MEETING RECAP
VISION 2050 AIRPORT MASTER PLAN
COMMUNITY ADVISORY COMMITTEE

Date: Monday, May 3, 2010

Location: TriPoint YMCA

Subject: Vision 2050 San Antonio International Airport Master Plan – Meeting #3

The meeting was convened at 1:30pm

Attendees:

Community Advisory Committee members:
Joe Aceves, Bexar County Infrastructure Services
Marco Barros, San Antonio Tourism Council
Stephanie Bocanegra, San Antonio Water System
Michael Meek, New Braunfels Chamber of Commerce
Andrea Marks, University of Texas Health Science Center
Sylvia Mendiola, VIA Metropolitan Transit
Zinnia Salcedo, Blue Star Contemporary Art Center
Liz Worley, Hill Country Village

Representing the San Antonio International Airport:
Kimberly Coleman, Contracts Coordinator
Richard Johnson, Public Relations Director
Tim O'Krongley, Assistant Director
Barbara Prossen, Marketing and Community Relations Director

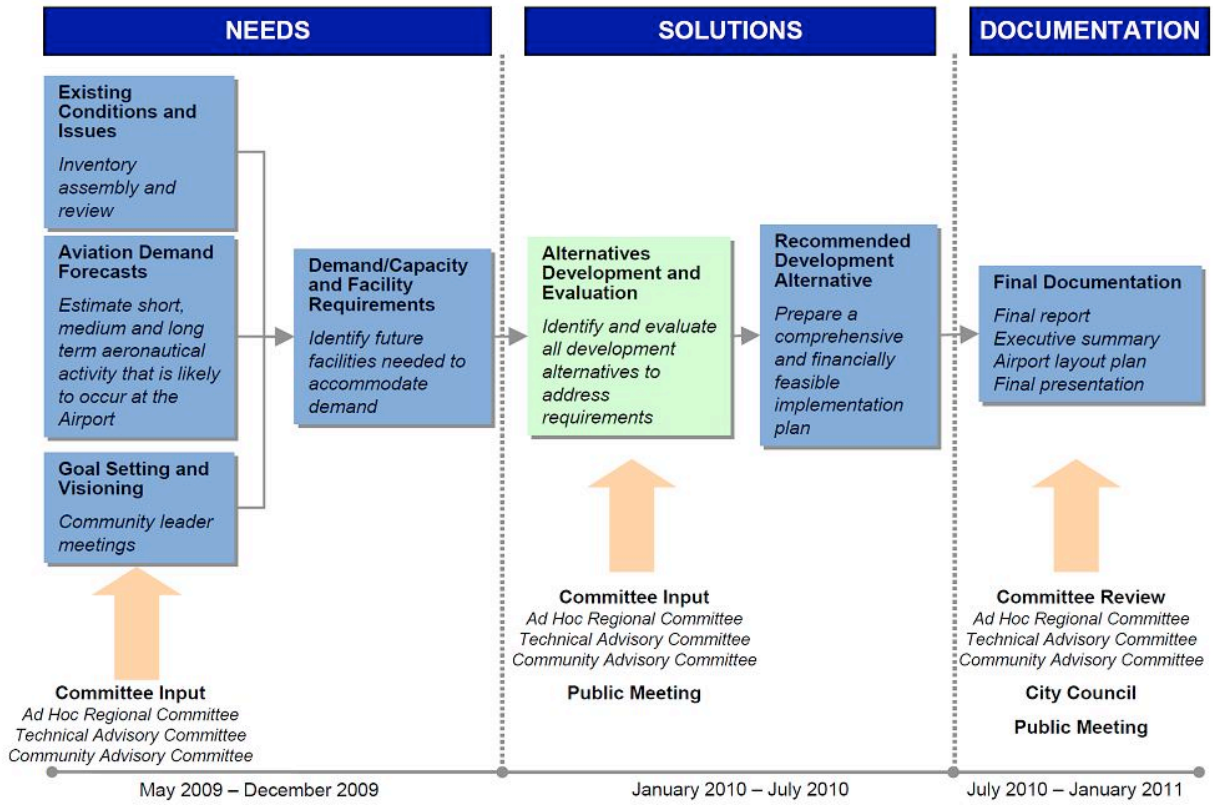
Representing the Vision 2050 Airport Master Plan project team:
Larry Bauman, AECOM
Elliott Lindgren, AECOM
Holland Young, Jacobs Consultancy
Julie Gueho, Jacobs Consultancy
Michael Gallis, Michael Gallis & Associates
Jeff Coyle, KGBTexas
Will Ellis, KGBTexas

Progress to Date

The project team began with an update of the progress to date. The NEEDS phase of the Master Plan is complete; the team assembled the inventory of existing facilities to analyze existing conditions and issues at San Antonio International Airport (SAT). The team also developed forecasts of aviation demand, which have been approved by the FAA. The team set goals for the project based on input from the three advisory committees. The findings from these elements of the project were combined and analyzed to compare forecasted demand with existing capacity and to establish future facility requirements to accommodate demand.

The team is now in the SOLUTIONS phase of the project. The team is currently developing and evaluating various alternatives to address the facility requirements. The purpose of the advisory committee meetings is for the committee members to provide input on the alternatives so that the project team can develop a recommended development alternative. The first public meeting on the Vision 2050 Airport Master Plan, scheduled for May 27 from 5-8 pm at the TriPoint YMCA, will also gather input to guide the plan. The recommended alternative will be completed by approximately July 2010 and will include a comprehensive financially feasible implementation plan.

The DOCUMENTATION phase will begin in July 2010 and will include the final report, executive summary, airport layout plan and final presentation to the City Council. The project team will hold additional committee meetings in this phase and another public meeting.

