



AIRPORT MASTER PLAN

CHAPTER 5 - RECOMMENDED DEVELOPMENT CONCEPT AND FINANCIAL ANALYSIS



The selection of a Recommended Development Concept is based on a combination of efforts by the planning team, Airport and City leadership, and tenant input. The airport master planning process for San Angelo Regional Airport (SJT) began with an inventory of existing facilities (Chapter One) followed by an evaluation of existing and potential future operational demand (Chapter Two) and facilities necessary to accommodate such demand (Chapter Three). Development alternatives were formulated to meet airport needs (Chapter Four) and then presented to the Planning and Technical Advisory Committees. Input received from these committees, Airport Leadership, and City Leadership resulted in the identification of the Recommended Development Concept.

The purpose of this chapter is to describe the recommended direction for the future development of SJT. This begins with a definition of the Recommended Development Concept. This concept will be appropriately phased, taking into consideration the planning horizons defined within the aviation forecasts and facility requirements. The phasing will result in the formulation of a Capital Improvement Program and a financial plan will define the financial implications and opportunities of planned development.

Recommended Development Concept

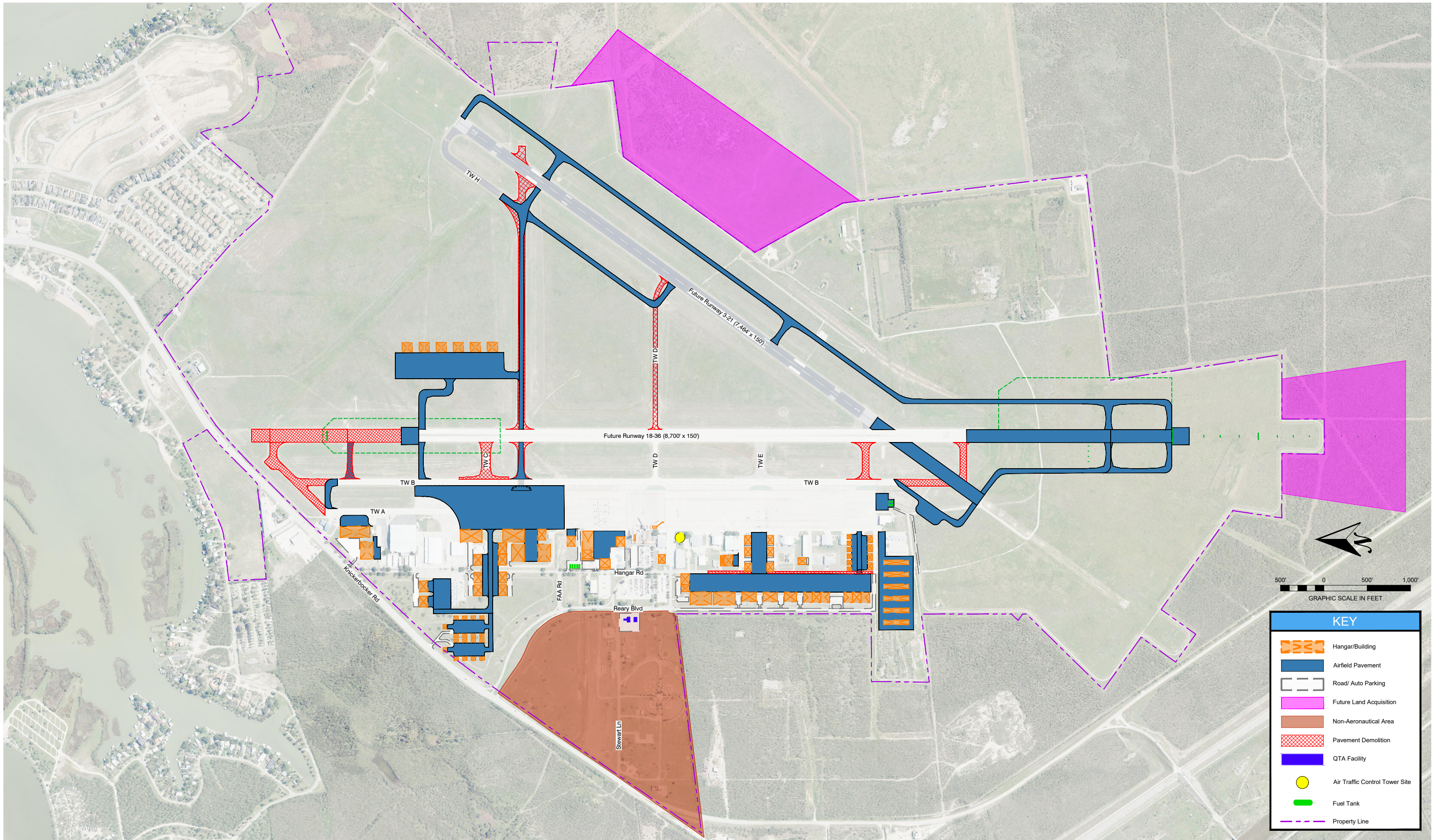
The Recommended Development Concept is depicted on **Exhibit 5A**. This concept provides airport improvements that not only conform to the City's goals and objectives but also meet identified facility needs while maintaining flexibility for future airfield expansion.

The Recommended Development Concept was prepared after the development alternatives presented in Chapter Four were vetted and refined based on stakeholder input. The Recommended Development Concept addresses all FAA design standards and provides direction to meet existing and future facility needs.

In comparing this plan to the Airport Layout Plan approved in 2012, primary differences include:

- Deconfliction of Runway 3 and 36 ends.
- Decommissioning of Runway 9-27 and conversion to a taxiway.
- Provision for additional aircraft access points for general aviation and cargo development along the extended Reary Boulevard.
- Potential expansion of the existing terminal building to meet long term commercial development needs. Prior planning reserved the area north of Runway 9-27 for the development of a commercial service terminal. This area is now set aside for the expansion of aviation related commercial and industrial land uses. Should a new terminal be necessary it is now planned for the areas east of Runway 3-21, providing access to the proposed Interstate 27 corridor.

For explanation purposes, the Preferred Development Concept can be separated into three categories, Airside Development, Landside Development, and Support Facilities. Below are detailed descriptions of each category.



KEY	
	Hangar/Building
	Airfield Pavement
	Road/ Auto Parking
	Future Land Acquisition
	Non-Aeronautical Area
	Pavement Demolition
	QTA Facility
	Air Traffic Control Tower Site
	Fuel Tank
	Property Line

Airside Development

As described in previous chapters, airside development needs relate primarily to the need to mitigate incompatible land uses within Runway Protection Zones (RPZs), mitigation of runway incursion hotspots, taxiway reconfiguration, and airfield development necessary to support the growth of the airport. Details regarding the projects are contained within the alternatives chapter and summarized below.

Runway 18-36

To meet FAA design standards and the overall vision of the airport the following improvements are recommended:

- Shift the runway to the south, thereby removing Knickerbocker Road from the RPZ critical surface. This will also allow the runway to fully meet runway safety area (RSA) and object free area (OFA) requirements eliminating the need for displaced thresholds.
- Relocate the Instrument Landing System (ILS) from Runway 3 to Runway 18. This will provide instrument landing capability to the airport's longest runway.
- The runway shift and upgrade to a precision instrument runway results in the need to acquire approximately 46 acres of land north of the airport. This property will contain the extended RPZ and approach lighting system.

Runway 3-21

To meet FAA design standards and the overall vision of the airport the following improvements are recommended:

- Extend the runway 1,525 feet to the southwest for a total runway length of 7,464 feet. This eliminates the potential runway incursion that results when aircraft access the Runway 3 end.
- Redesignate the runway as Runway 4-22 to reflect the change in magnetic declination.

Runway 9-27

Runway 9-27 will be decommissioned and converted to a taxiway to provide direct access from the east and west sides, as well as the ultimate aeronautical development in the midfield.

Taxiway Improvements

A number of taxiway improvements are proposed to meet FAA design standards as well as improve airfield efficiency.

- To ensure access to runway ends, taxiway improvements are recommended to accommodate the ultimate runway configuration.
- A full-length parallel taxiway on the east side of Runway 3-21 will provide access to the potential future terminal and cargo areas on the east side of the airfield. Please note, the ultimate terminal and cargo development is outside the planning horizon for this master plan.
- Taxiway Delta, between Runway 18-36 and Runway 3-21 will be closed to eliminate the high energy crossing location.

- New taxiways are proposed on the east side of Runway 18-36 to provide access for aviation-related development.

Taxilane Improvements

Numerous taxilane improvements are included within the ultimate plan to provide access to proposed hangar development areas. Most significant are the proposed taxilanes at the far north end of the existing apron, in the current t-hangar area, and leading to the airport's existing paint hangars.

Apron Improvements

As a result of the conversion of Runway 9-27 to a taxiway, it is proposed the area beyond the current Runway 9 end be converted to apron. This will facilitate needed hangar development as well as improved access from the southern portion of the airport to the northern portion.

Landside Development

Throughout the planning process the need for additional landside facilities was communicated to the planning team. To ensure future development is undertaken in a reasonable manner landside development planned in accordance with the land uses defined within Chapter Four, Alternatives.

General Aviation

General aviation is planned for the northern portion of the airport, west of Runway 18-36. As shown on Exhibit 5A, hangar facilities for smaller, general aviation aircraft are planned for the northernmost portion of the area with hangars for larger aircraft closer to midfield. As with previous planning efforts, expansion of aircraft storage is planned to occur west of existing hangars; therefore, it is critical access points be preserved.

Planned hangar facilities allow for a mix of development for single-engine, multi-engine, turboprop and business jet aircraft.

Aviation Business/Industrial

Expansion of aviation related business activity is planned to occur in the central and southern portions of the airport. Expansion of existing "MRO type" development is planned to occur in the areas north of the current commercial service terminal facilities. Additionally, the area south of Runway 9-27, between Runway 18-36 and Runway 3-21 has been set aside for additional aviation business/industrial growth.

