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MEETING OF THE

AVIATION TECHNICAL ADVISORY COMMITTEE

**Thursday, May 17, 2012
10:00 a.m. – 12:00 p.m.**

**Southern California Association of
Governments
Los Angeles Office
Policy Room B
818 West Seventh Street
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Los Angeles, CA 90017
213-236-1800**

If members of the public wish to review the attachments or have any questions on any of the agenda items, please contact Michael Armstrong at 213-236-1914 or armstron@scag.ca.gov

Agendas and Minutes for the Aviation Technical Advisory Committee are also available at: <http://www.scag.ca.gov/aviation/index.htm>

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AVIATION TECHNICAL ADVISORY COMMITTEE

AGENDA

PAGE #

Time

“Any item listed on the agenda (action or information may be acted upon at the discretion of the Committee”

1.0 CALL TO ORDER Gary Gosliga, ATAC Chair

2.0 WELCOME AND INTRODUCTIONS

3.0 PUBLIC COMMENT PERIOD

Members of the public desiring to speak on an agenda item or items not on the agenda, but within the purview of this committee, must notify the Chair and fill out a speaker’s card prior to speaking. Comments will be limited to three minutes and the Chair may limit the total time for comments to 20 minutes.

4.0 CONSENT CALENDAR

4.1 Approval of Meeting Minutes from February 16, 2012 Attachment 1

4.2 ATAC Membership List and Contact Information Attachment 16

5.0 PROJECT REVIEW

None

6.0 INFORMATION ITEMS

6.1 Update on Los Angeles World Airport Herb Glasgow
LAWA 15 min.

6.2 Update on Bob Hope Airport Mark Hardyment
Bob Hope Airport 10 min.

6.3 Update on Santa Monica Airport Bob Trimborn
Santa Monica Airport 15 min.

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AGENDA

6.0	<u>INFORMATION ITEMS</u> (Cont'd)		PAGE #	Time
6.4	<u>New FAA Guidelines – Submitting Airport/Aeronautical Survey Data in a GIS Format</u> Attachment	Eric Vermeeren FAA	18	20 minutes
7.0	<u>ACTION ITEMS</u>			
7.1	<u>SCAG Aviation Program – Future Work Program Priorities</u> Attachment	Michael Armstrong SCAG Staff	31	20 minutes
8.0	<u>MISCELLANEOUS ITEMS/ANNOUNCEMENTS</u>			
9.0	<u>FUTURE AGENDA ITEMS</u>			
	Any committee members of staff desiring to place Items on a future agenda may make such a request. Comments should be limited to three minutes.			
10.0	<u>SET NEXT MEETING LOCATION</u>			
11.0	<u>ADJOURNMENT</u>			

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THE FOLLOWING MINUTES ARE A SUMMARY OF THE MEETING OF THE AVIATION TECHNICAL ADVISORY COMMITTEE. AN AUDIO DIGITAL FILE OF THE ACTUAL MEETING IS AVAILABLE FOR LISTENING AT SCAG'S OFFICE.

The Aviation Technical Advisory Committee of the Southern California Association of Governments held its meeting at John Wayne Airport, Eddie Martin Building/Airport Administration, 3160 Airway Avenue, Costa Mesa CA. The meeting was called to order by Mr. Chris Kunze, ATAC Chair and Staff Advisor, Long Beach Airport.

ATAC Members Present:

Dan Burkhart	NBAA (teleconferencing)
Lea Choum	John Wayne Airport
Gary Gosliga	March Inland Port Airport Authority
Mark Hardyment	Bob Hope Airport
Bill Ingraham	San Bernardino International Airport
Chris Kunze	Long Beach Airport
Todd McNamee	Ventura County Airports
Rod Probst	Fullerton Airport
Kari Rigoni	John Wayne Airport

Others Present:

Richard Ayala	City of Ontario
Michael Behen	City of Palmdale (teleconferencing)
E.G. Blankenship	John Wayne Airport
Keith Downs	Mead & Hunt
Richard Eastman	SCAUWG
Mario Fabila	Long Beach Airport
Geoff Gosling	Aviation System Consulting
Loan Leblow	John Wayne Airport
Stelios Makrides	Santa Monica Airport
Alan Murphy	John Wayne Airport
Tom Naughton	OC Airport Working Group
Ron Reeves	URS Corporation
Masoud Sepahi	MARRS Services
Larry Serafini	John Wayne Airport
Ambi Thurai	John Wayne Airport
Courtney Wiercioch	John Wayne Airport
Mike Armstrong	SCAG
Philip Law	SCAG
Alan Thompson	SCAG

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1.0 CALL TO ORDER

Chris Kunze, Chair, called the meeting to order at 10:05 a.m.

2.0 WELCOME AND INTRODUCTIONS

Alan Murphy, Airport Director for John Wayne Airport, welcomed ATAC members and apologized for the extra security associated with President Obama arriving at the airport that morning.

3.0 PUBLIC COMMENT PERIOD

There were no public comments

4.0 CONSENT CALENDAR

4.1 Approval of Meeting Minutes from July 28, 2011

Chris Kunze noted that the minutes were excellent, but he had a few questions. For Action Item 7.0, the minutes discuss the RTP Subcommittee and the fact that it was happy with the regional air passenger demand forecast and the caveats that ATAC added to it. Also, the minutes say that the Subcommittee is finished with its work in reviewing inputs to the 2012 RTP, is happy with the direction set by ATAC and whatever refinements are made to the forecast by ATAC will be directly incorporated into the RTP including new general aviation demand forecasts. Mr. Kunze asked if this was really true. Mike Armstrong responded that this pertains mainly to the RTP technical appendices where the GA forecasts will be, although ATAC can still refine some of the policy-oriented language in the main body of the RTP report even though the public comment period for the RTP is over, as long as the changes are not substantive. The GA forecasts will be discussed at the meeting today. Mr. Armstrong stated that he didn't expect a lot of aviation-related public comments on the Draft 2012 RTP as opposed to past RTPs. Mark Hardyment remarked that under Item 8.0, Miscellaneous Announcements it says that a Notice to Proceed has been issued for the Bob Hope Airport Part 150 update. It should be clarified that a NTP has been issued only for the first phase of the project (noise exposure map update). With these clarifications the minutes were unanimously approved.

4.2 ATAC Membership List and Contact Information

Bill Ingraham noted that the offices for San Bernardino International Airport were relocated and they have a new phone system, and his phone number extension is now 131 instead of 251.

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5.0 PROJECT REVIEW - None

6.0 INFORMATION ITEMS

6.1 Update on John Wayne Airport Construction Projects

Kari Rigoni introduced Larry Serafini, Director of Facilities for John Wayne Airport who gave an update on construction projects at the airport. The JWA construction program totals \$543 million, with \$457 million in Phase I that will be completed by this June. Phase II will be primarily for constructing a new parking structure that is 2-3 years away. Mr. Serafini described and showed graphics of new TSA baggage and passenger screening facilities, new waste disposal facilities, the new Terminal C and parking structure, new aircraft gates, the new Common Use Passenger Processing System (CUPPS) stations with interchangeable modular components, and new art galleries and concessions that were completed or are nearing completion in Phase I. The new Central Utility Plant allows the airport to make most of its own electricity using natural gas-powered lean burn engines. The waste exhaust gas heat is used to make chilled water for distribution to the terminal complex. In the past, 40% of the electrical load was devoted to making chilled water and air conditioning, now the vast majority of that is made from electricity from waste heat. Energy efficiency at the airport is way up because of the new Central Utility Plant, but the overall cost is about the same as before.

Mr. Serafini went on to explain that the new Parking Structure C is the first one in the world to be built with buckling restraint braces. The bars in the parking lot columns are coated with a Teflon material surrounded by a cementitious material and a tube, which keeps the columns from buckling and can withstand many more pounds of compression loads than without the braces, which saves about \$1.2 million in foundation costs. All of the parking structures and terminal building are designed to a 1.5 safety factor in the face of a future major seismic event in Orange County.

