RESOLUTION NO. 2094

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF TERRELL, KAUFMAN COUNTY, TEXAS, APPROVING AND ADOPTING THE TERRELL MUNICIPAL AIRPORT BUSINESS PLAN ATTACHED HERETO AS EXHIBIT "A" AND MADE A PART HEREOF FOR ALL PURPOSES.

WHEREAS the City has determined that the Terrell Municipal Airport has a strategic location being situated immediately between Interstate Highway 20 and U.S. Highway 80 within the City of Terrell and outside the Dallas-Fort Worth Terminal Control Area (TCA); and

WHEREAS, the City has determined that the Terrell Municipal Airport fulfills an essential community purpose; and

WHEREAS, it is necessary for the City to adopt the attached Airport Business Plan to fully comply with the regulations of the Texas Department of Transportation – Aviation Division;

NOW THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF TERRELL, TEXAS THAT:

The Terrell Municipal Airport Business Plan attached hereto as Exhibits "A" and made a part hereof for all purposes is hereby fully **APPROVED** and **ADOPTED** for submission to the Texas Department of Transportation – Aviation Division.

PASSED AND APPROVED by the City Council of the City of Terrell, Texas on this the 22nd day of August, 2023.

E. Rick Carmona, Mayor

Attest:

Dawn Steil, City Secretary

Approved as to Form:

Mary Gayle Ramsey, City Attorney

BUSINESS PLAN

INTRODUCTION

The Terrell Municipal Airport (TRL) is a general aviation airport located in Terrell, Texas. The airport is owned and operated by the City of Terrell. Based on the 2018 Texas Aviation Economic Impact Study, TRL generates approximately $4.8 million in economic output annually.

The goals of this business plan are to:

1. Define a strategy to grow the number of based tenants at TRL,
2. Identify ways to attract more turboprop and jet aircraft traffic, and
3. Continue to support the growth of smaller general aviation traffic at TRL.

In alignment with this goal, Garver performed a detailed analysis that included the following elements:

- Review of TRL's current rates and charges model and financials
- Review of an example lease agreement at TRL to analyze terms and conditions
- Conduct a comparative analysis to review amenities and infrastructure at competing airports within the region
- Conduct interviews with business/corporate pilots that have used TRL to gather feedback on airport infrastructure and facilities

- Survey airport stakeholders to gather feedback on TRL's successes and areas for improvement
- Analyze TRL's existing available land holdings to document development considerations, including airside access, landside access, topography, utilities, and drainage
- Identify aeronautical businesses located at other airports in the region to identify service gaps and potential opportunities.

The results of this analysis were used to identify key improvements that should be considered for TRL to meet the goals of this business plan. The information gathered was also used to identify aeronautical business industries that the City of Terrell should focus on attracting to TRL, and to establish a preferred land use plan for the airport's future.

The data and information contained in this study were sourced from Federal Aviation Administration (FAA) databases, local documentation regarding the airport's history, interviews with airport leadership and users, other publicly available data sources, and Garver's knowledge and experience in the aviation industry.

RATES AND CHARGES ANALYSIS AND FINANCIAL REVIEW

OVERVIEW

A Financial Review and a Rates and Charges Analysis were conducted to see what TRL could do to increase its revenue as well as how its rates and charges compare to competing airports in the region.

FINANCIAL REVIEW

Garver conducted a review of TRL's current and historical financials. It was found that the Airport generally operates in a breakeven capacity notwithstanding capital projects. In total, the Airport receives approximately $550,000 in revenue annually. Approximately $275,000 is aeronautical revenue, such as revenue from hangars. The other $275,000 is non-aeronautical revenue. The majority of non-aeronautical revenue comes from land leases held by Oldcastle, the City of Terrell Service Center, and Star Transit. The fact that TRL currently operates in a breakeven financial position is a significant accomplishment. According to ACRP Report 16: *Guidebook for Managing Small Airports*, most general aviation airports require some form of tax subsidy to operate.

Based on the financial review, a few potential new revenue sources were identified. These new revenue sources include:

- Fuel Flowage Fee: Establishing a fuel flowage fee would bring in an estimated additional $4,000 - $8,000 annually.
- Lease for Main FBO Hangar: A lease of $0.06/square foot charged monthly for the FBO's main hangar would generate roughly $7,000 annually.
- Tie-Down Fees: Lastly, charging for tie-downs would add just under $1,000 of additional revenue.

Ultimately, there is no recommendation to pursue these, as the revenue streams are minute in scale resulting in less than a 3% increase to the airport's aggregate revenue.

RATES AND CHARGES

An airport rates and charges benchmarking analysis was conducted to compare the rates and charges currently used by TRL to those of other competing airports in the region. Eight airports were identified, with the help of the City of Terrell, as competing airports in the region. These airports were asked to voluntarily provide information regarding the following criteria:

- T-hangar lease rates (per unit per month);
- Box hangar lease rates (per square foot per month);
- Tie-down lease rates (per tie-down including both short and long-term rates); and
- Land/ground lease rates (per square foot per year).

The following airports provided information for the previously listed criteria:

- ✈ Athens Municipal (F44)
- ✈ Caddo Mills Municipal (7F3)
- ✈ Cleburne Regional (CPT)
- ✈ Corsicana Municipal (CRS)
- ✈ Mid-Way Regional (JWY)
- ✈ Rockwall Municipal (F46)
- ✈ Mesquite Metro (HQZ)
- ✈ Sulphur Springs Municipal (SLR)

Based on the results of the rates and charges analysis, it was found that rates in all criteria generally increased the closer an airport was to the Dallas/Fort Worth metroplex.

The analysis also revealed that the lower-end T-hangar rates at TRL are below average compared to lower-end T-hangar rates at the other airports in the region. As a recommendation, TRL may want to consider raising their lower-end T-hangar rates to over

$200 per month. This increase does not have to be completed immediately and could be implemented in phases.

The results of the rates and charges analysis are found in **Table 1**.

TABLE 1
RATES AND CHARGES
TERRELL MUNICIPAL AIRPORT

Criteria	Terrell Municipal (TRL)	Athens Municipal (F44)	Caddo Mills (7F3)	Cleburne Regional Airport (CPT)	Corsicana Municipal (CRS)	Lancaster Regional (LNC)	Mid-Way Regional (JWY)	Rockwall Municipal (F46)	Mesquite Metro (HQZ)	Sulphur Springs Municipal (SLR)
T-Hangar Lease Rate (per unit per month)	$172.50 -$445 based on size and age	$225 (size unspecified)	Airport does not own hangars	Small - $230 Large - $280	$0.15/sq ft per month	Small - $240 Medium - $256 Large - $408	All Medium 1,040 sq ft - $308 1,268 sq ft - $363 1,350 sq ft - $470	$290	40' - $360 45' - $400 50' - $440	$130, $155, and $200
Box Hangar Lease Rate (per sq. ft. per month)	$0.06 - $0.14	$0.06	Airport does not own hangars	$0.08 - $0.11/month Corporate - $0.42/month	$0.20	$0.24 - $0.40	$0.23	$0.23	40' - $430 50' - $550 60' - $1,000 65' - $1,290 Corporate - Negotiable	$200, $300, $400, $500, $600/mo Community box hangar (not private)
Tie-Down Lease Rates (per tie-down including both short and long-term rates)	$5.00/day $45/month	No Charge	No charge (currently) building 5 new tie downs. Will evaluate for a price once built	$50/month	$5.00/day	Not provided	$50/month	Long-Term - $100 Short-Term Covered - $14/night Short-Term Uncovered - $7/night	$80/month	No charge for short or long-term tie downs
Land/Ground Lease Rates (per sq. ft. per year)	$0.06 - $0.12	$0.13	$0.11 - $0.15 farthest away $0.15 - $0.20 secondary $0.18 - $0.30 closest to rwy	$0.11	Negotiated	Not provided	Improved - $0.30 Unimproved - $0.25	No land leases	25 yr lease - $0.30 40 yr lease - $0.45	Not provided

Source: Garver, 2022.

LEASE REVIEW

OVERVIEW

A review of the existing lease agreement between the Airport and Terrell Aviation, Inc. (the FBO) was completed for this analysis. This review was conducted to identify and recommend potential improvements.

FINDINGS AND RECOMMENDATIONS

Garver's review of the lease agreement identified multiple lease elements that are in compliance with FAA standards and industry best practices. However, a few items were noted for consideration as part of future lease negotiations. These items are discussed in the subsequent paragraphs.

The lease requires the Airport to provide financial assistance to the FBO related to uniforms, training, acquiring certifications, and organizational membership fees. Based on Garver's professional experience, most private FBOs (i.e., non-municipally owned) are typically required to pay for these costs themselves. The provision of this assistance to the FBO could open the airport up to other tenants seeking similar financial concessions as part of their leases. It is recommended that the City renegotiate the FBO lease when it comes up for renewal to incorporate this change.

The FBO currently does not pay a rental fee to the City for the use of the main FBO hangar. The hangar is primarily used for aircraft maintenance services provided by the FBO. Based on Garver's professional experience, private FBOs are not typically provided hangar space at no cost to conduct for-profit activities. Under the FAA rates and charges policy, airports are required to charge "fair and reasonable" rates for the use of aeronautical facilities. It is recommended that the City consider charging a fair and reasonable rate for the hangar when they renegotiate the FBO lease in the future.

The FBO lease mentions that all leased areas (both interior and exterior) must be maintained to a reasonable standard. It is recommended that the City include additional language discussing the provision of a consistent appearance with other airport facilities to promote uniformity. This language can also be included in the airport's minimum standards.

