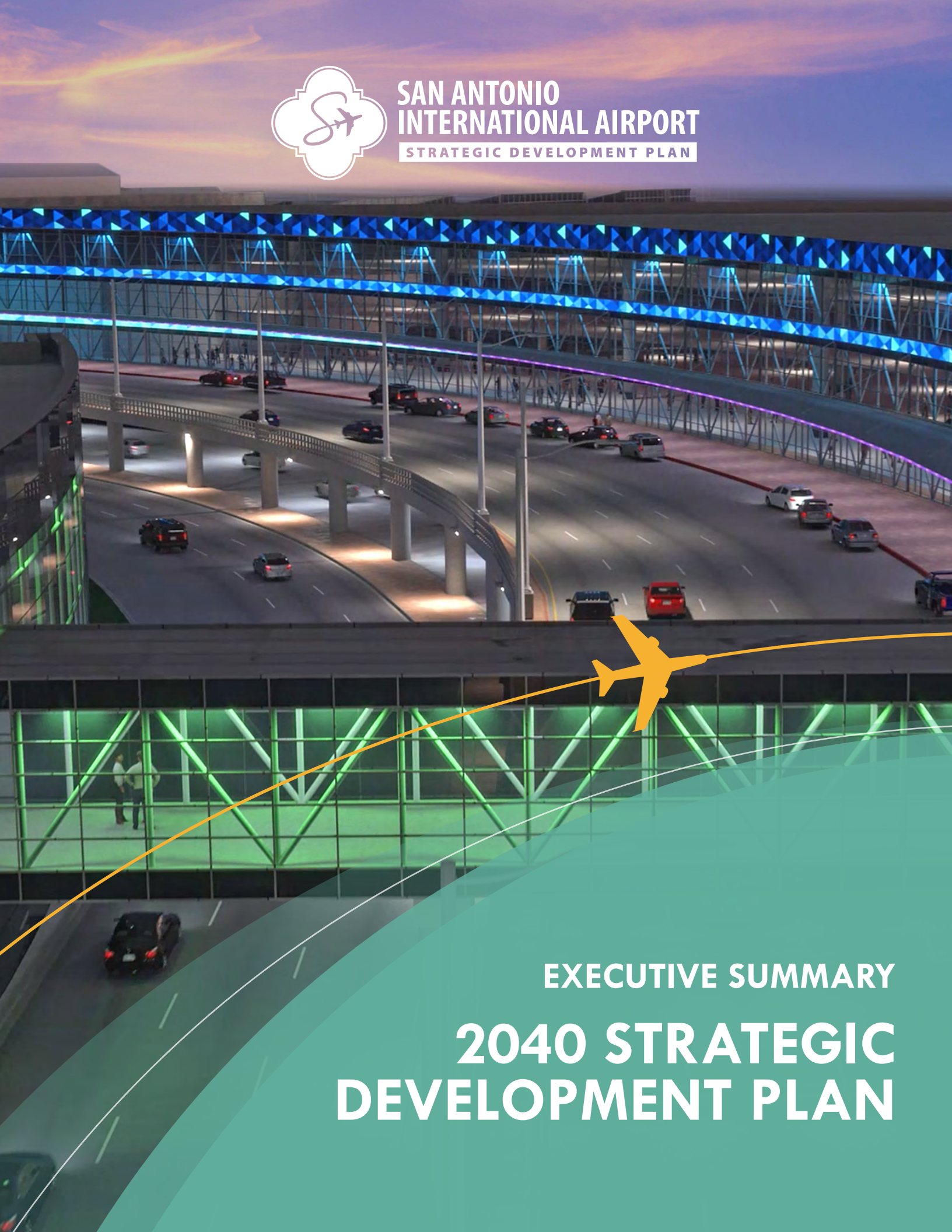
SAN ANTONIO INTERNATIONAL AIRPORT

STRATEGIC DEVELOPMENT PLAN



EXECUTIVE SUMMARY

2040 STRATEGIC DEVELOPMENT PLAN

The City of San Antonio is pleased to present the Strategic Development Plan (SDP) for the San Antonio International Airport. This 20-year plan was approved by City Council in November of 2021. The SDP was developed not only in response to the projected population growth within the City and the region, but also to meet Federal Aviation Administration (FAA) requirements to obtain Federal funding.

The City's Aviation Department engaged WSP, an international transportation planning and engineering firm with a local presence, to develop the SDP. I am pleased that several small or disadvantaged local firms contributed to this important plan, completing more than 30 percent of the crucial work.

To provide oversight of the SDP and to make sure that our local sense of place would be instilled in the plan, I created the Airport System Development Committee. This group, led by local tech executive, John Dickson, consists of 23 local leaders, heads of organizations, and entrepreneurs who have contributed their insights to the plan.

The expansion and development of San Antonio International Airport is one of the most important efforts our City will undertake during my time as Mayor. I'm grateful for the robust community input that has gone into it, and I'm excited to see what the future holds for SAT.

