REPORT

DATE: July 12, 2007

TO: Administrative Committee and Regional Council

FROM: Wayne Moore, Chief Financial Officer, 213-236-1804, moore@scag.ca.gov

SUBJECT: Federal Aviation Administration Grant (FAA) Application for $650,000

EXECUTIVE DIRECTOR'S APPROVAL:

RECOMMENDED ACTION:

Authorize SCAG to apply for, and if awarded, accept, FAA grant funds for regional aviation system planning.

BACKGROUND:

For the past several years, SCAG has sought and received FAA funds for regional aviation planning activities. This year, SCAG is seeking $650,000 in FAA funds to perform several tasks, including updating general aviation forecasts, assessing environmental implication of forecasts, evaluating the emission reduction potential of an airline pricing strategy, and collecting and updating regional aviation activity data. In addition, FAA funds would support public participation in aviation planning through SCAG's sponsorship of the Aviation Task Force and the Aviation Technical Advisory Committee (ATAC), which will be working closely with the previously dormant Southern California Regional Airport Authority (SCRAA). The SCRAA has been reorganized as a vehicle to help implement regional aviation system plans developed and adopted by SCAG and the ATAC will serve as a technical committee to SCRAA as well as to SCAG. FAA funds would also fund local government assistance activities performed by SCAG staff, such as local government briefings and review of airport capital improvement programs.

FISCAL IMPACT

If awarded, the FAA grant funds and the required 5% local, in-kind match will be included in SCAG's Comprehensive Budget. The in-kind match will be provided by the participation of local government representatives in SCAG sponsored task forces, committees, and associated activities.

Reviewed by: _____
Division Manager

Reviewed by: _____
Chief Financial Officer

SOUTHERN CALIFORNIA ASSOCIATION of GOVERNMENTS

BUDGET SUMMARY
SCAG REGIONAL AVIATION SYSTEM PLANNING

October 2007 – September 2008

TASK		DESCRIPTION	SCHEDULE	BUDGET
1		**Regional Transportation Plan—Phase II**		
	A	Update General Aviation Forecasts	10/01/07-4/30/08	$250,526
	B	Assess Environmental Implications of General Aviation Forecasts	4/30/08-9/30/08	$94,737
2		**Evaluate the Emission Reduction Potential of an Airline Pricing Strategy**		
	A	Model the Emission Reduction Potential of an Airline Pricing Strategy	10/01/07-6/30/08	$147,368
3		**Continuous Aviation System Planning**		
	A	Collect and Update Aviation Activity Data	10/01/07-9/30/08	$23,158
4		**Services**		
	A	Public Participation Program	10/01/07-9/30/08	$84,211
	B	Local Government Assistance	10/01/07-9/30/08	$63,158
	C	Reports, Coordination and Management	10/01/07-9/30/08	$21,053
		Total	10/01/07-9/30/08	$684,211
		Federal		$650,000
		Local		$34,211

REGIONAL AVIATION SYSTEM PLANNING
SCOPE OF WORK

INTRODUCTION

The Southern California Association of Governments (SCAG) is responsible to the Federal Aviation Administration and the State of California for planning the regional airport system in accordance with federal and state guidelines and requirements. SCAG's Regional Council has recognized that no transportation mode acts in a vacuum separate from other transportation modes. Airport system changes in the past decade have provided the region the opportunity to proactively plan for the growth of regional aviation in conjunction with planning for other modes of transportation.

SCAG's adopted 2004 Regional Transportation Plan, titled *Destination 2030* proposes a decentralized regional aviation element. This Plan would accommodate a total regional air passenger demand of 170 million passengers in 2030. Work on the agency's 2008 Regional Transportation Plan to be adopted in the fall of 2007 is currently updating and revising this forecast, for the year 2035. Future demand for air travel will be largely served by using available capacity at suburban airfields located in the Inland Empire and North Los Angeles County where projected population growth will be best served, rather than relying on expanding existing urban airports. Cooperation between airport authorities is necessary to ensure efficient usage of capacity, including coordinated planning for improving regional airport ground access to suburban airports with available capacity.