COMPARATIVE AIRPORT ANALYSIS

OVERVIEW

Garver conducted a comparative airport analysis to benchmark how TRL compares to other general aviation public-use airports in the region. Public-use airports within 25 nautical miles (NM) of TRL were included in this analysis. There are many different factors that could contribute to a pilot choosing to land at a certain airport. The factors that were analyzed for this analysis include:

- Fuel price (Jet A and 100LL)
- FBO amenities/services offered
- Aeronautical service businesses offered (e.g., maintenance avionics, flight training, etc.)
- Runway length
- Runway width
- Runway strength
- Instrument approach procedure minimums

Operational data was also collected to determine the amount of traffic that flies into the competing airports. The data collected for this part of the analysis included:

- Jet aircraft operations over the past five years
- Large jet aircraft operations (aircraft with an AAC of C or D or aircraft in ADG III) over the past five years
- Total IFR operations over the past five years
- Total based aircraft
- Total based jet aircraft

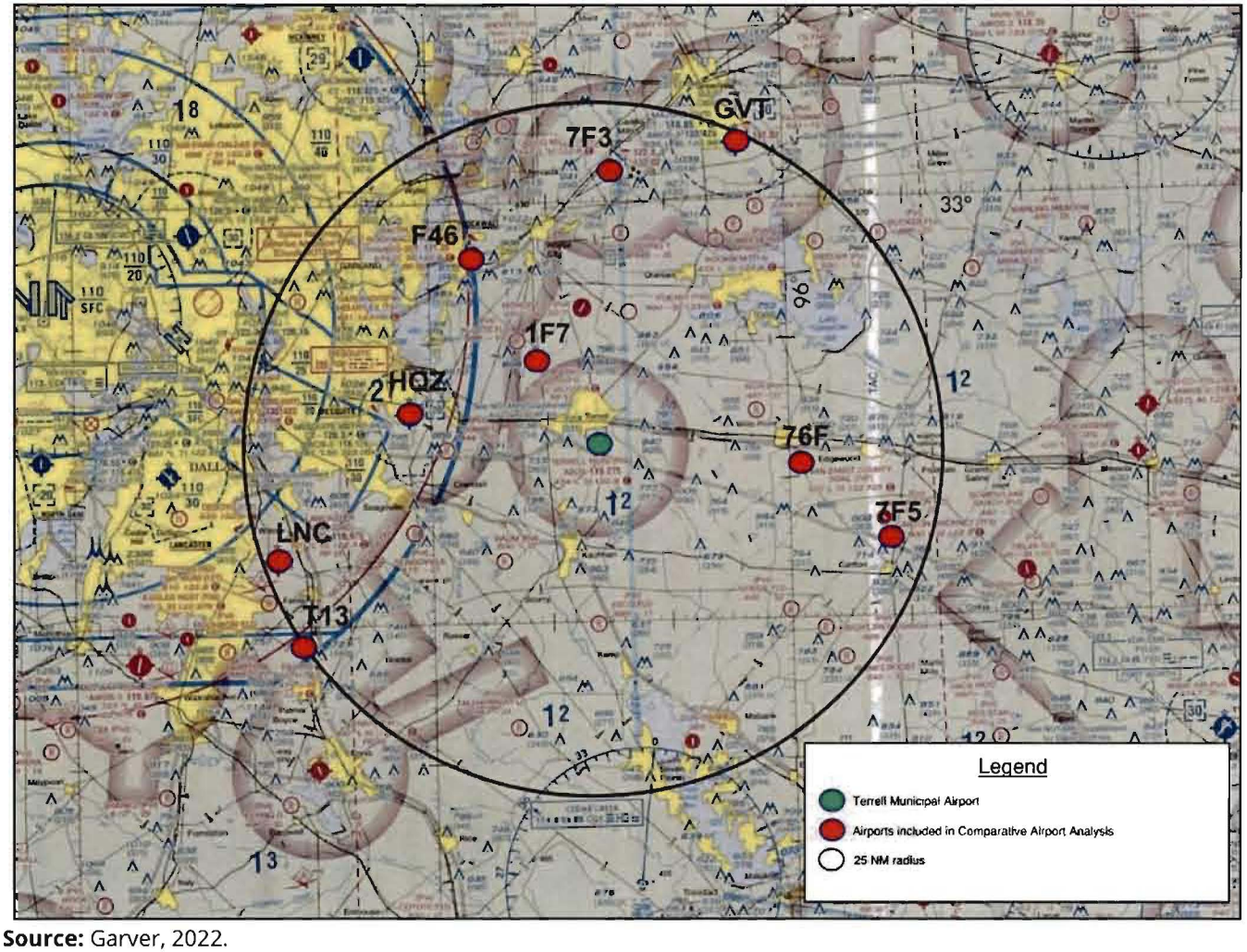
Comparing the different services and amenities at the airports with the number of operations/based aircraft helps identify why pilots may choose to go to one airport over another.

The following nine airports were a part of the comparative airport analysis (shown in **Figure 1)**:

- Mesquite Metro Airport (HQZ)
- Lancaster Regional Airport (LNC)
- Dallas South Port Airport (T13)
- Canton-Hackney Airport (7F5)
- Van Zandt County Regional Airport (76F)
- Majors Airport (GVT)
- Caddo Mills Municipal Airport (7F3)
- Ralph M Hall/Rockwall Municipal Airport (F46)
- Airpark East (1F7)

Table 2 shows the results of the comparative analysis.

FIGURE 1
COMPARATIVE AIRPORT ANALYSIS
TERRELL MUNICIPAL AIRPORT



Source: Garver, 2022.

TABLE 2
COMPARATIVE AIRPORT ANALYSIS
TERRELL MUNICIPAL AIRPORT

Elements	Terrell Municipal Airport (TRL)	Airports within 25 NM Radius					
		Mesquite Metro Airport (HQZ)	Lancaster Regional Airport (LNC)	Dallas South Port Airport (T13)	Canton-Hackney Airport (7F5)	Van Zandt County Regional Airport (76F)	Maj
Distance from TRL (nm)		13.5	24.1	25	21.7	14.4	
Full Service Fuel Price (Jet A/100LL)&	$5.05 / $6.50	$6.10 / $5.95	$6.40 / $6.50	No Full Service	No Fuel Available	No Full Service Option	$
Self Service Fuel Price (Jet A/100LL)&	No Self Service Option	$5.60 / $5.30	$6.20 / $5.50	No Jet A / $6.30	No Fuel Available	No Jet A / $5.73	No Je
FBO Amenities/Services	Pilot Lounge, Business Center, Meeting Room, WiFi, Detailing, CATS Testing Center	Pilot Lounge, Shower, Aircraft Parking, Overnight Hangars, Conference Room, Planning Room, Rental Cars, Courtesy Car, Catering, GPU/Power Cart, Lavatory Service, Hangar Leasing, WiFi, Detailing	Pilot Lounge, Planning Room, Conference Room, WiFi, Hangar Leasing, Café, Car Rentals	Aircraft parking, Hangar leasing and sales	Shuttle service (weekends only)	24-Hour Pilot Lounge, Planning Room, WiFi, Restrooms, Courtesy Car, Aircraft Parking, Hangar Leasing	Pilot Park Car Suppl In H
FBO Ownership Model	Privately-owned	City-owned	City-owned	Privately-owned	No FBO	City-owned	Pr
Aeronautical Service Businesses Offered	Aviation Fuel, Flight Training, Aircraft Maintenance, Aircraft Rental, Aerial Photography	Aviation Fuel, Flight Training, Aircraft Maintenance, Aircraft Sales, Avionics Sales and Services, Airframe Modifications and Inspections, Aircraft Painting/Detailing, Aircraft Rental, Aerial Imaging	Aviation Fuel, Flight Training, Aircraft Maintenance, Aircraft Salvage, Aircraft Parts Sales, Altimeter and Transponder Repair, Aircraft Rental	Aviation Fuel	No Aeronautical Services	Aviation Fuel, Flight Training, Aircraft Rental	Avia Tr. Main R Pa Se
Runway Length (ft.)	5,006	6,000	6,500	3,800	3,750	3,230	
Runway Width (ft.)	75	100	100	100	50	50	
Runway Material	Asphalt	Concrete	Asphalt	Turf	Asphalt	Asphalt	
Runway Strength (lbs.)	SW 30,000	SW 70,000 DW 100,000 DWT 100,000	SW 20,000 DW 60,000	No Data	SW 5,500	SW 12,000	
IAP Minimums	3/4-mile	3/4-mile	3/4-mile	No Published IAP	No Published IAP	No Published IAP	
Jet Aircraft Ops (Past 5 years)**	972	4,831	557	No Data	0	0	
Large Jet Ops (C, D, or III - 5 years)**	104	629	208	No Data	0	0	
IFR Ops (5 years)**	4,381	14,358	3,031	No Data	50	292	
Total Based Aircraft	85	188	77	12	0	14	

FINDINGS

The first comparison made between TRL and the nine airports in the region was the price of Jet A and 100LL fuel. The prices for both full-service and self-service fuel were analyzed. In terms of full-service fuel prices, TRL and Rockwell Municipal Airport (F46) sold the cheapest full-service Jet A fuel at the time the data was collected. TRL, Lancaster Regional Airport (LNC), and F46 sold the most expensive full-service 100LL fuel. More importantly, it should be noted that TRL does not currently have a 100LL self-serve fuel system, while seven of the nine airports in this analysis offered 100LL as a self-serve option. All seven airports provide self-service 100LL at prices cheaper than the full-service 100LL prices at TRL. Self-service 100LL fuel is an amenity that most single engine piston aircraft pilot's desire. Consequently, TRL should consider the establishment of a self-service fuel farm for 100LL.

