

California Department of Transportation Division of Aeronautics

Overview For

Western Regional Partnership

October 18, 2017



Overview

- Role/mission of State Aviation Offices
- Current priorities of the California Dept. of Transportation, Division of Aeronautics
- Efforts relating to state aviation plans and opportunities for stakeholder engagement
- Changes/predictions in UAS usage and efforts to address any issues, including state laws and federal preemption.



Why Aviation is Important to California

Aviation is vital for California!

- Provides for commerce centers that are vital for the movement of goods and people to and from markets
- Contributes nearly 5 percent of the U.S. employment and output – direct and indirect spending:
 - Contribution to the U.S. Gross Domestic Product: **\$168.7 billion** (4.7 percent)
 - Contribution to the U.S. employment: **1.2 million jobs** (5.5 percent)
 - **59,213** active licensed pilot community (10 percent of U.S. total)
 - **29,738** registered aircraft (10 percent of U.S. total)



Why Aviation is Important to California

(cont'd)

- Airports facilitate international and domestic trade
- They are necessary for “just-in-time” production and delivery
- Each airport is an essential component of the State’s emergency response and disaster recovery operations
- Aviation provides convenient and affordable air travel for tourists, as well as access for companies to conduct business in your local community



Roles of Federal, State and Local Government

Federal Aviation Administration (FAA):

- Regulate airspace, airport security, airlines, GA aircraft, pilots, and aircraft mechanics
- Manage FAA Airport Improvement Program (AIP) funding grants for National Plan of Integrated Airport Systems (NPIAS)
- Certify and perform safety compliance inspections of Part 139 Commercial Service Airports

State of California (Caltrans):

- Issue airport and heliport permits and conduct periodic permit compliance safety inspections
- Provide airport sponsors grants and loans in support of General Aviation airports from the California Aid to Airports Program (CAAP)
- Provide technical expertise in the areas of engineering, land use, aircraft noise, environment and compatible land use planning related to aviation
- Site evaluation of proposed state buildings, public schools and community colleges

Airport Sponsor:

- Facility Owner/Operator
- Maintenance
- Provide local matching funds for FAA AIP grants
- Provide for operational airport safety



Division of Aeronautics - Mission and Goals

- Foster development to improve the California air transportation system throughout the State
- Promote aviation safety while preserving the environment
- Introduce context-sensitive, sustainable solutions to promote aviation safety and to increase system capacity



Division Overview

Aeronautics Offices and Specialty Areas:

- Office of Airports
- Office of Aviation Planning
- Office of Technical Services & Programs

Other Specialty Areas:

- Funding for Airport Grants & Loans
- Aviation Noise, Environmental Review, and CEQA Compliance
- Aviation Legislation & Information



Division Core Functions

Aeronautics' General Functions and Responsibilities:

- Land Use Compatibility, Environmental and System Planning,, Airport Project Funding & Engineering, and Aircraft Noise
- Conduct Safety & Permit Compliance Inspections at 674 permitted aeronautical facilities:
 - 244 Public-use airports (27 commercial service & 217 general aviation)
 - 68 Special-use airports
 - 362 heliports (incl. 166 hospital, 196 police, fire, corporate, and other private heliports)
- Administer California Aid to Airports Program (CAAP) – 3 grant types:
 - Annual Credit grant program - \$10K/yr. for eligible GA airports
 - State AIP Matching grant program - 5% of federal AIP grant amount
 - Acquisition and Development grant - 90% of eligible projects
- Airport Loans – 2.94% APR with a 17 year term
- Technical Services:
 - Provide airport sponsors aeronautical expertise and technical assistance; engineer and inspector teams are integral to addressing the State's airport infrastructure issues



Office of Airports

- Perform periodic safety inspections for public-use airports and hospital heliports
- Implement State and federal airport design standards related to marking, lighting, signage, safety areas, and obstruction clearance criteria
- Provide technical assistance and guidance to sponsors, other aviation interests, and the public
- Coordinate with the FAA and other federal, State, and local government agencies



