

1.0 INTRODUCTION

The Master Plan for Sacramento International Airport establishes a program for the improvement of existing facilities and the development of facilities at the Airport over the next 20 years. A comprehensive undertaking, the process identifies the type and extent of facilities that are required to meet projections of aviation demand and evaluates a full range of alternatives for improving facilities consistent with forecast requirements. All functions at the Airport are considered, including the airfield, terminal and related passenger services, cargo, general aviation, airport support, and access.

This is the first full-scale master planning effort that has been undertaken at Sacramento International Airport since the mid-seventies. Consequently, the planning process includes an extensive coordination effort with the many airport tenants, public agencies, citizens groups, and community leaders that have a stake in the future of Sacramento International Airport.

1.1 VISIONS OF THE AIRPORT'S FUTURE

Visions of the Airport's future were carefully considered at the very onset of the Master Plan Study and were developed only after seeking input through interviews with key stakeholders, an open house/workshop with the public, and a brainstorming session with the Study's Technical Advisory Committee. Together, these individuals contributed to the following visions of the future of Sacramento International Airport:

- *...is surrounded by compatible and supportive land uses.* To preserve the long-term vision for the Airport, the Sacramento County Airport System uses foresight in acquiring land necessary for expansion and for buffering the Airport from adjoining uses. Concurrently, each jurisdiction with land use control over areas in the vicinity of the Airport plans for the development, or preservation, of compatible land uses. Planning for the compatible development of adjoining lands maximizes opportunities to preserve open space habitat and recreational space.
- *...has high quality, multimodal, congestion-free access.* Air travelers and employees have alternative modes of travel to Sacramento International Airport from directions north, south, east and west. The quality and convenience of transportation services to the Airport ensures that passengers enjoy a seamless trip to the gate from their point

of origin. Ultimately, the Airport will be a terminus for light rail service from Downtown Sacramento, with improved service by bus, shuttle and other alternative modes.

- *...is customer friendly.* Sacramento International Airport offers a pleasing experience to the user and employees. Its facilities are intuitively laid out, enabling “hassle-free” use by the air traveler, and accommodating the special needs of the elderly, disabled and families traveling with children. The Airport’s facilities are sufficient to maintain levels of convenience and efficiency while at the same time maintain the Airport’s current level of convenience. The Airport is easy to get into and out of, and has reasonably priced and adequate covered parking.
- *...accommodates the air travel needs of the region.* Sacramento International Airport has frequent non-stop service to domestic and international destinations. From Sacramento, air travelers can get anywhere. The Airport meets the increasing travel needs generated by the region’s growing conference and convention activity and accommodates future growth in charter and group activity as well.

Sacramento International Airport easily and conveniently accommodates increasing tourism travel, including travel destined for the Lake Tahoe area, the foothill wineries and other attractions in the region.

- *...has adequate capacity to meet future needs.* Sacramento International Airport has the capacity to serve projected growth, not only 20 years out, but beyond, and its runways, taxiways, and terminal aprons are sized and configured to handle the larger size of aircraft that are expected to operate at the Airport. This Airport is the region’s premier passenger service airport. Cargo facilities are provided to service nearby shippers. General aviation needs are considered, but primary facilities are promoted elsewhere in the system to reserve the capacity of the Airport for scheduled passenger service.
- *...is an international gateway.* Sacramento International Airport is beginning to emerge as an international airport, complete with the facilities necessary to process international passenger arrivals and to accommodate aircraft that fly international stage lengths. The Airport links the Sacramento region to the world—a link that is essential for the Sacramento economy to grow and be a player in the global economy. Mexico, Canada, Hong Kong, Tokyo, Shanghai and Europe are prominent destinations that can be served by the Airport’s facilities.
- *...operates safely and efficiently.* Sacramento International Airport must continue to provide a safe and secure operating environment for passengers and their baggage. Airport facilities are planned and designed to move passengers quickly. The airfield’s facilities are equipped with nav aids and lighting systems necessary for operating in all weather conditions. Airport improvements are planned in a way that is compatible and integrated with the airspace needs of other civilian and military airports in the area.

- *...is attractive and conveys a Sacramento “sense of place.”* As a primary entry point, Sacramento International Airport is an extremely important part of the region’s image to residents and visitors alike. Its facilities provide a good first impression, with ample use of public art creating a pleasing, sophisticated environment. Architectural integrity (style, materials) extends throughout the entire Airport. The arrangement of the Airport’s facilities maintains, as best as possible, a sense of open space, with the continued use of trees for aesthetic purposes and as a “cool down” measure.
- *...is environmentally responsible.* The Sacramento County Airport System continues its proactive approach for planning future facilities that meet specified needs, while at the same time minimize impacts on the environment. As best as possible, airfield improvements are planned that accommodate aviation demand and minimize noise impacts on adjoining communities. The Sacramento County Airport System and the system’s users continue their efforts to reduce carbon dioxide, greenhouse gasses, and ozone through thoughtful facility development that minimizes vehicular movements and congestion.
- *...is progressive.* In planning and designing facility improvements, the Sacramento County Airport System is adaptable to the changing needs of its customers, tenants, and federal requirements. It uses the best practices from the industry to service the air traveling public and the community safely, efficiently, and with good value.
- *...is an economic engine.* Sacramento International Airport is critical for attracting and maintaining businesses to Northern California’s Sacramento Valley, and is a vital part of the infrastructure that supports economic growth. The Sacramento County Airport System takes a lead role in support of economic development efforts.
- *...is financially solvent.* The Airport’s operation is financially self-sustaining. The Airport’s development is conducted in a financially feasible manner, balancing the need for new facilities with the maintenance of reasonable user charges.