Dan Burkhart asked if any of this construction at John Wayne Airport impacts business aviation. Larry Serafini replied there was no impact since one of the criteria at the outset of the construction program was to maintain the same level of GA through the program. A new GA hangar was built to replace one that was torn down to expand the apron, so there was no change in the overall GA capacity of the airport. Mr. Burkhart asked whether there were any changes in GA operations while the construction was ongoing. Mr. Serafini replied that the short GA runway had to be closed in the evening after 7 PM for four years. Chis Kunze asked about the screening of international passengers, and if there were any plans to use that for GA clearances. Mr. Serafini replied that they don't have any plans to do that.

Bill Ingraham asked if the remaining parking structures to be built in Phase II are funded. Mr. Serafini replied that they are funded, but not yet ready to be built. Loan

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Leblow added that they originally contemplated the funding of Phase II through subordinated debt, but due to new cash flows (with lower construction costs due to the recession) the project will now be cash funded, but they don't want to invest the cash upfront if they don't have to so they aren't in a hurry to build the project. Mr. Serafini added that the next phase should be relatively inexpensive since the ramp system has already been built for the entire project. Ms. Lebow said that the airport didn't sell bonds for the project until the bids came in, so they didn't over borrow or under borrow. They had "saved for a rainy day" so they were able to cash fund about half of the project and thus were well received in the market when they went to sell the bonds. Mr. Serafini added that due to the recession, total cost of the program dropped from an original estimated \$652 million to \$543 million, with nothing being dropped or added. Chris Kunze asked what the changes were to the cost per enplaned passenger to the airlines before and after the project. Ms. Lebow responded that it went from about \$9.07 to \$10.60.

Bill Ingraham asked whether parking utilization was close to the 1,000 per million air passenger (MAP) ratio. Larry Serafini replied that it was pretty close, although it varies between vacation and non-vacation periods. Loan Lebow added that the use of valet parking at the airport skews the ratio since it uses parking very efficiently. Chris Kunze asked whether they had given any thought to closing the remote, less expensive parking lot to force parking into more expensive lots. Ms. Lebow responded that they try to balance the fee structure to serve different groups of passengers with different parking preferences.

Chris Kunze asked if there was anything new with international service at the airport. Kari Rigoni replied that AirTran is going to start service to Mexico City and Cabo San Lucas in June, and they already have service to Vancouver and Calgary. Dan Burkhart asked if there were any opportunities for business aviation utilizing customs service. Mr. Serafini responded that the facility is set up strictly to handle commercial traffic, and there are no current plans to handle GA. Mr. Burkhart then asked if there could be any GA use of the existing facilities given that there will some interest in this. Mr. Serafini replied that the US Customs and Border Protection have facility requirements for doing that, and there are currently no plans for meeting those requirements. Mr. Burkhart commented that there are other facilities around the US that share customs services in that Customs personnel visits GA facilities to clear them, and they don't necessarily need big facilities, and that this concept should be considered here. Courtney Wiercioch added that they have heard from GA pilots who are interested in this, and if Mr. Burkhart could quantify the demand for this from the GA side it would be helpful to the airport. If they are paying for full-time Customs staff they would not want them to visit other airports, so it would be helpful if they could quantify the demand for additional services that they have not had in the past. Mr. Burkhart replied that would be difficult, but at one point at Van Nuys Airport before 9/11 they were up to almost 400 clearances a year. The cost per operation is substantial, and there shouldn't be any pushback from the business aviation

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community on sharing the costs for this service. Mr. Serafini responded that the problem is that there is no way to get a GA airplane into the facility because of the way it is designed. Mr. Burkhart replied that the opportunity relates to Customs agreeing to go to the FBOs, which they do around the country. Bill Ingraham added that he is dealing with this issue at San Bernardino International, and in his opinion US Customs can be difficult to work with in terms of providing needed staffing.

6.2 Helicopter Noise Relief Act of 2011

Mike Armstrong Remarked that Larry Welk of the Professional Helicopter and Pilots Association could not make the meeting and was not available to discuss the potential impacts of the Helicopter Noise Relief Act that is working its way through the House of Representatives. The bill was introduced by Howard Berman and would establish flight paths and minimum altitudes for helicopter operations in Los Angeles County, with law enforcement, emergency responders and the military being exempt. Mr. Welk has a presentation that shows current helicopter operations in Los Angeles County, and the potential impacts of this bill on those operations. Mr. Armstrong asked the ATAC members if they would like Mr. Welk to come to a future meeting to give this presentation--is it an appropriate issue for ATAC and SCAG to get involved in? Dan Burkhart replied that the presentation would definitely be worth hearing, there is a lot of value in helicopter transportation. Some of the altitudes suggested by the bill jump up into Class B or near Class B airspace, and from an airspace and operational point of view it is very problematic.

Chris Kunze commented that it would be appropriate for ATAC to discuss the more general issue of legislating airspace. When you start to piece meal airspace issues like this bill does, especially with the airspace complexity that we have in Southern California, it is bad way to proceed compared to comprehensive airspace redesign that the FAA needs to do. It would be better to work with community groups, pilot groups and organizations like ATAC and the Southern California Airspace Users Working Group to try to address these issues versus legislation. Mike Armstrong added that ATAC has taken up helicopter issues in the past--for example, years ago Chris Eberhard developed a handbook for SCAG on helicopter/community relations, so it is not unprecedented for ATAC to get involved in these issues. Mr. Kunze stated that Mr. Armstrong and the new ATAC Chair should work to agendize this item for a future meeting.

6.3 Optimization of Airspace and Procedures in the Southern California Metroplex—
Final Report

Chris Kunze remarked that the final OAPM report for Southern California is available (Mike Armstrong noted that the full report was included in the ATAC agenda packet). The NextGen Air Traffic Management System is expected to be implemented in phases by 2025, including replacement of ground-based radar by a satellite-based

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system to give pilots and air traffic controllers more precise and real-time information regarding aircraft location and weather. FAA thinks that this is very important since they forecast air traffic to increase by 50% by 2025, causing further delays and congestion. Benefits to passengers and pilots from the implementation of NextGen include fewer delays, safer travel, more direct flights, and less time spent on the ground or in holding patterns in the air. Benefits to airports include noise abatement and overall benefits include substantial fuel savings and reduction of greenhouse gas emissions. Initial cost estimates for implementation of NexGen are \$40 billion, with \$23 billion in benefits accruing by 2018.

Chris Kunze noted that the SCAG ATAC has been involved with the OAPM for the last several months. The first stakeholder meeting took place at the FAA Western-Pacific Headquarters in August that was attended by several ATAC members, and the third and final meeting took place on November 3rd. The process has focused on the “low-hanging fruit” that the study team thinks can be implemented within three years without the need for an EIS, since they are under pressure to show some progress. The team focused on LAX, Lindbergh Field, Bob Hope, Ontario, John Wayne, Long Beach, Santa Monica and Van Nuys, and also addressed some specific issues at Camarillo, Oxnard, Fullerton, Palms Springs and few other airports. The team identified around 70 airspace opportunities primarily for STARs and SIDs, for reducing traffic conflicts, fuel burn and/or time-in-mode.

Chris Kunze reviewed an e-mail sent on behalf of ATAC to the FAA study team leader, which expressed the appreciation of ATAC for what they were doing, and recommended additional NextGen implementation measures, the need for which was identified by the study team but didn’t fit into the three-year time frame. The e-mail also identified the need to address changing airspace issues as aviation use grows throughout the regional system that weren’t addressed by the evaluation of current activities, and to identify how the stakeholder outreach process could be continued on an ongoing basis. The report expresses fuel savings and greenhouse gas reduction for strategies shared by multiple airports, and the e-mail noted that it would be beneficial for EIR purposes to break out those benefits by individual airports. Mr. Kunze recommended that ATAC should keep this process going to gather that type of information. The process has been excellent and the study team has accomplished an amazing amount in a short period of time.

Chris Kunze stated that at Long Beach Airport, the recommendations are more important for arrivals than departures, in keeping the arrivals free of GA traffic in some of the practice areas. With tailored arrivals you can almost do a continuous descent approach, instead of holding at 2,000 feet for 10 miles. However, the report didn’t look at that and instead looked at higher altitudes to avoid intermingling with traffic at other airports. Mr. Kunze commented that they would rather look at arrivals being at 3,000 feet and gliding in instead of holding at 2,000 feet with high power. Long Beach intends to continue to follow up with the FAA on this issue, and the FAA

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said that they will look at it. Mr. Kunze recommended other airports should also continue follow up with the FAA on the implementation of NextGen recommendations at their airports.

