

**ORDINANCE NO. 16-12-15-03**

**AN ORDINANCE OF THE CITY OF LAGO VISTA, TEXAS ADOPTING THE “LAGO VISTA RUSTY ALLEN AIRPORT ACTION PLAN”; PROVIDING FOR RELATED MATTERS; FINDING AND DETERMINING THAT THE MEETING AT WHICH THIS ORDINANCE IS PASSED IS OPEN TO THE PUBLIC AS REQUIRED BY LAW**

**WHEREAS**, the Rusty Allen Airport is within the City of Lago Vista, Texas, a home-rule municipality (hereinafter “City”);

**WHEREAS**, the City, in 1999, adopted a plan for maintenance, development and operation; Texas Department of Transportation (TXDOT) Aviation indicated in 2014 that such Airport Master Plan should be updated and modified in accordance with TXDOT and Federal Aviation Administration (FAA) standards and should be called an Airport Action Plan (“Plan”);

**WHEREAS**, the purpose of the Plan is to provide systematic guidelines for the Airport's overall maintenance, development, and operation and is intended to be a proactive document which identifies and then plans for future facility needs well in advance of the actual need.

**WHEREAS**, the City has sought review and inquiry and the opportunity for citizen participation and input in one (1) Town Hall Meeting, three (3) Airport Plan Advisory Committee Meetings, One (1) Airport Advisory Board Meeting, Two (2) Planning & Zoning Commission Meetings, and two (2) City Council Meeting, to be included in the creation of the Airport Action Plan; and

**WHEREAS**, the Airport Plan Advisory Committee, Airport Advisory Board, and the Planning & Zoning Commission have recommended adoption of the Airport Action Plan, and the City Council finding that the adoption of the Airport Action Plan, hereinafter set forth and listed in this Ordinance are reasonable and necessary for the public health, safety, and welfare.

**NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF LAGO VISTA, TEXAS, THAT:**

**Section 1. Findings.** The foregoing recitals are hereby found to be true and correct and are hereby adopted by the City Council and made a part hereof for all purposes as findings of fact.

**Section 2. Adoption of the Lago Vista Rusty Allen Airport Action Plan.** The Lago Vista Rusty Allen Airport Action Plan, which is set forth in Exhibit A, attached hereto and incorporated herein, is hereby adopted.

**Section 3. Severability.** It is hereby declared to be the intention of the Council that the sections, paragraphs, sentences, clauses, and phrases of the Ordinance are severable and, if any phrase, sentence, paragraph, or section of this Ordinance shall be declared invalid by the final judgement or decree of any court of competent jurisdiction, such invalidity shall not affect any of the remaining phrases, clauses, sentence, paragraph, or section. If any provision of this Ordinance shall be adjudged by a court of competent jurisdiction to be invalid, the invalidity shall not affect

other provisions or applications of this Ordinance which can be given effect without the invalid provision, and to this end the provisions of the Ordinance are declared to be severable.

**Section 4. Effective Date.** This Ordinance shall take effect immediately from and after its passage and publication in accordance with the provisions of the *Tex. Loc. Gov't. Code*.

**Section 5. Open Meetings.** It is hereby officially found and determined that the meeting at which this Ordinance is passed was open to the public as required and that public notice of the time, place, and purpose of said meeting was given as required by the Open Meetings Act, *Chapt. 551, Tex. Gov't Code*.

**PASSED AND APPROVED** on this 15<sup>th</sup> day of December, 2016.

ATTEST:

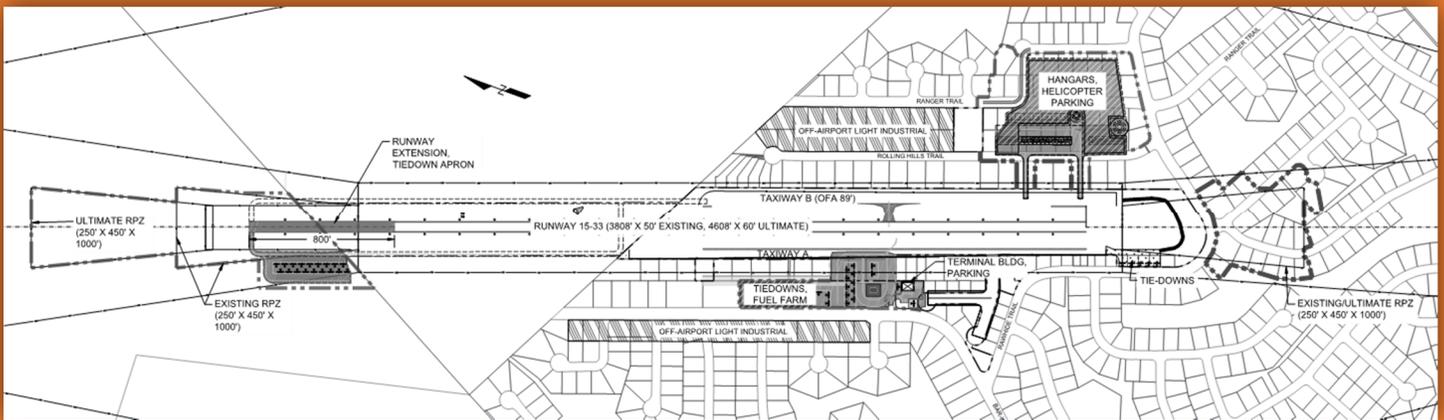


Sandra Barton, City Secretary

**CITY OF LAGO VISTA, TEXAS**



Dale Mitchell, Mayor



# Lago Vista - Rusty Allen Airport Action Plan

The City of

Lago Vista

Oct. 2016

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# Chapter 1 - Airport Study

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## 1.1 INTRODUCTION

This Lago Vista – Rusty Allen Airport Action Plan was initiated as a tool for the great community of Lago Vista, to get the airport stakeholders together, understand where the airport has been, where it is now, and develop a plan for where it should be in the future. TxDOT Aviation Division has included this Airport Action plan into the State’s Capital Improvement Program (CIP), using FAA Airport Improvement Program funds. This planning project was publicly advertised through TxDOT Aviation and selection of the consultant was made by representatives of the airport appointed by the City of Lago Vista, who owns and operates the airport, also known as the Airport Sponsor. TxDOT Aviation Division has funded the Action Plan at 90 percent of the total project cost, with the remaining 10 percent funded by the City of Lago Vista. The City selected Parkhill, Smith & Cooper (PSC), a Texas Architecture and Engineering Company with an office in North Austin based on the scoring criteria, and in February 2016, TxDOT Aviation notified PSC they were selected.



Airport Action Plan

Lago Vista – Rusty Allen Airport



### 1.1.1 PROJECT TEAM

The City has formed an Airport Plan Advisory Committee (APAC) to be responsible for reviewing materials, providing input and feedback on the airport plan, and to make the final recommendation for implementation to the Airport Advisory Board, the City Planning and Zoning Commission, and to the Lago Vista City Council. The APAC includes representation from the Rusty Allen Airport Property Owners Association (RAAPOA), the Airport Advisory Board, the Planning and Zoning Commission, City Staff and City Council. Airport users and neighbors were encouraged to participate in the planning process by attending the public meetings where the planning document was introduced, reviewed and discussed. The project kicked off with a town hall meeting and the first APAC meeting, both open to the public. There were a total of three APAC meetings and two Planning and Zoning Commission meetings where the plan was presented and discussed.

The project team that was instrumental in completing this project was:

- City Airport Plan Advisory Committee (APAC)
  - City of Lago Vista
    - Airport Manager/Director of Development Services: David Harrell
    - City Manager: Melissa Byrne-Vossmer
    - City Council Liaison: Rodney Cox
    - Planning Zoning Commission Liaison/Airport User: Jim Moss
    - Airport Advisory Board
      - Airport Advisory Chair/Rusty Allen Airport POA Representative: Don Barthlow
      - Board Member/Airport User: Linda Bush Warren
  - Citizen Member: Jim Awalt
- TxDOT Aviation Division Planning Project Manager: Michelle Hannah
- Planning Consultant: Parkhill, Smith & Cooper
  - Planning Subconsultant: McFarland Architects
- Public participants from the Lago Vista Community



*Figure 1 - June 22nd APAC Meeting*



### 1.1.2 ACTION PLAN COMPONENTS

An action plan is essentially a miniature Airport Master Plan. An Airport Master Plan develops a 20 year plan for the airport. This Airport Action Plan effort will focus on approximately the next decade, but needed improvements may be identified which will extend beyond. This Airport Action Plan is not meant to be a concrete plan that the City or TxDOT is committed to implementing, nor is it meant to be. As opportunities, needs and funding evolves through the years, adjustments will likely be needed, but this action plan will be the foundation and guidance for future development to get the Lago Vista – Rusty Allen Airport from where it is now to where it needs to be.

The City recently completed a Comprehensive Plan dated to the year 2030. To align with the Comprehensive Plan, there will be references in this Airport Action Plan to 2030. Funding availability from both the City and TxDOT aviation will help determine the programming of airport developments.

This action plan will also include an update to the Airport Layout Plan including the Airport Layout Drawing (ALD), the inner approach airspace drawing, and an updated property map. These are standard FAA documents and will be a tool for TxDOT and the City to easily see existing and future conditions at the airport. These will be completed once this plan is approved by City Council.

An initial step in the preparation of this Action Plan (Plan) was to collect data pertaining to the airport and the area it serves. An inventory of the airport was accomplished through physical observation of existing facilities, interviews with airport users, city staff, and a review of previous airport studies and records. This chapter summarizes the airport’s background, an inventory of the airfield, a review of airport management, aviation forecasts, and compliance review.

### 1.1.3 ACTION PLAN SCHEDULE

This action plan was a crucial project for the City as development has continued to increase around the airport. The City needed to act soon to put a plan in place for property acquisition and reserve areas for future expansion of the airport or future development would be very limited. This project was an accelerated effort to attempt to get a plan in place before the next fiscal year and to align with efforts of the recently completed City 2030 Comprehensive Plan. Below is the action plan schedule.

APAC Kickoff Meeting / Town hall	Thursday, May 26, 2016
APAC Meeting	Wednesday, June 22, 2016
Planning and Zoning Meeting	Thursday, June 23, 2016
Near Final APAC And Airport Advisory Meeting	Wednesday, August 3, 2016
Final APAC and Airport Advisory Meeting	Thursday, August 25, 2016
Final Planning Zoning Meeting	Thursday, August 25, 2016
City Council Presentation	Thursday, September 1, 2016
City Council Motion to Adopt	Thursday, September 15, 2016



### 1.1.4 AIRPORT LOCATION AND ACCESS

The Lago Vista – Rusty Allen Airport (RYW) is situated in the northern part of the City of Lago Vista, in Travis County, Texas. It is northwest of Austin, about a 35 mile drive to downtown. The City of Lago Vista is adjacent to Lake Travis in the beautiful Hill Country of Central Texas.

Being somewhat removed from the exploding population of the greater Austin area, Lago Vista has maintained a small town feel while enjoying fairly easy access to Austin and the Austin-Bergstrom International Airport (AUS). This access has been increased with the expansion of the 183A Toll Road to north of FM 1431, which is the primary arterial through Lago Vista. It begins east at I-35 in Round Rock and ends 55 miles northwest of Lago Vista at Lake Buchanan.

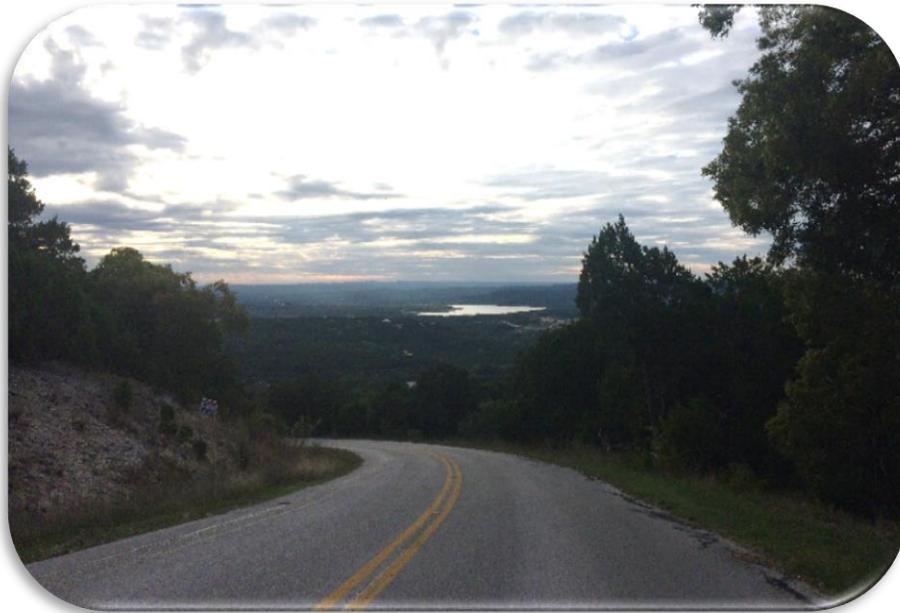
The existing signage and access to the airport is off of FM 1431, heading northeast on Bar K Ranch Road for approximately 1.5 miles. Bar K Ranch Road has steep grades. A recent construction project at the airport had issues with concrete trucks spilling concrete on the roadway due to its grade. There is one alternate route from FM 1431 to the airport, but without signage for airport access. The alternative access is through Bison Road, which is 1 mile further west on FM 1431. The slope along Bison Road is less than Bar K, but the pavement along Bison is starting to deteriorate, and with limited funds, the City does not want to increase the demand on infrastructure by signing Bison as the primary access to the airport. To prevent future issues with hauling materials on Bar K, the City may want to consider instructing contractors to use an alternative route. The City’s 2030 Comprehensive Plan shows a future, new minor arterial which would provide better access to and from the airport.



Figure 2 - Google Street View at FM 1431 and Bar K Ranch Road, primary access to the airport

### 1.1.5 AREA TOPOGRAPHY

Lago Vista is in the central Texas “Hill Country” and lives up to the name. The City of Lago Vista is full of varying topography which allows for several beautiful views of Lake Travis and rolling hills. The airport is situated on top of a hill, which reduces airspace encroachment concerns and provides for some great views.



*Figure 3 - View from Bar K Ranch Road near the Airport with view of Lake Travis*

### 1.1.6 CLIMATE

Lago Vista has fairly mild winters and hot, humid summers. The mean maximum temperature in the hottest month (July) is 98 degrees. The average annual rainfall average for Lago Vista is 30 to 35 inches. 2016 has been a record setting year of rainfall and as of June 2016, Lake Travis was at 117 percent capacity, which is a drastic change from recent years. Early in 2015, the lake was approximately 70 feet below June 2016 levels.

### 1.1.7 AIRPORT HISTORY

The Rusty Allen Airport began as Bar K Airport back in 1951 to serve a local dude ranch. The runway was paved and lengthened to 3,804 feet, its current length, in 1968 by National Resort Communities (NRC), the original developer of what is now the City of Lago Vista. In 1986, NRC platted the Bar-K Airport subdivision and began selling the adjacent lots. NRC sold the airport along with golf courses and other properties to Taiyo Corporation, a Japanese real estate company, in 1990. Taiyo resurfaced the runway and constructed the tie-down apron.



In 1993, Taiyo experienced financial difficulties and the airport was offered to the City. A committee was formed by the City, chaired by George Eeds, to analyze the offer and make a recommendation. The recommendation was that the airport was a valuable asset to the City and should be acquired but should include the tie-down apron. The City agreed with the recommendation, but did not have the resources to pay \$12,000 in back taxes and closing costs. The City was also weary of the ongoing maintenance costs. The property owners surrounding the airport decided to form the Bar-K Airport Property Owners Association (now, the Rusty Allen Airport Property Owners Association, RAAPOA) and partner with the City to help it acquire the airport. In 1994, the POA wrote the City a check for \$12,000 to cover the back taxes and closing costs and established an agreement with the City to help with ongoing operation and maintenance. That same year, the runway and taxiway were conveyed to the City of Lago Vista and the City renamed the airport in memory of late Mayor Rusty Allen, who contributed significantly to the Lago Vista community and was a large supporter of the airport. The renaming took place in approximately one minute at a City Council meeting, unbeknownst to Mayor Allen.

The northern third of the runway was being used based on a lease with the U.S. Fish and Wildlife Service for operation of the runway, but the lease was with the original developers. Soon after the City took ownership of the airport, it was determined that the runway lease needed to be succeeded to the City. In 1995, the lease was transferred to the City to allow the City continued use of the land. That same year, the FAA included the airport in the National Plan of Integrated Airport Systems (NPIAS) and TxDOT included the airport in the Texas Airport System Plan (TASP). This allowed the City to use FAA funds through TxDOT Aviation for airport improvements. According to aerial images taken in 1995, there were 16 hangars on the airfield. Now there are 49, more than three times as many. The City continues to own only the runway, taxiways, and the small tie-down apron. Private development has continued as evidenced by the growth in hangars.

The partnership between the City of Lago Vista and the RAAPOA that made City acquisition of the Airport possible continues today.

Note: Airport history was obtained from a collaboration of news articles put together by George Eeds.



## 1.2 AIRPORT INVENTORY

Existing facilities at the Airport are divided into three categories: airfield, landside, and support facilities. Airfield facilities include areas such as runways, taxiways and aprons. Landside facilities include areas such as hangars, airport buildings and auto parking. Support facilities include emergency services, utilities and miscellaneous facilities that do not logically fall into either airfield or landside facilities.

### 1.2.1 AIRFIELD FACILITIES

#### Airport Reference Code (ARC)

According to the existing Airport Layout Plan (ALP), the airport is classified as a B-I. The "B" indicates the Runway's Aircraft Approach Category, or Approach Speed, of greater than 91 knots, but less than 121 knots. The "I" represents the Airplane Design Group (ADG) for the largest aircraft expected to operate at the airport and is determined by wingspan and tail height. The pavement is rated for 12,500 pounds and by FAA definition, aircraft weighing 12,500 pounds or less, are classified as "small". Therefore, the full ARC for the Airport is B-I (small).

Aircraft expected to use the Lago Vista - Rusty Allen Airport may include aircraft greater than an ARC of B-I small. However, the existing airfield features prevent an upgrade in the ARC. This will be discussed further in Chapter 2, but it is recommended that the City considers the ARC of B-I (small) a permanent classification.

#### Runway

The existing runway is published as Runway 15-33 and is 3,808 feet long by 50 feet wide. The existing runway is an asphaltic concrete pavement, in good condition, as it was recently rehabilitated with a surface treatment through a TxDOT Aviation Capital Improvement Grant project.



*Figure 4 - Runway 15-33*



The FAA Advisory Circular 150/5300-13A was used to develop the runway standards below:

Table 1 - Runway Standard Dimensions (ARC B-I small)

Runway Feature	Dimension	Standard Value (ft)
Runway Width		60 ft
Runway Safety Area (RSA)		
	Length Beyond End	240 ft
	Width	120 ft
Runway Object Free Area (ROFA)		
	Length Beyond End	240 ft
	Width	250 ft
Runway Object Free Zone (ROFZ)		
	Length Beyond End	200 ft
	Width	250 ft
Runway Protection Zone (RPZ)		
	Length	1000 ft
	Inner Width	250 ft
	Outer Width	450 ft
Runway Centerline Separation to:		
	Holding Position	125 ft
	Parallel Taxiway/Taxilane Centerline	150 ft
	Aircraft Parking Area	125 ft

### Taxiways and Taxilanes

The existing taxiway system at the Lago Vista – Rusty Allen Airport includes two partial parallel taxiways, either side of the runway along with other hangar access taxiways which feed into the parallel taxiways. Most of the taxiways are asphaltic concrete pavement and have been recently rehabilitated with a surface treatment and restriped. In 2016, a project was completed to reconstruct the south end of the west parallel taxiway. This pavement was reconstructed with portland cement concrete.



Figure 5 - West Side Taxiway connecting hangars to the west side parallel taxiway





Figure 6 - West Side Parallel Taxiway (looking south)

The Taxiway Design Group (TDG) for all taxiways at the airport is 1A. This is evident based the existing aircraft using the airport and the existing taxiway dimensions. TDGs are classified from 1A to TDG 7 and are based on the main gear width and cockpit to main gear dimension. The TDG only affects taxiway design including width and taxiway intersections. Airplane Design Group (ADG) is used to determine Taxiway Safety Areas and Taxiway Object Free Areas. See below for the standard taxiway dimensions for the Lago Vista – Rusty Allen Airport, with a TDG of 1A and an ADG of I.

Table 2 - Taxiway Standard Dimensions (ADG I, TDG 1A)

Taxiway Feature	Standard Value (ft)
Taxiway/Taxilane Width	25 ft
Taxiway/Taxilane Safety Area Width	89 ft
Taxiway Centerline to Parallel Taxiway/Taxilane Centerline	70 ft
Taxiway Centerline to Parallel Taxiway/Taxilane Centerline	70 ft
Taxiway Centerline to Parallel Taxiway/Taxilane Centerline	70 ft
Taxiway Centerline to Fixed or Movable Object	44.5 ft
Taxilane Centerline to Parallel Taxilane Centerline	64 ft
Taxilane Centerline to Fixed or Movable Object	39.5 ft
Taxiway Wingtip Clearance	20 ft
Taxilane Wingtip Clearance	15 ft
Taxiway Shoulder Width	10 ft



## Aprons and Aircraft Parking

There are currently 11 aircraft tie-downs on the City owned tie-down apron. There is one vehicle parking lot, but access is limited as it is accessed through setbacks on private property or by driving on the west side parallel taxiway. Most of the tie-downs are currently occupied long term, which makes it very difficult to accommodate itinerant traffic, those that may use the airport, but are not based at the airport. Itinerant traffic is beneficial as it can allow people to visit the airport and the City, spending money in fuel, food, lodging, and shopping, thereby boosting the local economy. Without space for itinerant traffic, the City may be missing out on opportunities to benefit the community.



*Figure 7 - Tie-Down Apron*

## Airfield Lighting

Airfield edge lighting systems are categorized as low, medium, or high intensity. The color of the lights is also important as it indicates to pilots where they are in the airport environment. For example, runway edge lights are white and taxiway edge lights are blue. RYW has a medium intensity runway edge lighting system, which is pilot controlled by keying the microphone inside of the aircraft. The taxiways, apron and taxilanes are not lit.



*Figure 8 - Existing Runway Edge Light*



## Airport Navigational Aids

Airport Navigational Aids, or NAVAIDS, provide navigational assistance to aircraft for approaches to an airport. NAVAIDS are classified as visual approach aids or instrument approach aids; the former providing a visual navigational tool and the latter being an instrument-based navigational tool. The types of approaches available at an airport are based on the NAVAIDS provided. The following sections describe existing NAVAIDS at the Airport.

### Visual Approach Aids

The Airport has two forms of visual approach aids. A two-box Precision Approach Path Indicator (PAPI) is located at each runway end and an Airport Beacon is located on the west side of the runway at the northwest corner of the tie-down apron. PAPIs give glide slope information to pilots on final approach by displaying sequences of different colored lights to maintain a safe glide slope for landing.



*Figure 9 - Runway 33 PAPIs*



*Figure 10 - Airport Rotating Beacon*

### Instrument Approach Aids

The airfield does not currently have instrument approach aids, but Runway 15 does have an instrument approach procedure, which can be used when the visibility and cloud ceiling are below minimums for Visual Flight Rules (VFR) conditions. **Table 1A** details the approaches currently available at the Airport. It was confirmed with FAA Flight Procedures Team that on January 5<sup>th</sup>, 2017, the airport is scheduled to have a non-precision instrument GPS approach to Runway 33.



Table 3. Instrument Approach Procedures

Approach Name	Runway End Serviced	Approach Minimums	
		Ceiling (feet)	Visibility (statute miles)
RNAV LP MDA	15	1600	1
RNAV LNAV MDA	15	1620	1
RNAV Circling	15	1700	1
GPS Anticipated 1/5/2017	33		

### Other NAVAIDS

The airport also has Automated Weather Observation System (AWOS III) providing real-time weather information, located east of the runway. The wind sensor on the AWOS requires certain separation from obstructions which could impact wind readings. An exhibit has been included in the appendices including guidance for development surrounding the AWOS. Future development considerations should include provisions to prevent obstructions to the wind sensor.



Figure 11 - Lago Vista AWOS III located east of the runway.



## 1.2.2 LANDSIDE FACILITIES

### Hangars and Other Buildings

There are no on-airport, City owned hangars. All based aircraft users with hangars are through-the-fence (TTF) operators, private property owners with hangars and access to the airfield. The City has a master access agreement with the Property Owners Association for access to the airport. The City and other stakeholders have expressed the need for City owned hangars, a terminal building, and better restrooms. The existing public restroom is a portable style restroom.



*Figure 12 - Existing Public Restroom*

### Aviation Services

A fixed based operator (FBO) is an individual or a business that offers aviation-related services such as flight instruction, aircraft rental, aircraft maintenance, hangar/tie-down storage, and aircraft fueling to airport users. Currently, Lewis Ventures, is the only on-airport business. It owns and operates the airfield fuel service, with AvGAS only, and it is self-serve. While technically an FBO by definition, it does not provide on-airport staff or any other service. The fuel provider currently pays the City \$1 per year per the current agreement. There are no other on-airport FBOs. However, through existing through-the-fence agreements there are some services offered by property owners including flight training, aircraft repair, and maintenance.





*Figure 13 - Existing Self Serve Fueling Station (AvGAS only)*

### **Airport Access and Vehicle Parking**

There is one official public entrance and one unpaved access point through a vacant lot. There is one lot available for vehicle parking, but it is not near the entrance. It is off of the taxiway and there is no roadside access or signage to the parking lot. Other than this, there are no designated parking areas on the airfield. Part of the development plan includes possible areas for a defined airport entrance with vehicle parking.



*Figure 14 - Existing Vehicle Parking Lot Aerial View*





*Figure 15 - Existing Vehicle Parking Lot Elevation View*

Adjacent to the fueling station, the city also has a covered picnic area with a bulletin board.



*Figure 16 - Existing Public Picnic Area*



## Other

The Balcones Canyonlands, conservation land and trail is north of the airport, with gated access to a fire access road to the airport.

### 1.2.3 AIRPORT SUPPORT FACILITIES

#### Public Transportation/Loaner Car

Currently, there are no public transportation options for visitors flying in to the Airport. Having some sort of transportation option at the airport would help attract visitors and could increase tourism revenue for local businesses. Many general aviation airports, similar to Lago Vista, provide a loaner car for pilots, usually an old police vehicle. The City should consider providing a loaner car to attract visitors and allow them to experience all Lago Vista has to offer. This has potential to not only increase City revenue through fuel sales, but will have an economic benefit to the Lago Vista community as well.

#### Emergency Services

Lago Vista Police and Fire service from Travis County ESD #1 currently serve the airport area. The residents of the airport have voiced potential for a partnership with a local fire district to provide service at the airport, possibly developing some permanent use at the airport such as a post or training facility of some sort. The nearest public heliport for medical use is at the Cedar Park Regional Medical Office, approximately 15 miles east of Lago Vista.

The City should contact the local fire authority, police, and local ESD and see if a possible partnership for access through the Airport or the Airport environ would be needed or useful, and if it's feasible. Also will need to coordinate with the Balcones Canyonlands fire services staff.

#### Airport Maintenance

Airport maintenance is provided by the City and through use of TxDOT Aviation's Routine Airport Maintenance Program (RAMP), which reimburses the City 50 percent of maintenance costs up to \$50,000. Airport maintenance activities eligible for RAMP would include herbicide, pavement maintenance, drainage, sweeping, lighting bulb replacements, NAVAID repair and maintenance, AWOS maintenance, City owned hangar repairs and maintenance, airport entrance signs and landscaping, fencing, gates and openers, and small capital improvement projects (terminal buildings, utility projects, parking, airfield expansion, etc).

#### Airport Fencing

The Airport is currently not fenced. There is a gate at the main entrance, but there is another unofficial entrance through a vacant lot. During the kickoff meeting, one of the users mentioned the need for better security as he had seen unauthorized use of airfield pavement by people with no aeronautical purpose. Airport security is an important feature for an airport. FAA standards for airport design intends to minimize mixed pavement used for aircraft and ground transportation. In general terms, aircraft and cars



do not mix. Besides allowing direct access to and from hangars by those of aeronautical intent, airfield pavement should be used for landing, departing, and taxiing, only. Exceptions would include airfield inspections, construction, and maintenance activities. Keeping a secure airport perimeter with vehicular gates reduces unauthorized use of airfield pavements. Keeping a secure airfield also prevents accidental entrances to the airfield, especially the runway area, reducing risks of incursions. Airport security also protects the City and TxDOT/FAA's investment in NAVAID's, lighting, and other equipment. At minimum, the City should consider vehicular access gates to prevent unauthorized ground transportation from using airfield pavement, whether accidental or purposeful.

Currently, there is an unofficial entrance through a vacant lot by the F-4 Phantom Airport sign, not collocated with the official airport entrance. This unofficial access to the airport property increases chances for unauthorized access onto the airport by non-aeronautical users.

## Utilities

Utilities and public services provided at the Airport include:

- Water – City of Lago Vista provides this service to the airport and its users.
- Sanitary Sewer: The City provides sanitary sewer as well.
- Electricity: Pedernales Electric Cooperative offers electric service to the airport.

Overhead power lines provide much of the electrical power to structures on the airport, but electricity to airfield elements are through a buried circuit.

There are also on-airport stormwater facilities owned by the City.

**Airport Signage.** Guidance signs to the Airport are located on FM 1431 at Bar K Ranch Road and at the intersection of Bar K and Timber Trail, and the welcome airport sign is a mounted F-4 Phantom, see figure below. It is confusing when traveling north on Bar K, whether to turn right or stay on Bar K to get to the airport entrance. The Airport could use a standard airport with arrow sign at the stop sign at Rawhide Trail and Bar K Ranch Road.



*Figure 17 - F-4 Phantom Airport Sign*



## 1.2.4 AIRSPACE

The FAA is responsible for the control and use of navigable airspace within the United States. Aircraft in flight, whether approaching or departing an airport, are subject to varying degrees of FAA control depending on location and meteorological conditions. These levels of control are called airspace classes. The alphabet characters A through G distinguish classes, with A being most restrictive and G being “uncontrolled” airspace. Each class has a unique shape and rules that govern such things as visibility minimums and cloud clearances. Lago Vista – Rusty Allen Airport is shown on the San Antonio Sectional Chart and is in Class E airspace, with Class G below 700 feet above ground level at the airport location.

Traffic flows at the Airport are standard, left-hand patterns. Airport users report that the majority of aircraft land and takeoff from Runway 15.

## 1.2.5 LAND USE PLANNING AND ZONING

The following land use and zoning discussion focuses on four areas:

- Airport Environs zoning and land use.
- Surrounding area zoning and land uses.
- Protection of airport airspace.
- Ownership/control of airport runway protection zones to enhance the safety of people and property on the ground.

### Existing Airport Environs Zoning and Land Use

The airport property itself is zoned C-4, Airport Commercial. According to the City documents, the purpose of this district is to include land within City limits to “be used for the commercial development of an airport, to include aircraft operating and refueling areas, hangars, and ramp space related to aviation” and for financial, administrative, and business services compatible with the airport. There are also properties adjacent to the airport with access to the airport zoned C4. Most of these lots are occupied by hangars or hangar homes. This zone includes required front setbacks for a majority of the lots, and a rear setback without a front setback for the remaining lots. If living area is included on the lot, the minimum required living area is 750 sf. There are four lots with access to the airport which are undeveloped and are zoned RR-A, Restricted Single Family with Aircraft, allowing for a hangar home with through-the-fence access. The required front and rear setbacks are 25 feet, which is to allow shared taxiway access to the parallel taxiway.