The reactivation of the previously dormant Southern California Regional Airport Authority (SCRAA) presents a unique opportunity to achieve this kind of regional coordination needed to carry out a regional aviation decentralization strategy. The recent reorganization of SCRAA, including a redefinition of its overall mission, has resulted in a close working relationship between SCRAA and SCAG. SCAG will continue to conduct regional aviation system planning funded by the FAA, and SCRAA will now serve as a vehicle to help implement regional aviation system plans developed and adopted by SCAG. Also, SCAG's Aviation Technical Advisory Committee (ATAC) will serve as a technical committee to the SCRAA as well as SCAG. SCAG administrative support to ATAC to be funded in Task 3A below will therefore have the dual function of supporting aviation input to SCAG policy committees as well as to the SCRAA Board of Directors.

The following work tasks will be accomplished in a twelve month planning period. Organization of this continuous airport system planning process is structured to be consistent with the process defined in FAA Advisory Circular 150/5070-7 (The Airport System Planning Process) with the objective of supporting both SCAG and the SCRAA in carrying out the regional aviation policies adopted for the 2008 RTP. Special studies conducted consistent with Advisory Circular 150/5070-7 will focus on updating the general aviation forecast for the region, evaluating the potential environmental impacts of future growth in business aviation on general aviation airports in the region, and evaluating the potential environmental benefits of airline pricing strategies.

Tasks will be coordinated with recently completed and ongoing SCAG aviation studies, including the regional air passenger and air cargo forecasts, the Regional Airport Management Implementation Study, and the Regional HOV/Flyaway Study.

Specific technical input for the continuous aviation system planning program will be provided by ATAC. Overall policy direction will be provided by the Transportation and Communications Committee.

1. UPDATE GENERAL AVIATION FORECASTS AND EVALUATE POTENTIAL ENVIRONMENTAL IMPACTS

The main component of this Scope of Work is to develop new general aviation forecasts for the region, including forecasts for corporate aviation. This work will involve use of the Regional Aviation Demand Allocation Model (RADAM), which has not been previously employed to develop regional general aviation forecasts. An evaluation of the environmental impacts of accommodating increased general aviation activity at some airports, including corporate jets and Very Light Jets (VLJs), will also be conducted. This work will be reviewed by SCAG's Aviation Technical Advisory Committee (ATAC), and Transportation and Communications Committee (TCC).

Task A: *Update General Aviation Forecasts*

SCAG regional forecasts of general aviation based aircraft and operations will be updated and extended to a year 2035 planning horizon. Past general aviation forecasts conducted by SCAG were largely based on a simple extrapolation of past trends. For the first time the updated general aviation forecasts will be based on a comprehensive computer modeling process using the Regional Aviation Demand Allocation Model (RADAM) which has been employed by SCAG over the past 15 years to develop air passenger, air cargo and aircraft operations forecasts. The modeling will be based on past trends, but will also use 2035 SCAG socio-economic forecasts and demographic forecasts for the general aviation pilot population. It will also be based on an evaluation of the capacity of general aviation airports in the region to accommodate future general aviation operations, particularly IFR operations including corporate jets and Very Light Jets (VLJs).

General aviation airports will be surveyed by both phone and mailed/internet questionnaires, to determine recent trends in based aircraft by aircraft type and operations by trip type. The forecasts will incorporate past trends at each airport, as well as state and national forecasts for the general aviation industry. Facilities at general aviation airports will be inventoried with the objective of assessing their ability to accommodate future general aviation activity including corporate jet and VLJ operations. Capacity constraints at urban air carrier airports that accommodate generation aviation activities will also be assessed and factored into the forecasts. Also, information that was recently collected using tax county tax rolls that matched aircraft owner location (by zip code) with location (airport) of taxable property (aircraft) will be used to forecast aircraft migration from urban to suburban general aviation airports.