Sincerely,
Ron Nirenberg
City of San Antonio Mayor

The San Antonio metro area's population is growing and projected to top 4 million by 2050. The strategic development of the San Antonio International Airport (SAT) is the largest and most important capital project our City will have ever undertaken and will be a major economic generator for the region.

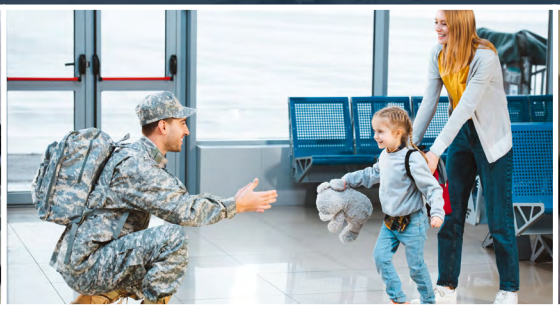
The Strategic Development Plan (SDP) envisions a modern airport with a strong sense of place that firmly lands San Antonio as a world-class airport. The first major projects to be completed will be a new Terminal C, terminal loop roadway modifications, a new parking garage and ground transportation center across from the new terminal, and a runway extension. SAT's terminals will be a unified single terminal complex, allowing accessibility to all gates for passengers past security. The new Terminal C, and all future development, will include increased presence of local businesses and food offerings. This will not only provide more opportunity for our local enterprise but provide visitors with a better feel for our great community and culture.

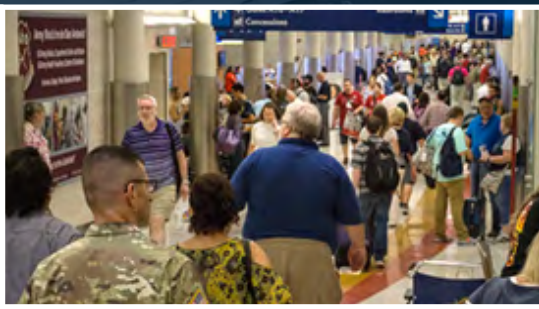
To accomplish the planning, design, and construction of the new Terminal C program it will require long-term commitment from departments across the City including Finance, IT, Human Resources, and Development Services.

This SDP provides us with the blueprint that will allow us to fly into the future, together, towards a world-class San Antonio International Airport.

Sincerely,
Erik Walsh
San Antonio City Manager

2040 STRATEGIC DEVELOPMENT PLAN





OVERVIEW

SAT is owned by the City of San Antonio (CoSA) and operated by its Aviation Department. It is the airport of choice for travelers not only in San Antonio, but also for those in surrounding counties. The Aviation Department launched the Strategic Development Plan (SDP) in 2018. The SDP aimed to develop a new long-term plan for systematic future development at the San Antonio International Airport (SAT or the Airport) to accommodate the growing activity expected through 2040. The SDP includes future airport and tenant need projections, a broad range of technical analyses, extensive stakeholder engagement, and provides airport-wide solutions for the 20-year planning horizon.

The Federal Aviation Administration (FAA) requires that airports update their plans every 10 to 15 years and assisted in funding this effort. The previous SAT Airport Master Plan was completed in 2010; several of its recommendations, such as the consolidated rental car facility and short-term parking garage, have since been built.

SDP GOALS AND APPROACH

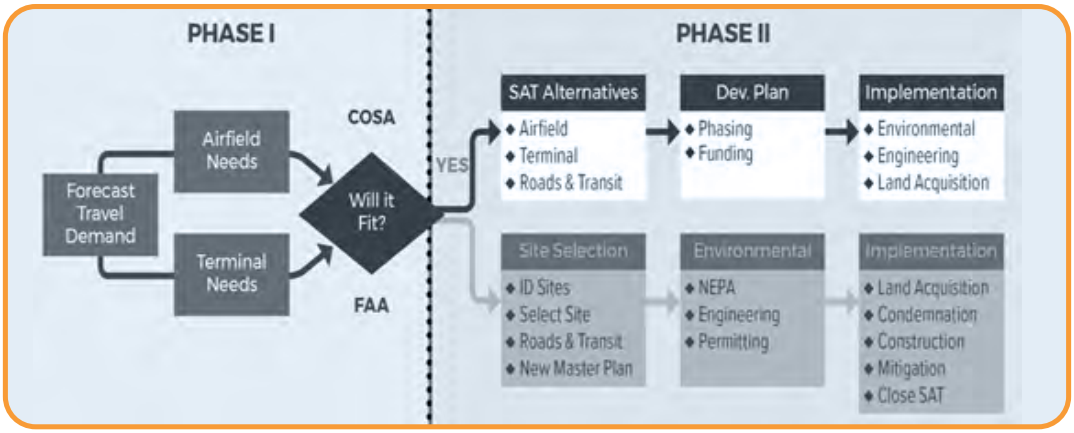
SAT exceeded a record 10 million annual passengers in 2019. Within the next 20 years, that number is projected to grow to 14.5 million passengers, as approved by the FAA. To accommodate the projected future aviation demand, meet customer expectations, and continue SAT's significant contribution to the regional economy, the Airport's facilities must be able to keep up growing air travel demand.