Office of Airports

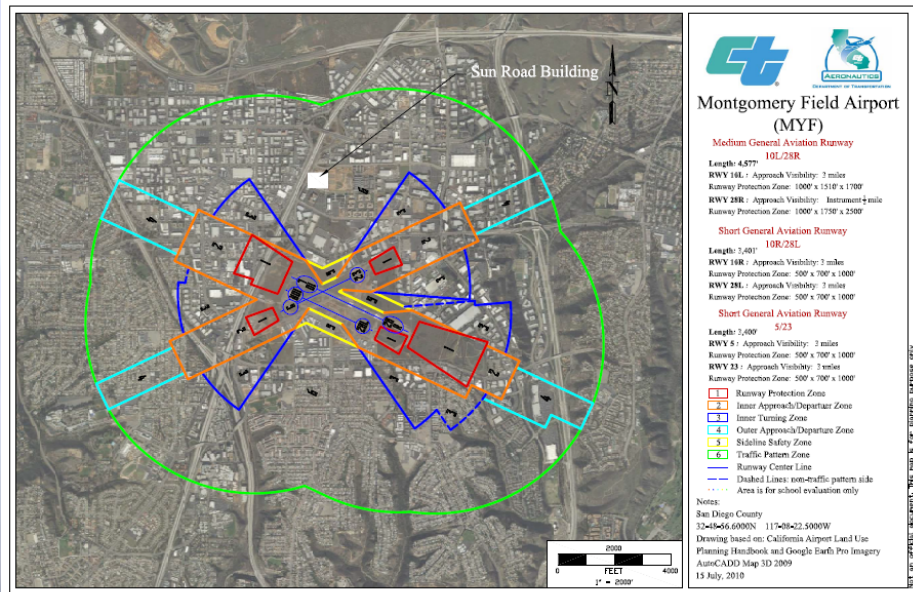
- Carry out PUC required permit actions:
 - Permitting public-use and special-use airports and heliports in CA. Evaluate & review plans, sites, CEQA, local govt approval (issue/revise ~30 permits/yr)
 - Evaluate proposed school, community college, and State building sites within 2 miles of an airport (~25/year) and other land use cases too
 - Evaluate and authorize helicopter landings at and within 1,000 feet of K-12 schools (~250/year)
- Conduct Airport Master Record inspections and updates under contract with the FAA
- Review FAA Airspace Obstruction Evaluation cases for potential impact on airports



State Buildings and School Site Evaluations - Airport Safety Compatibility Zones

The Division of Aeronautics is required to evaluate these sites within two nautical miles of an existing or proposed runway:

- Proposed K–12 schools – Education Code, section 17215
- Proposed Community Colleges – Education Code, section 81033
- Proposed State Buildings – Public Utilities Code, section 21655



Planning:

- Solicits input from airport sponsor and Airport Land Use Commission staff.
- Consider overall community planning consistent with adopted Airport Land Use Compatibility Plans
- Reference guidance from the California Airport Land Use Planning Handbook

Why?

To minimize disruptive noise and provide for adequate safety for new developments



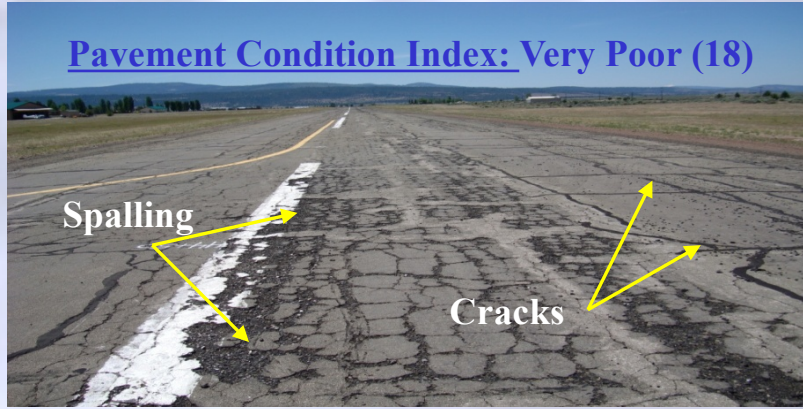
Office of Technical Services & Programs

- Provide engineering assistance (internal and external partners)
- Develop the 2-year Capital Improvement Plan (CIP)
- Review and manage State Acquisition & Development (A&D) grants & 3-year Aeronautics Program
- Prepare School Site Evaluation Maps, Land Use Incompatibility Maps, and AutoCAD drawings for airports
- FAA Contract Administration and Management (e.g. Asphalt Pavement Management System)
- Manage Caltrans Airport Projects from Programming to Construction Close-out



Operational Safety Discrepancy Resolution

Pavement Condition Index: Very Poor (18)



California Pines Airport, Modoc County



Runway Rehabilitation Project Cost: \$413,281

Result:

Safer and Smoother landings and take-offs!



Improved safety where aviation "hits the road."