Mike Armstrong asked how the FAA intends to implement these recommendations over the next three years. Chris Kunze responded that the next step of the study team is to carry out the implementation. Bill Ingraham added that the process goes back to the FAA's design group that will prepare the SIDs and STARs for various airports, and each one of these will have to have an environmental review. Mr. Ingraham noted that he was looking more for a comprehensive redesign of the entire regional airspace basin. Particularly in the eastern part of the basin with the San Bernardino Mountains and other obstructions, it is not particularly efficient to get aircraft into Ontario, San Bernardino and possibly March. Air traffic tends to be routed along the same corridors that automobiles use, which to him doesn't seem to make a lot of sense. There has never been a good look at the overall design of the basin, as the FAA has been done for other basins such as the one for Dallas, which fixed a lot of problems for both arrivals and departures. A more difficult an intense effort would be required in the future to deal with the overall problems here, including those associated with topography. Richard Eastman commented that one of the stated preconditions of this project was to minimize environmental impacts, and the recommendations are designed so as to not require a lot of additional environmental analysis. Additional studies will take place as part of the second phase of this project that is also underway, and a task group in Washington DC is studying the redesign of the entire basin. Hopefully they will reach out like the FAA did with the OAPM study. Mr. Eastman stated that the OAPM team did look at the flows in the eastern portion of the basin and conflicts between airports, but they have not yet addressed those issues in any significant manner.

6.4 Overview of SCAG's Draft 2012 Regional Transportation Plan/Sustainable Communities Strategy

Mike Armstrong introduced Philip Law from SCAG, who is a transportation planner and works out of SCAG's Orange County office. Mr. Law overviewed SCAG's Draft 2012 Regional Transportation Plan and Sustainable Communities Strategy (RTP/SCS) that was released in December 2011 and has just concluded an extensive stakeholder and public outreach process. It is first and foremost a transportation plan that seeks to improve mobility in Southern California, with an investment of \$525 billion in transportation through 2035. With SB 375 there is also a new emphasis on economic sustainability and greenhouse gas reduction with the SCS. About 18 million people currently reside in the region, and another 4 million are expected by 2035.

Mr. Law explained that as a Metropolitan Planning Organization (MPO) SCAG is required by the federal government to prepare an RTP every four years that looks out

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at a minimum to a 20-year horizon for the planning of needed transportation improvements, both capital and operations as well as maintenance of the system. The plan must be financially constrained and meet Federal air quality requirements. The State also sets guidelines for RTP development and now sets targets for the reduction of greenhouse gas emissions through SB 375. The Plan meets these targets including 8% reduction of greenhouse gas emissions by 2020 compared to 2005 levels, and 13% by 2035. In terms of performance benefits the Plan reduces delay by 30% between now and 2035. Also, over twice as many people will be living in “high quality transit opportunity areas” with the Plan. The investments in the Plan will create 168,000 jobs per year. In terms of cost effectiveness the plan will return \$2.90 for every dollar invested.

Mr. Law then described the types of improvements that are advanced by the Plan, including highway, high-occupancy vehicle (HOV) facilities, toll lanes, arterial and local street improvements, and “complete streets” that include bike lanes, sidewalks, landscaping etc. to accommodate modes other than just the private automobile. A significant number of these improvements are provided to SCAG by county transportation plans, and funded by local sales tax measures. On the transit side, a significant amount of passenger rail and bus improvements are included in the plan including expanding the Metro system in LA County with light rail extensions and enhanced bus rapid transit, expanding the MetroLink system that connects five of the six counties, and Phase I of the California High-Speed Rail Project. At \$139 billion by 2035, the operations and maintenance budget in the plan exceeds the transit capital investment. Another \$4 billion will be investment by the Plan in transportation demand management to reduce solo driving, and the Plan invests over \$6 billion in new active transportation (bicycle and pedestrian) improvements. With this Plan, over 62% of the population of the region will be within ¼ mile of a bicycle lane.

For goods Movement, Philip Law remarked that the Plan invests \$47.9 billion in improvements to port access, freight rail capacity, grade separations, and truck improvements. Substantial emission reductions will be achieved through zero or near zero emission freight corridors originating from the ports, going up I-710, and east along SR-60 towards I-15. For land use, the Plan reflects substantial input from and coordination with local governments in meeting SB 375 targets through directing growth to transit opportunity areas, reflecting trends towards more multi-family housing development, and expanding on the concepts established by the successful SCAG Compass Blueprint projects developed around the region that seek increased integration of land use and transportation.

To fund the Plan, Philip Law explained that the Plan assumes a significant amount of new funding (\$220 billion) from new sources. The Plan would continue to rely on local sales tax measures, but leveraging these funds to build project sooner, such through Mayor Villaraigosa’s 310 Plan/America Fast Forward Program. For goods movement, the Plan assumes new truck tolls and user fees to fund additional needed

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improvements. The Plan also proposes a new vehicle-miles-traveled (VMT) fee beginning in 2025. This is needed since the growth of revenues in the Highway Trust Fund is not expected to keep up with growth in driving, and the gas tax is not expected to continue to be a reliable source of revenue because of inflation, rising construction costs and increasing fuel economy of the vehicle fleet that are all eroding the purchasing power of the gas tax.

Lastly, Mr. Law said that the public comment period on the Plan had recently closed, and that the Plan was scheduled for adoption on April 5. After that will be sent to Federal agencies to be certified, and if it isn't certified Federal and State transportation funds for the region would be at risk. The Plan is available on SCAG's interactive RTP web site.

Kari Rigoni remarked that Orange County had submitted collective comments on the RTP, and that she hoped that the airport-related comments got to SCAG. In the SCS portion of the Draft Plan there is some language that got the attention of some of the airports that suggest that airport revenues at congested airports could be used to help decentralize service to uncongested airports. Orange County recommended some changes to this language to clarify that these strategies may or may not be pursued, and that extensive consensus building would be needed to advance them to the next step. Mike Armstrong responded that these comments would probably come to him, and that the language was taken from one of Geoff Gosling's issue papers that were previously presented to ATAC. The language was conditional, but SCAG shouldn't have a problem making the language even more conditional in terms of the recommended changes regarding the need for a regional consensus to implement these types of aviation financial and marketing strategies. Chris Kunze added that it should be clarified that these strategies may be needed in the long term, but it is unlikely that airports will support them now. Mike Armstrong added that someday it may be in the interest of Orange County to find ways of getting more of their passengers to use Ontario Airport as John Wayne reaches its capacity constraints.

Chris Kunze asked about the California High Speed Rail Project in light of the fact that it is very controversial. In the Business Plan for the project there are some pretty aggressive assumptions about diverting air travel demand to high-speed rail travel, how is this treated in the RTP? Philip Law responded that it is certainly a controversial part of the Plan right now. Phase I is in the Draft RTP (Anaheim to the Bay Area) and an MOU is currently being developed between the HSR Authority, Metrolink, the county transportation commissions and SCAG that would take \$1 billion of Prop 1A funding to make improvements in this region to the LOSSAN Corridor and the Metrolink system so that they can operate at significantly higher speeds and serve as part of the Phase I for the high-speed rail project in this region. The SCAG Regional Council demanded this MOU as a condition for putting the State High-Speed Rail Project in the 2012 RTP. Bill Ingraham asked whether the RTP does or does not include the potential impacts of high-speed rail in terms of its

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aviation demand forecast. Mike Armstrong replied that it does not. He added that the HSR Project's Business Plan makes some startling findings about the number of runways and aircraft gates that the HSR Project would substitute for (two runways in Southern California). The basis for these findings is a very hypothetical analysis that assumes an ideal, not realistic HSR ridership forecast, and what this ideal ridership forecast is theoretically equivalent to in terms of runways and gates, without evaluating the actual need for these new runway and gates at airports in this region. Mr. Ingraham remarked that the airport capacity is fairly fixed in this region, and that capacity needs to be preserved over the next 25-30 years. Mr. Armstrong added that that the analysis in the HSR Business Plan is misleading in that it did not account for excess capacity at airports like San Bernardino International, Ontario and March that can accommodate future demand. Mr. Ingraham responded that the capacity may be excess now, but may not be in 2035 and definitely not in 2065. If you adopt some kind of planning forecast that defines limits on airports like the HSR Business Plan does in terms of limits on roads and access, you will limit the access when it is needed.