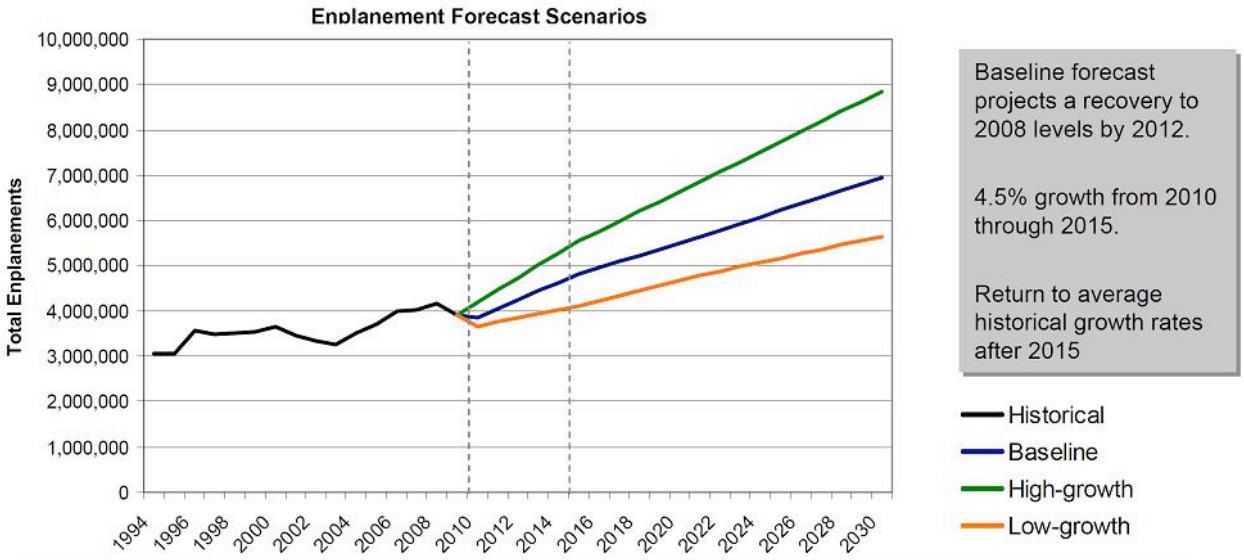


Forecasting

The project team explained the assumptions used to develop the forecast. At the February meetings, the committees had requested a technical memorandum on the forecasts, which was posted to the airport's web site April 14 and distributed to the committees via email April 26.

The team developed forecasts of future demand by looking at economic trends -- nationally, regionally, as well as the growth in specific sectors of the local economy, such as healthcare/bioscience, information technology, aerospace, tourism and the military. The team also looked at SAT's historical traffic and trends.

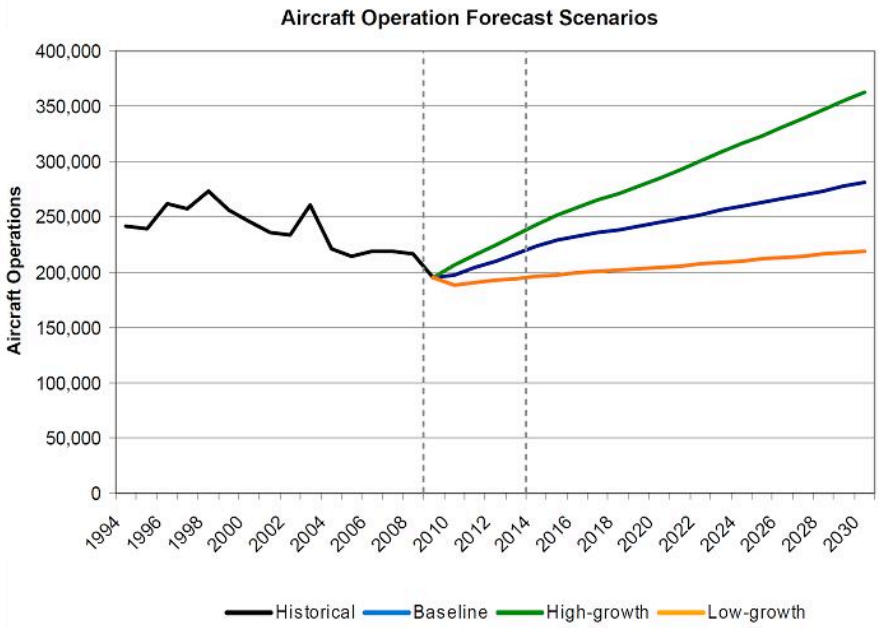
The team prepared baseline, low-growth and high-growth forecasts to account for the inherent uncertainty of aviation demand forecasting. In terms of enplanements -- the number of passengers boarding a flight, including origination, stopovers and connections -- the team forecasts an average annual growth rate of 2.8% through 2030, from 3.9 million enplanements in 2009 to 6.9 million enplanements in 2030.



DOMESTIC VS. INTERNATIONAL ENPLANEMENT FORECASTS

Forecast	2009	Projections				Annual Growth Rate
		2010	2015	2020	2030	2009-2030
Baseline	**3,905,439**	**3,863,000**	**4,814,000**	**5,500,000**	**6,940,000**	**2.8%**
Domestic	3,834,745	3,794,000	4,600,000	5,236,000	6,549,000	2.6%
International	70,694	69,000	214,000	264,000	391,000	8.5%
High-growth	**3,905,439**	**4,197,000**	**5,547,000**	**6,625,000**	**8,848,000**	**4.0%**
Domestic	3,834,745	4,064,000	5,265,000	6,235,000	8,357,000	3.8%
International	70,694	133,000	282,000	390,000	491,000	9.7%
Low-growth	**3,905,439**	**3,668,000**	**4,105,000**	**4,687,000**	**5,647,000**	**1.8%**
Domestic	3,834,745	3,599,000	3,981,000	4,445,000	5,327,000	1.6%
International	70,694	69,000	124,000	242,000	320,000	7.5%

In terms of aircraft operations -- the total number of aircraft take-offs and landings at the airport -- the team forecasts an average annual growth rate of 1.8% through 2030, from 195,000 operations to 281,000 operations. The team forecasts the long-term growth to occur in commercial operations, as general aviation, military and air taxi operations level off.



Number of operations declined by 10% in 2009. Baseline forecast projects a recovery to 2008 levels by 2014.

Commercial operations drives long-term growth as general aviation, military and air taxi level off.

Baseline forecast projects total operations long-term growth at 1.8%

OPERATIONS FORECASTS						
		Projections				Annual Growth Rate
Forecast	2009	2010	2015	2020	2030	2009-2030
Baseline	194,657	197,400	229,200	244,700	280,800	1.8%
High-growth	194,657	205,700	252,000	284,000	363,000	3.0%
Low-growth	194,657	188,600	197,700	204,000	219,000	0.6%

- **International service:** Included in the forecasts is future demand for nonstop international service. Demand for nonstop international service will increase as traffic reaches levels that justify the addition of new nonstop international flights. The team initially anticipated nonstop service to Europe within a 5-10 year timeframe. However, due to continued weak economic conditions, it appears that attaining direct international service would likely be delayed from the original forecast projections. It is more likely that direct international service could occur near the end of the planning horizon, approximately the year 2030.