The FBO amenities and services offered were also compared for this analysis. TRL's FBO offered similar amenities and services compared to many of the other airports, including a pilot's lounge, accessible wi-fi, a meeting room, and a business center. However, some competitors offer a wider range of amenities and services such as a rental car options, multiple meeting rooms, restaurants or diners, additional Ground Service Equipment, and accessible showers. The existing FBO facility at TRL is space constrained and the large terminal building is not extensively utilized. It is recommended that the FBO be relocated to be adjacent to the TRL terminal building. This will provide for synergies between the two facilities and the potential to add some of the additional amenities that pilots desire. The provision of additional amenities may attract more pilots to utilize the airport.

TRL's runway infrastructure is in a good position compared to the other airports in the region. Based on the comparison of runway characteristics, it is likely that TRL is losing some large jet aircraft traffic to airports with wider and longer runways, like Mesquite Metro Airport (HQZ) and Lancaster Regional Airport (LNC). Since it would be difficult to extend the runway at TRL, the airport should focus on attracting small and mid-sized business jets. In terms of Instrument Approach Procedures (IAP), TRL is comparable to most airports within the region.

In summary, the following are improvements TRL should consider enacting to make itself more attractive to pilots:

- Self-service 100LL fuel
- FBO to provide more amenities (e.g., rental car, food/restaurant, Ground Service Equipment, etc.)
- Attract additional aeronautical businesses (discussed in the next section)

AERONAUTICAL BUSINESS FEASIBILITY ANALYSIS

OVERVIEW

Garver conducted an aeronautical business feasibility analysis to determine the types of aeronautical businesses that could potentially and feasibly be located at TRL. To support this analysis, the aeronautical businesses at neighboring airports were documented to identify any potential industry gaps that exist within the region. The nine airports included in the Comparative Airport Analysis were the same nine airports used in the Aeronautical Business Feasibility Analysis.

The following aeronautical industries were reviewed at to see if they had a presence at any of the airports in the region:

- Flight school/flight training
- Aircraft maintenance and repair
- Avionics sales and repair
- Aircraft upholstery
- Aircraft painting
- Aircraft charter/on-demand cargo
- Aircraft rental
- Unmanned aircraft systems
- Propeller repair
- Aerial surveying/photography

FINDINGS

Table 3 graphically depicts the aeronautical businesses at the nine surrounding airports, with industry gaps highlighted in green.

TABLE 3
BUSINESS FEASABILITY ANALYSIS
TERRELL MUNICIPAL AIRPORT

Aeronautical Industries	Terrell Municipal Airport (TRL)	Airports: Mesquite Metro Airport (HQZ)	Lancaster Regional Airport (LNC)	Dallas South Port Airport (T13)	Canton-Hackney Airport (7F5)	Van Zandt County Regional Airport (76F)	Majors Airport (GVT)	Caddo Mills Municipal Airport (7F3)	Ralph M Hall/Rockwall Municipal Airport (F46)	Airpark East Airport (1F7)
Distance from TRL (NM)		13.5	24.1	25	21.7	14.4	23.8	19.6	15.7	7.6
Flight School/Flight Training	X	X	X			X	X	X	X	
Aircraft Maintenance and Repair	X	X	X				X		X	
Avionics Sales and Repair		X	X				X			
Aircraft Upholstery										
Aircraft Painting		X					X			
Aircraft Charter/On-Demand Cargo							X			
Aircraft Rental	X	X	X			X	X	X	X	
Unmanned Aircraft Systems										
Propeller Repair										
Aerial Surveying/ Photography	X	X							X	

Source: Garver, 2022.

RECOMMENDATIONS

Each of the following aeronautical businesses could be attractive to start at TRL due to service gaps in the region:

- Avionics Sales and Repair
- Aircraft Upholstery
- Unmanned Aircraft Systems
- Propeller Repair

While three airports were identified as having Avionics Sales and Repair businesses, there is still an industry gap in this area. The avionics businesses at HQZ and LNC have limited capabilities and the one at GVT works exclusively on large aircraft. Consequently, a full-service avionics provider for general aviation aircraft would likely be attractive to pilots within the region. Additionally, there could be the potential for a partnership with a local university to provide labor support to this type of business.

The growth in the Unmanned Aircraft Systems (UAS) industry should be a strong focus for future business development at TRL. The UAS industry is growing and evolving rapidly based on increasing demand and new use cases. TRL should stay engaged with UAS industry groups to identify potential segments of the UAS industry that could be well suited to be based at TRL.

In terms of the facilities required by these businesses, all four will need hangar space (est. 8,000 to 10,000 sq. ft.), ramp/tie-down space, and office space. Avionics sales and repair, aircraft upholstery, and propeller repair shops will require additional facilities such as a workshop and a storage area (est. 1,000 to 2,000 sq. ft.). The actual size of the facilities will vary based on the size of the operation and aircraft served. These facility needs are shown in **Table 4**.

To aid in attracting high-quality commercial aeronautical businesses to TRL, the City of Terrell should collaborate with local partners (e.g., Terrell Economic Development Corporation, Terrell Chamber of Commerce, etc.) to craft competitive incentive packages to support business development. The specific needs of each incentive package will vary based on the unique nature of the aeronautical business and their infrastructure needs.

Additionally, the airport should continue to support existing aeronautical businesses located at TRL and identify partnerships with local stakeholders to support business development. This may include partnering with local universities to provide the workforce

training necessary to attract commercial aeronautical businesses or to establish a university-based flight school.

TABLE 4
FACILITY NEEDS
TERRELL MUNICIPAL AIRPORT

	Facility Needs							
Aeronautical Businesses	Hangar Space	Ramp/Tie-Down Space	Classroom Facilities	Office Space	Workshop	Storage Area	Specialized Hangar Facilities	Full-Length Parallel Taxiway
Flight School/Flight Training	X	X	X	X				X
Aircraft Maintenance and Repair	X	X		X	X	X		
Avionics Sales and Repair	X	X		X	X	X		
Aircraft Upholstery	X	X		X	X	X		
Aircraft Painting	X	X		X	X	X	X	
Aircraft Charter/On-Demand Cargo	X	X		X				
Aircraft Rental	X	X		X				
Unmanned Aircraft Systems	X	X		X				
Propeller Repair	X	X		X	X	X		
Aerial Surveying/Photography	X	X		X				

SOURCE: GARVER, 2022.

HANGAR FUNDING

In addition to the recommendations set forth in the Aeronautical Business Feasibility Analysis, it is recommended that TRL continue to seek opportunities to fund the development of additional T-hangars at the airport. Additional T-hangars will bring in more based aircraft that will support the financial feasibility of commercial aeronautical business operations at TRL. Limited funding is available from the FAA and TxDOT for hangar projects. Consequently, the City of Terrell should focus on pursuing non-aviation related grant funds (e.g., economic development grants, etc.) or private investment for future T-hangar development. Specifically, hangar funding may be available through the North East Texas Regional Mobility Authority (NETMRA). According to the NETRMA website, they have provided funding for several airport projects within the area over the past 4 years.

AIRPORT STAKEHOLDER SURVEY

OVERVIEW

An online survey was distributed to TRL airport stakeholders. The purpose of the survey was to allow airport stakeholders the opportunity to provide feedback on what they felt were TRL's successes and areas for improvement.

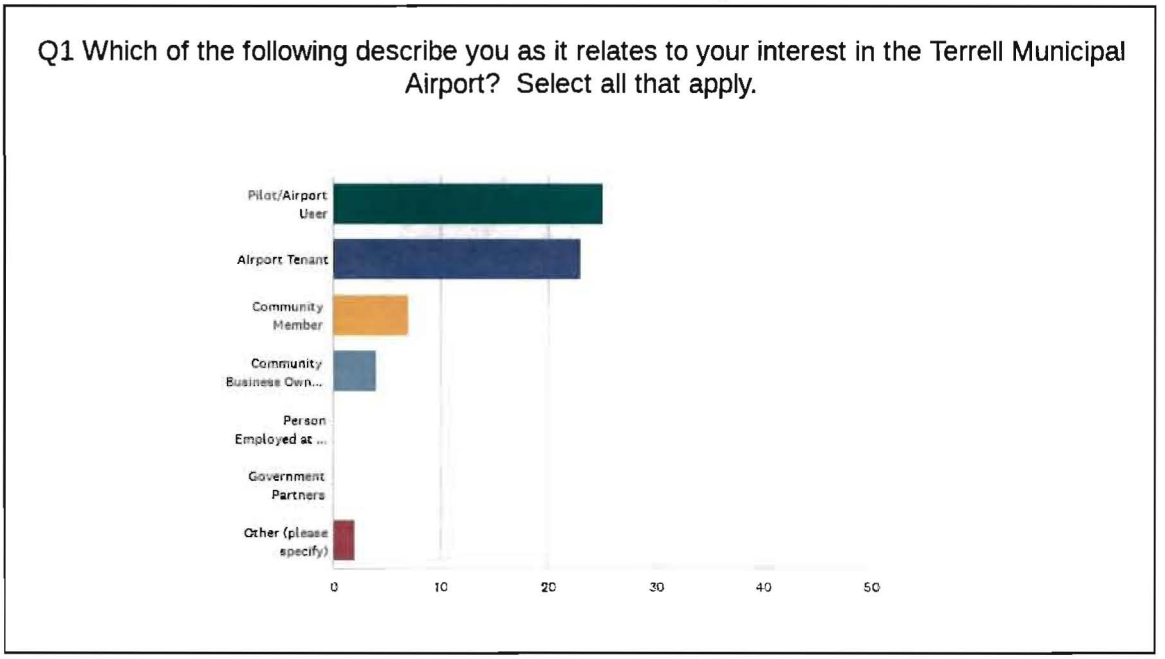
The survey consisted of eight questions in total. There were four questions with selected responses and four questions with open-ended responses. The survey was distributed to 69 stakeholders and a total of 27 responses were collected.