Commercial Aviation

Expansion of the facilities necessary to support commercial service at SJT are planned to occur in the footprint of the existing terminal. Forecasts of activity determined that the expansion of the existing terminal building, parking, and associated facilities will meet the forecasted demand throughout the planning period. Please note, space is reserved on the east side of Runway 3-21 for the development of facilities to support the growth of commercial service beyond what is forecasted within this master plan. Such growth would likely be the result of growth resulting from the development of Interstate 27.

Air Cargo

Currently air cargo is handled south of the commercial service terminal area. Significant expansion of cargo activity at SJT is not anticipated through this planning period; however, to ensure increased demand can be accommodated the expansion of cargo facilities on the other side of Hangar Road is planned. This will require the development of aircraft access through the existing t-hangar area.

Governmental

SJT has a history of accommodating governmental aviation uses at the airport. Through the planning process it was determined that the areas at the far north end of the airport should be preserved to allow for the continued use and growth of governmental facilities.

Support Facilities

A number of aviation support facilities were evaluated through the alternatives analysis. The recommended development concept includes areas for the following:

- New Airport Traffic Control Tower (ATCT)
- Consolidated fuel farm
- Self-serve fuel farm
- Consolidated rental car quick turn-around facility
- Additional parking for the commercial service terminal area

RECOMMENDED DEVELOPMENT CONCEPT PHASING

Table 5A presents a summary of the Recommended Development Concept recommendations and their rough order of magnitude (ROM) cost estimates. It is important to note that the cost estimates must be viewed as preliminary, reflecting a master plan level of detail subject to refinement in subsequent implementation steps.

As shown in the table, the preferred development alternative recommendations are estimated to total approximately \$256 million over the 20-year planning horizon.

Short-Term Improvements

Exhibit 5B depicts the proposed short-term improvements at SJT. These improvements are focused on the following.

Conversion of Runway 9-27 to a taxiway

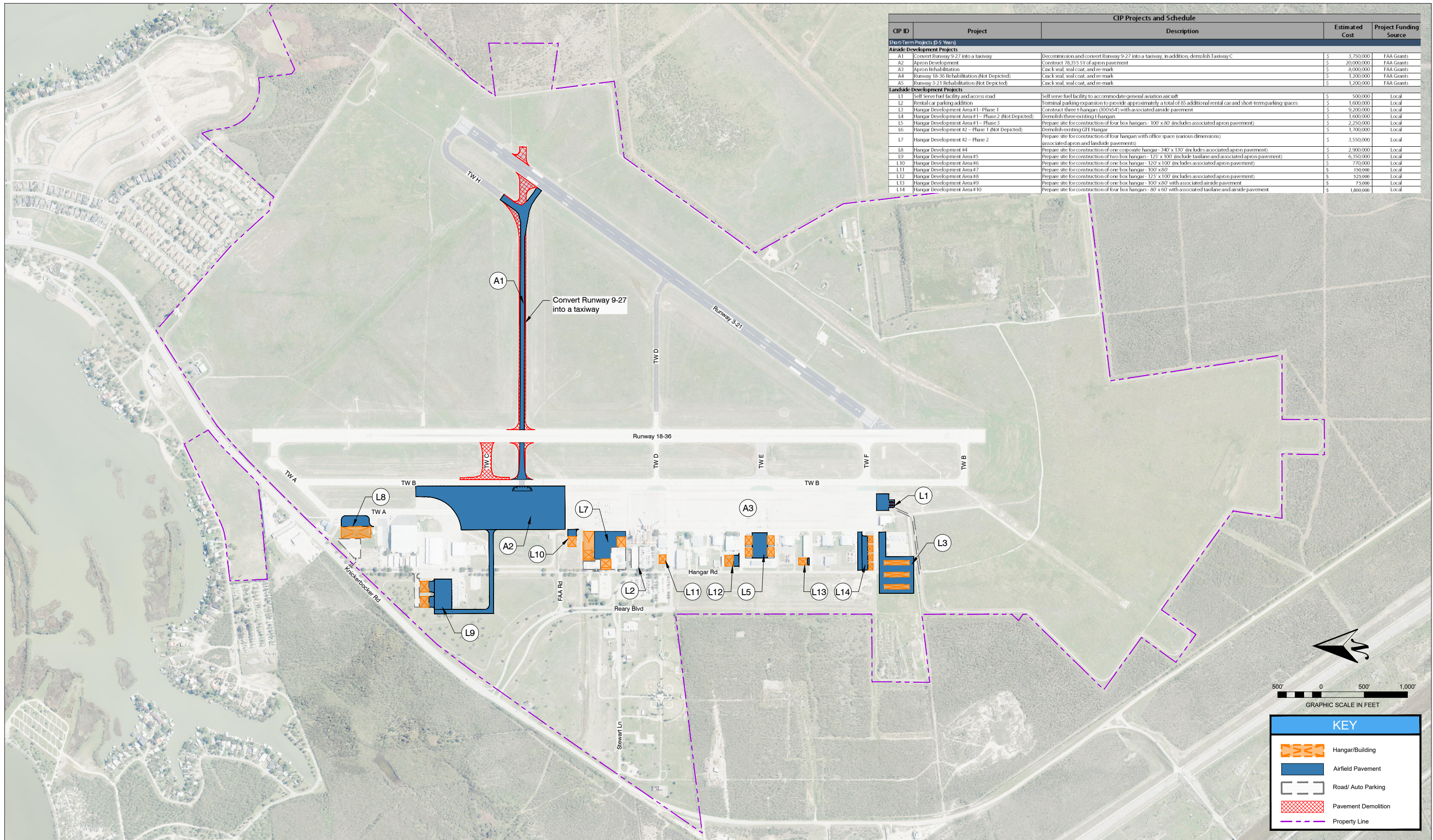
Previous planning conducted at the airport resulted in the decision to convert Runway 9-27 to a taxiway. Project A1 includes the costs for the conversion of the runway as well as additional improvements necessary to meet FAA taxiway design standards.

Apron Improvements

Conversion of Runway 9-27 to a taxiway provides the opportunity for additional apron development as depicted as project A2.

