

TRANSPORTATION COMMITTEE

May 18, 2007

AGENDA ITEM NO.: **8**

Action Requested: INFORMATION

2007 REGIONAL TRANSPORTATION PLAN WHITE PAPER:
AVIATION AND GROUND ACCESS ISSUES

File Number 3003900

Introduction

SANDAG has identified several key issue areas to be addressed in the 2007 Regional Transportation Plan (RTP) update. For each of these issue areas, staff is preparing a white paper to stimulate discussion and gather input from the SANDAG Policy Advisory Committees and working groups. SANDAG has worked closely with the San Diego County Regional Airport Authority (Airport Authority) and the two transit agencies to prepare the draft RTP White Paper (Attachment 1), which discusses how the RTP should address regional aviation and ground access issues. SANDAG staff is also working with the Airport Authority staff on several specific airport planning efforts, including the draft 2015 San Diego International Airport (SDIA) Master Plan and Environmental Impact Report (EIR), as well as a related effort to develop a transit plan for SDIA. The draft White Paper summarizes these planning efforts.

Discussion

The Aviation and Ground Access White Paper sets forth an approach to planning comprehensively for the region's long-term aviation needs, while phasing in needed improvements to meet short-term demand. The report is organized into three major sections:

- **Existing Conditions.** Discussion of existing conditions at commercial airports, general aviation airports, and military airports in the region, along with the role the Airport Authority plays in airport land use compatibility issues.
- **Long-Range Planning.** Discussion of forecasts for future aviation activity through 2030 and various options for meeting that future demand.
- **Near-Term Improvements.** Discussion on the improvements to San Diego International Airport, including both highway and transit ground access improvements.

The discussion below presents an overview of several key issue areas discussed in detail in the attached White Paper.

Airport Land Use Compatibility

The Airport Authority also serves as the Airport Land Use Commission for San Diego County, and is charged with preparing and adopting airport land use compatibility plans and reviewing certain land use actions from local agencies for consistency with airport plans. Each airport's master plan and land use compatibility plan must be considered in the RTP to ensure connectivity and compatibility in the region's transportation system. The White Paper discusses efforts over the last two years on airport land use compatibility plans.

Long-Range Airport Planning Efforts

A comprehensive planning effort is needed to determine how to meet the region's need for expanded aviation facilities and ground access connections. The white paper includes a recommendation that SANDAG and the Airport Authority prepare a Regional Air/Rail Network Plan to address the region's aviation and rail travel demands through 2030. A variety of options for meeting the region's aviation needs would be examined, including: a cross-border terminal, a supplemental airport, expanded use of the region's general aviation airports, using a network of airports in the Southern California/Baja California region, and tying into high-speed and conventional rail systems. In addition, this Phase II planning effort will include a 2030 Airport Master Plan for SDIA that will consider the future configuration of runways, terminals, and improved freeway and transit access to SDIA. The 2007 RTP will outline the issues to be addressed in these future planning efforts.

Near-Term SDIA Ground Access Improvements

The existing RTP includes several ground access improvements to SDIA that were recommended in the 2003 Central Interstate 5 (I-5) Corridor Study. The access improvements include: on and off ramps to and from the north between I-5 and Pacific Highway near Old Town Avenue; on and off ramps to and from the south between I-5 near Sassafras Street and feeding directly into a new northern airport terminal area being planned at that time; exclusive bus/high occupancy vehicle (HOV) lanes on Pacific Highway and Harbor Drive between the Old Town Transit Center and the airport; and local intersection upgrades.

SANDAG staff, the two transit agencies, and the Airport Authority have been working to identify potential transit access improvements to SDIA as part of the 2015 Airport Master Plan. These improvements include: enhancements to the existing Route 992 Flyer service, a new Rapid Bus service to the Old Town Transit Center, new express/rapid bus "Flyaway" services from the north I-15 and south I-805 managed lane corridors. The 2007 RTP should include these projects in the Unconstrained Plan scenario. Additionally, a feasibility study will be undertaken of an air/rail/transit hub at SDIA as part of the Regional Air/Rail Network Plan.

Conclusion

The White Paper concludes with three recommendations:

- SANDAG and the Airport Authority, working with rail service providers and local transit agencies, should initiate a comprehensive planning effort ("Regional Air/Rail Network Plan") to address the region's long-term aviation and rail travel demands. This effort would also address the feasibility of a new air/rail/transit hub at San Diego International Airport.
- The Airport Authority should pursue a Phase II San Diego International Airport Master Plan to maximize the efficiency of the airport to meet future demand.
- The specific ground access highway and transit improvements discussed above should be incorporated into the 2007 RTP.

Based on these recommendations from the attached White Paper and input from the Transportation Committee, staff will update the RTP as described in this report. Staff will return to the Transportation Committee for a more detailed report on the SDIA Transit Access Plan in the near future.

It should also be noted that pending state legislation (Senate Bill 10) could modify the planning responsibilities of the Airport Authority and SANDAG with regard to ground access planning and airport land use compatibility planning. SANDAG staff will continue to monitor this legislation, and will address any relevant changes resulting from this legislation in the final 2007 RTP.