Additionally, the results of a broader market analysis conducted in 2014 were also reviewed.

SELECTED-RESPONSE RESULTS

The first question respondents were asked inquired about their interest in TRL (e.g., pilot/airport user, airport tenant, community member, community business owner with interest in the Airport, or other). Respondents were allowed to select all the options that applied to them. Twenty-five respondents (92.59%) were pilots/airport users, 23 respondents (85.19%) were tenants of the Airport, 7 respondents (25.93%) were community members, 4 respondents (14.81%) were community business owners with an interest in the Airport, and 2 respondents (7.41%) marked other. This is graphically represented in **Figure 2**.

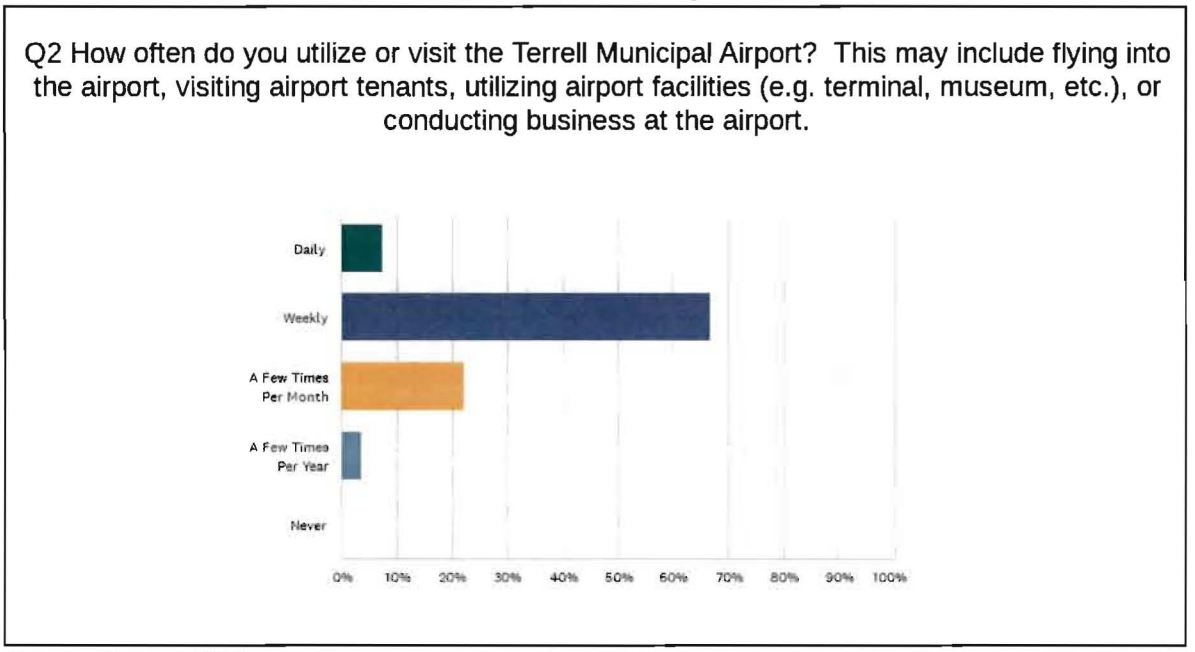
FIGURE 2
STAKEHOLDER SURVEY – QUESTION 1



Source: Garver, 2022.

The second question respondents were asked inquired about the frequency with which they utilize or visit TRL, whether it be flying in, visiting tenants, utilizing airport facilities (e.g., terminal, museum, etc.), or conducting business at the Airport. Eighteen respondents (66.67%) selected that they utilize or visit the Airport on a weekly basis, 6 respondents (22.22%) utilize/visit the Airport a few times per month, 2 respondents (7.41%) were daily users of the Airport, and 1 respondent (3.7%) only used the Airport a few times per year. This is graphically represented in **Figure 3**.

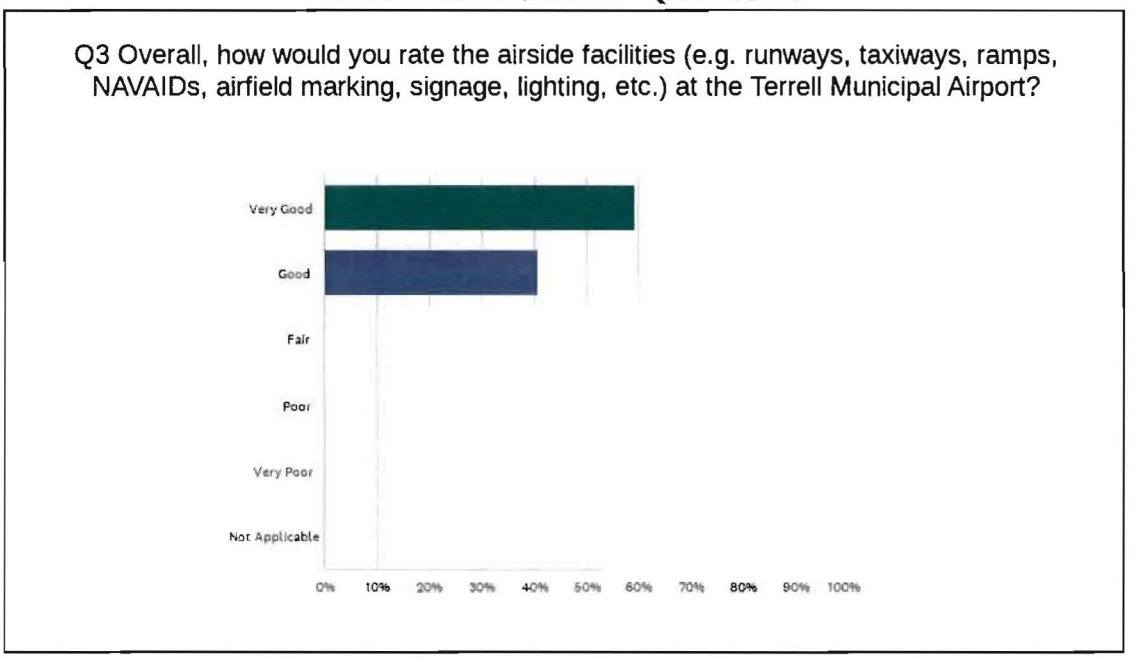
FIGURE 3
STAKEHOLDER SURVEY – QUESTION 2



Source: Garver, 2022.

The third question allowed the respondents to select their overall opinion of the airside facilities (e.g., runways, taxiways, ramps, NAVAIDs, airfield marking, signage, lighting, etc.). The selectable answers were "very good", "good", "fair", "poor", and "very poor". Sixteen respondents (59.26%) selected that they viewed the airside facilities to be "very good". The remaining 11 respondents (40.74%) selected "good". Overall, the airside facilities are positively regarded. This is graphically represented in **Figure 4**.

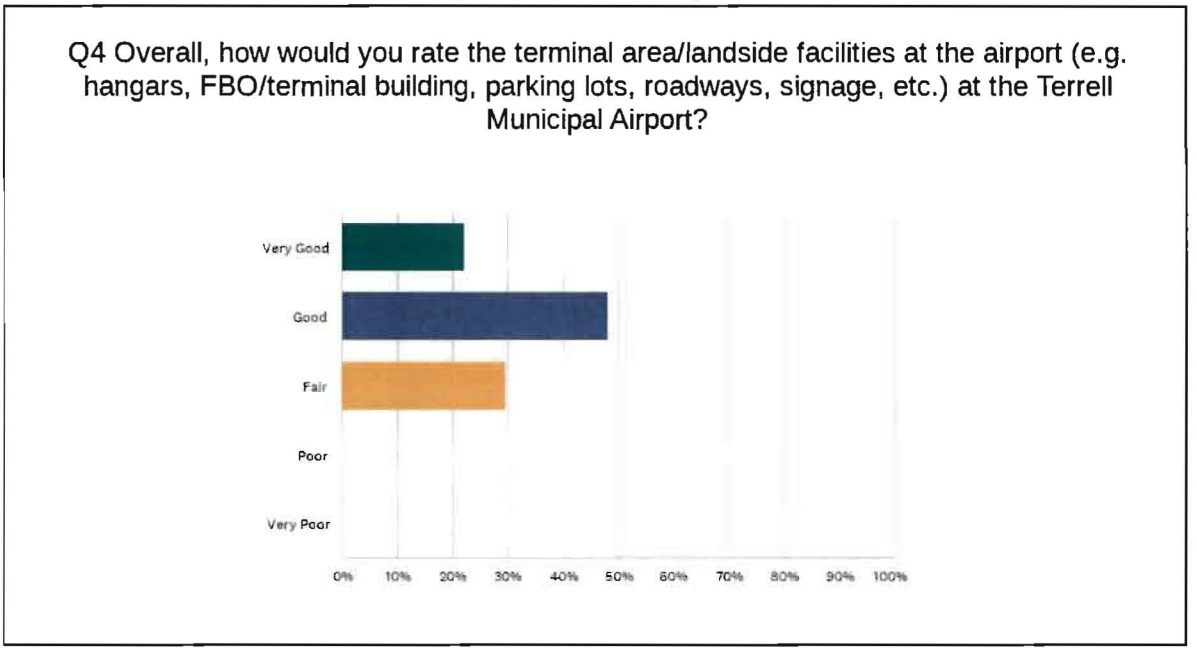
FIGURE 4
STAKEHOLDER SURVEY – QUESTION 3



Source: Garver, 2022.