BACKGROUND

In 2018, the community voiced concern that SAT might not be able to accommodate future air travel needs of the rapidly growing south Texas region. Before planning SAT's future, the SDP first analyzed whether the existing Airport location would be able to accommodate projected aviation demand for the next 50 years:

» **Phase 1** *(2018)*—The goal of the first phase was to answer the question **"Will It Fit?"** – i.e., is the existing Airport location sufficient to handle long-term aviation demand, or will a new airport site eventually be needed? To fully answer this important question, the Phase 1 technical analysis looked out 50 years, using a high-growth forecast of travel demand and associated airport needs. This analysis found that long-term aviation needs can be accommodated at the existing airport location through 2070. Through extensive engagement, stakeholders reviewed and confirmed these findings. Phase 1 was concluded with FAA and City Council acceptance of the technical findings in late 2018.

» **Phase 2** *(2019-2021)*—With the question on space for the Airport resolved, Phase 2 of the SDP advanced to planning facilities. Planning focused on providing optimal facilities for SAT's growing passenger and cargo traffic through 2040. The SDP was an airport-wide effort, and it addressed many typical future needs required by the FAA. Included in these were a decision about the future of the almost 40-year-old and functionally obsolete Terminal A; the need for location and timing of a future Terminal C; additional parking and



multimodal facilities; the size and location of cargo expansion; and runway improvements to accommodate demand for additional future international air service. Phase 2 also continued the extensive stakeholder engagement process that was started in Phase 1. The planning efforts and recommendations in Phase 2 were supported by detailed facility cost estimates, project phasing, financial analysis, and the identification of next steps to realize the proposed projects.

Planning analysis and recommendations in the SDP exceeded the FAA's Airport Master Plan technical requirements, and guidelines in *Advisory Circular 150/5070-6B*, Airport Master Plans while focusing on key elements that the CoSA Aviation Department defined as critical to successfully serving the region. An overarching priority of the SDP is for SAT to accommodate the region's air travel needs in a world-class manner, by:

- Providing an outstanding first and last impression of the city and region, with a sense of place.
- Enabling a business travel and tourism-driven economy to which SAT contributes approximately $5 billion annually.
- Recognizing that increasing congestion in aging facilities is not acceptable.

AVIATION DEMAND FORECAST

Future demand for air travel was projected for passengers, aircraft operations, cargo tonnage and SAT-based aircraft. The evolving COVID-19 impacts on aviation and SAT were assessed, and the FAA-approved SDP forecast was adjusted to reflect a two-year delay in projected demand. SAT has recovered more quickly than peer airports and finished 2021 at 72 percent of the record-level 2019 traffic. The Airport is expected to reach 2019 levels in 2022.

- **Passengers** – Passenger levels drive terminal, landside, and support facilities' needs and are forecast to increase to 14.5 million annual passengers by 2040. A high-growth scenario of 17.3 million passengers was also developed to make sure that essential facilities, such as the terminals, would be able to accommodate stronger-than-anticipated demand. International traffic is projected to grow faster than domestic passengers; however, the latter would continue to be the largest share of SAT's passenger demand. While Mexico and Canada were the Airport's current international markets in 2019, by 2040, demand for service to Europe and deeper into Latin America is expected. SAT primarily serves terminating and originating passengers, versus connecting passengers, and this is projected to remain unchanged.
- **Cargo** — Cargo plays a significant role at SAT, with approximately 126 metric tons of air cargo processed in 2019. This includes mail, freight, and express shipments, such as packages shipped by FedEx or UPS. By 2040, air cargo is expected to grow to approximately 166 metric tons.
- **Aircraft Operations** – In 2019, SAT recorded approximately 164,000 aircraft operations which drive the need for airfield and support facilities. By 2040, operations are forecast to increase to 209,000.

FUTURE FACILITY REQUIREMENTS

The SDP team assessed the adequacy of existing facilities to meet future demand through the 2040 planning horizon by comparing projected demand to the capacities of existing facilities. This entailed technical analysis, as well as extensive staff, tenant, and stakeholder input. Key needs or shortcomings were identified for 2040:

FUTURE TRAFFIC GROWTH DRIVES 2040 NEEDS

Airfield

- The current 8,500-foot runway is not long enough to reach farther international destinations.
- FAA airfield standards have evolved since prior planning, requiring consideration of new safety enhancements.
- Capacity of the existing runways should be increased by a small increment. No new parallel runway is required.

Terminal

- Current concourses are too narrow; today's width standard is approximately 110 feet versus the current 67 feet (Terminal A) to 100 feet (Terminal B).
- Terminal A is functionally obsolete and undersized and should therefore be replaced rather than renovated.
- Up to 37 total aircraft gates will be needed, compared to today's 24 gates. Up to five total international aircraft need to be accommodated. SAT is constructing three additional gates in 2022 to meet near-term needs, but additional gates post-2022 will need to be built as part of a new terminal.
- Inadequate space is available today for concessions. More variety and local offerings are also needed.
- CoSA Aviation Department staff and passengers prefer a unified terminal complex as opposed to the current stand-alone terminals and passenger security screening checkpoints.