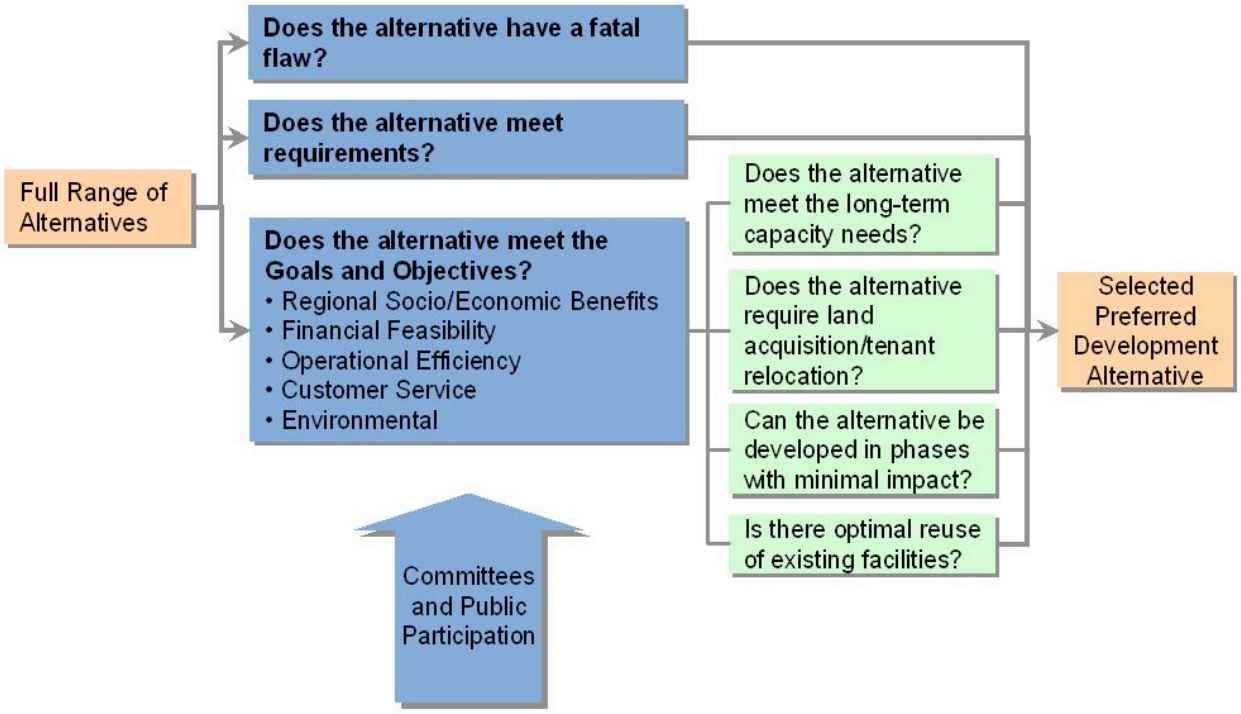
- **Destinations served:** At the February meetings, committee members also requested information on air service trends and the destinations served from SAT. The requested information was posted on the airport's web site March 30. SAT has had non-stop service to approximately 30 destinations in most years since 2000. SAT reached a record 40 non-stop destinations in 2008 as several new entrant airlines, such as ExpressJet and Spirit, started serving SAT. However, much of the new service was lost when the new entrant airlines pulled out due to the current economic climate. The bottom line is that the number of destinations served is approximately what it was before the recession.

2010: 30 non-stop destinations served by SAT

Alternatives Development and Evaluation

Although the Vision 2050 Airport Master Plan's recommended alternative will result in a three-phased capital improvement program that will outline the development of the Airport over the next 5, 10 and 20 years, the plan will utilize implementation triggers -- numbers of future enplanements and operations that should trigger the development of new facilities -- rather than a time-based capital improvement schedule. The ultimate goal is to bring new facilities online at the right time, not too early or too late to accommodate demand.

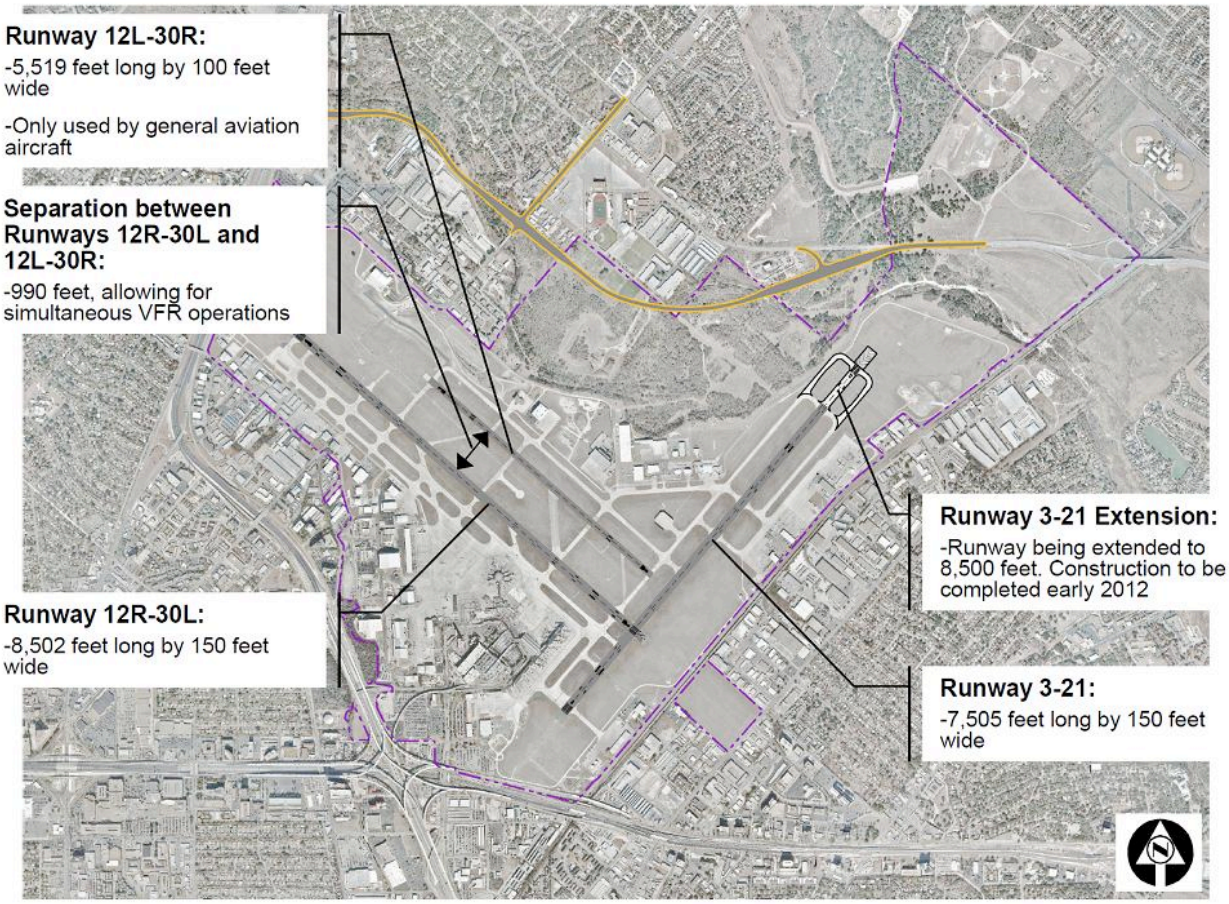
Alternatives were developed and evaluated using the following methodology:



Airfield Alternatives

The existing airfield consists of Runway 12R-30L (8,500 ft.), Runway 12L-30R (5,500 ft.) and Runway 3-21 (7,500 ft., extension to 8,500 ft. to be completed in 2012). The team believes the existing airfield can handle the 2050 demand

Existing Airfield



However, the project team believes runway improvements are needed to increase the efficiency of operations and to accommodate international traffic. With the following recommended improvements, the team is confident that operational demand can be met for a very long time.