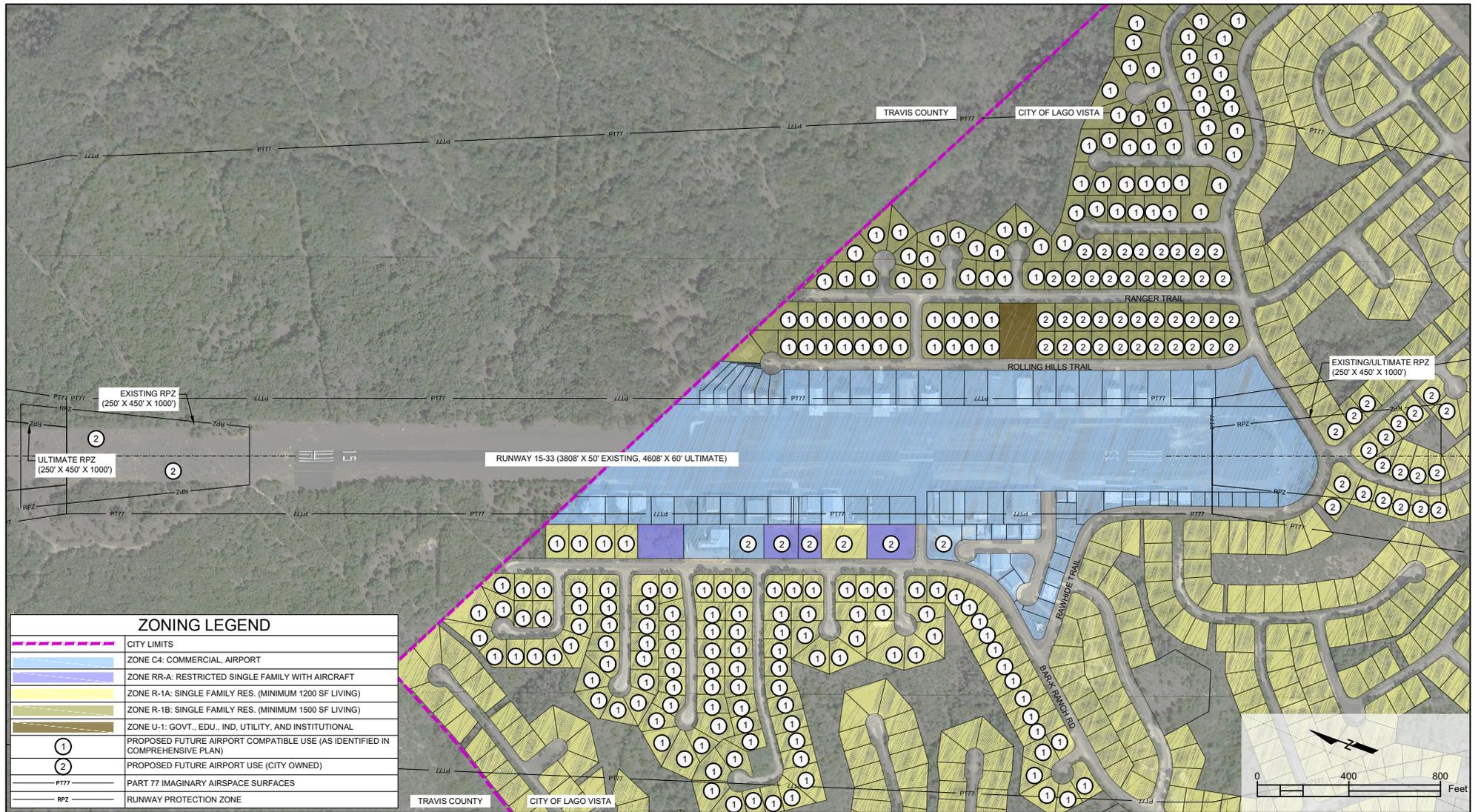
## Surrounding Area Zoning and Land Use

The area surrounding the north third of the runway and continuing off the north end of the airport is outside of city limits, in unincorporated Travis County. The lots surrounding the southern two-thirds of the runway, outside the airport environ, are zoned R-1A and R-1B, single family residential, with minimum 1,200 sf and 1,500 sf living area, respectively. The recently completed City 2030 Comprehensive Plan recommends rezoning many of the residential lots to the west and east of the runway as airport compatible industrial use. It recommended most of the area to the south of the airport be converted to conservation/parkland as the steep slopes make the area generally undevelopable.

The FAA does not have a clear policy for land use compatibility zoning. The FAA recognizes that zoning is a local effort. California and Washington state have both developed and started using Airport Impact Zones for general aviation airports as a land-use compatibility tool. Their approach would align with the approach in the Comprehensive Plan, to rezone the areas to the sides of the runway to industrial. Much of the available guidance for land use addresses noise compatibility. Noise modeling was not part of the scope of this project, but it is not needed. With the recommended rezoning of the sides of the runway and the airport being at the top of a hill with significant downhill slopes past the end of the north and south runway, this is a sensible approach to airport compatible land use.

Exhibit 2 on the next page shows the existing zoning and recommended changes based on the 2030 Comprehensive Plan and the development plan.





## Protection of Airport Airspace

The airport's location on top of a hill helps minimize encroachments into the airport airspace. The FAA has several different types of imaginary surfaces, but in planning efforts Part 77, Imaginary Surfaces are the standard airspace used for analysis and planning land uses. See figure below for a visual of these surfaces.

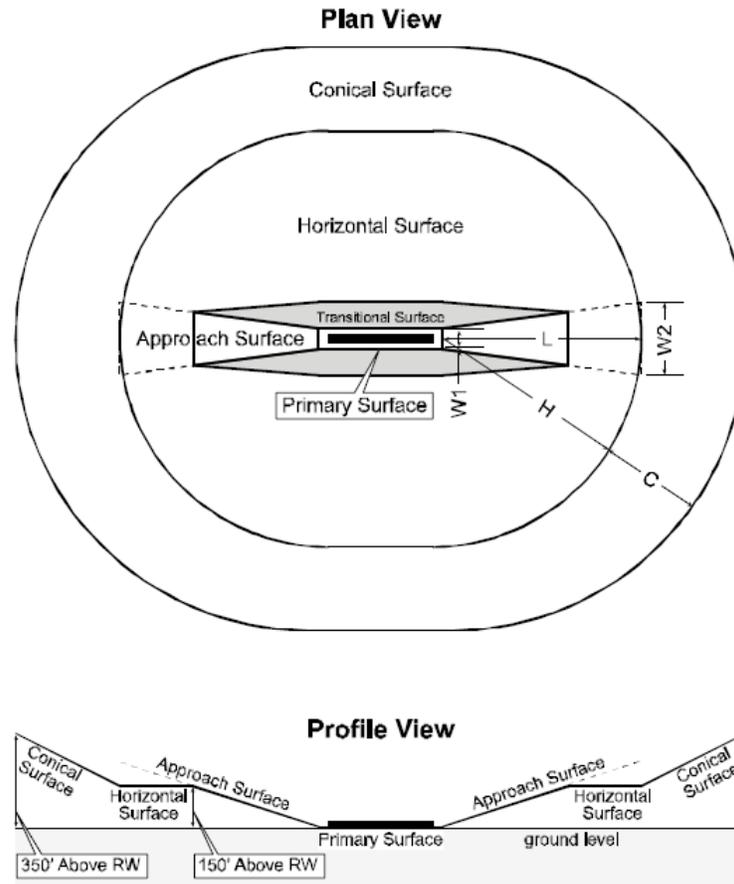


Figure 18 - Part 77 Airspace Imaginary Surfaces (from TxDOT Aviation's Airport Compatibility Guidelines, 2003)

The dimensions for each of these imaginary surfaces vary depending on airport features including if the airport is a utility runway (12,500 pounds and less) and if what type of approach procedure is available for the runway end. The airport currently has a GPS approach available for Runway 15, which is a non-precision instrument approach. The imaginary surface characteristics specific to Lago Vista – Rusty Allen Airport are summarized below:

- Primary Surface:
  - Lateral Geometry: 500 feet wide, centered on the runway, extending 200 feet past the runway end.
  - Vertical Geometry: Matches elevation of runway ends.



- Approach Surface:
  - Lateral Geometry: Starts at the end of the primary surface, matching the width of the primary surface and extends 5,000 feet outward in line with runway centerline, extending to a width of 2,000 feet.
  - Vertical Geometry: Starting at the end of the primary surface, matching the associated runway end elevation, increasing in elevation at a slope of 1 vertical to 20 horizontal.
- Horizontal Surface:
  - Lateral Geometry: Half circles with a radius of 5,000 feet centered on the ends of the primary surface opening towards the runway and connected with lines.
  - Vertical Geometry: A horizontal plane 150 feet above the higher of the 2 runway ends, (also known as the airport elevation.)
- Transitional Surface:
  - Lateral Geometry: Limits of this surface are determined by the vertical geometry. The surface starts at the sides of the primary and approach surfaces and extends perpendicular to and away from the runway centerline to where the slope intersects the horizontal surface.
  - Vertical Geometry: Elevation increases at a slope of 1 vertical to 7 horizontal.
- Conical surface:
  - Lateral Geometry: The surface is the space between the horizontal surface and an outward 4,000 feet offset of the horizontal surface.
  - Vertical Geometry: The surface elevation increases perpendicular to the horizontal surface at a slope of 1 vertical to 20 horizontal with the outer edge being 200 feet above the horizontal surface.

Part 77 surfaces are used to identify obstructions. Best practices are for Part 77 surfaces to be clear of obstructions, but according to FAA AC 150/5300-13, *Airport Design*, section 306, “the airport operator [City of Lago Vista] is not required to prevent or clear the penetrations to the Part 77, Subpart C, imaginary surfaces when the FAA determines these penetrations are not hazards.”

FAA determines if an obstruction to the Part 77 surfaces is actually a hazard. The FAA is typically more concerned with obstructions to approach surfaces and obstructions close to the runway ends, the most critical area for airspace safety. And while obstructions to primary and transitional surfaces are not desirable, they tend to not be as much of a concern to FAA. If there are obstructions in the primary or transition surface that are identified as hazards by FAA, many times they may be mitigated with obstruction lighting.

With the topography of the airport, it is unlikely that construction in the vicinity would create obstructions in the approach surfaces. The existing primary and transitional surfaces contain obstructions including existing hangars and likely trees at the north end. FAA makes the determinations if obstructions are considered hazards, but it was not the intent of this plan to seek that determination. However, any new construction within the airport environ, including private, TxDOT, or City construction should abide by the Code of Federal Regulations (CFR) Part 77, and file a Notice of Proposed Construction or Alteration, Form 7460, if required. The form has been included in Appendix 2. The instances which require a notice to be filed for determination are below (directly from 7460 form).



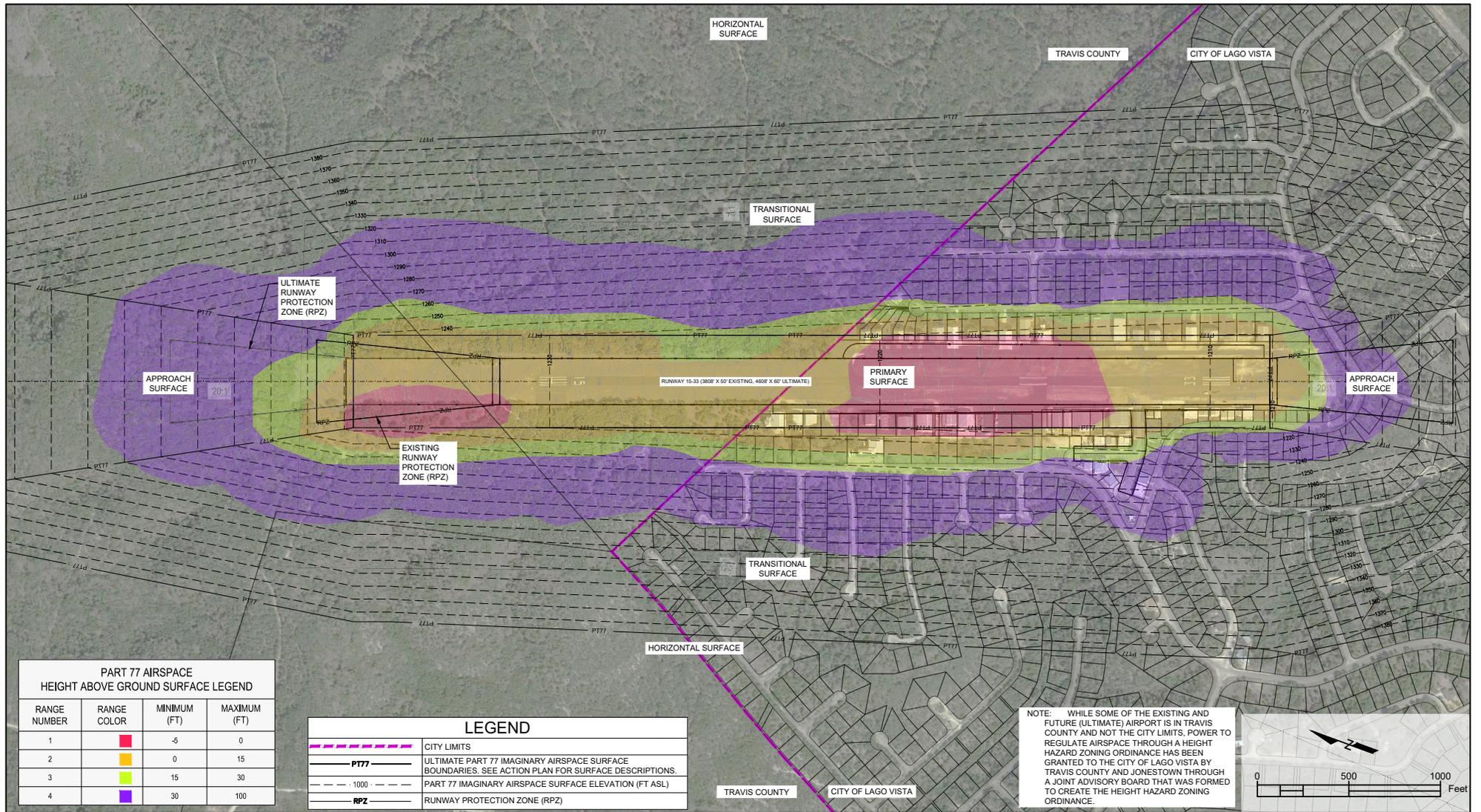
*"77.9 Construction or alteration requiring notice.*

*If requested by the FAA, or if you propose any of the following types of construction or alteration, you must file notice with the FAA of:*

- 1. Any construction or alteration that is more than 200 ft. AGL at its site.*
- 2. Any construction or alteration that exceeds an imaginary surface extending outward and upward at any of the following slopes:*
  - a. 100 to 1 for a horizontal distance of 20,000 ft. from the nearest point of the nearest runway of each airport described in paragraph (d) of this section with its longest runway more than 3,200 ft. in actual length, excluding heliports.*
  - b. 50 to 1 for a horizontal distance of 10,000 ft. from the nearest point of the nearest runway of each airport described in paragraph (d) of this section with its longest runway no more than 3,200 ft. in actual length, excluding heliports.*
  - c. 25 to 1 for a horizontal distance of 5,000 ft. from the nearest point of the nearest landing and takeoff area of each heliport described in paragraph (d) of this section.*
- 3. Any highway, railroad, or other traverse way for mobile objects, of a height which, if adjusted upward 17 feet for an Interstate Highway that is part of the National System of Military and Interstate Highways where overcrossings are designed for a minimum of 17 feet vertical distance, 15 feet for any other public roadway, 10 feet or the height of the highest mobile object that would normally traverse the road, whichever is greater, for a private road, 23 feet for a railroad, and for a waterway or any other traverse way not previously mentioned, an amount equal to the height of the highest mobile object that would normally traverse it, would exceed a standard of paragraph (a) or (b) of this section.*
- 4. Any construction or alteration on any of the following airports and heliports:*
  - a. A public use airport listed in the Airport/Facility Directory, Alaska Supplement, or Pacific Chart Supplement of the U.S. Government Flight Information Publications;*
  - b. A military airport under construction, or an airport under construction that will be available for public use;*
  - c. An airport operated by a Federal agency or the DOD.*
  - d. An airport or heliport with at least one FAA-approved instrument approach procedure.*
- 5. You do not need to file notice for construction*
- 6. or alteration of:*
  - a. Any object that will be shielded by existing structures of a permanent and substantial nature or by natural terrain or topographic features of equal or greater height, and will be located in the congested area of a city, town, or settlement where the shielded structure will not adversely affect safety in air navigation;*
  - b. Any air navigation facility, airport visual approach or landing aid, aircraft arresting device, or meteorological device meeting FAA approved siting criteria or an appropriate military service siting criteria on military airports, the location and height of which are fixed by its functional purpose;*
  - c. Any construction or alteration for which notice is required by any other FAA regulation.*
  - d. Any antenna structure of 20 feet or less in height, except one that would increase the height of another antenna structure"*

Exhibit 4 Lago Vista Airspace, on the next page, shows elevation contours for the Part 77 surfaces at the airport along with colored shading showing the airspace height above the existing ground.





There have historically been some obstructions to the Threshold Siting Surface (TSS) at the north end of the airport, not within the Airport's control. It is recommended as part of land acquisition for a future runway extension, that the City seek an aviation easement to allow the City the authority to remove obstructions.

The City has an airport Hazard Zoning Ordinance, number 99-10-18-01, which limits construction to prevent obstructions to airspace and includes certain restrictions to land use. This ordinance is included in the Appendices.

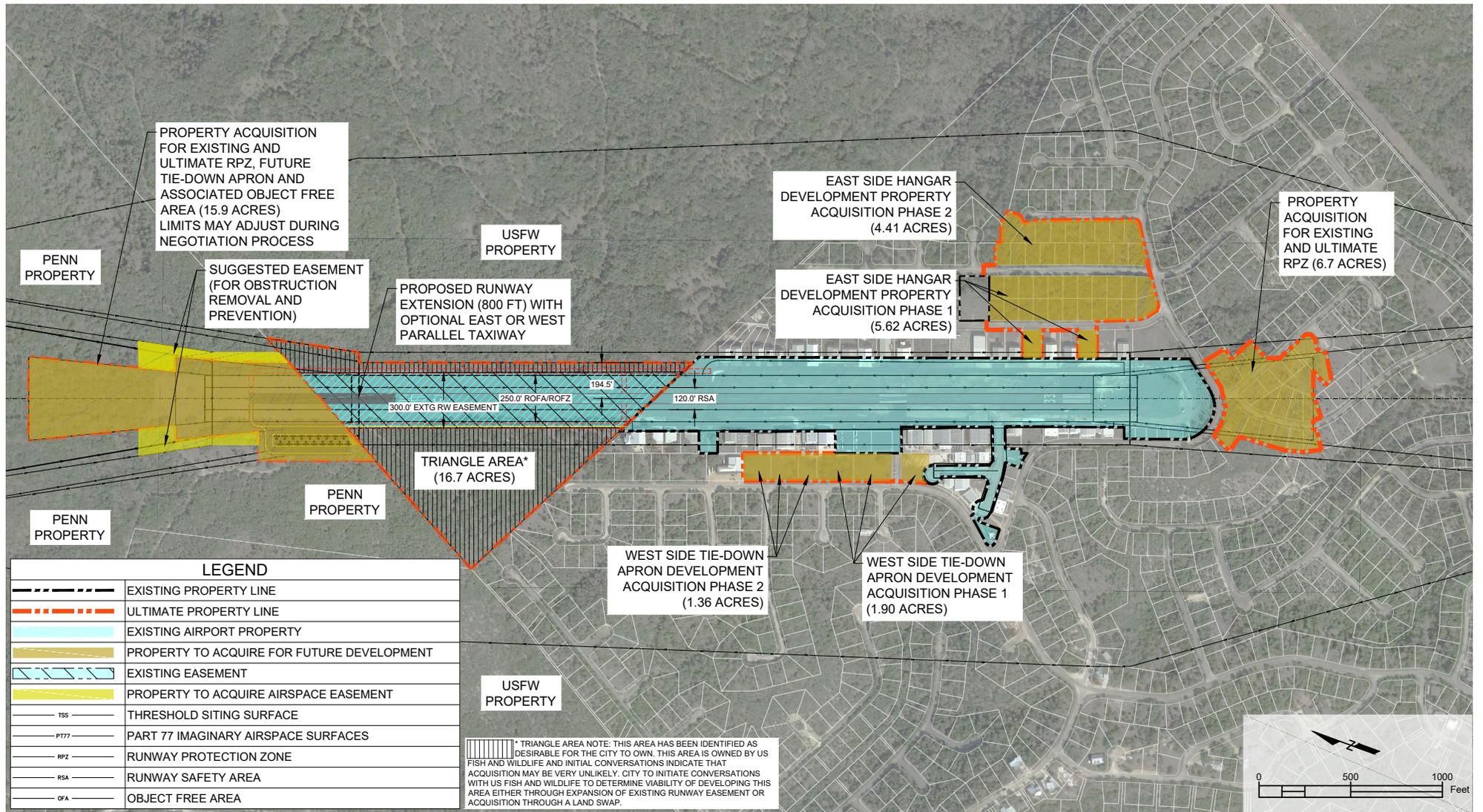
### Ownership/Control of Runway Protection Zones

The Runway Protection Zones (RPZ) are to enhance protection of the public on the ground. It is a trapezoid shape off the end of the runway. The RPZ does not have a vertical component and merely defines an area for land use purposes. FAA's guidance is for the airport to have control of the land in the RPZ, preferably achieved through owning the property, but where ownership is not possible, acquiring an easement. The following are acceptable uses for RPZ areas, according to FAA Advisory Circular 150/5300-13A:

- Farming
- Irrigation Channels with meet FAA/USDA Manual and FAA AC 150/5200-33
- Airport service roads, as long as they are not public road and directly controlled by the airport
- Underground facilities as long as they meet other design criteria (RSA, etc.)
- NAVAIDs and airport facilities considered to be fixed by function

It was discussed in the APAC meetings and is shown on the Proposed Property Plan, Exhibit 1 (next page) for the City to pursue ownership of the RPZ for both runway ends.





# 1.3 AIRPORT MANAGEMENT

## 1.3.1 AIRPORT ORGANIZATION

The City of Lago Vista owns and manages the Lago Vista – Rusty Allen Airport. There is not a dedicated airport manager so the City assigns the role of Airport manager to the Director of Development Services. By city code, the City Manager assigns the role of Airport Manager to a department director. There is an on-site Airport Supervisor providing maintenance and management services, but of a very limited scope, and at minimal cost. The City also has an Airport Advisory Board, which meets bi-monthly, and makes recommendations to the City Council. There is a City Council Liaison assigned to the Airport Advisory Board to allow collaboration and alignment of initiatives. The Rusty Allen Airport Property Owners Association (RAAPOA) has been and continues to be helpful in teaming with the City to address airport issues and move the Airport forward. Chapter 4 and 9 of the city code have been reviewed and the roles and responsibilities for each of these are summarized below. See Figure 1, below, for an airport organizational chart.

### City of Lago Vista City Council

The City Council has ultimate authority for decisions made concerning the airport. This includes, but is not limited to, approval of the airport budget, airport contracts and agreements, development plans, development projects, receiving grant funds, airport advisory board appointees, and personnel as may be authorized in the annual budget.

### Director of Aviation

The City Manager is responsible for appointing the Director of Aviation. Currently, the Director of Development Services is the Designated Airport Director. This is the point of contact for the airport for the public and for TxDOT for coordination of programming, grants, planning, and engineering. The other responsibilities include management of any airport development, maintenance of the City's facilities, operational continuity of the airport, enforcement of airport rules, suspension or restriction of airport use when necessary, issue Notices to Airmen (NOTAMs) for the airport, act as liaison to the Airport Advisory Board, City manager, and City Council, and supervise and negotiate terms and recommend approval of contracts and regulations for use of airport property.

The airport also has a "Superintendent", a caretaker who receives minimal funds (\$100 per month) to be an on-airport resource.

### Airport Advisory Board

The Airport Advisory Board is a volunteer board consisting of five members and two alternates. The board's responsibilities are to advise the city council in identifying short and long-term needs and their impact on airport development, recommend achievable goals as a basis for long-range planning and development programs, and to recommend plans, programs, policies and priorities to help the airport achieve said goals.



## Rusty Allen Airport Property Owners Association (RAAPOA)

Historically, the RAAPOA has been actively involved in the operation of the airport. Many of its members are on the Airport Advisory Boards and attend the bi-monthly meetings. The official roles of the RAAPOA are to collect the access fee from its members and pay the access fee to the City. The RAAPOA also participates financially in capital improvement projects limited to 5 percent of the total project cost, unless both the City and RAAPOA agree to other arrangements. In the event that there are maintenance or repair costs for which the City is not able to obtain other funding sources, the RAAPOA may also fund at 50 percent up to an amount of \$2,000 for such repairs. As allowed by city code, the RAAPOA may also recommend three members and one alternate to the Airport Advisory Board. This information was obtained from Chapter 9 of the city code and the *Funding Commitment and Access Fee Agreement for the Rusty Allen Airport Between the City of Lago Vista, TX and Rusty Allen Airport Property Owners Association, Inc.* effective July 1, 2009. The RAAPOA members also provide an unofficial on-airport presence acting as a resource to the public and identifying maintenance and safety concerns.

The RAAPOA is also responsible for collection of tie-down and other on-airport fees according to the agreement. Currently, the fees collected are deposited into the RAAPOA's account and used towards the five percent match the RAAPOA puts towards capital improvements. According to standard practices and TxDOT review in regards to compliance, it is recommended this arrangement should cease. Revenue generated in tie-downs owned by the City should go directly to the City. It has been expressed by some members and board members of the RAAPOA that they would desire to reduce their managerial role in the airport, specifically collecting on-airport fees.

The RAAPOA are currently the majority of the airports users and have been instrumental in keeping the airport open. Not only did they provide funding for the City to take over the airport, but they continue to be involved in the Airport Advisory Board and through their current agreement, have some responsibilities at the airport. As the Airport continues to grow and the City takes on more active management, the role of the RAAPOA will diminish, but its involvement will continue to be crucial to the airports success.



### 1.3.2 AIRPORT ORGANIZATIONAL CHART

The airport management and organization was discussed at the second APAC meeting. It was decided that the following would represent the airports organization. Everyone agreed the current primary point of contact for the airport is the Director of Development Services, David Harrell.



*Figure 19 - Airport Organizational Chart*



### 1.3.3 AIRPORT RULES, REGULATIONS, AND MINIMUM STANDARDS

Airports typically have two documents to help govern operations at an airport, *Rules and Regulations* and *Minimum Standards*. Rules and Regulations typically covers normal operations and provides requirements to ensure safety. Minimum Standards are typically used for Fixed Base Operators, or FBOs. FBOs are commercial entities providing aeronautical commercial services. Minimum Standards serves as a governing document for FBO operations on the airport and includes insurance requirements, provisions to ensure safety and security, and the rights and responsibilities of the FBO and the airport owner. Minimum Standards help ensure that the airport operates in compliance with grant assurances requiring open competition, not allowing exclusive rights, and preventing economic discrimination of on-airport FBOs.

#### Rules and Regulations / Minimum Standards Recommendations

The City currently has a document named "Minimum Airport Standards" in the city code, Article 4.900. The document is similar to a Rules and Regulations document and is included in the Appendices. Template examples from TxDOT Aviation for *Rules and Regulations* as well as *Minimum Standards for Fixed Base Operators (FBO)* are also included in the Appendices. It is recommended that the City develop Airport Minimum Standards specific to the airport, using TxDOT Aviation's template as a guide.

For the existing City "Minimum Airport Standards" document, the City could use this as the "Airport Rules and Regulations." The following are recommendations to the minimum standards document:

- Consider changing the name to "Airport Rules and Regulations". Minimum Standards are typically used for Fixed Base Operators (FBOs.)
- Consider drafting Minimum Standards for future FBOs using TxDOT's template as a guide. This could also be used for Through the Fence (TTF) FBOs. See section Section 1.6.2 of this document for a thorough-the-fence review and recommendations.
- Include insurance requirements, see TxDOT Template Rule 7-11.
- Sec 4.906 Taxiways.
  - Clarify "On airport" taxiway extension vs. TTF taxiway access (require POA membership/dues).
- Sec 4.914(c) (5), Vehicle Requirements for Crossing Primary Landing Area.
  - Instruct vehicles to stop at the hold line (instead of "stop well clear of the runway")
- Sec 4.918 Fueling of Aircraft
  - Consider modifying section to align with changes to fuel arrangement



### 1.3.4 AIRPORT MANAGEMENT RECOMMENDATIONS

The Lago Vista – Rusty Allen Airport is a unique airport and operates in a very unique way. The Airport is owned and managed by the City of Lago Vista, but the RAAPOA represents a majority of the airports users and the Airport Advisory Board, providing the City guidance in the management of the airport. The City of Lago Vista has limited funding and staff resources and is not currently capable of providing part or full time on-airport staff, so this partnership with the RAAPOA has been crucial in allowing continued operation of the airport. The City desires to grow the airport to provide typical features of a public airport, develop revenue generating facilities to make the airport self-sustaining, and provide capacity for the increasing aviation demand. The RAAPOA also desires to step back in the active role it serves for the airport. The agreement with the RAAPOA expires in 2019, which would be a great time for the City to improve the management of the Airport, including changes to the agreement with the RAAPOA. This is discussed in further detail in Section 1.6.2, Through-the-Fence Compliance, but in sum, the recommended changes to the agreement in regards to the RAAPOA responsibilities are for the City to take over the collection of on-airport fees and discontinue the five percent Capital Improvement match funding from the RAAPOA. The goal should be for the City to take on full management of the airport. This may require either an increase in the role of the current Airport Superintendent, relieving the Airport Director of other responsibilities in order to allow for more time to dedicate to the airport, or hiring a separate Airport Manager, part or full time. As the Airport continues to increase its revenue, airport management options should be considered, especially when City-owned hangars become a reality. The informal roles the RAAPOA currently fulfills will likely and should continue due to the nature of the airport. These include identifying maintenance issues with pavement and other facilities, notifying the City of unauthorized use of the airport, and being an on-airport resource for the public that either drive or fly to the airport, among other things.

TxDOT Aviation has expressed confusion regarding the Airport's main point of contact. In issues concerning the airport, there should be one primary point of contact. With the City taking on more management and rearranging the TTF agreement, this should help, but the City, Airport Advisory Board, and RAAPOA should also disseminate the airport organizational chart and direct all airport management type requests or issues through the designated point of contact. The City and APAC have determined the main point of contact to be the Director of Development Services, David Harrell. Any meetings with TxDOT, neighbors, or property owners concerning the airport and any requests or communications on behalf of the airport should involve this point of contact.



## 1.4 AIRPORT FINANCIALS

Airport financial records for the past 15 years from the City and TxDOT were reviewed to develop an overall financial picture for the Airport. The financial records were used to calculate average annual operating and capital improvement expenses as well as revenue. Some reasonable assumptions were taken as the data provided did not completely account for all funds spent. The following subsections provide a brief summary of historical financial information for the Airport.

### 1.4.1 HISTORICAL CASH FLOW

The financial data was consolidated to simply show airport expenses and revenue, shown in a cash flow diagram, below.