Geoff Gosling noted that although the SCAG RTP did not attempt to evaluate the potential diversion of aviation demand to the California HSR Project, the update to the Bay Area Plan did so for the Bay Area to Southern California market. The Bay Area concluded that about 6 million air passengers (MAP) would be diverted by 2035, based on the HSR Authority's original demand forecasts. This was considered to be a small but helpful contribution to the Bay Area's future airport capacity constraint problems. Mike Armstrong responded that the 6 MAP figure is consistent with his back-of-the-envelope calculations, and is about 20% of what the HSR Authority's Business Plan is forecasting in their hypothetical analysis that has no planning horizon. Dr. Gosling remarked that in his opinion the most interesting part of the debate about the HSR forecast is that the modeling that supports the forecast shows that the great majority of the HSR ridership will come from autos, not planes. This implies that changes in the aviation system could cause people to choose between flying and driving, which is an issue that is typically ignored in aviation demand forecasting that typically assumes that air travel either happens or doesn't happen. With higher fuel costs, these types of travel mode decisions could become more important than in the past.

7.0 ACTION ITEMS

7.1 Regional General Aviation Demand Forecast for 2012 RTP

Geoff Gosling recapped the forecast approach for the Regional General Aviation Demand Forecast that had been discussed at previous meetings. The approach reflects the different components in the general aviation sector. The projection of flight activity of pilots is based on a cohort analysis approach that looks at changes in the composition of activity levels in the pilot community over time. The input into this

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process is a model of new pilot starts, with gross domestic product (GDP) per capita used to differentiate new pilot starts between counties. Even though GDP has been increasing, new pilot starts have been decreasing so a decline factor has been added to the model. A series of transitions happen as the new pilots proceed through their careers. As pilots get older their flying activity changes as they go through the different certificate categories and some pilots drop out. The cohort modeling produces a distribution of pilots by age and category of certificate. The AOPA pilot survey done last year for California pilots addressed the question of how many hours per year pilots of different ages and certificates flew, and this data was input to the model.

Geoff Gosling remarked that the cohort modeling produced three scenarios: (1) a Baseline Scenario that assumes a continuation of the decline of student pilot starts relative to GDP per capita; (2) a Reduced Decline Scenario that assumes that by 2015 the rate of decline is cut in half, and stops by 2025; and (3) a very aggressive Arrested Decline Scenario that assumes that the decline stops in 2010, and the ratio of pilot starts to GDP per capita remains the same (and pilot starts increase with increasing GDP). Using these three scenarios, forecasts were developed of active pilots by county, class of pilot certificate and age range. From the AOPA survey data flight hours could be computed, and from the flight hours aircraft operations could be derived based on 2010 relationships between flight hours and operations. To separate out local operations from itinerant operations, the change in local operations was based on the change in student and private pilot flight hours, while the change in itinerant operations was based on the change in commercial and airline pilot flight hours.

Geoff Gosling noted that even under the Arrested Decline Scenario, by 2035 the total number of GA operations is slightly less than it was in 2010, since the number of older pilots that are transitioning out of the pilot community do most of the flying. Even though the number of pilots is increased, most of those are younger pilots who don't do as much flying as the older pilots who are transitioning out.

Dr. Gosling then discussed the regional general aviation based aircraft forecast. Instead of looking at the pilot community, this analysis looked at the number of aircraft in the region and the amount of flying they are doing. An attrition model was developed for the based aircraft fleet, to be able to forecast how long aircraft remain in the fleet after they are built. In the 1970's a study was done for the FAA that identified GA aircraft attrition rates that are still reasonably good. You need to know not only how many aircraft are registered, but also how many of those registered aircraft are actively flown. The FAA's Part 135 activity survey done every year provides data on the percent of aircraft of a given age that have been actively flown the previous year. Besides aircraft being lost to the fleet because they are scrapped or exported out of the region, and some aircraft becoming inactive, new aircraft are added to the fleet over time. The age profile of the current fleet is derived from

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adjusted county assessor's data. The data shows that about 80% of the fleet is active, but as the fleet get more than 30 years old that percentage steadily declines. A large portion of the aircraft fleet is already pretty old, with more aircraft dating from the 1970's than any other decade, mostly single engine piston aircraft. Newer aircraft have a larger portion of turboprop and jet aircraft, and helicopters. There has been a steady decline over the last three years in the number of based aircraft, which is probably an effect of the recession. An important question is how rapidly that recovers in the future as the overall economy recovers.

For turboprop and multi-engine piston aircraft, said Dr. Gosling, most of the aircraft are fairly old, and in recent years there are much fewer aircraft but with a greater portion of higher-end turboprop aircraft. For rotorcraft and jet aircraft there is a very different pattern. Much of the fleet is quite young, with most of the aircraft being no more than 20 years old.

Dr. Gosling remarked that it was necessary to make some assumptions about how many aircraft would be added over the next 20 years. It was assumed that aircraft would continue to be added to the fleet at the average rate of the last 10 years, with Los Angeles County getting about half of the added aircraft based on this assumption. Applying this assumption in conjunction with the based aircraft attrition model led to the development of a Baseline Forecast of based GA aircraft by county. This forecast shows a slight growth in the total size of the fleet from about 9,300 aircraft to about 10,000 aircraft by 2035. Applying average hours flown by category of aircraft (from the FAA activity survey) to the forecast of active aircraft gives an estimate of the number of hours flown per year. This can be compared with the forecast estimate of the number of pilot hours flown, which are about 39% higher, which is not unreasonable given that there are some two-pilot operations. Also, the sources of the data are different (the aircraft activity data is national data from the FAA, the pilot activity data is from a statewide AOPA survey).

Geoff Gosling concluded his presentation by noting that there are additional steps that need to be done to complete the regional GA demand forecast. The planned Phase II for the study (not yet funded) would develop an aircraft allocation model for allocating aircraft operations and based aircraft below the level of county, down to individual airports. There was some discussion at the October ATAC meeting whether this level of detail was needed. There are also a number of potential research issues that are posed by this analysis, to better understand the dynamics of the general aviation sector. There is a need to better understand the factors that affect new pilot starts, and how the demand for commercial airline pilots might influence future pilot transition and attrition rates. On the aircraft side there could be more analysis of the different attrition rates between the different types of aircraft. The vast majority of the new single piston aircraft that have been added to the fleet over the last ten years have been home built aircraft, which are likely to have different attrition addition and attrition rates than commercially-built aircraft. Also, the continued addition of the jet

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aircraft and helicopters that have been added in large numbers in recent years may slow down if the need has been met, and if those aircraft have fairly long life spans.

Chris Kunze asked what ATAC needed to do on the draft GA forecast since this is an action item. Geoff Gosling replied that if there are any questions or comments on the methodology or results there is an opportunity to make some revisions. Mike Armstrong added that this information will go in the 2012 RTP Technical Appendices, so the action could be to make revisions to that information. Mr. Kunze replied that it that there are a lot of variables in this forecast as opposed to a simple top down forecast like the FAA does. In terms of the future research that is suggested, the passage of time gives you a lot of information, and for the next RTP a few items could be tracked to come up with a more well-defined forecast for the 2016 RTP instead of continuing to study these issues. Richard Eastman remarked that his company is doing some similar kinds of research in the travel business on why people are traveling and where they are traveling. One of the issues that should be looked at is how the industry is scaling down from big aircraft to smaller aircraft, driven by people who want point-to-point access, which implies growth of small air taxi service due to the need for speed and automation. This in turn implies expansion of the use of more disparate and smaller airports rather than the hubs for short haul travel. The analysis and data presented here haven't addressed these trends in the business and personal leisure travel markets.