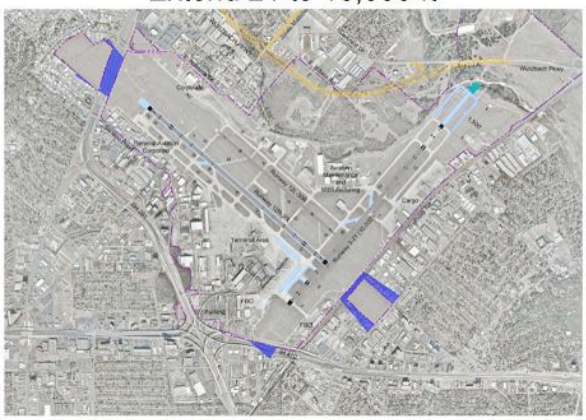
- Upgrade Runway 12L-30R, which is 5,519 feet long and currently used only by general aviation aircraft, to an air carrier runway. This will give the airport operational flexibility. Today if there is a problem on Runway 12R-30L and high winds won't allow the use of 3-21, the airport must essentially close the airfield. The team believes it is important to have a second full length parallel runway in the event of an emergency or if maintenance activities requires that Runway 12R-30L be closed.
- Make targeted improvements to the taxiway system to improve aircraft flows and interface with apron.
- Add CAT I navigational aid to Runway 3-21

Beyond 2030, the team sees the need to extend a runway to 10,000 feet to accommodate larger aircraft for long-haul flights.

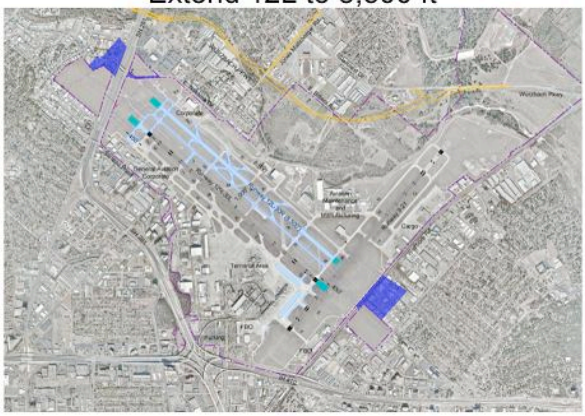
The team analyzed 11 alternatives and the following three alternatives were shortlisted:

Alternative 1
No Build – FAA Standards

Alternative 6
Extend 21 to 10,000 ft



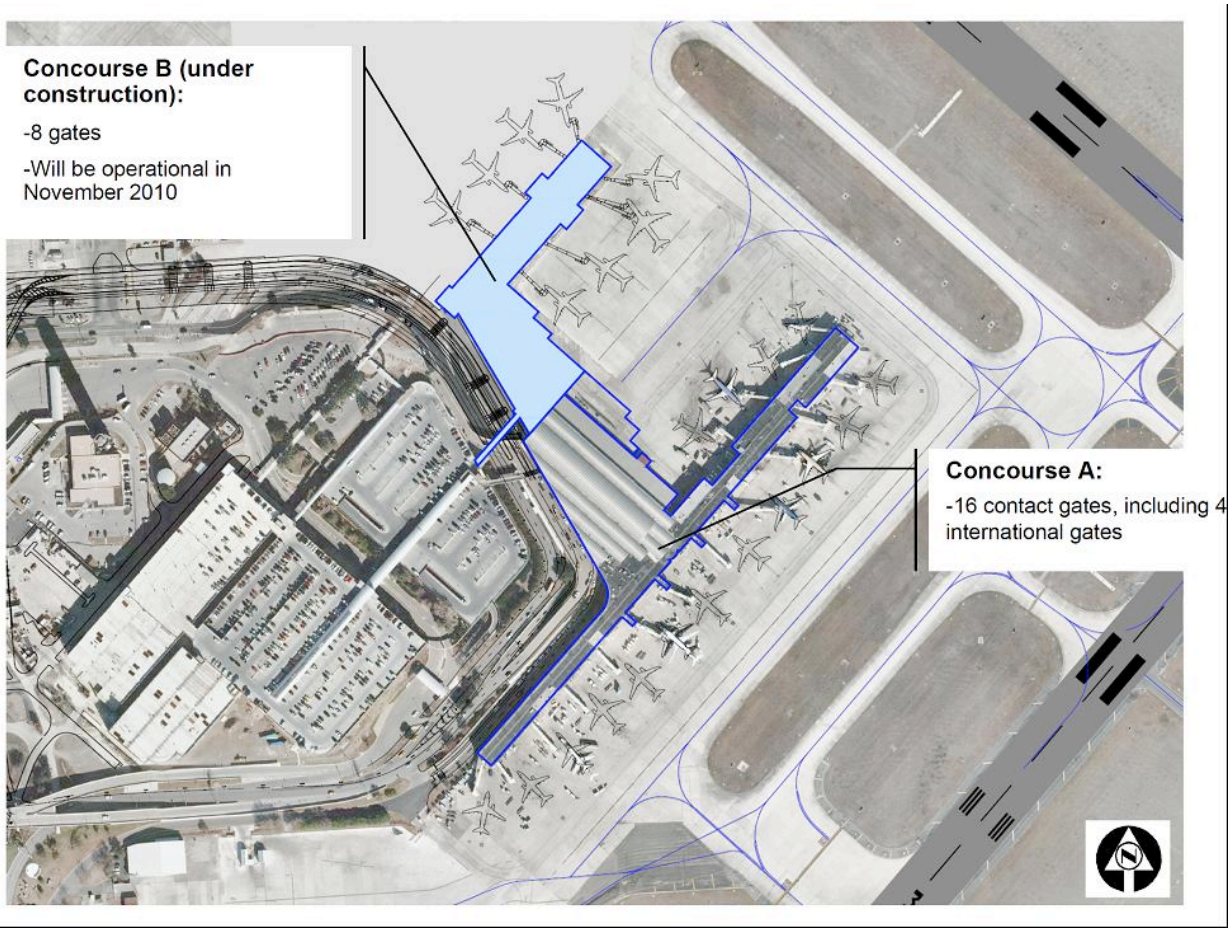
Alternative 8
Extend 12L to 8,500 ft



The purple areas represent the Runway Protection Zones (RPZ) the airport needs to control through land acquisition or avigation easements.

