.
- B. Develop strategies to improve ground access to airports. Examples include: alternative modes; off-airport terminals; air cargo consolidation; economic incentives; and methods identified in air quality management plans, state plans, RTPs, and local general plans.
- C. Identify ground access projects in the Capital Improvement Program.
- D. Recommend that the Department's districts include ground access to airports in each district's system planning process.
- E. Explore with our partners (The Federal Aviation Administration, Department Districts, Regional Planning Agencies, local governments, airports) the feasibility of using airport revenues and/or other funds to support airport ground access initiatives.



AIR SERVICE Policy 11

CALTRANS' VISION

We will work in partnership with other agencies and the public to assure that our work is done in a way that is sensitive to the needs of the environment and communities.

We anticipate and plan for changes.

CALTRANS' GOALS

Communicate effectively internally and externally. Be good stewards of the public's resources and transportation investments.

Improve the economic competitiveness of the State through transportation activities.

Promote tourism and access to California's historic, scenic and recreation areas.

Expand and improve transportation services and systems to provide users better access and choice.

<u>PUC Sections 21002(h) and</u> 21690.5(a) and (b). The Department will promote adequate air transportation access to the national air transportation system for all state residents.

- A. Maintain knowledge of changes in air service and the airline industry; and provide technical assistance to local government.
- B. Periodically update commercial air service market demand in the State.
- C. Recommend improvement of scheduled and nonscheduled commercial air service within California to serve the air transportation needs of the State.
- D. Maintain the availability of general aviation airports and facilities in remote locations in California.
- F. Preserve an effective system of reliever and general aviation airports in California.
- F. Participate in the development of regional transportation plans and airport master plans.



FUNDING Policy 12

CALTRANS' MISSION

The Department improves mobility across California.

CALTRANS' GOALS

Be good stewards of the public's resources and transportation investments.

<u>PUC Sections 21602(a) and 21680.</u>

The Department will participate in providing funding to address system needs that are identified in the California Aviation System Plan (CASP).

- A. Recommend legislation to direct fuel and aviation related taxes to aviation improvement needs.
- B. Evaluate existing and potential funding mechanisms to address aviation system needs identified in the CASP.
- C. Provide a stable long-term funding mechanism for ALUC/CLUP activities through state and federal funding.
- D. Provide grants to eligible airports.



CAPITAL IMPROVEMENT PLAN/ PROGRAM Policy 13

CALTRANS' VISION

We anticipate and plan for changes.

CALTRANS' GOALS Be good stewards of the public's resources and transportation investments.

Communicate effectively externally and internally.

<u>PUC Sections 21602(a) and 21680.</u>

The Department will recommend programming of funds in a manner that will provide the optimum benefit to the State Aviation System with an emphasis on maintaining and preserving the aviation system.

- A. Coordinate the Federal Aviation Administration's (FAA) Aviation Capital Improvement Program (ACIP) with the State's Capital Improvement Program (CIP) as the basis for programming state funding.
- B. Expand the State's role in the prioritization of federal AIP funds and coordinate selection of state projects to complement the FAA in ACIP development.
- C. Continue state participation in required local match for FAA Airport Improvement Program (AIP) grants.
- D. Develop a functional Airport Pavement Management System (APMS) to be the basis for programming decisions at the State and federal levels.
- E. For small airports that do not have staff, provide technical help for programming projects.



LOCAL ASSISTANCE Policy 14

CALTRANS' VISION

We will use the latest research and technology to improve mobility for people, goods, and information.

PUC Section 21601.

The Department will provide technical aviation expertise in engineering, planning, and operational matters to our customers.

- A. Provide technical equipment, expertise and referral services to airport proprietors and planning agencies in ensuring compliance with state and federal standards.
- B. Provide services, including acoustical counters and land use planning expertise, to airports and ALUCs in addition to technical assistance in the preparation of engineering plans and specifications for projects.
- C. Publish the biennial California Aeronautical chart.



ECONOMICS Policy 15

CALTRANS' VISION

We will be responsive and accountable.

CALTRANS' GOALS

Be good stewards of the public's resources and transportation investments.

Communicate effectively externally and internally.

PUC Section 21602.

The Department will assist airports to maintain economic viability and financial stability.

- A. Promote methods that maximize the financial return to the airport consistent with the airport master plan, deed covenants, and federal grant assurances and guidelines.
- B. Oppose activities adversely impacting the stability and economic viability of airports, such as "through the fence" operations.
- C. Provide capital improvement loans to airports for revenueproducing projects.
- D. Study the economic impact of aviation.



GOODS MOVEMENT Policy 16

CALTRAN'S VISION

We will use the latest research and technology to improve mobility for people, goods and information. The Department will promote and participate in the development of an airport system that provides for efficient movement of air cargo.

IMPLEMENTING ACTIONS

A. Continue to work with the Division of Transportation Planning and others to identify problems related to goods movement and seek solutions to those problems.

CALTRANS' GOALS

Communicate effectively internally and externally.

- B. Develop a comprehensive approach to goods movement in the California Transportation Plan (CTP) in coordination with the Department's Division of Transportation Planning.
- C. Include external and internal partners, including air cargo representatives, in goods/freight movement issues.



SPACE AND TECHNOLOGY Policy 17

CALTRANS' MISSION

We will use the latest research and technology to improve mobility for people, goods and information.

We anticipate and plan for changes.

CALTRANS' GOALS

Demonstrate leadership and integrity in everything we do.

Be good stewards of the public's resources and transportation investments.

Focus transportation investments in job creation, access to jobs and training of Californians for new employment opportunities.

PUC Section 21002.

The Department will promote and participate in the development of the space mode as an essential segment of the transportation system.

- A. Include the space transportation mode in developing the California Aviation System Plan, other inter-modal planning, and in updating the California Transportation Plan.
- B. Involve other transportation partners in identifying and addressing issues impacting space infrastructure development.
- C. Provide policy and technical support to the California Space Authority and other related groups.



CALTRANS' VISION

We will be responsive and accountable.

We anticipate and plan for changes.

CALTRANS' GOALS

Be good stewards of the public's resources and transportation investments.

Communicate effectively externally and internally.

Demonstrate leadership and integrity in everything we do.

Continue to improve the effectiveness of our products, information and services.

Focus transportation investments in job creation, access to jobs and training of Californians for new employment opportunities.

Performance Measures Policy 18

The Department will develop system performance indicators and measures to assess the effectiveness of the aviation transportation system as it affects the economic sustainability and enhancement of the state.

- A. Establish a coordinated and cooperative framework with other transportation system operators, users and beneficiaries for consistent performance measurement of the aviation transportation system.
- B. Work with other transportation partners to identify and define desired outcomes of the aviation transportation system and to determine the degree to which the desired outcome is being achieved.
- C. Work with other transportation partners to incorporate the desired outcomes and indicators into the established planning and decision-making process.
- D. Advise decision-makers of the likely impacts of their actions on the overall effectiveness of the aviation transportation system.
- E. Form effective partnerships with transportation partners to plan effective use of the aviation system, gather data, and enhance tools to enable performance measurement.
- F. Periodically monitor the aviation transportation system to understand how previous system improvement investments contribute to enhanced performance.



GLOSSARY

Acoustical Counter Program	A Department project which acoustically counts aircraft at nontowered airports.
Airport Improvement Program (AIP)	Mandated in the Airport and Airways Improvement Act of 1982 and reauthorized in the Airport and Airway Safety and Capacity Expansion Act of 1987, and later acts the FAA is authorized to provide funding assistance for the planning, design and development of airports.
Airport Land Use Commission (ALUC)	A county-level agency established by California law and required to develop a plan for promoting and ensuring compatibility between each public-use airport in a county and surrounding land uses.
Airport Layout Plan (ALP)	Depicts existing and proposed airport facilities and land uses, their locations and pertinent clearance and dimensional information required to show conformance with the applicable standards. It shows the airport location, clear zones, approach areas and other environmental features that may influence airport usage and expansion capabilities and includes the following elements: - Airport Layout - Location Map - Vicinity Map - Basic Data Table - Wind Information
Airport Master Plan	Documents and drawings providing guidelines for future development of an airport from a physical, economic, social and political perspective. The Airport Layout Plan is included in this plan.
APMS: Airport Pavement Management System	Developed by the State of California under a Federal Aviation Administration planning grant. Established a pavement condition index (PCI) for each of 191 nonprimary publicly owned airports in California.
Automated Weather Observing System (AWOS)	Weather information for pilots.

CASP: California Aviation System Plan	Provides the forum for the Department to conduct eontinuous aviation system planning. Guides the future development and preservation of the statewide system of airports and aviation facilities.
CCASP: Central California Aviation System Plan	An aviation system planning document modeled after the CASP, the CCASP guides the future development and preservation of the aviation system of airports and aviation facilities in the CCASP region, which is defined as that area from Kern County in the south to Sutter/Yuba Counties in the north.
CIP: Capital Improvement Plan/Program	A comprehensive list of airport project needs broken into two 5-year phases. The CIP is updated every 2 years and becomes the basis for the Division of Aeronautics Proposed Program for Aeronautics (PPA) adopted by the California Transportation Commission. Federal and state funded projects should be included in the CIP.
CLUPs: Comprehensive Land Use Plan	Provides for the orderly growth of each public airport and the surrounding area within the jurisdiction of the ALUC and safeguards the general welfare of the inhabitants therein, and the public in general. Includes a long-range master plan that reflects the anticipated growth of the airport during at least the next 20 years. May contain height restrictions on buildings, specify use of land and determine building standards, including soundproofing adjacent to airports within the planning area.
CMA: Congestion Management Agency	Develops the Congestion Management Plan in consultation with other agencies. Is usually a public agency designated by resolutions adopted by the county board of supervisors and the city councils of a majority of cities representing the majority of the population in the incorporated areas of the county. Can be either an existing agency or a new one formed to develop and monitor the Congestion Management Plan.
CTP: California Transportation Plan	Plan prepared by the California Department of Transportation with extensive public input that provides long-range direction for planning, developing, operating, and maintaining California's transportation system over the next 20 years.
Federal Aviation Administration (FAA)	The U.S. governmental agency which is responsible for insuring the safe and efficient use of the nation's airports and airspace and regulating pilots and aircraft.

