



FINAL

**DESTINATION LINDBERGH TECHNICAL REPORT
SAN DIEGO INTERNATIONAL AIRPORT**

Prepared for

San Diego County Regional Airport Authority
San Diego, California

March 2009



FINAL

**DESTINATION LINDBERGH TECHNICAL REPORT
SAN DIEGO INTERNATIONAL AIRPORT**

Prepared for

San Diego County Regional Airport Authority
San Diego, California

March 2009

CHAPTER 1 – INTRODUCTION

The San Diego County Regional Airport Authority (the Authority or SDCRAA) initiated Destination Lindbergh: The Ultimate Build-out (the Project) in March of 2008 to determine the ultimate configuration and capacity of the San Diego International Airport (the Airport or SDIA) as well as improve intermodal transportation connectivity between the Airport and the greater San Diego region.

This report provides documentation of the goals and objectives, aviation demand forecasts, facility requirements, alternatives, environmental overview, and financial considerations.

1.1 The Destination Lindbergh Regional Partnership

The Authority established a unique regional partnership to guide and assist with the Project. Notably, the scope and extent to which regional stakeholders have contributed to this Project is among the most comprehensive stakeholder involvement processes that have occurred in San Diego in the last several decades.

The Destination Lindbergh Project, a unique regional collaboration, is led by three public agencies:

- San Diego County Regional Airport Authority
- San Diego Association of Governments
- City of San Diego

In addition to the SDCRAA, the San Diego Association of Governments (SANDAG) and the City of San Diego were core participants in the Project, beginning with initial goal-setting, continuing through the technical analyses, and culminating with the establishment of conclusions. SANDAG, an association of 18 municipal governments in San Diego County, is the planning agency responsible for mobility planning throughout the region; the agency builds consensus, makes strategic plans, obtains and allocates resources, plans, engineers, and builds public transit, and provides information on a broad range of topics pertinent to the region's quality of life. The City of San Diego has community planning expertise and is responsible for implementing land use and zoning plans throughout the City, which includes the areas surrounding the Airport.

In addition to the three lead agencies, the Project has also benefited from involvement by other key organizations including the Unified Port of San Diego, the County of San Diego (County), Metropolitan Transit System, North County Transit District, and the United States Department of Defense. All of

these agencies combined to form an Ad Hoc Airport Regional Policy Committee (Policy Committee) to provide guidance and direction throughout the Project. The Mayor of San Diego chaired the Policy Committee. The collaboration among stakeholders allowed project analyses to take into account the issues and concerns of all regional entities, ensuring the best possible outcome for SDIA and regional intermodal transportation planning.

1.2 Background

SDIA occupies an approximately 661-acre site that is surrounded by natural and man-made barriers to expansion.

San Diego International Airport is located on a land-constrained site within the City of San Diego to the north of its central business district. As shown on **Figure 1-1**, the Airport occupies an approximately 661-acre site bordered to the east by downtown San Diego, to the south by North Harbor Drive and the harbor itself, to the west by a marine channel and residential areas, and to the north by Interstate Highway 5 (I-5), the U.S. Marine Corps Recruit Depot (MCRD), and residential and other developments.

Figure 1-1. San Diego International Airport Site



The functional capacity of the entire Airport is limited by the single runway, lack of available property for expansion, and strictly-enforced overnight noise curfew, among other factors. Given the importance of air transportation to the economic

SANDAG is working toward an improved network of transit services to combat worsening congestion on surface roadways in greater San Diego.

SDIA is well-situated to become a regional intermodal transportation hub.

Previous SDIA planning projects were reviewed to ensure that problems and solutions identified are appropriately considered in the Destination Lindbergh effort.

health of the region and its more than 3 million residents, one major objective of this Project is to ensure that the Airport site is developed to provide the most capacity possible. This includes prudent planning of remaining undeveloped areas as well as targeted redevelopment of current facilities.