Roadways

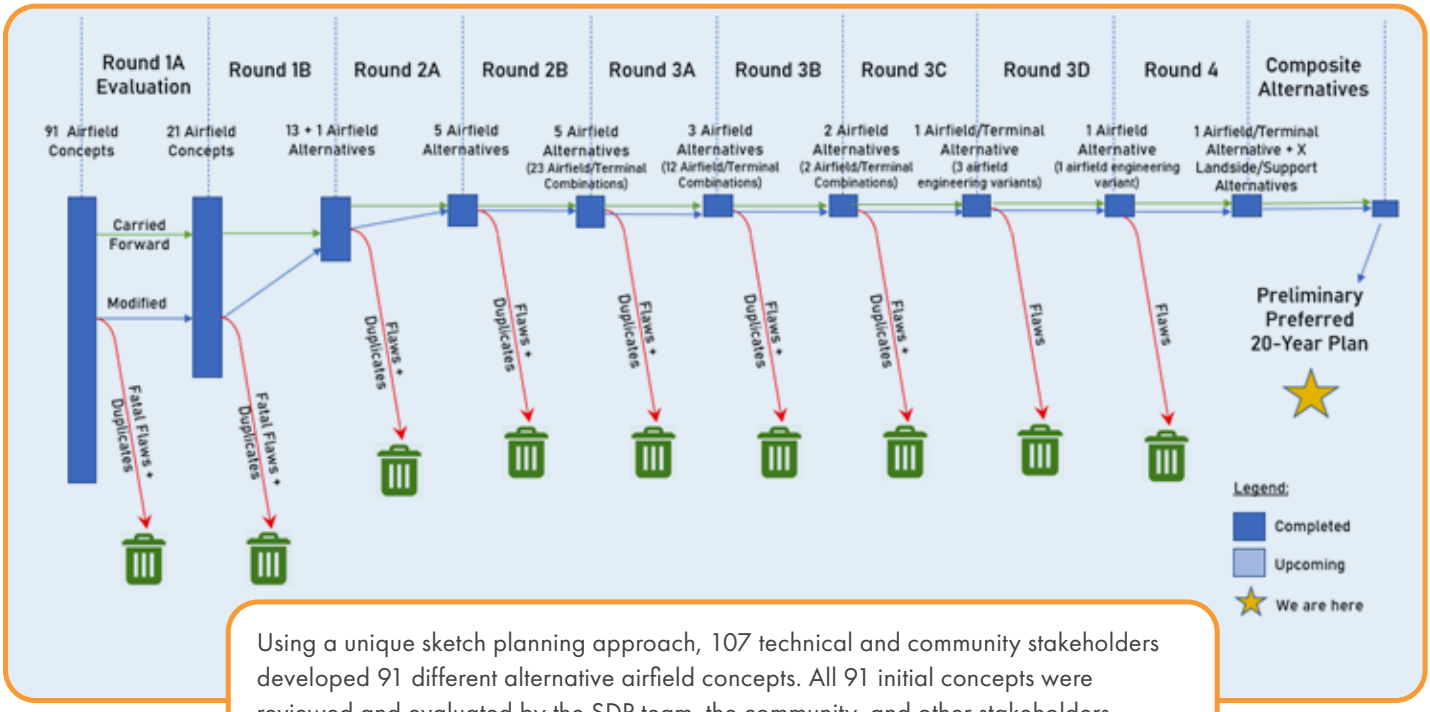
- On-airport roads are complicated, disorienting, include too many turns and intersections, and require multiple driver decisions within a short distance. Backups leading up to Terminal A occur frequently.
- All transportation modes currently mix at the terminal curbs causing congestion.
- Crosswalks along the terminal curb front mix passengers with vehicles, causing congestion and safety concerns.
- Inadequate space is available in the parking garage, which reaches 100% capacity during peak periods.
- Multimodal access needs to be improved, with consolidated areas for hotel and parking shuttles, as well as transportation network company (TNC), such as Uber and Lyft and taxi drop off/pick up closer to the terminal.

And More

- Tenants intend to expand their activities and space over time and their needs must be accommodated.
- Technology and innovation that continue to change and affect airports need to be considered.
- The current facilities do not provide a San Antonio "sense of place" for travelers.

PROPOSED 2040 DEVELOPMENT

Alternative solutions were developed to meet the requirements for 2040. The airfield was the priority, followed by terminal facilities, then multi-modal access and support facilities.



Using a unique sketch planning approach, 107 technical and community stakeholders developed 91 different alternative airfield concepts. All 91 initial concepts were reviewed and evaluated by the SDP team, the community, and other stakeholders. The evaluation criteria included technical feasibility, safety, operational efficiency, passenger convenience, costs, and environmental impact and sustainability. The Aviation Department selected the preferred alternative for each airport functional area after several rounds of technical analysis and evaluation.