Runway Rehabilitation Project Description:

- Pulverized, reshaped, graded, and compacted into sub-base
- Widened 4,250' runway to 60 feet, including a 2.5" hot-mix asphalt overlay and new runway markings



Aircraft Noise

- Since 1969, the Public Utilities Code (PUC) mandates mitigation of aircraft noise at airports to resolve existing noise problems and prevent the development of new problems
- County government determines which airports must meet noise standards
 - 10 airports statewide (9 air carrier and 1 general aviation)
- Department noise activities include:
 - Review and approval of aircraft monitoring plans
 - Assess airports' progress toward achieving standards
 - Consider applications for a variance from standards

For more information, please visit the Aviation Noise Program website:

<http://www.dot.ca.gov/hq/planning/aeronaut/avnoise.htm>



Aviation & Environmental Review

Review projects submitted from State Clearinghouse (IGR/CEQA)

- Analyze project from an aviation perspective and comment on potential environmental impacts, such as effects relating to aircraft flight, aircraft noise, and public safety

How you can help Aeronautics identify potential impacts to aviation?

Contact us with your concerns whenever you think there might be an environmental issue within 2-nautical miles of an airport!

**POC: Philip Crimmins, Environmental Review
(916) 654-6223**



Office of Aviation Planning

Work Products:

- California Aviation System Plan (CASP) Policy Element (2016)
- Public Use Airports and Military Airfields Map (2016)
- California Airport Land Use Planning Handbook (2011)
- CASP General Aviation System Needs Assessment (2010)
- California General Aviation Airports: Links to Vitality (DVD - 2008)



Compatible Land Use Development



Incompatible Land Use Development



Santa Monica Airport
Los Angeles County



Office of Aviation Planning

Work Products:

➤ California Aviation System Plan (CASP) - 2018

- Provides framework for preserving and enhancing the State's aviation system of public use airports
- Addresses state of commercial and general aviation airports, airport access development, and surrounding compatible land-use planning
- Consists of multiple elements that are mostly updated on a five-year cycle
- Mandated by the CA Public Utilities Code (PUC section 21701-21707)
- Update and modernize the CASP - 90% FAA funded. \$350K
- Plan will promote sustainability, intermodal connectivity, and incorporate latest guidance from FAA AC 150/5070-7, Airport System Planning Process (rev. JAN 2015)



Office of Aviation Planning

Work Products (continued):

➤ CASP:

- Incorporates California Transportation Commission (CTC), California State Transportation Agency (CalSTA), and California Transportation Plan (CTP) goals and objectives
- Addresses statewide policy and incorporate related plans
- Supports safety, sustainability, multimodal mobility, and the economy
- **Engages stakeholders** in developing CASP goals, including: FAA, CalSTA, CTC, and the Technical Advisory Committee on Aeronautics (TACA)
- Drafts a revised CASP with aviation community/public participation
- Aligns the preparation of the CASP with future CTP cycles
- Estimated completion - Fall 2019



Office of Aviation Planning

Work Products (continued):

- California Aviation System Plan Policy Element (2016)
- Public Use Airports and Military Airfields Map (2016)
- California Airport Land Use Planning Handbook (2011)
- CASP General Aviation System Needs Assessment (2010)
- California General Aviation Airports: Links to Vitality (DVD - 2008)



Upcoming Aviation Planning Activities

- Airport Safety Data Program Inspections (2017/18)
 - New FAA “5010” contract to inspect 72 GA airports eff. 1OCT17. \$47,500
- Airport Pavement Management System (APMS) Plan (2017/18)
 - Conduct APMS studies for 84 GA airports - 90% FAA funded. \$1.5M
 - Goal is to understand pavement conditions statewide and prioritize pavement maintenance and rehab projects system-wide.
- APMS Online Searchable Database (2018)
 - Create online accessible database to host APMS survey data for all CA airports – 90% FAA funded. \$TBD



Future Aviation Planning Activities

- California Aviation Economic Study (2018-2019)
 - Assess current role aviation contributes to California's economy and project future trends. \$ - TBD
- Update California Land Use Compatibility Planning Handbook (2018)
 - Technical corrections and synchronization w/new statutes and regulations
- Wildlife Hazard Assessment Studies
 - Obtain FAA grant for additional studies as needed. \$ - TBD
- Airport Obstruction Surveys
 - Obtain FAA grant to perform obstruction surveys at airports needing new GPS instrument approaches



Unmanned Aircraft Systems

- Unmanned Aircraft Systems (UAS) Operations
 - Aeronautics will facilitate all Caltrans UAS operations
- UAS Policy
 - Aero Drafting Deputy Directive for UAS Operations, Acquisitions & related UAS Handbook
- UAS Acquisitions
 - Two Districts currently own one UAS each.
 - D4 obtained FHWA grant to purchase latest survey technology & equipment. UAS equipment, applications, and training will be included.
- Many proposed state and federal laws
 - Privacy and security concerns
 - Strong desire to create restricted airspace by state and local agencies (cities and counties)
- Exponential usage increase is expected!