Regionally, surface transportation congestion is currently and forecasted to remain a significant concern. SANDAG noted in its *2030 Regional Transportation Plan (RTP)* that traffic congestion on roads and highways is one of the San Diego region's biggest problems and that the predicted growth over the next 25 years is likely to exacerbate congestion on the area's roadways. The *RTP* calls for an improved network of fast, flexible, reliable, safe, and convenient transit services to improve mobility across greater San Diego.

The Airport's location adjacent to I-5, rail (Amtrak/Coaster) and trolley (Metropolitan Transit System) lines, and proximity to the central business district make it a logical place to provide a regional transportation hub that would allow passengers to connect between air, rail, and roadway transportation modes. The Project affords the opportunity to incorporate a regional transportation hub into ongoing planning of traditional airport facilities.

1.3 Previous Studies

Many past studies prepared for SDIA have acknowledged that its constrained site would limit overall airport capacity. Several studies have evaluated alternatives to increasing capacity at SDIA through the construction of new airports or shifting traffic from SDIA to other existing airports. The most relevant studies for this Project are the two most recent master plans, prepared in 2001 and 2008. The issues described and development concepts considered in these documents were also evaluated during the Project to maintain continuity with recent planning work. It is important to note, however, that while both of the previous master plans did contain statements about the Airport's goals and objectives, no specific "vision" statement was included.

The stated objective of the *2001 SDIA Master Plan* was "to produce an efficient and environmentally acceptable development program for the airport through the year 2020." Four specific goals were identified: (1) balancing landside with

airfield capacity; (2) balancing on-airport facilities with off-airport needs; (3) developing efficient and expandable terminals; and (4) supporting local and regional economic goals.

The *2008 SDIA Master Plan* provided a more extensive list of eight goals, including among them improving level of service to enhance airport access to the region's transportation system, involving the community, and promoting compatibility with surrounding land uses. The plan also included objectives that focused on meeting the Authority's stated goal of "providing adequate facilities to accommodate air service demand through 2015." Specific objectives were grouped into the following six categories: environmental, financial, airside, terminal, ground transportation and airport support.

1.4 Destination Lindbergh Goals Development Process

Destination Lindbergh's primary goal is to provide a fundamental, long-range strategy to optimize the efficiency of SDIA's facilities and functions.

Traditionally, goals and objectives are established in early phases and then used to guide the technical work through the latter phases of most planning projects. Destination Lindbergh, however, takes a different path than past planning efforts at SDIA. Here, the process for developing goals and objectives was designed to create them and refine them in tandem with the overall planning process. It was also felt, because of the many recent past planning efforts at SDIA, that a specific "vision" statement should be prepared during the course of the Project.

The primary goal of Destination Lindbergh differs from past master plans because it seeks to provide a fundamental, long-range strategy to optimize the efficiency of airport facilities and functions rather than simply providing incremental updates based on projected demand. This effort involves defining SDIA at several levels, including as an integrated, intermodal transportation hub within the context of the air service that can be provided; connections to the intermodal transportation network; and its role in the regional economy and quality of life.

The goals and objectives process involved three distinct steps. The first was to conduct a general review of goals and objectives statements from other airports. Several airports' planning documentation was reviewed in depth, including Los Angeles International Airport (LAX), as it is the major international gateway to Southern California and its future direction will have

effects on the future of air service in Southern California. Detroit Metropolitan Wayne County Airport (DTW) planning documentation was also reviewed, as it recently completed major reconstruction of its terminals and parking facilities. It is important to note that one of the stated goals for LAX is “distributing commercial service not essential to the LAX international gateway role to other airports in the region.”

Secondly, the goals and objectives put forth in previous SDIA master plans and the *2006 Airport Site Selection Program* were reviewed. Finally, a first draft of the goals and objectives for the Destination Lindbergh Project were prepared with the input of the Policy Committee and submitted to the committee for review and comment. The final goals and objectives are described in the following section.