Federal Aviation Regulation (FAR) Part 150 Airport Noise Compatibility Planning	This regulation provides resources and guidelines for airports wishing to study methods for improving airport/ community compatibility through reducing the effects of aircraft noise. Airport operators may seek federal funds for implementing the elements of the plans approved by FAA.
Federal Aviation Regulation (FAR) Part 139 Airport	An airport receiving scheduled service from an air carrier, which operates aircraft of over 30 seats, is required to have a FAR Part 139 Certificate. The FAA sets the standards for the operations and safety of the airport.
Federal Aviation Regulation (FAR) Part 77	Establishes standards for determining obstructions to navigable airspace.
Global Positioning System (GPS)	Satellite-based aircraft landing system. Allows for multiple approach paths and steep approach paths.
National Plan of Integrated Airport Systems (NPIAS)	A national plan for the development of public-use airports in the United States published by the Secretary of Transportation in accordance with the Airport and Airway Improvement Act of 1982 and reauthorized in the Airport and Airway Safety and Capacity Expansion Act of 1987.
Regional Aviation System Plan (RASP)	Provides a forum for a Regional Transportation Planning Agency to conduct continuous aviation system planning. Guides the future development and preservation of a regionwide system of airports and aviation facilities.
Regional Transportation Plan (RTP)	Prepared and adopted by RTPAs biennially in accordance with CTC guidelines, the Plan attempts to provide a coordinated and balanced regional transportation system over a 20-year timeframe.
Regional Transportation Planning Agency (RTPA)	The multi-county or county-level agency responsible for transportation planning, the preparation of Regional Transportation Plans, and the allocation of transportation funds.
Rotorcraft	Either helicopter (blades that rotate around a vertical central axis) or tiltrotor (see definition below).

State Implementation Plan (SIP)	A collection of regional plan elements for the attainment of the National Ambient Air Quality Standards prepared under the requirements of the Federal Clean Air Act. Addresses emission reductions from stationary and mobile transportation sources.
Tiltrotor Aircraft	An aircraft with fixed wings having proprotors which can be tilted through an arc of 95 degrees to operate in a horizontal plane as a helicopter or rotorblade; in a vertical plane as an airplane propeller; in any position between helicopter or airplane modes; or up to 5 degrees past the vertical position.
Vertiport	An identifiable ground or elevated area, including any buildings or facilities, that has been designated to be used for the takeoff and landing of tiltrotor aircraft and rotorcraft.



APPENDICES

APPENDIX A POLICY ELEMENT BACKGROUND

AVIATION SYSTEM PLANNING

Continuous aviation system planning is essential to the development and preservation of a balanced system of airports that is responsive to the needs of the State and the nation. The system planning process considers the interdependency among airports, airspace, public demand for aviation facilities, and ground access to airports. It also takes into account the concern for local, regional, state, and national aviation needs.

The Federal Aviation Administration (FAA) has encouraged planning at the State, regional, and local levels by financing planning studies since 1970. The Airport Improvement Program (AIP), created by the Airport and Airway Improvement Act of 1982, provides funding for, among other things, airport planning and the development of system plans.

In 1987, the Department formed a Regional Transportation Planning Agency Aviation System Planning Committee to assist in updating the California Aviation System Plan (CASP). The role of the committee has grown to include participation and input into all aspects of the aviation planning process. The committee meets every three months and is comprised of Regional Transportation Planning Agencies (RTPAs), FAA, military, California Transportation Commission (CTC) staff, and the California Department of Transportation Planning staff. The current list of members is included as *Appendix C*.

The Department coordinates its aviation activities closely with the CTC's Technical Advisory Committee on Aeronautics (TACA). TACA played an integral role in the development and adoption of the 1991 Policy Element and subsequent updates. The current list of TACA committee members is included in *Appendix D*.

The Department also maintains a current list of individuals and organizations interested in aviation matters. Input from constituents is routinely solicited on important issues affecting aviation.

CALIFORNIA AVIATION SYSTEM PLAN (CASP)

The CASP is the vehicle by which the Department conducts continuous aviation system planning. The Department developed the first CASP in 1981. This document was the initial attempt to guide the future development and preservation of a statewide system of airports and aviation facilities. In 1990, Public Utilities Code (PUC) Section 21701, et seq., mandated that the Department, in conjunction with RTPAs, prepare a CASP consisting of the following elements: background and introduction, air transportation issues, regional and state plans, regional and state comparison, capital improvement plan/program (CIP), summary and conclusion, and any other element deemed appropriate. The CIP and Inventory Elements are revised biennially while the remaining elements of the CASP are revised every five years. The CASP must be submitted to the CTC for public hearings and adoption. A copy of the Statute requiring the development of the CASP is attached as *Appendix E*.

ROLE OF THE CALIFORNIA DEPARTMENT OF TRANSPORTATION

The role of the Department in air transportation is to:

Assist in the development of an air transportation system that is consistent with the needs and desires of the public, and in which airports are compatible in location with, and provide services, meeting statewide and regional goals and objectives. Section 14000.5 (c), California Government Code.

ROLE OF PARTICIPANTS IN THE AIR TRANSPORTATION SYSTEM

The federal government regulates interstate commerce, operates the air traffic control system, certifies airline companies and their airplanes, certifies commercial and general aviation pilots, registers general aviation aircraft, and administers the Airport and Airway Trust Fund. Due to the major role of the federal government, its statutory responsibilities and policies have a significant impact on aviation in California. There are a number of other public agencies, industries and entities that participate in the development and operation of the air transportation system in California. The airport owners, airlines, federal, state, regional and local agencies, and the public all have an impact on the aviation system. *Appendix F* identifies the various participants and their roles.

STATUS OF AVIATION SYSTEM PLANNING ACTIVITIES

In 1987, the Department, with funding from the FAA, initiated the first update of the CASP. The Department hired a private consultant to help develop seven elements of the CASP: Status Report and Summary of Phase I, Inventory, Forecasts, Policies, System Requirements, Financial and Phase I Report on Action Plan. Thereafter, studies were conducted by consultants on the following critical issues identified in Phase I: air cargo, airspace, and ground access to airports. The CASP Inventory and the Policy Elements have been updated; the Policy Element was adopted by the CTC in October 1991, May 1995, and January 1998.

The primary focus of the current CASP update is to develop the CASP in accordance with PUC Section 21701, et seq., outlined above. In addition, the Policy Element is updated to acknowledge and address current air transportation issues. The CIP, first developed in 1993, was updated in 1995, 1997, 1999, and 2001.

From 1994-1997 the Department passed FAA system planning funds through to the RTPAs in the Central Valley to conduct continuous aviation system planning. To facilitate this process, the Department formed a Central California Aviation System Plan (CCASP) Technical Committee. The CCASP area ranged from Kern County in the south to Sutter and Yuba Counties in the north. The committee was composed of RTPAs and airport managers from the CCASP area and other aviation interests. The purpose of the CCASP committee was to guide the development of individual county and regional aviation system plans (RASPs) and the CASP for the remainder of the State.

In 1999, the Department's Division of Aeronautics initiated a similar process in Northern California counties and the balance of the State (minus MTC, AMBAG, SANDAG, and SCAG regions which already have aviation system plans). FAA is providing funds for this project.

The work program on the following page displays the tasks involved in updating the CASP, as well as other activities related to the CASP.

California Aviation System Plan (CASP) Work Program For Continuous Aviation System Planning

FY 1999 - 2000	FY 2000 - 2001	FY 2001 - 2002
Calfornia Aviation System Plan	Calfornia Aviation System Plan	Calfornia Aviation System Plan
Update Policy Element	Update Policy Element	Action Plan
Update Inventory Element	Update Inventory Element	Summary and Conclusions
Refine Airport Functional Classifications	Update Financial Element	
	Background and Issues	
Biennial CIP Update	Biennial CIP Update	
Refine Forecast Plan	Refine Forecast Plan	
	System Requirements	
	Develop Work Plan for Continued System Planning	Develop Work Plan for Continued System Planning
	Develop and Install Relational Database	Maintain Relational Database
Interregional California Aviation System Plan	Interregional California Aviation System Plan	
Facilitate Airport Layout Plan Updates	Facilitate Airport Layout Plan Updates	Facilitate Airport Layout Plan Updates
Update Airport Land Use Planning Handbook	Update Airport Land Use Planning Handbook and conduct training	Continue Airport Land Use Planning training
	Update Airport Pavement Management System	Participation in the California Spaceport Authority's (CSA) Space Committee and Board of Directors
Continue acoustical counter program	Continue acoustical counter program	Continue acoustical counter program
Air quality activites	Air quality activites	Air quality activites
		Economic Impact Study
	Ground Access to Airport Study	Implement Ground Access to Airport Strategies
California Transportation Plan Update (98)	California Transportation Plan Update	California Transportation Plan Update
	Global Gateways Development Program (SCR96)	Implement Global Gateways Strategies
Continue monitoring Goods Movement and Performance Measure activity	Continue monitoring Goods Movement and Performance Measure activity	Continue monitoring Goods Movement and Performance Measure activity
Coordinate with New Technology and Research Program and Instutute of Transporation Studies at UC Berkeley on NEXTOR activity: Role of Air Cargo in California's Goods Movement; California Aviation Database	Coordinate with New Technology and Research Program and Instutute of Transporation Studies at UC Berkeley on NEXTOR activity: Intelligent Transportation Systems in Intermodal Air Cargo Operations	Coordinate with New Technology and Research Program and Instutute of Transporation Studies at UC Berkeley on NEXTOR activity: Status of California's Aviation System

STATUS OF IMPLEMENTING ACTIONS

The Policy Element was last updated in January 1998. Since that time, the Division of Aeronautics has sought to carry out the actions in the 1998 Policy Element. Listed below are completed, on-going, and future activities. The policies that those activities fulfill are also listed together with any applicable specific implementing actions.

<u>Completed Activities</u> Developed CASP including forecasts, CIP	Policies/Implementing Actions 1A, 1C, 7B, 7C, 7E, 11E
Developed ICASP	2 3
Promoted aviation education and awareness	_
Developed Airport Pavement Management System	13E
Installed Automated Weather Observation System	1.4
at Fresno Chandler and Truckee Tahoe Airports	4A
Participated in development of California	10
Transportation Plan	10
On-going Activities	Policies/Implementing Actions
Database project	1F
Review Overall Work Programs (OWPs) and	
Regional Transportation Plans (RTPs)	1D, 9E, 10A, 10B
Review District system planning documents	10D
Legislative updates	2D
"Plan for Planning"	1E, 2B
Participate in State Aviation Directors Workshop	12, 22
and National Association of State Aviation Officials	
(NASAO) activities	2A, 2E
Participate in State Intermodal Goods Movement	211, 22
Advisory Committee	16A
Participate in Airspace Users Working Groups	3A
Participate, co-fund UC Berkeley's National	511
Center of Excellence for Aviation Operations	
Research (NEXTOR)	4C
Aircraft Operations Acoustical Counter Program	11, 14A, 14B
Annual safety inspections; issuance of airport permits	5A, 5B, 14A, 14B
Review proposed projects within 2 miles of an airport	5J, 8G
Airport Functional Classification	7A, 11D, 11E
Conduct Regional Transportation Planning	,,,
Agency (RTPA) Aviation System Planning	
Committee meetings	1, 8A, 14
Provide assistance in Airport Land Use Commission	1, 01, 11
(ALUC) matters, periodically update ALUC	
Handbook and provide training	9A, 9B, 9D, 9E, 14A, 14B, 15B
Noise monitoring and variance process	6
Comment on state/federal legislative proposals	2D, 2F, 12B, 12E
Wirestrike Education Program	5D
Participate in meetings regarding air quality	
conformity and air quality certification process	8A
contenting and an quanty contineation process	01 x

Administer California Aeronautics Account	
Program (CAAP) and Loan program	13
Attend FAA project planning meetings	13B, 13C
Engineering assistance in design, construction	
and maintenance	14A, 14B
Environmental review of any projects that may	
have an adverse impact on airport operations	8G

Upcoming Activities	Policies/Implementing Actions
Airport Layout Plans	2C

AVIATION ISSUES

There are a number of aviation issues in California. The task facing the Department and the aviation community is to try to resolve these issues or mitigate their impact on aviation. The policies and implementing actions represent the Department's response to over 25 issues identified for discussion in the CASP. The following list shows the policy or policies that correspond to the issues.