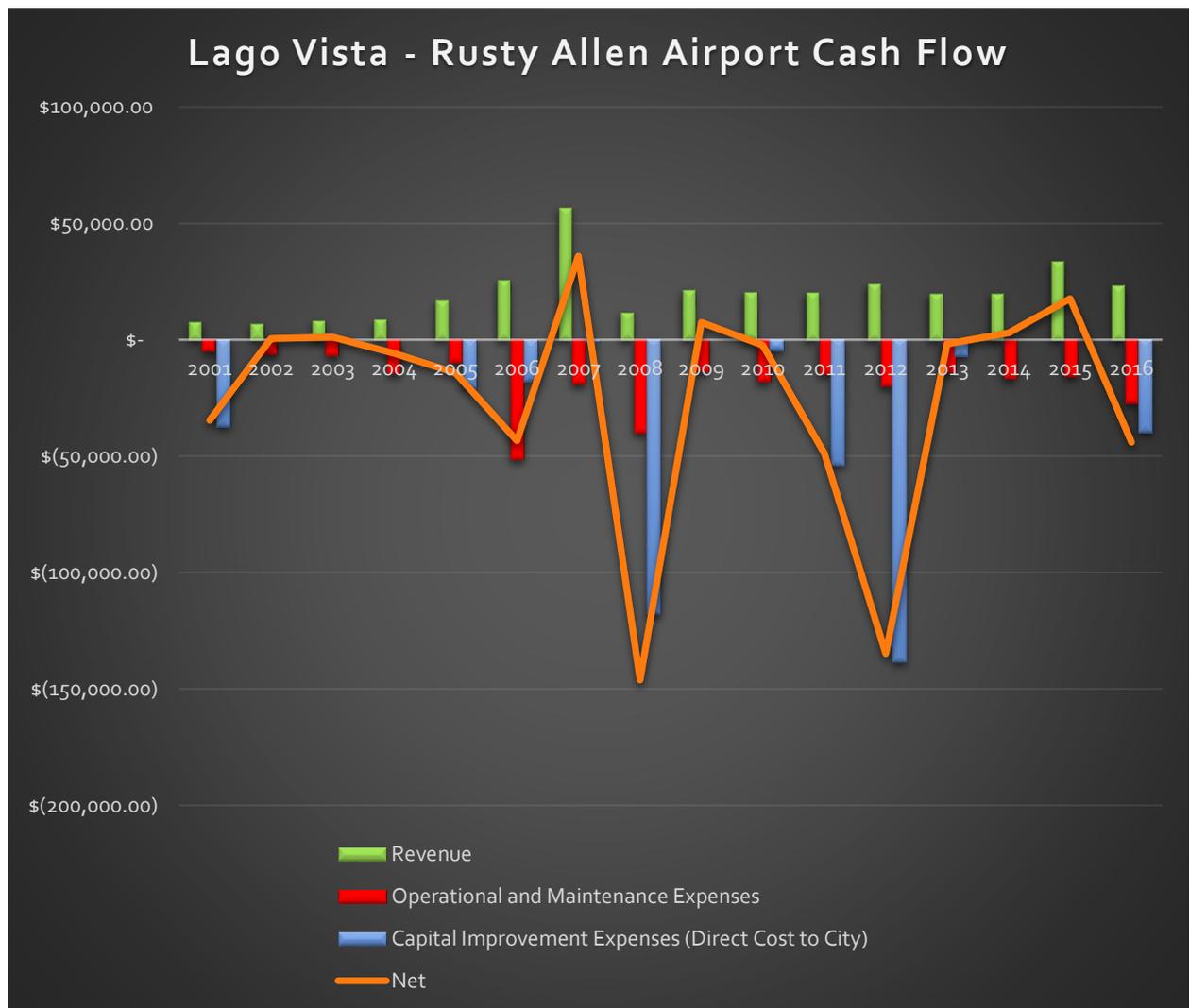


Figure 20 - Airport Cash Flow. Note that expenses include Capital Improvements as well as operational costs.



## 1.4.2 CAPITAL IMPROVEMENT HISTORY

The City and TxDOT financial data was compiled and analyzed to determine how much the airport has spent on capital improvements. The following tables show the capital improvements by the City alone and by TxDOT with matching funds from the City. Routine Airport Maintenance Program (RAMP) projects were not included in the capital improvements as they are accounted for in the operational expenses.

Table 4 - TxDOT Capital Improvements

TxDOT Aviation Grant Projects Since 2001					
FY	Total Project Cost	City of Lago Vista	State	Federal	Project Type
2001	\$750,810	\$75,081	\$675,729	\$0	Construction Pavement
2005	\$83,740	\$20,935	\$0	\$62,805	AWOS
2006	\$89,467	\$8,947	\$80,520	\$0	Design
2008	\$1,178,303	\$117,830	\$0	\$1,060,473	Construction Pavement
2011	\$415,172	\$41,517	\$373,655	\$0	Property Acquisition
2012	\$87,353	\$0	\$4,368	\$82,985	TxDOT Obstruction Survey
2013	\$72,403	\$7,240	\$65,163	\$0	Design
2016	\$624,160	\$62,419	\$561,741	\$0	Construction Pavement
2016	\$86,306	\$8,631	\$0	\$77,675	Planning
<b>Total</b>	<b>\$3,387,714</b>	<b>\$342,600</b>	<b>\$1,761,176</b>	<b>\$1,283,938</b>	

Table 5 - City of Lago Vista Capital Improvements

City of Lago Vista Capital Improvements Since 2001		
FY	Cost to City	Project
2006	\$8,809	
2007	\$1,152	F-4 Project. Note, the City received \$10,035 in donations accounted for in revenue that covered \$10,035 of the total \$10,088 F-4 project costs.
2008	\$127	
2010	\$4,640	Airport Water Pressure Plane V Design (Cancelled)
2011	\$12,511	Airport Water Line Construction
2012	\$138,751	Airport Water Line Construction
<b>Total</b>	<b>\$165,990</b>	



### 1.4.3 AIRPORT HISTORICAL FINANCIAL SUMMARY

The historical airport revenues and expenses are summarized below and include operational and maintenance costs as well as capital improvement costs.

Table 6 - Airport Revenues and Expenses Summary

City of Lago Vista Airport Financial History	Historical Annual Average (2001-2010)	2011	2012	2013	2014	2015	2016 Budget
<b>Revenue (R)</b>							
RAAPOA	\$15,777.10	\$20,000.00	\$20,000.00	\$20,000.00	\$20,000.00	\$20,000.00	\$20,000.00
TxDOT RAMP Grant	\$214.82	\$515.00	\$4,183.07	(\$0.30)	\$0.00	\$3,777.16	\$3,500.00
Others	\$2,635.36	\$0.00	\$0.00	\$0.00	\$0.00	\$10,000.00	\$0.00
<b>Total Revenue ( R )</b>	<b>\$18,627.28</b>	<b>\$20,515.00</b>	<b>\$24,183.07</b>	<b>\$19,999.70</b>	<b>\$20,000.00</b>	<b>\$33,777.16</b>	<b>\$23,500.00</b>
<b>Operational and Maintenance Expenses (OM)</b>							
Personnel	\$1,499.33	\$1,688.50	\$1,723.59	\$1,753.43	\$1,815.62	\$1,855.50	\$1,891.00
Operations, Maintenance, and Repairs (Includes RAMP costs)	\$6,493.40	\$8,403.11	\$11,725.45	\$5,670.07	\$3,319.37	\$8,810.90	\$5,539.00
Electricity	\$2,755.35	\$3,777.52	\$3,905.13	\$4,243.13	\$3,961.90	\$3,885.16	\$3,804.00
Supplies	\$211.33	\$0.00	\$0.00	\$0.00	\$0.00	\$28.50	\$100.00
Services	\$1,563.72	\$1,457.25	\$2,895.94	\$2,862.88	\$7,922.65	\$1,557.92	\$16,466.00
<b>Total Operational and Maintenance (OM)</b>	<b>\$12,523.13</b>	<b>\$15,326.38</b>	<b>\$20,250.11</b>	<b>\$14,529.51</b>	<b>\$17,019.54</b>	<b>\$16,137.98</b>	<b>\$27,800.00</b>
<b>Total Income (= R - OM)</b>	<b>\$6,104.15</b>	<b>\$5,188.62</b>	<b>\$3,932.96</b>	<b>\$5,470.19</b>	<b>\$2,980.46</b>	<b>\$17,639.18</b>	<b>(\$4,300.00)</b>
<b>Capital Improvement Costs (CIP), Direct Costs to City Only</b>							
TxDOT CIP Projects	\$18,496.92	\$41,517.00	\$0.00	\$7,240.00	\$0.00	\$0.00	\$39,840.10
Non-TxDOT, City Only CIP Projects	\$1,472.82	\$12,511.00	\$138,751.00	\$0.00	\$0.00	\$0.00	\$0.00
<b>Total Capital Improvement Costs (CIP)</b>	<b>\$19,969.74</b>	<b>\$54,028.00</b>	<b>\$138,751.00</b>	<b>\$7,240.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$39,840.10</b>
<b>Airport Net Cash Flow (= R - OM - CIP)</b>	<b>(\$13,865.59)</b>	<b>(\$48,839.38)</b>	<b>(\$134,818.04)</b>	<b>(\$1,769.81)</b>	<b>\$2,980.46</b>	<b>\$17,639.18</b>	<b>(\$44,140.10)</b>



## 1.4.4 RATES AND CHARGES

The airport currently collects fees from two sources:

- Fuel lease: \$1 annually
- RAAPOA Access and Maintenance Agreement: \$20,000 annually from the RAAPOA (approximately \$270 per property owner.)

### TxDOT/FAA Policy in Regards to Rates and Charges

TxDOT and FAA's policy in regards to rates and charges are focused on two overarching goals: financial sustainability and equitable treatment for on-airport users. The following documents provide guidance in regards to rates and charges:

- Department of Transportation FAA RIN 2120-AF90, *Policy Regarding Airport Rates and Charges* (Federal Register, Vol. 73, No. 12)
- FAA Airport Sponsor Grant Assurances (2014)
- FAA Order 5190.6B, *Airport Compliance Manual* (2009)
- *FAA Examples of Residential Through-the-Fence Access Rate-Setting Methodology*

### Financial Sustainability

In regards to financial sustainability, the City is obligated to levy rates and fees to become as self-sustaining as possible, given the airport's specific situation. The fees charged must also be fair and reasonable. Also, an airport sponsor is not allowed to charge fees in excess of the direct airport costs, including operating, maintenance, and capital improvement costs, or the total cost of ownership. Most general airports operate at a loss considering the total cost of ownership, which is allowable, but airports should consider their specific situation and use rates and charges to be come as self-sustaining as possible. This requires operating annually at a net income to plan for periodic capital improvement projects.

### Equitable Treatment

When considering rate and fee setting for on-airport users, the airport sponsor must have policies in place that treat on-airport users fairly. Determining the rate setting methodology is crucial. For example, most airports that own hangars charge a standard per square foot price per hangar. Or if an airport leases land to others to build their own hangar, they charge a rate per square foot of land (land lease). This ensures equitable treatment of tenants leasing hangars or land space. Some airports charge FBOs a per gallon fuel flowage fee and have more than one FBO selling fuel. The fuel flowage fee should be equal between the two FBOs. Whatever fees are charged, the rate setting methodology should be consistent.



## Rates and Charges Recommendations

Considering the total cost of ownership, the airport currently operates at a net cost. The City should seek to increase revenue through existing and new sources of revenue. The following are recommended to be the future revenue sources:

- Fuel Revenue
- RAAPOA Access Agreement
- Tie-down Fees
- Hangar Rent

The City needs to maintain a rate and fee schedule that is readily available and posted at the airport. The City will also need a way to collect fees and make it as easy as possible for the users to pay, especially for tie-downs. This could be accomplished by using the City's online payment system and putting a QR code along with the web address on a sign, along with the fee schedule, at the airport. A physical collection lock box would also need to be part of the collection method, which would need to be collected on a regular basis. The following are recommendations for the proposed rates and fees.

### Fuel Revenue

Cities that run their own fuel make decent income from fuel sales. However, the initial investment required for a City-owned fuel farm is significant. Given the other needs for the airport, the City should consider owning and running a fuel farm in their long range plan (10+ years). In the meantime, the City and APAC have mentioned the desire to issue a request for proposal (RFP) to solicit fuel service to the airport. This would allow the City to start generating revenue immediately without an initial investment. The current fuel provider pays only \$1 per year to the City to sell fuel and it has been noted that the customer service is not satisfactory.

The City should consider charging the new fuel provider a **land lease** rate equivalent to a tie-down rate. The current annual tie-down rate is \$400 per year. In addition to the land lease, there should be a **fuel flowage fee**, a per gallon fee the fuel provider will pay the City. Typical fuel flowage fees are \$0.10-0.12 per gallon. The agreement should include a requirement for annual, quarterly, or monthly reporting from the fuel service provider along with the payment to document fees. The agreement should also include a term that would make sense in preparing for the long-term goal of owning their own fuel farm. In regards to competition, the City may not allow a monopoly on the airport for fuel service, if space would allow more than one fuel service provider. At Lago Vista – Rusty Allen Airport, space is very limited, so it is expected that there would only be one fuel service provider, but the agreement should not include clauses that would give exclusive rights to the fuel provider.

A fuel wholesaler was contacted to give a projection of fuel sales and it is estimated the airport would sell 60,000 gallons of fuel per year, including Jet A and AvGas. In the near term, a fuel flowage fee could generate approximately \$7,200 annually. When the City has the resources and staff to own and run a fuel farm, the city could charge approximately \$0.50 per gallon, which could generate up to \$30,000 annually in the long term (10+ years).



## RAAPOA Access Agreement

The existing RAAPOA Access Agreement expires in 2019 and the fee has been one aggregate fee, \$20,000, representing all owners and does not specify how much each through-the-fence property is paying. This fee has remained constant for the last 10 years. As discussed later, in Section 1.6.2, the City needs to revise the agreement to prepare for future on-airport users to remain in compliance with FAA regulations. The revisions that need to be included in the new agreement, in regards to rates and charges, include assessing a fee per property and to thoroughly document the methodology for setting fees considering future on-airport users and type of use.

The acceptable rate methodologies for through-the-fence (TTF) access, directly from the FAA (*Examples of Residential Through-the-Fence Access Rate-Setting Methodology*) are:

- Requiring TTF users to pay fees equal to tie-down charges
- Establishing a fee for TTF users based on the on-airport land lease rate
- Establish a ground lease for dedicated taxiway connectors to off-airport properties
- Charging an assessment of capital costs for general infrastructure, or
- A local tax assessment or levy on off-airport aircraft owners that is dedicated to the Airports account

The current agreement reflects the intent of charging an assessment of capital costs. The fee was set based on normal operation and maintenance costs. The RAAPOA took initiative to determine the airports operating and maintenance costs and set an aggregate fee to cover those costs. While the current agreement meets the intent of this methodology, it could be better defined and documented. While it's not a problem now, it may introduce issues of compliance when future on-airport users are introduced. The methodology needs to be clearly identified and documented to prepare the airport for its future on-airport users. The City should make sure any changes to the agreement are reviewed and approved by TxDOT prior to entering into any new or amended agreement.

A sampling of airports with relevance to the Lago Vista – Rusty Allen Airport were interviewed to compare methodologies in charging TTF fees. The information is summarized in the table below.



Table 7 - TTF Rate Setting Methodology Case Study Comparison to Lago Vista

Airport	Relevance to Lago Vista	Total Based Aircraft	TTF Based Aircraft	TTF Rate Setting Methodology (From FAA guidelines)	Rate	Units	Average Annual Fee Per Property with Access	If Applied to Lago Vista, Equivalent Annual Fee Per RAAPOA Property	If Applied to Lago Vista, Equivalent Annual Revenue to City of Lago Vista
Burnet Municipal Airport (38 miles from Lago Vista)	Vicinity (38 miles from Lago Vista)	49	2	Land Lease	\$0.09/\$0.18	per SF per year (Non-Aviation /Aviation Developed Land)	Range: \$4,000 - \$6,000 Average: \$5,000	<b>\$1680 (Average)</b>	<b>\$124,320.00</b>
Eagle Lake Municipal Airport	Similar distance to metropolitan area (Houston), similar runway length	26	7	Land Lease	\$0.12	per SF Hangar per year	Range: \$150.00 - \$1,200.00 Average: \$675	<b>\$702 (Average)</b>	<b>\$51,948.00</b>
Independence State Airport (Oregon, used as Case Study in ACRP Report)	Large percentage of TTF users, use master TTF agreement with property owners association.	254	180	Tie-down	\$17.50	per property with TTF Access per month	\$210.00	<b>\$400 (Lago Vista's current annual tie-down rate)</b>	<b>\$29,600.00</b>
Lago Vista - Rusty Allen Airport		86	75	Assessment of costs for general infrastructure	\$20,000.00	per property with TTF Access per year	\$270.27	<b>\$270.27</b>	<b>\$20,000.00</b>

The RAAPOA has historically been a symbiotic partner with the City for managing and maintaining the airport. It is recommended the City work with the RAAPOA to develop a new agreement that will keep the Airport compliant when new on-airport users are introduced and also help the City in becoming self-sustaining. This would include determining the rate setting methodology to be used, assessing it on a per property basis (either per area of property, per based aircraft using property, or per single property), and implementing a reasonable fee per the unit chosen. If, for example, the City chose to use the tie-down rate methodology, the revenue generated using the current annual tie-down rate would be \$29,600.

### Tie-down Fees

While the City has aircraft tie-downs, it does not currently incur revenue from them. The current RAAPOA access agreement states that “the RAAPOA shall have the authority to determine and collect tenant aircraft parking fees from all property owners and airplane owners utilizing the airport; provided that fees charged to non-property owners shall be approved by City Council.” It was interpreted by PSC and TxDOT that this meant the RAAPOA was responsible for collection of those fees, but those fees would go directly



to the City. In the APAC meeting held August 3, 2016, it was made clear that the RAAPOA collects those funds, then uses them towards their five percent match for Capital Improvement Program (CIP) projects. Those tie-down funds should be going directly to the City per grant assurance. **TxDOT Aviation has stated this current arrangement is in violation of Grant Assurance 25 (airport revenues go back into the Airport)** and that this arrangement needs to cease. This could be done through a new and clarified understanding with the City and RAAPOA on the existing agreement, through an amendment to the existing access agreement, or through a cancellation and revised agreement. The current tie-down fees should be going directly to the City towards the airport account. With the immediate need being land acquisition for the next few years, it is not anticipated that the RAAPOA would be obligated towards a five percent CIP match for the remainder of the agreement term (February 2019).

Future expansion including grass tie-downs in the property to the southwest of the runway and expansion of the west side tie-down apron, will increase the tie-down capacity of the airport, increasing the airport revenue. The tie-down fees should be going directly to the City, and for now, it is recommended the tie-down fees remain the same. However, the City should periodically review tie-down fees to determine if adjustments are warranted.

The current tie-down fees collected by the RAAPOA, are \$5 per night (for overnight), \$50 per month, or \$400 per year. If all of the current tie-downs (11) were rented at the average of an annual rate, the revenue to the City would be \$4,400. If the area to the southwest was converted to a grassed tie-down, that would generate an additional \$2,000 per year, for a total of \$6,400 in annual revenue.

### Hangar Rent

The City currently does not own any hangars, but TxDOT has a hangar program that allows City-owned hangars to be funded at 90 percent up to \$600,000. This presents a prime opportunity to the City to own revenue generating facilities at a relatively low cost. Some airports also choose to use TxDOT RAMP funds to build hangars, which can also be a way to avoid long programming periods and get hangars built quickly. RAMP funds are at a 50 percent match up to \$50,000 per year.

Readily available hangar space is an easy, low risk opportunity for aircraft owners to store their aircraft. Texas has a shortage of hangar space evidenced by waiting lists for hangar space across the state and even more so here in the greater Austin area. The City of Lago Vista receives regular calls requesting hangar space. The demand is present and if the City could own Tee hangars, which are very economically built to hold one airplane per hangar due to their "T" shape, they could likely rent for \$300 per month. The proposed development plan shows the east side of the airport as the planned location for a City-owned hangar development. If the City wanted to stick to the \$600,000 maximum grant for hangars, it is estimated that would fund approximately eight tee hangars. At \$300 per month per hangar, that would generate \$28,800 annually.



### 1.4.5 FINANCIAL IMPACT SUMMARY

General aviation airports are economic engines allowing for alternate access to local communities for business, recreation, emergency services, and more. While the majority of a community may not use or see its general aviation airports, the airport allows for significant economic impacts to the community, region, and beyond. In Texas alone, there are over 300 general aviation airports serving communities of all sizes. In 2010, TxDOT Aviation initiated a study conducted by the Center for Economic Development and Research at the University of North Texas in Denton, TX. The study determined the economic impact of general aviation throughout the state and for individual airports, including Lago Vista – Rusty Allen Airport. The results are shown below:

*Table 8 - General Aviation and Lago Vista Economic Impact*

	State of Texas	Lago Vista – Rusty Allen Airport
Economic Output	\$14,482,332,000	\$3,006,284
Labor Income	\$3,127,309,000	\$1,051,424
Employment	56,635	17.3

### 1.4.6 FINANCIAL SUMMARY

The airport currently operates at a net cost to the City of Lago Vista when considering the total cost of ownership. Its expenses, including operational, maintenance, and capital improvements are greater than the revenue the City receives from the airport. This is very common for general aviation airports, but some airports are able to become self-sustaining, including Burnet Municipal Airport and Taylor Municipal Airport, according to conversations with the airport managers. Considering the economic impact of the Lago Vista – Rusty Allen Airport, it truly is an asset to the community. Not only does the airport provide an economic benefit to the community, but it is vital for air ambulance services to have access to and from the community. Having that access helps provide doctors those crucial minutes they need to offer optimum care in emergency situations.

Several stakeholders have stated that the City needs to generate more revenue to sustain the airport as the City’s general funds are stretched. When the City accepts grant funding from TxDOT Aviation, it also signs and agrees to Grant Assurances. Grant Assurances 24 and 25 state that the City needs to strive to become as self-sustaining as possible through revenues generated at the airport and that airport revenues must stay on the airport. They cannot be used to fund other City expenses. The airport is not meant to become a profit generating enterprise, but the **City should make efforts to generate enough revenue to cover all expenses, including capital improvements.** This means that, when possible, the airport should try to operate at a net surplus to save and plan for future capital improvements including major repairs, reconstruction of pavements, airport expansion, property acquisition, etc. The recommended future sources of revenue include fuel, TTF access fees, tie-downs, and City-owned hangars. The recommended increases in revenue, including the recommendations to rates and charges along with revenue generating capital improvements (City-owned hangars and additional tie-downs), should get the Airport closer to self-sustaining while allowing for increased capacity of the airfield and potentially part- or full-time airport management.

#### 1.4.7 AIRPORT BUDGET RECOMMENDATIONS

The City currently maintains an airport budget which tracks and accounts for airport expenses and revenue. However, when considering airport capital improvements, the budget is not clear and TxDOT records were needed to help determine actual historical costs to the City. The budget did not account for all CIP match funds that were incurred as revenue from the RAAPOA. The current airport budget accounts for some of the airport capital improvements, but not all of them. **The airport should be viewed as a business, almost a separate entity from the City, or as a city within a city.** The goal for the City should be to operate the airport at a surplus when considering only revenue minus operational and maintenance expenses to cover the periodic capital improvement costs. This requires all costs specific to the Airport be accounted for in the budget, so the City can track and report to the FAA, if needed, the airport financials and track financial sustainability. Any funds coming into or out of the airport should be tracked in an airport specific budget. There should also be a separate airport account where surplus airport revenue can be banked for future improvements.

It is expected that for at least the first several years, the City will be required to cover property acquisitions and capital improvements with City funds. The City could include a line item in the revenue portion of budget to show City contributions as income. Again, the goal is for the airport to become financially self-sustaining, and to do this, the City must treat the Airport as a business, almost separate from the City. Below is a sample budget that could be used.



Table 9 - Example Airport Budget Including Recommendations

<b>Airport Operational Budget</b>	
<b>Aviation Department Revenue</b>	<b>2017 (Estimated)</b>
Airport TTF Fee	\$20,000.00
Airport Hangar Lease	
Fuel Flowage Fee	\$7,200.00
Tie-down Fees*	\$6,400.00
RAMP Grant Reimbursement	\$3,500.00
City CIP Contribution	
Private CIP Contribution	
<b>Total Aviation Department Revenue (R)</b>	<b>\$37,100.00</b>
<b>Operational and Maintenance Expenses</b>	
<b>Personnel Services</b>	
Salary	\$1,300.00
Salary Overhead (Summarized)	\$591.00
<b>Subtotal Personnel Services</b>	<b>\$1,891.00</b>
<b>Operations &amp; Maintenance</b>	
Liability/Property Insurance	\$2,014.00
Travel	\$300.00
Conventions (TxDOT/AAAE Annual)	\$225.00
Bank Charges	\$0.00
Telephone/Data	\$0.00
Electricity	\$3,804.00
Maintenance and Repairs (RAMP Eligible)	\$7,000.00
Miscellaneous Expenses (Non RAMP Eligible)	\$1,000.00
<b>Subtotal Operations &amp; Maintenance</b>	<b>\$14,343.00</b>
<b>Supplies</b>	
Supplies	\$100.00
<b>Subtotal Supplies</b>	<b>\$100.00</b>
<b>Services</b>	
Professional Services	\$1,500.00
Miscellaneous Services	\$1,500.00
<b>Subtotal Services</b>	<b>\$3,000.00</b>
<b>Total Operational and Maintenance Expenses (OM)</b>	<b>\$19,334.00</b>
<b>Airport CIP</b>	
City Only CIP Project (City Share Only**)	\$20,000.00
TxDOT Aviation CIP Project (City Share Only***)	\$25,000.00
<b>Total Airport CIP</b>	<b>\$45,000.00</b>
<b>Net Airport Income (= R – OM – CIP)</b>	<b>-\$27,234.00</b>

\*This is assuming tie-down fees start going directly to the City and the City develops a grassed tie-down area to the SW of Runway 33 for a total of 16 tie-downs at \$400 per year each.

\*\*This is assuming a \$20,000 project to develop the grass tie-down area.

\*\*\*This is assuming a \$250,000 land acquisition project (10 percent match for the City), which is the approximate amount currently programmed through TxDOT's CIP.



## 1.5 AVIATION DEMAND FORECASTS

There are two primary measures of aviation activity at a general aviation airport: based aircraft and aircraft operations. Each activity type is discussed below.

### 1.5.1 BASED AIRCRAFT

Based aircraft are the number of aircraft that use a specific airport as a home base. The existing based aircraft for the Airport are 82. Of the aircraft based at the Airport, they can be further broken down into the following categories:

*Table 10 Based Aircraft*

Aircraft Category	Number Based at Lago Vista – Rusty Allen Airport
Single Engine	77
Jet	2
Multi-engine	3
Helicopter	0
Total	82

### Current Aircraft Using the Airfield

The following is a list of some of the aircraft currently using the airport.

- Citation CJ3 (2 based)
- Cessna 172
- Cessna 150
- Cessna 310
- Cirrus SR22
- Long EZ
- Bellanca Viking
- Beech B300, Super Kingair
- RV 8
- RV 9A
- Pilatus PC-12

The largest aircraft that regularly uses the Airport is the Citation CJ3. Two are based at the Airport with through-the-fence (TTF) access.



## 1.5.2 AIRCRAFT OPERATIONS

Annual operations are the total number of aircraft takeoffs and landings occurring at the Airport in a year. A touch-and-go, which occurs during pilot training, counts as two operations. Touch-and-go operations are categorized as local, along with other operations that remain within 20 miles of the Airport. Airport users conducted an operational survey several years ago, which estimated an average daily operations of 78. TxDOT’s method for calculating operations for planning efforts is 300 operations per based aircraft. The existing Airport Master Record, 5010 form, appears to be an underreported number for both based aircraft and annual operations. We recommend the City update the Airport Master Record in parallel with this planning effort. Estimates from both sources are shown in the table below.

Table 11. Airport Operations

	Lago Vista Estimate, 2016 (300 operations per based aircraft)	Previous Traffic Count Estimate (78 operations/day)
General Aviation	25,800	28,470
Military	0	
Total	25,800	

A comparison of based aircraft and annual operations between several of Lago Vista’s neighboring airports is shown in the figure below. As indicated by the bar graph, Lago Vista is a highly utilized airport in the region, more so than Burnet, Llano, and Taylor. The current published information for Lago Vista – Rusty Allen airport is underreported. When it comes to airport classification and prioritizing grant funds, the measure of based aircraft and operations is very important. Updating the master record to the actual values for based aircraft and operations may help the City’s chances in securing grant funding from TxDOT.

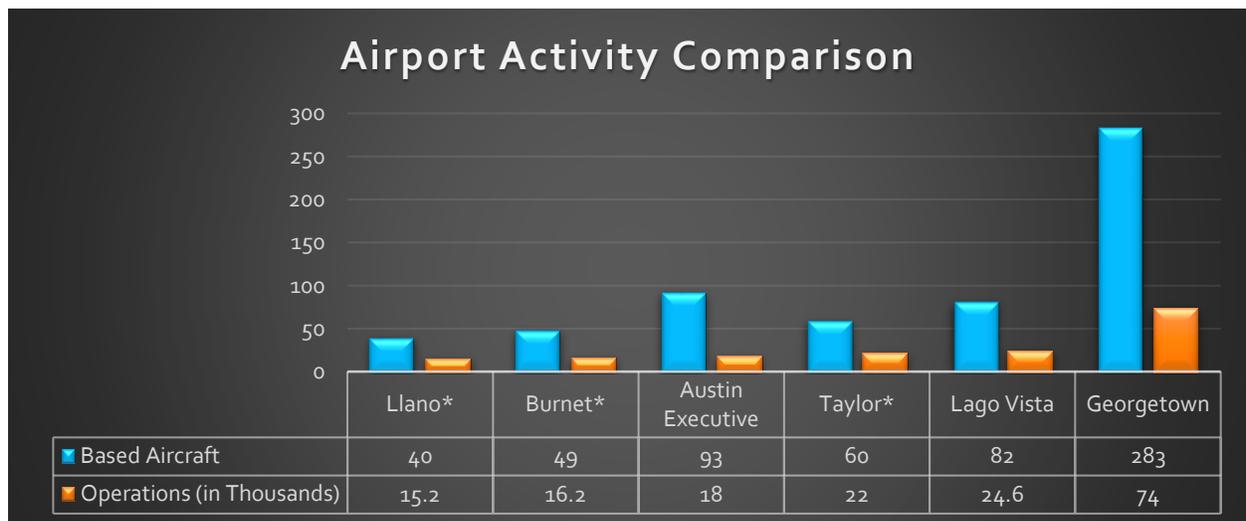


Figure 21 - Airport Comparison with a sample of GA airports within 100 miles (\*Values updated based on conversations with airport managers, does not match published value)

### 1.5.3 AIRPORT ACTIVITY FORECASTS

Aviation activity forecasts are an essential piece of the airport planning process. These projections are typically unconstrained, assuming unlimited developable land. While that assumption is not necessarily realistic for Lago Vista due to its limited developable land, the forecasts will use some traditional forecasting methods while considering the constraints at the airport. The projections will extend out to 10 years and 20 years and will help gauge the development needs for the airport to accommodate the growth. It is an approximation as it is impossible to accurately predict future activity. Economic changes as well as oil prices, especially in Texas, can have effects on aviation activity. This section will look at national trends and predictions as well as the historical trends for Lago Vista and estimate future activity based on a collaboration of the data.

#### National Trends

The FAA’s 2016-2036 Terminal Area Forecast is a document that looks at the aviation industry and provides forecasting rates for several types of aviation activity including commercial airport data such as enplanements and commercial revenue per mile. The statistics for general aviation trends are summarized in the charts below. The measures that seem most applicable to Lago Vista include general aviation hours flown, active pilots, and GA fuel consumption.