The fourth and final selective-response question inquired about the respondent's overall opinion of the terminal area/landside facilities (e.g., hangars, FBO/terminal building, parking lots, roadways, signage, etc.). The selectable answers were the same as question three. Thirteen respondents (48.15%) selected that the terminal/landside facilities were "good", 8 respondents (29.63%) selected "fair", and the remaining 6 respondents (22.22%) selected "very good." This is graphically represented in **Figure 5**. Overall, the terminal/landside facilities did not draw as much positive feedback as the airside facilities did.

FIGURE 5
STAKEHOLDER SURVEY – QUESTION 4



Source: Garver, 2022.

OPEN-ENDED RESULTS

Unlike the selected-response questions, open-ended questions allow respondents to provide whatever input they feel best contributes to the question asked. Open-ended questions can end up providing significant variance in possible responses which can make it difficult to narrow down the responses into common themes. For the first three open-ended questions, respondents were allowed to provide up to three separate answers per question.

In the first open-ended question, respondents were asked to provide their thoughts and opinions on was what they believed to be the best features of TRL. The most mentioned responses were:

- The runway (16 responses)
- TRL's location to the Dallas-Fort Worth metroplex (13 responses)
- The terminal building (6 responses)
- The taxiways (6 responses)
- The hangars (6 responses)

The second open-ended question that respondents answered asked about the improvements they felt needed to be made at the Airport. The most mentioned responses were:

- Self-service fueling station (13 responses)
- Additional hangars needed (10 responses)
- Upgrade the FBO or move it to the underutilized terminal building (5 mentions)

The third open-ended question asked the respondents to suggest any businesses or amenities they felt would help TRL grow and prosper. The most mentioned responses were:

- A restaurant (8 responses)
- Specialty aeronautical businesses (6 responses)
- Self-service fueling station (6 responses)

The fourth and final open-ended question asked the respondents to provide any additional feedback they felt would help in developing this Airport Business Plan. Many took this opportunity to reiterate responses to previously answered questions.

RECOMMENDATIONS

As is evident from the feedback to both the selected response and open-ended questions, the stakeholders very clearly have a positive opinion of TRL. The airside facilities are unanimously ranked "good" or better. The landside facilities were overall ranked "good" or better. The improvements that were mentioned focused on actionable items.

The following needs were the most requested:

- Self-service fuel
- Additional hangars
- Upgrade the FBO or move it to the underutilized terminal building
- Additional aeronautical business options on the airfield

By and large, the most requested need for TRL was the addition of a self-serve fuel system. A majority of the respondents mentioned the need for a self-serve fuel system at least once in one of the open-ended responses. The second most requested infrastructure improvement was the addition of more hangars. Many respondents mentioned the amount of land available for hangar development. The third most mentioned suggestion was to use the terminal building more. Many suggested moving the FBO building to the

terminal building as this would provide for synergies between the two facilities and likely allow for the provision of additional amenities. The desire for more aeronautical business options on the airfield was the fourth most requested need for TRL. All of these items should be pursued as part of future development at TRL.

To supplement the survey results, interviews were completed with two corporate pilots that have utilized the airport. Both pilots stated that the airside facilitates at the airport are excellent. Both pilots recommended that additional services/amenities and food options at the airport would be help attract more pilots and passengers to the airport. The feedback provided by the corporate pilots is in alignment with the survey results.

The results of the broader 2014 market analysis are generally in alignment with the results of the stakeholder survey completed as part of this business planning effort.

LAND-USE PLAN DEVELOPMENT

OVERVIEW

Based on the preceding elements of this business plan and the inventory work completed as part of the Airport Master Plan, a land-use plan was developed. The land-use plan is meant to identify the highest and best use of airport property so the airport can determine how to utilize its available land holdings.

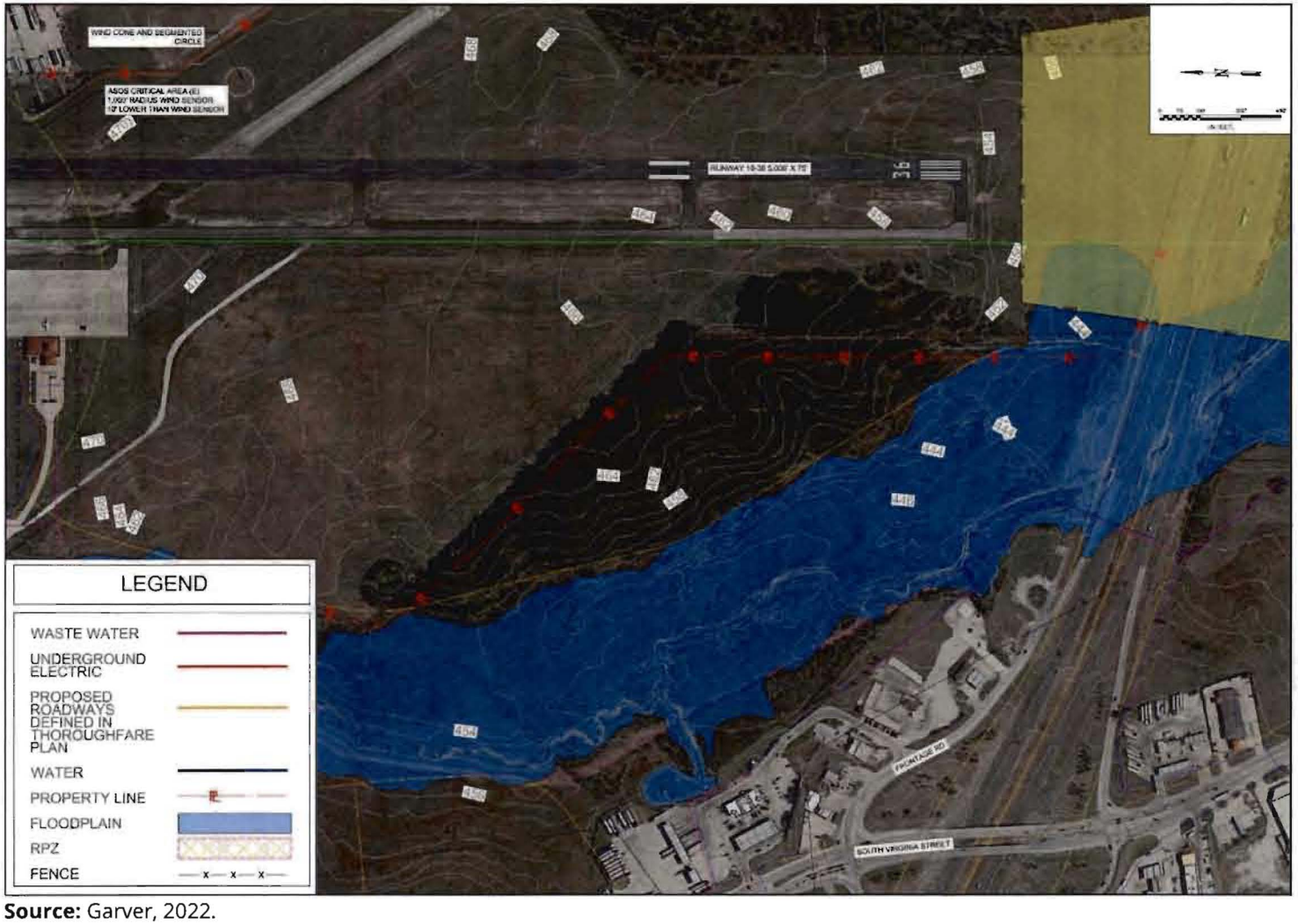
DEVELOPMENT CONSIDERATIONS

There were multiple factors considered when evaluating the highest and best use of available land parcels at the airport. All of the following were a part of the considerations: airport protected surfaces, existing utilities, existing/ultimate roadways, topography, and the floodplain. **Figures 6 through 8** graphically represent these considerations on airport property and the surrounding area.