Masoud Sepahi asked how GA airports particularly in the outlying counties are going to be sustainable in terms of getting AIP funding and doing improvements given this forecast that shows no growth. Also, how do you justify keeping them open in the face of community opposition? Dr. Gosling replied that the analysis is done at the county level, and the proportion of the higher-end GA operations has been increasing, so the airports that serve that market won't see the decline we are seeing in the overall fleet. Mike Armstrong added that there was a pretty extensive debate about the issue at the last ATAC meeting of allocating the forecast to individual airports, which can be found in the meeting minutes. Bill Ingraham remarked that he didn't agree with even doing the forecast at the county level since migration and redistribution of pilots and aircraft will be a major factor in the future. He said that he agrees with Chris Kunze that there are too many variables in the forecast, and a few things should be tracked over multiple RTPs such as the overall growth in the number of pilots and aircraft and distribution between the major categories of flying activity on a regional basis. Geoff Gosling replied that one of the reasons the forecast is presented at the county level is because much of the data behind the analysis is from the county level. Mr. Ingraham responded that he didn't have a problem with tracking these factors on a regional basis, but we shouldn't get away from detailed master planning and forecasting at a local airport level.

It was asked why the production of aircraft peaked in the 1970's and has declined since then. Geoff Gosling replied that once you produce aircraft they can stay in the

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fleet for 40 or 50 years. As the demand for aircraft has declined since the 1970's, the need for new aircraft has declined. There are a lot of reasons for this including product liability and the cut off of the GI Bill funding of pilot training. Eventually these older aircraft will not be economic to maintain and operate, which may lead to a resurgence of new aircraft sales. Chris Kunze commented that this could also lead to a continuous decline in active pilots and aircraft, particularly with the leaded fuel issue and the likely unwillingness to spend money to upgrade those aircraft, which is another issue that should be tracked. Dr. Gosling suggested that the two main messages that have come from the forecast are that the age distribution of the pilot community is skewed towards older pilots, and over the last 10 years not enough new pilots have been generated to replace them. Also, a lot of the aircraft fleet is also fairly old and growing older and we are not replacing that fleet (except for the high-end aircraft) at rates needed to account for the attrition rate. Unless something changes in these dynamics, active pilots and aircraft will both continue to decline. Monitoring is good, but we need to know what needs to be monitored so we can understand these dynamics better. Mr. Kunze replied that he thought that AOPA would be very willing to allow SCAG to resurvey their membership in few years to track changes in key variables. Dr. Gosling added that there are questions that can be added to the survey to obtain information on issues we didn't think to ask about before.

Mike Armstrong remarked that the GA forecast information should be considered "food for thought," which is why it will be in the Technical Appendices and not the main body of the 2012 RTP. It has some controversial elements that need to be monitored and looked at in more detail in the future. Alan Thompson added that the increasing cost of operating and maintaining aircraft should also be monitored.

7.2 Election of New ATAC Chair and Vice-Chair

Gary Gosliga, the current ATAC Vice-chair, was nominated and seconded to serve as the new ATAC Chair. Mr. Gosliga was elected unanimously. Rod Probst was nominated and seconded as the new Vice-chair, and was elected unanimously.

8.0 MISCELLANEOUS ITEMS/ANNOUNCEMENTS

Chris Kunze distributed a hand out from the California Transportation Commission Technical Advisory Committee on Aeronautics (TACA) on legislative recommendations for reallocating airport funding from user fees to meet GA needs. Mike Armstrong announced that he will participate on a panel at the Four Corners Coalition 2012 Economic Summit on May 16th on the regional economic importance of Ontario International Airport. The event will be held in Diamond Bar. Alan Thompson added that the Four Corners Coalition represents local jurisdiction in the area where Los Angeles, Orange, San Bernardino and Riverside Counties intersect, and SCAG helps the group staff their meetings. Dan Burkhart announced that a business aviation forum will be held at Van Nuys

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Airport on April 12th. About 25 aircraft will be on display and there will be 70-80 exhibitors.

9.0 FUTURE AGENDA ITEMS

10.0 SET NEXT MEETING LOCATION

Mike Armstrong suggested that ATAC meet on a quarterly basis for the time being since the RTP process is wrapping up and there are no ongoing aviation projects. Mr. Armstrong said that he would work with the new ATAC Chair Gary Gosliga to establish a date and agenda for the next meeting that will be held at SCAG.

11.0 ADJOURNMENT

The meeting was adjourned by Chairman Kunze at 12: 40 pm.

AVIATION TECHNICAL ADVISORY COMMITTEE PHONE/FAX/E-MAIL LIST

Last Update: 5/10/2012

MEMBERS:						
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			Corona Municipal Airport			
			Chemehuevi Airport			
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			Compton Airport			
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			Big Bear City Airport			
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AVIATION TECHNICAL ADVISORY COMMITTEE PHONE/FAX/E-MAIL LIST

Last Update: 5/10/2012

MEMBERS: Page 2

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Propst	Rod	Airport Manager	Fullerton Municipal Airport	(714) 738-6323	(714) 738-3112	rodp@ci.fullerton.ca.us
Richardson	Park W.	Airport Manager	Hi Desert Airport	(760) 366-2281		
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Rowena	Mason	Airport Manager	Santa Paula Airport	(805) 933-1155	(805) 933-1155	rowenaszp@yahoo.com
Santos	Barbara	Executive Director	Riverside County Airports	(951) 343-5493	(909) 688-6873	bsantos@rivcoeda.org
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Schneider	Gerd	Airport Manager	Hesperia Airport	(760) 948-1177	(760) 948-1177	
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Smith	Tahirih	District 7	Caltrans	(213) 897-1347	(213) 897-1337	tahirih_n_smith@dot.ca.gov
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Toor	Paul	Director of Public Works	City of Banning	(909) 922-3130	(909) 922-3128	cobpw@earthlink.net
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Volk	Christopher	Army Representative	FAA, Western Pacific Region	(310) 725-3909	(310) 725-3915	christopher.volk@faa.gov
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Zehr	Steve	Asst. Director of Aviation	Palm Springs International Airport	(760) 318-3800	(760) 318-3815	stevez@ci.palm-springs.ca.us
Zucker	Marty	Business Manager	Zamperini Field Airport	(310) 784-7911	(310) 784-7930	

SCAG STAFF:

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Thompson	Alan	Senior Planner	SCAG	(213) 236-1940	(213) 236-1963	thompson@scag.ca.gov

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Federal Aviation
Administration

FAA Airport Surveying - GIS Program

Airports GIS

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Airports Geographic Information System (AGIS)

The Airports Surveying-GIS program helps the Federal Aviation Administration (FAA) collect airport and aeronautical data to meet the demands of the Next Generation National Airspace System.

Guided by Advisory Circulars, you, the airport sponsor or proponent, are a key link in the

News & Highlights

Latest News Letter

[System Release Newsletter \(3.0\)](#)

information chain. A single web app lets you access airport data and submit changes. The changes match defined business rules to ensure the proper FAA office is notified.

We hope to reduce reporting and processing time for an airport change from “ up to a year” to a publication cycle or two.

The FAA is streamlining the existing survey application and integrating other aeronautical applications into a single Internet portal for submission and delivery of airport and aeronautical data. Airports GIS currently supports open data standards, enhanced workflow and tracking capabilities, automatic validation of all submitted data,

and a GIS viewer.

We are developing electronic Airport Obstruction Charts and electronic Airport Layout Plans (for Phase 2). Our ultimate goal is to integrate multiple versions of the airport data: preliminary, current, planned, and temporary. And to share data with other FAA systems such as iOEAAA and eNASR. Stay tuned for future implementations.

There is a tremendous amount of work ahead, but it will be worth it. Please continue visiting to see our progress.

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RELEASE: 3.0

Newsletters to Accompany New FAA Airports GIS System Releases

The FAA Office of Airports Safety & Standards, Airports Engineering Division (AAS-100) is proud to announce the publication of newsletters to accompany each new release of the Airports GIS system. These newsletters provide general overviews of major system updates, and inform you of up-and-coming system design changes. This newsletter represents our first installment.



AC-17C RELEASED

The FAA Office of Safety and Standards, Airports Engineering Division (AAS-100) released an updated version of **AC 150/5300-17C** on Sept 30, 2011. Changes and updates to this Advisory Circular (AC) include enhanced airport data gathering technologies such as Light Detection and Ranging (LIDAR). The AC also boasts a new title, ["Standards for Using Remote Sensing Technologies in Airport Surveys."](#)



in this release...