#### Total General Aviation Hours Flown

The forecasted growth for General Aviation hours flown from 2016 to 2036 is 1.2 percent. The national trends indicate that the recession took a toll on general aviation activity. For example, the general aviation total hours flown decreased from 27.0 million hours in 2001 to 22.8 million in 2013 and up to 23.3 million hours in 2016. The forecast shows a **growth of 1.2 percent** over the next 20 years.

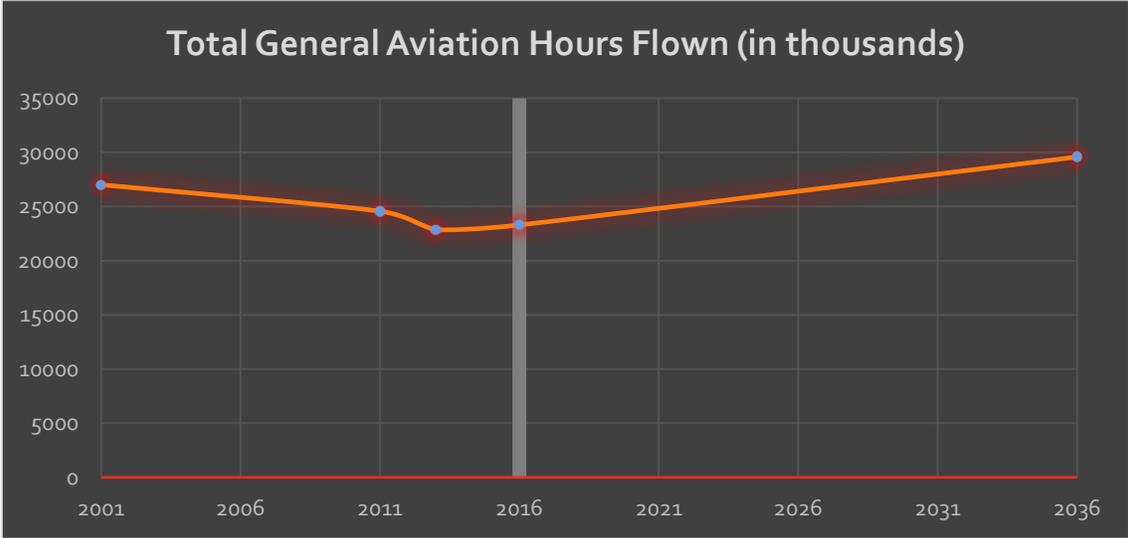


Figure 22 - GA Hours Flown Trend from Terminal Area Forecast 2016-2036

### Total General Aviation Active Pilot Licenses (Excludes Airline Transport)

As with hours flown, the number of active pilots experienced a decline during the recession. The prediction is that this decline will slow down to a **rate of -0.1 percent**.

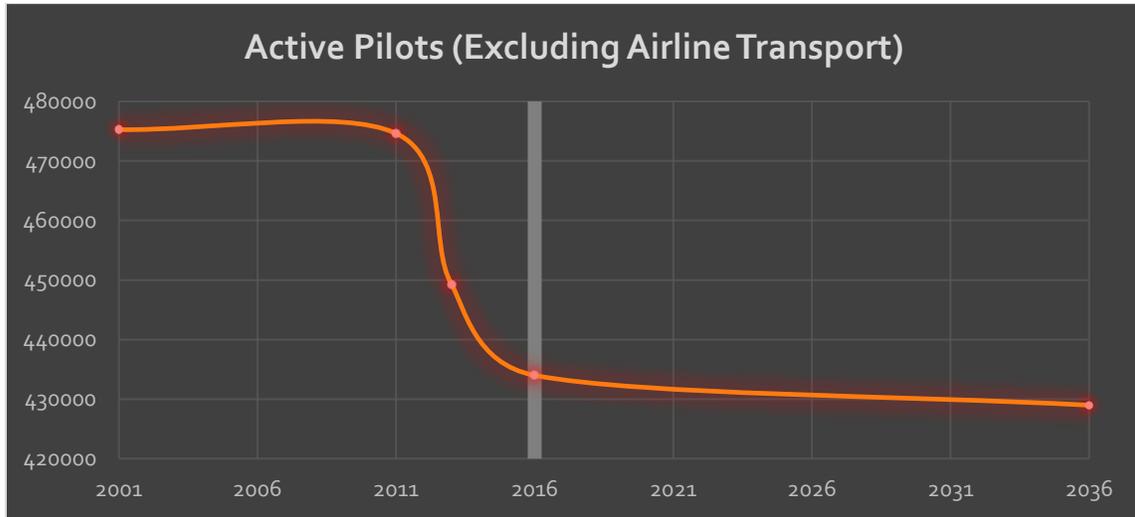


Figure 23 - Active Pilots Trend

### Total General Aviation Aircraft Fuel Consumption

For GA fuel consumption, AvGas and jet fuel both saw a decline during the recession, but **AvGas consumption is expected to stay stagnant at 0.0 percent**, while use of jet fuel is estimated to increase at a rate of **2.1 percent** from 2016 to 2036.

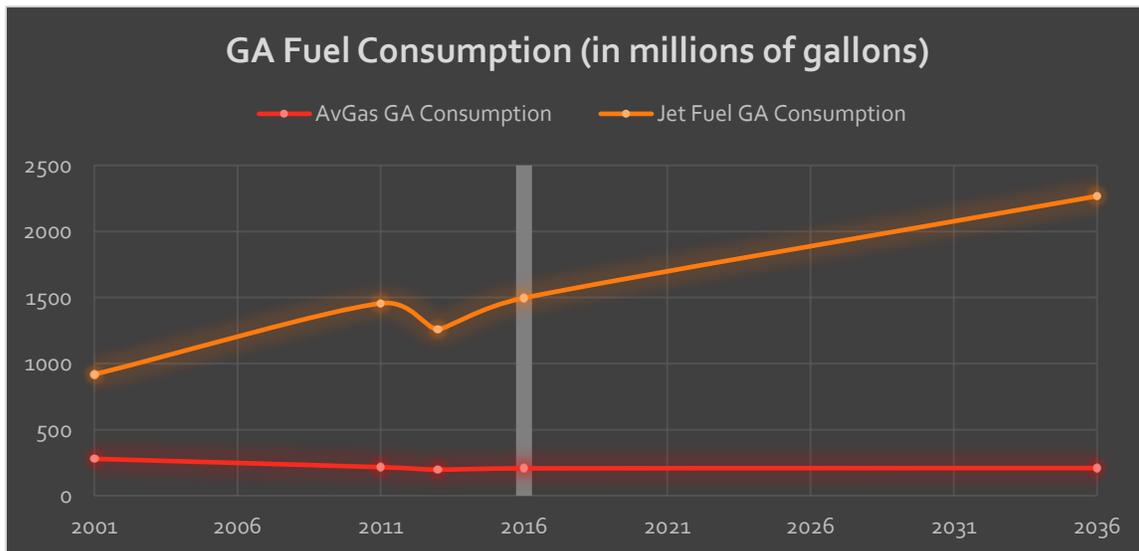


Figure 24 - GA Fuel Consumption



## Lago Vista --Rusty Allen Airport Trends

### City Population Trend and Forecast

The 2030 Comprehensive Plan estimated that the City of Lago Vista is expected to grow from a population of 6,617 in 2016 to 22,000 in 2036, a growth rate of 6.2 percent.

### Airport Operational Trend

It was evident during the count of the existing based aircraft that the reported data on the Airport Master Record, 5010 form, is incorrect. Historical data for annual operations and based aircraft was not available, but historical aerial images were used to determine the increase in number of hangars that access the airport through private property. It was assumed that each hangar represented 1.3 based aircraft. This was calculated by estimating that one out of every two hangar owners stored two aircraft with the exception of 2016 where the actual based aircraft is 86. Also, it is estimated based on the historical aerial images that there were six tie-downs up until 2002 when the tie-down ramp was expanded to 11 spots. It is assumed that three-quarters of the historical tie-downs were also based aircraft except for 2016, where it is known that all of the existing tie-downs are long-term, based aircraft occupants. The number of hangars increased from 1995 to 2016 from 16 to 49 and based aircraft increased from 27 to 82, a **growth rate of six percent**. See trend below.

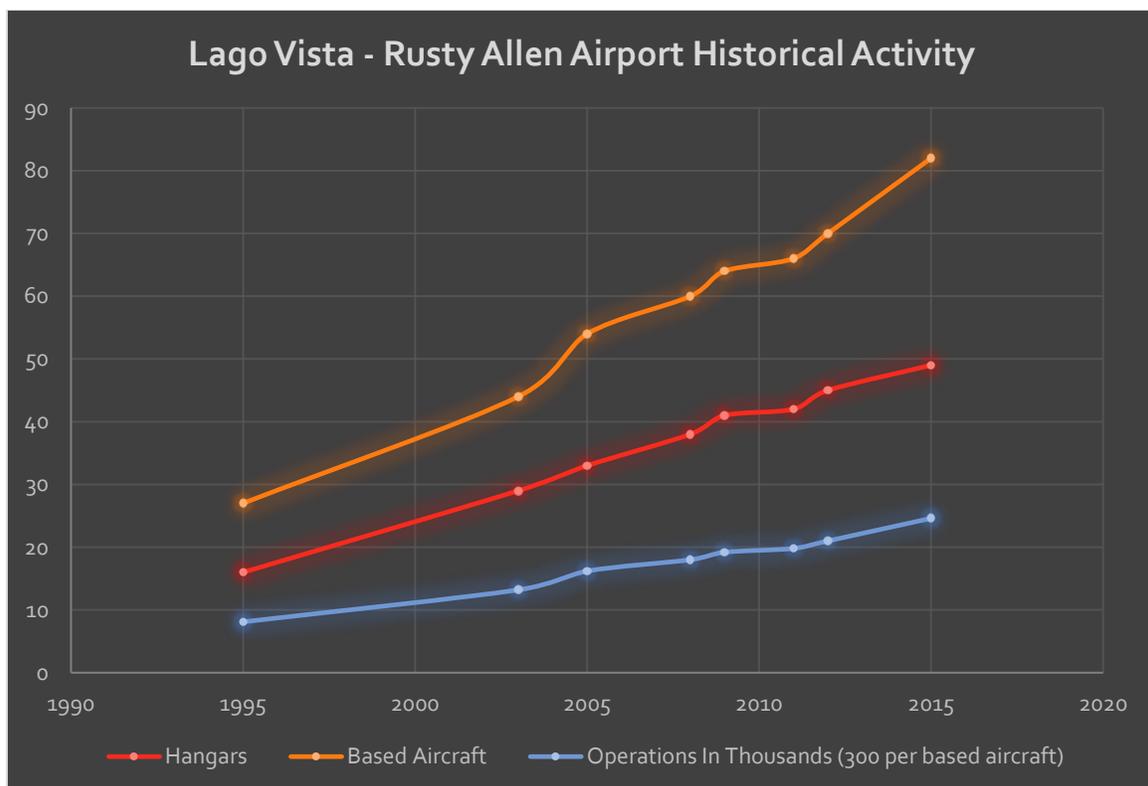


Figure 25 - Lago Vista - Rusty Allen Airport Historical Based Aircraft, Hangars, and Operations



## Recommended Activity Forecast

The historical trends for the Lago Vista – Rusty Allen Airport do not follow the national trends presented in FAA’s Terminal Area Forecasts. The national forecasts for general aviation for the three measures shown above averages to a 0.4 percent increase, while the historical growth at the airport is closer to six percent. This growth will decrease due to development constraints. There is limited available property with access or potential access to the airport. If the City can acquire property and secure areas for development, it is expected that for the immediate future, a growth rate of six percent would continue perhaps at an even greater rate. The population in the greater Austin area continues to grow at historic rates. Almost every general aviation airport within this region has a long waitlist for hangars. However, with the development constraints of topography and limited City and TxDOT funding, the expected growth rate for the near term will likely decrease. A growth rate of three percent is recommended for based aircraft and operations. This is roughly an average of the historical rate at Lago Vista and the national trends. The forecasted airport activity is summarized below.

*Table 12- Recommended Forecasted Airport Fleet Mix, Based Aircraft, and Operations Using Three Percent Growth Rate*

Year	Single Engine	Multi Engine	Jet	Total	Annual Operations
2016	77	3	2	82	25,800
2026	103	4	3	110	34,800
2036	138	5	4	147	44,100

Airport classification is also important in considering future demand. Currently, the Airport is classified with an Airport Reference Code of B-I (small). While there may be potential demand for aircraft that would require an upgrade in classification, the existing features preclude the airport from increasing any element of its classification elements. Any increase in the Airport Approach Category (B), Airplane Design Group (I), and weight classification (small is 12,500 pounds and under) would increase object free areas, which would require substantial removal of current airfield taxiways and many of the existing hangars accessing the airfield. While various aircraft use the airfield, it is recommended the design aircraft for the airport be a generic 12,500 pound single-wheel aircraft. These classifications determine design standards for runway and taxiway clearances as well as airfield pavement geometric and structural design.

Airport Feature Classification	Existing	Ultimate
<b>Airport Reference Code (ARC)</b>	B-I (small)	B-I (small)
<b>Taxiway Design Group</b>	1A	1A
<b>Design Aircraft</b>	Generic 12,500 lb Single Wheel	Generic 12,500 lb Single Wheel



## 1.6 COMPLIANCE REVIEW

The Lago Vista – Rusty Allen Airport is a federally-obligated airport, because it has received Federal Aviation Administration (FAA) funding administered through the TxDOT Aviation Division. As an obligated airport, the City is contractually bound to comply with FAA's Airport Sponsor Grant Assurances. These are part of the funding agreements signed for each grant the City receives from TxDOT Aviation Division. With few exceptions, these assurances are in place for 20 years from the funding agreement.

This section will address each of these grant assurances and this plan will take a proactive approach to achieving compliance and avoiding noncompliance.

Guidance for the preparation of this chapter comes from FAA's Airport Sponsor Grant Assurances (dated March 2014) and FAA Order 5190.6B, *Airport Compliance Manual* (2009, September).

### 1.6.1 AIRPORT SPONSOR GRANT ASSURANCES

There are 39 grant assurances that are part of the agreement at the acceptance of a TxDOT Aviation Division grant. Below are brief summaries of each assurance and an examination of the current airport in regards to each assurance.

1. **General Federal Requirements.** The City will comply with all applicable federal laws, regulations, executive orders, policies, guidelines, and requirements as they relate to the application, acceptance, and use of federal funds.
  - To the best of its ability, it appears the City has, and will continue to, comply with all applicable federal guidance.
2. **Responsibility and Authority of the Sponsor.** Verifies the City has the legal authority to apply for, finance, and administer the TxDOT Aviation grant, which may include FAA funds.
  - The City, as acknowledged by the State of Texas, is the local discretionary authority for the Airport.
3. **Sponsor Fund Availability.** The City must have sufficient funds for their match portion of the AIP grant.
  - As part of the forthcoming Capital Improvement Plan, the City will identify funding sources for the local match prior to applying for federal assistance.



4. **Good Title.** According to Order 5190.6B, the City is required “to assure that good title exists or that the sponsor will acquire good title for any property where federal funds will be used. For airport development programs, the sponsor must assure that the sponsor, another public agency, or the federal government holds good title to the airfield or airport site.”
- The city currently owns a limited amount of property at the airport, including a tie-down apron, all taxiways, and most of the runway. The north third of the runway is owned by the United States of America, and controlled by the U.S. Fish and Wildlife as the Balcones Canyonlands. The City has an easement through this property “for constructing, operating, and maintaining an airport runway.” This easement is centered on and in-line with the runway, 300 feet wide, extending from the northernmost City-owned airport property line to the boundary between the Fish and Wildlife property and the neighbor’s property to the north. While it would be ideal for the City to own this portion of property, this existing arrangement does meet the intent of the grant assurance. .
5. **Preserving Rights and Powers.** The City will not take or permit any action that would deprive it of the rights and powers necessary to perform any of the grant assurances, nor will it sell, lease, encumber, or transfer any part of its title or interests in the Airport property.
- The existing City-owned airport property is limited to the runway, taxiways, and one tie-down apron. To this point, there is no actual agreement contradicting this assurance. This would include assuring any agreements the City enters must not limit their ability comply with all assurances, including through-the-fence (TTF) agreements, FBO agreements, land lease agreements, fuel services, and others.
  - TxDOT has stated the current TTF should to be changed to assess a per property fee, either based on a square footage, based aircraft using property, or flat per property fee. The one aggregate fee does not confirm how much each member of the RAAPOA is paying. While TxDOT doesn’t believe the current agreement puts the City in violation of this agreement, they have stated the City is at risk for the future. The next version of the agreement should make the fee property specific, instead of an aggregate fee for the entire RAAPOA.
  - With the current through-the-fence agreement, the City collects five percent of airport improvement CIP total project cost from the RAAPOA. This, however, has created an arrangement in which the RAAPOA has a say in what CIP projects are needed and their timing. While this is not a right the TTF agreement grants to the RAAPOA, it has essentially created an arrangement in which the City does not retain the full power to manage the airport. Because the RAAPOA is keeping the City’s tie-down fees for their CIP match and they are contributing five percent match funding to the CIP project, this appears to TxDOT as the City ceding some control of the airport which is contrary to the intent of this assurance. The next version of the TTF agreement should also discontinue the five percent match from the RAAPOA.



6. **Consistency with Local Plans.** Proposed projects must be reasonably consistent with local, county, and state plans, to include the area surrounding the Airport.
  - There are no indications that past projects undertaken at the Airport are inconsistent with local, county, and state plans. The property the Airport operates on is mostly within the Lago Vista City limits; the easement within the U.S. Fish and Wildlife property is within Travis County. The City has recently completed a Comprehensive Plan, and the proposed plan will be consistent with the recommendations of the Comprehensive Plan.
7. **Consideration of Local Interests.** The City will give fair consideration to the local community's interests.
  - The City has complied with this guidance. In fact, the City has inherited the airport from the local community. The City has created and maintained an Airport Advisory Board which includes a liaison to the City Council and airport users. The Board allows input and guidance from the airport users and the local community. This action plan will consider public input and local interests in proposed developments and recommendations.
8. **Consultation with Users.** Consultation with affected parties using the Airport will be conducted prior to, and during, the proposed project.
  - The City not only consults users, but also truly relies on airport users to guide developments at the airport.
9. **Public Hearings.** For major projects involving airport location, a new or relocated runway, or a major runway extension, the City will give the community an opportunity for a public hearing to consider economic, social, and environmental effects of the proposed project.
  - No major projects are anticipated at the airport. If, in the future a major project is considered, the City should coordinate with TxDOT to verify public hearing procedures and publishing requirements.
10. **Metropolitan Planning Organization.** For major projects involving airport location, a new or relocated runway, or a major runway extension, the City will make available to the metropolitan planning organization in the area in which the airport is located, if any, a copy of the amended airport layout plan to depict the proposed change along with a copy of the current airport planning document. A major runway extension for this airport is assumed to be any extension over 500 feet.
  - This current project is not anticipated to be or to plan a major change to the runway. The Capital Area Metropolitan Planning Organization (CAMPO) covers several counties including Travis County, which includes the City of Lago Vista and all of the airport environ. Although no major change to the runway is anticipated at the airport, it is recommended that if any future major change to the runway is to take place that the City coordinate with CAMPO early in the process to obtain buy-in.



**11. Pavement Preventative Maintenance.** The City will implement an effective airport pavement maintenance-management program for the useful life of any pavements construction with TxDOT/FAA grant assistance.

- The City currently maintains the airport pavement through the TxDOT Routine Airport Maintenance Program (RAMP) and recently completed a pavement rehabilitation project. It is recommended that the airport continue to conduct a yearly inspection of City-owned airfield pavement and keep records of the inspections and maintenance that is conducted. Some airports choose to implement a more detailed pavement maintenance program, but for the size of Lago Vista and its airport, yearly inspections and regular preventative maintenance and repair, along with good record keeping, is all that is needed to satisfy this assurance.

**12. Terminal Development Prerequisites.** If the City were to develop a public-use commercial service passenger terminal (for aircraft designed for at least 31 passenger seats), it must certify that all safety and access equipment required by rule or regulation is provided to all passengers.

- A passenger terminal is not planned for Lago Vista. The airfield features would likely preclude use by any aircraft intended for passenger service of at least 31 seats.

**13. Accounting System, Audit, and Record Keeping Requirements.** The City will keep all project accounts and records relative to any grant project in accordance with the Single Audit Act of 1984. Additionally, the City will make all records available for the purpose of audit and examination.

- The City's recordkeeping for the airport could be improved. In reviewing City financials for the airport, there seems to be some mixing of operational costs and Capital Improvement Costs. Some of the Capital Improvement Costs and matching funds from the RAAPOA are accounted for in the airport budget information that was provided, but some information was not. Then, there is a separate City Capital Improvement Program (CIP) that tracks some of the capital improvements at the Airport. All Airport specific costs, including CIP and land acquisition should be tracked and accounted for in one location. The airport needs to be treated like a separate business. All revenues, expenses, and capital improvements should be tracked as airport specific. Project documentation should be readily accessible and include such items as fund transfers, income received, expenditures, and any other information pertinent to the airport. Even if the City has to use the general CIP fund to fund the airport project, the direct cost to the City could be shown in the airport budget, then indicate funds from the City general CIP as revenue to cover the CIP cost. The goal for the airport should be to become self-sustaining, even with Capital Improvement Costs. In case of audit of records by FAA to ensure airport funds are staying on-airport, having all airport related financials readily available will be



very helpful. Also, in better tracking capital improvements specific to the airport, the City can easily monitor total cost of ownership.

- Also, the tie-down fees being collected from the RAAPOA are not being tracked and reported. All fees collected on Airport property should be accounted for.

**14. Minimum Wage Rates.** For all contracts in excess of \$2,000 that involve labor, the City shall establish minimum wage rates in accordance with the Davis-Bacon Act (40 U.S.C. 276a-276a-5).

- The City has, and will continue to, establish minimum rates of wages consistent with the Davis-Bacon Act for all federally-assisted contracts meeting this requirement.

**15. Veteran's Preference.** Contracts for work involving TxDOT/FAA grants will ensure that preference shall be given to available and qualified veterans.

- TxDOT administers construction contracts and they include veteran's preference clauses in the contract documents.

**16. Conformity to Plans and Specifications.** The City will execute the AIP projects per the plans, specifications, and schedule approved by TxDOT and ultimately the FAA; who authorizes TxDOT administration of the grants.

- TxDOT Aviation division contracts directly with engineers and contractors to complete projects according to the plans and specifications and by doing so has assumed responsibility in assuring conformity. The City should still take an active role in construction projects and be forthcoming with any apparent non-conformity issues.

**17. Construction Inspection and Approval.** Competent and technical supervision will be provided by the City throughout the grant funded construction projects to assure the work conforms to the plans, specifications, and schedule approved by TxDOT/FAA.

- This assurance has been and will continue to be satisfied by TxDOT, since TxDOT contracts directly with the engineers and contractors.

**18. Planning Projects.** For planning projects, the City will execute the project as approved in the TxDOT/FAA approved scope of work, report on project progress, acknowledge the project was grant funded, make material available to the public and the FAA/TxDOT, allow FAA/TxDOT to publish final material, and grant TxDOT/FAA authority to disapprove employment of a consultant, subcontractor, or employee to do all or any part of the project. In addition, the City will understand and agree that TxDOT/FAA's approval of any planning material "does not constitute or imply any assurance or commitment on the part of the Secretary [TxDOT/FAA] to approve any pending or future application for a Federal airport grant."

- The City has worked with the consultant and TxDOT in scoping this planning effort and the process is open to public involvement, and documents will be made available. The City should understand that approval of a development plan as a result of this action plan



does not guarantee funding for such developments from TxDOT. Any future planning projects should follow the same approach to maintain compliance with this assurance.

**19. Operation and Maintenance.** The Airport and all facilities will be operated at all times in a safe and serviceable condition and in accordance with minimum standards by the City. Any temporary closure for non-aeronautical purposes must be approved by the FAA. The City will promptly mark and/or light hazards and will notify airmen of any condition affecting aeronautical use of the Airport.

- It appears the City meets the criteria of this grant assurance. All facilities are operational, in safe and operable conditions.

**20. Hazard Removal and Mitigation.** The City will take appropriate action to assure the Airport's airspace will be adequately cleared and protected.

- The City has and continues to clear obstructions. The Airport Advisory Board, prior to this Action plan, has initiated installing overhead power line marking balls for some power lines in the airport vicinity. The City is also pursuing obstruction removal on the U.S. Fish and Wildlife property. The City should continue to pursue removal of any existing obstruction that is identified, but should also take a proactive approach to preventing potential obstructions through zoning efforts. This Action Plan did not include survey to identify obstructions, but known obstructions from previous data will be included in the updated Airport Layout Plan.

**21. Compatible Land Use.** To the extent reasonable, the City will include the adoption of zoning laws to restrict the use of land adjacent to or in the immediate vicinity of the Airport to activities and purposes compatible with normal airport operations.

- The City has zoning in place to keep land use compatible in the airport environ. The City also recently completed their Comprehensive Plan, which recommends an expansion of their current aviation compatible use zone. In addition, the City should consider implementing an Airport Hazard Zoning ordinance, which would be superimposed. This practice is allowed by the Texas Airport Zoning Act (AZA).

**22. Economic Nondiscrimination.** The City will make the Airport available as an airport for public use on reasonable terms and without unjust discrimination to all types, kinds, and classes of aeronautical activities. Any agreement the City enters with a third party must outline and enforce provisions that 1) services will not be unjustly discriminatory; 2) charges will be reasonable and just; 3) each Fixed-Based Operator (FBO) shall be subject to the same rates and charges; and 4) the City will not grant any right which operates to prevent any person, firm, or corporation operating aircraft from performing any services on its own aircraft that it may choose to perform. The City may prohibit or limit any given type, kind or class of aeronautical use of the airport if such action is necessary for the safe operation of the airport or necessary to serve



- There are no existing concerns of economic discrimination at the Airport, but as the airport grows and on-airport users are introduced, a minimum standards for FBOs should be in place and separate agreements should be established with the TTF FBOs to ensure that on-airport users are treated equitably. In addition, when renewing the TTF access agreement in 2019 when the current agreement expires, the City should clearly identify the method for setting the fee charged to TTF users and make sure the on-airport users are treated equitably based on the same methodology.
- Because the current TTF agreement designates an aggregate fee for the entire RAAPOA, the City is transferring the responsibility of economic discrimination to the RAAPOA. The agreement may be one master agreement, but the fee should be assessed on some type of per property fee (area of hangar and/or property, number of based aircraft, or flat per property). Since the City has minimal on-airport use (tie-downs), the risk of non-compliance will increase as the airport continues to grow and on-airport users are introduced.

**23. Exclusive Rights.** The City will not permit exclusive right for the use of the Airport by any person providing aeronautical services to the public. Services by a single FBO are not considered an exclusive right if it would be unreasonably costly or impractical for more than one FBO to provide the services and if allowing more than one FBO would require the reduction of the first FBO's lease area.

- Currently, the City only has one agreement with a self-service fuel provider. From available information and general airport knowledge, the City appears to be in compliance. The City plans to cancel the existing contract and pursue new methods of providing fuel.

**24. Fee and Rental Structure.** The fee and rental structure for Airport facilities and services will be maintained by the City, to help the Airport become as self-sustaining as possible, taking into account local factors.

- The City has an agreement with the RAAPOA which establishes a fee paid to the City. The only other airport-generated revenue is from a fuel provider at \$1 per year. The City also receives additional compensation from the RAAPOA for Capital Improvement Projects of up to five percent of the total project cost. Including past and future capital improvement, operating, and maintenance expenses, the Airport has historically operated at a net cost to the City. The City should increase their revenue through rents and fees to cover these costs. The City should and desires to change the arrangement for providing fuel. In the short term, this could include contracting with an entity to provide fuel, but charge a fuel flowage fee. Eventually, the City could benefit from owning its own fuel farm and providing fuel service. The City could also revise the current agreement with the RAAPOA to include a modest increase in fee as the fee has remained stagnant for 10 years through the agreement. The next version of the agreement should also



remove the five percent CIP match and the collection of the on-airport tie-down fees. In addition, as proposed in this plan, the City should seek to build, own, and rent hangar space. These increases in revenue should help the City to become more self-sustaining while the airport grows to meet the demand.

**25. Airport Revenues.** All revenues generated by the Airport and any local taxes on aviation fuel will be expended by the Airport for the capital or operating costs of the Airport, the local airport system, and other facilities owned by the City which are directly and substantially related to the actual air transportation of passengers or property.

- When assessing solely the airport revenues and the operational and maintenance costs, the airport has historically been very close to self-sustaining. Some years there is a surplus, some years a deficit. However, when capital improvement costs are considered, the Airport has been a net cost to the City, which is evidence that airport revenue is being used for the airport only and that the City has to supplement airport revenue with City general CIP funds. In conjunction with better record keeping, it is recommended that the City have an airport specific account where surplus airport revenues can be banked for future needs, including capital improvements. This would also help with keeping better airport specific records.
- **CONCERN:** The current arrangement in which the RAAPOA collects and retains the airport tie-down fees is a concern and contradicts the intention of this assurance. The following is from Bill Gunn, compliance specialist with TxDOT Aviation Division:

“The City apparently has RAAPOA collect the revenue from ramp tie downs, both residence and transient. The City may use RAAPOA or any other group as an agent to collect these fees however it is very important these fees are identified separately from the TTF access fees and are paid to the City at least monthly. These fees are not part of the annual TTF access fees for RAAPOA; rather they are separate revenue. The FAA is very explicit about tracking fees for aeronautical services to ensure the money stays in the airport account for capital improvements. If these fees are paid as part of the TTF access fee, then the City most likely is violating the intent of Grant Assurance 25.”

- This arrangement should cease as mentioned before. Even if the tie-down fees are coming back to the City in the form of the RAAPOA’s five percent CIP match, that is not explicitly allowed in the agreement and there is no current method of accounting for the tie-down funds. The City should have control of the Airport and the revenue the Airport generates.

**26. Reports and Inspections.** The City will submit annual financial and operations reports to the FAA, and make the reports available to the public. All Airport records for development projects must be available to the FAA upon request.



- The City keeps records of airport finances and operation. Development project records are maintained by TxDOT Aviation as they administer the grants and contract directly with consultants and contractors.

**27. Use by Government Aircraft.** The City will make available all of the facilities of the Airport developed with federal financial assistance and all those usable for landing and takeoff of aircraft to the United States for use by government aircraft at all times without charge. However, if the use by government aircraft is substantial, charges may be made for a reasonable share, proportional to such use, for the cost of operating and maintaining the facilities used.

- The City has and will make facilities available for government use, as appropriate, under this grant assurance.

**28. Land for Federal Facilities.** The City will furnish real estate, without cost to the federal government, for use in connection with any air navigation, weather reporting, or communication activities.

- The existing facilities, including PAPIs and the AWOS are owned and operated by the City, and supported by maintenance funds through TxDOT’s RAMP program. The City should be aware that if the federal government asked to install such equipment at the airport, that the City would be obligated to offer available land at no cost to the federal government.

**29. Airport Layout Plan.** The Airport Layout Plan will be kept up-to-date at all times.

- The current Airport Layout Plan is being updated as part of this project.

**30. Civil Rights.** The City will take necessary measures to ensure that no person is excluded from participation in, be denied the benefits of, or be subject to discrimination in any activity conducted with, or benefiting from, funds received from grant funds on the basis of race, creed, color, national origin, sex, age, or disability. See grant assurances for further detail.

- From review of airport documents, indications are the City is in compliance with this assurance.

**31. Disposal of Land.** When land purchased with grant funding is no longer needed for the original intended use, the funds shall be used for other eligible airfield development or transferred to another eligible airport for eligible development. The funds for the sale of property no longer needed may not be used for operating expenses or to supplement the sponsors other needs.