FIGURE 6
EAST PROPERTY
TERRELL MUNICPAL AIRPORT

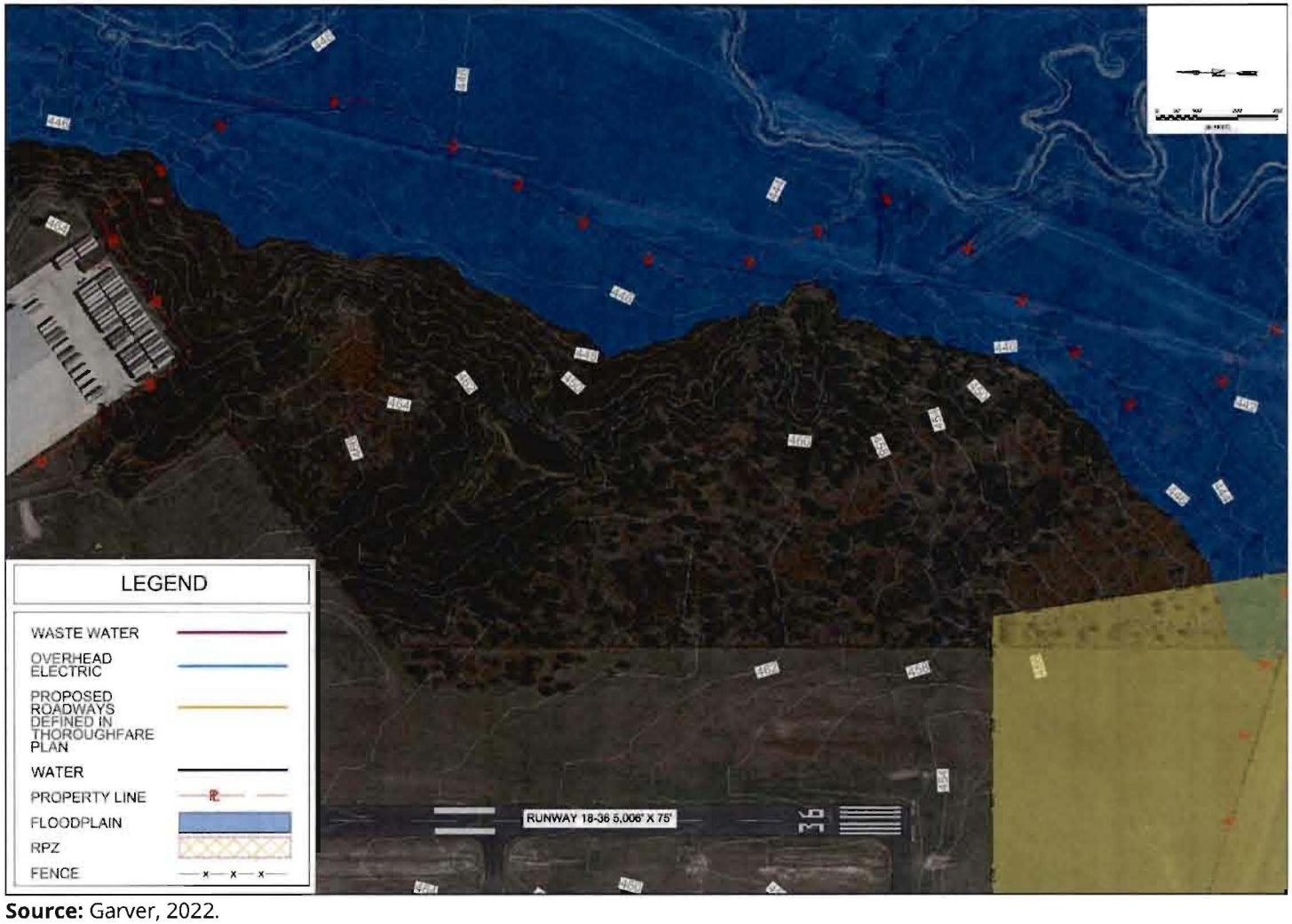
Source: Garver, 2022.

FIGURE 7
SOUTH PROPERTY
TERRELL MUNICPAL AIRPORT



Source: Garver, 2022.

FIGURE 8
WEST PROPERTY
TERRELL MUNICIPAL AIRPORT



Source: Garver, 2022.

LAND-USE ALTERNATIVES DEVELOPMENT

Multiple land-use alternatives were developed, shown in **Figures 9 through 12**, to analyze the highest and best use of airport property. Land-use at the airport was segmented into the following categories:

- Commercial aeronautical businesses – Commercial aeronautical development includes aeronautical businesses that provide a wide array of services to the aviation industry.
- FBO development – FBO development includes the establishment of a Fixed Based Operator (FBO), associated hangar development, and service facilities (e.g., maintenance, aircraft washing, fueling, etc.). This could include the relocation of the existing FBO to this area.
- T-Hangar development – T-hangar development includes the development of private T-hangars for aircraft storage.
- GA/Corporate development – General Aviation (GA)/corporate development includes the development of private box hangars for aircraft storage.
- Non-aeronautical development – Non-aeronautical development includes the establishment of non-aeronautical facilities (e.g., shops, storage, restaurants, industrial, etc.).

Figure 13 shows the preferred Land-Use plan. Garver developed it based on discussions with City of Terrell staff on the original four land-use alternatives. The southern portion of the Airport property was selected to be used for commercial aeronautical businesses because of the wide expanse of property that can also be accessed by the proposed roadway shown in the City of Terrell Thoroughfare Plan. To facilitate the full development of this area, the City of Terrell will need to purchase approximately 62 acres of additional property surrounding the proposed road shown in the Thoroughfare Plan. This acquisition will provide additional area for development between the proposed road and the existing airport property line. This acquisition of this property will be further discussed in the Airport Master Plan.

A small portion of area surrounding the current terminal was selected to be used for the FBO. This would provide ample space for fuel trucks, tugs, and any other ground service equipment the FBO would need on a daily basis, all while being within close proximity to the terminal building. As previously discussed, locating the FBO closer to the terminal building will allow for synergy between the two facilities.

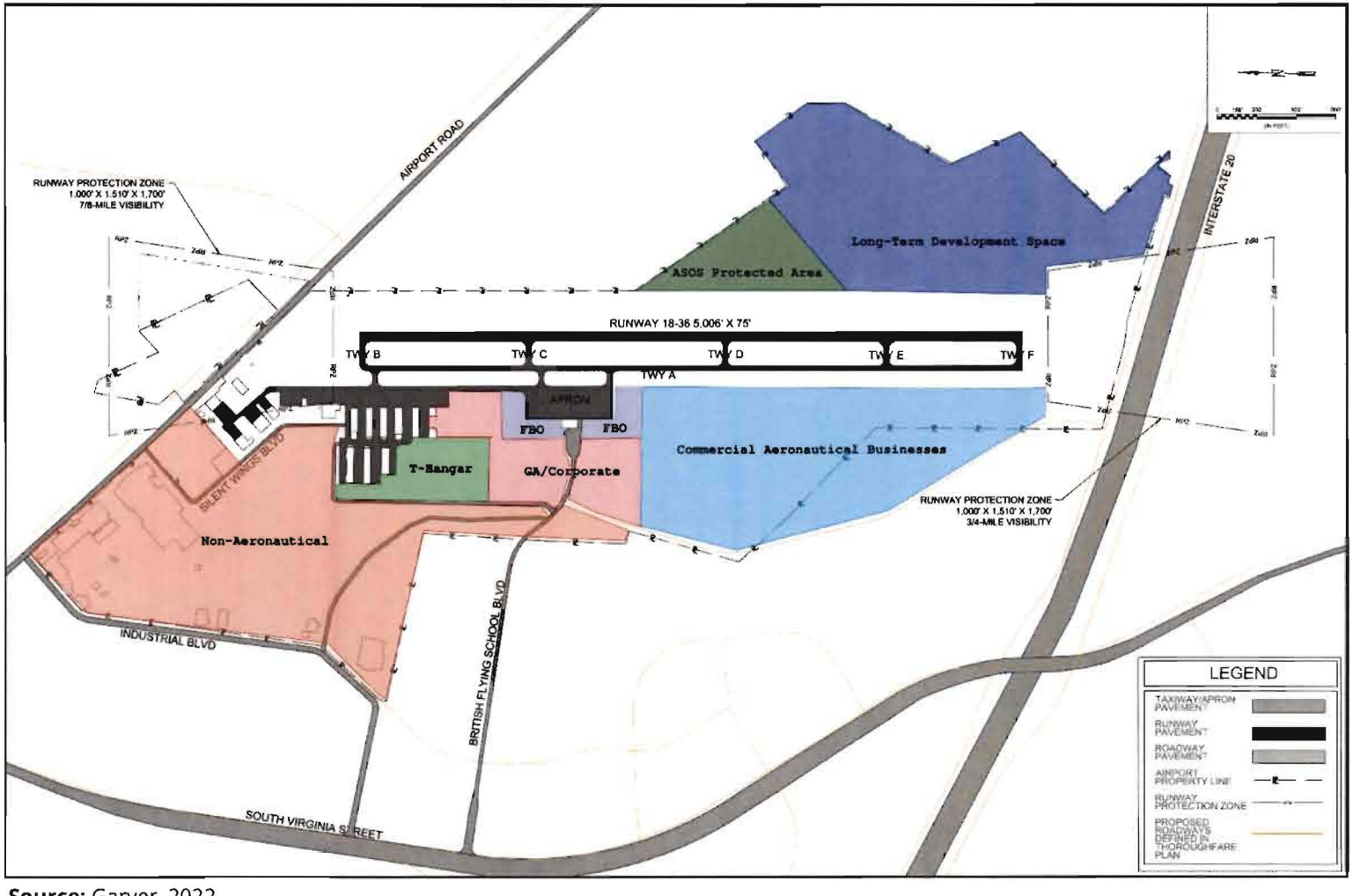
T-hangar development is expected to be located just north and west of the current T-hangars. Due to this land already being used for T-hangars, it makes logical sense to continue to establish more T-hangars in this area.

The land south of the proposed T-hangar development, north of the commercial aeronautical business development and west of the FBO/terminal area, was determined to be best used for GA/corporate development. This would consist of larger box hangars for jet aircraft. This location provides quick access to the FBO/terminal area as well as the access road. This land use arrangement should support TRL's goal to attract more turboprop and jet traffic.

The northwest portion of the land-use development plan was categorized for non-aeronautical development. This area is farthest away from the airfield and has existing development (e.g., hangars, roadways, etc.) in front of it which could make it difficult to develop for aeronautical purposes. This portion of land was categorized the same throughout all alternatives that were developed.