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- Airport-Centric...A New View! **P.2**
- New Additions to Project Creation **P.3**
- Design/As-Built – A Closer Look **P.4**
- Additional Release 3.0 Changes **P.5**

Release 3.0 - New Functionality and a New Look

The Federal Aviation Administration proudly announces Release 3.0 of the FAA Airports GIS online project and data management system. This new system update, due for release in January 2012, will replace the existing online system and is one of several major system upgrades planned for FY2012.

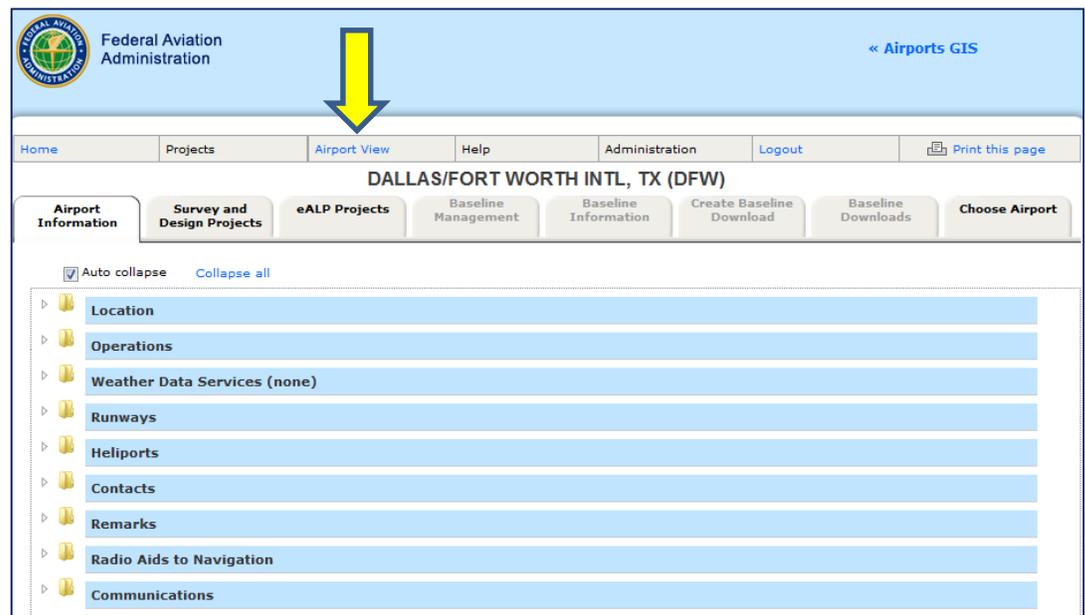
Airports GIS Release 3.0 includes Graphical User Interface (GUI) upgrades, project workflow enhancements, two new project workflows entitled **Design/As-Built** and **Survey Work (PACS/SACS only)**, several electronic Airport Layout Plan (eALP) assembly changes including several workflow changes and the

inclusion of electronic signatures, and a new way to view airport data from one central location known as the **Airport-Centric** view (shown below).

Forthcoming Airports GIS system releases will include links to online resources and support enhanced visual reference systems such as Google Earth™ and ESRI Arc GIS™. System enhancements and training products will be provided with each significant system release.

Training videos providing complete walkthroughs of all system changes are currently under development. Expect release of these training videos by February 2012.

Screen shot of the new Airport-Centric view.



Viewing Data the Airport-Centric Way

Secrets of a Successful Airports GIS Survey Upload

Having trouble uploading survey data to the Airports GIS system? Here are a few “tips & tricks” you can add to your arsenal of internal quality review checklists to make this process a lot smoother:

Tip #1: Download and use **FAA geodatabase templates**. These templates make it easier to create new and compliant AC-18B survey files for upload to Airports GIS.

Tip #2: Ensure all files include critical airport reference points. Incomplete survey files will produce errors. The Airports GIS validation system cross-references certain associated feature data to ensure quality control. All survey uploads require, at a minimum, the **Airport Reference Point (ARP)** and the **Airport Elevation** in the **Airport Control Point** layer as critical airport reference points.

Tip #3: Use the **Test a Survey File** tool until you get a good upload (*System Administrators call this tool the **Sandbox***). This tool saves every test file iteration you submit while the project writes over your last upload. Help Desk Administrators can use data from this tool to evaluate your previous survey tests for trends and file errors.

Tip #4: It's all about the **Status**. Make sure all associated features classes have the same **Status** value. Some examples of **associated feature classes** include runways and runway ends, and airport NAVAIDS and their perpendicular points (if required).

Look for more of these tips in the next version of the Airports GIS System Release Newsletter!



The Airports GIS System Release 3.0 includes the long-awaited system enhancement known as the Airport-Centric viewer. Under development for over a year, this exciting new feature allows you to view and access all facets of airport data from a single source. You can manage airport survey data, airport projects and baseline data sets all from one central location. To access this feature, log in to Airports GIS and click **Airport View** at the top of the main page (see screenshot page 1).

The default **Airport View** tab is titled **Airport Information**. This tab displays published airport data in several expandable categories (To expand each category, click the arrow (▷) to the left of each folder icon.). This published and organized FAA airport data is pulled directly from the National Flight Data Center (NFDC) database, which is also known as the National Airspace System Resource (NASR).

Use the second tab, **Survey and Design Projects**, to access, view, and manage all current and completed projects for the selected airport. This tab lists project types, current status, and next actions to be completed. View additional details for each project by clicking on the arrow (▷) to the left of the associated project folder icon. To go directly to a project, click on the project number. You can also access and download all submitted project survey data directly from this tab. You will find functionality under the **eALP Projects** tab. (Note to users: If the selected airport does not have any eALP projects started, this tab will not be accessible and will remain grayed out.)

The **Baseline Management** tab lets you create and manage the official on-file airport baseline dataset. After a project is complete, a designated airport data specialist uses this tab to review and eliminate data ambiguities and redundancies, and merges new survey data with the established airport baseline dataset. This essential functionality is critical to ensuring the develop-

ment of a quality dataset and will require additional training. These additional training videos will be posted on the FAA Video [Training Series \(VTS\)](#) website after they have been approved for public distribution.

After creation, an airport baseline dataset can be downloaded (only in the **Airport-Centric** view) by anyone with approved access. This file contains the most current and up-to-date features from completed projects. Uncompleted project data cannot be merged into the airport baseline until it has been verified. Supported download formats include .DWG, .SHP, and .DGN, with Google Earth support scheduled for FY2012.

After managing one airport, you can easily move to another airport by clicking the **Choose Airport** tab or the **Airport View** link at the top of the page. Both links will bring you back to the initial **Choose Airport** user input page. Type in an airport 3-letter ID and click **Select**.

The Airport-Centric Viewer enables users to “...manage airport data, airport projects and baseline data sets all from one central location.”

For questions about the **Airport-Centric** view, or any other Release 3.0 updates, please contact the Airports GIS Help Desk (*See the last page of this newsletter for contact information and hours of operation.*).



The Debut of Two “New Survey Project” Additions

Airports GIS Release 3.0 includes two **New Survey Project** selections when you create a new Airports GIS project: **Design/As-Built Airport Data Project** and **Survey Work - Establish permanent geodetic control (PACS/SACS)**. These additions give airport sponsors additional flexibility when creating airport projects. In addition, these new workflows are streamlined and less ambiguous in their deliverable requirements.

The **Design/As-Built** project type reflects the incremental workflow of the project. It lists the proposed airport information, adds more detailed and more accurate design information, and culminates in a set of features that represents the as-built state of the airport. Turn to Page 4 of this newsletter for a more information about this workflow and its functionality.

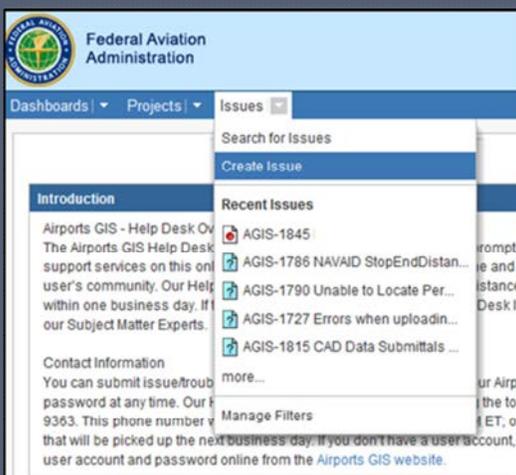
The **Survey Work**, or **PACS/SACS** only, survey purpose creates a standard workflow that only requires contractors to submit a Geodetic Control Plan; no other plans are required. This project type also requires the submittal of a survey file that contains the new, or recovered, geodetic control marks, the ARP, and the Airport Elevation control points. Currently, these project types are handled by NGS (besides the SOW review). Any questions regarding them should be directed to the NGS subject matter expert assigned to your specific airport project.