- The City is in compliance as they have not sold land.

**32. Engineering and Design Services.** The City use a qualifications-based selection.

- The City relies on TxDOT Aviation to conduct Engineering and Design services solicitations and procurement and TxDOT uses appropriate procurement methods.



- 33. Foreign Market Restrictions.** The City will not allow funds provided under this grant to be used to fund any project which uses any product or service of a foreign country during the period in which such foreign country is listed by the U.S. Trade Representative as denying fair and equitable market opportunities for products and suppliers of the U.S. in procurement and constructions.
- There are no indications of non-compliance.
- 34. Policies, Standards, and Specifications.** The City will carry out projects funded by the grant in accordance with applicable FAA advisory circulars, policies, and standards.
- While there are existing non-standard airport features, under TxDOT Aviation's supervision, the previous developments have been conducted in accordance with applicable standards and so will future projects.
- 35. Relocation and Real Property Acquisition.** The City will be guided by Subpart B of 49 CFR Part 24 in property acquisition causing displacement, providing relocation assistance and reimbursement for necessary expenses.
- There are no such previous or planned instances.
- 36. Access by Intercity Buses.** Intercity buses, if applicable, will have access to the Airport.
- No bus service is available at the Airport, but the City does not prohibit access to public transportation to the airport.
- 37. Disadvantaged Business Enterprises (DBE).** No discrimination on the basis of race, color, national origin, or sex will be tolerated in the award and performance of any FAA-assisted contract or in the administration of the DBE Program.
- TxDOT administers the grant and DBE programs and therefore the City is in compliance..
- 38. Hangar Construction.** If a third party constructs a hangar at their own expense on the airport property, the City will grant the third party a long-term lease subject to such terms and conditions on the hangar as the City may impose.
- There are no such instances. All hangars that use the airport are on private property.
- 39. Competitive Access.** This assurance only applies to medium or large hub airports.



## 1.6.2 THROUGH-THE-FENCE (TTF) COMPLIANCE

The City of Lago Vista owns the Airport and is responsible to maintain the airport components to maintain access as a public-use airport. The Airport is currently used primarily by through-the-fence (TTF) Operators. TTF operations are when users access the airport from private property by crossing the airport property line, which, in some cases, would be fenced, hence the term. At Lago Vista – Rusty Allen Airport, the only on-airport users include aircraft owners leasing tie-down space on a part- or full-time basis, and the fuel service provider, who currently pays \$1 per year. All of the existing hangars that have access to the airport and the land they occupy are privately owned, with several of these being hangar homes for residential use. These property owners are organized into the Rusty Allen Airport Property Owners Association (RAAPOA). The use of the existing privately owned hangars includes residential hangar homes, commercial activities, and aircraft storage. All existing hangar access is granted to the RAAPOA through one master TTF agreement. The existing agreement includes fees that are collected by the RAAPOA. The fee is set based on capital costs for general infrastructure as allowed by FAA, however the fee is not well documented as to the fee. Currently, the RAAPOA pays the City \$20,000 per year for an access fee and may pay additional amounts for maintenance and repairs not covered by TxDOT Grants (50 percent share up to \$2,000) and for capital improvements (up to five percent of total project costs). This agreement was last executed in 2009 and expires in 2019.

In recent years, TTF operations have been under scrutiny based on the FAA Modernization and Reform Act of 2012. The Act precluded commercial service airports from entering into new Residential Through-the-Fence (RTTF) agreements and if there was a triggering event, those agreements would need to be reviewed and updated. For general aviation airports, such as Lago Vista - Rusty Allen Airport, residential TTF access agreements are allowed by the Act as they will not result in non-compliance. As part of the compliance review, the existing agreement was reviewed and evaluated based on the FAA Compliance Guidance Letter 2013-01, *FAA Review of Existing and Proposed Residential Through-the-Fence Access Agreements*, FAA Order 5190.6B, *Airport Compliance Manual*, and Transportation Research Board's Airport Cooperative Research Program (ACRP), *Guidebook for Through-The –Fence Operations*. There are no limits or requirements as to the length (term) of the agreement, however FAA recommends a price escalation allowance for any agreements longer than five years. The guidance letter requires that the TTF access be shown on the updated ALP and that these agreements be written and meet the following requirements:

*Residential only TTF agreements must require property owners to:*

- Pay access charges that the sponsor determines to be comparable to those fees charged to tenants and operators on-airport making similar use of the airport.
- Bear the cost of building and maintaining the infrastructure necessary to provide access to the airfield from property located adjacent or near the airport.
- Maintain the property for residential, noncommercial use for the duration of the agreement (noncommercial is interpreted as aeronautical noncommercial, commercial use of the property which would not compete with aeronautical commercial activities is allowed).



- Prohibit access to the airport from other properties through the property of the property owner; and
- Prohibit any aircraft refueling from occurring on the property (this is interpreted as selling fuel on personal property accessing the airfield).

#### *Commercial TTF Use Requirements*

- For general aviation, the FAA discourages aeronautical commercial through-the-fence use. However, having aeronautical services available for aircraft is beneficial for airports and when there is not available space or property for on-airport aeronautical commercial businesses, the FAA is understanding. Having aeronautical commercial services available at the airport are beneficial in that they provide necessary service for the safe operation of aircraft and they provide jobs, boosting the local economy.
- A separate Commercial TTF agreement is required for aeronautical commercial access to the airport.
- The intent of the guidance for through-the-fence commercial activity is to allow fair competition between a through-the-fence commercial operator and an on-airport commercial operator. As stated by the Compliance Guidance Letter Section III.D., if there are existing aeronautical commercial use agreements, they must not “result in unjust economic discrimination for on-airport aeronautical service providers.”

#### *Additional TTF Requirement, both Commercial and Residential TTF*

- The City must have an agreement with any TTF user accessing the airport. This includes restricting anyone from having “piggyback” access from a property without an agreement to access the airport through another property with an agreement. In the case of Lago Vista, this would mean anyone not a member of the RAAPOA, since the RAAPOA has one master agreement fulfilling this requirement for all its members.

### **Assessing Existing Through-the Fence-Agreement**

During the 3<sup>rd</sup> APAC meeting, it was discovered that the tie-down fees being collected by the RAAPOA are not going directly to the City. TxDOT and PSC understood the TTF agreement put the responsibility of collecting the tie-down fees on the RAAPOA, but the agreement does not clearly state what to do with the collected funds. According to grant assurances, revenue generated on the airport should be going to the airport. Apparently, the tie-down funds are being used by the RAAPOA towards their five percent CIP match, but that isn’t explicitly allowed in the TTF agreement and there are no records accounting for those funds. This arrangement should cease. The tie-down fees are generated by City-owned airport property and should be going directly to the City.

Aside from the tie-down issue, it appears that the City of Lago Vista is within compliance of the intent of the FAA Compliance Guidance Letter for TTF agreements. Potential concerns could arise as the City develops the airport and more “on-airport” users are introduced, especially aeronautical commercial operators. The intent of the grant assurances and the TTF Compliance Guidance Letter are to require that the sponsor keep fees and charges fair and reasonable for on airport users. Rates set for future “on-airport” commercial users, land leases, and hangar leases must be justifiable using this guidance.



## Assessing Existing Commercial Aeronautical TTF Use

It was noted during the APAC meetings that there are existing and proposed commercial aeronautical through-the-fence operators on the airfield. These include aircraft maintenance, flight training, and perhaps more. FAA's term for a commercial aeronautical operator is an FBO, or Fixed-Based Operator. According to the Transportation Research Board's Airport Cooperative Research Program (ACRP), *Guidebook for Through-The-Fence Operations*, Commercial Aeronautical TTF (or TTF FBO) activities would include:

- Fueling products and services
- Aircraft storage facilities
- Location based services (aircraft ground handling, passenger and crew services, etc.)
- Technical products and services (aircraft maintenance and repair, avionics, instruments, parts sales, etc.)\*
- Flight services (instruction, aircraft rental/leasing, aircraft charter, air cargo, etc.)
- Aircraft sales
- Other products and services (aircraft cleaning, painting, upholstery, sightseeing, aerial photography, crop dusting, etc.)

The intent of FAA guidance and policy for TTF FBOs is to ensure the safety and security of the airfield by knowing who has access to the airport and the equitable treatment for similar on-airport operators. It does not, however, require protection of TTF users, including FBOs. In fact, the City is not even required to allow TTF access. Some airports choose to exercise that right. However, for Lago Vista – Rusty Allen Airport, TTF access is part of its history and identity. The engagement of and relationship with the Rusty Allen Property Owners Association has been and will continue to be vital to the airports existence and operational safety.

The City should, according to FAA policy, have agreements with any TTF FBO users. Although there are not current specific agreements with existing TTF FBOs, there are no current conflicting on-airport and TTF FBOs. This could change in the future as the City intends to expand the airport. The City's zoning of C<sub>4</sub>, Commercial Airport, for most of the airport accessible properties allows for commercial activity. This could be construed as an arrangement which allows for commercial aeronautical TTF activity, but does not comprehensively assure compliance as it does not address equitable treatment. To clarify, the equitable treatment requirement, in regards to commercial activity, does not imply that the customers of on-airport and TTF FBOs need to be treated equitably. It applies to the FBOs and their agreements with the City. So, if there were a TTF FBO and an on-airport FBO offering fuel, the City must not charge the on-airport FBO more than the TTF FBO for a fuel flowage fee or other charge relating to the FBO agreement.

The existing arrangement with TTF FBOs does not seem to conflict with the intent of the TTF policies. However, the City should address potential conflicts proactively prior to entering into future agreements with on-airport users. It is recommended that the City work with the RAAPOA to include, in future renewal of the RAAPOA agreement, a requirement that TTF FBOs enter into a separate FBO agreement



with the City. This agreement could be a standard agreement the City crafts for all FBOs, distinguishing between FBO types, and should reference adherence to the Airports minimum standards and other rules and regulations.

TxDOT is not an enforcement agency, but issues in regards to equitable treatment arise when complaints are filed and the airport does not have documentation showing that equitable treatment is addressed. The City should be proactive in anticipation of additional on-airport users and make sure it knows who has access to the airport.

## **TTF Agreement Recommendations**

For both residential and aeronautical commercial TTF use, the existing TTF agreement currently works, but it expires in February of 2019 and revisions need to be made to better ensure compliance as new on-airport users are introduced. One master agreement with the RAAPOA is recommended. An airport that operates similarly through a master agreement with a POA is the Independence State Airport in Independence, Oregon. Like Lago Vista, most of their users are TTF and one master agreement has been used and is preferred. FAA has reviewed their agreement and it has been determined to be in compliance. The following are other recommendations for the City to consider in the next version of the TTF access agreement with the RAAPOA

### **Agreement Party/User Identification**

To follow the intent of FAA's guidance, the City should make sure they have record of all properties and property owners who have access through the master RAAPOA agreement. The current agreement does not identify the properties or properly identify who the RAAPOA is. This could be done by requiring the RAAPOA to submit a member roster and based aircraft information along with their annual payment. The City should also considering including an insurance requirement and add reference to the airport rules and regulations and minimum standards in the next iteration of the agreement.

### **Access Fee**

One master agreement with the RAAPOA is recommended, but the fee should be specified per RAAPOA member either through per area, per based aircraft, or a flat per property fee using FAA approved rate setting methodology. Historically, the fee has been one aggregate fee of \$20,000, equivalent to a per property fee of approximately \$270 per year. This has been the arrangement for the past 10 years and there has been no accounting to the City as to how much each property has contributed or how many members the RAAPOA has. The next version of the agreement should properly identify and document the rate setting methodology and seek a modest increase from the \$270 per year as the fee has remained constant for the past 10 years. See rates and charges section for information on acceptable rate setting methodologies and a comparison of some relevant airport examples.

### **TTF Aeronautical Commercial Use (TTF FBO)**

FAA discourages TTF FBOs, but given that there are existing TTF FBOs and the airport needs TTF FBOs to be able to provide essential aviation services (maintenance, repairs, etc.), the City should make efforts



to continue to allow and address the intent of FAA policy in dealing with TTF FBOs. The City should consider adding a requirement in the master RAAPOA agreement that TTF FBOs sign some sort of separate FBO agreement which reference the airports minimum standards for FBOs. The goal would be to be proactive in preparing for future on-airport FBOs.

#### Restricting Piggyback Access

The next version of the agreement should also include a requirement that no RAAPOA member may grant access to the airport from an adjacent property that is not a member of the RAAPOA because in that case, the adjacent property would not have an agreement with the City.



# Chapter 2 - Future Use and Development

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## 2.1 AIRPORT FACILITY NEEDS

Chapter 1 provides a detailed study of the airport and the current state of the airfield and its operation and management. This chapter will focus on current and future development needs to meet current and future demand. In the initial kickoff meeting, APAC members expressed their vision for the airport. Through this exercise, other conversations with community members, and observations, the overall vision for the airport is to provide a safe, self-sustaining airport, with maximum access to and from the Lago Vista community. This helped establish the following priorities for the City of Lago Vista and the Lago Vista – Rusty Allen Airport.

1. **Safety.** This aligns with both TxDOT and FAA’s priorities. Safety is paramount for an airport and it is the responsibility of the airport sponsor, the City of Lago Vista, to maintain the airport in a safe and operable manner. In considering future developments, safety measures will be addressed and FAA standards will be used in the design of airfield features. Bringing airfield features up to FAA standards, where possible, should be a priority when considering future developments.



2. **Financial Sustainability.** The airport currently operates at a net cost to the City when considering the total cost of ownership (operations, maintenance, and capital improvements). This is very common for general aviation airports, but the City should make efforts to make the airport as self-sustaining as possible, including both operating costs and capital improvements. This is also one of the grant assurances the City has agreed to by accepting grant funds. The City currently has very limited sources of revenue and should seek to increase revenue.
3. **Community.** Given the history of the airport and the RAAPOA's partnership, the community feel of the airport with several hangar home users, and other City amenities which are community focused (Lake Access, Golf Courses), community enhancement will be another goal for the airport developments. This would include allowing greater access to and from the community through adding public use facilities (public leased hangars, parking, tie-downs, bathrooms, terminal building) on the airfield and sensible development complimenting surrounding uses.

Through analysis of existing conditions and deficiencies, input from the City and airport users through several discussions with individuals along with input provided at the public meetings for this project, the following are identified airport needs:

### 2.1.1 PUBLIC INPUT ON AIRPORT NEEDS

- Tie-downs
  - Purpose to increase access to and from community, increase revenue
  - Priorities Alignment: Community, Financial Sustainability
- City take over fuel operations, move fuel station
  - Purpose to increase revenue
  - Priorities Alignment: Financial Sustainability
- City-owned hangars
  - Purpose to increase access to and from community, increase revenue
  - Priorities Alignment: Community, Financial Sustainability
- More City owned property
  - Purpose to increase development options by the city
  - Priorities Alignment: Safety, Financial Sustainability, Community
- Helicopter area
  - Purpose to increase access by helicopters
  - Priorities Alignment: Community
- Vehicle parking
  - Purport to increase access to and from community, to feel like a real public airport.
  - Priorities Alignment: Safety, Community
- Terminal building
  - Purpose to increase access, sense of community, feel like a real public airport with adequate restrooms. It would also improve marketability of the airport.
  - Priorities Alignment: Community
- Zoning changes for airport expansion, aviation compatible light industrial use surrounding airport
  - Priorities Alignment: Safety, Community



- Runway extension to the north
  - Increased length provides additional safety to existing users and expands access to more aircraft within the airport’s current classification. Runway Capacity: According to FAA 150/5325-4B, *Runway Length Requirements for Airport Design*, to get to 100% coverage of existing “B” aircraft, the runway would need to be extended 400 feet to 4,200 feet. Additional length may be justified if it provided access to areas for City owned facilities.
  - Priorities Alignment: Safety, Community, Financial Sustainability
- Runway lighting and sign replacement (LED)
  - The existing lighting and signage may reach the end of its useful life within the planning period and need replacement. New LED runway lighting could introduce cost savings.
  - Priority Alignment: Safety, Financial Sustainability
- Security increase needed, unauthorized use by ground transportation has been observed
  - Needed for safety, possibly install gates for any vehicle access point
  - Priorities Alignment: Safety
- Perimeter road
  - Increase safety by minimizing runway crossings by ground transportation
  - Priorities Alignment: Safety
- Increased weight capacity of runway
  - To provide more access and to increase future fuel revenue by not excluding larger aircraft
  - Currently at 12,500 pounds
  - Increase in published weight would increase Runway OFA to 400 feet. Many buildings and the parallel taxiways would need to be removed to clear the OFA. This would not be feasible and is discussed further in section 2.2.
- Non-aviation commercial development areas
  - Cars and aircraft do not mix. Any areas that are designated for future non-aviation industrial/commercial use should be identified and planned to have landside only access, no airside access.
  - Priorities Alignment: Safety, Community
- New location for windcone
  - The existing windcone is not erected and is being stored by the existing fuel station. The airport needs a windcone.
  - Priorities alignment: Safety
- Existing pavement maintenance, rehabilitation, and reconstruction
  - There are areas of existing pavement which have received a surface sealant by the rehabilitation project that was completed in 2016, but there are some areas that may need more extensive rehabilitation within the planning period. Continued preventative pavement maintenance will extend the life of the airfield pavement and maintaining pavement will also provide increased marketability of the airport.
  - Priorities Alignment: Safety, Financial Sustainability, Community



## 2.1.2 FAA STANDARDS REVIEW

In addition to the airport needs identified by the sponsor and users, an analysis of the existing airfield reveals existing non-standard features that, at minimum, should be identified and discussed, and where possible, mitigated. For some non-standard items, there may not be a feasible approach to mitigation. In that case, the approach should be to not make matters worse. In the case of new development, TxDOT/FAA will not fund new developments which are non-standard.

Table 13 - FAA Standard Issues

Airport Feature	FAA Standard Requirement	Existing at Lago Vista – Rusty Allen Airport	Mitigation Options
Runway to Parallel Taxiway Centerline Separation	150 feet	West Side Parallel: 120-125 feet (non-standard)	Alternatives: <ul style="list-style-type: none"> <li>Abandon parallel taxiway, build individual perpendicular entrance taxiways from hangars</li> <li>Stripe holdline at standard distance, consider parallel taxiing as backtaxiing and when west side tie-down area is reconstructed, construct a standard parallel through the portion adjacent to tie-down area (Recommended)</li> </ul>
		East Side Parallel: 150'	Meets standard
Runway width	60 feet	50 feet	Consider a runway widening project. A runway widening project would complement a runway lighting replacement project.
Holding Position Markings (Holdlines)	125 feet from Runway Centerline	West Side Parallel Taxiway; 65 feet	Consult with TxDOT to evaluate benefit in striping holdline at correct separation (would require holdline across most of the West Parallel Taxiway).
Runway/Taxiway Grade	Runway/Taxiway Safety Area/OFA Grading	Along the sides of the Taxiway/Runway, and some Taxiway longitudinal grades appear non-standard	Deficiencies in grade of the existing taxiway system are less of a concern in regards to safety, but can make it troublesome for taxiing. With the topography constraints of the area, it is not expected that mitigation would be possible.



Runway Protection Zone (RPZ)	Preferred for the airport to own or at minimum hold easement to RPZ area	RPZ on both ends is owned by others, no existing easements	<p>The City should seek ownership of existing and ultimate RPZ areas.</p> <p>North End (15): The City should look into a land swap with U.S. Fish and Wildlife and possible donation of RPZ land from property to the north, Thomas Penn.</p> <p>South End (33): There are several smaller city size lots in the Runway 33 RPZ. The City should aim to acquire these lots. The lots, according to the City, are not developable</p>
Taxiway/ Taxilane Object Free Area (OFA)	<p>Taxiway OFA (89 ft)</p> <p>Taxilane OFA (79 ft)</p>	On the west side of the runway, there are some hangars that impede on the Taxiway/Taxilane Object Free Area (OFA).	City should consider zoning setback requirements and discuss possible common sense mitigation with property owners for non-structure critical features.
Airspace	Part 77 Imaginary Airspace	Some buildings in Primary and Transitional Surfaces	<ul style="list-style-type: none"> <li>• Coordinate with TxDOT Aviation to determine if mitigation by obstruction lighting is needed.</li> <li>• For future hangar building application or any other building surrounding the airport, require a 7460 be filed with FAA to allow FAA to determine if the proposed construction is a hazard and if mitigation is required.</li> </ul>
Full Length Parallel Taxiway (parallel to Runway)	A full Parallel Taxiway increases safety of airfield and is justified when airport operations exceed 20,000 or when based aircraft exceeds 30	Airport has 2 partial length parallel taxiways and has 82 based aircraft with 25,800 operations	Full length parallel taxiway is recommended. This requires further negotiations with USFW for triangle area to either acquire property or expand current easement.



## 2.2 AIRPORT DEVELOPMENT NEEDS AND RECOMMENDATIONS

This section will address identified airport development needs and recommended improvements. See Exhibit 3, *Airport Development Plan* for a depiction of the proposed development plan. This section will include development concepts which may not be feasible but require further studies or analysis. The recommended development plan will be summarized into the Proposed Implementation Program.

### 2.2.1 PROPERTY ACQUISITION

Exhibit 1, Airport Proposed Property Plan, indicates the proposed property acquisition. In regards to capital improvements and growth of the airport, property acquisition should be the first priority as it is required before most of the proposed developments can even be considered. Property acquisition is eligible for 90 percent funding by TxDOT and can be reimbursed retroactively. There is not a question of *IF* TxDOT will fund property acquisition, the question is the timing as long as the property is for airport use. Given that it can be retroactively reimbursed, the City should pursue property acquisition as soon as possible. The City should coordinate closely with TxDOT to make sure the TxDOT process is followed. The property to be acquired includes the following:

- Penn Property
  - RPZ (existing and future) acquisition for runway extension.
  - Avigation easement. This is shown on Exhibit 1 and should allow the City the rights to keep control of the area of land included in the airports approach surface and Threshold Siting Surface (TSS) to be able to remove and prevent obstructions to airspace.
  - If the property is donated, 90 percent of the appraised amount could be credited towards future match funds with TxDOT
- East side hangar area property and access taxiway property. The access taxiway and the properties labeled for phase 1 should be the near term priority.
- West side tie-down, fuel, terminal, and parking area land acquisition. The three properties nearest the existing airport entrance should be the priority at this location. Additional properties should be considered as the City can warrant.
- South RPZ acquisition.

### 2.2.2 RUNWAY EXTENSION

At the Kickoff and first APAC meeting, there was a desire expressed to lengthen the runway. There were initial concerns that seemed to preclude the feasibility of an extended runway. The initial questions in relation to the feasibility of extending the Runway at Lago Vista – Rusty Allen Airport to the north were:

- **Runway Length Justification:** There was doubt that justification existed to lengthen the runway as it was suspected that the airport classification would need to increase to justify a longer runway. That was not the case. The existing runway length is 3,808 feet. According to FAA AC/5325-4B, *Runway Length Requirements for Airport Design*, for the current airport classification at Lago Vista, B-I(small), the length required to serve 100 percent of small aircraft serving 10 passengers or less is 4,200 feet. See the chart below from the AC. This chart is to be used when the airport is “primarily intended to serve communities located on the fringe of a metropolitan



area,” which describes Lago Vista. This suggests a runway length of 4,200 feet, an extension of 400 feet, would be justified without an increase to the ARC.

7/1/2005

AC 150/5325-4B

Figure 2-1. Small Airplanes with Fewer than 10 Passenger Seats  
(Excludes Pilot and Co-pilot)

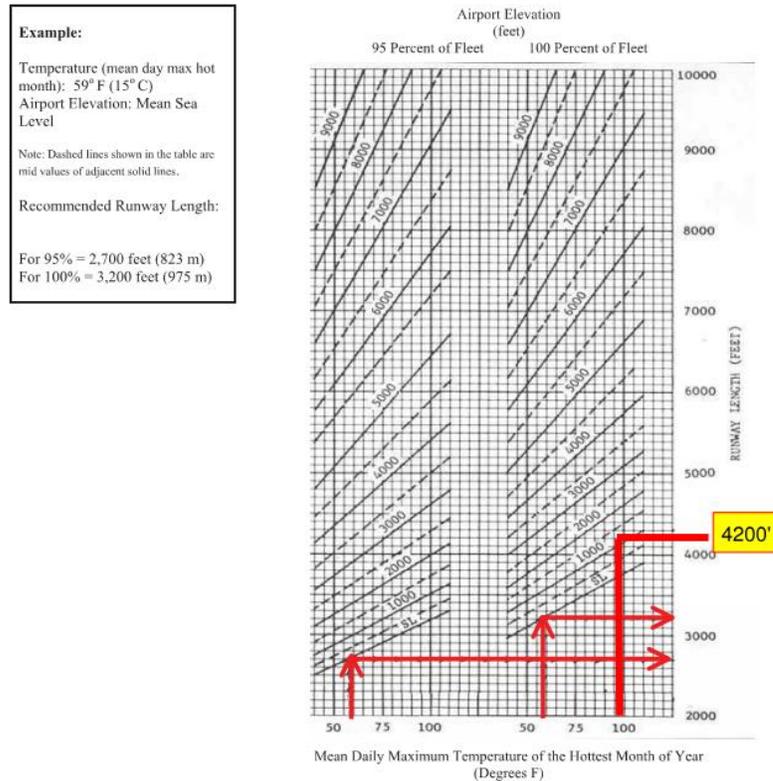


Figure 26 - Runway Length Determination Chart from FAA AC/5325-4B, Runway Length Requirements for Airport Design

- **Grant Assurance 4, “Good Title”.** Another perceived hurdle to a runway extension was Grant Assurance 4. The typical expectation is for the sponsor to own property on which it would extend the runway, as well as the OFA and the RPZ for the extended runway.
  - The guidance for this grant assurance, as described in FAA Order 5190.6B, *Airport Compliance Manual* (Sept., 2009), is that “good title exists or that the sponsor will acquire good title for any property where federal funds will be used. For airport development programs, the sponsor must assure that the sponsor, another public agency, or the federal government holds good title to the airfield or airport site.”
    - U.S. Fish and Wildlife Property at Runway 15 end. The airport currently does not own the property that roughly a third of the northern end of the runway is on. Use as a runway is granted through an easement with the U.S. Fish and Wildlife for “constructing, operating, and maintaining an airport runway.”
      - The property is owned by the federal government, which would meet “good title” requirements.



- Penn Property: The property north of the USFW runway easement is privately owned. The Penns have mentioned the possibility to donate land to allow for a runway extension. No formal negotiations have begun at this point. The minimum amount of property needed to acquire would be the length needed for the runway extension, its associated Runway Object Free Area (ROFA), the existing and ultimate Runway Protection Zones (RPZ), and the Object Free Area for parallel taxiways adjacent to the extended runway.

Another question was if it would be feasible to extend the runway to the south, the Runway 33 end. This option was determined to not be feasible due to runway safety area grading requirements beyond the runway end and because the change would prompt a new RPZ determination by the FAA which may require closure or relocation of Rawhide Trail.

Lago Vista – Rusty Allen Airport is a highly utilized airport. Increasing runway length, even if it is a displaced extension, adds to the safety and usability of the airport. While the airport is unique, with many challenges, the proposed runway extension and the solutions to non-standard conditions would allow the airport to operate in a safer and more standardized manner.

### Further Runway Extension Discussion

On September 22<sup>nd</sup>, 2016 a meeting was held with TxDOT, the City, consultant, and Thomas Penn, the owner of the property to the north of the airport. Thomas Penn indicated that he would be inclined to possibly donate land for future airport use, in addition to land needed for the runway extension, if the runway extension allowed airside access to his property. While the calculated and justified runway length only extends the runway 400 feet, to 4,208 feet, TxDOT offered that if there was a need for more facilities and a longer runway would allow access for future facilities, a longer extension of 800 feet would be justified. This would require the City to acquire not only the land for the extension and the associated RPZ and other safety and object free areas, but also to acquire land to expand needed City owned facilities, such as tie-downs or City hangars or land lease. This arrangement would need to be negotiated, but if this were to come to fruition, it would be beneficial to the City as it would increase capacity for which there is a current demand and increase the safety and overall usability of the airport with a longer runway.

### Parallel Taxiways to Accommodate Runway Extension

Including a parallel taxiway to serve the extended runway is also recommended to increase safety. The operations and based aircraft at Lago Vista-Rusty Allen Airport justify a full length parallel taxiway according to TxDOT Aviation Division Policies and Standards (>20,000 operations or >30 based aircraft). In order to construct a parallel taxiway, the existing runway easement from the US Fish and Wildlife (USFW) would need to be expanded or the City would need to acquire some of the USFW property. The expanded lease or acquisition of the property for the parallel taxiway should include a standard taxiway Object Free Area at the correct distance from the runway.



## Runway Extension Recommendation

It is recommended that the City include a runway extension of 800 feet to the north off the Runway 15 end in the long range plan for the airport. Other developments including property acquisition and hangar and tie-down development may be of higher priority as the City needs to have a foundation of facilities to generate revenue and allow better access to itinerant traffic. In addition to the runway extension, a parallel taxiway should be pursued, either on the east or west side of the runway, which will require working with USFW to either expand the current runway easement or acquire property.

The next steps would be for the City to pursue land acquisition options with the Penn property to the north, especially if land donation is possible. The footprint should include Runway Protection Zone (RPZ), area for the existing and extended runway, Object Free Areas for parallel taxiways and a tie-down apron, and an easement or acquisition of close-in areas of the approach surface as shown in the exhibits. The City should coordinate with TxDOT Aviation Division throughout the land acquisition process. If land is acquired for the extended runway RPZ, the City would then coordinate with TxDOT Aviation for environmental considerations for the runway extension, which may require an environmental assessment. There are some known endangered bird species in the vicinity of the airport, so it is possible that a runway extension is not feasible. However, due to the area of the extended runway centerline being cleared, the likelihood for habitat disturbance due to the proposed runway extension is low based on available maps.

### 2.2.3 RUNWAY LIGHTING AND SIGNAGE REPLACEMENT (LED)

It was expressed that new LED runway lighting is desired to introduce costs savings. The existing lighting will eventually reach the end of its useful life, and replacement should be considered for future improvements. Runway lighting is eligible for funding through TxDOT at 90 percent funding from TxDOT.

### Runway Lighting and Signage Recommendation

Runway lights are important to the safe operation of the airport. The City should track maintenance and repairs and coordinate with TxDOT Aviation to determine the urgency of the lighting replacement. If a runway extension and/or widening is programmed, that would be the ideal time to replace the runway lighting and signage as the layout is based on pavement geometry. Some of the existing signs are starting to fade and the City should consider a short term solution using RAMP funds to replace or rehabilitate the sign faces.

### 2.2.4 RUNWAY WIDENING

The existing runway is 50 feet wide, while the standard width for a B-I (small) airport is 60 feet. A widening project would standardize the airport and increase the pavement available for aircraft wander during landing and takeoff. It is recommended that a runway widening project be included in the future developments, but it would be best completed as a combination with a runway lighting and/or a runway extension project.



## 2.2.5 NON-STANDARD EXISTING WEST SIDE PARALLEL TAXIWAY AND HOLDLINE SEPARATION

The existing west side parallel taxiway is approximately 25 feet too close to the Runway. The standard centerline separation for a B-I (small) airport is 150 feet. The existing west parallel taxiway separation is closer to 125 feet. The existing hold lines are also at non-standard locations. They are painted at the Runway Safety Area instead of at the correct distance of 125 feet which corresponds to the Runway Object Free Area (ROFA) and the Runway Object Free Zone (OFZ). To relocate the parallel taxiway to its standard separation would require removal of approximately 23 existing hangars due to the Taxiway OFA. The cost and process would be prohibitive.