TABLE 5A
RECOMMENDED DEVELOPMENT CONCEPT

CIP Projects and Schedule				
CIP ID	Project	Description	Estimated Cost	Project Funding Source
Short-Term Projects (0-5 Years)				
Airside Development Projects				
A1	Convert Runway 9-27 into a taxiway	Decommission and convert Runway 9-27 into a taxiway, in addition, demolish Taxiway C	\$ 3,750,000	FAA Grants
A2	Apron Development	Construct 78,355 SY of apron pavement	\$ 20,000,000	FAA Grants
A3	Apron Rehabilitation	Crack seal, seal coat, and re-mark	\$ 8,000,000	FAA Grants
A4	Runway 18-36 Rehabilitation (Not Depicted)	Crack seal, seal coat, and re-mark	\$ 1,200,000	FAA Grants
A5	Runway 3-21 Rehabilitation (Not Depicted)	Crack seal, seal coat, and re-mark	\$ 1,200,000	FAA Grants
Landside Development Projects				
L1	Self Serve fuel facility and access road	Self serve fuel facility to accommodate general aviation aircraft	\$ 500,000	Local
L2	Rental car parking addition	Terminal parking expansion to provide approximately a total of 85 additional rental car and short-term parking spaces	\$ 1,600,000	Local
L3	Hangar Development Area #1 - Phase 1	Construct three t-hangars (300'x54') with associated airside pavement	\$ 9,200,000	Local
L4	Hangar Development Area #1 - Phase 2 (Not Depicted)	Demolish three existing t-hangars	\$ 1,600,000	Local
L5	Hangar Development Area #1 - Phase 3	Prepare site for construction of four box hangars - 100' x 80' (includes associated apron pavement)	\$ 2,250,000	Local
L6	Hangar Development #2 - Phase 1 (Not Depicted)	Demolish existing GTE Hangar	\$ 1,700,000	Local
L7	Hangar Development #2 - Phase 2	Prepare site for construction of four hangars with office space (various dimensions) (associated apron and landside pavements)	\$ 3,550,000	Local
L8	Hangar Development #4	Prepare site for construction of one corporate hangar - 340' x 130' (includes associated apron pavement)	\$ 2,900,000	Local
L9	Hangar Development Area #5	Prepare site for construction of two box hangars - 125' x 100' (include taxilane and associated apron pavement)	\$ 6,350,000	Local
L10	Hangar Development Area #6	Prepare site for construction of one box hangar - 120' x 100' (includes associated apron pavement)	\$ 770,000	Local
L11	Hangar Development Area #7	Prepare site for construction of one box hangar - 100' x 80'	\$ 150,000	Local
L12	Hangar Development Area #8	Prepare site for construction of one box hangar - 125' x 100' (includes associated apron pavement)	\$ 525,000	Local
L13	Hangar Development Area #9	Prepare site for construction of one box hangar - 100' x 80' with associated airside pavement	\$ 75,000	Local
L14	Hangar Development Area #10	Prepare site for construction of four box hangars - 80' x 60' with associated taxilane and airside pavement	\$ 1,800,000	Local
Mid-Term Projects (6-10 Years)				
Airside Development Projects				
A6	Runway 36 Extension	Construct 1,664 foot extension to Runway 36 and relocation of PAPI. Construct approximately 2,500 LF of taxiway pavement to provide access to Runway 36 extension and demolish a portion of Taxiway B	\$ 16,800,000	FAA Grants
A7	Midfield Development	Construct approximately 50,000 SY of apron pavement	\$ 13,000,000	FAA Grants
A8	ILS Relocation to Runway 36	Installation of Glide Slope, Localizer, and MALSR on Runway 36 (Includes removal of Glide Slope, Localizer, and MALSR from Runway 3)	\$ 2,800,000	FAA Grants
A9	Runway 3 extension and the removal of Taxiway F	Construct 1,525 foot extension on Runway 3 and demolish Taxiway F	\$ 6,800,000	FAA Grants
A10	Runway 18-36 Partial Mill/Overlay (Not Depicted)	2" Overlay	\$ 3,000,000	FAA Grants
A11	Taxiway A Construction	Construct two taxiway connectors adjacent to the Runway 18 end with partial pavement demo	\$ 3,800,000	FAA Grants
A12	Taxiway D Reconstruction (Not Depicted)	Reconstruction of Taxiway D east and west of Runway 18-36	\$ 1,292,000	FAA Grants
A13	Taxiway F Rehabilitation (Not Depicted)	Crack seal, seal coat, and re-mark	\$ 117,000	FAA Grants
A14	Taxiway H Mill/Overlay (Not Depicted)	Mill and Overlay 3-inch	\$ 402,000	FAA Grants
Landside Development Projects				
L15	Hangar Development Area #3 - Phase 2	Prepare site for construction of eight hangars (various dimensions) with associated airside and landside pavement (includes associated apron pavement)	\$ 22,180,000	Local
L16	QTA facility	Construction of a Quick-turn-around facility for rental cars. Facility will include carwash, vacuum and fueling	\$ 3,000,000	Local
L17	Closure of Hangar Road and extension of Reary Boulevard	Close Hangar Road to provide for construction of west hangar facilities. Extend Reary Boulevard to provide access to hangar areas	\$ 2,000,000	Local
L18	Consolidated fuel farm facility	Construct a fuel facility to be leased to tenants	\$ 1,500,000	Local
L19	ATCT relocation	Demolition of the existing tower and construction of a new ATCT on the site identified.	\$ 4,000,000	Local
L20	Hangar Development #4	Prepare site for construction of one corporate hangar (340' x 130') with associated airside pavement	\$ 4,800,000	Local
L21	Construct two box hangars (100' x 80') with associated airside pavement	Prepare site for construction of two box hangars - 100' x 80'	\$ 1,800,000	Local
Long-Term Projects (11-20 Years)				
Airside Development Projects				
A15	Runway 36 extension	Construct 1,416 foot extension to Runway 36 and relocation of PAPI	\$ 16,800,000	FAA Grants
A16	Partial demo of Runway 18 end and associated work	Demolish 820 feet from Runway 18 and construct two entrance taxiways on both side of the runway	\$ 3,500,000	FAA Grants
A17	Relocation of Runway 36 ILS	Relocate ILS (MALSR, Glide Slope, and Localizer) to accommodate Runway 36 extension	\$ 2,800,000	FAA Grants
A18	Taxiway H extension and partial removal of Taxiway D	Construct approximately 2,100 LF of taxiway pavement and demolish approximately 1,800 LF of Taxiway D	\$ 6,300,000	FAA Grants
A19	Full-length parallel taxiway	Construct full-length parallel taxiway with connectors to provide access on the eastside of the airfield	\$ 16,250,000	FAA Grants
A20	Commercial Terminal Building Expansion	Expansion to the existing terminal to provide one additional aircraft parking gate, as well as, expansion to the baggage handling facilities.	\$ 6,000,000	FAA Grants
Landside Development Projects				
L22	Land acquisition for MALSR and RPZ for Runway 36 extension	Acquire approximately 46 acres of land to maintain Runway 36 RPZ and MALSR on Airport property	\$ 30,000	FAA Grants
L23	Terminal land acquisition	Acquire approximately 75 acres of land for future terminal development	\$ 125,000	FAA Grants
L24	Construct three t-hangars (300' x 54') with associated airside pavement	Prepare site for construction of three t-hangars - 300' x 54' (includes associated apron pavement)	\$ 3,600,000	Local
L25	Construct six box hangars with associated airside pavement	Prepare site for construction of six box hangars - 50' x 50' (includes associated apron pavement)	\$ 4,500,000	Local
L26	Construct (11) hangars (various dimensions) with associated airside and landside pavement	Prepare site for construction of eleven hangars - Various dimensions (includes associated apron and landside pavement)	\$ 10,340,000	Local
L27	Construct four corporate hangars with associated airside and landside pavement	Prepare site for construction of four hangars - 125' x 100' (includes associated apron and landside pavement)	\$ 8,500,000	Local
L28	Construct (18) box hangars with associated airside pavement	Prepare site for construction of eighteen box hangars - 50' x 50' (includes associated apron pavement)	\$ 8,000,000	Local
Cargo Development Projects				
C1	Cargo facility	Construct two hangars with associated landside pavement	\$ 15,000,000	Private



CIP Projects and Schedule				
CIP ID	Project	Description	Estimated Cost	Project Funding Source
Short-Term Projects (0-5 Years)				
Airside Development Projects				
A1	Convert Runway 9-27 into a taxiway	Decommission and convert Runway 9-27 into a taxiway, in addition, demolish Taxiway C	\$ 3,750,000	FAA Grants
A2	Apron Development	Construct 78,355 SY of apron pavement	\$ 20,000,000	FAA Grants
A3	Apron Rehabilitation	Crack seal, seal coat, and re-mark	\$ 8,000,000	FAA Grants
A4	Runway 18-36 Rehabilitation (Not Depicted)	Crack seal, seal coat, and re-mark	\$ 1,200,000	FAA Grants
A5	Runway 3-21 Rehabilitation (Not Depicted)	Crack seal, seal coat, and re-mark	\$ 1,200,000	FAA Grants
Landside Development Projects				
L1	Self-serve fuel facility and access road	Self-serve fuel facility to accommodate general aviation air lift	\$ 500,000	Local
L2	Rental car parking addition	Terminal parking expansion to provide approximately a total of 85 additional rental car and short-term parking spaces	\$ 1,600,000	Local
L3	Hangar Development Area #1 - Phase 1	Construct three hangars (300x54') with associated airside pavement	\$ 9,200,000	Local
L4	Hangar Development Area #1 - Phase 2 (Not Depicted)	Demolish three existing hangars	\$ 1,600,000	Local
L5	Hangar Development Area #1 - Phase 3	Prepare site for construction of four box hangars - 100' x 80' (includes associated apron pavement)	\$ 2,250,000	Local
L6	Hangar Development Area #2 - Phase 1 (Not Depicted)	Demolish existing GFE Hangar	\$ 1,700,000	Local
L7	Hangar Development Area #2 - Phase 2	Prepare site for construction of four hangars with office space (various dimensions) (associated apron and landside pavements)	\$ 3,550,000	Local
L8	Hangar Development Area #4	Prepare site for construction of one corporate hangar - 340' x 130' (includes associated apron pavement)	\$ 2,900,000	Local
L9	Hangar Development Area #5	Prepare site for construction of two box hangars - 125' x 100' (include taxiway and associated apron pavement)	\$ 6,350,000	Local
L10	Hangar Development Area #6	Prepare site for construction of one box hangar - 120' x 100' (includes associated apron pavement)	\$ 770,000	Local
L11	Hangar Development Area #7	Prepare site for construction of one box hangar - 100' x 80'	\$ 150,000	Local
L12	Hangar Development Area #8	Prepare site for construction of one box hangar - 125' x 100' (includes associated apron pavement)	\$ 525,000	Local
L13	Hangar Development Area #9	Prepare site for construction of one box hangar - 100' x 80' with associated airside pavement	\$ 75,000	Local
L14	Hangar Development Area #10	Prepare site for construction of four box hangars - 80' x 60' with associated taxiway and airside pavement	\$ 1,800,000	Local

Meeting current hangar development needs

During the planning process the ongoing need for additional hangar storage was communicated. It was important that development occurring in the short term not hinder future opportunities; therefore, the short-term hangar development plan was formulated in a logical manner that will allow for implementation of the long-term development plan.

General aviation hangars noted as L11, L12, and L13 could be developed with minimal infrastructure needs. Hangar location L5 requires the demolition and replacement of three t-hangar facilities in the location noted as L3. L14 requires the construction of a taxilane to facilitate the development of small hangar units.

The Business/Industrial hangar L10 can be developed within minimal infrastructure improvements. The hangar complex noted as L7 requires the removal of the large “AMCOM” hangar and L9, located in the area of the current paint hangars, requires the construction of a taxilane to provide access.

Hangar L8 in the Governmental Hangar area could also be developed with minimal infrastructure needs in the short term.

Please note, cost estimates within the CIP for conventional and box hangar development only include site preparation costs as the cost of the hangar is typically borne by the user at SJT. Cost estimates for the replacement of the t-hangar facilities is included as these are City-owned hangars that are individually leased.

Table 5B provides general information for the cost of hangar development using 2020 dollars. These figures include a basic hanger with office space.

TABLE 5B Cost of Hangar Development	
Hangar Dimensions (in feet)	Estimated Cost (in 2020 dollars)
80' x 60'	\$1,200,000
100' x 80'	\$800,000
120' x 100'	\$1,140,000
125' x 100'	\$1,187,500
130' x 100'	1,235,000
200' x 150'	\$2,850,000
220' x 130'	2,717,000
250' x 150'	3,562,500
300' x 54'	\$1,200,000
340' x 130'	\$4,200,000

Source: Centurion Planning and Design, April 2020.

Expansion of commercial service terminal parking

During the planning process the need for additional parking to support commercial service operations was identified. The development of project L7 allows for the development of additional parking spaces for rental cars and the conversion of existing rental car spaces to short term parking spaces. This reallocation of space is depicted on **Exhibit 5C**.

EXHIBIT 5C
Service Terminal Parking Extension



Source: Centurion Planning and Design, December 2019.

Self-serve fuel facility

Input received from the general aviation pilot community indicated the desire for a self-serve fuel facility at the airport. This project is noted as project L1 and requires the construction of an access road to support fuel deliveries.