Throughout the visioning process, stakeholders affirmed that Sacramento International Airport is a regional asset and is valued by the public. Fulfillment of the preceding visions will ensure continued appreciation and support of the Airport by inhabitants and businesses throughout the Airport’s expanding air trade area. To the greatest extent possible, the Master Plan Study applies the visions to assess the potential for aviation demand and to screen facility improvement alternatives to accommodate the Airport’s future demand.

1.2 ASSESSMENT OF THE AIRPORT'S STRENGTHS, WEAKNESSES, OPPORTUNITIES AND THREATS

In concert with the development of visions for the future of Sacramento International Airport, the Technical Advisory Committee was asked to assess the Airport's strengths, weaknesses, opportunities, and threats. Input obtained from the public workshops and the stakeholder interviews were also used to identify issues that should be addressed.

This assessment provided a beginning point for the Master Plan Study and will be used to guide the Master Plan Study's projection of aviation demand as well as the identification of facility needs and requirements. Strengths and weaknesses describe existing conditions that the planning effort recognizes at the onset, whereas opportunities and threats are potential future conditions that the planning effort must anticipate when developing its recommendations.

1.2.1 Strengths

Sacramento International Airport has many characteristics that signal its continued presence as the airport of choice for Northern California's Sacramento Valley over the next 20 years. These strengths range from the quality of the Airport's facilities and the strength of its economic base, to its proximity to the market that it serves. These strengths are:

- *The Airport's role is clearly defined.* As part of the system of airports operated by Sacramento County, the Airport's role for accommodating the region's air passenger travel is well established.
- *The Airport is well positioned with respect to the geographic area that it serves.*
- *The regional market for air travel is very strong.* The regional economy is healthy and diversified and is capable of supporting continued growth in air travel. The presence of a low-cost carrier has stimulated air travel in the region.

- *The Airport is convenient.* It has good access and is easy to get to. Once at the Airport, customer travel is facilitated by the congestion-free layout of the landside facilities.
- *The Airport is expandable.* Currently isolated from the more urbanized areas of the County, much of the Airport is “greenfield” and available for development. Overall, it is felt that the Airport is not capacity constrained whatsoever.
- *The capability and capacity of the Airport’s runway system.* The Airport has excellent air traffic control services. The weather is typically good and favors good operating conditions. The parallel runways are suitably spaced to enable simultaneous aircraft arrivals during Instrument Meteorological Conditions (IMC).
- *The success of Terminal A.* Terminal A and the airport grounds are attractive. The Airport has a good concessionaire program.
- *The Airport has the good will of the region.* There is a lot of interest in the Airport. As noted by one stakeholder, the Airport is everyone’s airport.
- *The Airport is financially strong and is self-sustaining and has competitive rates and charges that foster growth.*

1.2.2 Weaknesses

Despite the many and varied strengths that will accompany the Airport into the future, there are a number of weaknesses that must be addressed to ensure that its future remains bright. Many of these weaknesses are addressed in this Master Plan Study. Weaknesses of importance include:

- *A long-range plan for the improvement of aviation facilities is needed.* The Master Plan Study should prescribe the highest and best use of land. For example, some facilities have been incompatibly located on prime land along the terminal ramp.
- *Frequent public transit service is needed.* The need for public transit to the Airport, and particularly light rail access, is among the most frequently cited issues by stakeholders. Some view rail as being particularly attractive for international travelers (who are accustomed to using rail in their countries) and for employees.

- *Non-stop service to more East Coast and international destinations is desired.* Without international status, tourism is limited. Non-stop East Coast service is instrumental to attract more business to the region.
- *Certain passenger facilities and services require improvement and expansion.* Of particular note are the needs to improve Terminal B and to provide additional passenger amenities such as a sit-down restaurant, a close-in hotel, and meeting space. Other facility issues cited by stakeholders include: capacity limitations of the single level roadway design of Terminal A; the need to improve pedestrian connectivity between Terminals A and B; and the inefficiency of the V-shape of Terminal A's concourses for aircraft movement.
- *Airfield improvements are required.* Additional runway length is required to accommodate international travel beyond our continent. Other necessary improvements include north/south taxiways, run-up areas and deicing pads. Category III (CAT III) approach capability needs to be available on every runway approach to ensure all-weather capability. Additional instrumentation (ASDE-X) is necessary to accommodate aircraft ground movements during fog conditions.
- *Airport ground access should be improved.* More than one access point is necessary, especially alternative access points from the north. Lack of regional funding for access improvements was also cited as a weakness.
- *The current division of terminal facilities requires additional resources to manage effectively.*
- *Current environmental concerns could affect the implementation of future aviation improvements.* Aircraft noise and air quality concerns are the most often mentioned. Aircraft noise is an important concern for certain neighborhoods. The existing air quality permit is valid for a given level of activity only.