- Mitigation Alternatives
  - **Runway Shift:** One alternative to address the non-standard west side parallel taxiway would be to shift the entire runway east. An initial analysis of the site indicates that a shift to the east of 20 feet would put the west parallel taxiway at the correct separation. However, this would require full reconstruction of the east side parallel and a reconstruction of much of the runway as FAA standards do not allow an offset runway crown. A new full airspace analysis survey would likely be required to update the GPS procedure to Runway 15. In addition, the Taxiway OFA would still not be clear on the west side, which is still non-standard. Due to the very high cost of this concept and that it does not fully address the non-standard taxiway, this alternative is not recommended.
  - **Individual Hangar Access Taxiways:** Another solution to standardize would be to abandon the existing west parallel taxiway pavement and construct individual access taxiways from the existing hangars, perpendicular to the runway, installing holdlines at the correct locations. While this is not ideal as it introduces several access points to the runway, it would meet FAA standards. In addition to the single access taxiways, an additional connector taxiway between the east side parallel taxiway and the runway would allow aircraft to cross the runway and minimizing taxiing on the runway.
    - One possible issue with this approach is the idea of direct access from an apron to a runway. There is guidance in the FAA Advisory Circular 150/5300-13A, *Airport Design*, which does not allow taxiway design to allow direct access from an apron to a runway unless there is a turn involved. The intent of this guidance is to prevent unintentional entrance to the runway area from public aprons where someone not familiar with the airfield could accidentally enter the runway. This approach to standardization would not violate the intent of the direct access guidance.
    - This would be a costly approach and since these would serve only certain individual hangars, TxDOT Aviation's (and FAA) policy would not participate in the funding for these.
  - **Re-Stripe Holdline at Standard Location.** Another solution, while unconventional, would be to cease considering the parallel taxiway as a parallel taxiway, but consider it similar to apron pavement and install a hold line along its length. This would mean that any aircraft using the pavement to taxi would be inside the OFZ, similar to when aircraft back taxi on the runway, which is already done frequently as Runway 15 is the favored



end. This approach is actually shown on the current Airport Layout Drawing (ALD). As with the previous alternative, an additional connector taxiway could be constructed to minimize taxiing inside an active Runway OFZ. While this is an unconventional, it would seem to meet the intent of the FAA standards for airport design. The piece of parallel taxiway along the proposed tie-down apron would be designed at the correct separation from the runway. This is depicted below:

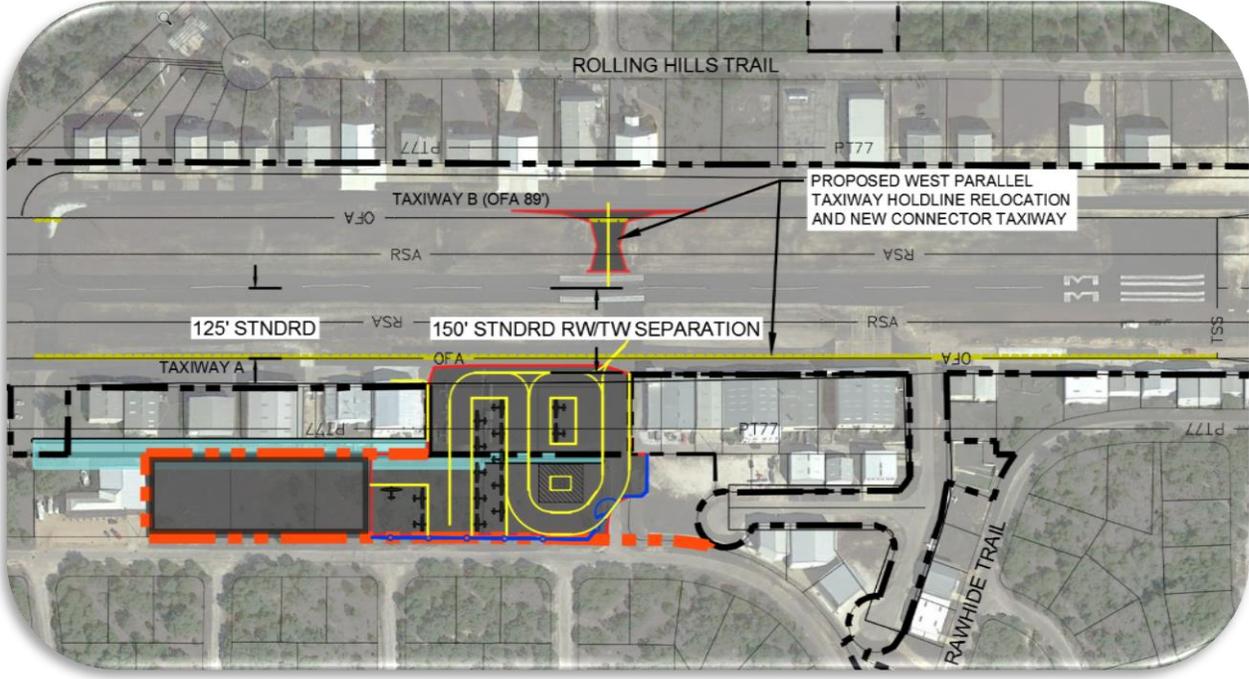


Figure 27 - Holdline Relocation and new Connector Taxiway

**West Side Parallel Taxiway/Holdline Recommendation**

If TxDOT and the City deem that mitigation of the non-standard west side parallel taxiway is needed, it is recommended that to mitigate the non-standard west side parallel taxiway and holdline, the holdline be re-striped at the correct location. This is the approach shown on the previous approved Airport Layout Drawing (ALD), which will be updated as part of this planning project. The recommended timing of this work would be in conjunction with or soon after the West Side Tie-down Apron.

**2.2.6 EXISTING PAVEMENT MAINTENANCE, REHABILITATION, AND RECONSTRUCTION**

The airport recently completed a pavement rehabilitation of the entire airport through TxDOT Aviation's CIP. Most of this project involved a surface sealant on existing asphaltic concrete (AC) pavement, but the southern portion of the west parallel taxiway along with 2 other isolated areas were reconstructed in Portland Cement Concrete (PCC). Some portions of the airfield pavement that received a surface sealant are experiencing base failure and the rehabilitation project in 2016 was a short term solution.

## Pavement Maintenance, Rehabilitation, and Reconstruction

The airport needs to focus on property acquisition and increasing City owned facilities, but maintaining the existing pavement should be a priority as well. The Airport should use the TxDOT Routine Airport Maintenance Program (RAMP) to make isolated repairs as necessary to address base failure and for regular preventative maintenance to seal cracks. The recent rehabilitation project and future use of RAMP to maintain the existing pavements should keep the airport pavement safe and operable while it focuses on acquiring land and developing revenue generating facilities.

### 2.2.7 NEW LOCATION FOR WINDCONE

The existing windcone has been taken down and the airport needs to have a windcone on the airfield. One suggestion was to install a windcone on an existing hangar. This option was acceptable to TxDOT, but it also presents challenges. If it is a City owned windcone, having it installed on a private hangar would require some sort of agreement to make it a sustainable solution. Also, installing it atop a building would likely require a structural evaluation to ensure the hangar and the windcone tower wouldn't undermine each of their structures. The FAA standards were used to determine the optimal location, which would be 1000 feet inboard of the runway end on the left side, outside the runway Object Free Area (OFA), although allowed to be inside the OFA if a frangible ground connection is used and there is an operational need.

#### Windcone Recommendation

It is recommended the windcone be placed as shown below, 1000 feet from the runway 15 end, on the left (as a pilot approaches the runway end), halfway between the OFA and RSA with a frangible coupling. This could be done using RAMP funds (50% split). The windcone is a safety measure associated with the runway, similar to runway edge lights. The City should consult with the USFW to see if they could consider a windcone similar to runway edge lights and allow installation within the existing runway easement.

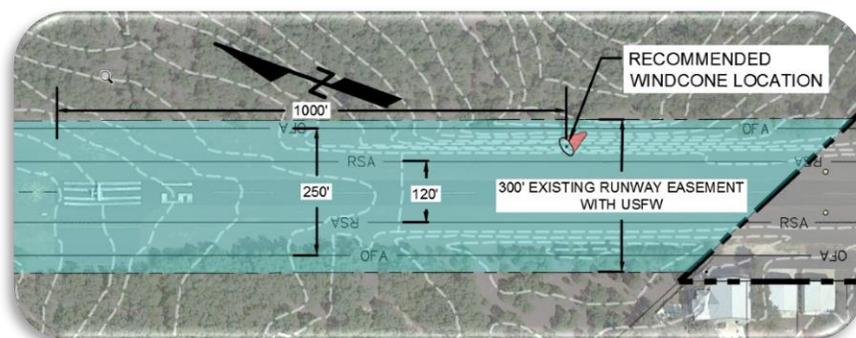
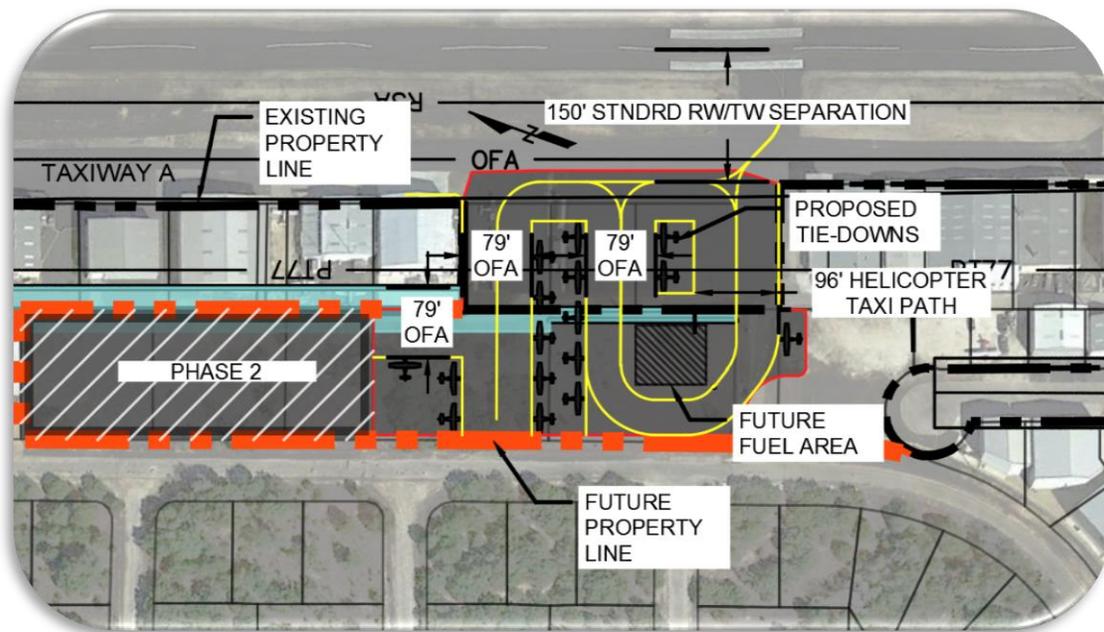


Figure 28 - Recommended Windcone Location



## 2.2.8 TIE-DOWNS

Currently, there are 11 public tie-down spots. Many of these are currently occupied by long term, based aircraft. There is minimal room for itinerant aircraft to come and tie-down for the day to visit the golf course, experience Lake Travis, go hunting, or to conduct business in the area. The airport based aircraft has grown steadily since 1995 and the airfield is pretty much at capacity with its current facilities. Users end up needing to use undeveloped areas to temporarily park their aircraft. Additional tie-downs would help the City incur additional revenue, but would also allow for increased access to and from the community, increasing the indirect economic impact the airport has to the City. There was one area identified as a potential area for tie-down development on the west side of the runway, which would expand the existing tie-down apron. See below for the proposed West Side Tie-Down Apron Development. This was agreed to be the optimum location for tie-downs since undeveloped land is scarce and having the public tie-downs close to the airport entrance, the Fueling area, and the future terminal building made the most operational sense.



*Figure 29 - Proposed West Side Tie-Down Apron Development*

Another option for increasing tie-downs would be to put a row of tie-downs at the southwest corner of the airport. In conversations with TxDOT, the City was told that TxDOT may not fund these given their proximity to the runway end environment. According to an initial analysis, these tie-downs would be outside the RPZ and there is a significant decrease in grade in that area compared to the runway end, indicating that the parked aircraft may not penetrate the Part 77 imaginary surfaces. While ideally, this would be a paved area, the City could start by grassing the area and providing tie-down anchors for relatively minimal cost. In addition, if enough land is acquired as part of the runway extension, an additional tie-down apron should be included adjacent to the runway as shown in the development plan.



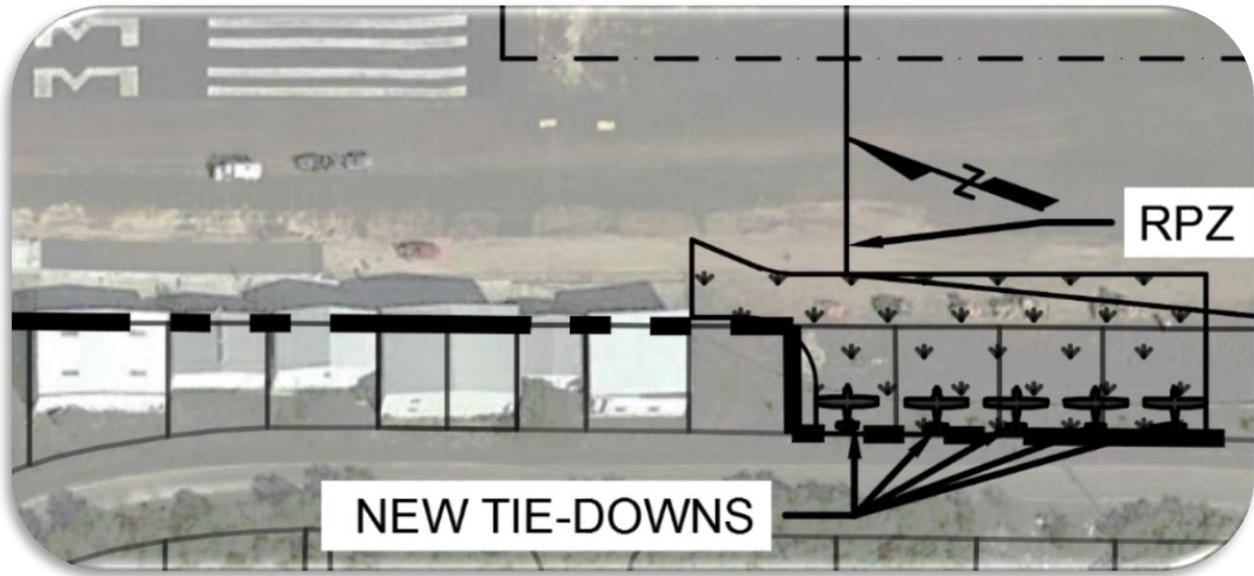


Figure 30 - Proposed City (non-TxDOT) grassed Tie-Down Area

### Tie-Down Recommendations

It is recommended the City pursue a grassed tie-down area at the southwest corner of the airport and use for long term tie-down tenants, charging the current \$400 per year for use per tie-down. The City would need to acquire property in order for the West Side Tie-Down Apron Development to occur, which should be a priority. There is demand for tie-downs and currently there are several aircraft parking in undeveloped areas due to the lack of tie-down capacity. The area recommended for more tie-downs would be adjacent to the airport entrance, expanding the current tie-down apron. This area is adjacent to the recommended public parking and terminal area, which will keep public use and fueling consolidated to one area. These proposed developments are recommended to be included in the development plan, the airport needs more public use tie-downs to accommodate the increasing traffic. This would also increase the airport revenue in tie-down fees.

### 2.2.9 FUEL OPERATIONS

The City currently only receives \$1 annually from the private self serve fuel provider. The City and other stakeholders would like to have the City generate revenue from the fuel. Also, the existing location of the fueling station causes congestion on the taxiway and you can only pump from one side. The City would like the airport to also have jet fuel in addition to the AvGas it currently has. The proposed location for a future, city owned fuel farm is in the proposed West Side Tie-Down Apron development.

### Fuel Recommendations

A short term suggestion, until the City could afford to invest in a fuel farm, would be to issue a request for proposals for a temporary fuel provider, where the City would collect a fuel flowage fee per gallon of fuel sold. Common fuel flowage fees range from \$0.10-0.12 per gallon. This is a very common practice



and allows airports to generate a revenue on fuel sales. Fuel farms are eligible for 75% funding through TxDOT and it is recommended that when the property for the proposed fuel farm is acquired and when funding from the City and TxDOT is available, the City consider investing in a fuel farm (25% match). The City could then enter into an agreement with an FBO to run the fuel, allow it to be self-serve, or determine if hiring City staff to manage the airport and provide fuel service is viable. Some airports receive as much as \$0.50 per gallon when they own and run the fuel farm. For now, a temporary solution should be considered to allow the City to gain revenue from fuel to include a fuel flowage fee. Property acquisition is vital to making a future fuel farm a reality.

### 2.2.10 CITY-OWNED HANGARS

The City and APAC agreed that the City should own hangars on the airport and rent them out. General Aviation airports commonly use rental fees from airport owned hangars as a primary source of revenue to sustain the airport. TxDOT Aviation will fund 90% of hangar (building only) costs up to \$600,000, which makes this a very attractive and inexpensive option for the City to own revenue generating facilities. It was agreed that, if the City can acquire property on the east side of the airport, that there be an East Side Hangar Development area. The APAC preferred to show a large area for acquisition and development. However, to maximize the TxDOT funds by keeping the initial development closer to \$666,667 (90% would be \$600,000), the development is shown as phased, where Phase 1 would be the initial project and Phase 2 would be developed in the future when funds were available.

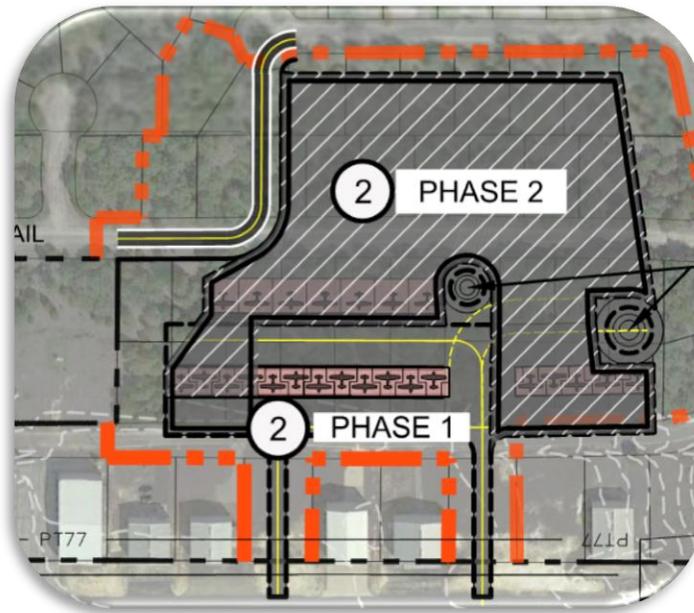


Figure 31 - Proposed East Side Hangar Development

Another area that was identified where the City could own and rent hangar space was near the airport entrance where the proposed vehicle parking and terminal building area shown. This is shown as a single

box hangar. As discussed in section 2.2.7, Terminal Building, the City could consider a combined terminal/hangar facility and lease out the hangar portion.

### Hangar Recommendation

Owning hangars and renting them out for revenue is a primary source of revenue for most airports throughout Texas. There is a shortage of hangar space throughout the state, especially here in the central Texas market. The City receives regular calls asking if there is hangar space available for rent at the airport. There is demand and the City should proceed with the proposed hangar developments. The first step would be to pursue acquisition of property within the proposed development areas. If the City owned 8 hangars and could rent them out for \$300 per month, that would be an increase in annual revenue of \$28,800, which would more than double the current Airport revenue.

### 2.2.11 HELICOPTER PARKING AREA

Currently, there is no area designated for helicopter parking on the airport. As discussed in the APAC meetings, an area for helicopters, especially for emergency services, would be beneficial to both the airport and the region. As part of the planning effort, PSC contacted StarFlight, an air ambulance service serving Travis County and the Lago Vista area and in conversations with them, found that they would appreciate and would likely use helicopter parking areas if available. They also said they'd likely buy fuel, if Jet A was available. Their fleet includes a UH-1 (Huey) and 2 EC 145 helicopters. An area inside the proposed East Side Hangar Development is shown as possible location for helicopter parking. Also, the clear taxi path required for a Huey, according to FAA Advisory Circular 150/5390-2C, *Heliport Design*, is 96 feet, which has been included for access to fuel in the proposed West Side Tie-Down Development.

### Helicopter Parking Recommendations

An area where helicopters can park and stage would be beneficial and it is recommended that parking for 2 helicopters be included in the development plan. The property acquisition and development of the proposed East Side Hangar Development is required before the helicopter parking can be considered.

### 2.2.12 TERMINAL BUILDING

An airport terminal building was also discussed as a need for the airport. An airport terminal building gives structure to an airport, allows visitors and users a place to meet, use a restroom, flight plan, and find useful information. While it does not generate direct revenue, a terminal building can give the airport a real sense of community and increase the overall marketability of the airport. Terminal buildings, like landside facilities, are eligible for TxDOT Aviation funding at a 50% match up to \$500,000. The development plan currently shows a standalone terminal building across from a city owned box hangar, but the City may also consider a combined terminal/hangar facility or a small portable building style terminal building to keep the costs down. Several airports have chosen the portable style and used RAMP funds instead of the terminal building program.

Another desire and potential that some stakeholders have mentioned is working with the Emergency Services District (ESD) to see if they would participate in a joint facility for an airport terminal and some



sort of ESD base or training facility. While this may be convoluted in how the funding eligibility and the required match from the City might be, if it is a truly viable option, this concept should be further investigated by the City. If there is funding availability, this could be a great partnership.

### **Terminal Building Recommendation**

It is recommended that a terminal building be included in the development plan, but given the potential cost, other developments that increase airport revenue should take priority. Property acquisition is required prior to consideration of a terminal building. The recommended location for the terminal building is adjacent to the airport entrance, to the south of the entrance road. This will allow for a public area for the public to park and keep landside access controlled and separate from airside pavements. This is also next to the public tie-down area, which will best serve the airport. Once the City has acquired the property, the City should coordinate with TxDOT to explore the options available. TxDOT recommends the Terminal Building be included within 10 years, but the City would need to determine the type of facility desired and budget accordingly. The current development plan shows a concept for a terminal building, this concept is not set in stone and may be changed as needed.

### **2.2.13 VEHICLE PARKING**

Currently, there is only one area designated for ground vehicle parking, but this area is not even visible from the airport entrance. The proposed area for future vehicle parking is near the airport entrance, adjacent to the proposed future terminal building. This is the most logical area for vehicle parking. TxDOT funds landside (as opposed to airside) projects, such as ground vehicle parking, at 50% up to \$50,000.

### **Parking Recommendation**

Having an area where people can park is a vital part of a public airport and the parking area should be included in the development plan. As with most of the proposed developments, property acquisition is needed prior to developing a parking area. This could be accomplished through TxDOT's Capital Improvement Program (CIP) or through the Routine Airport Maintenance Program (RAMP) which is a 50% match grant that covers airport maintenance and small capital improvement projects. The City could also charge long term parking fees for any parking over 72 hrs as another source of revenue.

### **2.2.14 PERIMETER ROAD**

A road around the south end of the airport perimeter would increase safety by minimizing runway crossings by ground transportation. There is currently a dirt road at the south end. Perimeter roads are allowed inside an RPZ as long as it's outside the ROFA and it is for on-airport transportation only without landside access. There are several other revenue generating developments that would take priority, but the City should consider a paved perimeter road in the overall development plan, it would improve safety in reducing vehicle runway crossings.



## **2.2.15 SECURITY INCREASE NEEDED, UNAUTHORIZED USE BY GROUND TRANSPORTATION HAS BEEN OBSERVED**

At the first APAC meeting, it was mentioned that there was unauthorized use of the airfield by vehicles occurring at the airport. The airport is currently very open to the public. Whether intentional or not, it is very simple for anyone to wander onto the airport in their car, even onto the runway. Increased security would increase airfield safety and should be a priority in future development. Gates and fencing is included in the development plan, but short term solutions should be considered to reduce unauthorized access and use of airfield pavements.

## **2.2.16 ZONING CHANGES FOR AIRPORT EXPANSION, AVIATION COMPATIBLE LIGHT INDUSTRIAL USE SURROUNDING AIRPORT**

Exhibit 2, Airport Zoning, shows the zoning recommendations. The areas to the East and West of the airport, not designated for future airport development, have been recommended for industrial use, compatible with the Airport. This aligns with the City's 2030 Comprehensive Plan.

## **2.2.17 LAND SWAP WITH US FISH AND WILDLIFE FOR TRIANGLE AREA WEST OF RUNWAY 15**

The triangle shaped area of land to the west of Runway 15 is a potential area for the airport to increase the safety of the airfield by constructing a full length parallel taxiway to the Runway 15 end, being able to control and prevent obstructions to airspace, and mitigating wildlife hazards to aircraft. There are also other opportunities that the City could realize if this triangle area were acquired including greater access for emergency services and expanding other needed facilities. This would require the City to have an expanded easement or acquisition of a portion of the triangle area. FAA, TxDOT, and the City would prefer for the City to own this area as well as the current runway easement area, along with a sliver of property to the East of the runway to leave the option for a future parallel taxiway and the Threshold Siting Surface (TSS) area to control obstructions. Thomas Penn, the property owner to the north, has attempted to do a land swap with US Fish and Wildlife, but was told that it would literally take an act of congress for that to happen. Another option that was discussed was to request an expansion of the runway lease to include the triangle area to allow for airport expansion.

### **Land Swap Recommendation**

It does not seem like land acquisition of the triangle area is likely based on input from Thomas Penn, the private property owner to the north, but it is recommended that City pursue this further with the US Fish and Wildlife to see if a land swap or an expansion of the existing runway easement is even possible. If it is feasible, it would require the city to acquire property surrounding the airport to offer for a swap. See figure below for a depiction of the triangle area. At minimum, it would be beneficial if the existing runway easement would be expanded to allow for a parallel taxiway as this would further the safety of the airfield.



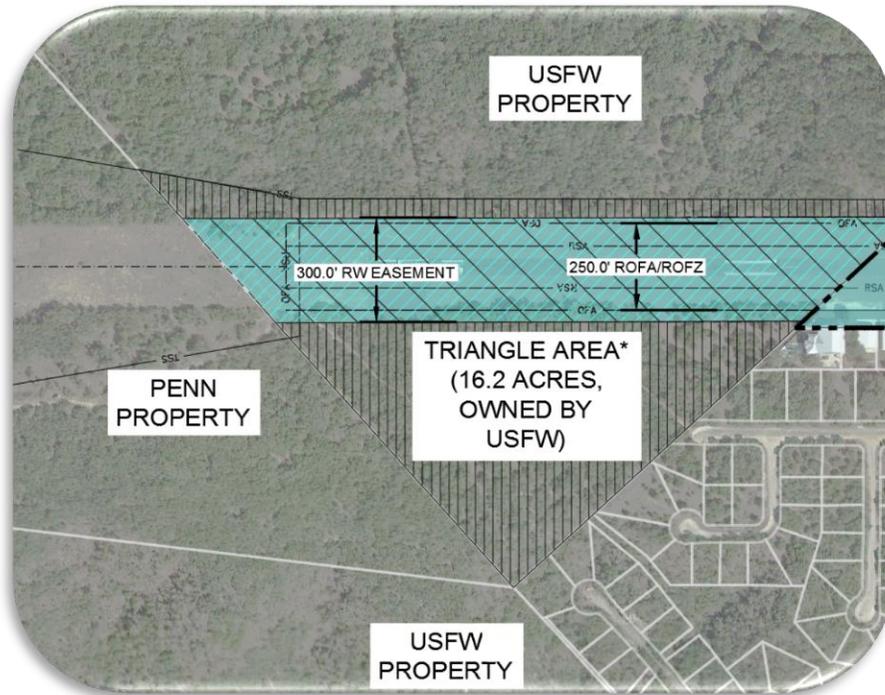


Figure 32 - Proposed Triangle Area Land Swap/Acquisition. To include area east of the Runway for future parallel taxiway OFA and Threshold Siting Surface (TSS) to be able to control obstructions.

## 2.2.18 INCREASED WEIGHT CAPACITY OF RUNWAY, INCREASE IN AIRPORT CLASSIFICATION

There was a discussion in the first APAC meeting of increasing the weight capacity of the runway. The benefit would be to allow larger aircraft to use the airport and purchase fuel. Currently the weight capacity of the airport and runway is for 12,500 lb aircraft. This is part of the airport classification of "small". The pavement itself may or may not be capable of supporting aircraft heavier than 12,500 lbs. This action plan did not include an analysis of the pavement structure. However, if the airport were to be classified for aircraft larger than 12,500 pounds, the Object Free Area (OFA) would increase from 250 feet wide to 400 feet. In order for TxDOT/FAA to approve an upgrade of the airport from "small", it would require the OFA to be clear, which would require removal of both parallel taxiways and most of the hangars on the west side of the airport. The same concept is true in considering increasing the other facets of the Airport Reference Code (ARC); the Airport Approach Category of "B" and the Airplane Design Group of "I". Upgrading either of these would also require removal of half or more of the existing hangars and both of the parallel taxiways.





Figure 33 - Increase in Weight Capacity of Airport Not Possible. Would require removal of all hangars within a 400 feet wide OFA.

### Airport Classification, Weight Capacity Recommendation

While there are existing non-standard taxiway features on the airport, the existing runway RSA and OFA are met. Any increase to the ARC or weight capacity of the airport would require standardization of the airfield to the RSA and OFA standards associated with the upgraded classification. This is not feasible as it'd require condemnation and removal of much of the existing infrastructure and hangars. It is recommended that the City consider the ARC of B-I (small) as the permanent classification for the Lago Vista – Rusty Allen Airport.

### 2.2.19 ZONING CHANGES FOR AIRPORT HAZARD HEIGHT ZONING

It has been mentioned that some sort of zoning overlay or aviation easement be considered to protect the City from complaints about noise from airport neighbors. The 2030 Comprehensive Plan recommends considering rezoning of the areas immediately to the east and west of the airport to light industrial, which would be airport compatible. Also the areas to the north and south of the runway end mostly drop off in elevation, likely preventing obstructions to airspace. The City already has a Height Hazard Zoning protecting the airspace.

### Zoning Recommendations

It is recommended that the City move forward with the zoning recommendations from the 2030 Comprehensive Plan and pursue control of the Runway Protection Zones (RPZ) through acquisition. With the recommended rezoning, the acquisition of the RPZ, and the already in place Height Hazard zoning, no further zoning actions are required. The City may consider a property notification document to include with disclosures in future title transfers within the airport environ notifying the property owner they are within an airport zone if the City is concerned with potential noise complaints.

## 2.3 PROPOSED IMPLEMENTATION PROGRAM

The proposed development plan has been put together based on recommendations from the needs identified to both meet existing and future demands for the airport. The City of Lago Vista will continue to grow as the greater Austin area continues to grow. The Airport needs more facilities to both become financially self-sustaining and to have capacity to meet current and future demand. Currently aircraft owners are parking aircraft in undeveloped areas and current users along with the City's Director of Aviation receive inquiries for aircraft storage (hangar or tie-down) on a very frequent basis. To prepare for the future development, there are some general airport management recommendations along with property acquisition that will need to occur. The Airport implementation program includes airport management recommendations based on chapter 1 and a proposed Capital Improvement Program for the near term, the next 10 years (2017-2026), and the long range plan (2027 and beyond). This is a snapshot projection for the airport. Planning is an ongoing process and the City and TxDOT will need to annually review the plan and make adjustments as necessary.