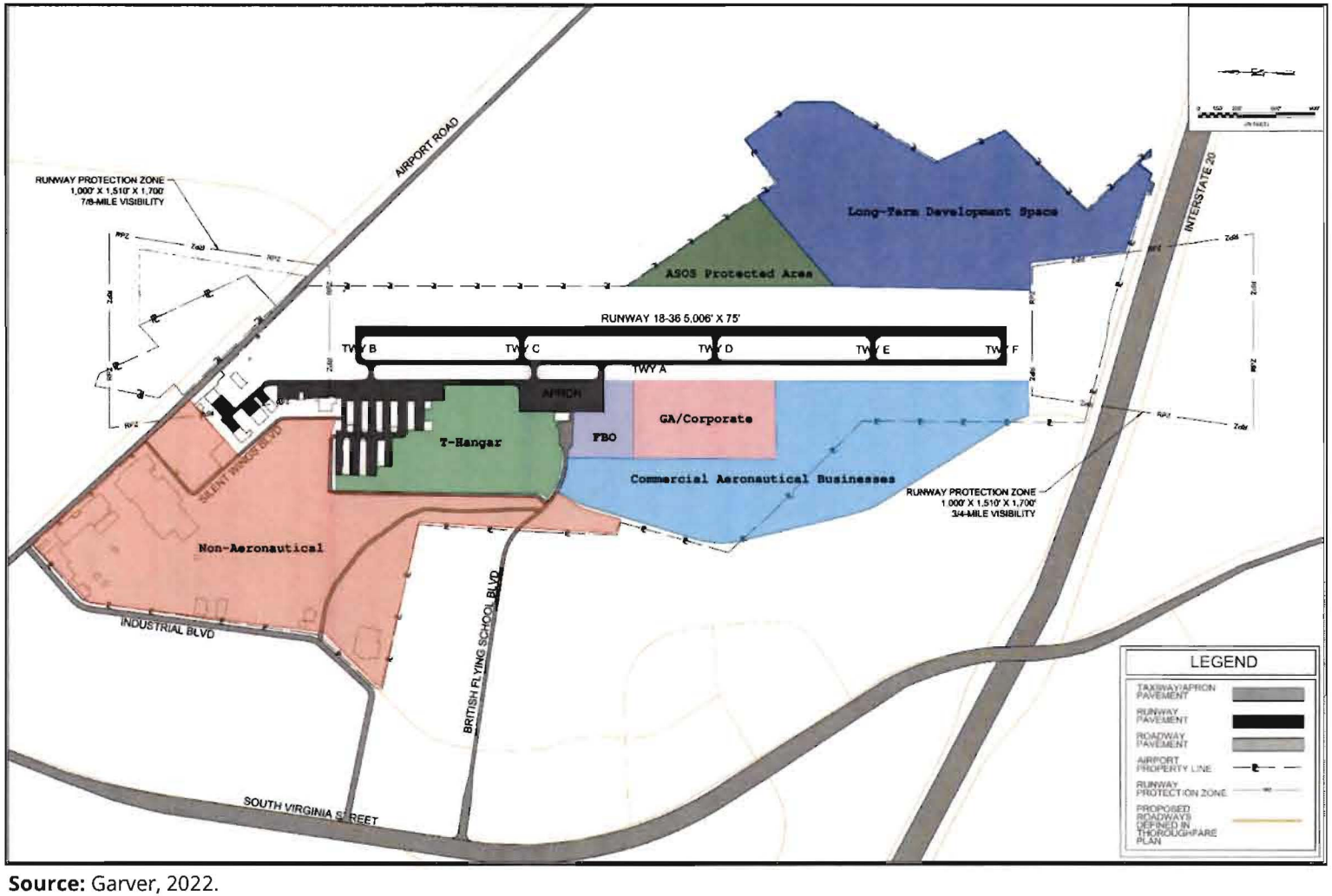
Two portions of land were partitioned on the east side of the Airport property line. A small section of this is the ASOS protected area, which is required to be free of objects/developments so that the ASOS can provide an accurate reading of the weather. The area south of this ASOS Protected Area is reserved for long-term development. A good portion of this land is covered in trees and lies within the floodplain. There is no planned roadway access to this area at this time.

FIGURE 9
ALTERNATIVE #1
TERRELL MUNICIPAL AIRPORT



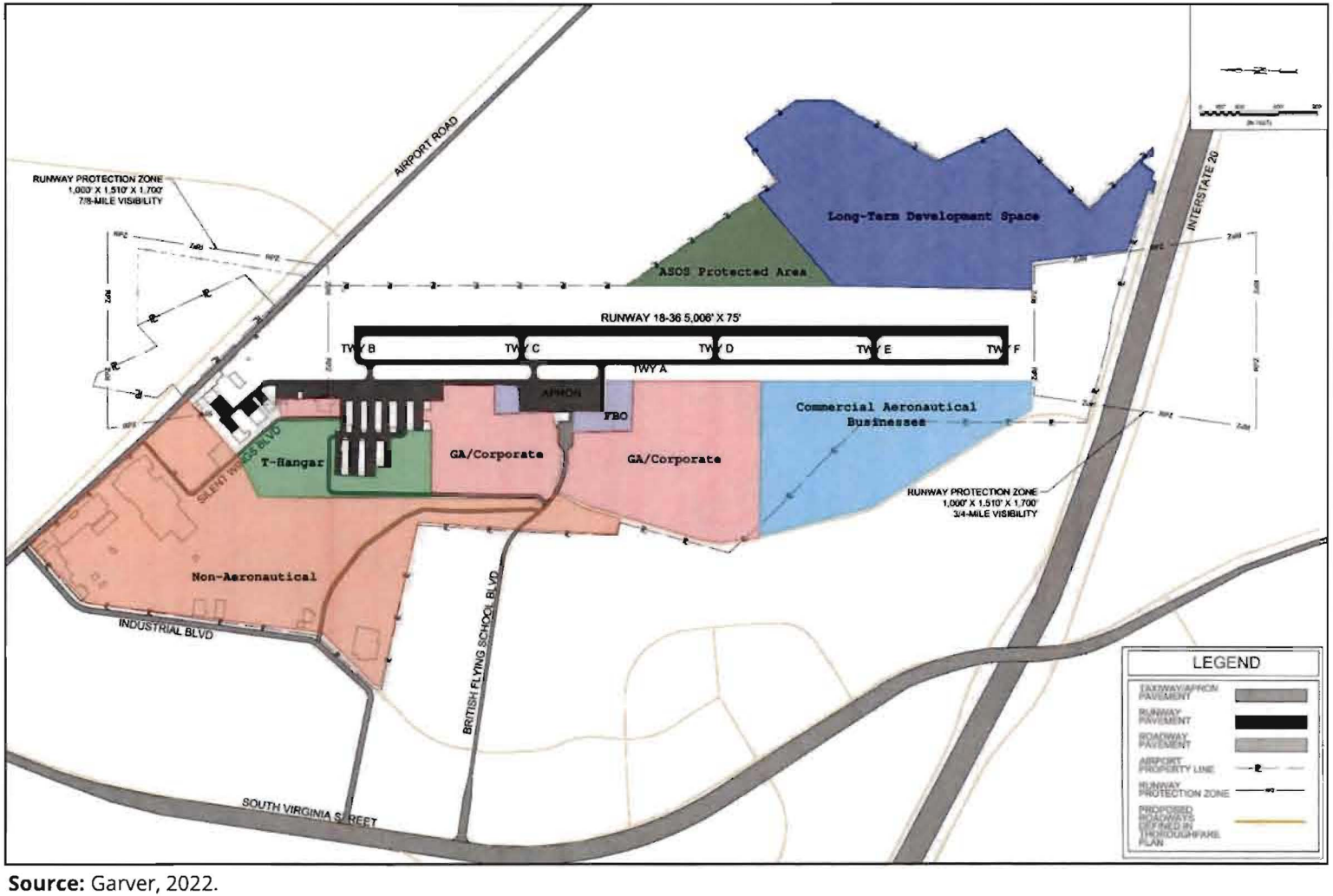
Source: Garver, 2022.