In previous versions of Airports GIS, most project workflows required contractors to upload “placeholder” documents as plan deliverables even though they were not a requirement of the project. Airports GIS Release 3.0 lets you select or deselect plan submittal requirements during project creation. If a specific plan is required for the selected project workflow, the system prompts the user with a pop-up warning, and then automatically opts-in that plan for project submittal.

For more information on this topic, contact the Airports GIS Help Desk.

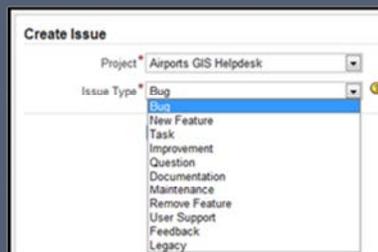
Above: Screenshots of the new **Design/As-Built** addition to Step 1 of the airport project creation process.

Below: Screenshot of the new **Survey Work (PACS/SACS)** purpose addition to Step 3 of the airport project creation process.



Airports GIS Help Desk Gets a Facelift

The FAA Airports GIS Help Desk system recently received a significant software upgrade. This new system offers improved issue tracking tools, and delivers user e-mail notifications of ticket actions and resolutions. During ticket creation, you can upload multiple support files and include screen shots for additional reference. Our system developers analyze this data and use it to plan modifications and upgrades.



The Airports GIS Help Desk Team aims to resolve all requests for assistance on supported applications within one business day. You can submit issue and trouble tickets directly to our Help Desk using your Airports GIS user account and password. Just click the [Airports GIS Support Desk Request](#) link at the bottom of the log-in page.

Navigating the New “Design / As-Built” Workflow



After a significant period of coordination, discussion, development, and workflow refinement, the FAA Airports GIS System Development Team is proud to announce the release of the new **Design/As-Built** project workflow. As a significant part of the Release 3.0 system enhancement, this new project workflow provides airport managers with a central location to create and manage these critical airport projects. From initial design submittals, to final as-built reviews and operational dates, this workflow does it all!

calendar tool. Once this date is set, all of the required lines-of-business (LOB) coordination suspense dates are calculated and displayed. Users click check boxes next to each LOB date when the task is complete. (Hint: Mouse over each LOB title to see how each date is calculated.). The project manager will set the actual operational date of the project and approves survey data at the very end of this process (11).

(5) The **SOW/Concurrence** tab has not changed in this release. Remember, submitting documents involves clicking two **Submit** buttons: one to upload and one to submit. To make sure all of

is directly associated with design data. In each design project, more than one design **Alternative** to construction or installation can be submitted. When this occurs, the project manager can choose only one **Alternative** (using the drop box provided under the word **Alternative** - see page 5) to complete coordination through the environmental and airspace review processes. The sample on page 5 shows that design **Alternative #2** was selected as the final approved data.

The selected data is used to coordinate Environmental and Airspace review actions.

FPO Deadline	NGS Deadline	NFDC Deadline	Proposed Operational	AIRAC Publication
05/19/2012	08/17/2012	10/01/2012	11/02/2012	11/15/2012

A sample Design/As-Built page

When users select **Create New Survey Project** for an airport, step 1 of this process now presents an additional project selection type: the **Design/As-Built Airport Data Project** (see page 3 for a screenshot of this menu). After completing this 4-step setup process, the project will open and look similar to the screenshot provided below.

(1) Users access the Airport-Centric viewer (see page 1) by clicking the **Airport View** link located on the main toolbar at the top of the project. To navigate to the Airport-Centric viewer for the current airport, click the **Project Summary** tab (3), then click the link provided below the airport name (2).

(3) The **Project Summary** tab incorporates a proposed operational date (or estimated project completion date) for project data. The project creator clicks the **Change Target Operational Date** (4) link and selects a date in the pop-up

your required actions are complete, check the **(Name), your next action(s):** prompt just below the **Project Summary** tab. As a reminder, all documents submitted to Airports GIS projects must be in non-editable format such as .PDF.

(6). The new **Design** tab includes a series of sub-tabs (see page 5) that support the submittal and coordination of project design data. This tab contains the same process tabs located in the **Survey** tabs for previous projects plus a few new additions and survey data requirements. **Notice: The next few paragraphs are very important and may impact system functionality!**

The **Download File** tab is here for quick access to file type translations. Supported translation types include AutoCAD (.dwg), ESRI (.shp), and Microstation Map (.dgn).

Under the **Update Phases** tab the feature class attribute **Alternative** plays a big role in this part of project management because it

After all review and approval actions are complete and construction begins, the project manager sets the data to **Work in Progress**.

After the work has been completed and the As-Built survey has verified that nothing has changed with the design data, the project manager sets the data to **As-Built**. This action automatically sets the submitted design features to an As-Built status, and transfers the data over to the **As-Built Survey** tab (9).

If, after completing the as-built survey, the contractor finds that the data differs from original design data, the contractor must upload a corrected survey file along with all required final report documentation into this tab (9). When uploading new data, the contractor must include a summary document outlining the reasons for the new survey file and all changes made to original design data. (continued page 5)



(Warning: Do not click Submit for Verification until all documents are uploaded.) After all support documents have been uploaded, click **Submit for Verification**.

(7-8) There were no functionality changes to the **Geodetic Control Data** and **Imagery Data** tabs Release 3.0, but some actions in these tabs directly affect the function of others. For instance, the **As-Built Survey** tab will not open if a plan is pending approval, and if all steps in the **Design -> Update Phases (6)** sub-tab have not

been completed. Make sure all steps have been completed.

(9) (Recap) If the As-Built survey identifies that changes to the original submitted design data are required, the contractor may upload a new corrected survey file. Be sure to include a detailed document listing all changes made.

(10) There were no changes made to the **Verification** tab.

(11) Using the **Operational** tab, the sponsor sets the all of the As-Built data an operational

status. This completes the project and allows the new data to be reviewed and set for merging into the airport's baseline dataset under the Airport-Centric **Baseline Management** tab.

Final Comments – This is a general overview of functionality within the new **Design/As-Built** project workflow. A full project walkthrough will be available in an upcoming Video Training Series (VTS) video to be posted on the FAA website at the following web address:

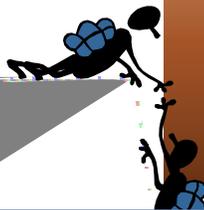
<http://www.faa.gov/airports/engineering/training/agis/>.

Sub-tabs available on the **Design** tab. In this example, Alternative 2 is the final approved data.

Download File Design File Upload Validation Summary Validation Errors Design Viewer Update Phases					
	Last Set	User	Notes/Comments		
Alternative 2	Environmentally C	11/04/2011 12:49 PM	Todd Johnson	Cleared on this date	
6	Airsaced	11/04/2011 02:40 PM	Brian Love	Cleared on this date	
	Work in Progress				
	As-Built				

Need More Help?

We encourage you to use the new and improved **Airports GIS Support Desk Request** available online at any time. Help Desk tickets are resolved in a timely manner and include user email updates. **You can also reach a Help Desk staff member between the hours of 8AM-8PM ET Mon-Fri at 1-877-503-9363.**



WEB LINKS

FAA Airports GIS

<https://airports-gis.faa.gov/>

Airports GIS Help Desk

<http://arp-helpdesk.isicns.com/secure/Dashboard.jspa>

FAA Airports GIS - Progress Through Innovation





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Step 1 – Funding the Survey

Your survey may be eligible for [Airport Improvement Program \(AIP\)](#) grant funds. To review AIP eligibility, contact your local [FAA Airports District Office \(ADO\)](#) or [Airports Regional Office](#).

Step 2 – Hiring a Surveyor

Before hiring a surveyor to conduct your survey, consult these advisor circulars (ACs) and sample forms.