Terminal Alternatives

Baseline conditions



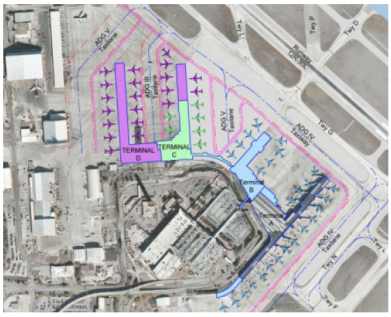
To accommodate the increase in enplanements from 3.9 million in 2009 to the forecasted 6.9 in 2030, SAT will need eight additional gates, bringing the total number of gates from 24 to 32. To provide these gates, the team believes SAT will need to bring a third concourse online by 2030. (Terminal A and the soon-to-be-opened Terminal B will be renamed Concourses A and B to create a unified terminal scheme with several concourses. The team heard from the committees that the sense of place is important, that passengers will know when they've arrived in San Antonio.)

Gate requirements are projected to grow to 50 by 2050, necessitating a fourth concourse. The team believes the current terminal envelope will accommodate at least 50 gates.

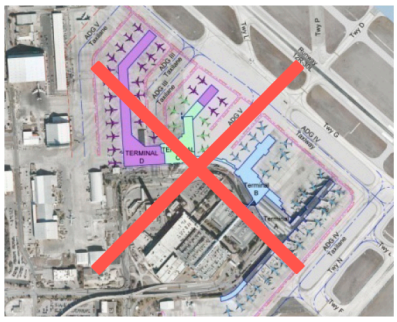
The team held a series of design charettes to analyze nine terminal layout alternatives. Any alternatives that impacted the new terminal loop road were eliminated because of

the investment being made there. The team believes the existing roadway will be efficient for a long period of time. Similarly, any concept that impacted San Antonio Aerospace, Wetmore Road or US 281 was eliminated. The team shortlisted 5 alternatives.