Cases & FAQs

Significant Land Use related cases:

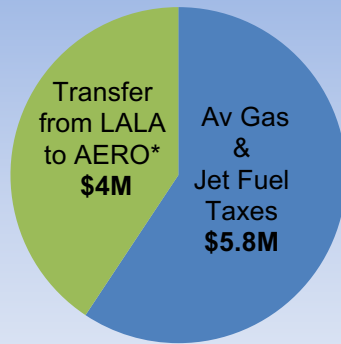
1. Rancho Murieta Airport, Sacramento, CA
 - Trees in FAR Part 77 transitional surfaces
2. Hawthorne Municipal Airport, Hawthorne, CA
 - Conversion of bankrupt mall into school located in Safety Zone 2
3. Montgomery Field Airport, San Diego , CA
 - Sunroad Development constructs office building to height that FAA considers hazardous to air navigation

Questions?



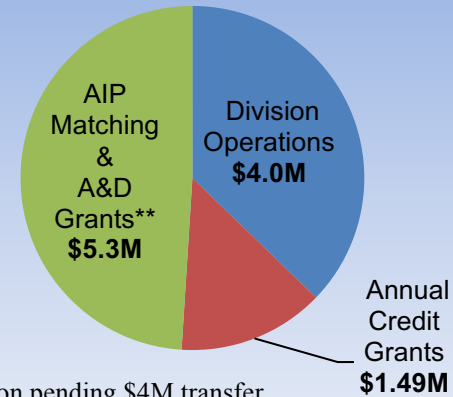
Aeronautics FY 2016-17 Funding

REVENUES and TRANSFERS



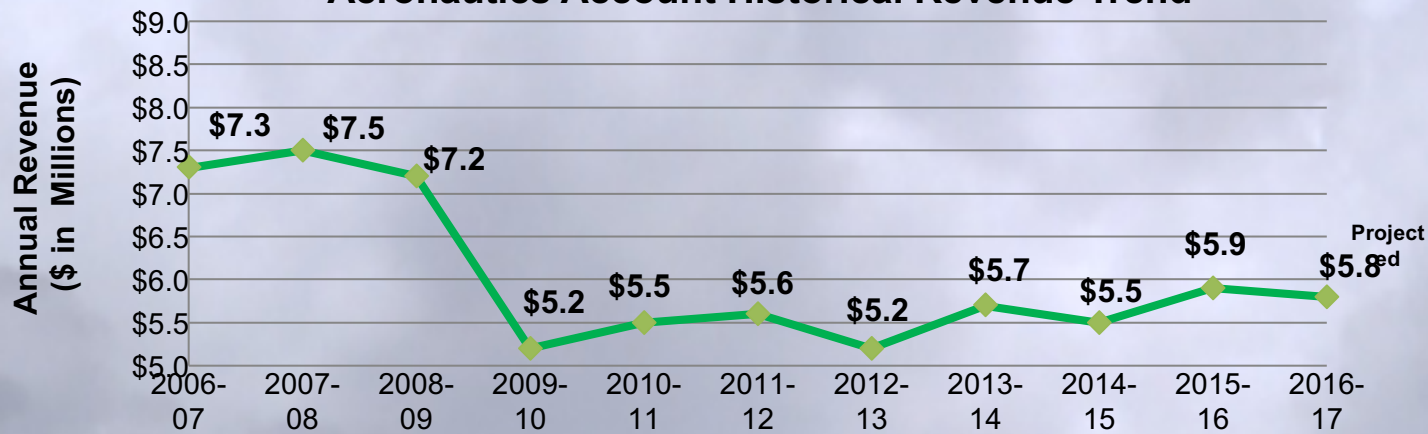
*pending Department of Finance approval

EXPENDITURES



**dependent on pending \$4M transfer

Aeronautics Account Historical Revenue Trend



State, Federal, and Other Aviation Partners

State:

- Department of Education (DOE)
- Department of Fish and Game (DF&G)
- California Energy Commission (CEC)
- Governor's Office of Planning and Research (OPR)
- Governor's Office of Emergency Services (OES)

Federal:

- Federal Aviation Administration (FAA)
- U.S. Department of Defense (DOD)
- U.S. Department of Agriculture (USDA) – Wildlife Services
- U.S. Department of Transportation (USDOT)

Private Non-Government Organizations:

- National Association of State Aviation Officials (NASAO)
- American Association of Airport Executives (AAAE)
- Airport Cooperative Research Program (ACRP), Transportation Research Board (TRB)
- National Business Aircraft Association (NBAA)
- Airplane Owners & Pilots Association (AOPA)
- Association of California Airports (ACA)
- California Airports Council (CAC)
- California Pilots Association (CPA)

