

# MEMO

**TO:** Aviation Technical Advisory Committee

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**SUBJECT:** Prioritization of Regional Aviation Policy Issues for Further Analysis and Policy Development

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International Group Technologies (IGT) has recently been engaged by SCAG to assist in defining overarching regional aviation policy issues for further discussion and evaluation, leading to the development of an overall Regional Aviation Strategy (RAS) for the 2012 RTP. The RAS is envisioned as a policy document with a series of related action steps for carrying out the recommended policies. IGT will develop issue papers on selected regional aviation issues that will provide the basis for the formulation of recommended regional aviation policies and implementing actions steps for the RAS.

Dr. Geoff Gosling, who is on the IGT team, will lead a round table discussion on identifying aviation issues that merit further evaluation for the development of the RAS at a special meeting of the SCAG Aviation Technical Advisory Committee. Below are listed a number of such issues, with initial thoughts provided by IGT on 17 issues that were in the original RFP for this project, grouped by issue category. Regional Aviation Policies and Action Steps that were adopted by SCAG's 2008 Regional Transportation Plan follow these issues.

## **Regional Aviation Demand Forecasts**

### **1. Ongoing trends in national and regional aviation industries that may have long-term impacts on regional aviation demand**

Long-term regional aviation demand will be influenced by changes in the structure of the airline industry and evolving aircraft capabilities, including competition between low-fare carriers and the legacy carriers and expanded trans-Pacific international service from mid-continent or East Coast airports. The current trend in airline consolidation is likely to have implications for the ability of smaller commercial airports to attract new air service. As low-fare carriers expand their market share, they are increasingly finding it necessary to offer service at larger airports rather than competing from smaller secondary airports. The continued escalation of fuel prices could reinforce this trend. The California High-Speed Rail Project could shift some short-haul service in the California Corridor to the high-speed mode, but could also benefit airports like Ontario, March Inland Port and Palmdale via superior access provided by adjacent high-speed rail stations. Air cargo carriers have shifted much of their domestic express cargo activity, which has been significantly impacted by electronic document sending, to time-definite second- and third-day delivery via ground transport.

## **2. Development of financial incentives to encourage airlines to increase service at secondary airports with capacity to accommodate expanded traffic**

Changing the distribution of air passenger demand among the region's commercial airports will require the airlines to add service at those airports with the ability to accommodate expanded traffic at fares that are competitive with the congested airports. Policy actions and financial mechanisms are likely to be necessary to encourage airlines to offer competitive service in order to offset the scale economies of the larger airports.

## **3. Inherent Limitations of the Regional Aviation System in Attracting Future Aviation Demand**

The region's airport system has a relatively large number of established air carrier airports (six) compared to other regions in the country. Yet at 81.1 million air passengers (MAP) in 2010, the region serves about the same as 1997 levels, and two MAP less than 2003 levels. On the other hand, global passenger activity has increased 43% since 2003. The recent severe economic downturn in Southern California is one obvious reason for the region lagging so far behind the global air travel market. Another potential factor could be that the region's air carrier airport system is dominated by small, "boutique" airports (collective acreage: 7900 acres) and lacks the very large, international hub airport that air carriers increasingly desire to maximize economies of scale, especially in an era of increasing airline code-sharing and alliances.

### **Airport Economics/Finance**

## **4. Survival strategies airports can employ to weather ongoing severe economic conditions, including the development of airport strategic plans**

Both commercial and general aviation airports can be adversely impacted by changing economic conditions, both in the larger economy as well as within the aviation sector itself. In Southern California, changing patterns of air service and distribution of air passenger traffic is likely to affect some commercial airports more than others, as in the recent rapid decline in traffic at Ontario International Airport. For general aviation airports, understanding changing regional patterns of demand for general aviation activity is critical to developing effective airport strategic plans. The SCAG Aviation Program can assist airports develop effective strategic plans by providing information on changes in regional patterns of demand and likely user responses to changes in air service and relative costs of using different airports. Airports can also be encouraged to develop flexible "strategic plans" that can respond to a variety of possible future circumstances, in lieu of static airport master plans.