BOB LEITER

Director of Land Use and Transportation Planning

Attachment: 1. Draft 2007 RTP Update - White Paper on Aviation and Ground Access

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DRAFT**SANDAG
2007 Regional Transportation Plan Update****White Paper on Aviation and Ground Access**

INTRODUCTION

This White Paper discusses how the 2007 Regional Transportation Plan (RTP) should address the region's aviation needs and the ground access improvements that are needed to accompany the region's aviation assets. It sets forth an approach to planning comprehensively for the region's long-term aviation needs, while phasing in needed improvements to meet short-term demand. It also discusses several possible roadway and transit access improvements to the existing major commercial airport, and their potential for inclusion in the RTP. This White Paper is organized into three major sections: Existing Conditions, Long-Range Planning, and Near-Term Improvements. The White Paper then concludes with a summary of actions.

EXISTING CONDITIONS

The San Diego region is served by two commercial service airports, which are San Diego International Airport (SDIA) and McClellan-Palomar Airport in Carlsbad, California. Commercial service airports provide regularly scheduled passenger service. Ten general aviation airports and four military airports are also located within the County (see Figure 1).

San Diego International Airport

San Diego International Airport is the region's primary commercial airport, having served 17.5 million passengers and 221,000 aircraft operations in 2006. The airport is located in the City of San Diego, adjacent to downtown, the Marine Corps Recruit Depot (MCRD), and San Diego Bay. The airport encompasses 661 acres and is the busiest one-runway commercial airport in the United States. Classified by the Federal Aviation Administration (FAA) as a large-hub airport, SDIA is ranked 30th in the U.S. and 3rd in California in terms of passenger enplanements. San Diego International Airport is operated by the San Diego Regional Airport Authority, which was created by state law in 2003.

SDIA has one runway that is 9,400 feet in length. The single runway is the biggest capacity constraint at the airport. The length of the runway, along with the terrain constraints of the Point Loma peninsula and Banker's Hill, do not allow for certain types of aircraft to depart when fully loaded with passengers, fuel, and cargo.

In 2006, approximately 165,800 tons of air cargo was shipped through a combination of dedicated cargo aircraft and belly cargo in passenger planes. The airport hosts seven cargo airlines that have an average of nine flights per day. In addition, there is one Fixed Based Operator (FBO) that provides general aviation services.

As of spring 2007, the airport has 22 airlines that provide nearly 300 daily flights to 54 markets in the United States, Canada, and Mexico. International destinations include Toronto and Vancouver,

Canada; and Cancun, Mexico City, Puerto Vallarta, and Los Cabos, Mexico. The airport has a departure curfew from 11:30 p.m. to 6:30 a.m., while allowing 24-hour arrivals.

Transit access to the airport is provided by the Metropolitan Transit System (MTS) Route 992 ("The Flyer"), which connects to Amtrak, the COASTER, and the regional trolley and bus system in downtown San Diego, primarily at Santa Fe Depot. Shared-ride vans, shuttles, limousines, and taxi services are provided by a variety of off-airport companies. Car rental services are available in nearby off-airport properties.

There are currently no direct access ramps from the region's freeways to the airport. Airport users driving to the passenger terminals access the airport via North Harbor Drive, a regional six-lane arterial road. Washington Avenue is the primary ground access road for cargo transporters.

Parking at the airport is constrained by limited land. There are currently 4,085 parking spaces located on airport property, and 6,000-8,000 spaces operated by commercial off-airport property owners.

McClellan-Palomar Airport

McClellan-Palomar Airport in Carlsbad serves a small portion of the region's commercial aviation needs. The airport is an FAA-classified non-hub airport and is ranked 260th in the U.S. in terms of passenger enplanements. It is owned and operated by the County of San Diego.

Two airlines serve McClellan-Palomar Airport, providing eight flights a day to two destinations - Los Angeles International and Phoenix Sky Harbor Airports. The airport sits on 487 acres, and its single runway is 4,600-feet-long. The runway cannot handle most types of regional jets operated by the commercial airlines. In 2006, the airport had 201,000 operations and served 96,000 passengers. There are 426 light aircraft and five Fixed Base Operators based at McClellan-Palomar Airport.

General Aviation

There are ten general aviation airports located within San Diego County. These airports do not have scheduled passenger service but may support private jets, flight schools, helicopters, or recreational aircraft.

Seven general aviation airports are owned and operated by the County of San Diego:

- Agua Caliente
- Borrego Valley
- Fallbrook
- Gillespie Field (El Cajon)
- Jacumba
- Ocotillo
- Ramona

Two airports are owned and operated by the City of San Diego:

- Brown Municipal Field (Otay Mesa)

- Montgomery Field (Kearny Mesa)

One airport is owned and operated by the City of Oceanside:

- Oceanside Municipal

The County's general aviation airports provide a wide range of aviation-related functions that are vital to the economy and quality of life in San Diego County. For example, Ramona Airport, located in the rural community of Ramona near the center of San Diego County, houses the joint California Department of Forestry (CDF) and United States Forest Service (USFS) firefighting Air Attack Base. Every year, from May through November, the airport is very active with firefighting aircraft.

