APPENDIX 1
Functional Classification of Airports

Public use airports are classified different ways by different agencies for different purposes. The following definitions will describe the details and illustrate the differences between the classification systems utilized by the FAA and the CASP.

CALIFORNIA AVIATION SYSTEM PLAN (CASP)

Limited Use Airports – Airports that provide limited access; usually located in non-urban areas; may be used for a single purpose; have few or no based aircraft; and provide no services.

Community Airports – Airports that provide access to other regions and states; located near small communities or in remote locations, serve, but are not limited to, recreational flying, training, and local emergencies; accommodate predominately single engine aircraft under 12,500 pounds, provide basic or limited services for pilots or aircraft.

Regional Airports – Airports that provide the same access as community airports, may provide international access; located in an area with a larger population base than community airports with a higher concentration of business and corporate flying; accommodate most business, multi-engine, and jet aircraft, provide most services for pilots and aircraft including aviation fuel; has a published instrument approach, may have a control tower.

Metropolitan Airports – Airports that serve the same activity as regional airports; are located in urbanized areas; provide for the same flying activities as Regional airports with an emphasis on business, charter, and corporate flying, accommodate all business jet and turboprop aircraft with a higher level of activity than Regional airports; provide full services for pilots and aircraft, including jet fuel; has a published instrument approach and a control tower; provides flight planning facilities

FEDERAL AVIATION ADMINISTRATION

Commercial Service Airports – An airport that provides scheduled passenger service and enplanes more than 2,500 passengers annually.

Primary – An airport having more than 10,000 annual enplanements. Below are the three primary hub sizes based on enplanements.

Large Hub – An airport having more than 1% of total national annual enplanements.

Medium Hub – An airport having between 0.25% and 0.99% of total national annual emplacements.

Small Hub – An airport having between 0.05% and 0.25% of total national annual emplacements.

Nonprimary – An airport having less than 0.05% total national annual enplanements. Nonprimary airports have fewer than 10,000 annual enplanements.

General Aviation Airports (GA) – An airport with no commercial service, usually having 10 or more based aircraft, and are at least 20 miles from the nearest NPIAS (see definition below) airport.

Reliever – A high capacity general aviation airport in a metropolitan area.

National Plan of Integrated Airport Systems (NPIAS) –. A plan that identifies 3,356 existing and 55 proposed public-use airports[1] that are significant to national air transportation and therefore, eligible to receive grants under the Federal Aviation Administration (FAA) Airport Improvement Plan (AIP). The NPIAS is used by FAA management in the in administering the AIP. It supports the FAA's goals identified in the Flight Plan for safety and capacity by identifying the specific airport improvements that will contribute to the achievement of those goals.

Non-NPIAS – Public owned, public use airports that do not meet any of the commercial service criteria noted above or are located at inadequate sites and cannot be expanded and improved to provide safe and efficient airport facilities and private use. Also Non-NPIAS are privately owned, public use airports that are not included because they are located at inadequate sites, are redundant to publicly owned airports, or have too little activity to qualify for inclusion. In addition, almost 14,000 civil landing areas that are not open to the general public are not included in the NPIAS.

[1] The word "airport", as identified in the NPIAS, includes landing areas developed for conventional fixed-wing aircraft, helicopters, and seaplanes. Source: Federal Aviation Administration, Report to Congress, National Plan of Integrated Airport Systems: 2009-2013.

APPENDIX 2
Glossary of Terms from Enhancement Need-Cost Tables

ALP (Airport Layout Plan) – The plan of an airport that showing the layout of existing and proposed airport facilities.

ASOS- Automated Surface Observing System

AWOS- Automated Weather Observing System

GPS – Global Positioning System – Satellite based navigation aid and instrument approach providing non-precision (for now) guidance to runway.

ILS – Instrument Landing System – precision (vertical and horizontal position) instrument approach utilizing on airport radio navigation aids and in aircraft navigation displays to assist pilots in making landings during periods of very low visibility and cloud ceilings.

LDA – Localizer-type Directional Aid – Localizer equipment set up so that guidance is provided to runway along final approach course that is not aligned with the centerline of the runway.

LOC – Localizer. The portion of an ILS that gives left/right guidance information down the centerline of the instrument runway for final approach.

LPV – Localizer Performance with Vertical Guidance. One of the four lines of approach minimums found on an RNAV (GPS) approach chart.