Mid-Term Improvements

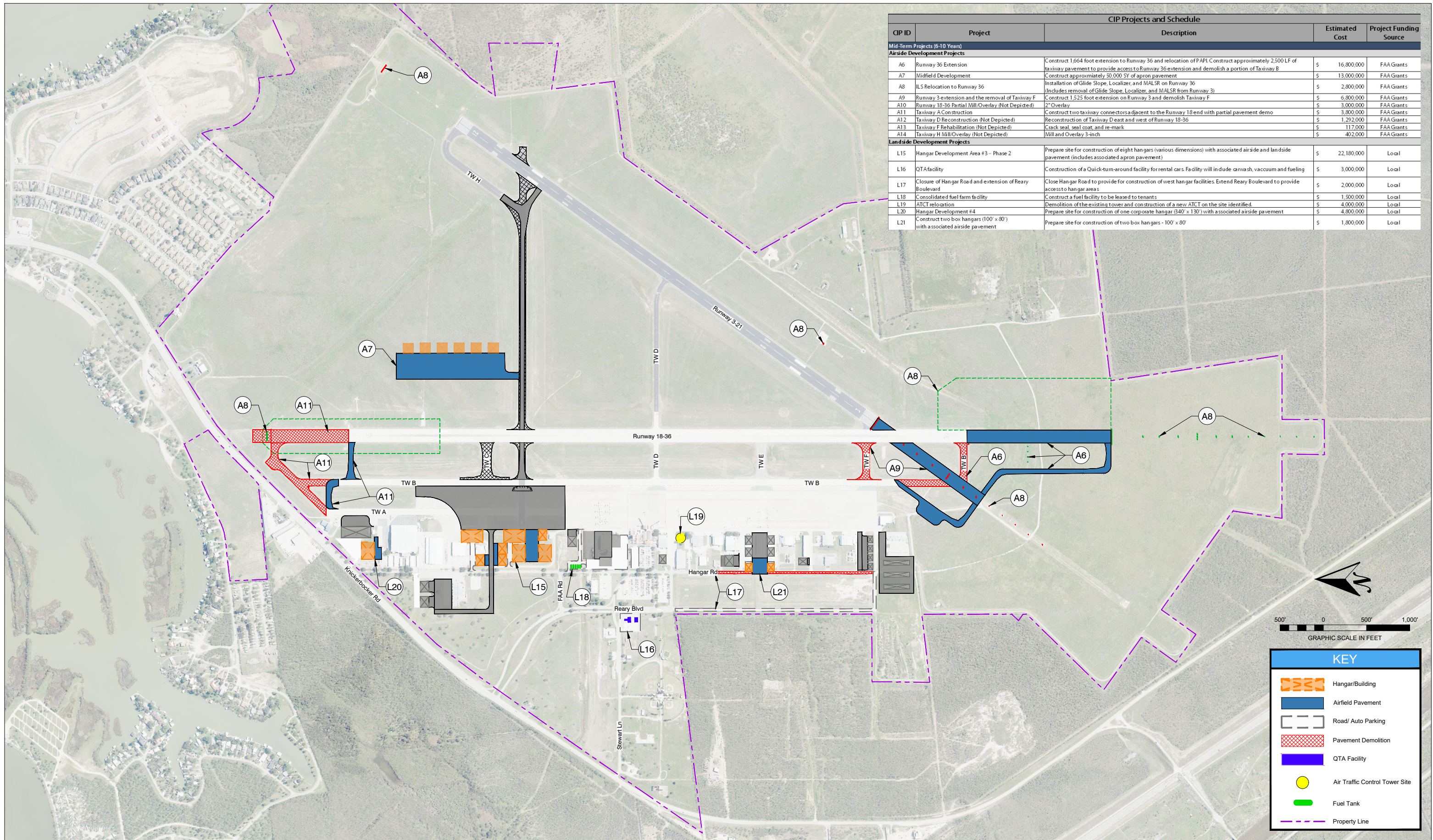
Exhibit 5D depicts the proposed mid-term improvements at SJT. These improvements are focused on the following.

Runway improvements necessary to meet FAA design standards

Runway improvements necessary to meet RSA and runway incursion mitigation needs are planned to begin during the mid-term development phases. Planned improvements will meet RSA requirements for Runway 18-36 and will deconflict the Runway 3 end from Runway 18-36.

Relocation of ILS to Runway 18-36

An evaluation of wind and weather data determined that Runway 18-36 best serves the airport during inclement weather. This is the airport's longest runway; therefore, the relocation of the ILS is reasonable and should be pursued as part of the improvements to Runway 18-36.



CIP Projects and Schedule				
CIP ID	Project	Description	Estimated Cost	Project Funding Source
Mid-Term Projects (6-10 Years)				
Airside Development Projects				
A6	Runway 36 Extension	Construct 1,664 foot extension to Runway 36 and relocation of PAPI. Construct approximately 2,500 LF of taxiway pavement to provide access to Runway 36 extension and demolish a portion of Taxiway B	\$ 16,800,000	FAA Grants
A7	Midfield Development	Construct approximately 50,000 SY of apron pavement	\$ 13,000,000	FAA Grants
A8	ILS Relocation to Runway 36	Installation of Glide Slope, Localizer, and MALSR on Runway 36 (Includes removal of Glide Slope, Localizer, and MALSR from Runway 3)	\$ 2,800,000	FAA Grants
A9	Runway 3 extension and the removal of Taxiway F	Construct 1,525 foot extension on Runway 3 and demolish Taxiway F	\$ 6,800,000	FAA Grants
A10	Runway 18-36 Partial Mill/Overlay (Not Depicted)	2" Overlay	\$ 3,000,000	FAA Grants
A11	Taxiway A Construction	Construct two taxiway connectors adjacent to the Runway 18 end with partial pavement demo	\$ 3,800,000	FAA Grants
A12	Taxiway D Reconstruction (Not Depicted)	Reconstruction of Taxiway D east and west of Runway 18-36	\$ 1,292,000	FAA Grants
A13	Taxiway F Rehabilitation (Not Depicted)	Crack seal, seal coat, and re-mark	\$ 117,000	FAA Grants
A14	Taxiway H Mill/Overlay (Not Depicted)	Mill and Overlay 3-inch	\$ 402,000	FAA Grants
Landside Development Projects				
L15	Hangar Development Area #3 - Phase 2	Prepare site for construction of eight hangars (various dimensions) with associated airside and landside pavement (includes associated apron pavement)	\$ 22,180,000	Local
L16	QTA facility	Construction of a Quick-turn-around facility for rental cars. Facility will include car wash, vacuum and fueling	\$ 3,000,000	Local
L17	Closure of Hangar Road and extension of Reary Boulevard	Close Hangar Road to provide for construction of west hangar facilities. Extend Reary Boulevard to provide access to hangar areas	\$ 2,000,000	Local
L18	Consolidated fuel farm facility	Construct a fuel facility to be leased to tenants	\$ 1,500,000	Local
L19	ATCT relocation	Demolition of the existing tower and construction of a new ATCT on the site identified	\$ 4,000,000	Local
L20	Hangar Development #4	Prepare site for construction of one corporate hangar (340' x 130') with a associated airside pavement	\$ 4,800,000	Local
L21	Construct two box hangars (100' x 80') with associated airside pavement	Prepare site for construction of two box hangars - 100' x 80'	\$ 1,800,000	Local

Midfield development

Project A7 begins the development of the midfield for business and industrial development. Conversion of Runway 9-27 to a taxiway facilitates this development.

Additional hangar development

If demand warrants, additional areas for general aviation and business/industrial hangar development are provided. General aviation hangar development is noted as project L21. This development provides for two additional hangars along with apron pavement that provides access to the west side hangar development area. Construction of this apron and hangar requires the closure of Hangar Road and the extension of Reary Boulevard (project L17).

Additional business/industrial hangar development (L15) will occur in the areas provided by the apron and taxiway improvements developed as part of the short-term development plan. Additional Governmental hangar development will occur in the areas currently occupied by U.S. Customs and Border Protection (L20).

Please note, cost estimates for conventional and box hangar development only include site preparation costs as the cost of the hangar is typically borne by the user.

Commercial service terminal expansion

The need for the expansion of the commercial service terminal is dependent on number of passenger enplanements as well as the number of airlines service. For purposes of this CIP the expansion of the terminal building is included as a mid-term project.