The projects, phasing, and costs presented in the implementation program are based on the best available information at the time of its formation. Individual opinions of probable costs (OPC) have been developed for each of the proposed developments. These are preliminary estimates and should be used for planning purposes only. The City is the airport owner and sponsor and will be responsible for funding the sponsor share required for TxDOT Grants. TxDOT and the City have provided preliminary funding projections and input on project phasing to help develop the Capital Improvement Program (CIP) portion of the program. The purpose is to provide a reasonable projection of the capital needs to be used in the City of Lago Vista and TxDOT's budgeting and programming processes.



### 2.3.1 AIRPORT MANAGEMENT RECOMMENDED ACTION ITEMS

#### City Action Items (Based on Chapter 1 Recommendations)

- The City should contact the local fire, police, and ESD to see if there is a need for and the feasibility of an emergency services facility at the airport.
- Fencing, automatic gates, and/or some sort of barriers should be considered to eliminate unauthorized access onto the airfield, whether intentional or not. Currently, the main entrance gate remains open and it is fairly easy for someone to drive right onto the runway. There is also a vacant lot by the F-4 airport sign that is being used as an unrestricted airport entrance. While the long term solution should include automatic gates and fencing in conjunction with new parking areas, terminal building, etc., the City should implement short term solutions for decreasing unauthorized use of the airfield pavements.
- A standard highway type airport with arrow sign should be installed at the intersection of Bar K and Rawhide Trail directing the public towards the airport entrance.
- When the City starts property acquisition for the north end, the City should also pursue avigation easements within the Threshold Siting Surface (TSS) to gain the freedom to remove and prevent obstructions.
- City should pursue ownership of Runway Protection Zones (RPZ) for Runway 15 existing and future and for Runway 33.
- It was mentioned that the Penn property to the North of the airport was interested in donating land for a runway extension. This should be a priority for the City as it is a great opportunity to prepare for a runway extension. Also, if the land is donated, TxDOT will allow the City to consider it as in-kind match for future projects, which would relieve the City of some of the financial demands for the future Capital Improvements.
- City should change the name of the current "Minimum Standards" to Airport Rules and Regulations and review the TxDOT Rules and Regulations template document to see what changes may be warranted. Also, a new "Minimum Standards for FBOs" should be drafted. TxDOT has a template form the City can use as a starting point. These templates are included in Appendix 2.
- The Airport Master Record with FAA is currently out of date in regards to based aircraft and operations. The City should seek to gain based aircraft data (tail numbers) from the known 82 based aircraft and update the published information (the published information shows 17 based aircraft). This could put the City in a better position for receiving grant funds as airports with more activity are typically given priority over those with less.
- The airport financial record keeping should be improved. Any funds coming in or out of the airport should be accounted for in the airport budget. Also, an airport specific account could be set up for when the Airport operates at a surplus, so the City can save for Capital Improvements.
- Change the fuel arrangement to start charging a fuel flowage fee (\$0.10-\$0.12 per gallon is typical) to a fuel service provider. This could be done through issuing an RFP for a new fuel service provider. The new agreement should not grant exclusive rights and should be developed considering a future City owned fuel farm.
- The City should consider providing a loaner car to attract visitors and allow them to visit Lago Vista.
- The City should also pursue a land swap or some sort of acquisition or expansion of the existing runway easement with the U.S. Fish and Wildlife.



- Through the Fence (TTF) Access Agreement with RAAPOA Recommendations are covered in section 1.6.2 of this document, and they include:
  - Keep the master agreement framework, but make revisions and execute the new agreement when the existing agreement expires (or sooner if both parties agree).
  - A master agreement with the RAAPOA is recommended, but a property specific fee should be assessed instead of one aggregate fee.
  - The property specific fee should be set using an FAA approved method
  - The agreement should
    - State TTF FBOs are required to have a separate FBO agreement with the City
    - Better define who the RAAPOA is and the City should maintain a list of members and based aircraft information
    - Discontinue the RAAPOA collection of tie-down fees and the five percent match towards CIP projects
    - Reference the airport Rules and Regulations for users to abide by
    - Include insurance requirements
- An airport fee schedule should be developed and the City should post this at the airport along with instructions for payment. This should include all fees for the airport both existing and future, so the City is prepared for future development. Also, the City should set up a convenient way to receive payments. This could be done as it is currently through physical collection near the tie-downs, but the City could also add an online payment option and put the website address for payment on the sign along with a QR code.

These recommendations, if implemented, would increase airport revenue and improve airport operation. These action items have been summarized into a recommended plan in Table 14 (next page.)



Table 14 - City Airport Management Action Item Summary and Recommended Plan

Year	City Airport Management Action Items						Land Action Items			
2017	Obtain Based Aircraft Data (Make/Model/Tail Number), Update Airport Data (Based Aircraft and Operations)	Issue Fuel RFP, start charting fuel flowage fee (\$0.12 per gallon)	Coordinate with local police, fire, and ESD to determine feasibility of a joint Terminal Building facility	Refine airport budget, start accounting for airport expenses separately to include all funds in/out.	Develop Standard Airport Fee/ Rate Schedule and payment method for Airport fees (secured box collected by City, online payment option, City office payment)	Consider short term Options for securing airfield from unauthorized airfield use	Penn RPZ Land Acquisition (Donation) and avigation easement	Property Acquisition for West and East Side developments (Ph 1 minimum)	Pursue Land Swap or Expansion of Lease with USFW	Continue with Comp Plan Zoning Recommendations
2018	Develop Airport Minimum Standards for FBOs and Airport Rules and Regulations (Use existing City document as starting point for Rules and Regs)	Develop Standard FBO agreement for TTF FBOs and future on-airport FBOs		Revise TTF Agreement to include recommended changes.	Revise City website to include an Aviation site under "Local Government" departments. Post Fee/Rate, Minimum Standards, Airport Rules and Regulations	Install airport with arrow sign at Rawhide and Bar K				
2019	Execute new TTF Agreement by 3/1/2019 (Current Agreement expires last day of Feb, 2019)	Develop standard hangar lease agreement for future hangars								
2020	Consider providing loaner car for transportation for visitors									
2021	Consider hiring very part time airport superintendent (\$10k/yr)						Pursue south RPZ land acquisition	Pursue Property Acquisition for East and West development phase 2 areas and consider ANY lots that advertise for sale with direct access to airport.		
2022										
2023										
2024										
2025	Increase Airport Superintendent responsibilities and salary (to \$20k/yr)									
2026										



## General Airport Management Recommendations

- Distribute and continually reinforce the airport organizational chart and who the primary airport owner point of contact is. All airport management issues, meetings, etc. should include the primary point of contact, currently the Director of Development Services, David Harrell.
- Treat and think of the Airport as a business, almost separate from the City. This is important as the City makes strides to make the airport self-sustaining. All airport specific expenses, revenue, capital improvement costs should be accounted for independently.
- For airport construction projects, the City may want to consider instructing contractors hauling materials to use Bison for airport access to prevent material spillage (this occurred during the 2016 CIP project).
- The existing AWOS has wind sensors sensitive to development. Future development considerations should include provisions to prevent obstructions to the wind sensor. An exhibit has been included in the Appendices to assist in preventing obstructions to the wind sensor.
- Keep in mind construction around the airport may be required to fill out an FAA 7460 form for an airspace determination. Guidelines on the clarify when the form is required.
- The TxDOT Routine Airport Maintenance Program (RAMP) is a great program which funds a wide range of maintenance and capital improvements. TxDOT funds RAMP projects at 50% up to \$50,000 (\$100,000 total project cost). AWOS maintenance, pavement repairs, NAVAID and runway lighting and signage maintenance and repairs, as well as many other items are eligible under this program. City labor is not reimbursed, but materials and invoices from contractors including contractor labor is eligible. The City should coordinate with TxDOT RAMP coordinator to make sure it is taking advantage of this great program.
- Annual collaboration with TxDOT RAMP coordinator and Planner assigned to the airport is the minimum recommended frequency. Even if there is not a project planned in the current or following year, it will be important to have a 5 year CIP updated annually so both the City and TxDOT can plan accordingly.



### 2.3.2 10 YEAR CAPITAL IMPROVEMENT PROGRAM (CIP)

Development Plan Legend No.	Priority	Project Description	Total Cost	City of Lago Vista	TxDOT Aviation (FAA/State)	Remarks
<b>10 Year CIP</b>						
11	1	Southwest City Grassed Tie-Downs	\$40,000	\$20,000	\$20,000	Use for 5 long term tiedowns @ \$400 per tiedown per year (\$2000 annual revenue)
	2	Property Acquisition for East Side Development (PHASE I)	\$740,000	\$74,000	\$666,000	Property reimbursement through TxDOT may be retroactive.
	3	North RPZ Land Donation	\$10,000	\$1,000	\$9,000	Possible Land Donation Real Estate Fees
	4	Property Acquisition for West Side Development (PHASE I)	\$1,410,000	\$141,000	\$1,269,000	Property reimbursement through TxDOT may be retroactive.
2,5	5	DESIGN East Side Hangar Development Phase 1 and Helicopter Parking	\$345,000	\$34,500	\$310,500	Potential to increase revenue through hangar rent (8 units @ \$300 per month per unit = \$28,800 per year)
		CONSTRUCTION	\$2,613,667	\$261,367	\$2,352,300	
	6	RPZ South Acquisition	\$148,000	\$14,800	\$133,200	
<b>5 Year TxDOT Land Credit</b>				<b>-\$87,480</b>		From North RPZ Land Donation
<b>1st 5 Year CIP Subtotal (2017-2021)</b>			<b>\$5,306,667</b>	<b>\$459,187</b>	<b>\$4,760,000</b>	
	7	Pavement Maintenance and Rehab	\$100,000	\$50,000	\$50,000	Use RAMP for base failure repairs
1,4,7	8	DESIGN West Tie-Down Apron Phase 1, Connector Taxiway and Relocated Holdline, and City Box Hangar	\$295,000	\$29,500	\$265,500	Potential revenue increase for tie-downs (\$2,000 per year for 6 additional tiedowns) and single hangar lease (\$4,800 per year)
		CONSTRUCTION	\$1,875,625	\$187,563	\$1,688,063	
9	9	Portable Style Terminal Building	\$100,000	\$50,000	\$50,000	Small terminal building option done with TxDOT RAMP program
3	10	Fuel Farm	\$500,000	\$125,000	\$375,000	Approximately 60,000 gallons annually could produce \$27,000 annual income if fuel markup is \$0.45 per gallon.
<b>2nd 5 Year CIP Subtotal (2022-2026)</b>			<b>\$2,870,625</b>	<b>\$442,063</b>	<b>\$2,428,563</b>	
<b>Total 10 Year CIP (2017-2026)</b>			<b>\$8,177,292</b>	<b>\$901,249</b>	<b>\$7,188,563</b>	



### 2.3.3 LONG RANGE CAPITAL IMPROVEMENT PROGRAM (2026 AND BEYOND)

Development Plan Legend No.	Priority	Project Description	Total Cost	City of Lago Vista	TxDOT Aviation (FAA/State)	Remarks
<b>Long Range Plane CIP (2026 and Beyond)</b>						
8	TBD	Runway Extension, Widening, Lighting and Tie-Down Apron	\$3,003,000	\$300,300	\$2,702,700	Coordination with TxDOT, USFW, and Penn property would be required.
9	TBD	Terminal Building Alternate (Substantial Terminal Building)	\$534,000	\$267,000	\$267,000	The estimated cost shown here is for a more substantial, traditional GA terminal building, instead of or to replace the portable style terminal building in the 10 year plan
6	TBD	Parking Fencing and Gates	\$340,000	\$170,000	\$170,000	May be done with RAMP funds, phased.
10	TBD	Perimeter Road	\$190,000	\$95,000	\$95,000	May be done through RAMP funds, phased.
	TBD	Property Acquisition for West Side Development (PH II)	\$730,000	\$73,000	\$657,000	Property reimbursement through TxDOT may be retroactive.
	TBD	Property Acquisition for East Side Development (PH II)	\$190,000	\$19,000	\$171,000	Property reimbursement through TxDOT may be retroactive.
14	TBD	East Side Parallel Taxiway	\$1,283,000	\$128,300	\$1,154,700	Contingent on easement expansion or acquisition from USFW
	TBD	Existing Runway and Taxiway Pavement Extensive Rehab	\$2,000,000	\$200,000	\$1,800,000	Rehab or reconstruction of existing pavements
<b>Long Range Plane CIP Subtotal (2026 and Beyond)</b>			<b>\$6,681,000</b>	<b>\$1,093,700</b>	<b>\$5,587,300</b>	



## 2.3.4 POTENTIAL IMPLEMENTATION IMPACT

The following is a summary of the impact the implementation of the recommendations could have to the City and the airport over a 10 year period. These are based on assumptions and estimates using the best available information.

Airport Financial Projections if recommendations are implemented	1st 5 Year CIP		2nd 5 Year CIP		2027
	2017	2021	2022	2026	
<b>Revenue (R)</b>					
Fuel Revenue	\$7,200.00	\$7,950.00	\$8,780.00	\$32,920.00	\$33,578.40
Hangar Leases	\$0.00	\$28,800.00	\$28,800.00	\$33,600.00	\$33,600.00
Tie-down Fees	\$6,400.00	\$6,400.00	\$6,400.00	\$8,820.00	\$8,820.00
RAAPOA	\$20,000.00	\$29,600.00	\$29,600.00	\$31,080.00	\$31,080.00
TxDOT RAMP Grant	\$3,500.00	\$5,000.00	\$5,000.00	\$6,000.00	\$6,000.00
Others	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
<b>Total Revenue ( R )</b>	<b>\$37,100.00</b>	<b>\$77,750.00</b>	<b>\$78,580.00</b>	<b>\$112,420.00</b>	<b>\$113,078.40</b>
<b>Operational and Maintenance Expenses (OM)</b>					
Personnel	\$1,891.00	\$15,000.00	\$17,400.00	\$30,000.00	\$30,900.00
Operations, Maintenance, and Repairs (Includes RAMP costs)	\$10,539.00	\$14,950.00	\$16,510.00	\$20,440.00	\$20,848.80
Electricity	\$3,804.00	\$4,200.00	\$4,600.00	\$5,100.00	\$5,200.00
Supplies	\$100.00	\$100.00	\$500.00	\$500.00	\$500.00
Services	\$3,000.00	\$3,000.00	\$4,000.00	\$5,000.00	\$5,000.00
<b>Total Operational and Maintenance (OM)</b>	<b>\$19,334.00</b>	<b>\$37,250.00</b>	<b>\$43,010.00</b>	<b>\$61,040.00</b>	<b>\$62,448.80</b>
<b>Total Income (= R - OM)</b>	<b>\$17,766.00</b>	<b>\$40,500.00</b>	<b>\$35,570.00</b>	<b>\$51,380.00</b>	<b>\$50,629.60</b>
<b>5 Year Total Income (5TI) (5TI= Average 5 yr x 5)</b>	<b>\$145,670.00</b>		<b>\$217,380.00</b>		
<b>Capital Improvement Costs (CIP), Direct Costs to City Only</b>					
TxDOT CIP Projects (5 Year Totals)	\$459,187.00		\$442,063.00		
Non-TxDOT, City Only CIP Projects (5 Year Totals)	\$20,000.00				
<b>Total Capital Improvement Costs (CIP)</b>	<b>\$479,187.00</b>		<b>\$442,063.00</b>		
<b>Airport Net Cash Flow (= 5TI - CIP)</b>	<b>(\$333,517.00)</b>		<b>(\$224,683.00)</b>		



# Appendix 1: Action Plan Exhibits

Exhibit 1 Airport Proposed Property Plan

Exhibit 2 Lago Vista Airport Environ Zoning

Exhibit 3 Proposed Airport Development Plan

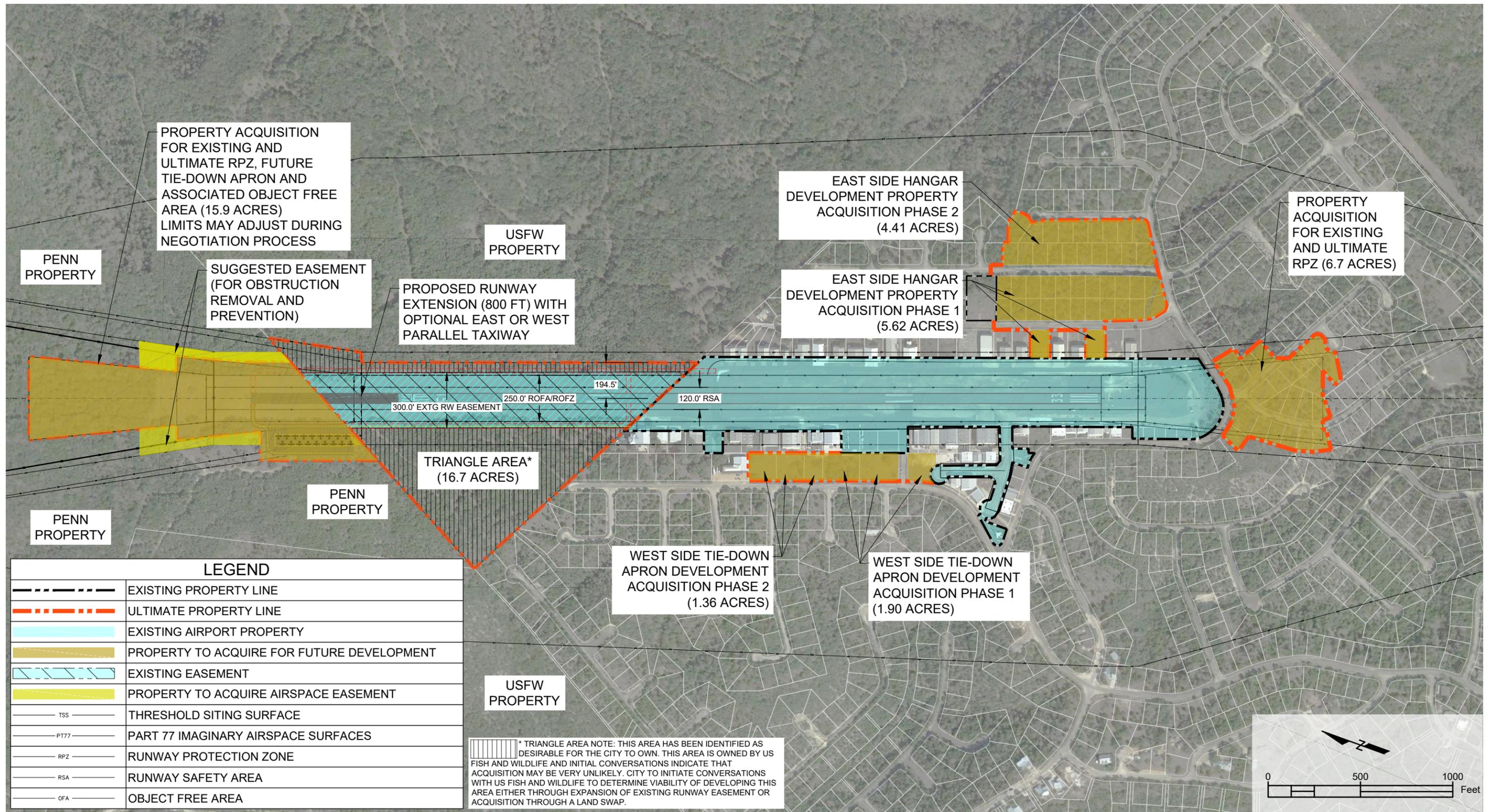
Exhibit 4 Lago Vista Airspace



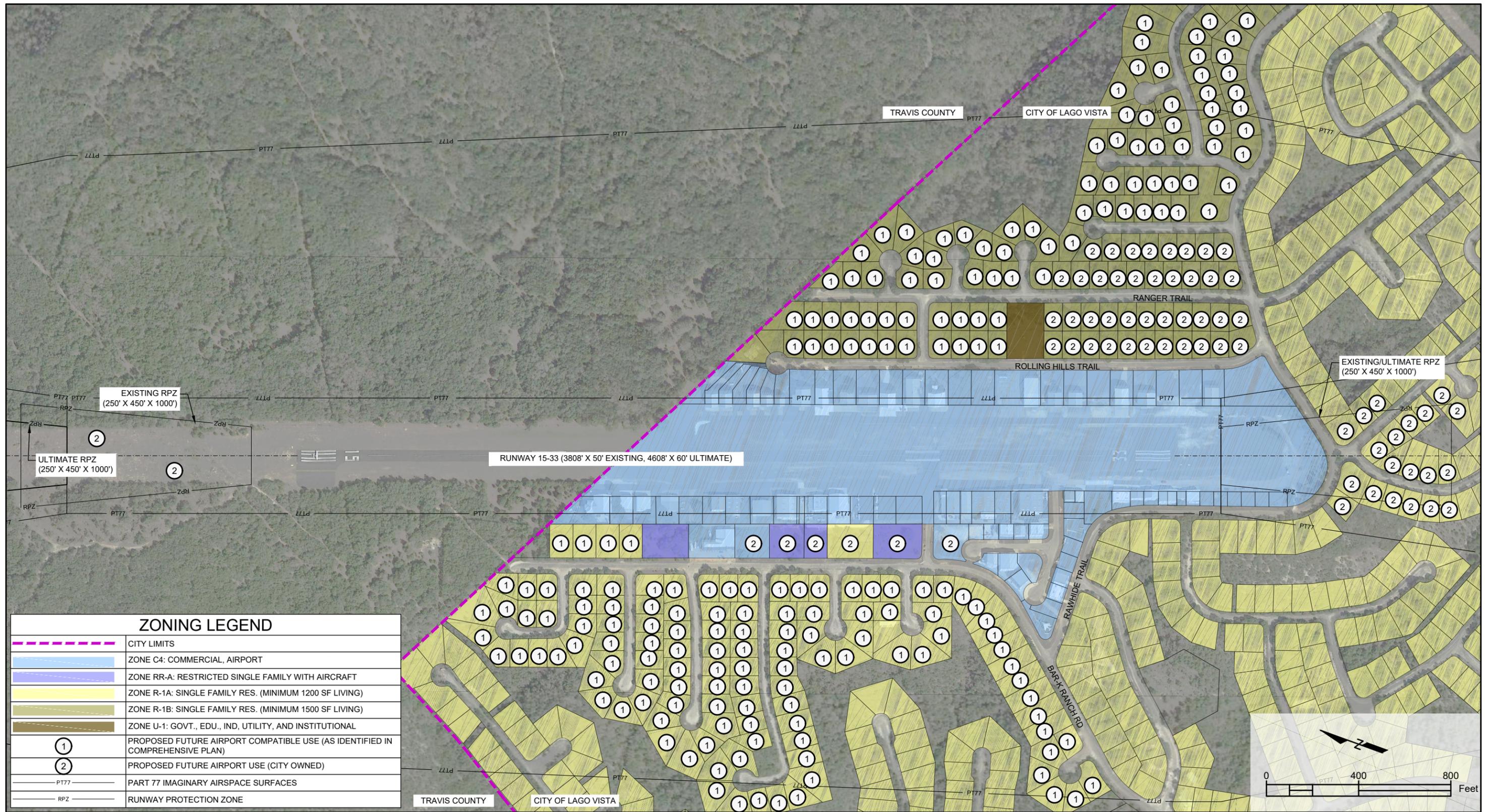
Airport Action Plan

Lago Vista – Rusty Allen Airport

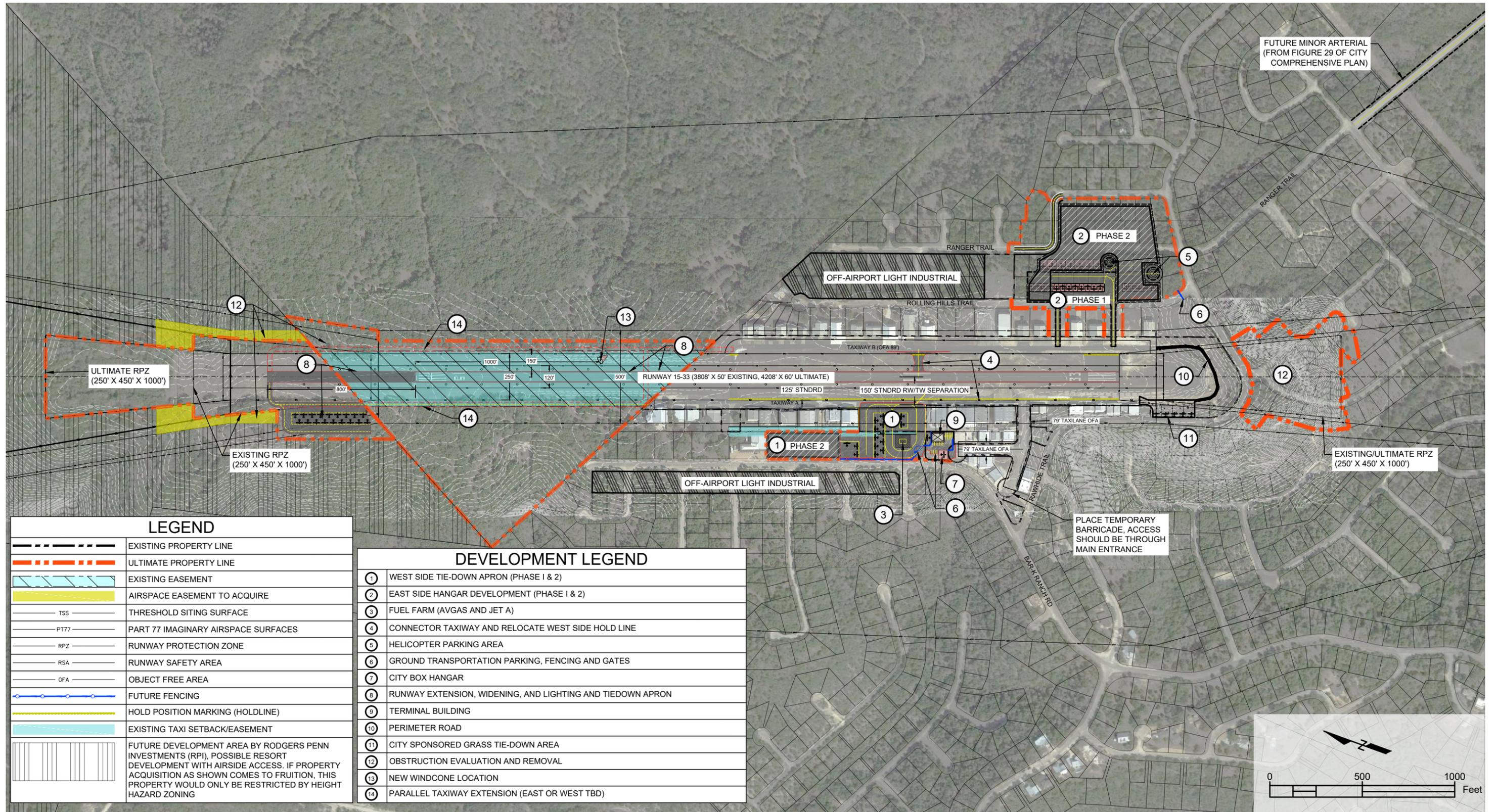












FUTURE MINOR ARTERIAL  
(FROM FIGURE 29 OF CITY  
COMPREHENSIVE PLAN)

ULTIMATE RPZ  
(250' X 450' X 1000')

EXISTING RPZ  
(250' X 450' X 1000')

EXISTING/ULTIMATE RPZ  
(250' X 450' X 1000')

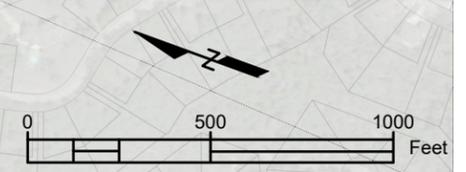
PLACE TEMPORARY  
BARRICADE, ACCESS  
SHOULD BE THROUGH  
MAIN ENTRANCE

**LEGEND**

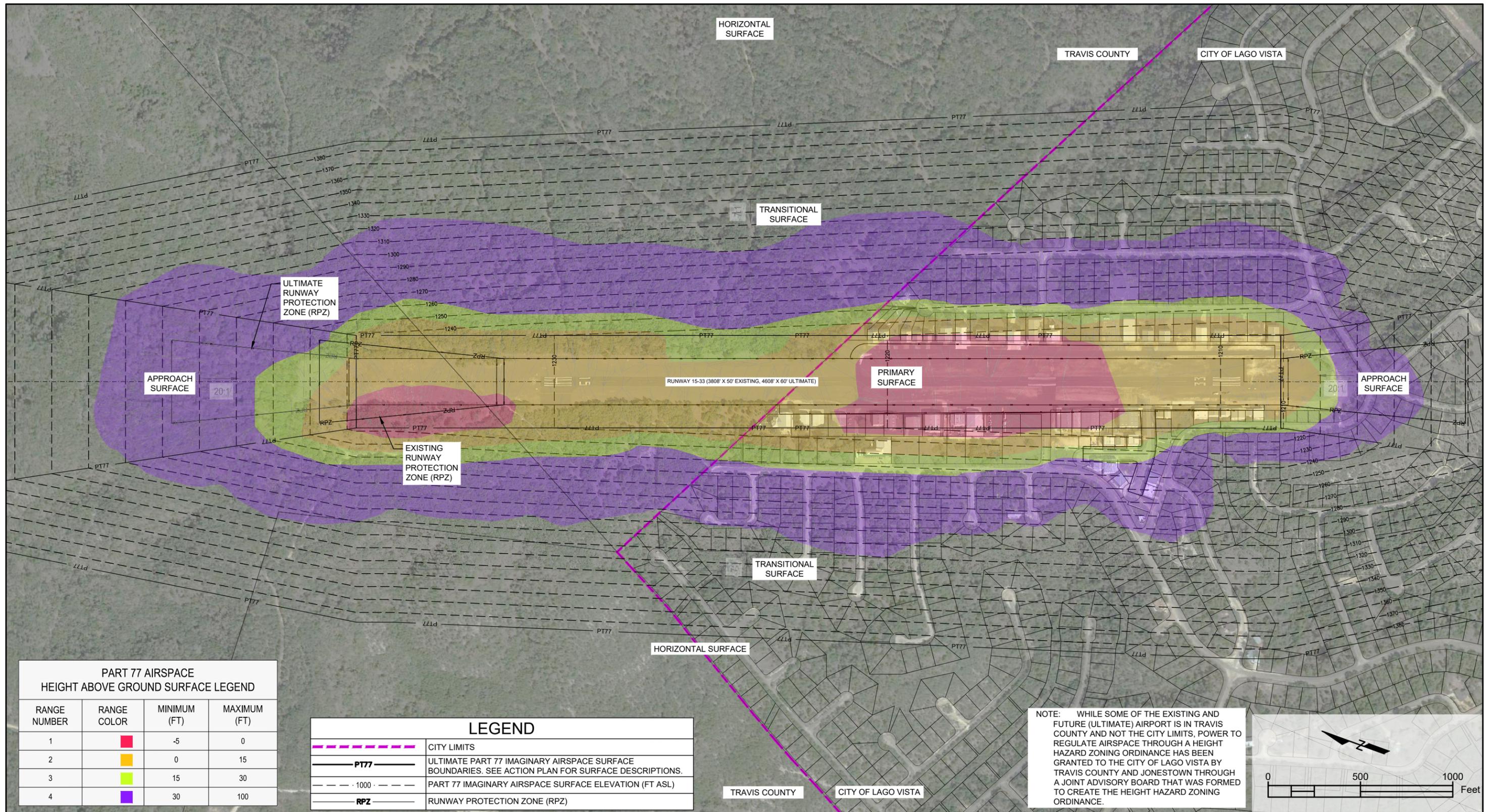
	EXISTING PROPERTY LINE
	ULTIMATE PROPERTY LINE
	EXISTING EASEMENT
	AIRSPACE EASEMENT TO ACQUIRE
	THRESHOLD SITING SURFACE
	PART 77 IMAGINARY AIRSPACE SURFACES
	RPZ
	RSA
	OFA
	FUTURE FENCING
	HOLD POSITION MARKING (HOLDLINE)
	EXISTING TAXI SETBACK/EASEMENT
	FUTURE DEVELOPMENT AREA BY RODGERS PENN INVESTMENTS (RPI), POSSIBLE RESORT DEVELOPMENT WITH AIRSIDE ACCESS. IF PROPERTY ACQUISITION AS SHOWN COMES TO FRUITION, THIS PROPERTY WOULD ONLY BE RESTRICTED BY HEIGHT HAZARD ZONING

**DEVELOPMENT LEGEND**

①	WEST SIDE TIE-DOWN APRON (PHASE I & 2)
②	EAST SIDE HANGAR DEVELOPMENT (PHASE I & 2)
③	FUEL FARM (AVGAS AND JET A)
④	CONNECTOR TAXIWAY AND RELOCATE WEST SIDE HOLD LINE
⑤	HELICOPTER PARKING AREA
⑥	GROUND TRANSPORTATION PARKING, FENCING AND GATES
⑦	CITY BOX HANGAR
⑧	RUNWAY EXTENSION, WIDENING, AND LIGHTING AND TIEDOWN APRON
⑨	TERMINAL BUILDING
⑩	PERIMETER ROAD
⑪	CITY SPONSORED GRASS TIE-DOWN AREA
⑫	OBSTRUCTION EVALUATION AND REMOVAL
⑬	NEW WINDCONE LOCATION
⑭	PARALLEL TAXIWAY EXTENSION (EAST OR WEST TBD)



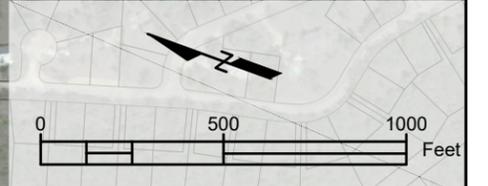




PART 77 AIRSPACE HEIGHT ABOVE GROUND SURFACE LEGEND			
RANGE NUMBER	RANGE COLOR	MINIMUM (FT)	MAXIMUM (FT)
1	Red	-5	0
2	Yellow	0	15
3	Green	15	30
4	Purple	30	100

LEGEND	
	CITY LIMITS
	ULTIMATE PART 77 IMAGINARY AIRSPACE SURFACE BOUNDARIES. SEE ACTION PLAN FOR SURFACE DESCRIPTIONS.
	PART 77 IMAGINARY AIRSPACE SURFACE ELEVATION (FT ASL)
	RUNWAY PROTECTION ZONE (RPZ)

NOTE: WHILE SOME OF THE EXISTING AND FUTURE (ULTIMATE) AIRPORT IS IN TRAVIS COUNTY AND NOT THE CITY LIMITS, POWER TO REGULATE AIRSPACE THROUGH A HEIGHT HAZARD ZONING ORDINANCE HAS BEEN GRANTED TO THE CITY OF LAGO VISTA BY TRAVIS COUNTY AND JONESTOWN THROUGH A JOINT ADVISORY BOARD THAT WAS FORMED TO CREATE THE HEIGHT HAZARD ZONING ORDINANCE.