All inventoried data will be input to the RADAM model along with SCAG socio-economic and pilot demographic forecasts to forecast general aviation operations by aircraft type at each general aviation airport to the years 2015, 2025 and 2035.

Task:	**Conduct new general aviation surveys and develop updated general aviation forecasts**
Output:	**2035 general aviation forecasts--based aircraft and operations**
Time:	**October 2007—June 2008**
Staff Cost:	**$105,263**
Consult. Cost:	**$145,263**

Task B: *Assess Environmental Implications of General Aviation Forecasts*

Airports that will accommodate the bulk of new general aviation operations in the region, as indicated in the forecasts developed in Task A, will be identified. The environmental implications in terms of increasing noise and air emission impacts at those airports will be estimated, with the focus on new corporate jet and VLJ operations. The environmental "footprint" of future general aviation aircraft fleets in terms of their forecast noise and air emission levels will be used in the analysis in conjunction with the use of INM and EDMS noise and air emission models. Potential abatement and mitigation strategies for minimizing the severity and extent of those impacts will be identified.

Task:	**Assess environmental implication of general aviation forecasts**
Output:	**Noise and air quality impacts of general aviation forecasts at selected airports**
Time:	**October 2007—June 2008**
Staff Cost:	**$42,105**
Consult. Cost:	**$52,632**

2. EVALUATE THE EMISSION REDUCTION POTENTIAL OF AN AIRLINE PRICING STRATEGY

The generation of aviation-related air emissions has become an issue of great interest to the region as it strives to meet stringent new emission standards for ozone and particulates. Aircraft engine emission standards are set internationally by the International Civil Aeronautics Organization (ICAO) and local airport operators are very limited in their ability to control these emissions. One potential strategy that has been considered involves allowing local airport operators to base airline charges (landing fees, lease rates etc.) on level of noise and air emissions instead of aircraft landing weights. This would provide an incentive to airlines, in combination with substantial fuel cost savings, to re-engine their aircraft or purchase new aircraft with new engine technologies that are substantially cleaner than older technologies in terms of level of NOx and particulate emissions.

Task A: *Model the Emission Reduction Potential of an Airline Pricing Strategy*

The objective of this study is to estimate the overall emission reduction potential of applying such an airline pricing strategy at air carrier airports in the region. The study would involve RADAM computer modeling of the likely response of airlines to pricing signals that reward the employment of low-emission engine technologies through lower airport fees. Factors and assumptions that will be considered in the modeling process will include existing and forecast aircraft fleet mixes and engine types, airline amortization patterns for aircraft, airline engine replacement costs and patterns, total airline costs (from financial statements), forecast fuel costs, and assumed new airline pricing structures. Model outputs will include changes in fleet mixes and engine types for the years 2010, 2020 and 2030, and average air and noise emission reductions per commercial aircraft operation.

Task:	**Model the emission reduction potential of an airline pricing strategy**
Output:	**Air and noise emission reductions per commercial aircraft operation**
Time:	**October 2007—June 2008**
Staff Cost:	**$42,105**
Consult. Cost:	**$105,263**

3. CONTINUOUS AVIATION SYSTEM PLANNING

Task A: *Collect and Update Regional Aviation Activity Data*

Data concerning aircraft operations, passenger enplanements and air cargo tonnage will be collected on a monthly basis. SCAG will collect this data from all air carrier and commuter service airports.

An Air Service Trends Monitoring program has been established and maintained for the SCAG region. This program purchases OAG flight data and aircraft ownership data with the objective of monitoring regional commercial air service in the region. It provides trend data to airport operators around the region for their uses and will also assist in monitoring the success of the Aviation Implementation Plan. Data will be purchased to continue this program in FY 07-08. Data will be collected on many aspects of airline service in the region. These include daily passenger departures by length of haul and international region, passenger and cargo departures by departure time, top O&D markets served, market share by airline departing seats, domestic load factors by airport and aircraft type, and new non-stop routes from the LA Basin. Data will be compiled for each airport, and will also be aggregated for all commercial airports to track changes in the region. Quarterly and annual reports will be prepared that summarize major trends in the region.