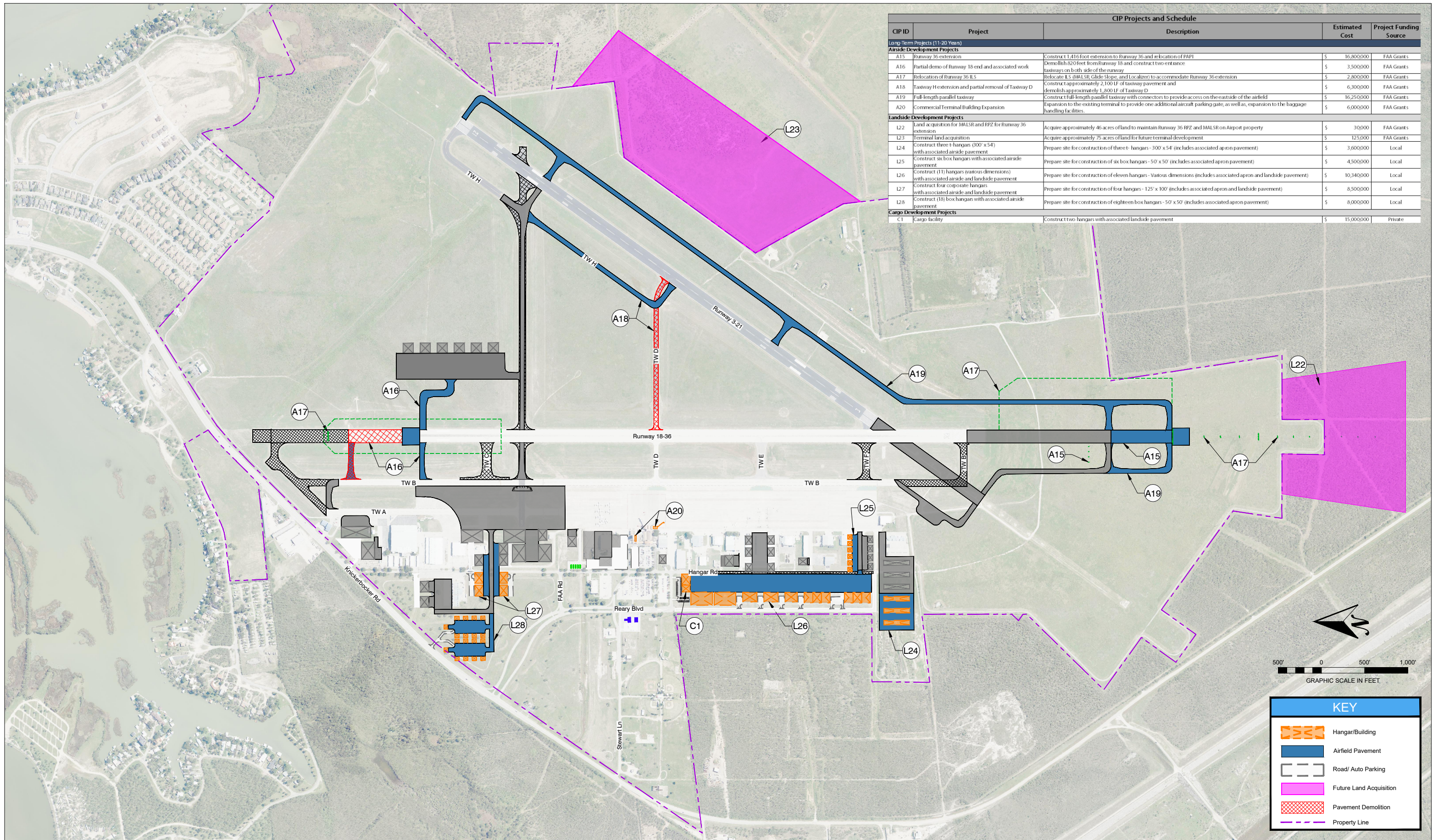
Support facilities

Development of a number of airport support facilities are included in the mid-term CIP. A new ATCT is planned south of the existing facility (L19), a consolidated fuel farm is planned on Reary Boulevard (L18), and a consolidated rental quick turn around facility is planned west of the long-term parking area (L16).

Long-Term Improvements

Exhibit 5E depicts the proposed long-term improvements at SJT. These improvements are more conceptual in nature and may be accelerated as needed. Generally, the improvements include:

- Shift of Runway 18-36 to meet RPZ requirements.
- Closure of Taxiway D and extension of Taxiway H to meet taxiway design standards.
- Construction of a parallel taxiway on the east side of runway 3-21 to facilitate a new commercial service terminal should it be required.
- Land acquisition for a new commercial service terminal.
- Additional general aviation and business/industrial hangar development.
- Expanded cargo facilities.



CIP Projects and Schedule				
CIP ID	Project	Description	Estimated Cost	Project Funding Source
Long-Term Projects (11-20 Years)				
Aside Development Projects				
A15	Runway 36 extension	Construct 1,416 foot extension to Runway 36 and relocation of PAPI	\$ 16,800,000	FAA Grants
A16	Partial demo of Runway 18 end and associated work	Demolish 820 feet from Runway 18 and construct two entrance taxiways on both side of the runway	\$ 3,500,000	FAA Grants
A17	Relocation of Runway 36 ILS	Relocate ILS (MALS, R, and Localizer) to accommodate Runway 36 extension	\$ 2,800,000	FAA Grants
A18	Taxiway H extension and partial removal of Taxiway D	Construct approximately 2,100 LF of taxiway pavement and demolish approximately 1,800 LF of Taxiway D	\$ 6,300,000	FAA Grants
A19	Full-length parallel taxiway	Construct full-length parallel taxiway with connectors to provide access on the eastside of the airfield	\$ 16,250,000	FAA Grants
A20	Commercial Terminal Building Expansion	Expansion to the existing terminal to provide one additional aircraft parking gate, as well as, expansion to the baggage handling facilities.	\$ 6,000,000	FAA Grants
Landside Development Projects				
L22	Land acquisition for MALS and RPZ for Runway 36 extension	Acquire approximately 46 acres of land to maintain Runway 36 RPZ and MALS on Airport property	\$ 30,000	FAA Grants
L23	Terminal land acquisition	Acquire approximately 75 acres of land for future terminal development	\$ 125,000	FAA Grants
L24	Construct three t-hangars (300' x 54') with associated airside pavement	Prepare site for construction of three t-hangars - 300' x 54' (includes associated apron pavement)	\$ 3,600,000	Local
L25	Construct six box hangars with associated airside pavement	Prepare site for construction of six box hangars - 50' x 50' (includes associated apron pavement)	\$ 4,500,000	Local
L26	Construct (11) hangars (various dimensions) with associated airside and landside pavement	Prepare site for construction of eleven hangars - Various dimensions (includes associated apron and landside pavement)	\$ 10,340,000	Local
L27	Construct four corporate hangars with associated airside and landside pavement	Prepare site for construction of four hangars - 125' x 100' (includes associated apron and landside pavement)	\$ 8,500,000	Local
L28	Construct (18) box hangars with associated airside pavement	Prepare site for construction of eighteen box hangars - 50' x 50' (includes associated apron pavement)	\$ 8,000,000	Local
Cargo Development Projects				
C1	Cargo facility	Construct two hangars with associated landside pavement	\$ 15,000,000	Private

FINANCIAL PLAN

The previous sections of the Master Plan evaluated the Airport’s existing facilities, projected the future activity levels, identified potential facility needs, and detailed alternatives and preferred development alternative recommendations for addressing those facility needs throughout the 20-year planning period. Regardless of the identified need for improvements, the ability to pay for a project will ultimately influence when the project is implemented. This section addresses the financial implications of the proposed Master Plan improvements.

Following an overview of both the state and federal grant programs, a general overview of potential funding sources and eligibility relative to state and federal funding programs is outlined. Finally, the net operating position of the airport is presented, along with a review of the Airport’s potential sources for additional revenue that may assist in meeting the local funding requirements.

In general, the financial plan for the Master Plan was conducted as follows:

- An overview of the Airport’s financial structure was prepared to present the current accounting practices, financial operating environment, and key provisions of certain governing documents.
- Rough order of magnitude (ROM) cost estimates for each project in the preferred development alternative recommendations are summarized in this section.
- Potential funding sources were identified, including the FAA’s Airport Improvement Program (AIP), Texas Department of Transportation (TxDOT) funding, and other funding sources. Project costs not funded by these sources are expected to be funded by some combination of third-party investment, Airport funds, and/or City debt.
- The Airport’s existing financial operating results were projected to determine primary revenue generating sources, its major expenses, and the ability of the Airport to fund the costs of the preferred development alternative recommendations.

This section, which presents the results of the financial analysis, is organized as follows:

- Financial Structure Overview
- Federal Grant Assurances
- Capital Program Funding Sources
- Operating Expenses
- Operating Revenues
- Airport Cash Flow and Capital Funding
- Passenger Facility Charges
- Additional Revenue Opportunities
- City Investment and Long-Term Debt
- Summary

Financial Structure Overview

The Airport is owned by the City of San Angelo and is classified by the Federal Aviation Administration as a commercial primary, non-hub airport. The City’s fiscal year ends on September 30th of each year, and its financial statements are presented on the full accrual basis in accordance with Generally Accepted Accounting Practices (GAAP). All Airport’s activities are accounted for within a single proprietary (enterprise) fund within the City of San Angelo.

The City operates under the council-manager form of government. Policy making and legislative authority reside in a council comprised of a mayor and six council members. The City Council is responsible for, among other things, passing ordinances, adopting a budget, selecting a city manager and municipal court judges, and appointing citizens to City boards and commissions. Council members are selected on a non-partisan basis and serve four-year, staggered, terms. The six council members are selected by the voters in single-member districts. The Mayor is selected by city voters at large. The City Manager is responsible for implementation of the Council adopted policies and ordinances, oversight of the operations of the City, and for appointment of City department heads.

The City annually adopts an operating budget for the General, Special Revenue and Debt Service Funds. Budgets for the Proprietary Funds are adopted for internal management purposes. Budgetary control is maintained at the line item level by the encumbered, appropriated and expended balances within any fund; however, any revision that increases the total budgeted expenditures must be approved by the City Council after public hearings. City budgets are prepared on a modified accrual basis and accounting records are maintained on that basis throughout the fiscal year. Applicable accounting records are then adjusted to the full or modified accrual basis for year-end reporting purposes.

Federal Grant Assurances

In addition to State and local legal requirements, the Airport also must fulfill various federal legal obligations because it uses federal grant funds for airport purposes. All airport sponsors that receive federal grants must comply with certain grant assurances, legislation, orders, regulations, and circulars as part of their agreement to access those funds. The federal grant assurances are codified in Title 49, U.S.C. Subtitle VII, as amended. Two of the requirements among these grant assurances pertain to airport revenue use exclusively for airport-related purposes and for maintaining fee structures that make the airport as self-sustaining as possible. The next two subsections further describe these requirements.

Revenue Use

Grant assurances provide that a public airport will only expend the revenue it generates for its capital or operating costs, the local airport system, or other local facilities owned or operated by the airport owner. These other local facilities must be directly and substantially related to the air transportation of passengers or property. Any use of the revenue that does not conform to the permitted capital or operating costs above may be considered revenue diversion, which is prohibited.

Revenue diversion includes direct or indirect payments exceeding the value of services and facilities provided to the airport, use of the airport revenues for general economic development, marketing, and promotional activities unrelated to airports, and payments in lieu of taxes. In addition, this grant assurance prohibits payments to compensate non-sponsoring governmental bodies for lost tax revenues exceeding stated tax rates.

An airport must conduct annual financial audits to prove its permissible use of airport revenue and to establish compliance with the prohibition on revenue diversion. The statutory penalties for diverting revenue are severe.