Issue	Policy #
Air Access	
Air Cargo	1, 2, 16
Air service	5, 7, 11
Military airports	3, 7, 9
Aviation System Requirements	
Capacity and expansion	3, 7
Capital Improvement Plan	13
Economics	
Economics	14, 15
Financing	12
International issue	7, 11
Local Assistance	12, 13, 14, 15
Environment	
Air Quality	8
Energy	8
Noise	6
Toxic waste clean up	8
Partnerships	
Awareness and education	All
California's relationship to other states	2
Institutional relationships	2, 13
Public participation	1, 16
Planning	
Airport Land Use Commission	9

Aviation System Planning	1
California Transportation Plan	10
Ground access and financing ground access	10
Intermodal systems (i.e., aviation and high speed rail)	1, 7
Intermodal Transportation Management System (ITMS)	10
Transportation planning process	1, 7, 10
Safety, Navigation and New Technology	
Airspace	3
Navigation aids and new technology	3, 4
Research and technology	1, 2, 4
Safety and Regulation	5, 6, 9
Space and Technology	17

The following pages provide a background for the above issues. The policies and implementing actions relate to these issues; however, not all issues are addressed. In some cases, the political, social, or technological environment is not conducive to developing policies and implementing actions. In these cases, the Policy Element promotes continued awareness and consideration of these issues throughout the planning process.

As previously stated, the strategic perspective considers aviation's role within California's rapidly changing environment. It is important to have a wide and global perspective of all factors affecting transportation in order to guide short-term decisions and to redirect policies and implementing actions as the issues discussed in this document change in the future.

APPENDIX B

CALIFORNIA AVIATION SYSTEM PLAN POLICY BACKGROUND

POLICY 1: Aviation System Planning

Aviation system planning attempts to determine if the current or planned system is adequate to accommodate projected demand. Ideally, aviation system planning should be incorporated into a larger approach to transportation planning that assumes that no one mode is the only way to fulfill transportation needs. The goal of this multimodal approach is to provide better ways to coordinate and integrate all transportation modes. One way to accomplish this goal is through the development of a comprehensive Aviation Element of the Regional Transportation Plans (RTPs) or Regional Aviation System Plans (RASPs).

RTPs are prepared by California's 43 Regional Transportation Planning Agencies (RTPAs) and updated every three years in urban regions and every four years in non-urban regions. The RTP outlines regional goals and transportation improvements to be implemented in a region over the next 20 years. Because many RTPAs lack the technical expertise necessary to prepare a comprehensive Aviation Element for their RTP, aviation is sometimes briefly discussed in the RTP with little information for aviation system planning purposes. Additionally, many RTPAs have difficulty accessing the information that would enable them to conduct aviation system planning. Thus, before aviation system planning can become part of a multimodal approach to transportation planning, planners must have the tools and technical expertise that will give them a complete multimodal perspective.

Approximately five years ago, Aeronautics staff worked with the Central Valley RTPAs to develop Regional Aviation System Plans that were used in the development of Aviation Elements of RTPs. The Central California Aviation System Plan (CCASP) project was funded with FAA funds which were passed through by the State to 10 RTPAs. Aeronautics has extended this process to Northern California counties and the balance of the State (minus RTPAs who already had RASPs in 1998). Thus, FAA, the State and RTPAs are continuing to work together to equip RTPAs with the tools and technical expertise necessary to engage in aviation system planning and to take a comprehensive multimodal approach to transportation system planning and programming.

POLICY 1 -- ISSUES

- Developing a comprehensive approach to aviation planning which can be incorporated into the Department's California Aviation System Plan (CASP);
- Maintaining accessible databases that can be used in aviation system planning;
- Providing an opportunity for all RTPAs to gain experience in aviation system planning;
- Identifying the importance of an aviation facility to the state system;

- Incorporating aviation system planning into a multimodal planning process that looks at how transportation modes work together; and
- Exploring ways to coordinate and integrate all transportation modes.

POLICY 2: Institutional Relationships

Neither federal, state, nor local governments control all the resources or make all the decisions necessary to provide an adequate air transportation system in California. Therefore, each agency must work with the others. However, establishing and maintaining these institutional relationships can be difficult and time consuming.

Current state and federal policies continue to emphasize the need for closer relationships between airports and Regional Transportation Planning Agencies (RTPAs), the Department's Division of Aeronautics and the FAA. Those policies also emphasize the need for better coordination among various local, regional, and state departments that have control over transportation, land use, air quality, energy, and other interrelated issues that affect aviation. Within the Department, emphasis has been placed on the need for better coordination between the modes to keep each other informed on the status of various projects that may be of interest.

The California Transportation Plan (CTP) is a document that guides department activities. The CASP, as well as planning documents generated by the various other Department modal programs, should be consistent with the CTP. In addition, emphasis has been placed on coordination with California's sister states regarding aviation.

New emphasis is being placed on developing relationships between public and private sectors. Both public and private entities are interested in seeing that transportation problems are resolved so that the community, region and state can continue to flourish. The issue, however, is how to find the right balance between public and private participation. In the recent past, the Division of Aeronautics has acted as a facilitator between the public and private sectors. It is undoubtedly a role the Division will continue to play, however it is unknown if that role will broaden and/or become stronger.

POLICY 2 -- ISSUES:

- Coordinating between federal, state, regional and local agencies;
- Coordinating between state agencies and programs within the Department;
- Coordinating aviation activities with state aviation agencies outside of California; and
- Finding the right balance between public and private participation.

POLICY 3: Airspace

The primary users of the National Airspace System are general aviation, commercial air carriers, and the Department of Defense. The competing interests of these airspace users and the composition of the aircraft fleet mix place heavy demands on the airspace system. Technological advances make possible a more uniform separation between aircraft resulting in capacity increases and improvements to system safety. However, given the competition for airspace, a multitude of solutions may be necessary in order to ensure equal access.

The FAA has exclusive jurisdiction over airspace. Airspace Users Working Groups have been formed in Northern and Southern California, including the San Diego area, to study airspace use and related safety issues in their respective areas. These "working groups" have representatives from virtually all segments of aviation. They make formal recommendations regarding airspace issues to the FAA. Given the complexities of airspace, the aviation system is best served with a coordinated approach involving all aviation users.

The FAA and Congress have been modernizing the air traffic system which has been an extensive financial and technological commitment.

POLICY 3 -- ISSUES:

- Equal access to airspace for all users of the system;
- Development of new technology to enhance airspace capacity;
- Real time use of special use airspace when not required by the Department of Defense; and
- Resolution of airspace conflicts by airspace users groups working with the FAA.

POLICY 4: Aviation Research and Development

Working with a consortium of other universities throughout the country, as well as private industry, the Institute of Transportation Studies (ITS) at the University of California at Berkeley has established a National Center of Excellence for Aviation Operations Research (NEXTOR). The primary client is the FAA but other public/private partners representing the aviation industry, including the Department, are co-funding NEXTOR. NEXTOR proposes to take on a wide range of safety, business, and operational issues of interest and concern to the aviation community.

A recent development in airspace management is "Free Flight." Operating under instrument flight rules, Free Flight increases flexibility in flight planning by allowing pilots to pick optimal routes, altitudes and speeds to reach their destinations. Air traffic control restrictions are only imposed to ensure separation, prevent exceeding airport capacity, prevent unauthorized flight through special use airspace, and ensure flight safety. Because Free flight will enable the FAA to handle the 40% increase in flights that is expected over the next 20 years there will be less cramming of aircraft into tight airborne corridors. However, this freedom in airspace may also bring more conflict with local communities over noise, traffic, and air pollution.

POLICY 4 -- ISSUES:

- Lack of aviation data;
- Access to aviation data; and
- The full costs of Free Flight.

POLICY 5: Regulatory and Safety

State law requires an airport permit from the Department before an airport or heliport is constructed or expanded. The Department may exempt classes of airports if a permit is not required in the interest of public safety. The Division of Aeronautics regularly conducts safety/permit compliance inspections at public-use airports and medical facility heliports to ensure that operating areas, traffic patterns, and approach zones meet safety standards. The Department may revoke an airport permit if it determines that new construction or other physical/operational changes around an airport or heliport would create an unsafe condition for the flight of aircraft.

By statute, the Department's Division of Aeronautics must evaluate helicopter landings near schools to determine whether they can be conducted in a safe manner. Many schools throughout the year ask law enforcement agencies and others to land a helicopter at their schools and talk with the children. Aeronautics' staff work with helicopter operators, school officials, and public safety agencies trained by the Department to determine whether the proposed helicopter operations can be conducted in a safe manner and to establish criteria and conditions for those operations.

POLICY 5 -- ISSUES:

- Maintaining hazard free operating surfaces at airports and heliports; and
- Determining whether helicopter landings near schools can be conducted in a safe manner.

POLICY 6: Noise

Aircraft noise has been a significant issue for more than three decades in California. In order to measure the impact that aircraft noise has on the Community, California uses the Community Noise Equivalent Level (CNEL). There are ten designated "noise problem" airports in California that cumulatively impact approximately 126,600 residents statewide within the 65 decibel CNEL contour which constitutes less than one-half of one percent of the State's population. State, federal, and local governments work together to reduce or eliminate noise impact areas around the noise-problem airports.

California has also developed the California Noise Standards which are designed to bring about the cooperation of airport proprietors, air carriers, pilots, local governments, the general public, and the Department. The regulatory role of the State is to assure accuracy and standardization in noise monitoring systems and to balance the conflicting needs of the general public in the variance process. Variances, issued by the State, allow an airport to operate in compliance with the noise standards under certain conditions; however, variance requirements must not conflict with federal law.