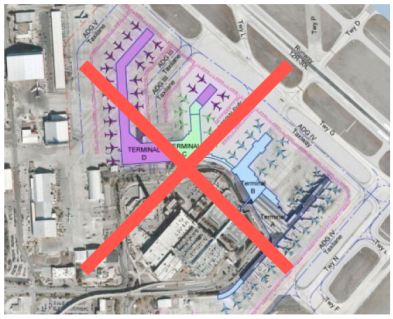
Alternative 1



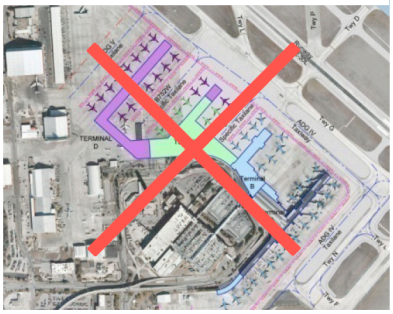
Alternative 2



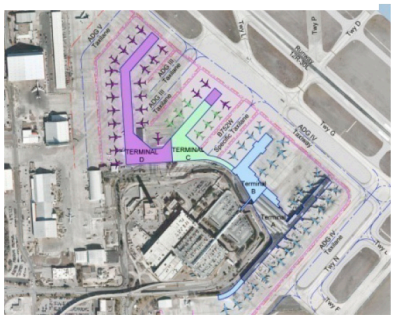
Alternative 3



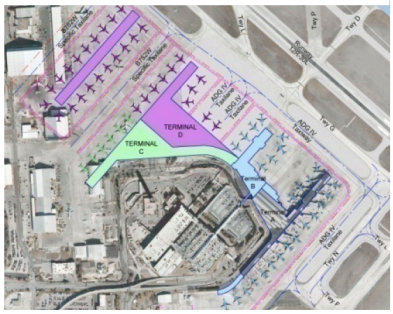
Alternative 4



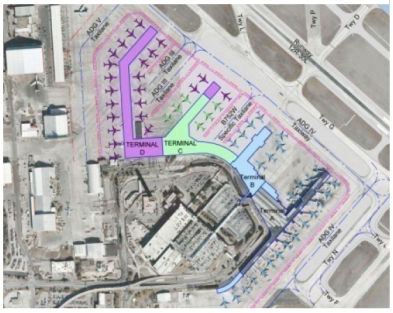
Alternative 5



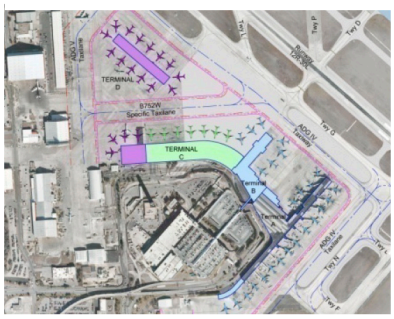
Alternative 6



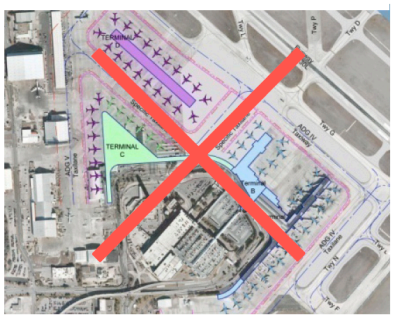
Alternative 7



Alternative 8



Alternative 9



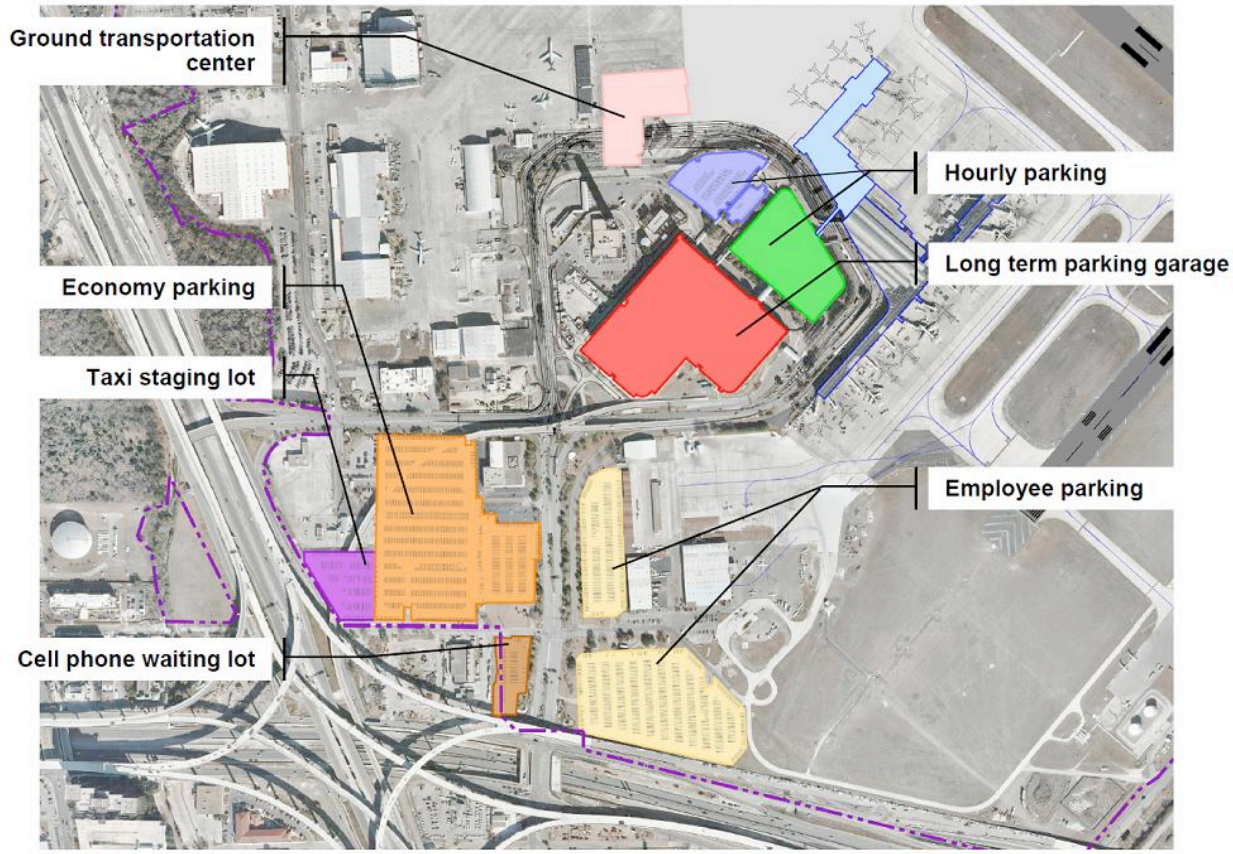
Meets 2030 Demand

Potential 2050 Expansion

An upcoming study will focus on targeted improvements to improve efficiencies and extend the life of Concourse A. The study will look at security screening checkpoints, passenger circulation, concessions, gates and baggage claim. Concourse B will meet the 2030 facility requirements as designed.

Landside Alternatives

Baseline conditions



The team demonstrated that both the existing hourly parking and planned roadway improvements currently under construction are adequate to accommodate forecasted demand through 2030. However, the team recommends adding 2,300 new parking spaces in daily and economy lots and consolidating rental car facilities to improve passenger level of service. The team concurs with a previous analysis recommending the rental car facility be located inside the terminal roadways loop.

To accomplish both objectives, the team proposes a new six-level parking facility to be located at the current surface level hourly parking lot across from Concourse B. Floors 2-5 of the new facility would serve as the consolidated rental car facility. Moving rental car facilities closer to the terminal would eliminate the need for rental car shuttles. The top and bottom floors of facility would provide public parking spaces – hourly parking on the first level and long-term parking on level 6 of the new structure.

- **Regional rail**: The team met with Lone Star Rail District, whose proposed LStar regional rail service would run adjacent to SAT. The recommended alternative plan will

recommend that placeholders are kept to allow the airport to connect to the future system. The team will also look at various modes of transit to bring passengers to the terminal complex. One option is a Personal Rapid Transit (PRT) line; the team has done preliminary schematic research that indicates a PRT line can be woven through the existing infrastructure to connect to the terminal.

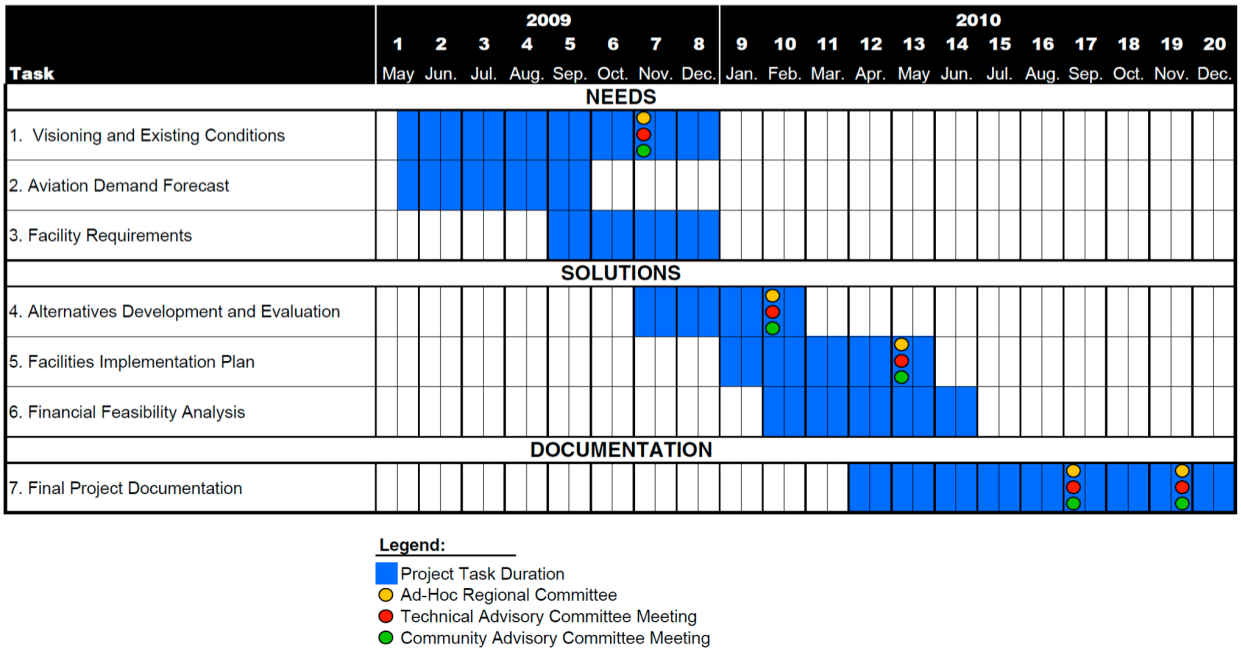
Public Outreach

The first public meeting of the Vision 2050 Airport Master Plan will be held on May 27, 2010 from 5-8 pm at the TriPoint YMCA at the intersection of U.S. 281 and N. St. Mary's Street. The meeting will be held in an open house format; attendees will be invited to explore seven different stations that demonstrate the progress that has been by the advisory committees and project team.

Committee members were provided with flyers announcing the public meeting. They will also receive e-invitations and are asked to distribute the announcement among their organizations and networks of contacts. The invitation is also posted on the airport's web site: www.sanantonio.gov/aviation.