Self-Sufficiency

Airports must maintain a fee and rental structure that makes the airport as financially self-sustaining as possible under the particular circumstances at that airport. The requirement recognizes that individual airports will differ in their ability to be fully self-sustaining, given differences in conditions at each airport. The purpose of the self-sustaining rule is to maintain the utility of the federal investment in the airport.

To conform to this requirement, an airport owner must have undertaken reasonable efforts to maintain a fee and rental structure to sustain itself as much as possible under the circumstances existing at that particular airport. Fees for the use of the airfield generally may not exceed the airport's capital and operating costs of providing the airfield. Aeronautical fees for landside or airfield facilities (e.g., hangars and aviation offices) in non-movement areas may be at a fair market rate but are not required to be higher than a level that reflects the cost of services and facilities.

Rates charged for non-aeronautical use (e.g., concessions) of the airport must be based on fair market value (e.g., lease of land at fair market rent subject to the specific exceptions).

Capital Program Funding Sources

Based on the preferred development alternative projects and their associated costs, various sources of potential project funding were identified. It is assumed that the costs for the preferred development alternative will be funded from a combination of the following sources:

- Federal Aviation Administration (FAA) Grants
- Texas Department of Transportation (TxDOT) Funds
- Third-Party Funds
- Local Funds
- Coronavirus Aid, Relief, and Economic Security (CARES) Funds

A description of the funding sources anticipated to be available for the funding of the Recommended Development Concept is presented in the following paragraphs.

FAA Grants

Federal participation is based on the Airport Improvement Program (AIP) as reauthorized under the FAA Modernization and Reform Act of 2012. The FAA provides federal grants in the form of entitlement grants (based on annual enplaned passenger levels) and discretionary grants. The FAA

distributes AIP funds each year based on the appropriation received from Congress. If Congress authorizes AIP at a level above \$3.2 billion, the current legislation provides eligible “Primary” airports with entitlement funds that are calculated based on the Airport’s number of annual enplaned passengers and cargo operations.

The FAA allocates funds from the FAA to the nation’s airports based on various eligibility criteria. Allocation is tied to a priority system used to rank each request and determine which projects will occur during any given federal fiscal year. The priority system employed by the FAA has different criteria for different projects. Generally, projects that enhance the safety of aircraft operations and those that enhance capacity in the system are higher priority projects. The priority system also ranks projects based on the airport size and the number of aircraft and aircraft operations at the facility.

Each FAA region distributes discretionary grants based on availability and project priorities. FAA Order 5100.38D, Airport Improvement Program Handbook, provides guidance on issues of eligibility. In general, only those projects related to non-revenue producing items, such as land acquisition, airfield construction, certain public areas of the terminal area building, and safety/security projects are eligible for FAA AIP funding.

The FAA AIP Program may fund up to 90 percent of eligible projects at the Airport, depending on funding availability. In FY 2019, the Airport received approximately \$1.1 million in FAA AIP Entitlement grants. This amount is based on enplaned passenger levels at the Airport and the number of cargo operations. It is assumed that the Airport will continue to receive FAA AIP Entitlement grants based on the FAA’s current formula. It is also assumed that the Airport will apply for discretionary amounts to maximize federal funding up to 90 percent of eligible project costs.

Given that future FAA AIP grant funding is based on factors as described above, the Airport could potentially receive less funding than eligible project costs. If future FAA AIP funding were not available at assumed levels, the Airport would have to find alternative funding in addition to the local share already required.

Texas Department of Transportation (TxDOT) Funds

TxDOT administers the Routine Airport Maintenance Program (RAMP) which matches local government grants up to a maximum of \$50,000 annually. This grant program is available to cover 50% of the costs of many annual airport maintenance requirements, such as airfield pavement repair and rehabilitation, drainage maintenance, sweeping and repair and maintenance of lighting and approach aids. It can also be utilized for certain low-cost capital improvements such as airport public parking lots, installation of security fencing, replacement of rotating beacons, etc. Under the RAMP, any project costs in excess of \$100,000 are to be covered with local funds.

Third-Party Funds

Third-Party funding can be available for certain revenue-producing facilities at an airport, including fixed base operators (FBOs), hangars, aircraft maintenance, or cargo facilities. While private funding can be provided in many different forms, a typical approach is for private parties to fund and construct the development of FBO facilities or hangars at an airport and pay ground rent to the airport. FBOs, maintenance facilities, and hangars for aircraft are usually built as demand warrants.

Local Funds

The balance of project costs (i.e., after consideration of FAA funding, State grants, and other funding sources) must be funded through the local sponsor. As such, it is anticipated that local sources will be a primary component for the funding of the preferred development alternative projects. Local funding of airport improvements can come from PFCs, CFCs, Airport cash, City investment, or the issuance of bonds or other debt. Additional discussion of local funding sources is provided in the following sections.

Cares Act Funds

On March 27, 2020, the Coronavirus Aid, Relief, and Economic Security (CARES) Act was signed into law and included \$10 billion in funds to be awarded as economic relief to certain U.S. airports as a response to the COVID-19 pandemic. In addition to an increase to the federal share to 100 percent for fiscal year 2020 AIP grant funding, fund allocations to airports were determined by various formulas relative to enplanements, debt, and unrestricted cash reserves. For SJT, the CARES Act grant amounts, exclusive of the 2020 AIP grant increase, were \$1,227,539. These funds may be used for any purpose for which airport revenues may be lawfully used. As determined through a standard form 424 administered by the FAA, airports may use these funds on operating expenses, debt service payment or new airport development. While FAA stated that the funding is available until expended, FAA has amended its guidance that some or all funds would be subject to a four-year limit on the period of performance regarding operating expenses with remaining amounts subject to recovery by FAA.

Table 5C presents anticipated potential funding sources of the preferred development alternative recommendations.

TABLE 5C					
Potential Funding Sources for Preferred Development Alternatives					
Preferred Development Alternative	TOTAL COST	FAA Grants	PROJECT FUNDING SOURCES		
			TxDOT	Third Party	Local
Airside Development Projects	\$133.8 -	\$123.8 -	\$1.0 -	--	\$9.0 -
Landside Development Projects	--	--	--	--	--
Hangar Development Projects ¹	\$94.6 -	\$10.0 -	--	\$83.6 -	\$1.0 -
Rental Car Parking Addition	\$1.6 -	--	--	--	\$1.6 -
Rental Car QTA Facility	\$3.0	--	--	--	\$3.0
Fuel Facility Projects	\$2.0 -	--	--	--	\$2.0-
Other Landside Development Projects	\$6.2 -	\$0.1 -	--	--	\$6.0 -
Total Landside Development Projects	\$107.3 -	\$0.1 -	--	\$83.6 -	\$13.6
Cargo Development Projects	\$15.0 -	--	--	\$15.0 -	--
TOTAL	\$256.2 -	\$134.0 -	\$1.0 -	\$98.6 -	\$22.6 -

¹ Hangar development grant eligibility will ultimately be determined through project development and funding sources determined through public-private partnership, City investment, and/or third-party investment opportunities. See 'New Hangar Lease Revenues' below.

Source: San Angelo Airport, Landrum & Brown.

As shown in Table 5C, project costs are estimated to approximately \$256.2 million. Of this total, approximately \$134 million of project costs are anticipated to be eligible for funding through FAA grants and approximately \$1 million of project costs are eligible for funding through TxDOT funding. It is important to note that these funding estimates represent the amount of project costs that are eligible for federal and State funding. However, depending on actual funding appropriations made each year, and competition with other airport funding needs throughout Texas, these levels of federal and State participation may not be attainable.

Also shown in Table 5C, approximately \$98.6 million of preferred development alternative project costs are anticipated to be funded through third-party funding with the remaining

\$22.6 million of estimated project costs anticipated to be funded from local funds generated by the Airport over the 20-year forecast period.

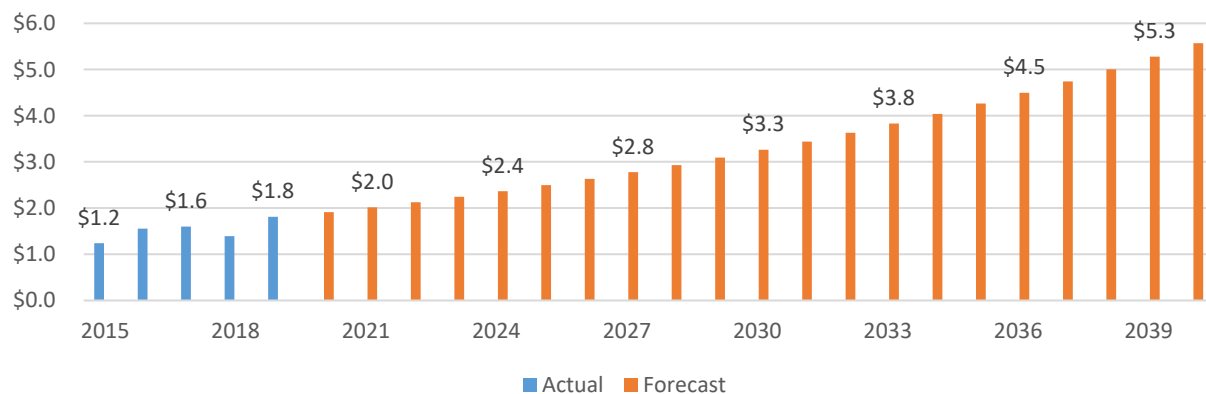
Operating Expenses

Operating expenses at the Airport are assigned to various expense categories including personnel, supplies and equipment, contract services, utilities, other charges, and minor capital outlays.

Exhibit 5F presents actual operating expenses at the Airport for FY 2015 through FY 2019 and projected operating expenses at the Airport through the 20-year forecast period. In general, projections of future operating expenses were based on a review of historical trends and the anticipated impacts of inflation. As shown, operating expenses are estimated to increase from approximately \$1.9 million in FY 2020 to approximately \$5.6 million in 2040, representing a compounded annual growth rate of 5.5%.