Task:	**Collect and Update Regional Airport Activity Data**
Output:	**Quarterly and annual reports of regional aviation activity**
Time:	**Ongoing.**
Staff Cost:	**$10,526**
Consult. Cost:	**$12,632**

4. **SERVICES**

Task A: *Public Participation Program*

Specific policy direction for the Aviation Continuous Planning Program, including work in preparing new regional aviation and airport ground access elements for the 2008 RTP, will be provided by SCAG's policy committees. These include the Transportation and Communications Committee, comprised of regional elected officials. Technical input on regional aviation matters, assistance in data collection and identification of new aviation issues will be provided by the Aviation Technical Advisory Committee (ATAC), which will provide technical input to both SCAG and the SCRAA. Membership on this committee includes air carrier, commuter and general aviation airport representatives.

Staff will attend and actively participate in meetings of various aviation interest groups in the Los Angeles metropolitan area. Attend and participate in meetings related to Southern California aviation and provide expertise and/or develop materials for the groups as requested. Groups could include but are not limited to the Transportation Research Board, the San Diego County Regional Airport Authority, the State Division of Aeronautics, the State Transportation Commission, the South Coast Air Quality Management District, local airport authorities and other local agencies. Staff will also attend regular meetings of the SCRAA, and will agendize SCRAA issues for ATAC meetings since the ATAC will serve as a technical advisory committee for both SCAG and the SCRAA.

Task:	**Sponsor the Aviation Technical Advisory Committee and the Aviation Technical Advisory Committee, and participate in other meetings as necessary.**
Output:	**Copies of printed materials developed for the Aviation Task Force, Aviation Technical Advisory Committee and other groups, including meeting agendas and minutes, fact sheets, Regional Aviation Element summary handouts, and SCAG aviation web pages**
Time:	**Ongoing**
Staff Cost:	**$84,211**

Task B: *Local Government Assistance*

Counties and other local jurisdictions will have access to SCAG staff and documents as a resource which they can utilize to keep abreast of the current status and projections for those elements of aviation activity which directly impact their planning.

When a jurisdiction decides to initiate aviation studies such as a master plan, site selection, or aviation facility expansion, aviation staff will make appropriate data and documents available to the entity. Staff will assist jurisdictions in integrating the aviation studies with the aviation goals and policies in the Regional Transportation Plan.

Assistance to the sponsor in preparation of pre-applications for funds will be made available. SCAG will comply with Executive Order 12372 (Clearinghouse Review) in the review of the proposed applications.

Airport Five year Capital Improvement Plans will be collected and reviewed with SCAG surface transportation plans as required by Caltrans.

Task:	**Periodically brief local jurisdictions on those aviation issues which impact them.**
Output:	**Assistance to airport sponsors and local jurisdictions, clearinghouse project reviews, airport Capital Improvement Program reviews**
Time:	**Ongoing**
Staff Cost:	**$63,158**

Task C: *Reports, Coordination and Management*

Throughout the project, various technical working papers will be prepared for review by the FAA, CalTrans, the Aviation Task Force and Aviation Technical Advisory Committee. Those products of this program which recommend changes of policy or extension of the plan into new planning periods will be submitted to the SCAG Regional Council for adoption.

Any updates or amendments to the Regional Aviation Plan will be conducted by SCAG. Overall project management will be the responsibility of SCAG. Airport managers, aviation interest individuals and the State of California will be asked to assist on particular elements of the work program. Work associated with this task will involve preparation for meetings, recording of minutes and distribution of working papers and pertinent data.

Task:	**Project Management**
Output:	**Issue Papers, Reports, Memoranda**
Time:	**Ongoing**
Staff Cost:	**$21,053**