Next Steps

The team provided an overview of the next steps. Using the input provided by the committees and the public, the team will finalize the recommended development plan. It will then determine the phasing of the recommended improvements. The timing of projects will be based upon appropriate activity triggers. The team will conduct an environmental analysis and a financial feasibility analysis. The next round of committee meetings will be scheduled in August or September. The final committee meetings are scheduled for November or December. The master plan analysis will be complete by the end of 2010. Committee members may email additional questions and comments to Vision2050@kgbtexas.com.


2009
2010
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20
Task
May Jun. Jul. Aug. Sep. Oct. Nov. Dec. Jan. Feb. Mar. Apr. May Jun. Jul. Aug. Sep. Oct. Nov. Dec.
NEEDS
1. Visioning and Existing Conditions
2. Aviation Demand Forecast
3. Facility Requirements
SOLUTIONS
4. Alternatives Development and Evaluation
5. Facilities Implementation Plan
6. Financial Feasibility Analysis
DOCUMENTATION
7. Final Project Documentation
Legend:
Project Task Duration
Ad-Hoc Regional Committee
Technical Advisory Committee Meeting
Community Advisory Committee Meeting

Questions and Answers

Following the presentation, committee members offered the following observations and questions regarding San Antonio International Airport and the Vision 2050 Master Plan.

- How would landfill impact extension of 3-21? Is that something you're looking at?
    - The project team is evaluating the environmental impacts of extending 3-21. Generally speaking, we would try to stay clear of landfill.

- How does our airport's strategic plan fit in with other strategic plans in SA (Port SA, New Braunfels airport)?
    - This plan takes into consideration projections and growth forecasts for the San Antonio region. We are looking at regional airport systems and committees provide us with valuable input on these concerns. At the beginning of this project the mission statements of other organizations in the region were considered.

- At one point in the past we talked about our airport relative to Austin. Are there plans for some activity in the Austin / San Antonio corridor? Have we looked at collaborations?
    - We have not looked at a collaboration with the Austin area airport. We have met with Lone Star Rail District and made some progress with the concept of a rail link to the airport. In the final recommendations we will have something to show you.

- Does this study look at infrastructure needs around airport to facilitate growth in relation to the impact on traffic? With the emergence of Lone Star Rail between Austin and SA and the ability to access New Braunfels and San Marcos, it could enhance SA since the rail does not connect to Austin-Bergstrom International Airport, was that taken into account? Might be good from a marketing standpoint.
    - Airport generated traffic is typically a small fraction of the traffic on the off-airport roadways and not usually sufficient to significantly impact TxDOT projects. Different signage, maybe. Major infrastructure improvements because of airport -- probably not.
    - We haven't looked at intercity rail as having a large impact on demand and airport traffic. We don't consider that to be a large enough demand segment to incorporate it into plan.

- Is environmental impact a consideration in developing in phases?
    - Yes, but in phasing we are primarily looking at not having to tear down something already built in a previous phase. But yes, there were many environmental considerations in our planning.

- When does the detailed environmental guidelines process take place?
    - What will eventually occur is that the airport layout plan gets approved by the FAA. Conditioned approval means the plan then has to go through

NEPA process, then an Environmental Impact Statement (EIS) for any development project that is likely to have significant impacts. As to when this might occur, we cannot give a definitive timeline.

- There is an Environmental Impact Study for the commuter rail that is supposed to be done in 2013, is there momentum for seeing that happen?
    - We included the potential for airport passengers to arrived by commuter rail within the high level growth forecasts. We've found in the past that it is not a simple planning effort to determine where airport customers come from when there are competing airports in fairly close proximity. Customers usually choose airfare price and flight schedule times as the deciding factor for which airport to use. We are doing a study in San Diego where they are incorporating high speed rail into the plan-- it was assumed that people would come from LA. What we really found was people coming from closer areas.

- Will your deliverable include the various phases that need to be implemented within this plan?
    - We will establish a Phased Implementation Plan. The plan will have some dates tied to projects, but will also have implementation triggers to adapt the plan to realized traffic. Then, we have to make assumptions for FAA funding and we also have to talk through the financial feasibility with city staff.

- It appears that you have all the property you need for physical expansion, but you may need some off-property for safety.
    - There are some areas off the runway -- trapezoidal shapes – called Runway Protection Zones that are off-property. FAA requires that the airport controls those for safety purposes.

- On 12R-30L, didn't you tell us it was already at 8,502 foot long? Why do you propose to extend it slightly?
    - Runways 12R-30L and 3-21 intersect. We want to move the 12R-30L threshold back 450 feet and add 450 feet at the north end of Runway 12R-30L so we don't lose length. Having runways intersect reduces capacity and increases the risk of accidents and runway incursions. This recommendation of decoupling the two runways addresses both safety and capacity issues.

- When you suggest extending the runway to 10,000 feet, is that to accommodate international flights?
    - International flights require a 10,000 foot runway. Extending Runway 3-21 is the only alternative to provide this runway length without significantly impacting off-airport infrastructure. While we do not think that the extension while be required before the end of the planning period, we

want to preserve the land required for it so the extension can be constructed when demand requires.

- Doesn't matter that it is north-south only?
    - The team analyzed wind coverage and demonstrated it is adequate.

- Do any of the alternatives show how SAT could serve as a hub?
    - Having a hub operation at SAT wasn't a scenario in the Master Plan. However, whether SAT is an airline hub or not would not affect the airfield recommendations unless airline hubbing dramatically increases activity. We are trying to make the most efficient use of the airfield.
    - Airlines simply can't develop hubs the way they used to. As long as SAT is three hours from Houston Intercontinental and Dallas/Fort Worth, SAT will not be a hub. Many airlines are actually de-hubbing markets.
    - Master planning is a dynamic effort. We update it based on what happens in the market and economy. It is highly unlikely that SAT will become a hub.

- If these recommendations are implemented, how long will it suffice?
    - An airports master plan should be reviewed every five to seven years.

- On slide 16, you presented 11 alternatives. All the purple dot lines are land owned by SA.
    - Yes, the purple dot line represents the airport boundary.

- What aircraft types would be served by a 10,000-foot runway?
    - Runway length is more of an issue during take off, but with a 10,000 foot runway, you can serve all wide-body aircraft.

- So 10,000 feet is the magic number?
    - Yes, aircraft type, weight of aircraft, altitude, temperature etc. are all factors affecting runway length requirements but having a 10,000 foot runway would meet the needs of all aircraft including the Boeing 777.

- Are all of the factors for considering the alternatives weighted differently?
    - We want to keep the analysis on a very level field. At this point all factors are given the same weighting.

- Looking at Alternative 6, what does it mean that the alternative does not meet the capital investment requirement?
    - It means that the alternative would be expensive to construct comparatively to the other alternatives, due to the amount of fill required to build the runway extension. We've ranked these by comparing them to other alternatives.

- Is 6 the only alternative that has multimodal connectivity?

- In all the alternatives we've allowed for a third level connection in the Concourse C connector for any type of people mover system.