It should be noted that the implementation of the preferred development alternative may result in additional operating expenses above what is projected. The timing and magnitude of these potential incremental expenses will ultimately be determined based on the projects implemented.

EXHIBIT 5F
Airport Operating Expenses (FY 2015 – FY 2039)



Source: San Angelo Airport, Landrum & Brown.

Operating Revenues

The Airport is provided with a diverse revenue stream from a number of different sources. These revenue sources include revenues from the airlines (landing fees and terminal rent), restaurant, rental car, general aviation, cargo, and other miscellaneous revenues. In FY 2019, the Airport's operating revenue totaled approximately \$1.7 million.

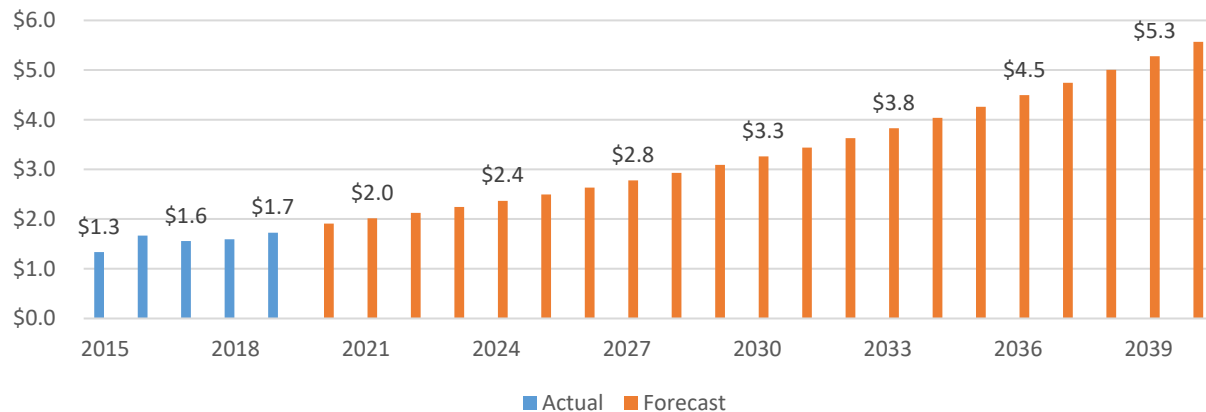
Major revenue sources include.

- **Airline Revenues** – Comprised of terminal rentals and landing fees, rates are set annually by City Council, based on market value and fair market values at comparable airports.
- **Restaurant Revenues** – Revenues equal to 5% of gross restaurant revenues or the monthly minimum annual guarantee.
- **Rental Car Revenues**– Rental car fees are privilege fees assessed to the rental car operators for the right to provide services to users of the Airport, equal to 10% of gross rental car sales or the monthly minimum annual guarantee.
- **Building and Ground Rental Revenues** - Building and ground rental revenues consist of revenues generated from building and ground rental fees assessed to various tenants located on the Airport such as the Airport's FBO, cargo tenants, etc. These revenues are generally charged to tenants based on a per square foot basis for the building and/or land contained within their leasehold for which their facilities occupy.
- **Other Revenues** – Include other revenues generated through fuel flowage fees, cargo, general aviation, and other operating activities.

Exhibit 5G presents actual operating revenues at the Airport for each year from FY 2015 through FY 2019 and projected operating revenues from 2020 through the 20-year forecast period. In general, projections of future operating revenues were based on a review of historical trends and the anticipated ability of the City to recover Airport operating expenses from various users of the Airport. As shown, operating revenues are estimated to increase from approximately \$1.9 million in FY 2020 to approximately \$5.6 million in 2040, representing a compounded annual growth rate of 5.5%.

It should be noted that the implementation of the preferred development alternative may result in opportunities to generate additional operating revenues in addition to what is projected. These additional opportunities are described in the following sections.

EXHIBIT 5G
Airport Operating Revenue (FY 2015 – FY 2039)



Source: San Angelo Airport, Landrum & Brown.

Airport Cash Flow and Capital Funding

As shown in Exhibits 5F and 5G above, operating revenues are projected to be sufficient to cover operating expenses of existing facilities and planned minor capital outlays. However, existing Airport operations are not anticipated to generate operating revenues above operating expenses to the extent that sufficient revenues would be available to fund the portions of the preferred development alternative projects not funded through Federal, State, or Third-Party funding. Therefore, funding of the preferred development may depend on utilizing PFCs, developing new revenue sources not currently generated at the Airport, and utilizing City investment, which may include the issuance of City debt, each of which is described in the following sections.

Passenger Facility Charges (PFCs)

PFCs may be used by the Airport to fund the local share of eligible project costs (PFC eligibility for projects generally follows the same general guidelines for determining AIP grant eligibility outlined earlier). In accordance with the Aviation Safety and Capacity Expansion Act of 1990, as amended by the Aviation Investment and Reform Act for the 21st Century, the Airport is currently imposing a \$4.50 PFC at the Airport. The Airport currently collects approximately \$250,000 in PFC revenues each year.

Additional Revenue Opportunities

The City has identified several opportunities to generate additional operating revenues which could be used for the local funding of the preferred development alternative, which are as follows.

New Hangar Lease Revenues

The City is planning numerous hangar development opportunities to grow its tenant base and generate additional non-airline revenues. As mentioned previously, various funding sources will be necessary to complete the hangar projects. These capital funding sources may be comprised of federal or state grants, City bonds or allocated funds, public-private partnerships, third party investments or

available Airport discretionary funds. Each type of hangar (e.g., t-hangar, box hangar, or corporate hangar) will have a different trigger to determine the timing and potential for its development. The enabling demolition as a prerequisite for construction and/or the associated landside or airside adjacent pavement will factor into the capital cost, ongoing maintenance, and overall project viability. Hangars will be constructed as demand necessitates and as the projected revenues support the development costs.

Many of the hangar projects have an associated airside pavement component. In each case where the hangar(s) will be multi-tenant, the project may be eligible for FAA grants. The significant cost of constructing the adjacent ramp, as well as the ongoing ramp maintenance, will likely make the rental of a multi-tenant hangar not feasible if those costs are required to be absorbed by the tenants. Conversely, the airside portion of the ramp that may be dedicated to a single tenant or a relatively small allocation of ramp could be included as part of the overall project cost.

The hangar developments are separated into the short-, mid-, and long-range planning periods as described in the early portions of this chapter. The relevant rental rates are subject to appraisal at the time of development to ensure that the rental rate is reflective both of a reasonable rate of return and of a tenant's tolerance. Based on historical market rates, future hangar building rental rates for hangar developments could be expected to be approximately \$4.00-\$5.00 per square foot annually. However, actual rates and resulting rental revenues will depend on timing of the developments, available funding sources, size of the development, and prevailing market conditions at the time.

Depending on whether the hangar structures are funded by the City or Airport, or by a third party, or some combination of the two, the rental rates will vary. In these instances, a portion of the rental rate assumes some level of debt service or imputed interest to recover the investment, in addition to building and land rent. The landside improvements are likely to be invested similarly to the structures and recovered through rents in the same manner. As noted above, the airside improvements may be eligible to be funded through federal grants. In some cases, a portion of the ramp may be funded privately or through City or Airport investment. In those cases, rent recovery could be negotiated. However, in most cases, the airside construction cost is prohibitive to fund directly and charging rents on grant funded projects is generally unacceptable.

Breakeven costs based solely on rental rate recovery requires a substantial amount of time if funded through the City or Airport. Other considerations such as job creation and economic impact may be assumed in making the business case for development.

Auto Parking

Auto parking revenues are generally a significant component of non-airline revenues generated by airports. Currently, the City does not charge for automobile parking at the Airport. At most commercial airports throughout the U.S., public parking lots are fee-based and one of the largest sources of non-airline generated revenue. As previously described, FAA intends for airports to generate revenues in order to provide for financial self-sufficiency and to reinvest those funds into the airport infrastructure. In order for the Airport to begin charging for parking, the City Council will need to pass an ordinance establishing set rates.

To determine reasonable parking rates, an understanding of necessary initial investment and ongoing costs should be established by the Airport. Currently, there are two major parking parcels adjacent the terminal building with one directly in front of the terminal and the second due west of the first. An overflow lot is directly south of the second parking parcel.

To secure the parking lots, both entrance and exit areas' infrastructure must be addressed as well as adding a barrier (e.g., railing) around the perimeter to prevent non-paying persons from entering or departing the lots. Additional investments include a revenue control system / pay station (e.g., Luke II) for payment processing of credit card in / credit card out, gate arms (with related cameras and electrical), repair or repaving of the lots, as needed, and striping of the parking stalls. Maintenance of the pavement and equipment will require minimal personnel; however, customer service for issues regarding the lot or payment system may require a designee by the Airport.

Estimated costs for these improvements are estimated at \$400k, subject to the level of infrastructure modifications and the number of entrance/exit points maintained for the project. While the initial investment must be funded by the Airport or City, establishing a modest daily rate for parking will eventually offset these costs.

Parking rates are often front loaded such that the full day rate is met in a matter of only a few hours. However, the Airport may elect to have a grace period for the first hour or two, which would allow meeters and greeters to pick up deplaned passengers without a charge. If so, the hourly rate could begin in the second or third hour. If the initial rate goal is \$5 per day, then each hour would be \$1 per hour after the grace period noted above. Within a few hours, the daily maximum rate of \$5 would be met. This would allow the Airport to recoup the full day's cost on either a day trip business traveler or on a last day trip where the passenger parked for a portion of the final day.