The FAA's Federal Aviation Regulation Part 150 program encourages airports to prepare noise exposure maps that show land uses which are incompatible with high noise levels and propose programs to reduce this incompatibility. If an airport's Part 150 study is approved by the FAA, projects such as land acquisition, acoustic treatment of residences, etc., become eligible for Federal Airport Improvement Program (AIP) funds.

Local government officials are heavily involved in the resolution of aircraft noise problems and must respond to their constituents' complaints about aircraft noise. Some local governments react by adopting or threatening to adopt more stringent operation restrictions or take action to close or restrict operations at the offending airport.

The Federal Airport Noise and Capacity Act of 1990 sought to apply consistent aircraft noise regulations. Final phaseout of Stage 2 aircraft to quieter Stage 3 aircraft occurred on 1/1/2000. While the transition to Stage 3 aircraft has resulted in smaller areas near major airports being impacted by aircraft noise, the FAA estimates that nationwide approximately 470,000 people living near airports will still be exposed to significant levels of aircraft noise.

The interrelationship between the federal, state, and local governments to address aircraft noise problems will undoubtedly continue. These entities, along with the aviation industry and community groups, must continue to coordinate their efforts and work together in the further development of tools to mitigate the effects of aircraft noise.

POLICY 6 -- ISSUES:

- Community concerns about future aircraft noise can influence their decision to expand a civilian airport or convert a former military facility to a civilian airport;
- Resolving noise problems in a reasonable time period given various funding constraints;
- Addressing the concerns of people living near airports who continue to be bothered by aircraft noise, even with the conversion to Stage 3 aircraft;
- Constraining airport projects that are needed to meet air service demand because of potential noise problems; and
- Coordinating federal, state, and local efforts to mitigate the effects of aircraft noise.

POLICY 7: Capacity and Expansion of Airport Facilities

In California, enplanements and deplanements totaled almost 173 million passengers in 1999. According to the "1999 Statewide Forecasts Element" of the California Aviation System Plan (CASP), passenger traffic is expected to more than double during the period 2000 to 2020.

In spite of the fact that many commercial service airports are at or near capacity, expansion for airports is very difficult. Residents around an airport may be opposed to any expansion because of noise, traffic, and air quality concerns or airports may find it difficult to expand because of crowded airspace, encroaching land uses, or lack of funds. Recent forecasts indicate that without

additional airport capacity, 29 of the nation's primary airports will become severely congested by the year 2004 and several of these airports are in California. As demand for travel increases, the barriers to expanding existing airports will lead to greater delays. The successful implementation of alternatives to improve system capacity will challenge every airport. Options may include diverting short haul trips, peak-hour pricing or converting surplus military facilities to civilian airports.

High-speed ground transportation (HSGT) can serve the short haul market in the future, diverting people away from airports. In order to compete successfully with air travel, HSGT will have to be competitive with air travel. HSGT stations will have to be located in the heart of the central business district, as well as other key locations.

To handle the projected heavy growth in air passengers, airlines may have to increase the size of their aircraft or fly more frequently. Large aircraft may pose a problem for airports whose physical layouts are not large enough to accommodate the bigger planes. High frequencies of aircraft operations will exacerbate existing capacity problems at busy airports.

Ultimately, only expansion of airports with new runways or construction of new airports can provide major increases in system capacity. With regional approval, the civilian reuse of closed military facilities and joint use of military facilities could alleviate some congestion. Additionally, if the extra-large aircraft materialize as predicted, the large runways at the surplus military facilities could accommodate the aircraft of the future as a commercial service airport. Thus, civilian use of these facilities provides an opportunity to expand the aviation system.

POLICY 7 -- ISSUES:

- Expansion of airports;
- Delays at airports;
- Larger aircraft exacerbating airport capacity constraints;
- The roles of aviation and high speed rail; and
- Joint use or reuse of military facilities.

POLICY 8: Environmental

The public's concern with the environment has continued to grow significantly. Airports and airlines have come under increasing pressure to respond to environmental issues such as air and water quality as well as quality of life. For example, all federally funded airport projects, and all increased ground traffic resulting from that airport project, must demonstrate air quality conformity through modeling, obtaining emission offsets, or determining that the action does not increase baseline emissions. Conformity determination for on-airport projects is the responsibility of the FAA.

Although methods to reduce aircraft emissions have been identified, certain methods may not be technologically or financially feasible because of safety and other considerations. Airports and airlines have been converting some of their aircraft ground service equipment to alternative fuels

such as compressed natural gas or electric vehicles. While both may burn cleaner than gasoline, the cost and problems associated with these alternative fuels can make their purchase prohibitive.

Airports and airlines need to have information regarding the cost of alternative fuels and the infrastructure required, as well as the emissions saved as a result of any conversions. With this information, they can then make decisions regarding which alternative fuels would best meet their needs, at what cost, and for what emission benefit.

Communities must deal with a number of controversial environmental issues when deciding to build or expand an airport. In San Francisco, for example, airport officials and environmentalists disagree on the issue of the potential filling of the bay for runway construction. Some say filling in two square miles of the bay would change the flow of the tide and upset the balance of wildlife in the bay and surrounding areas. San Francisco International Airport (SFO) officials are attempting to mitigate the issue by purchasing up to 18,000 acres of South Bay salt ponds owned by an agricultural products company and returning them to natural tidal marsh. Legislation in 2000 appropriated \$25 million from the state General Fund for the acquisition of the salt ponds. As capacity constraints at airports continue, public involvement regarding ecosystem issues is predicted to increase.

Other environmental issues which could affect airports include sustainable communities, environmental justice, and social equity issues. According to the Federal Sustainable Communities Initiative, a "sustainable community" provides stability for a community's physical and social systems achieved through meeting the needs of the present without compromising the ability of future generations to meet their own needs. The vision at the federal level is to reduce greenhouse gas emissions and improve quality of life including air and water quality. Other goals include promoting a vigorous economy and social equity in addition to meeting the housing needs by using the basic framework already identified in federal legislation. The initiative attempts to ensure transportation decisions can be considered "more or less" sustainable in terms of promoting economic, environmental and equitable outcomes.

The Memorandum of Environmental Justice (Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations) intends to ensure that publicly supported projects do not disproportionately have adverse human health or environmental effects on minority and low-income populations. For example, within aviation one concern is that noise impacts of airports affect low-income neighborhoods more than high-income neighborhoods.

The Department's Division of Aeronautics performs an environmental role by reviewing and commenting to local agencies on proposed land development near airports. The Department's goal is to ensure that land use compatibility is considered in the environmental analysis.

The Department's comments provide a statewide perspective that is missing from regional and local review.

POLICY 8 -- ISSUES:

- Setting national standards for the aviation industry that meet the air quality goals of the 1990 Clean Air Act;
- Dealing with new environmental issues introduced by the aircraft of the future;
- Addressing air quality concerns that will likely affect airport operations and facility requirements;
- Addressing increasing public concern regarding disruption of ecosystems when planning for airport expansion or location;
- Weighing the cost and time involved in retrofitting older facilities to accommodate new and more environmentally friendly equipment;
- Insuring transportation decisions of today will not preclude future generations from a high quality of life;
- Ensuring economically disadvantaged populations are not disproportionately adversely affected by transportation decisions;
- Deciding what process will we use to obtain public participation and outreach; and
- Deciding what should be done when air facilities are needed in an area where the community opposes the airport.

POLICY 9: Land Use Compatibility

A key ingredient in transportation planning is land use. California Public Utilities Code 21670 requires the creation of an Airport Land Use Commission (ALUC) or a countywide jurisdiction functioning in lieu of an ALUC. The ALUC's overall purpose is to provide for the orderly development of public airports and to ensure compatible land uses in the vicinity of airports. To ensure this compatibility, an ALUC must develop a comprehensive land use plan (CLUP) for each airport. An ALUC must take into account the specific circumstances of the airports and communities for which it is planning.

Through the CLUP, regulations can be developed and implemented to promote land uses which are compatible with airport activities. All city and county general and specific plans, zoning ordinances and building codes are required to be consistent with the adopted CLUP. When the CLUP is adopted into the general plan, ALUCs are required to review any amendments and changes to general plans for consistency with the provisions of the CLUP. If a city council or county board of supervisors does not agree with specific provisions of the CLUP, it may overrule the CLUP entirely or in part. Compromises may be necessary to ensure a high degree of airport land use compatibility and development needs. However, even if a county has no ALUC, local governments have basic duties to promote compatibility among all land uses, including airports.

Like CLUPs, Air Installation Compatible Use Zones (AICUZ) are land use compatibility plans prepared by the U.S. Department of Defense for military airfields. AICUZ plans serve as recommendations to local governments having jurisdiction over land uses surrounding the military facilities. However, because local governments do not prepare AICUZ, their recommendations are not always taken into consideration or incorporated into the local government's General Plan.

Although the ALUCs are authorized by the Public Utilities Code, many facets of airport land use planning are not clearly defined by law. For example, ALUCs have no authority over existing land uses even if such uses are incompatible.

Many different approaches have been taken in the preparation of CLUPs. Because there are no statutory requirements regarding the content of CLUPs, some communities ignore the need for proper land use planning and compatible zoning around an airport. In an effort to alleviate this situation and strengthen ALUC expertise, in 1993 the Division of Aeronautics updated its Airport Land Use Planning Handbook. Subsequently, a law was passed in 1994 requiring ALUCs to be guided by the handbook when preparing CLUPs. Aeronautics is in the process of updating the 1993 Handbook.

However infrequently applied or unevenly administered, the purpose of airport land use planning is to insure that there are compatible uses around airports which protect the community, its local residents, and the airport itself.

POLICY 9 -- ISSUES:

- Recognizing that the contents of CLUPs are advisory only;
- Recognizing that CLUPs may not provide adequate protection for the airports;
- Recognizing the potential conflicts of interests within the ALUC process;
- ALUCs need certain enforcement capabilities;
- Addressing the incompatibility of local land uses around an airport;
- Establishing standards within the ALUC process; and
- Strengthening ALUC expertise.

POLICY 10: Airport Ground Access

Ground access problems affect many major airports in California. In heavily used urban transportation corridors, ground access to airports can be a critical issue. Passengers encounter long delays in accessing the airport which results in more and more time to get to and from the airport. Ground access to airports has had a major impact on the air cargo industry, making it difficult to pick up or deliver cargo within the allotted time. Some air cargo carriers have sought to solve their ground access problems by locating to another airport away from the major metropolitan areas. In some instances, this only shifts ground access problems elsewhere and increases regional highway congestion.