LPV/GPS - Lateral Precision with Vertical Guidance and GPS. GPS alone is not a precision approach, but if coupled with another feature (such as VOR) it can be a precision approach.

Longest Runway Length – Length in feet of longest currently used runway at the specific airport.

Longest Runway Width – Current width of the longest runway at a given airport.

PAPI – Precision Approach Path Indicator. A system of lights similar to the VASI, but consisting of one row of lights in tow- or four-light systems.

PCI (Pavement Condition Index) also Runway Pavement Condition – General descriptive category of runway surface type and condition:

- TRTD – Treated, as in a non-paved serviced treated with oil to provide smoother stronger surface with less likelihood of foreign object related aircraft damage.
- ASPH – Asphalt paved runway
- CONC – Concrete runway surface
- GRVL – Gravel runway surface
- TURF- Grass runway surface
- DIRT – Dirt runway surface
- G – Good condition
- F – Fair Condition
- P - Poor Condition

RNAV (Area Navigation) – A method of navigation that permits aircraft operations on any desired course within the coverage of station referenced navigation signals or within the limits of self contained system capability.

RSA (Runway Safety Area) – The area, under normal (dry) conditions, that supports airplanes without causing structural damage to the airplane or injury to their occupants in the event a plane undershoots, overruns, or veers off the runway. Also provides greater accessibility for firefighting and rescue equipment during such incidents. For purposes of this report, RSA conditions are rated as follows:

S = Satisfactory; meets current standards
U = Unsatisfactory; does not meet current standards for reasons identified
NF-X = Not Feasible to Meet Standards for identified such as topography, terrain, or land use

VASI – Visual Approach Slope Indicator. A visual aid of lights arranged to provide descent guidance information during the approach to the runway. Provides obstruction clearance within 10 degrees of the extended runway centerline, and to 4 nautical miles from the runway threshold.

VOR- Very High Frequency Omni Directional Range Station – Radio navigation aid used for enroute and instrument approach/departure navigation. Non-precision in that no vertical navigation is provided.

APPENDIX 3

State and Federal Airport Development Project Funding Sources

Federal Aviation Administration (FAA) Aviation Funding Sources

- Airport Improvement Program (AIP) (supports 95 percent of the total project cost)
- Commercial Service Airport Entitlement Program (airports with scheduled passenger service air carriers, airports must report total annual enplanements)
- Air Cargo Entitlement Program (airports with dedicated air cargo air carriers, airports that exceed 1 million pounds landing weight must report to the FAA the total landing weight)
- AIP Grants (Commercial Service and General Aviation Airports)
- Passenger Facility Charge (PFC)

FAA National Plan of Integrated Airport System (NPIAS)

The NPIAS report estimates the cost associated with establishing a system of airports adequate to meet the needs of civil aviation and to support the Department of Defense and the Postal Service. It draws selectively from local, regional, and State planning studies. The development estimates contained in this report were largely compiled in 2007 and reflect infrastructure needed in Fiscal Years (FY) 2009 through 2013.

About 39 percent of the development in the National Plan of Integrated Airport Systems (NPIAS) is intended to accommodate growth in travel, including more passengers and cargo and more and larger aircraft. These projects include major airfield programs, such as new runways, rehabilitation or expansion of passenger terminals, and improvements to the highways or transit systems on the airport. The large scale, long-term programs (i.e., a new runway or significant runway extension) involving a sequence of planning, environmental analysis, approval, financing, and construction, typically over a 10- to 15-year period, are not particularly sensitive to short-term fluctuations in traffic.

About 61 percent of the development in the NPIAS is intended to rehabilitate existing infrastructure and to keep airports up to standards for the aircraft that use them. The need for this type of development is not expected to change, but the timing may be affected by the financial concerns of airports.

California Division of Aeronautics Aviation Funding Sources

Aeronautics Account ($, funded by Fuel Excise Tax: Jet A @ $0.02 per gallon, Aviation Gasoline (Avgas) @ $0.18 per gallon)

California Aid to Airports Program

- ✓ Airport Improvement Matching Grant (191 NPIAS airports in California, match grant supports 2.5 percent of the FAA AIP Grant)
- ✓ Acquisition & Development Grant (90 percent of total project cost, ?% of Aero Program, supports land acquisition, airport development for non-NPIAS airports as well as for Airport Land Use Compatibility Plan)
- ✓ Annual Grant (149 airports, $10,000 per general aviation airport)
- ✓ Airport Loan Program (low-interest simple loans for revenue generating projects such as hangar construction)

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