Airfield – Runway extensions will allow aircraft to reach farther international destinations from SAT. The proposed airfield layout will provide a 10,000-foot runway on SAT property by extending Runway 13R-31L on both ends. Extending the runway on both ends also realizes the desired airfield safety enhancement.

Passenger Terminal – The SDP analyzed the terminal expansion and replacement facilities both on the existing terminal site and on other locations at SAT. Various 2040 terminal options were evaluated, including unit terminals versus a centralized single terminal, and terminal area expansion to the west versus east. The existing terminal area was found to be the optimal location for passenger terminal facilities.

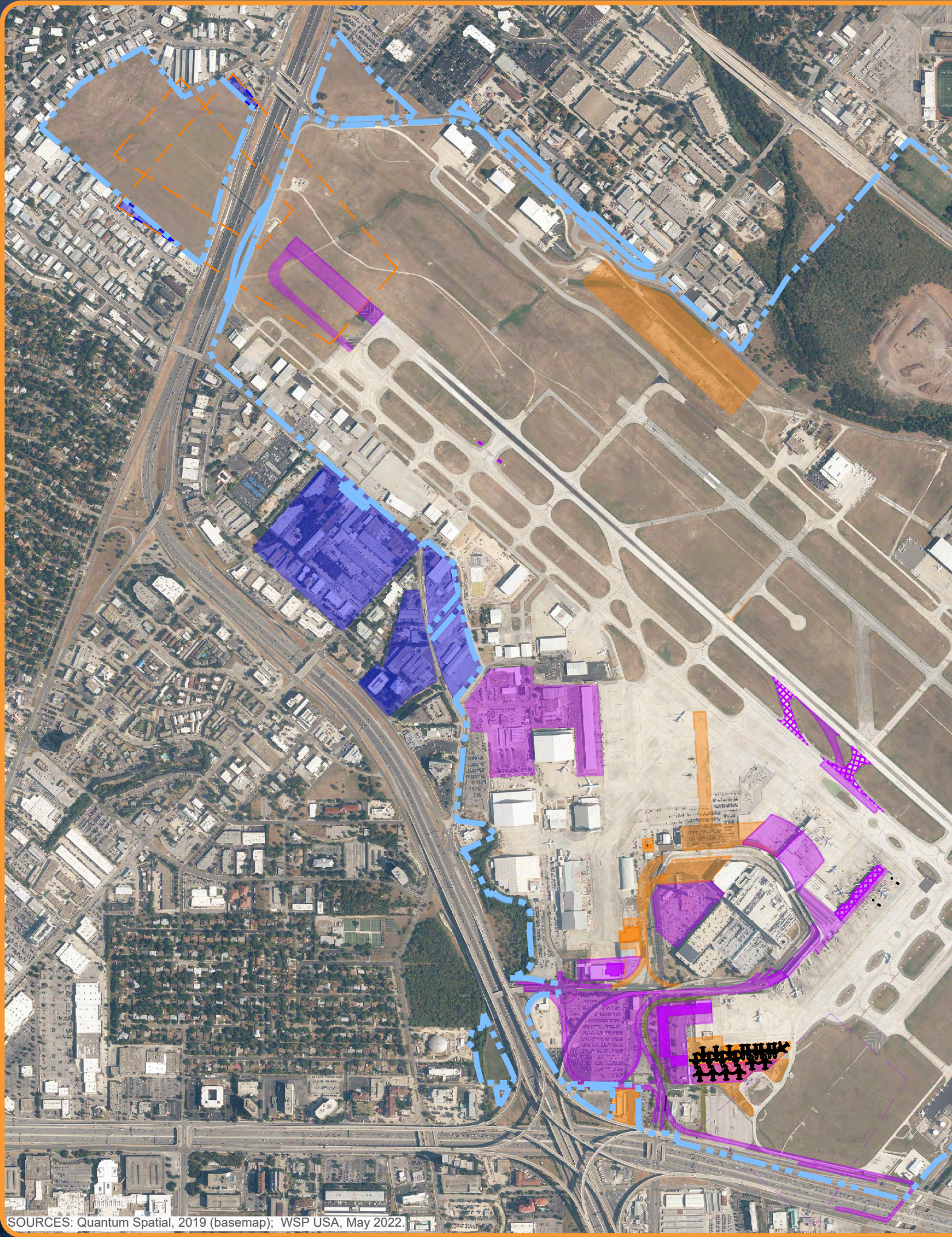
Terminal expansion to the largely vacant area west of the existing Terminal B is the most feasible first step in the proposed plan, as it has been reserved for terminal expansion.

Eastward expansion would require the closure of Runway 4-22 before the end of its useful life. The new terminal will provide up to the 17 gates needed to accommodate continued growth and additional gates needed for airline relocations during the reconstruction of Terminal A. Seven variations of the terminal expansion to the west were developed and evaluated.