## **5. Airport pricing strategies, including peak-hour congestion pricing, area pricing, and equalization of airport fees between urban and emerging suburban airports**

Airport pricing strategies are frequently cited as a potentially useful tool to influence the distribution of aviation activity within the region, as well as achieve more efficient use of existing airport capacity. However, the latter objective is less relevant in cases where the total level of air traffic is constrained by policy or legal limits rather than by the physical capacity of the system. There may be some application in cases where the limits on airport activity are established by restrictions on the number of aircraft gates, although attempts to allow expansion of airport activity through more efficient use of aircraft gates could shift the focus of community and political pressures on the airport to other ways to limit the impacts of airport activity on the surrounding communities.

## **6. Identification and use of excess property for non-aeronautical uses**

The use of excess airport property for non-aeronautical uses can present a useful opportunity for airports to diversify their sources of revenue and allow smaller general aviation airports to remain economically viable in the face of changing demand for general aviation activity. While these decisions are primarily the responsibility of the individual airport operators, SCAG aviation policies and programs may be helpful in encouraging local jurisdictions to facilitate such uses and serving as a clearinghouse for information on potential non-aeronautical uses. These could include policies and strategies for the “re-invention” of general aviation airports that have declining activity with new roles, uses and revenue sources.

## **7. Airport privatization**

The issues surrounding airport privatization are sufficiently complex that it is likely to be helpful to the discussions about how to meet the future regional aviation needs to explore these in some detail as part of developing a regional aviation strategy. Consideration needs to be given to the reason for considering privatization, as well as the likely financial viability of a given proposal for private sector investors. A current Airport Cooperative Research Program study is developing guidance on potential roles of airport privatization, which may produce results in time to prove useful in addressing this issue.

## **8. Regional aviation economic benefits**

While it is clear that aviation plays a major role in the regional economy of Southern California, from a policy perspective this is less interesting than how changes in the pattern of air service, the cost of flying, and the performance and convenience of the airport system in meeting the needs of air travelers and air cargo shippers affect the regional economy. Traditional approaches to measuring aviation economic impacts are generally unable to provide much insight into these issues. Therefore the SCAG Aviation Program may need to undertake a more focused effort to understand and measure-the economic consequences of different regional airport development strategies.

## Airport Ground Access

### **9. Prioritization and financing of major airport ground access projects including more flexible use of airport revenues for off-airport ground access projects**

Funding major airport ground access projects generally requires a carefully crafted combination of funding sources, due to the restrictions on the use of different funding sources. In particular, the use of airport revenues for off-airport projects is significantly restricted by Federal legislation, policy and regulation. A current study for the Mineta Transportation Institute led by Dr. Geoffrey Gosling of the IGT team has been reviewing opportunities of funding airport ground access projects and undertaking case studies of the actual or planned funding arrangements for various major airport ground access projects in California and elsewhere.

## Airport Land Use Compatibility/Environmental Impacts

### **10. Airport land use compatibility strategies applied on a regional basis**

Effective airport land use compatibility planning is critical to reducing community opposition to airport expansion and avoiding constraints on airport operations, as well as maintaining an adequate quality of life in those communities surrounding major airports. As the distribution of future air traffic activity shifts within the region, it will become critical that airport land use compatibility planning anticipates these changes. Although airport land use planning is not a responsibility of SCAG, the SCAG aviation policies and programs can provide valuable support to the region's Airport Land Use Commissions.

### **11. Airport environmental "Best Practices" and incentives for mitigating air, noise and water pollution**

This is another example of another area where SCAG aviation policies and programs can encourage and support the dissemination of information on best practices to the regional airports, but the implementation of those practices is largely in the hands of the individual airport operators.

### **12. Strategies to reduce greenhouse gas emissions by airport operations and airport ground access and egress trips, including increasing the mode share of rail systems and high-occupancy modes, as well as the use of alternative fuels for airport ground access vehicles**

Although these actions are primarily the responsibility of airport authorities, SCAG can provide regional coordination and leadership through sharing ideas, developing information on the effectiveness of different strategies, and improving coordination between airport planning and surface transportation system planning.