Potential parking revenues at the Airport were estimated based on the Airport's expected passenger activity profile, an assumed daily parking rate provided by the City, and assumptions for leisure and business travel, which are summarized below:

- Of the Airport's annual approximately 60,000 enplaned passengers, it is assumed that approximately 25% would result in a paid parking transaction, or approximately 15,600 transactions annually. This assumption takes into account both originating versus destination passengers and an assumption of multiple travelers per parking transaction for leisure travelers.
- The remaining originating passengers not assumed to park at the Airport are assumed to be dropped off at the Airport by friends/relatives, taxicabs, transportation network companies (TNCs), or other modes of transportation.
- Of the number of passengers parking at Airport, 75% were assumed to be business travelers, with an average parking duration of 2 days. The remaining 25% of parkers were assumed to be leisure travelers with an average parking duration of 6 days.
- A maximum daily parking rate of \$5.00 was assumed.

Table 5D presents projected potential parking revenues at various forecast enplaned passenger levels.

TABLE 5D				
Projected Parking Revenue				
	PROJECTED			
	2021	2022	2027	2037
Enplaned Passengers	62,491	63,758	67,643	76,136
Share of Enplanements Parking at the Airport	25%	25%	25%	25%
Parking Transactions	15,623	15,940	16,911	19,034
Average Length of Stay (days)	3.0	3.0	3.0	3.0
Parking Transaction Days	42,963	43,834	46,505	52,344
Daily Parking Rate	\$5.00	\$5.00	\$5.00	\$5.00
TOTAL PARKING REVENUE	\$234,341	\$239,093	\$253,661	\$285,510

Source: San Angelo Airport, Landrum & Brown.

As shown in Table 5D, based on the above parking assumptions, gross parking revenues are estimated to total approximately \$234,000 annually if the Airport implements a parking revenue system and increase over time as enplaned passengers are forecast to increase. It should be noted that this incremental revenue does not take into account any parking management fees that might be paid to a parking operator or operating expenses associated with the parking lot improvements required to implement a parking revenue system. These revenues would pay down the initial investment and be applied to annual parking lot operation and maintenance costs; however, once the initial investment is recovered, the excess revenues would be utilized as local matching funds for AIP grants or Airport cash for projects that are not AIP or PFC qualified. It should also be noted that this forecast assumes the maximum daily parking rate remains at \$5 per day through the forecast period, however, the City would have the ability increase the maximum daily rate over time as needed.

Per the rental car concession agreements in effect, the Airport collects a minimum annual guarantee of \$12,000 per year per concession or ten percent (10%) of gross revenues, whichever is greater. Recently, the Airport has determined it will collect seven dollars (\$7.00) per month for each ready return stall for rental car parking. This new, additional charge collection amount will vary depending on how many rental car stalls are allocated and leased to each company. Each concession agreement is currently expired and operating on holdover month to month tenancy pursuant to Section 2.2 of the agreement. As part of a renegotiated concession agreement, both the quantity and location of ready return stalls may be determined for the RACs.

Rental Car Customer Facility Charge (CFC)

In order to fund all or a portion of the QTA development and the rental car parking addition, and to pay for associated ongoing operating expenses, the Airport can create a customer facility charge (CFC) that is a fee associated with rental car transactions. Those fees are remitted to the Airport by the RACs

and can be used for projects and associated costs that are for the benefit of the RACs. A QTA is a common use for CFC funding at other airports in the United States. CFCs are generally in the range of \$2.00 to \$4.50 per transaction day charged to a rental car customer. Determining the appropriate level of CFC is a function of the anticipated projects to be funded over a definitive period of time and taking into consideration CFCs of other airports in the region. This analysis assumes \$3.00 per transaction day, the same CFC rate currently charged at Abilene Regional Airport, as the likely CFC amount implemented. In order to implement a CFC, the City Council would be required to pass an ordinance for the RACs to collect a CFC, and a notification to the RACs to collect and remit the CFC would follow. It is prudent for the Airport to begin collection of a CFC well in advance of incurring the capital or operation costs associated with a project due to the need to accumulate a substantial dollar amount that will need to be expended.

Potential CFC revenues at the Airport were estimated based on the Airport's expected passenger activity profile, an assumed CFC rate based on industry averages at comparable airports, and assumptions for leisure and business travel, which are summarized below:

- Of the Airport's annual approximately 60,000 deplaned passengers, it is assumed that approximately 25% would result in a rental car transaction, or approximately 15,600 rental car transactions annually. This assumption takes into account both originating versus destination passengers and an assumption of multiple travelers per rental car transaction for leisure travelers.
- The remaining visiting passengers not assumed to rent a car at the Airport are assumed to be picked at the Airport by friends/relatives, taxicabs, transportation network companies (TNCs), or other modes of transportation.
- Of the number of passengers renting cars at Airport, 75% were assumed to be business travelers, with an average parking duration of 2 days. The remaining 25% of passengers renting cars were assumed to be leisure travelers with an average parking duration of 6 days.
- A CFC rate of \$3.00 per rental car transaction day was assumed.

Table 5E presents projected potential CFC revenues at various forecast enplaned passenger levels.

TABLE 5E				
Projected CFC Revenue				
	PROJECTED			
	2021	2022	2027	2037
Deplaned Passengers	62,491	63,758	67,643	76,136
Share of Deplanements Renting Cars at the Airport	25%	25%	25%	25%
Rental Car Transactions	15,623	15,940	16,911	19,034
Average Length of Stay (days)	3.0	3.0	3.0	3.0
Rental Car Transaction Days	46,868	47,819	50,732	57,102
CFC Rate (per transaction day)	\$3.00	\$3.00	\$3.00	\$3.00
TOTAL CFC REVENUE	\$140,605	\$143,456	\$152,197	\$171,306

Source: San Angelo Airport, Landrum & Brown.

Based on the above assumptions, CFC revenues are estimated to total approximately \$141,000 annually if implemented and increase over time as enplaned passengers are forecast to increase. It should be noted that CFC revenue must be used for rental car related capital and operating costs. If CFC revenues are insufficient to fully cover the costs of the Rental Car QTA, the Airport may also elect to impose a car wash fee on rental car companies but may not collect more than the cost of the facility. Car wash fees and resulting revenues would be determined based on project scope, timing, and resulting CFC revenues. It should also be noted that this forecast assumes the CFC rate remains at \$3 per transaction day through the forecast period, however, the City would have the ability increase the CFC rate over time as needed to cover for rental car related capital and operating costs.

In addition to the CFC, the Airport could collect a per gallon fuel fee from the RACs for gasoline sold or dispensed at the QTA. This fee collected is often around \$0.05 per gallon and can be used for any airport purpose.

Fuel Farm Revenues

Generally, a lease rental rate for the ground rent would be applied based on fair market value. While an appraiser should determine, a reasonable estimate for aeronautical, commercial land would be approximately \$0.25 per square foot. If fuel storage tanks are provided by the Airport, it would provide the opportunity for the Airport to charge rent on a per gallon basis. Again, an appraiser would have to set the fair market rate, but a reasonable rate for storage would be \$0.75 per gallon.

The revenues generated from a consolidated fuel farm may not be substantial, but the source of revenue is in addition to the benefits of safety and control regarding fuel on the airfield.

City Investment and Long-Term Debt

Any additional local funding beyond what can be funded from Airport revenues (including parking revenues and incremental fuel and rental revenues), PFCs, and CFCs would require investment from the City. Depending on the exact timing and magnitude of future capital expenditures, it may be necessary for the City to issue future debt to fund the preferred development alternative. Debt service payable on the City debt may be offset by PFCs and the incremental revenue opportunities provided herein.

Summary

Implementing and funding the preferred development alternative will largely be a function of circumstances of federal, state, and third-party funding sources at the time of specific project implementation. Due to the conceptual nature of a master plan, implementation of most of these capital projects should occur only after further refinement of their costs and timing. The financial feasibility of the preferred development alternative is based on a number of factors, most notably of which is the level of external funding sources the City is able to secure to fund the various capital projects. While the previous sections identified the maximum eligibility levels available for certain projects from the FAA, TxDOT, and other potential sources, there is no guarantee that these funds will be made available in any given year, or if they are, that they will be funded at the full eligibility levels. Given this uncertainty, there are a number of approaches that the City can undertake in order to undertake the preferred development alternative projects and also ensure their financial feasibility, including:

- **Defer or delay capital project cost expenditures** – The actual implementation schedule for the capital projects identified in the Master Plan will be defined by certain development triggers and demand growth rather than by specific years. In the event that certain funding sources are not available, or that financial feasibility cannot be achieved when a project is needed, however, the City may need to defer certain projects until appropriate funding sources can be obtained. In addition, rather than deferring whole projects, in some cases, projects can be completed in several smaller phases over several years to help increase the participation from other funding sources and spread out local funding requirements.
- **Prioritize revenue-producing projects** – As identified in the preferred development alternative, certain projects, including the development of new hangars, auto parking, and QTA, would be revenue-producing projects that would ideally, at a minimum, support the associated local share costs for that facility. These projects will be demand-driven projects that should only be undertaken when demand warrants and the project can be as self-supporting as possible from the day it is put in operation. In addition, ideally, these projects could generate additional profits that could help to support other non-revenue producing projects. As such, it will be important for the City to thoroughly review any revenue-producing projects to ensure that they will be supported by anticipated demand and generate positive cash flow at the Airport.

- **Issue long-term debt** – As discussed earlier, in order to fund the local share of large capital projects, airports typically will issue long-term debt to help defray upfront expenditures and mitigate the impacts to its available cash balances. In addition, special facility debt can be issues for certain revenue-producing projects which are secured by a pledge of the revenues to be produced by the proposed facility. While issuing long-term debt can be an effective approach for implementing certain projects and minimizing up-front cash expenditures, it is important to ensure that the Airport’s expected net operating income (revenues minus expenses) can not only pay for the expected annual debt service, but also generate the required minimum debt service coverage ratio of 1.25X.

Funding and ultimately implementing the preferred development alternative will largely be a function of circumstances of federal, state, and other funding sources at the time of specific project implementation. As previously mentioned, due to the conceptual nature of a master plan, implementation of most of these capital projects should occur only after further refinement of their costs. As a result, the project capital costs developed for the Airport must be viewed as preliminary, reflecting a master plan level of detail subject to refinement in subsequent implementation steps.