1.5 Goals and Objectives

Ground Transportation

Goal

1.0 Improve direct access by auto and transit to San Diego International Airport and accommodate parking demand

Objectives

- 1.1 Provide direct access from I-5 to the Airport by auto
- 1.2 Reduce traffic on city streets in the Airport vicinity
- 1.3 Accommodate appropriate levels of airport and regional demand for short-term and long-term parking spaces to ensure sufficient user satisfaction

Intermodal Facilities

Goal

2.0 Develop an intermodal facility to provide access for passengers and employees to San Diego International Airport and strengthen regional connectivity

Objectives

- 2.1 Increase transit ridership by providing a single location for currently available and future transit modes to access airport terminals and facilitate mode transfers by non-airport users

Destination Lindbergh goals and objectives were developed in seven categories, as follows:

- Ground transportation
- Intermodal facilities
- Passenger terminal
- Airfield/airspace
- Environment
- Financial
- Regional development

-
- 2.2 Provide a facility to accommodate the parking requirements of passengers and employees of the Airport, non-airport transit users, and other local demand centers
 - 2.3 Provide the land envelope necessary to accommodate an intermodal facility

Passenger Terminal

Goal

- 3.0 Develop passenger terminal facilities to efficiently accommodate future activity levels and enhance user satisfaction

Objectives

- 3.1 Provide a positive passenger experience from site access point to the curbside through security and to the gate
- 3.2 Maintain appropriate level of service on the curb front, security checkpoints, and passenger holdrooms
- 3.3 Minimize walking distance from curbside to aircraft gate
- 3.4 Provide passengers and service personnel with the most convenient, efficient and flexible terminal arrangement for gates, and associated baggage and freight handling

Airfield/Airspace

Goal

- 4.0 Develop an airfield configuration to best accommodate the future activity levels

Objectives

- 4.1 Provide flexibility to respond to future aircraft, technology, and industry changes
- 4.2 Minimize airfield and airspace congestion
- 4.3 Develop airfield in accordance with FAA safety regulations

Environment

Goal

- 5.0 Incorporate best practices of environmental stewardship in all components of the Airport's physical environment and operations

Objectives

- 5.1 Minimize noise impacts on surrounding communities
- 5.2 Reduce emissions through improved access
- 5.3 Utilize sustainability solutions in all parts of the Airport

Financial

Goal

- 6.0 Develop a financially feasible plan

Objectives

- 6.1 Balance short-term, long-term, and legacy benefits for new investments
- 6.2 Maximize existing funding resources through appropriate facility planning
- 6.3 Seek innovative funding methods and expand pool of potential funding sources

Regional Development – Greater San Diego County/ Southern California

Goal

- 7.0 Leverage Lindbergh to provide major direct and indirect social and economic benefits

Objectives

- 7.1 Accommodate necessary air service to support and grow the regional economy
- 7.2 Provide surface transportation access (transit and auto) to Southern California destinations and transportation facilities (e.g., other airports) to support the economy and quality of life of the San Diego region
- 7.3 Provide services to improve the regional quality of life for visitors and residents
- 7.4 Work with regional entities to provide opportunities for satellite development such as hotels, retail, office and other commercial development that will strengthen economic development in the region

Regional Development – Downtown / Convention Center / Adjacent

Goal

- 8.0 Integrate the Airport, through context sensitive urban design, into the fabric of the central San Diego area, including the downtown, waterfront, convention center, embarcadero and harbor areas

Objectives

- 8.1 Plan airport facilities to fit within the context of existing and future plans for central San Diego
- 8.2 Recognize the importance of scale relationships between airport facilities and surrounding communities
- 8.3 Integrate architectural building design and landscaping to soften the effects of airport facilities on surrounding communities

1.6 Vision Statement

Based on the aforementioned goals and objectives, the following vision statement was drafted. Destination Lindbergh would:

- Provide an opportunity for increased transit ridership, including access to SDIA and within the region, with a new intermodal station
- Assist in mitigating traffic impacts and reducing greenhouse gas emissions by shifting passenger access to the north side of the Airport
- Prepare for long-term Airport build-out, optimizing operational capability within the given airfield and property constraints