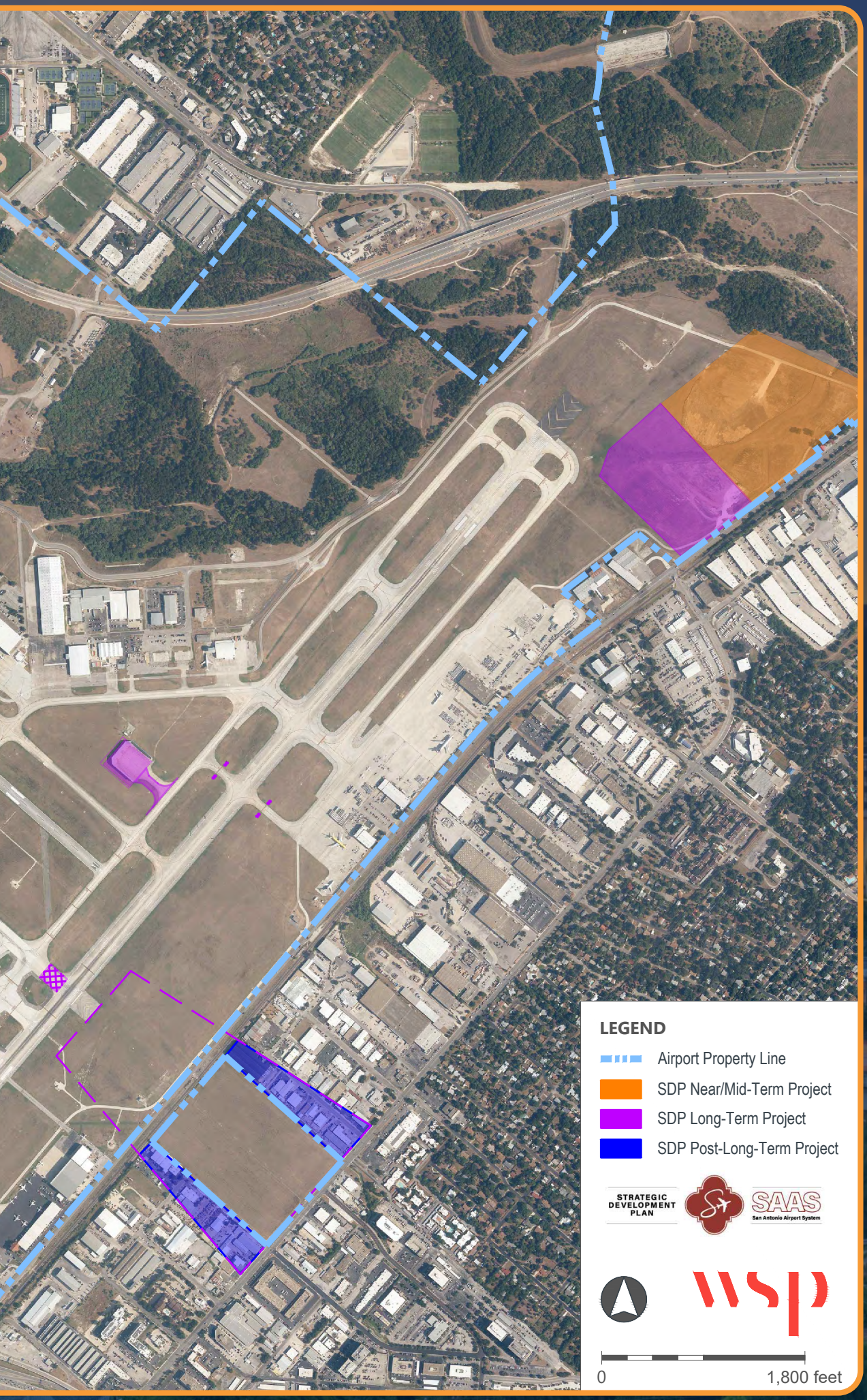
In evaluating terminal alternatives and selecting the preferred alternative, the Aviation Department considered the following key factors:

- Provides the needed 37 gates at completion, including three to five international-capable gates.
- Creates a world-class facility with convenient layout and efficient passenger flow.
- Connects all gates, allowing free flow and concession access throughout the entire unified terminal complex.
- Allows for reasonable phases and incremental construction as warranted by demand.
- Adds new gates early, so that the total number of gates continues to increase over time
- Allows for airline relocations during the later phases of reconstruction.