Brown Municipal Field, located on Otay Mesa in the City of San Diego, is two miles north of the U.S.-Mexico border. The airport provides important U.S. Customs services for general aviation aircraft entering the United States from Mexico. The airport also serves as the base for lighter-than-air vehicles (blimps, dirigibles, and balloons), many of which cruise over San Diego during major sporting and entertainment events. Brown Field is also a primary airport for performers and spectators destined for Coors Amphitheatre in the City of Chula Vista.

In eastern San Diego County, the Ocotillo Airport is used by visitors to the Ocotillo-Wells State Vehicular Park and the Anza-Borrego State Park. Accessing these natural wonders by air provides a unique way to experience the remote desert areas to the east.

Military

There are four military airfields in the San Diego region:

- Marine Corps Air Station Camp Pendleton
- Marine Corps Air Station Miramar
- Naval Air Station North Island
- Naval Out-Lying Field (NOLF) Imperial Beach

These military installations are an important part of our national defense, while contributing significantly to the San Diego regional economy.

Airport Land Use Compatibility

The San Diego County Regional Airport Authority Board serves as the Airport Land Use Commission (ALUC) for San Diego County. By state law, ALUCs have two specific duties:

- To prepare and adopt Airport Land Use Compatibility Plans, also known as ALUCPs
- To review certain land use actions from local agencies and airport plans to ensure consistency with their respective airport compatibility plans

Each airport's master plan and approved forecast are major components in the preparation of the ALUCPs. Each airport's master plan and ALUCP must be considered in the RTP as the primary

components of the region's aviation system to ensure connectivity and compatibility in the region's transportation system.

The essential role of the ALUC is to support current and future airport operations and to protect public health and safety around the 16 public use and military use airports in San Diego County. The ALUC will continue to work toward adopting ALUCPs for all airports within its jurisdiction that satisfy the dual purpose of protecting the airports and the people who live and work around them.

In November 2005, the ALUC established an extensive public outreach and community involvement process to assist in the preparation of the ALUCPs through the development of the Airport Land Use Compatibility Plan Technical Advisory Group ("ATAG"). The ATAG consists of approximately 50 members, representing public agencies, local jurisdictions, pilots, landowners, developers, military personnel, and other interested parties. ATAG members worked with the technical consultants who participated in the preparation of the draft ALUCP with staff on development of the compatibility policies and criteria, and provided input to local officials, municipalities, and agencies involved in the ALUCP process.

During the fourth quarter of 2006, the ALUC completed ALUCPs for six of the 16 county airports and certified their environmental documents. The ALUCPs for Agua Caliente, Borrego Valley, Fallbrook Community Airpark, Jacumba, Ocotillo, and Ramona airports were adopted by the ALUC on December 4, 2006. Adoption of ALUCPs for the remaining 10 airports is anticipated in 2007 and 2008.

LONG-RANGE PLANNING FOR AVIATION NEEDS

Planning for the region's aviation needs to 2030 and beyond requires a comprehensive examination of the region's assets, including SDIA and the other airports described above, options for connecting into service provided by surrounding jurisdictions both within Southern California and in Mexico, and consideration of using other modes (especially high-speed rail) to meet some of the region's demands. Long-range planning also requires an examination of how to provide convenient access to the airports from the region's planned network of managed lanes and high-capacity transit services. The role of San Diego International Airport in meeting aviation demand also requires examination, with the goal of maximizing the efficiency of the airport property and surrounding lands. This planning effort should begin as soon as possible.

Aviation Activity Forecast

In 2004, forecasts were prepared of the region's constrained and unconstrained passenger, operations and cargo activity through the year 2030. The 2004 forecasts updated previous forecasts that were prepared in 1998. The unconstrained forecast estimates the region's commercial passenger and airline growth absent any physical limitations that may be experienced at SDIA. That forecast also accounts for changes in the region's economy, airline service, and a post-9/11 recovery. The constrained forecast accounts for the operational limits at SDIA that are caused by its single runway.

The forecasts were based on regional information provided by SANDAG. Basic inputs included existing and anticipated population growth, economic growth, total personal income, gross regional product, employment, hotel room capacity, and passenger leakage to other regions.

Historical trend analysis, professional expertise, and case studies were also part of the forecasting methodology.

According to the forecasts, the region will generate between 27.1 and 32.7 million annual passengers (MAP) in 2030 (see Table 1, San Diego International Airport Air Activity Forecast). Since recovering from the events of 2001, SDIA's passengers are forecast to grow at a 2.2 to 2.8 percent average annual rate.

The single runway at San Diego International Airport is the limiting factor for growth in outer years. According to the FAA, the airport will reach severe congestion on the airfield at 260,000 annual operations, likely to occur between 2015 and 2022. An operation is a take-off or landing.