In its 1996 Annual Report to the Legislature, California Transportation Commission (CTC) staff pointed out that airport ground access projects have not competed well for highway funds through California's State Transportation Improvement Program (STIP) process. In part, this is because STIP funding levels are not adequate to program many high priority projects. The large commercial airports are able to raise revenues to expand groundside and airside operating capacity, but they are limited by the federal government in their ability to address ground access

needs beyond airport property. For these reasons, CTC staff recommended that revenues from existing sales tax on jet fuel be redirected for 15-20 years from the General Fund to an airport ground access improvement program that would facilitate economic growth.

Since political support is rare for airport expansions, airports need to maximize the use of existing facilities. Transportation System Management (TSM) and information technology improvements allow the roads and highways around airports to be more efficiently operated. TSM measures may include remote passenger check-in sites; greater accuracy in aircraft landing times; shuttle service/vanpools for airport employees and a consolidated rental car facility.

Planning for ground access improvements must take a comprehensive approach. Adequate data needs to be collected and formatted to provide transportation agencies with information necessary to plan for ground access to airports. Projects that appear to only affect one mode must be carefully analyzed for hidden impacts and/or possible modifications that would improve ground access to airports at the same time. Rather than analyzing how modes can compete with one another, a more constructive approach would be to determine how the modes could complement one another, thereby helping to solve ground access problems.

Recognizing the importance of these issues, the Division of Aeronautics has recently hired a consulting team to complete a ground access study which should be completed by July 2001. In addition, Congress has appropriated funds for ground access projects through surface transportation programs.

POLICY 10 -- ISSUES:

- Recognizing the lack of convenient public transportation to and from commercial airports;
- Recognizing that airports receive significant revenues from auto parking;
- Recognizing how ground-access impacts the air cargo industry and the economy;
- Dealing with the lack of information regarding TSM measures at airports;
- Recognizing TSM has limited usefulness in terms of increasing airport capacity;
- Approaching airport ground access issues comprehensively and with flexibility, considering all modes of transportation;
- Funding of airport ground access improvement projects beyond airport property; and
- Emphasizing the complementary nature of the various modes rather than competition between the modes.

POLICY 11: Air Service

In major metropolitan areas, airside access to commercial and general aviation services is generally taken for granted. However, there are areas in California that do not have good air access, especially to commercial service airports. In other areas, so few airlines serve an airport that airfares are very expensive. On routes with less competition, the loss of a single airline can have serious adverse effects.

APPENDIX B -- Continued

In some remote areas, general aviation airports are the only facilities available but they do provide these areas with a connection to the national system. In contrast to the remote areas, general aviation airports in metropolitan areas can act as a reliever to congested commercial service airports providing access to the surrounding areas and reducing delays at commercial service airports.

The federal Essential Air Service (EAS) program provides subsidized air service, if necessary, in a community that is at least 70 miles from the nearest medium or large "hub" airport. While initially 21 communities in California were eligible for the EAS program, only two are currently receiving subsidized air service: Merced and Crescent City. The EAS program provides commercial service to communities by subsidizing airlines if necessary. The EAS program indirectly provides revenue to airports: The airlines are doing business at the airport and are paying airports for leases, fuel flowage fees, etc.

POLICY 11 -- ISSUES:

- providing convenient and affordable access to national and international air service; and
- Insuring that remote areas have access to the national aviation system by maintaining general aviation airports.

POLICY 12: Funding

It is vital to the future of the nation's air transportation system and the economic well being of the country to provide stable and reliable funding sources for aviation development. Usually, the needs of airports far exceed available resources. Federal, state, and local revenue sources are inadequate to meet those needs. Inadequate funding not only affects aviation but also aviation related activities such as the preparation of Comprehensive Land Use Plans (CLUPs).

Aviation generates tax revenues that do not go back into aviation. These taxes include a state tax on aircraft sales, a local ad valorem tax on aircraft, a state tax on jet fuel, and a possessory interest tax on air carrier and other business leases at public-owned airports. Air carriers are currently exempt from the 2-cent per gallon state excise tax on jet fuel. Many of the cities and counties who own and operate California's public-use airports are seeking equitable returns from the public funds taxpayers have invested in their airport facilities by diverting airport revenues to the local government's general fund.

In the past, the authorization and appropriation amounts for the Federal Airport Improve-ment Plan (AIP) have been less than the obligation. Thus, the needs in California have exceeded the originally promised amount. To increase financial resources, some airports have developed non-aviation sources for revenues such as expanding their concessions; developing industrial parks and free trade zones; increasing cargo operations; and leasing vacant land for other purposes.

The Aviation Investment and Reform Act for the 21st Century known as "Air 21" offers new opportunities for capital financing at airports. It promotes projects for both small and large airports.

APPENDIX B-- Continued

Funds for the Federal Airport and Airway Trust Fund come from user taxes on airline tickets, fuel, international travel and air cargo. The fund pays for the Airport Improvement Program (AIP) which provides federal grants to airports for capacity, security, and safety projects. A new general aviation entitlement of up to \$150,000 is available. Allocated AIP funds were generally declining over the years, until the increase to \$2.475 billion in fiscal year 2000, \$3.2 billion in 2001, \$3.3 billion in 2002 and \$3.4 billion in 2003.

Passenger Facility Fees (also known as Passenger Facility Charges or PFCs) are an additional ticket tax of \$1-4.50 per enplanement (maximum \$18/round trip). If approved by FAA, PFCs fund projects eligible for federal dollars but for which federal funds are not available; projects that are eligible for federal funds; environmental studies and/or mitigation measures. PFC funds are limited in use for off-airport projects. FAA can terminate an airport's PFC authority lowering the credit ratings of bonds backed by PFCs. Due to past practices, some companies have been reluctant to issue bonds in part because they are backed by PFCs affecting an airport's ability to improve existing or construct new facilities.

State Funding: The California Department of Transportation, Division of Aeronautics administers four financial assistance programs primarily for general aviation projects. The revenue sources are an 18 cents per gallon motor vehicle fuel tax, which includes a tax on general aviation gas, and a 2 cents per gallon general aviation jet fuel tax. **Annual Grants** of \$10,000/year are available for capital improvements as well as maintenance and operation costs at general aviation public-use airports. Reliever and commercial service airports are not eligible for this grant. **AIP Matching** funds match every eligible Federal AIP grant. Commercial service airports are not eligible but reliever airports are. **Acquisition and Development Grants** are selected from the State's Capital Improvement Program (CIP). All publicly owned se airports are eligible. The California **Airport Loan Program** issues loans to airports for construction and acquisition projects that benefit the airport and improve its self-sufficiency. All airports that are owned by a qualified public agency are eligible for these funds.

POLICY 12 -- ISSUES:

- Identifying a stable and reliable funding source for all aviation activities;
- Assessing and distributing the proceeds from taxes equitably;
- Obtaining California's full share of AIP funds;
- Diverting aviation revenues for nonaviation purposes;
- Identifying innovative funding sources;
- Recognizing limitations on use of AIP funds;
- Getting sponsors to accept an allocation of state funds, put up the local match, and build the project to achieve timely use of state funds;
- Recognizing that the possible use of Airport Improvement Program (AIP) funds for "off-airport" intermodal projects may raise concern within the aviation community; and
- Finding ways to increase state and local funding to match increased federal funding.

POLICY 13: Capital Improvement Plan/Program

The goal of the Division of Aeronautics' Capital Improvement Program (CIP) is to: provide a statewide assessment of needs; foster intermodal planning; and build partnerships among federal, state, regional and local governments. The CIP consists of a 10-year list of projects by region divided into two 5-year phases. The project listings are developed from local, regional, state and federal sources and include all public-use airport capital needs in the State regardless of funding source. Projects in the first 5-year phase identify sources of funding (i.e., local, state, federal) to complete the projects in a specific year. The second 5-year phase is a compilation of projects with their source of funding unidentified. To be eligible for Division of Aeronautics funds, projects must be included in an adopted CIP. Based on input from Aeronautics and the RTPAs, the CTC programs these projects.

The CIP process emphasizes working with the RTPAs and developing partnerships. To foster closer partnerships among the RTPAs and the FAA and between the State and the FAA, the Department would like to see consistency between the State's CIP and the FAA's Airport Capital Improvement Program (ACIP). A coordinated process could be developed to avoid duplication of effort on the part of the airports and the RTPAs. The CIP could be incorporated into the FAA's ACIP and become a factor in distributing federal Airport Improvement Program (AIP) funds.

The Airport Pavement Management System (APMS) determines the pavement needs of airports now and in the future. It also describes the current condition of the airport pavement and identifies a schedule to maintain the pavement or bring it up to a certain standard. Life cycle costs and the long-life pavement recommendations associated with these improvements are part of these APMS considerations.

POLICY 13 -- ISSUES:

- Developing a statewide assessment of pavement and capital needs;
- Striving for consistency among federal and state programming documents;
- Avoiding duplication of effort at the State and federal levels;
- Making the CIP process part of an overall intermodal, regional planning process;
- Improving consistency between the CIP process and the planning and programming process for highway and transit projects; and
- Improving the consistency of the CIP with transportation plans at the federal, state, regional and local level.

POLICY 14: Local Assistance

The many state and federal requirements necessitate expertise in areas where airports do not traditionally have trained staff. Funding shortfalls hamper the airport's ability to hire technical experts. The Department' Division of Aeronautics staff provides engineering services that include technical assistance to airports in the design, construction, and maintenance of capital projects.

Program staff are also available to provide technical assistance during the permit inspection process or by request. Aeronautics' staff periodically advises airports and other aviation interests of the status of legislative proposals. Aeronautics' staff also provides analyses of state and federal legislation that affect aviation.

The Department's Division of Aeronautics planning staff provides guidance to Airport Land Use Commissions (ALUCs) in the performance of their duties. Other planning staff involvement includes providing assistance to RTPAs and airports in a number of areas: site selection, system planning, and an Aircraft Operations Counter Program which counts the number of operations at non-towered airports throughout the State.

POLICY 14 -- ISSUES:

- Responding to state and federal mandates when expertise or staff capabilities are not available; and
- Recognizing the need for more accurate operations data for non-towered airports.

POLICY 15: Economics

There is inadequate understanding by the general public and local policymakers of the importance of the air transportation system to economic development. However, it is critical to the economic health of the State to maintain its aviation infrastructure, and it is important that the public and their representatives appreciate the economic significance of airports if they are to continue to support them. Although some of the benefits that aviation provides to a community are fairly obvious, other benefits are not. For example, the presence of an airport and the types of service it provides are important considerations in the siting of business and industrial facilities.

In California, airports provide a variety of benefits including contributing to the local, regional, and state economies; promoting the fast and efficient movement of people and goods; and enabling California to maintain a competitive position in Pacific Rim trade. Large airports attract office parks, hotels and other development. Smaller airports help to attract industry to small- and medium-sized communities. Air transportation is an important employer. Since about 65% of the dollar value of all exports goes by air, this would yield over one-half million jobs spread throughout the State's local communities.