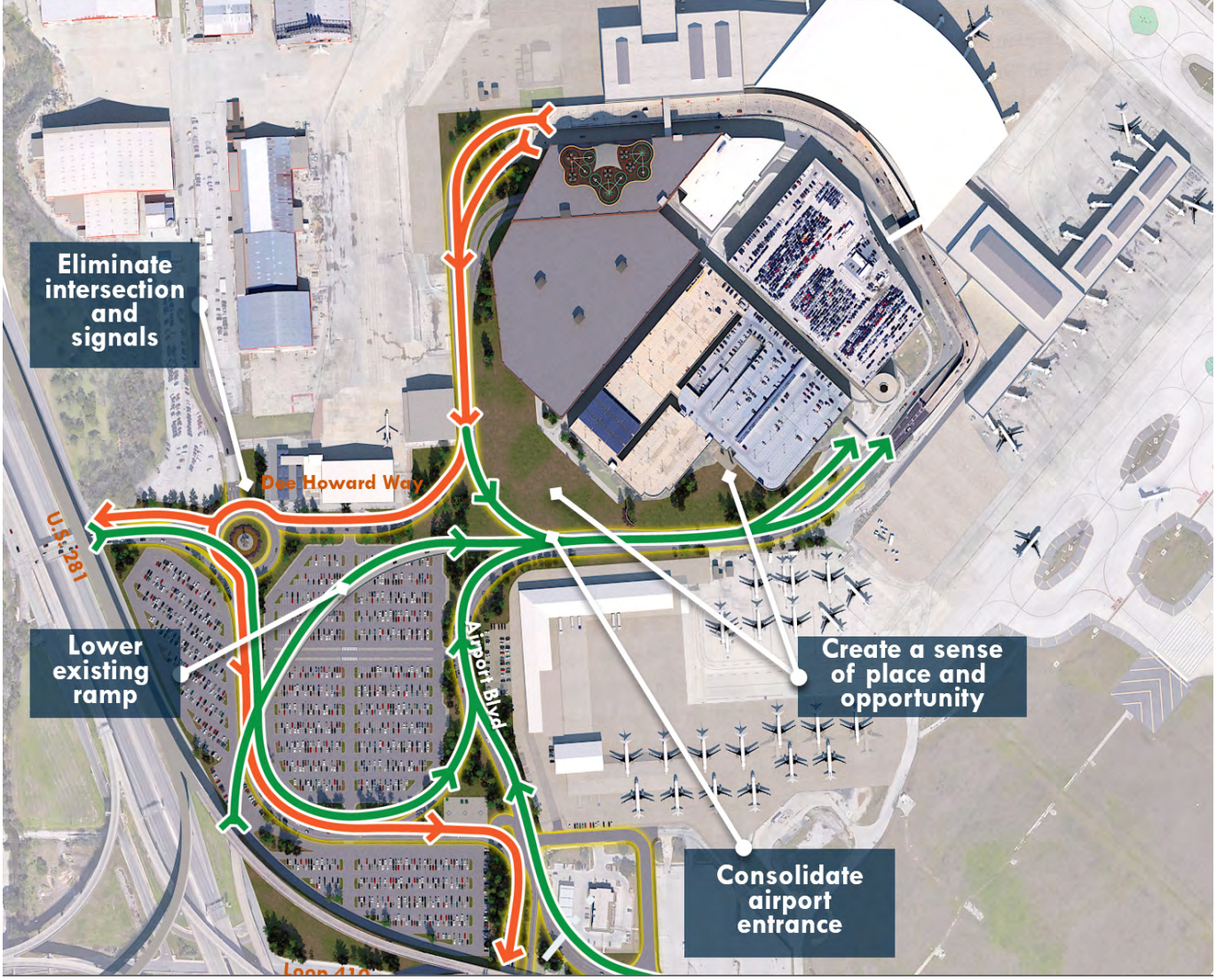
The preferred terminal alternative meets all these goals.



SOURCES: Quantum Spatial, 2019 (basemap); WSP USA, May 2022.



For additional information see *Chapter 6: Implementation and Funding Plan.*



Multimodal Access/Landside – The SDP proposes to realign the entrance and exit roadways, as well as improve on-airport circulation, providing for continuous traffic flow and simplified access and wayfinding. The US-281 northbound ramp into SAT will be upgraded by lowering the ramp which will lead to an increase in decision-making distances, improving safety and efficiency, and increased "sense of place" for drivers. Southbound US-281 access will also be improved by installing a roundabout and looped roadway system to retain a constant flow of traffic and ease of connecting with the airport. A new parking garage will connect with Terminal C and will encompass a convenient ground-level transportation center for VIA and other buses, shuttles, taxis, and TNC vehicles, such as Uber and Lyft.

And More – The SDP also identified room for all of SAT's tenants and critical functions to grow, including air cargo, airline support, aircraft overhaul, general/corporate aviation, and airport maintenance and operations. Additionally, the SDP is a flexible plan that can accommodate emerging and evolving technologies such as urban air mobility and driverless vehicles at SAT.