While cargo flights compose only 3 percent of SDIA's operations, they are an integral component of the air transportation system. Between 2002 and 2030, the growth rate in air cargo tonnage is expected to be between 3.9 and 4.8 percent annually. As a result, the 2030 demand will be between 487,100 and 622,100 tons per year, compared to 165,800 tons in 2006. This cargo is shipped primarily in dedicated cargo aircraft, but some cargo is transported in the bellies of passenger airplanes. Based on the forecast, San Diego International Airport's single runway will reach severe congestion sometime between 2015 and 2022, and will not be able to meet the forecast passenger demand through 2030.

Options for Meeting Future Regional Aviation Demand

Recent discussions between Airport Authority and SANDAG officials have identified a number of options that should be considered in meeting the region's future aviation needs.

Cross-Border Terminal

Tijuana Rodriquez International Airport (TIJ) is located about 20 miles south of downtown San Diego, adjacent to the U.S.-Mexico border. The airport has one runway and, according to Grupo Aeropuerto del Pacifico (GAP), the private agency that operates the airport, has significant unused capacity. Therefore, the San Diego County Regional Airport Authority conducted a feasibility study in early 2007 to identify the issues associated with constructing and operating a cross-border terminal connection between the United States and TIJ. The study concluded that a connection would face a variety of major challenges, including legal and regulatory, market demand, and logistics. However, none appear to be insurmountable. Therefore, the Airport Authority Board authorized a market-demand study to more fully understand both passenger and airline acceptance of a cross-border terminal connection. Completion of that study is expected in early 2008.

Supplemental Airport

As part of the 2006 Airport Site Selection Program (ASSP) and the earlier 2003 Air Transportation Action Program (ATAP), the feasibility of constructing a commercial airport in the San Diego region to supplement the operations at SDIA was evaluated. Based on the existing and forecast population of the San Diego region, travel times, capital costs, and airline economics, that analysis concluded that a supplemental airport is not currently viable. However, if these issues change in the future, the concept of a supplemental airport could be revisited.

Expanded Use of General Aviation Airports

An extensive review of the County's general aviation airports was conducted in 2003 to determine if any are suitable to expand and ultimately replace SDIA. It was concluded that none is suitable as a full replacement airport to SDIA.

However, to ensure the most efficient use of the region's airport infrastructure, the roles of each airport in the County's airport system should be evaluated. This will be done by continuing to explore opportunities for expanding, consolidating, or relocating aviation-related functions currently located at SDIA, such as cargo, corporate jets, flight schools, commuter flights, and U.S. Customs to other regional airports.

Other Airports in the Southern California Region

The Airport Authority and SANDAG work closely with our neighbors to the north and east to identify opportunities to maximize the aviation assets of the Southern California region, including Orange, Riverside, San Bernardino, Imperial, Ventura, and Los Angeles counties. However, there is limited opportunity for San Diegans to rely on existing Los Angeles airports for future air passenger needs. The Los Angeles regional population is growing at an even faster rate and airport capacity in Los Angeles is even more constrained than in San Diego. These issues warrant further examination.

Imperial County voters passed Measure P in 2005 by an overwhelming majority, strongly supporting the development of a new regional airport in that county. The Southern California Association of Governments (SCAG) is also assuming that a new Imperial County airport would serve some San Diego demand.

Transportation planners from both regions will continue to work together to find comprehensive solutions that benefit all, while not over-burdening any one area or facility.

High-Speed Rail and Conventional Rail

There is considerable interest in using high-speed rail and conventional rail service to alleviate some commuter flight operations and to allocate demand to airports with available capacity. In 2005, SANDAG and the Airport Authority evaluated the potential of connecting San Diego to an Imperial County airport by high-speed rail using magnetic levitation technology. Additional federal funding is being sought to study the potential for high-speed rail along the I-15 corridor that may connect to other Southern California airports and major destinations. Other specific transportation issues that should be addressed include air cargo, airspace, truck lanes, toll roads, and international air service development.

Expansion of San Diego International Airport (SDIA Master Plan Phase II)

The Airport Authority will shortly begin to study the ultimate configuration of SDIA to develop the most feasible concept to accommodate the projected 32.7 million annual passengers expected in 2030. Improvements will focus on maximizing the efficiency of the airport's 661 acres. It will include improvements to airfield, terminal, ground transportation, and airport support facilities, and will include both the Teledyne-Ryan property on the south side of the runway and the former General Dynamics property on the north side. Specific features that will be considered are a

consolidated rental car facility; an intermodal center, potentially including a rail link located on the airport's north side and connected to the terminals by an internal circulation feature; and a secure check-in facility on the airport's north side.

Next Steps

SANDAG and the Airport Authority, working with existing rail service providers, local transit operators, and other partners within the region and neighboring regions, should initiate a comprehensive planning effort ("Regional Air / Rail Network Plan") to address the region's aviation and rail travel demands through at least 2030. The plan should address future aviation and rail demands in an integrated manner, and should also address related ground access requirements. This Plan should also address the feasibility of creating a new air/rail/transit hub at SDIA. SANDAG and the Airport Authority should take the lead in developing a scope of work and funding program for this planning effort.

NEAR-TERM IMPROVEMENTS

While planning for the region's long-term needs, near-term improvements to San Diego International Airport and to the ground transportation system that serves it are needed. Any near-term improvements should be carefully analyzed to ensure that they do not conflict with the long-range planning that is soon to be underway.