AC 150/5100-14	Architectural, Engineering, and Planning Consultant Services for Airport Grant Projects
Statement of Work (Templates)	SOW illustration for an Aeronautical Survey and Airport Airspace Analysis (Supports approach procedure development)
Selection Process	SOW illustration for a General Construction Project (Does not involve runway data)
	SOW illustration for an eALP Project
	Addendum to Statement of Work (Discusses other survey activities such as sub-surface utilities, Category II/III operations, more.)
	Link to Qualifications for Program Manager, Team, Contractor

These are samples only and do not replace any state or local requirements, guidelines, or formats you may be required to follow.

Step 3 – Conducting the Survey

To ensure safety, all survey data collected by your contracted surveyor must meet the accuracy requirements in these ACs. They spell out how to collect and format data for National Geodetic Survey (NGS) to validate and approve.

AC 150/5300-16	General Guidance and Specifications for Aeronautical Surveys: Establishment of Geodetic Control and Submission to the National Geodetic Survey
AC 150/5300-17	Standards for Using Remote Sensing Technologies in Airport Surveys
AC 150/5300-18	General Guidance and Specifications for Aeronautical Surveys: Airport Survey Data Collection and Geographic Information System Standards

You submit the completed survey through the Airports GIS web site.

Questions?

For additional information, consult the [Airports GIS Support Desk Request](#) online or call 1-877-503-9663.



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Surveyor Introduction

Congratulations. You have been selected to join an elite group of survey professionals, those performing in the very specialized world of airport surveys. Gathering high-accuracy aeronautical information requires specific tasks and deliverables, some of which may be all-new to a traditional land surveyor.

The documents and information on this web site ensure you have the right tools to complete your work in a timely and efficient manner. The FAA, in concert with the National Geodetic Survey (NGS) Aeronautical Survey Program, developed these materials. If you need more clarification, or just have suggestions on how to make the process easier, please let us know.

AC 150/5300-16	General Guidance and Specifications for Aeronautical Surveys: Establishment of Geodetic Control and Submission to the National Geodetic Survey
AC 150/5300-17	Standards for Using Remote Sensing Technologies in Airport Surveys
AC 150/5300-18	General Guidance and Specifications for Aeronautical Surveys: Airport Survey Data Collection and Geographic Information System Standards

FAA Form Downloads

[Download All](#) as zip file, or as individual files below:

- [FAA Airport Field Survey Checklist General](#)
- [FAA Deliverables Checklist](#)
- [GPS Observation Log Sheet](#)
- [Interview with Air Traffic Control Tower Chief](#)
- [Interview with Airport or Operations Manager](#)
- [Interview with Facilities Personnel](#)
- [Navigational Aid Facilities Abstract](#)
- [Navigational Aid Facility Sketch](#)
- [Navigational Aid Screening and Interference Measurement Sketch](#)
- [Non-Vertically Guided Airport Airspace Analysis Checklist](#)
- [Pencil Rubbing Form](#)
- [Photographic Flight Report](#)
- [Runway Data Sheet](#)
- [Station Description and Recovery](#)
- [Station Location Sketch and Visibility Diagram](#)
- [Station Table and Recon Checklist](#)
- [Vertically Guided Airport Airspace Analysis Checklist \(draft\)](#)

Survey and Quality Control Plan Templates

- [Download](#) sample template for Survey and Quality Control Plan (AC 150/5300-18)
- [Download](#) sample template for Imagery Plan (AC 150/5300-17)
- [Download](#) sample template for Geodetic Control Plan (AC 150/5300-16)

AC 150/5300-18B Chapter 5 Geographic Format Templates

Full Versions:

- [Download](#) AutoDesk Format
- [Download](#) Bentley (Microstation) Map Format
- [Download](#) ESRI File Geodatabase Format

Instrument Procedure Development (IPD) Version: This version is to be used for all survey types involving instrument procedure change review or new procedure development.

- IPD schema for the AutoDesk Format is within the [full Autodesk Format version](#)
- IPD schema for Bentley (Microstation) Map Format is unavailable at present
- [Download IPD](#) for ESRI File Geodatabase Format

Data Migration Tool (DMT) - No Longer Supported

- Data Migration Tool for Autodesk Civil 3D 2008™ - No Longer Supported
- Data Migration Tool for Autodesk Civil 3D 2009™ - No Longer Supported

Questions?

For additional information, fill out the [Airports GIS Support Desk Request](#) online or call 1-877-503-9663.

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FAA Airport Surveying - GIS Program

[Login to Airports GIS web application.](#)

Airports Geographic Information System (AGIS)

The Airports Surveying-GIS program helps the Federal Aviation Administration (FAA) collect airport and aeronautical data to meet the demands of the Next Generation National Airspace System.

Guided by Advisory Circulars, you, the airport sponsor or proponent, are a key link in the information chain. A single web app lets you access airport data and submit changes. The changes match defined business rules to ensure the proper FAA office is notified.

We hope to reduce reporting and processing time for an airport change from “up to a year” to a publication cycle or two.

The FAA is streamlining the existing survey application and integrating other aeronautical applications into a single Internet portal for submission and delivery of airport and aeronautical data. Airports GIS currently supports open data standards, enhanced workflow and tracking capabilities, automatic validation of all submitted data, and a GIS viewer.

We are developing electronic Airport Obstruction Charts and electronic Airport Layout Plans (for Phase 2). Our ultimate goal is to integrate multiple versions of the airport data: preliminary, current, planned, and temporary. And to share data with other FAA systems such as iOEAAA and eNASR. Stay tuned for future implementations.

There is a tremendous amount of work ahead, but it will be worth it. Please continue visiting to see our progress.

News & Highlights

Latest News Letter

[System Release Newsletter \(3.0\)](#)

MEMO

DATE: May 16, 2012

TO: Aviation Technical Advisory Committee

FROM: Michael Armstrong
Aviation Program Manager
213-236-1914/armstron@scag.ca.gov

SUBJECT: Future Work Program Priorities for the SCAG Aviation Program

With the adoption of the 2012 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), SCAG is now primarily focused on implementing recommended strategies in Adopted Plan over the next fiscal year, particularly for the SCS. Currently there are no aviation-related projects programmed in SCAG's Draft FY 12-13 Overall Work Program. ATAC can play an essential role in highlighting the need for SCAG to begin addressing regional aviation-related issues as soon as possible, by setting priorities for the SCAG Aviation Program over the next year. Potential initiatives and projects to be considered by ATAC for recommending to SCAG management as priorities for the SCAG Aviation Program over the next year are listed below. These are taken from Regional Aviation Action Steps recommended by ATAC and adopted for the 2012 RTP, as well as recommendations in the 2012 RTP Airport Ground Access Report for assisting future RTP updates.

1. Initiate work on conducting a region-wide air passenger and airport employee survey
2. Initiate work on developing an in-house regional aviation demand forecasting model
3. Complete the Phase II Regional General Aviation Demand Forecast Project
4. Evaluate the potential for express bus services to underutilized secondary airports, and evaluate funding opportunities and constraints that limit the provision of high-occupancy public transit services to underutilized secondary airports
5. Establish a Regional Airport Ground Access Task Force to define potential projects and programs to improve accessibility to underutilized secondary airports, and to identify new funding sources for those projects
6. Sponsor and support new legislation that allows for more flexible use of airport revenues for off-airport ground access projects
7. Sponsor and support new legislation to allow for underutilized airport property to be used for revenue-generating non-aeronautical uses, and coordinate with the FAA to make appropriate changes in their guidelines concerning non-aeronautical uses
8. Conduct updated regional aviation economic impact studies
9. Conduct additional airport "Smart Growth" project using the Airport Smart Growth Framework developed for the Chino Airport Smart Growth Demonstration Project
10. Conduct information sharing forums for the region's Airport Land Use Commissions, and refine SCAG's regional GIS data base to assist airport in developing Airport Land Use Compatibility Plans, and in submitting airport and aeronautical data to the FAA in a GIS format

MEMO

11. Continue to coordinate with the FAA Optimization of Airspace and Procedures in the Metroplex (OAPM) Program for Southern California and similar airspace modernization activities, in coordination with the Southern California Airspace User's Working Group (SCAUWG)
12. Continue to advocate that the region should serve as an early "test bed" for the phase implementation of new airspace/NextGen technologies