General aviation aircraft are often used for commercial activities such as agricultural crop dusting and air taxi/charter services. Recreational uses such as sail planes or skydiving also provide revenue to an airport. Airports enable patients who live in communities where medical treatment is not readily available to travel quickly, making possible swift diagnosis and treatment of disease. Airports are also a key source of relief from natural disasters, such as floods and earthquakes. Airports support police, fire suppression, civil air patrol and National Guard activities. Time is saved and costs avoided in the fast and efficient transportation of goods and people by air.

Airports promote and accommodate tourism, an especially important segment of California's economy. The State's economic vitality depends upon air transportation for moving people, goods, and services across the nation and around the world as foreign exports by air become an increasingly important economic factor. Global competition and technological change are rapidly shrinking the world and altering the way we do business. No one place is immune from competition. Global flows of labor, capital, and technology require entrepreneurs to constantly seek the most profitable locations for their activities. Thus, California's competitive position in the Pacific Rim could be severely challenged.

Other impacts of aviation are not so obvious. Benefits such as safety, comfort, convenience, the access that an airport provides to the national airport system, and enhancements to community well being are all significant but not easily quantifiable.

While airports make a significant contribution to the local economy, the financing of airport improvements has become increasingly problematic. Airports are usually at the bottom of the funding list for receiving local revenues from the cities and counties that operate them, but some airports are supported by general fund contributions. In addition, some programs, such as the Division of Aeronautics' loan program, provide direct assistance to airports to help them become more self-sufficient. However, some airports may charge low hangar and tie-down fees, in order to stay competitive with nearby airports, thereby decreasing airport revenue.

POLICY 15 -- ISSUES:

- Promoting the economic benefits of an airport to a community;
- Developing creative ways to fund improvements;
- Establishing market rate values for the services an airport provides;
- Ensuring that California can successfully compete with other states to continue as the international gateway on the West Coast; and
- Recognizing that the public and their elected representatives do not always appreciate the economic significance of airports.

POLICY 16: Goods Movement

Air cargo has grown rapidly and has had a positive impact on California's economy. In 1985, California handled a little more than 1.7 million tons of cargo. By 1998, that figure increased 176% to over 4.7 million tons. Primary stimuli: just-in-time businesses eliminate the need for large warehouse inventories; and growth in international trade, especially in the Pacific Rim.

The capacity to transport goods by air is an essential prerequisite for competing in the expanding world economy. California's airports are in a position to directly benefit from this expansion. However, with the new, longer-range aircraft coming on line, California will have to compete with airports in other states in order to continue as the Air Cargo Hub for the Pacific Rim.

By 2010, five of the major cargo airports in California will require additional cargo facilities. None have the acreage necessary for new cargo facilities without jeopardizing passenger growth. If increasing air cargo demand is not met in California, in order to remain competitive air cargo carriers will go to other states with more cargo capacity.

The needs of air cargo are often in direct conflict with the needs to expand an airport for passengers. When passenger needs win out over cargo needs, the overall capacity of the California aviation system to accommodate cargo is limited. Also, the need for customs clearance makes it difficult to accommodate international trade and limits the number of airports that can accommodate international cargo. Surplus military facilities may help to alleviate capacity problems, but the conversion to civilian air cargo operations is often controversial.

Not all cargo is shipped out of large, major metropolitan airports where air cargo can be "bumped" if the space is needed for passengers' baggage. Some shippers have allied themselves with airports outside or on the fringe of major metropolitan areas so they can fly their products directly in and out of the airport with ease. Thus, an option for domestic and international cargo shippers is to avoid the larger, congested airports and use secondary airports.

Most recently, the airline and air cargo industries have recognized the need to forge new alliances. The driving force behind these new alliances is the necessity for economy of scale in order to remain competitive. Alliances with large passenger carrier airlines have given shippers increased access to cargo space and flight frequency. By combining facilities with airlines, some air cargo operators have found that they can keep their costs low and still meet demand. However, as stated above some cargo airlines have found that it is more cost effective to land their aircraft at a secondary airport where the landing fees and ramp handling fees are cheaper than the big airports.

In the future, all-cargo carriers may move goods by <u>all modes</u>, via an intermodal air-truck container system whereby containers are uncoupled from the truck tractor and loaded onto the airplane. No rehandling is required and the shipment never goes into the terminal building. Conversely, airports may move cargo off-airport rather than processing cargo at the airport.

POLICY 16 -- ISSUES:

- Accommodating growth in domestic and international air cargo;
- Processing cargo off-airport;
- Using secondary airports for domestic and international cargo activity;
- Building alliances between airlines and air cargo operators to provide better, less expensive service;
- Recognizing that surplus military bases have the potential to serve as all-cargo facilities;
- Recognizing that capacity constraints that threaten air cargo growth also threaten the economy; and
- Recognizing that moving international cargo to an off-site location would require additional customs facilities.

POLICY 17: Space and Technology

During the 1990's California experienced economic decline related to the end of the Cold War, including closure of major military bases and a greatly reduced aerospace defense industry. California's economy is now recovering from these setbacks. Some former military bases were successfully converted to civilian facilities. California's evolving aerospace market involves both commercial and military aspects of aircraft and satellite manufacturing, spaceports and related electronics. Existing launch facilities are located at Vandenberg Air Force Base on the Central Coast, Edwards Air Force Base in Central Southern California and Sea Launch out of the Port of Long Beach. The potential development and operation of Reusable Launch Vehicles (RLVs) will bring new challenges. Emerging issues related to how space transportation will interact with the rest of the transportation system need to be identified and addressed.

California still has the largest share of the national aerospace market largely due to the historical development of the industry in the State. The demographics of the aerospace industry support its importance to California's economy as evidenced by the large number of suppliers and businesses located in the State and the resulting jobs and payroll. Aerospace has been a key part of the economic food chain due to its cutting edge technology focus starting with a skilled work force, world-class research and development and end-to-end capabilities.

There appears to be a strong future for the aerospace industry. The launch business currently has revenues of \$40 billion a year. The ten-year forecast is \$160 billion. Currently, those revenues are divided 90 percent government, 10 percent commercial. In ten years, the projection is for 60 percent commercial. The future of the Internet is space based and made possible through systems like Sea Launch. It is expected that 200,000 jobs will be created in the aerospace and defense industry over the next ten years

California has almost completely lost its aircraft manufacturing industry and is in danger of losing the launch and satellite manufacturing industries as well. Whereas in the past California has been the home of the aerospace industry, that industry has become a target for other states and other nations seeking to grow their own economies. California faces significant challenges when competing with others such as: cost of living and housing; complexity of operating in the State; critical environmental issues; and workforce drain to other industries.

The California Space and Technology Alliance (CSTA), created by statute in 1998, and recently renamed the California Space Authority (CSA), reports to the Deputy Secretary of the Division of Science, Technology and Innovation in the Trade and Commerce Agency. Membership includes public and private entities partnering to promote and develop a State Space Transportation system. The California Department of Transportation, Division of Aeronautics, staff serves on the CSA Board of Directors and Space Committee. The CSA has developed a strategic plan to enhance and expand California Space development to benefit the State's space companies, entrepreneurs, public-sector stakeholders and workers, and residents. An \$8.5 million California Space Infrastructure Program Study (CSIS) is currently underway to develop a Space Infrastructure Master Plan (SIMP).

The Department is including space launch facilities at Vandenberg and Edwards Air Force Bases and Sea Launch at Long Beach in the state aviation system identified in the California Aviation System Plan (CASP). These facilities are being considered in the current Airport Ground Access and Aviation Economic Impact Studies, which are being coordinated with the CSA's CSIS.

POLICY 17 -- ISSUES

- The need to consider increasingly routine commercial space launch and recovery activities as a recognized mode of transportation;
- The need to identify, operate and maintain a surface transportation network to ensure that oversized space launch and recovery vehicles and devices can safely travel between manufacturers and to launch pads;
- The need to plan, fund, develop and maintain an appropriate system of launch and recovery facilities as commercial space launches increasingly outnumber military-oriented launches and in light of the changing role of the U.S. Air Force and the private sector; and
- The need for FAA to modify its air traffic control system to accommodate launch and return of reusable launch vehicles (RLVs).

POLICY 18: Performance Measures

Efficient and effective transportation is directly linked to economic growth and quality of life. Yet how do decision-makers know which transportation investments will yield the best return on investments, while avoiding undesirable consequences? The need to provide this information led to the department's current effort to develop Performance Measures for all modes. Performance measures will provide a framework for a systems approach for informed transportation planning and decision-making.

A performance measurement framework involves three key components:

- 1. A clear direction or purpose;
- 2. A simple set of metrics based on available data; and
- 3. Routine, useful reports.

The roots of the current emphasis on Performance Measures stems from the passage of the Intermodal Surface Transportation Efficiency ACT (ISTEA) in 1991. ISTEA not only recognized the importance of viewing the transportation system from an intermodal perspective, it also stressed the need to address how efficiently the system meets the needs of its users.

The 1998 Transportation Equity Act for the 21st Century (TEA-21) added concepts of fairness in the distribution of resources. To make decisions on a rational multimodal basis, the performance of each of the modes needs to be assessed in a consistent way. Performance Measures will guide the allocation of resources across the modes in a way that maximizes their contribution to the overall performance of the entire transportation system.

Senate Bill 45 made it possible for the State to recommend projects at the regional level and the regions can recommend projects to be funded by the State. To do this, a consistent method of comparing projects and programs is needed. System performance measures provide some of the tools for making these comparisons.

The goals of Performance Measures, as defined by the California Transportation Plan, are:

- To develop indicators/measures to assess the performance of California's multi-modal transportation system, to support informed transportation decision by public officials, operators, service providers, and system users.
- To establish a coordinated and cooperative process for consistent performance measurement throughout California.

Performance measures/indicators tell us where we are in relation to where we want to go. Performance measures also allow us to benchmark or compare performance against best practices; identify opportunities for improvement; and guide the allocation of resources. The measures/indicators should be understandable to decision makers, planners, and others. They should also rely on information or data that can be obtained at a reasonable cost and with reasonable effort. By monitoring the system we will understand how previous investments contributed to its performance. Finally, these measures have to be reported regularly so that we can monitor where we are in relation to where we want to be.

Policy 18—Issues

- Measuring cost effectiveness.
- Measuring safety.
- Measuring "social equity."
- Determining which outcomes are appropriate.
- Assessing system capacity level and constraints vs. projected growth.
- Measuring system throughput efficiency and effectiveness.