Improvements to San Diego International Airport

2015 Airport Master Plan. The Airport Authority recently prepared a draft Airport Master Plan (AMP) for San Diego International Airport. The master plan describes the airport uses of airfield, terminal, ground transportation, and airport support facilities. The goals of the master plan include providing facility improvements to accommodate demand through 2015; improving customer/airport user service, safety, and security; enhancing airport access; and using the airport property as efficiently as possible. Proposed improvements include:

- Ten new jet gates with corresponding terminal expansion on the west side of Terminal 2
- New aircraft parking apron and taxiways
- Second-level roadway for Terminal 2, which would add a new departure curb
- Improved vehicle circulation
- Parking structure integrated with the second-level roadway at Terminal 2
- Relocated and reconfigured surface parking facility in north area
- New access road to North area facilities from Sassafras Street/Pacific Highway intersection
- New general aviation facilities in north area
- Airfield improvements to Taxiways C and D in the north area

- A consolidated rental car facility and/or intermodal center connected to the terminals by an internal roadway

In addition, an Airport Transit Plan proposes improvements in transit access to SDIA. The Airport Authority has been working with the region's transit agencies since 2005 to develop an Airport Transit Plan to improve transit connections to the airport. The proposed improvements address existing services (providing low-floor buses, Next Bus signs, ticket vending machines, etc.), marketing, and new routes/services (rapid bus service to the Old Town Transit Center, "Flyaway" services to remote parking/terminals along the I-15 and I-805 corridors).

The state and federal environmental review process is currently underway, including an Environmental Impact Report (EIR) for the Airport Master Plan, with certification expected in 2008.

Ground Access to San Diego International Airport

The RTP will address how ground access to the primary region's airport, San Diego International Airport, will be improved for: (1) transit access, and (2) roadway access. While the majority of the airport users (passengers and cargo transporters) use highway and road access, the existing ground access system is constrained. Therefore, a primary focus of this RTP will be transit access improvements to the airport for passenger use.

Transit Access

A key goal of the RTP is to maximize transit access. A comprehensive transit plan for San Diego International Airport is being developed by the Airport Authority, SANDAG, and the transit agencies to maximize transit access. The proposed improvements are listed in Table 2 (Draft Airport Transit Plan), and include the following elements:

- Existing Service Improvements: Low-floor buses, transit ticket machines, Next Bus signs, dedicated bus lanes, signal priority, and queue jumper lanes.
- Marketing: Target marketing informing existing transit users, airport users, high density visitor areas (Downtown, Mission Valley) and residents along transit corridors.
- New Routes/Service: Rapid bus to Old Town Transit Center, Express bus ("Flyaway") to remote parking/terminals along the I-15 and I-805 corridors, Automated People Mover to a new airport transit center, and trolley connections to the airport terminals.

SANDAG, MTS, and the Airport Authority are working collaboratively to implement the following near-term transit improvements identified in the Airport Transit Plan.

Existing Service Improvements. Service improvements to the existing Route 992 (Flyer) service that provides bus service from the Santa Fe Depot/Centre City area include the acquisition of low-floor vehicles for passengers with luggage initiating of quarterly passenger surveys to better define passenger characteristics, and activating the Next Bus signs at the airport. The agencies are also discussing service branding, installation of ticket vending machines, and additional transit information in the terminals.

The following transit service concepts identified in the Airport Transit Plan are ready to advance into the feasibility and design stages:

Rapid Bus to Old Town Transit Center. The SDIA Transit Plan recommends rapid bus service using exclusive bus/high-occupancy-vehicle (HOV) lanes between the Old Town Transit Center and the airport, and transit priority measures and intersection upgrades on Laurel Street at Pacific Highway and North Harbor Drive. A preliminary engineering-level study is needed of transit priority measures along the corridor and of design options for the Old Town terminus, including the possibility of including security and baggage check-in. The Old Town work effort will include a parking management plan to address the chronic parking shortage at the Old Town Transit Center and to ensure that existing transit riders are not displaced. Ridership projections and cost estimates are also needed. The Airport Authority and SANDAG staffs are evaluating how to include this work in the FY 08 work program and budget.

Flyaway Service. The Airport Transit Plan also proposes express bus/rapid bus service and remote parking/check-in facilities, or “Flyaway” service, along the high-density I-15 and I-805 corridors. As identified in the Airport Transit Plan, the I-15 corridor appears to be a good candidate for initial evaluation, since managed lanes are already under construction. An environmental document is currently being prepared for managed lanes on the I-805 corridor. A feasibility study is needed to determine the most promising corridors, capital and operating costs, patronage projections, and opportunities and constraints for such a service. This feasibility study should be initiated as soon as possible to address the following issues:

- Identify quantity and best locations for park-and-ride lots along the managed lane network to provide for remote long-term airport parking and direct airport service;
- Operate separately or jointly with major transit park-and-ride lots;
- Identify how Flyaway lots would be acquired, managed, and funded;
- Fees and duration of permitted parking;
- Airport passenger services including ticketing, baggage check-in, and security clearance;
- Transport services and operation by public transit, the Airport Authority, private operators, or a combined public/private partnership.