1.2.3 Opportunities

The future of Sacramento International Airport will depend, in part, on the ability of the Sacramento County Airport System to take advantage of several important opportunities. Specifically, airport management will need to provide the facilities necessary to accommodate projected growth, foster public understanding and support on a region-wide basis, and remain financially strong. A continued focus on long-range

planning will be necessary to ensure that these opportunities are realized. The following are opportunities cited that will foster future growth:

- *The Air Trade Area will continue to grow.* Commercial and residential migration from the Bay area is increasing the size of the Airport's air trade area. Sacramento is becoming a desirable alternative for people who want to live in California and for businesses that want to grow in California. Many dot.com and technology spin-off companies are moving to Sacramento. Concurrent with further business growth, the Airport can expect growing air cargo shipments as well as air passenger travel.
- *The Airport's air trade area will expand geographically.* Competing airports in the Bay area are capacity-constrained, unlike Sacramento International Airport. With increasing traffic congestion in the Bay area, it will become more expedient for those living on the northern and eastern portions of the Bay area to use Sacramento International Airport. Also, future rail service improvements in the Capitol Corridor will facilitate travel to Sacramento from the Bay area.
- *Non-stop service to international markets will be probable.* There are increasing numbers of Asians, East Indians, Hispanics, Hmong, and Russians living in the area with ties to their homeland. The region's businesses and tourism industry are strongly linked to the global economy.
- *Expect regional collaboration.* Cooperation is necessary to facilitate the development of compatible land uses around the Airport. Already there is synergy with the planned development of Metro Airpark, whose commercial uses will be compatible with the Airport. Regional collaboration will furnish the coordination necessary to improve the infrastructure for further growth. Seizing the opportunity for regional collaboration is very critical to the Airport since new city formations as well as recent and on-going annexations will diminish the County's role in regional affairs over time.
- *An increasingly strong financial base will be available to support further aviation improvements and to expand the Airport's role in stimulating economic development.* The Master Plan Study will provide a basis for developing traditional and nontraditional aviation uses that will further enhance revenues. Public/private partnerships for development may be an opportunity. The Airport will need to consider such things as tax increment benefit districts, enterprise zones, etc. At the same time, the Airport must manage facility development to reduce long-term operating costs. Revenue producing opportunities such as conference and meeting facilities (e.g. for State hearings), which when located at the Airport reduce trips and associated air quality impacts, will have to be evaluated.

- *Gain public support for the Airport and the Master Plan.* Continuous coordination with the public will be necessary to sustain support for further aviation improvements.
- *Continue the benefits of prudent, long-range planning.* The Master Plan will need to be updated frequently to maintain a congestion-free facility, to accommodate changing technology and incorporate modern design philosophies, and to continue efforts to enhance the environment.

1.2.4 Threats

Although there are many opportunities for the Airport, several important threats to its future need to be addressed if it is to continue to meet the air travel needs of the region as efficiently as it has in the past.

- *The potential for encroachment by incompatible land uses will need to be addressed.* Encroachment by incompatible land uses was the most often cited concern of stakeholders. If not averted, incompatible development will limit the expansion of the Airport, eliminate opportunities for increasing its capacity, and create aircraft noise conflicts.
- *Airport access will become less convenient.* Increasing traffic congestion threatens access to the Airport. Growing congestion on I-5 is a particular concern.
- *Wildlife habitat improvement and airport operation will need to be managed to preclude conflict and potential safety hazards.* Several stakeholders cited opportunities for wildlife preservation in association with the creation of a buffer for the Airport. If this approach is pursued, habitats that attract large waterfowl or birds that flock should be avoided to minimize any potential for aircraft/bird strike hazards.
- *To the extent possible, master plan and ensuing facility planning will need to reduce air quality impacts.* Federal sanctions can limit transportation improvement projects if air quality standards are not met. The Sacramento County Airport System must continue to be aggressive with clean fuel applications and search for methods to reduce ground vehicle movement.
- *The potential for erosion of air travel in air trade area may arise.* The Sacramento County Airport System should monitor air service events of competing and regional airports such as Stockton. Also, rail improvements

(especially high-speed rail) could alter air passenger activity for short-haul, intrastate air travel.

- *The Airport's infrastructure may need to be improved and expanded.* The Airport is presently served by its own water well and wastewater treatment facilities. Extension of an alternative water supply and sewer system to the Airport will be desirable if substantial development of airport properties occurs. Fueling facilities will need to be expanded and the form of delivery addressed.
- *Rising costs could limit further improvements.* The cost to build and operate aviation facilities will need to be carefully weighed.

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With visions for the future of the Airport in place, the next step was an inventory of existing conditions, including the physical facilities, as well as the environmental and community setting of this important regional asset. Chapter 2.0 presents existing conditions at Sacramento International Airport.