APPENDIX C

California Aviation System Plan Regional Transportation Planning Agency AVIATION SYSTEM PLANNING COMMITTEE

DAVE BOYER Sacramento Area Council of Governments

GINGER GHERARDI Ventura County Transportation Commission

JACK KOERPER and BILL TUOMI San Diego Association of Governments

DAN LANDON Nevada County Transportation Commission

JON CLARK Butte County Association of Governments

MICHAEL ARMSTRONG Southern California Association of Governments

RONALD BRUMMETT Kern Council of Governments

KATHRYN MATHEWS Placer County Transportation Planning Agency

MIKE POWERS Santa Barbara County Association of Governments

MICHELLE MORRISS-BRUBAKER Metropolitan Transportation Commission

CLARK THOMPSON Council of Fresno County Governments

TODD MUCK, Association of Monterey Bay Area Governments

BOB DURANT, Director of Airports, San Diego County

ELLSWORTH CHAN, Planning & Programming Branch, Federal Aviation Administration

PHIL ROBERTS, Roberts, Roach & Associates

MAJOR GENERAL ROBERT W. BARROW

DANIEL W BURKHART, Regional Representative

National Business Aviation Association

LT COL BILL FRANK AF REP/FAA WESTERN REGION

JACK KEMMERLY, California Representative, Aircraft Owners & Pilots Association

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APPENDIX D

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District Field Services Manager

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R. Austin Wiswell

The California Department of Transportation, Division of Aeronautics

APPENDIX E

AERONAUTICS LAW--AIRPORT PLANNING

853

by registered mail or in person. Any person aggrieved by an order of the department may have the action of the department reviewed by the courts in the manner provide by law.

CHAPTER 6. AIRPORT PLANNING

California Aviation System Plan

21701. The division, in consultation with transportation planning agencies as designated by the director pursuant to Section 29532 of the Government Code, shall prepare a California Aviation System Plan, which shall include, but not be limited to, every California airport designated in the federal National Plan of Integrated Airport Systems and any other existing or proposed public use airports, as designated by the division.

Elements in Plan

21702. The California Aviation System Plan shall include, but not be limited to, all of the following elements:

(a) A background and introduction element, which summarizes aviation activity in California and establishes goals and objectives for aviation improvement.

(b) An air transportation issues element, which addresses issues such as aviation safety, airport noise, airport ground access, transportation systems management, airport financing, airport comprehensive land use planning, and institutional relationships.

(c) A regional plan alternative element, which consists of the aviation elements of the regional transportation plans prepared by each transportation planning agency. This element shall include consideration of regional air transportation matters relating to growth, capacity needs, county activity, airport activity, and systemwide activity in order to evaluate adequately the overall impacts of regional activity in relation to the statewide air transportation system. This element shall propose general aviation and air carrier public use airports for consideration by the commission for funding eligibility under this chapter.

(d) A state plan alternative element, which includes consideration of statewide air transportation matters relating to growth, including, but not limited to, county activity, airport activity, and systemwide activity in order to evaluate adequately the state aviation system and to designate an adequate number of general aviation and air carrier public use airports for state funding in order to provide a level of air service and safety acceptable to the public.

(e) A comparative element, which compares and contrasts the regional plan alternative with the state plan alternative, including, but not limited to, airport noise, air quality, toxic waste cleanup, energy, economics, and passengers served.

(f) A 10-year capital improvement program, which is divided into two five-year phases for each airport, based on the airport's adopted master plan, prepared by each transportation planning agency, and submitted to the division for inclusion in the California Aviation System Plan.

(g) Any other element deemed appropriate by the division and the transportation planning agencies.

(h) A summary and conclusion element, which presents the findings and recommended course of action.

APPENDIX F PLANNING PARTICIPANTS

AVIATION SYSTEM

APPENDIX E, continued

854

AERONAUTICS LAW--AIRPORT PLANNING

Submittal to Commission

21703. The division shall submit the California Aviation System Plan to the commission.

Periodic Revision of Plan

21704. The division, in consultation with the transportation planning agencies, shall biennially revise the capital improvement program developed pursuant to subdivision (f) of Section 21702, and the division shall submit the revised program to the commission. The division, in consultation with the transportation planning agencies, shall revise all other elements of the California Aviation System Plan every five years, and shall submit the revised plan to the commission.

Adoption of Revisions by Commission

21705. The commission shall review, hold public hearings on, and, based on these hearings, adopt or revise and adopt as revised, the California Aviation System Plan and its subsequent revisions.

Project Funding Applications

21706. The division shall require that every project submitted for funding from the Aeronautics Account in the State Transportation Fund shall be consistent with the California Aviation System Plan. Applications for funding shall be processed in accordance with the procedures adopted by the commission for processing applications by local entities for projects included in the state transportation improvement program, to the extent those procedures may be applicable. In determining the priorities of projects, the division shall, and the transportation planning agencies may, utilize the methodology adopted by the commission for determining the priorities of projects listed in the aviation element of the state transportation improvement program.

Federal Grant Funds

21707. Any funds necessary to carry out this chapter shall be obtained from federal grants.

APPENDIX F	AVIATION SYSTEM PLANNING PARTICIPANTS PLANNING ACTIVITIES																
PARTICIPANTS / ROLES	A EROSPACE &	AIRSPACE	AIR SERVICE	CAPACITY	CAPITAL IMPROVES	ECONOMICS	ENTAL		GOODS MOVEMENT	1	1	LAND USE	LOCAL	NOISE	REGULATORY	RESEARCH AND	SYSTEM PLANNING
AIRPORT OWNERS (Cities, Counties, Districts, University, Military, and Private):																	
> Plan, develop, operate and maintain airport facilities, including design, construction, financing, setting rates and charges, leasing and providing security and emergency response.	1		1	1	1		1						1	1	1		Î
AIRPORT/SPACEPORT USERS (Shippers, CH	IP, CD	F, and	Others	5)													
Seek and obtain aviation-related transportation services and facilities at the least possible cost.																	
* General Aviation Pilots				Í		í									í		
* Air cargo providers/Fixed Based Operators			í	ĺ		ĺ			í	Ĩ							
* Airline passengers			Í			í				ĺ							
* Airlines]							
> Provide air transportation services for the general public and goods movement businesses.		Í	Í	ĵ		Í			ĵ								
Coordinate a business operation utilizing aircraft, employees, unions, compliance with Federal statutes in provision of transportation services.				ĵ			Ĩ		Ĩ					ĵ	ĵ		
* Space Industry	Í																
FEDERAL AGENCIES:																	
* Federal Aviation Administration (FAA)																	
> Operates air traffic control system.	í	ſ	í	í			í	ſ			í				ſ		í
> Certifies aircraft flown by airlines.		<u>и</u> —и	Í	Í			4—I	ν—ı	Í		м—1			Í	Í		
> Registers aircraft.			Î						Î						Î		
> Certifies commercial and general aviation pilots.			Î						Î						Î		
 Develops the National Plan for Integrated Airport Systems (NPIAS). 			Í	ĵ	ĵ		Ĩ		1		Ĩ	Í	Ĵ	ĵ			Ĩ

APPENDIX F	AVIATION SYSTEM PLANNING PARTICIPANTS PLANNING ACTIVITIES																
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PARTICIPANTS / ROLES	AEROSPACE &	AIRSPACE	AIR SERVICE	CAPACITY	CAPITAL IMPROVED	ECONOMICS	ENVIRONMENTAL	FUNDING	GOODS MOVEMEN	GROUND ACCESS	INSTITUTIONAL RELATIONAL	LAND USE	LOCAL ASSIST	NOISE	REGULATORY AND	RESEARCH AND	SYSTEM PLANNING
FAA (cont.)								<u> </u>				~		\sim		<u>~~</u>	
> Regulates airports for obstructions and hazards in approach zones pursuant to Part 77.	ĵ	ĵ	ĵ									ĵ			ĵ		
> Administers the Airport and Airway Trust Fund.				Í	Î		Î	Í	_			Í		Í		<u> </u>	
> Funds capital improvement projects on airports				ĺ	í		Î	1	Í		1					┝──	
> Establishes & Implements Federal Noise Standards.			1	1			_	Í			Î	Î		Ĩ		<u> </u>	Î
> Certificates airports with air carrier service.		1	Í	Í			Í	_		ĺ	Í	Í.		_	Í		Í
Conducts Research and Development.		Í		Í			_	í	Í	Î	_			Í		Î	
 Determines air quality conformity for aviation projects. 			Î		Î		Î			Í	Ĩ						Í
> Aviation educational awareness in safety		Í		Í		Í	Í	Í				Í			ĵ	Í	
enhancement, art contest and career training.															_	───	
> AWOS/ASOS Programs			Ĩ						Í		Í		Ĩ		Ì		
* Environmental Protection Agency																	
> Establishes and enforces Federal air quality standards.			ĵ	Î			ĵ		ĵ	ĵ	ĵ						Î
> Water and hazardous waste discharge oversight of regional agencies.							Ĩ				ĵ		Ĩ				
* Department of Defense																	
> Owns military airports and utilizes an extensive amount of restricted airspace in regions throughout California.	Ĵ	Ĵ		Ĵ					Ĵ		Ĵ				Ĵ		Î
 > Designates Air Installation Compatible Use Zones (AICUZ) around air military installations. 	ĵ	ĵ					ĵ					ĵ		ĵ	ĵ		ĵ
 Provides air traffic control to civil aircraft around military installations. 	ĵ	ĵ		Ĩ											ĵ		
 Conducts research and development and educational outreach. 				í		ĵ		Í								Í	
> Purchases, operates and maintains aircraft.	1	í	1	í	1	1	í		1	í	í		1	í	í		
Cooperates with FAA air traffic control on available air space for civilians.	ĵ	Ĵ		1=15			Ĵ			1=1	1=1			1=4	Ĵ		

APPENDIX F

AVIATION SYSTEM PLANNING PARTICIPANTS

									G AC	TIVI	TIES						
	AEROSPACE &	AIRSPACE	AIR SERVICE	CAPACITY	CAPITAL IMPROVENT	ECONOMICS	ENVIRONMENTAL	FUNDING	GOODS MOVEMEN	GROUND ACCESS	INSTITUTIONAL RELATIONE	LAND USE	LOCAL ASSISTANC	NOISE	REGULATORY AND SAFFORY	RESEARCH AND	SYSTEM PLANNING
PARTICIPANTS / ROLES	IE AE	Ψ <u>Ψ</u>	Ψ <u>Ψ</u>	5	N CA	$E_{\rm C}$	EN	FU	US X	Ĕ	Z H	LA	4S AS	ZCZ	A_{IN}	D_E	<u>रिंड</u> से
* Department of Transportation																	
> Administers Essential Air Service Program.			Í			Í											
> Administers economic regulation of airlines.			Í						í								
> Negotiates international air service agreement.		ĵ	Í	ĵ			Í		Í		Í						
* NASA																	
> Conducts research and development and educational outreach.																Ĩ	
> Oversees space programs.	Í	ĵ								Î	ĺ	Í			ĵ	Í	
REGIONAL AGENCIES:																	
* Regional Transportation Planning Agencies (RTPAs)/Metropolitan Planning Organizations (MPOs):																	
> Prepares and adopts Regional Transportation Plans (RTPs), including a ground access element for primary airports.	1		Î	Ĵ	Ĵ		ĵ		1	Ĩ	Ĵ	Ĵ					1
 Prepares Regional Transportation Improvement Programs (RTIPs). 					Í		Í				Í						Ĩ
> Prepares and submits a Capital Improvement Plan/Program to Caltrans.				Í	Í			Í			Í						Ĩ
> Prepares and adopts a Regional Aviation System Plan (RASP).	Í		ĵ	Í	Í		Í		Í	Í	Í	Í	Í	ĵ			Ĩ
 > Determines air quality conformity for transportation projects. 							Ĩ				Ĩ	Í			ĵ		Î
* RTPAs/Air Quality Management Districts																	
> Develops air quality plans in response to U.S. Clean Air Act of 1990.			Ĵ	Ĵ	Ĵ		ĵ			Î	Ĵ	ĵ			Ĵ		Î
> Funding source.					Í		ĺ	Í									