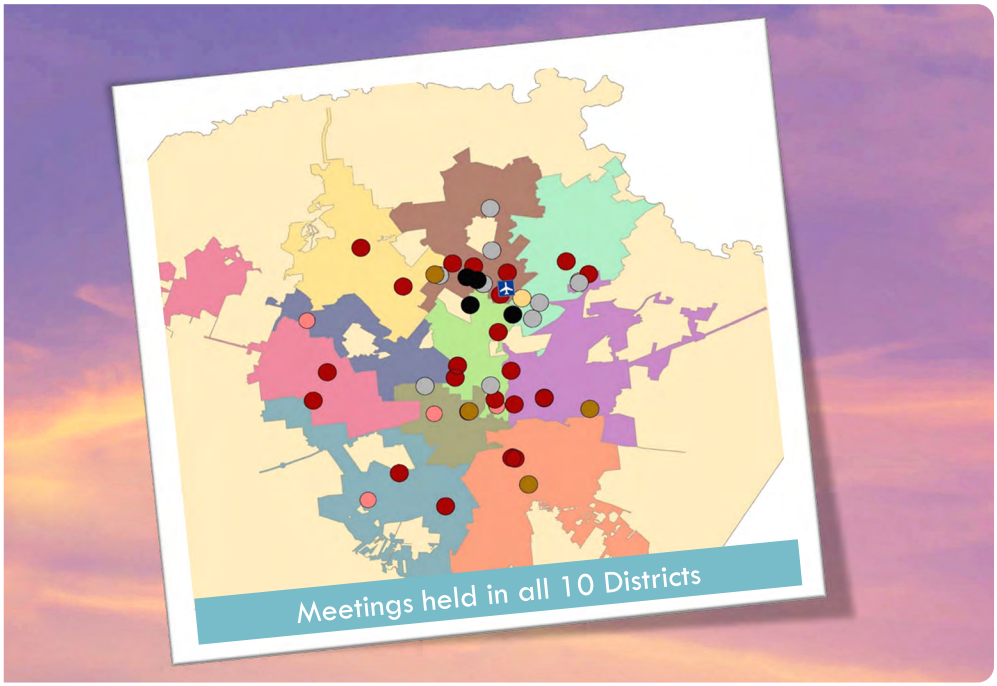
STAKEHOLDER AND COMMUNITY ENGAGEMENT

The CoSA Aviation Department's SDP team conducted an extensive stakeholder and community public engagement program throughout the planning process. Stakeholder engagement was conducted through regular meetings with the FAA, local, state, and federal agencies, tenants, airlines, airport users, elected officials, and business and civic leaders. Community engagement was conducted through a variety of methods throughout the entire city and area:

- Informal public pop-up and formal public information meetings
- Participation in existing community meetings, such as neighborhood association meetings
- Social media
- SDP web page
- Newsletters
- E-mail list updates
- Community surveys
- Stakeholder advisory groups and an ad hoc committee appointed by Mayor Ron Nirenberg representing the functional areas of the airport system
- Public briefings to the Airport Advisory Commission, City Council, and the Council Transportation & Mobility Committee
- Community interaction was nearly 100,000 direct engagements, including at the following events:
- 96 meetings held in all 10 City Council Districts
- 3,600 surveys received
- 9 open houses (either in person or virtually)

SAT is committed to continuing stakeholder engagement as individual projects from the SDP are implemented.

- **81 meetings held in ten districts**
- **3,600 surveys received**
- **100,000 direct engagements**
- **9 open houses**



A WORLD-CLASS FACILITY IS WITHIN OUR MEANS

NO CITY OR LOCAL TAX DOLLARS REQUIRED

USER FEE

Airport development and operations funded by FAA and user fees

Comparable to world-class US terminal programs

Airlines and FAA engaged in the plan

FUNDING THE SDP

The first major phase of the SDP, completion of Terminal C and supporting parking and roadway projects, is estimated to cost between $880 million and $950 million and will likely be completed around 2030. No City or local tax dollars will be spent on the SDP. Funding is available from a variety of aviation sources, including the FAA, passenger facility charges, airport bonds, rent, and user fees. The projects in the SDP are affordable given reasonable assumptions related to funding availability. The Aviation Department and the airlines will ultimately negotiate a business deal that will determine the exact funding mechanisms. The Aviation Department is also receiving federal infrastructure funding under COVID recovery measures, such as the Bipartisan Infrastructure Law, which can be used for SDP projects.

We must accommodate the region's air travel needs in a world-class manner

First and last impression of the City and the region

Enables business travel and tourism economy

Generates economic impact of $5B annually

45,000 jobs are directly related to the airport

Increasing congestion in aging facilities is not acceptable

NEXT STEPS

The SDP creates a framework for future development. To make this a reality, the CoSA Aviation Department will retain teams of planners, engineers, and architects to prepare more refined plans and preliminary designs, beginning in 2022. These will define purpose and need, and better evaluate required scope and timing of individual projects, all of which are needed to prepare required environmental reviews. Environmental approval is required for many projects, such as the new terminal and runway extension. After approval, final engineering and architectural design will proceed, followed by construction. the Aviation Department will phase the work to harmonize development and minimize passenger and aircraft disruptions due to construction.

NEXT TYPICAL TERMINAL PROGRAM IMPLEMENTATION

SAN ANTONIO INTERNATIONAL AIRPORT
STRATEGIC DEVELOPMENT PLAN

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