### **13. Development of more rational policy instruments for managing the adverse impacts of expanded airport activity**

Currently limits on air traffic at the region's commercial airports are defined in terms of annual passengers, aircraft operations, or airport facilities (generally the number of gates). However the concerns of the surrounding communities that led to the limits being imposed were the adverse environmental impacts of airport activity, including aircraft noise, ground traffic congestion, and air quality. By defining the limits in terms of air traffic measures or airport facilities rather than the impacts themselves, there is no incentive for the airlines or the airport authority to reduce the environmental impacts while accommodating increased demand. By establishing limits on aircraft noise impacts, airlines could be allowed to increase operations if they used quieter aircraft. Similarly, by establishing limits on ground access/egress vehicle trips rather than annual passengers, airports could accommodate expanded passenger traffic by actively promoting the use of high-occupancy vehicles or rail access.

### **Airspace/New Technologies**

### **14. Application of new technologies to increase airspace and airport facility capacities, including introduction of NextGen technologies in the region**

While understanding the potential role of new technologies to increase airspace and airport facility capacities in the Southern California region forms a critical aspect of assessing the ability of the current airport system to accommodate growth, for those airports that are limited by policy or legal constraints on their ability to accommodate growth in demand, the benefit of these technologies lies more in reducing delays than enabling expanded levels of air traffic activity.

### **15. Coordination with the FAA to facilitate airspace redesign that could reduce potential future airspace conflicts in the Los Angeles Basin airspace**

Development of regional strategy to meet the future regional aviation demand must recognize those limitations imposed by the airspace structure and procedures in the Los Angeles Basin. Therefore it is important for the SCAG Aviation Program to continue to support coordination between the FAA and stakeholder groups such as the Southern California Airspace Users Working Group both to facilitate airspace redesign to reduce potential future airspace conflicts as well as to ensure that airspace constraints are properly reflected in developing plans to accommodate future regional aviation demand.

## **Adopted Regional Aviation Policies in SCAG's 2008 Regional Transportation Plan**

New regional aviation policies were adopted for the 2008 RTP with input from both the SCAG Aviation Task Force and the SCAG Aviation Technical Advisory Committee (ATAC). They respond to changing circumstances and new priorities in the regional aviation system. The recommended policies are divided into Aviation Guiding Principles and Aviation Action Steps, as follows:

### **Aviation Guiding Principles**

1. Provide for regional capture of economic development opportunities and job growth created by the prospect of significant regional air traffic growth between now and 2035.
2. Distribute maximum opportunity to Southern California airports where population and job growth are expected to be strong and where local communities desire air traffic for economic development.
3. Reflect environmental, environmental justice and local quality of life constraints at existing airports that operate in built-out urban environments.
4. Reflect that each county should have both the obligation and the opportunity to meet its own air traffic needs where feasible.
5. Reflect that the region as a whole has an obligation to help pay the costs of airport environmental mitigation and ground access improvement in counties that serve a disproportionate share of regional air travel demand at their airports.

### **Aviation Action Steps**

1. Support capacity enhancements at existing and potential airports to handle anticipated increases in passengers and cargo volume where it is desired.
2. Mitigate the effects of expanding airports and maximize air passenger and air cargo utilization of outlying airports in less-populated areas so that community impacts are minimized.
3. Support the continued responsibility of SCAG for developing regional aviation and ground access plans for the region.
4. Support the close cooperation between SCAG and other aviation organizations to facilitate the implementation of adopted regional aviation plans prepared by SCAG.
5. Support legislative, marketing and ground access initiatives that promote the decentralization of aviation demand to under-utilized suburban airports where it is desired.

6. Support more flexible use of airport revenues for off-airport ground access projects.
7. Support giving priority to key airport ground access projects in the programming of transportation projects in the Regional Transportation Plan (RTP) and the Regional Transportation Improvement Program (RTIP).
8. Support the development of a regional network of new flyaways that connect to multiple airports via HOV, light rail and commuter rail facilities, to help decentralize aviation demand to under-utilized suburban airports where it is desired.
9. Support efforts to redesign the regional airspace system that may be needed to reduce significant conflicts and delays associated with future air traffic in SCAG's adopted 2035 regional aviation forecast.
10. Support a more active role by the federal government in developing substantial incentives for airlines to upgrade their aircraft fleet to cleaner and quieter aircraft.