APPENDIX F	AVIATION SYSTEM PLANNING PARTICIPANTS PLANNING ACTIVITIES																	
PARTICIPANTS / ROLES LOCAL AGENCIES:	$\frac{AEROSPACE}{TECHNOT} \&$	AIRSPACE	AIR SERVICE	CAPACITY	CAPITAL IMPROVED	ECONOMICS	ENTAL			1	,	LAND USE	LOCAL ASSISTANC	NoISE	REGULATORY AND SAFET	RESEARCH AND	SYSTEM PLANNING	, /
* Cities and Counties																		
 > As airport owners. > Has jurisdiction over local zoning and land use around airports. 			1		Ĩ		1		1		Î	 		Î				
* Airport Land Use Commissions (ALUCs)																		
> Assists local agencies in ensuring compatible land uses in the vicinity of airports [PUC 21670].	ĵ			Ĵ			Ĩ		Ĵ	Í		Ĩ		Ĩ	Ĵ			
> Prepares Comprehensive Land Use Plans (CLUPs) to define compatible land uses around airports.											Ĩ		Ĩ					
STATE AGENCIES/ORGANIZATIONS:																		
* California Air Resources Board																		
> Prepares the State Implementation Plan (SIP) for air quality required by the U.S. Clean Air Act of 1990			Ĵ	Ĵ	Ĵ		Î			Ĩ	1	Ĩ						
 > Issues Air Quality Certificates to airports for major expansion projects. 			Ĵ	Ĵ	Ĵ		Ĵ			Ĩ	Ĩ	Í					ĵ	
* California Transportation Commission																		
> Biennially adopts a three-year aviation Capital Improvement Program which programs state funds for surface and aviation projects [Gov. Code. Part 5.3].				1	1			Î										
> Retains a Technical Advisory Committee on Aeronautics which considers aviation issues and funding. [Gov. Code. 14505.5, 14506, 14506.5].	Ĩ				Ĵ			Ĩ	Ĩ			Ĩ					Ĩ	
> Adopts the California Aviation System Plan [PUC 21705].					ĵ						Ì						Ĩ	

APPENDIX F	AVIATION SYSTEM PLANNING PARTICIPANTS PLANNING ACTIVITIES																	
PARTICIPANTS / ROLES	AEROSPACE &	AIRSPACE	AIR SERVICE	CAPACITY	CAPITAL IMPROVT.	ECONOMICS	ENVIRONMENTAL PTA		1	ESS	,	LAND USE	LOCAL ASSISTANC	NOISE	REGULATORY AND SAFE	RESEARCH AND DEVELOPATED	SYSTEM PLANNING	/
 California Public Utilities Commission Regulates a portion of airport ground transportation system operators other than hotel and rental car shuttles, taxis, and public providers. 			1				Ĩ		1	1					1			
 California Technology, Trade and Commerce Agen Conducts and supports programs to strengthen economy of the state: publicizes information on travel and tourism in California, including air transportation. 	cy		1			1				1	1							
> Lead State agency for Space Port Activities.	í	í				í				í	í						í	
> Oversees Military Base Closures	l=r					Î				1=2	Î	ĵ					1=2	
 California Department of Toxic Substances Contro Regulates and controls use and effects of toxic substances. 											1							
* State Board of Equalization																		
> Issues guidelines to County assessors pertaining to general assessment and taxation of aircraft and possessory interest; provides procedures and practices to determine property tax, collects and disperses proceeds from sales tax.					1													
 * State Water Resources Control Board > Permitting agency for administration of storm runoff regulations which are part of Clean Water Act developed by EPA. 																		
* California Energy Commission																		
Interested in fuel efficiency, including alternative fuels.					ĵ		ĵ				Ĩ					Ĩ		

APPENDIX F	AVIATION SYSTEM PLANNING PARTICIPANTS PLANNING ACTIVITIES																	
PARTICIPANTS / ROLES	AEROSPACE &	AIRSPACE	AIR SERVICE	CAPACITY	CAPITAL IMPROIS	ECONOMICS			GOODS	Ese	,	LAND USE	LOCAL	NOISE	REGULATORY	RESEARCH AND	SYSTEM PLANNING	
* Caltrans, Aeronautics Program																		
> Prepares and updates the California Aviation System Plan (CASP) every five years and maintains a current database to support statewide system planning [PUC 21701].			ĵ	ĵ	1		ĵ		1	ĵ	1	ſ		Ĵ				
> Develops and administers policies with regard to Caltrans involvement in aviation issues.	Í		Ĩ	Ĩ	ĵ		Í		ĵ	Ĩ			ĵ	Í	Í	ĵ	Í	
> Prepares a ten-year Capital Improvement Plan/Program to be incorporated into the CASP [PUC 21702(f)].				Ĵ	1			Î			Î						Î	
> Participates in federal, state, regional and local studies and programs to provide a statewide perspective on issues related to aviation [PUC 21002(f), 21241, and 21242].	Î		Ĩ	Ĩ	Ĵ	Ĵ	Ĩ		í	Ĩ		ſ	Ĩ	Ĩ	Ĵ		í	
 Reviews and comments on Regional Transportation Plans, Regional Capital Improvement Programs, Airport Master Plans, Comprehensive Land Use Plans, policy plans, environmental documents [PUC 21241]. 			1	1	1		1		1	1			1	1	Ĵ		1	
> Provides planning and technical assistance to Airport Land Use Commissions and agencies responsible for zoning [PUC 21670].												1	ĵ	Ĵ	ĵ			
> Reviews and comments on Federal Rulemaking and legislation; reviews and drafts proposed state positions on aviation legislation and issues [PUC 21002(d), 21002(f), 21241 and 21242].	Í		Í	Ĩ	Ĵ		Í		Í	Î	Î	Î	Î	Í	Í		1	
Verifies project eligibility (must be consistent with CASP) for programming in the STIP; prioritizes state-funded projects; prepares proposed STIP for adoption by CTC [PUC 21683].					ĵ												1	

APPENDIX F	AVIATION SYSTEM PLANNING PARTICIPANTS PLANNING ACTIVITIES																	
PARTICIPANTS / ROLES	AEROSPACE &	AIRSPACE	AIR SERVICE	CAPACITY	CAPITAL IMPROV	ECONOMICS			,	1	1	LAND USE	LOCAL	NOISE	REGULATORY AND	RESEARCH AND	SYSTEM PLANNING	/
State, Caltrans Aeronautics (cont.) > Administers California Aid to Airports Program (CAAP) including allocation of \$10,000 annually to eligible airports; analyzes and reviews applications for projects funded through CAAP (must be consistent with CASP); monitors construction projects; approves payments; and provides technical assistance [PUC 21682].				Î	Î	Ĩ												
> Administers state Airport Loan Program for loans to publicly owned, public-use airports to match federal funds and to develop revenue generating projects [PUC 21602].					Ĩ		Ĩ	ſ				ſ					1	
> Provides portion of local match for federal Airport Improvement Program for eligible airports [PUC 21683.1].					j	Ĵ	Ĩ	ĵ					Ĵ				Î	
> Review environmental documents in order to identify potential incompatible development in the vicinity of airports; or, as a Responsible Agency, for projects involving airport permits [CEQA, PUC 21002(b), 21002(g)]							Ĩ					1		1	Ĩ		1	
 Administers State Noise Standards: participates in airport noise studies; conducts public hearings on variances from the Noise Regulations and issues variances; provides technical assistance to airports and communities on airport noise [PUC 21002(g), 21669 and 21669.61] 			1										1	1	Ĩ			
 Maintains an Airport Pavement Management System (APMS). 					ĵ			Í					Í				Ĩ	
 Issues state permits for airports and heliports; inspects and approves helicopter landing sites near schools; evaluates proposed school sites, proposed community college sites, and proposed State buildings near airports [PUC 21655, 21662, 21662.5, 21666; Education Code 17215 and 81033]. 															1			

APPENDIX F AVIATION SYSTEM PLANNING PARTICIPANTS PLANNING ACTIVITIES

PARTICIPANTS / ROLES	AEROSPACE &	AIRSPACE	AIR SERVICE	CAPACITY	CAPITAL IMPROUT	ECONOMICS	ENVIRONMENTAL	DNIQNUA	GOODS MOVFMED	GROUND ACCESC	INSTITUTIONAL RELATIONAL	LAND USE	LOCAL	NOISE	REGULATORY	RESEARCH AND	SYSTEM PLANNING
State, Caltrans Aeronautics (cont.)						7	1				~ ~						
> Has permitting authority for erection or extension of structures more than 500 feet above ground or for obstructions near airports [PUC 21656- 21659].												Ĵ			Ĩ		
> Conducts FAA Airport Master Record (Form 5010) inspections of public-use airports through contract with National Association of State Aviation Officials (NASAO) [PUC 21002(f)].															Ĵ		Ĵ
> Administers acoustical counter program for non- towered airports in the state.			ĵ		ĵ											ĵ	ĵ
> Evaluates present and future needs of military facilities that may be available to meet aviation capacity demand or otherwise be of benefit to the state's public-use airport system [PUC 21606].		Ĵ	Ĩ	Ĵ	Ĵ	Ĩ	Ĩ		Ĵ	Ē	ſ	ĵ	ĵ	ĵ			Ĵ
> Participates in meetings on issues affecting spaceports and space launch activities in California.	Ĩ												Ĩ				ĵ
* University-Associated Research Groups																	
> National Center of Excellence for Aviation Operations Research (NEXTOR)A consortium of five (5) Universities.																Ĵ	
> UC Berkeley / Institute of Transportation Studies																ĺ	
> San Jose State Minneta Institute																Ĩ	

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