The Old Town Rapid Bus and Flyaway transit improvements should be included in the Unconstrained scenario of the RTP to address the need for access improvements in the near and mid term. SANDAG and the Airport Authority will continue working together to develop design details for these improvements, and to establish a funding strategy that meets federal and state restrictions on the use of airport funds to participate in access improvements.

Air/Rail/Transit Center

Development of a transit hub on the north side of the airfield, connected to the terminals by an on-airport circulator, is gaining renewed interest. The concept will be included in the 2015 SDIA Master Plan and EIR, and should be included conceptually in the RTP. The new transit hub could be integrated with a parking facility and/or consolidated rental car facility. Conceptual planning is

needed to determine the feasibility of building a new or relocated Blue Line light rail station and/or COASTER station at the hub.

Roadway Access

The RTP roadway access system should provide direct roadway access to SDIA and tie the regional airport system into the highway, managed lane, and transit networks. In 2003, the Central I-5 Corridor Study was prepared to address ground access improvements to San Diego International Airport, the marine terminals, downtown, and other land uses along the I-5 corridor from Sea World Drive to State Route 94. In the SDIA area, the study evaluated four potential direct access ramp alternatives and recommended airport access improvements from I-5 to Pacific Highway near Old Town Avenue to provide transition ramps and arterial improvements that would benefit the airport and the Embarcadero.

Recommended freeway improvements include new I-5 to Pacific Highway ramps to and from the north near Old Town Avenue, and new I-5 ramps to and from the south near Sassafras Street feeding directly into a north airport terminal that was planned at that time. A north terminal is not currently included in the Airport Master Plan due to identified land and cost constraints. In addition, the Corridor Study recommends transit improvements, including provision of an HOV/bus lane on Pacific Highway from the Old Town Transit Center to the airport.

The 2007 RTP should include the southbound I-5 to Pacific Highway direct access ramps. Inclusion of the northbound I-5 to airport direct access ramps is more problematic, as they would serve a new north terminal or passenger access point that are not currently included in the Airport Master Plan. However, these ramps would improve access from the airport via Pacific Highway to northbound I-5. These northbound direct access ramps should be included qualitatively in the RTP, in a discussion of long-term improvements. It should be acknowledged that City of San Diego community plans and land use designations have changed in the areas studied (including conversion of industrial/commercial land uses to residential) and will have to be considered.

CONCLUSION

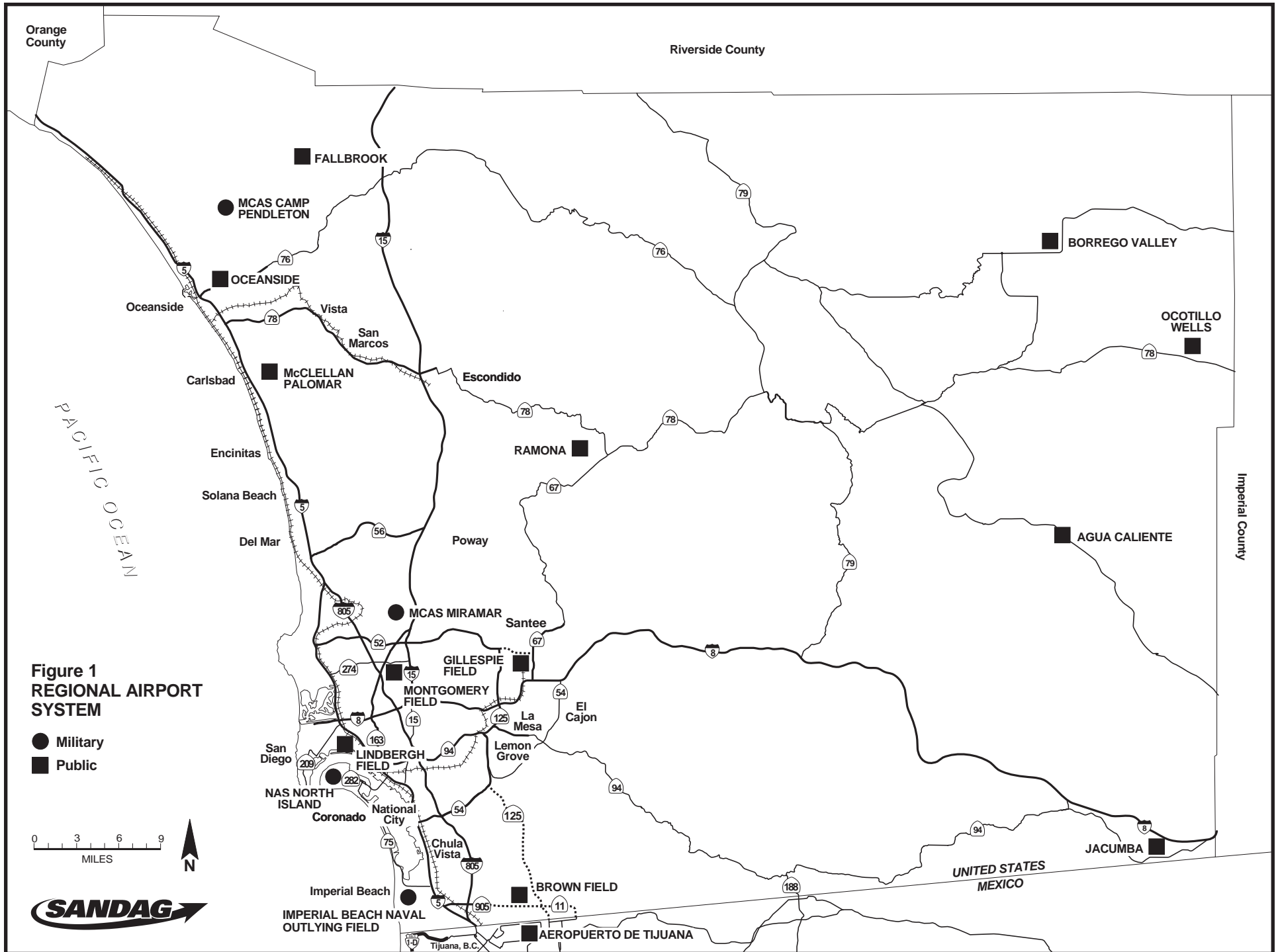
This White Paper describes a process for long-term and near-term aviation and access planning. The White Paper should include the following recommendations described above:

1. SANDAG and the Airport Authority, working with existing rail service providers, local transit operators, and other partners within the region and neighboring regions, should initiate a comprehensive planning effort ("Regional Air / Rail Network Plan") to address the region's aviation and rail travel demands through at least 2030. The plan should address future aviation and rail demands in an integrated manner, and should also address related ground access requirements. This Plan should also address the feasibility of creating a new air/rail/transit hub at SDIA. SANDAG and the Airport Authority should take the lead in developing a scope of work and funding program for this planning effort.
2. In conjunction with the Regional Air/Rail Network Plan discussed above, the Airport Authority should also pursue Phase II of the San Diego International Airport Master Plan. The Phase II Airport Master Plan would maximize the efficiency of SDIA to meet

the forecasted demand to the extent possible, including consideration of runway reconfiguration and other long-term aviation capacity improvements at SDIA.

3. Specific ground access transportation improvements that should be included in the RTP are the I-5 ramps, improvements to existing services, marketing and branding efforts, the Old Town-to-Airport Rapid Bus, and the Flyaway service concept.

Attachments: Figure 1: Regional Airport System
Table 1: San Diego International Airport – Passenger Growth Forecast through 2030
Table 2: Draft Airport Transit Plan



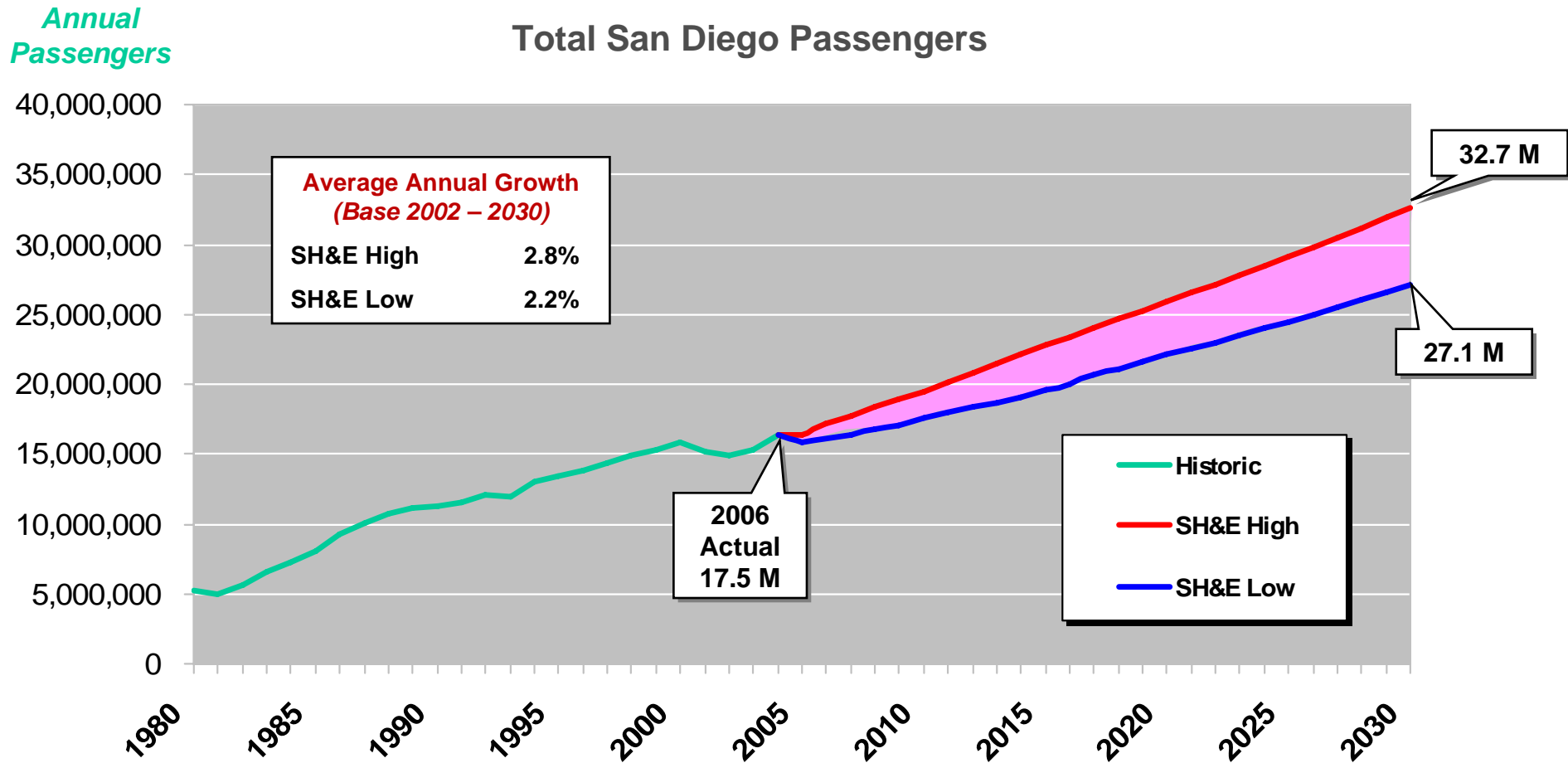
**Figure 1
REGIONAL AIRPORT
SYSTEM**

- Military
- Public





Passenger Growth Forecast through 2030



Sources: SH&E Analysis; San Diego International Airport Master Plan Final Report – June 2001; HNTB Airport Economic Analysis (AEA), HR&A with Landrum and Brown, January 2001.

Draft Airport Transit Plan
Transit Improvements Recommended
 Transit Demand and Access Study
 San Diego International Airport

Improvement Alternative	Study Tier			Timeframe for Implementation			Potential Benefit			Responsible Agency (1)					
	1	2	3	Near-term (1-3 years)	Mid-term (3 to 5 years)	Long-term (over 5-years)	Increase Ridership	Traffic Reduction (fewer buses)	Passenger Service Improvement	SDCRAA (2)	SANDAG	MTS	NCTD	City	Caltrans (3)
Existing Service Improvement															
Low Floor Buses (2-steps)	X			X					X			X			
Passenger/Customer Service Training	X			X					X			X			
Install Transit Ticket Machines at Airport	X			X					X			X			