- In looking at the expansion of the terminals have you considered spaces for concessions and retailers?
  - Yes. We've kept the spaces large to accommodate concessions, etc. within the terminals.

- On future Terminal C, should the airport be thinkingof sort of future build out now? Pads or something on the 2050 fingertip?
  - We would not build out until needed, so we've designed this to be easily expanded with minimal expenditure. Whether you build a foundation initially should be worked out separately from the master plan.

- What are the triggers for the need to build Terminals C and D?
  - We're primarily focused on Concourse C - 2030 demand. It would be a wider range of triggers for 2050 and Concourse D.

- Another glaring need is a consolidated rental car facility (CONRAC). Are there provisions in the alternatives for a CONRAC and if so, have we begun to consider how it will be paid for and whether it should be privatized. Will environmental analysis look at opportunities, such as reusing the water from car wash facilities?
  - We have included a CONRAC in the alternatives. Timing for its implementation will be discussed at next meetings. The airport should probably start collecting Customer Facility Charges (CFCs) as early as possible to build up savings. The airport will not make the recommendation to privatize the system.

  - Locating the CONRAC close to the terminal eliminates the need for shuttlebuses. It is a much more efficient system and easier for travelers.

  - The master plan does not go into great detail on the environmental design of the CONRAC facility. At this stage we are just looking at the best ways to make the current site most efficient. But most newer rental car servicing facilities do have systems to recycle the water .

- Did you look at possible alignments for a mass transit system to cross Loop 410?
  - We looked at various modes of transit to bring traffic to the airport complex. A Personal Rapid Transit (PRT) line has been identified as the best way to achieve this. The PRT offers more flexibility to work around Loop 410 and is more cost effective than other alternatives. We've done enough schematic research to say we can get a PRT line through any barriers that Loop 410 offers.

- Is your technical committee looking at airspace? Has FAA Air Traffic been involved in this analysis?

- We are consulting with the appropriate personnel on the issue. The whole discussion was couched in how we most efficiently move aircraft. High speed exit locations, etc. Some of the alternatives and recommendations we are making set up placeholders to help address airspace. We also feel that the parallel Runway 12-30s will address this concern.

- When the general aviation traffic is relocated, who will cover the costs of relocating businesses to the north of the airfield?
    - There is a cost associated with relocation. We are suggesting as the leases expire and buildings reach the end of their useful life that SAT takes these opportunities to take the leases over and offer new space on the north side of the airport.

- We're concerned about airspace at Randolph. If you could include that in the plan, it would be valuable.
    - For the most part this master plan is concerned with what is on the ground, although some of our planning and recommendations do offer placeholders for air space.

- There have been a lot of questions regarding the number of operations. The majority of decreases have been in general aviation (GA) activity. What has contributed to that loss? In the past, we proposed extending 12L, but we couldn't justify it based on the number of operations.
    - Big picture: projections of GA rising back to levels of 70s, has never really happened. Cost of aircraft, fuel, equipment, etc. has stifled the growth. GA is a challenging market, several factors hurt the pleasure flyer. The market shifted to the business flyer. The increase in GA traffic is from business jet traffic.
    - Local: The City policy is to encourage GA activity at Stinson. We have seen some leakage to that airport and the City wants to preserve capacity at SAT for larger aircraft.

- How does the Continental and United merger impact your calculations?
    - We will likely see some route consolidation and some facilities consolidation. If gates become shared, that puts off need to build new gates and ticket counters. That's the most tangible impact. How the routes will be impacted is not determined yet.

- Capacity is not an issue here, but you're showing an increase in demand. How do you intend to meet increase in demand?
    - The existing airfield can handle the forecasted demand. We currently have excess capacity on the airfield. Improvements are to increase efficiency of operations and meet long-term need for international traffic.

- What is the timeframe for recommended improvement to 12L-30R?

- We're researching that now. Today we are putting forth our ideas on the recommended plan. If there is general agreement to go forward, we will put that in the phasing plan. We don't have phases yet because we don't have an agreed upon recommendation.

- The FAA won't fund the upgrade of Runway 12R-30L until the justification is there from a capacity standpoint. They won't fund it for flexibility reasons alone because there is a huge investment here.
    - We would argue that the economic impacts of the closing of the airport at any time would outweigh that. One closure would have a significant impact on tourism, etc.
    - Admittedly, the ability to justify the runway upgrade will be challenging, but we and the airport feel it is the correct recommendation.

- Is there an option to look at another location altogether?
    - No. We found no justification for a new location because the existing site can handle the future demand.

- Regarding the fact that the widely-spaced parallel runway is no longer recommended, the airspace is not going to be protected if you don't show it on the Airport Layout Plan (ALP).
    - We're comfortable with that. If we improve the runways, we are confident that the needs can be met for a very long time without requiring a fourth widely-spaced runway.
    - (*Note: After further discussion with the FAA and airport, the recommendation might be to preserve the airspace on the airport layout plan. More to come on this.)*

- You mentioned going to CAT I capability on Runway 3-21. Did you look at the clearance requirements on Wurzbach?
    - Yes, we looked at it and were comfortable that the threshold was met.

- Are you also including an Instrument Landing System (ILS) with the 12L extension?
    - Yes, a CAT I ILS would be included as the upgraded Runway12L-30R would be the primarily landing runway.

- Is there clearance on State Highway 281?
    - Yes, it would be the same instrumentation as 12R.

- At what point does Terminal A become functionally obsolete?
    - We are not recommending demolition of Terminal A. The Airport is doing a more detailed analysis to study what can be done to extend the building's life.

- What is the useable life of a terminal? It's 28 years old now.

- It's beyond the planning horizon of 2030. We realize there is an investment in the facility and we want to extend it and carry it through the planning horizon. Our recommended plan considers existing assets and are the best way to preserve them.

- Any potential issues with air traffic control and line of sight? Is the tower in a good location?
    - We performed an analysis to ensure that we could meet FAA line of sight requirements with the recommended terminal improvements. We don't recommend relocating the tower.

- Is this Terminal C the same one that was designed?
    - No this is a different design. We heard from a lot of committees that a sense of place is important. When you deplane it is important to know you're in San Antonio. The previous design concept didn't accomplish that in our opinion. We will not get into the design concepts too deeply in the master plan, but our recommended concept does address accommodating the sense of place objective.

- Did you evaluate the ability of the surrounding roadways to accommodate future demand?
    - Yes, and the existing roadway will be sufficient for a long period of time. The City has done a good job there.

- How did you incorporate the needs of local industry and how their growth would impact demand?
    - What's interesting about the San Antonio market is it's not too hot, not too cold. It is solid and sees reasonable growth year after year. None of our analyses shows a huge growth rate coming, but we know the city continues to diversify its economic base. One thing that was a surprise at the beginning was the significant presence of the medical industry, which has huge impact on this region.
    - Our analysis does incorporate a reasonable expectation of local industry growth.