FIGURE 10
ALTERNATIVE #2
TERRELL MUNICIPAL AIRPORT



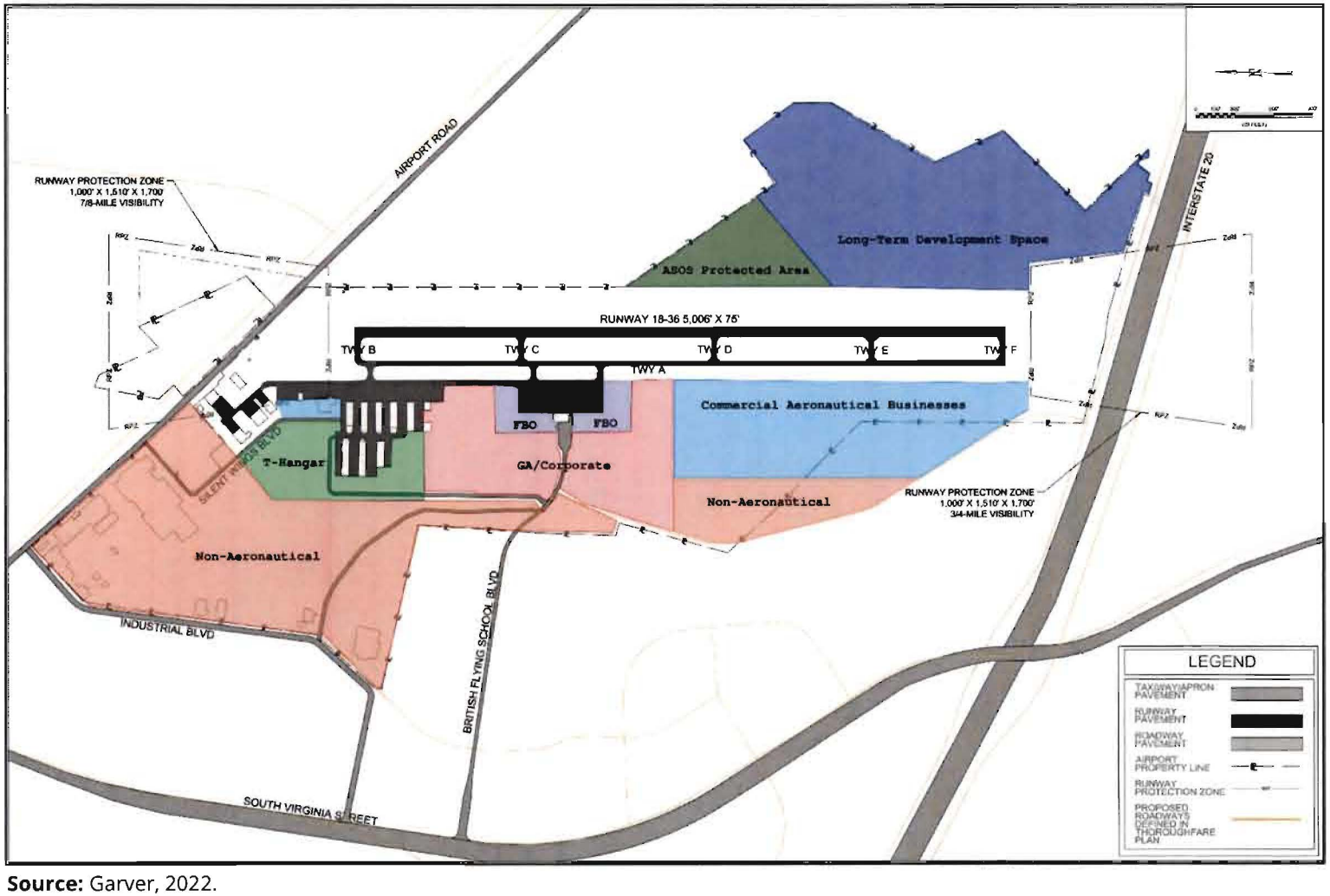
Source: Garver, 2022.

FIGURE 11
ALTERNATIVE #3
TERRELL MUNICIPAL AIRPORT



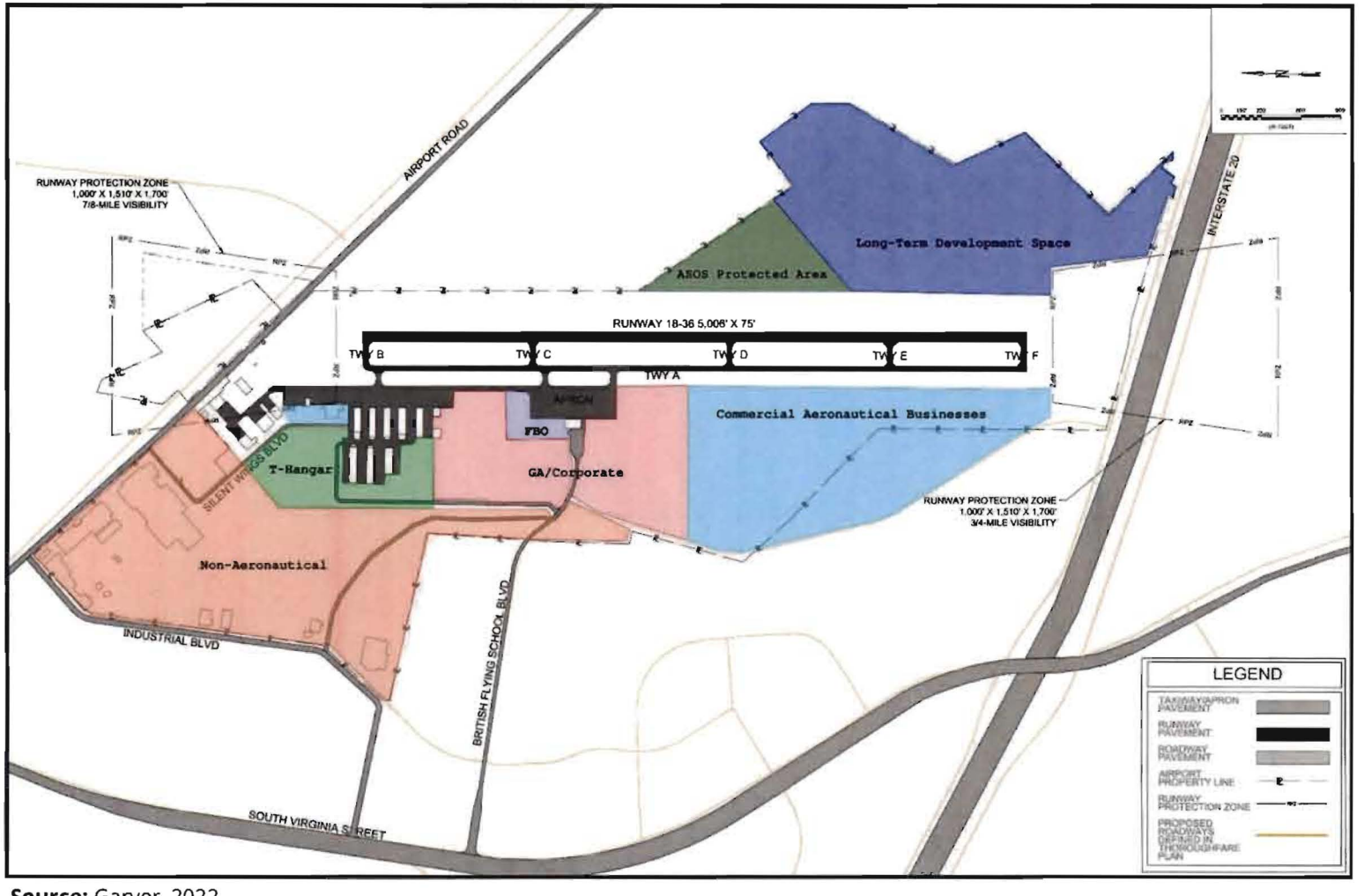
Source: Garver, 2022.

FIGURE 12
ALTERNATIVE #4
TERRELL MUNICIPAL AIRPORT



Source: Garver, 2022.

FIGURE 13
PREFERRED ALTERNATIVE
TERRELL MUNICIPAL AIRPORT



Source: Garver, 2022.

STRATEGY DISCUSSION

OVERVIEW

The goals for TRL are to grow its number of based tenants and to attract more turboprop and jet aircraft. Garver conducted a strategy discussion with City of Terrell staff to determine what is needed in specific areas to meet these goals. This discussion was rooted in the strategic analyses discussed earlier in this document.

SERVICES/AMENITIES

Based on the result of the previous analyses, the following items were identified as key actions or services/amenity improvements that are needed to support the strategic growth plan of the airport:

- Create a full-time airport manager position
- Attract more specialty maintenance businesses to TRL (e.g., avionics)
- Attract additional high-quality airframe and powerplant/maintenance, repair, and overhaul businesses to TRL
- Establish a 100LL self-serve fuel system
- Provide the airport with full-time maintenance employee(s)
- Restrooms at or near the T-hangars
- TRL must remain competitive on their fuel prices to help attract new users and based aircraft

The comparative airport analysis, aeronautical feasibility analysis, and stakeholder survey all revealed that TRL was providing the essential services and amenities. However, if TRL wants to meet its goal of increasing turboprop and jet aircraft traffic, additional services and amenities should be considered for the future.

OPERATIONS

The operational improvements that would be necessary to facilitate growth at the Airport were also considered as part of this strategy discussion. The needs that were identified are:

- Building new hangars
- Full-time airport manager and maintenance employee(s)

- More landside roadway connections with the Thoroughfare Plan to allow easier access to the airport

FINANCIAL

Garver's study of the Airport's financial position was key in identifying areas for financial improvement in service of TRL's goal of expansion. The following needs were identified to meet that goal:

- Increased T-hangar rates to maximize revenue
- Consider local debt issuance to fund projects that have limited grant funding eligibility (e.g., hangars)
- Identify potential funding partnerships with local universities or other agencies that may be invest in the growth of the airport.
- Pursue opportunities to fund additional hangar development (e.g., NETRMA, economic development grants, etc.)

LAND DEVELOPMENT

The Airport owns a substantial amount of land that could be developed into future amenities and facilities. The strategy discussion investigated ways the Airport could facilitate the development of this available land. The following were discussed:

- Acquire adjacent property (62 acres) to support future development of the commercial aeronautical business area
- Improve access to landside facilities via access roads
- Expand utilities within the area to support hangar development
- Maximize the utilization of the existing land holdings to be as efficient as possible
- Protect areas for future technological changes in aviation (e.g., electrical aircraft, etc.)
- Continue to improve drainage at the airport
- Continue to identify ways to attract more small general aviation aircraft via T-hangar development

As was discussed in the Land-Use Development Section, there is available land owned by the City on which the Airport could develop aeronautical businesses. The Airport should consider expanding utilities and developing enabling infrastructure (e.g., taxilanes,

roadways, etc.) to support land development. These infrastructure improvements will be analyzed in the airport master plan.