Free Ride for Arriving Airport Passengers	X			X			X		X			X			
Turn on NextBus Signs Installed in 2004 at Airport	X			X					X			X			
Airport Employee Transit Incentive Program		X		X			X								
BRT Technologies (bus lane, signal priority, queue jumper lanes)		X			X				X					X	X
Marketing															
Target Residents (existing transit users)	X			X			X				X	X			
Target Visitors (high density visitor areas - Downtown, Mission Valley)	X			X			X				X	X			
Target Residents (new transit users)	X			X			X				X	X			
Existing Route Change															
Extend Convention Center Flyer Route Hours	X			X			X						X		
Capture Additional Hotels/Residences			X	X			X						X		
Reduce Flyer Headways (less than 12-minutes)		X		X			X		X						
Add Coaster Service (nights and weekends)		X		X			X						X		
New Route															
Hotel Circle Route			X	X			X	X							
Harbor Island Route			X	X			X	X							
Combine Hotel Shuttles			X	X				X							
Express Bus to Cruise Ship Terminals			X	X					X						
Express Bus to Old Town Transit Center (4)		X		X			X			X	X	X			
Remote Parking/Terminals (Flyaway) along I-15 and I-805 corridors		X			X		X			X	X				
Express Bus/Flyaway to Escondido Transit Center		X			X		X			X	X		X		
Consolidated Bus to Consolidated Rental Car Facility			X			X		X							
APM to Transit Center			X			X	X	X	X						
APM to CONRAC Facility			X			X	X	X	X						
Trolley Connection to Airport Terminals			X			X	X	X	X						

BRT = bus rapid transit

APM = automated people mover

CONRAC = consolidated rental car facility

SDCRAA = San Diego County Regional Airport Authority

SANDAG = San Diego Association of Governments

MTS = Metropolitan Transit System

NCTD = North County Transit District

City = City of San Diego

Caltrans = California Department of Transportation

Study Tiers

Tier 1 projects = Implement

Tier 2 projects = Implement after further study and cost estimating

Tier 3 projects = Requires link to transit ridership and airport development before implementation

(1) Responsible agency indicated for improvement alternatives recommended for further review.

(2) SDCRAA: Although not the operator of the bus and rail systems, the Authority will provide on-airport facilities and will contribute to extent allowed by federal restrictions on airport revenue.

(3) Caltrans would be involved in BRT technologies if freeway ramps are included.

(4) Use of Old Town Transit Center would require involvement of Old Town San Diego State Historic Park.