# Appendix 2: TxDOT/FAA Reference Documents

TxDOT Model Rules and Regulations

TxDOT Model Minimum Standards (FBO)

TxDOT Model Lease Agreement

FAA Form 7460

TxDOT RAMP Program Information

Guide to TTF Rate Setting Methodology



Airport Action Plan

Lago Vista – Rusty Allen Airport





# TxDOT Model Rules and Regulations



Airport Action Plan

Lago Vista – Rusty Allen Airport







## Model Airport Rules and Regulations

9/24/2014 – supersedes all previous

Airport sponsors must allow use of the airport by all types, kinds, and classes of aeronautical activity as well as by the general public. Airport rules and regulations provide a means to control operations at a public airport to protect both aeronautical activities and public safety.

The airport sponsor may impose reasonable rules and regulations which restrict use of or access to the airport, in the interest of safety indicated by local conditions unique to an airport.

If the airport rules are intended for use at a City owned airport, the City Council should adopt the rules as a City Ordinance; if the rules are for a County owned airport, the Commissioners Court should adopt the rules as a County Order.

***This model ordinance/order is provided by TxDOT Aviation Division as a guide for establishing operating procedures, rules, and regulations at general aviation airports. The model document is a compilation of industry standards, and all sections are not applicable to every airport. The Model Rules and Regulations are provided by TxDOT Aviation Division as a template for individual airport development, and are not intended or required to be adopted exactly as written.***

# Airport Ordinance/Order

No. \_\_\_\_\_

## Rules and Regulations

An ordinance/order providing rules and regulations for the efficient and safe operation of the \_\_\_\_\_ Municipal / County Airport (hereinafter referred to as the "Airport"); and to provide the greatest service for the citizens of \_\_\_\_\_ and the aviation public, is adopted by the City Council / Commissioners Court, providing enforcement by \_\_\_\_\_ or the Airport Manager, and providing penalties for violations; all as authorized by the Texas Transportation Code Chapter 22 "County and Municipal Airports".

The definition of "Airport", "aircraft", "airplane", and other common terms used herein is as defined in Part 1, Code of Federal Regulations, Title 14, Aeronautics and Space. Ultralight refers to aircraft that fall within the description given in FAR Part 103. "Airport" with a capital refers to the specific airport for which these rules are adopted. "TxDOT" herein refers to the Texas Department of Transportation, Aviation Division.

### **Section 1. Use of Airport Restricted**

No person, partnership, firm, association, corporation or entity, incorporated or otherwise, shall use the Airport for any commercial activity, unless approved by a written permit from the City Council / Commissioners Court or its duly authorized agent.

### **Section 2. General Rules and Regulations**

The following rules and regulations shall be observed in the use and operation of the Airport:

**Rule 2-1. Federal Air Traffic Rules** of the Federal Aviation Administration (FAA) for aircraft operated within the United States, and presently or hereafter effective, are hereby referred to, adopted, and made a part hereof as though fully set forth and incorporated herein.

**Rule 2-2. Safeguard of Persons and Property** – The Airport Manager shall at all times have authority to take necessary and legal actions to safeguard any person, aircraft, equipment, or property at the Airport.

**Rule 2-3. Through-the-Fence Operations** – No private individual, partnership, FBO, company, or corporation shall be permitted direct ground access to the Airport by their aircraft, customers' aircraft, or private vehicle from property adjacent to or in the immediate vicinity of the Airport without prior coordination with TxDOT. Furthermore, no private individual, partnership, company, corporate, or customers' aircraft or vehicle shall be permitted direct ground access to property from the Airport – a practice commonly known as a "through-the-fence operation" without prior coordination with TxDOT.

**Rule 2-4. Lien for Charges** – To enforce the payment of any charge for repairs, improvements, storage, or care of any personal property by the City / County or its agents in connection with the operation of the Airport, the City / County may place a lien upon such personal property, which shall be enforceable as provided by law.

**Rule 2-5. Lien Possessory Right-** To enforce the payment of any such charge, the Airport Manager may retain possession of such personal property until all reasonable, customary, and usual compensation has been paid in full.

**Rule 2-6. Unauthorized Signs and Equipment** – No signs, non-aeronautical equipment, portable buildings, or trailers may be erected, moved-in, or installed on Airport property, except as may be specifically authorized by the Airport Manager.

**Rule 2-7. Surreptitious Activities** – Any person observing suspicious, unauthorized or criminal activities should report such activities immediately to the Airport Manager, local police, officers of the Texas Department of Public Safety, and the Transportation Security Administration General Aviation Information Hotline at 1-866-GA SECUR(E) or 1-866-427-3287.

**Rule 2-8. Wrecked Aircraft** – Every aircraft owner, his/her pilot or agents, shall be responsible for notifying FAA and promptly removing disabled or wrecked aircraft from the operational areas of the Airport, under the direction of the Airport Manager.

**Rule 2-9. Repairs to Aircraft** – No aircraft shall be repaired on any part of the landing or takeoff area. All outside repairs shall be made only at places designated by the Airport Manager for such purpose. Major engine, airframe, or avionics repairs shall be conducted by a properly licensed mechanic or other person authorized by the FAA within a hangar or building rented, leased, or owned for such commercial purposes. Any preventative maintenance authorized by FAR Part 43 may be made by the owner or operator of any aircraft, but only within a hangar leased or owned by that aircraft owner or operator or at places designated by the Airport Manager for such purpose.

**Rule 2-10. Damage to Airport** – Any person, individual, or corporation or the owner of any aircraft causing damage of any kind to the Airport, whether through violation of any of these rules, through vandalism, or any act of negligence, shall be liable therefore in and to the City / County.

**Rule 2-11. Injury to Person** – Persons entering the Airport groundside property by automobile, other vehicular conveyance, or on foot (does not include persons in aircraft using approved airside facilities) do so at their own risk and with no liability incurring to the City / County for any injury or damage to person or property. Further, any person desiring to use the Airport shall observe and obey all laws, resolutions, orders, rules, and regulations promulgated and enforced by the City / County or by any other Authority having jurisdiction over the operation of the Airport.

**Rule 2-12. Licensed Pilots** – Only aircraft with current and correct FAA Certificates of Registration and Airworthiness and persons holding valid and current airman and medical certificates issued by the FAA, for those flight operations requiring medical certificates, shall be authorized to operate aircraft upon the Airport except as provided in this ordinance / order. Ultralights operating under FAR part 103 do not require aircraft registration, pilot certificates, or medical certificates. This limitation shall also not apply to students-in-training under licensed instructors or to public aircraft of the Federal government or of a State, Territory, or political subdivision thereof, or to aircraft licensed by a foreign government with which the United States has a reciprocal agreement covering the operation of such licensed aircraft. Use of the Airport by ultralight aircraft and light sport aircraft in the weight shift control and powered parachute class shall be subject to approval by the City Council / Commissioners Court and shall be in accordance with FAA Order 5190.6 (latest change) and appropriate FARs Part 61 and 103 and any other rules established by the City / County.

**Rule 2-13. Registration** – Each person owning an aircraft based at the Airport, or any person based and receiving flight instruction toward an FAA rating at the Airport shall register at the office of the Airport Manager their name, address, telephone number, aircraft model, aircraft registration “N” number, or make and model of aircraft for those aircraft not requiring registration (ultralight), and the name, address, and telephone number of their next of kin or person to be notified in case of an accident or emergency.

**Rule 2-14. Animals** - No person shall enter the Airport with a dog, cat, or other animal unless the animal is, and remains, restrained by a leash or properly confined as determined by the Airport Manager.

**Rule 2-15. Living Quarters** - No person may make permanent living quarters on Airport. Exceptions to this rule for cause, such as alert crew members or security personnel, will be coordinated with TxDOT.

**Rule 2-16. Intoxicants and Narcotics Prohibited** – No person under the influence of any intoxicant, narcotic, or other illicit drug shall operate or fly in any aircraft to or from the Airport. Such prohibition shall not apply to a passenger under the care of a medical doctor and accompanied by a doctor, nurse, or caretaker.

**Rule 2-17. Foreign Objects** – No foreign objects, including bottles, cans, scrap, nuts, bolts, nails, or any object that may cause damage to an aircraft, shall be left upon the floor of any building or upon any part of the surface area of the Airport. Individuals are encouraged to pick up such foreign objects when observed and place them in a trash receptacle.

**Rule 2-18. Litter** - No boxes, crates, cans, bottles, paper, tall grass, weeds, unusable airplane parts or wreckage, scrap wood or metal, discarded airplane or automobile tires, trash, or other litter shall be permitted to accumulate in or about a hangar, building, or other leased space. If such trash and litter is permitted to accumulate around a privately owned, rented, or leased hangar / building, the Airport Manager shall notify the hangar / building owner, renter or lessee by registered letter to remove the offending litter. If within ten (10) work days after receipt of the letter the hangar/building owner, renter, or lessee has not removed the trash and litter as directed, the Airport Manager may have the area cleaned and the cost for such cleaning shall be charged to the hangar/building owner, renter, or lessee.

### **Section 3. Ground Operations**

**Rule 3-1. Air, Ground & Vehicular Traffic** – No person shall operate a vehicle on the Airport except in accordance with the following rules, and all federal, state, and local law:

- A.** All vehicles shall yield right of way to aircraft in motion and emergency vehicles.
- B.** No vehicle except ground service and emergency vehicles shall approach so close to any aircraft with running engine(s) as to create a hazard.
- C.** All vehicles entering or exiting an operating Airport access gate shall wait for the gate to completely close behind them before proceeding to their destination so as to not allow the entry of any other vehicle.
- D.** Any vehicle authorized to operate on the Airport runways or taxiways shall display a rotating or steady beacon that complies with FAA Advisory Circular 150/5210 (latest change).

E. All vehicles that are authorized to operate on taxiways or the runways must be equipped with a two-way aviation radio, and must receive a clearance from, and remain in continuous communications with, the Airport Traffic Control Tower (ATCT) when the ATCT is operating. When the ATCT is not operating, or at airports that do not have an ATCT, any vehicle authorized to access the taxiways or runways is required to monitor the published Common Traffic Advisory Frequency (CTAF) for the Airport, and have the ability to communicate with aircraft via a two-way aviation radio.

**Rule 3-2. Speed Limits** - All vehicles shall be operated within the posted speed limits at the Airport. The maximum speed limit for all vehicles in the airside area, with the exception of authorized municipal vehicles in the performance their official duties, is fifteen (15) miles per hour, unless posted otherwise.

#### **Section 4. Airport Security**

**Rule 4-1. Security** - The Transportation Security Administration publication "Security Guidelines for General Aviation Airports", Information Publication A-001 dated May 2004 or most recent version, is available for reference at their website - [www.tsa.gov/](http://www.tsa.gov/).

This document is used by the Airport as a guideline to security on the Airport and is incorporated as a working document.

**Rule 4-2. Access Codes/Devices** - Persons who have been provided either a code or device for the purpose of obtaining access to the Airport shall not divulge, duplicate, or otherwise distribute the same to any other person, unless otherwise approved in writing by the Airport Manager

#### **Section 5. Aircraft Operation Rules**

##### **Rule 5-1. Aircraft Tie Downs**

- A. All aircraft not hangared shall be tied down and additionally should have the wheels chocked when remaining overnight and during inclement weather.
- B. All aircraft owners or their agents are responsible for the tie down or security of their aircraft at all times and particularly during inclement weather.
- C. Aircraft parked overnight on the transient apron shall pay a tie down fee of \_\_\_\_\_ for each night, except that such fee may be waived upon purchase of fuel or services.

##### **Rule 5-2. Running Aircraft Engines**

- A. Aircraft not equipped with adequate brakes shall not be started until the wheels have been set with chocks attached to ropes or other suitable means of removing them.
- B. No aircraft will be left running without a qualified person at the controls.
- C. No aircraft engine shall be started or run inside any building or hangar.
- D. No engine shall be started, run up, or warmed up until and unless the aircraft is in such position that the propeller stream or jet blast will clear all buildings, other aircraft, and groups of people.

**Rule 5-3. Damage to Airport Lighting** – Any person damaging any runway, ramp, or taxiway light or fixture by operation of aircraft or otherwise, shall immediately report such damage to the Airport Manager. Persons causing damage to runway and taxiway lights as a result of negligent operation of an aircraft or willful acts will be liable for replacement cost of the light(s) and/or fixture(s) and may be charged with a misdemeanor as provided in Section 10 of this order.

**Rule 5-4. Taxiing Aircraft**

- A.** No person shall taxi an aircraft until it is reasonably ascertained there will be no danger of collision with any person or object in the immediate area.
- B.** Aircraft will be taxied at a safe and prudent speed and in such manner as to be under the control of the pilot in command at all times.
- C.** Aircraft not equipped with adequate brakes will not be taxied near buildings or parked aircraft unless an attendant (wing-walker) is at a wing of the aircraft to assist the pilot.
- D.** Aircraft shall not taxi onto the runway from the ramp and taxiway area if there is an aircraft approaching to land or on the ground in takeoff position. Aircraft waiting on the taxiway for another aircraft to take off or land will remain behind the runway holding position markings.
- E.** Aircraft shall not be taxied by engine power into or out of any hangar.
- F.** ATCT Airports – Taxi operations in the movement area will be as directed by the ATCT, when the Tower is operating. When the ATCT is not operating, and for taxiing operations in other than the movement area, these operations shall be as stated in rule 5-4, A to E.

**Rule 5-5. Parking Aircraft**

- A.** Unoccupied aircraft shall not be parked or tied down within any protected area (object free area, runway safety area, etc.) as described in FAA AC 150/5300-13 (latest change) and all aircraft not hangared shall be parked in the areas designated by the Airport Manager for that purpose.
- B.** Aircraft shall not be parked within fifty (50) feet of an aircraft fuel pump or fuel service truck parking area.
- C.** Aircraft shall not be parked in such a manner as to hinder the normal movement of other aircraft and traffic unless specifically authorized by the Airport Manager as an emergency measure.
- D.** It is the responsibility of the pilot in command when leaving a parked aircraft unattended to see that the brakes are set and / or it is properly chocked and / or tied down.

**Rule 5-6. Wash Racks** - Wash racks shall be used for purposes of washing and polishing aircraft, and any other purpose approved by the Airport Manager. Washing / cleaning materials and run-off shall be used and disposed of in compliance with all applicable federal, state, county and local laws and regulations.

**Rule 5-7. Loading and Unloading Aircraft** – Loading or unloading aircraft with the engine running is prohibited. Exception will be approved by the Airport Manager.

**Rule 5-8. Authority to Suspend Operations** – The Airport Manager may suspend or restrict any or all operations whenever such action is deemed necessary in the interest of safety.

**Rule 5-9. Emergency Locator Transmitter (ELT)** - At a safe and appropriate time after takeoff and after landing prior to engine shutdown, pilots should tune their aircraft radios to the emergency frequency (121.5 or 243.0) and listen to determine if their, or any, aircraft ELT is transmitting. If your ELT is transmitting after takeoff or landing, turn off the ELT and advise the FAA Automated Flight Service Station for the area via radio or telephone (800-WX-BRIEF or 800-992-7433) that your ELT was accidentally turned on. Provide the time and location of activation, if known, and the time and location of deactivation. 406 Mhz ELTs should be checked for normal operation as part of the preflight / post flight checks.

**Rule 5-10. Standard Traffic Pattern and Altitude, Non Towered Airports** – All flight activity will adhere to FAA Advisory Circular 90-66 (latest change) "Recommended Standard Traffic Patterns and Practices for Aeronautical Operations at Airports without Operating Control Towers"; also depicted in the Aeronautical Information Manual. Recommended traffic pattern altitudes are 1000 feet Above Ground Level (AGL) for piston powered airplanes and 1500 feet AGL for turbine powered airplanes. Helicopters will operate as to not obstruct the normal traffic pattern. The use of standard traffic patterns does not alter the responsibility of each pilot to see and avoid other aircraft.

**Rule 5-11. Clearing Public Right of Ways** – No aircraft shall takeoff or land in such manner as to clear any public street or highway at an altitude of less than fifteen (15) feet, or seventeen (17) feet over an interstate highway, twenty-three (23) feet over a railroad, or twenty-seven (27) feet over a coastal water way, or the clearance height of the tallest bridge over the waterway, nor land or take off on the taxiway or over hangars or other structures, automobile parking areas, or groups of spectators. (Ref: FAR 77).

**Rule 5-12. Takeoffs on Other Than Runways** – Takeoffs or landings shall not be made on the apron, parking ramp, taxiway, or any area other than designated runways by airplanes, gyroplanes, powered lift, balloons, airships, ultralights, or light sport aircraft except by prearranged permission from the Airport Manager. Helicopters may operate to and from designated helicopter landing areas.

**Rule 5-13. Takeoffs**

**A. Takeoffs Allowed, Non Towered Airports** – Low approach, full stop, touch and go, or stop and go landings may be made at the discretion of the pilot in command. Pilots remaining in the traffic pattern making landings should broadcast on the CTAF their pattern direction of turn and their landing (low approach, full stop, touch and go, stop and go) intentions at least by the final segment leg. All aircraft departing shall clear the traffic pattern for traffic before taxiing into takeoff position. See FAR 91.113 (g).

**B. Tower Controlled Airports** - When the tower is operating, the tower controller will direct traffic. When the tower is not operating, the guidelines of Rule 5-13 A. will be used. The Tower movement areas and other than movement areas are depicted in diagram \_\_\_\_\_.

**Rule 5-14. Preferred Runway, Non Towered Airport or Towered Airports, Tower Not Operating** - If the winds are calm or at a ninety (90) degree crosswind to Runway \_\_\_\_\_, the preferred take off and landing runway is \_\_\_\_\_.

**Rule 5-15. Student Training, Local Operations**

**A.** Flight instructors shall avail themselves and their students of all rules and regulations, including local rules and FARs in effect at the Airport.

**B.** The Airport Manager may designate and advise airport users via public posting and electronic transmission of limited areas of the Airport and local areas sanctioned by the FAA for practice flying and student training.

**Rule 5-16. Agricultural Spraying Operations** – Agricultural (Ag) spraying operations will be conducted in accordance with procedures approved by the Airport Manager and made known to all persons conducting agricultural spraying operations. Ag operations shall be accomplished in accordance with the standards of the Environmental Protection Agency and the Texas Commission on Environmental Quality in an area so designated by the Airport Manager. Each Ag operator shall carry liability insurance in the amount of \_\_\_\_\_dollars, payable to the City/County for the cleanup of any hazardous chemical spills on Airport property caused by the Ag operator.

**Rule 5-17. Special Procedures, Parachuting**

**A.** The Airport Manager may, in the interest of safety, designate special traffic procedures for certain operations, such as helicopters, air shows or aviation fly-ins, agricultural operations, gyroplanes, powered lift, gliders, balloons, airships, ultralights, and light sport aircraft in the weight shift control or powered parachute class. Any such change from standard procedures shall be published in the FAA's Airport / Facility Directory if of a permanent nature or the Airport Manager shall issue a NOTAM if such change is if a temporary nature. Permanent changes require filing through TxDOT Aviation Division to the FAA. Temporary closing of a portion of the airport for special events will be approved by the FAA, through TxDOT Aviation Division. See FAA Order 5190.6 (latest change).

**B.** Parachute descent onto the Airport property shall not be permitted without the recommendations of the City / County / Airport Advisory Board and the written approval of the City Council / Commissioners Court. The Airport Manager may develop operating procedures and designated landing areas for parachute operations.

**Rule 5-18. Model Aircraft** – Model aircraft not capable of carrying a person shall not be permitted to operate, take off or be launched from, flown over or land at the Airport. Model A/C operations for specific aeronautical events such as fly-ins or air shows may be approved for specific times by the City Council / Commissioners Court

**Section 6. Fueling, Flammable Fluids, and Fire Safety**

**Rule 6-1. Fueling Aircraft**

**A.** All aircraft fueling, fuel equipment, and procedures will be in accordance with Manual 407 – “Standard for Aircraft Fuel Servicing, 2012 edition,” (or as revised) published by the National Fire Protection Association, 1 Batterymarch Park, Quincy MA 02169-7471, 800-344-3555, <http://catalog.nfpa.org>

**B.** All transportation, storage and other handling of aircraft and vehicle fuel shall comply with the International Fire Code, 2012 Edition, (or current edition) as published by the International Code Council, Inc. and FAA Advisory Circular 150/5230-4, (latest change).

**C.** All aircraft shall be fueled clear of all hangars, other buildings, and aircraft by at least fifty (50) feet.

**D.** Fueling trucks shall not be parked within any building or hangar or within \_\_\_\_\_ feet of any building, hangar, or parked aircraft, as determined by the local Fire Marshall. Fuel trucks shall be parked with at least ten (10) feet separation between vehicles.

**E.** Aircraft fuel storage tanks for below-ground or above-ground use will be constructed and installed, registered as required, monitored for leakage, operated, and maintained in accordance with Federal and State statutes, rules, and regulations promulgated by the Environmental Protection Agency and the Texas Commission on Environmental Quality.

**F.** Aviation or auto fuels shall not be stored within a hangar or building except in approved five (5) gallon or smaller containers manufactured and marked for such purpose and only with the approval of the local Fire Marshal.

**G.** Persons or businesses wishing to dispense fuel into their privately owned aircraft shall not be denied; however, they must meet all reasonable requirements the City / County places on other fuel suppliers, public or private. Private fueling facilities located on leased or private property must be installed and the fuel dispensed in accordance with all rules applicable to aircraft fueling and fire safety contained herein.

**H.** Public sale of automobile gasoline for use in aircraft will not be permitted on the Airport without written approval of the Airport Manager. Aircraft authorized by the FAA to use auto gasoline may be privately fueled by the owner in a location designated by the Airport Manager in accordance with all rules appertaining to aircraft fueling and fire safety contained herein.

**I.** All aviation fuel storage tanks, aviation fuel pumps, hydrant fuel services, and aircraft fuel service vehicles, whether publicly or privately owned, shall have the type of aviation fuel dispensed printed in large block letters, including octane if aviation gasoline, plus the fuel I.D. number, and "NO SMOKING" signs. This information shall be printed on all sides of the fueling tanks, pumps, etc. so the information is visible from any direction on the ground.

**J.** Fuel spills in excess of one gallon must be reported to the Airport Manager and immediate action taken by the spilling entity to clean up the spill in accordance with all local, state, and federal regulations

**Rule 6-2. Fuel Flowage Fee** - Any person, corporation, partnership, association, or business entity of any kind, or any person acting for or through them, including, but not limited to, any wholesale fuel distribution company, who delivers fuel to an fuel storage tank or who delivers fuel obtained from a source not on the Airport directly into any aircraft on the Airport must pay the amount of \$.\_\_\_ per gallon of fuel delivered.

Payment to the City or County of all fuel flowage fees due must be made not later than the fifteenth (15th) day of the month following the date of the fuel delivery.

Payment of fuel flowage fees shall be accompanied by a report in a form approved by the Airport Manager that indicates the amount of fuel delivered to the airport during the preceding month.

Military aircraft conducting operations which require fueling from U.S. Government facilities are exempt from fuel flowage fees.

**Rule 6-3. Fire Safety**

- A.** Every person using the Airport or its facilities in any manner shall exercise the greatest care and caution to avoid and prevent fire.
- B.** Smoking or open flame within fifty (50) feet of any fuel tank, fuel pump, or fuel truck is prohibited.
- C.** Compressed flammable gas shall not be kept or stored upon the Airport, except at such place as may be designated by the Airport Manager.
- D.** No flammable substance shall be used for the cleaning of any aircraft part or anything inside a hangar, T-hangar, or other building upon the Airport.
- E.** No one shall smoke or ignite a match or lighter in any building, hangar, or public ramp area except in posted "Designated Smoking Areas" identified by the Airport Manager.
- F.** Hangar entrances must be clear in a manner such that emergency or fire / rescue personnel and equipment can immediately access the hangar without hindrance.
- G.** The floors in all buildings shall be kept clean and free of oil. Volatile or flammable substances shall not be used to clean floors, walls or any portion of a hangar structure.
- H.** All Airport tenants and lessees shall supply and maintain such adequate and readily accessible fire extinguishers as may be required by applicable fire codes and regulations. Each fire extinguisher shall carry a suitable tag showing the date of most recent inspection.

**Section 7. Lease of Airport Property and Construction on Airport**

Hangars and other buildings or structures owned by the City / County may be leased to private individuals, companies, or corporations on a monthly or yearly basis for the storage of aircraft and ancillary equipment or to conduct a commercial Fixed Base Operation (FBO).

The City / County may lease property within the building area or other portions of the Airport for the construction of hangars, buildings, lean-tos, aprons, taxiways, and auto parking lots in accordance with an approved Airport Master Plan/Airport Layout Plan and design guidelines. Aviation related use must be given priority in the use of all leased or privately owned property, buildings or structures. If the aviation needs of the Airport are sufficiently met, the City Council / County Commissioners Court may authorize non-aviation use of any portion of the Airport or any building on the Airport on a case-by-case basis. Application of such non-aviation use shall be made to the City Council / County Commissioners Court; and approval from TxDOT Aviation Division must be received prior to granting authorization for non-aviation use.

**Rule 7-1. Lease Term** –No lease of airport property or facilities shall be granted for a term exceeding (20) years, however the initial term of a lease of airport property or facility may exceed twenty (20) years but in no case more than forty (40) years if a loan or deed of trust lien is obtained expressly for construction of the facility which will become property of the City/County at the end of the lease term, free and clear of all liens and encumbrances. Non-aviation leases shall not exceed eighteen (18) months.

**Rule 7-2. Construction on Leased Property**

- A.** As given in FAR part 77, the sponsor or sponsor's agent will file electronically with the FAA for any construction on or near the airport. See FAR part 77. File at

<http://oeaaa.faa.gov> (or most current URL). A determination of no objection must be received from the FAA prior to any construction on the Airport. No hangar or structure may be erected beyond the building restriction line or in conflict with the approved Airport Layout or Development Plan.

**B.** All plans and specifications for construction, renovation, remodeling, or refurbishing of the leased premises shall meet all current Standard Fire and Building Codes published by the Southern Building Code Congress and the National Electrical Code, and shall provide for the construction to be from material satisfactory and acceptable to the City Council/Commissioners Court. All construction must be of a compatible standard capable of withstanding winds of (a wind load rating applicable to airport location) mph, with doors open or closed.

**C.** The City Council / Commissioners Court's written approval of the plans and specifications must be obtained prior to construction of the improvements.

**D.** Construction must begin within one hundred twenty (120) days after the effective date of the lease or final comment from TxDOT and the FAA for the filed air space study as required by FAR Part 77, whichever date is later. Construction must be substantially completed within one hundred eighty (180) days of start of construction. Projects anticipated to exceed 180 construction days require approval of the Airport Manager. The Improvements on the leased premises shall remain the tenant's property until expiration or termination of the lease and its covenants or as otherwise agreed to in the contract between the City Council/Commissioners Court and the tenant.

**E.** Any privately owned structure or hangar not in use for aviation purposes for a period in excess of ninety (90) days or not available for lease or sublease for aviation purposes, unless so authorized for non-aviation uses by the City Council / Commissioners Court, must be removed after due notice to the owner in writing or the City Council / Commissioners Court will consider such structures or hangars abandoned and will seek title to such structure or hangar.

**F.** Leased land from which any building, hangar, or structure is removed, after due notice will be cleared, cleaned, and put back in its original or acceptable condition.

**Rule 7-3. Assignment and Sub-letting** -- Without the prior written consent of City Council / Commissioners Court, the leased premises or any rights there under (except to a leasehold mortgagee as herein provided) may not be assigned. Any assignment or subletting shall be expressly subject to all the terms and provisions of the original lease.

**Rule 7-4. Flying Clubs** - A Flying Club ("Club") shall meet the following standards:

**A.** At the time of applying for a lease, license, permit or agreement to operate at the Airport, the Club shall furnish the Airport Manager with a copy of its documents of organization; the Club's list of members, including names of officers and managers; evidence of required insurance; a description of all aircraft used; evidence that such aircraft are properly certificated; evidence of ownership of such aircraft; and any operating rules of the Club.

**B.** All aircraft used by the Club shall be owned by the Club or leased exclusively by written agreement to the Club, and all ownership or lease rights to such aircraft must be vested on a pro-rata basis in all of the Club's members. The property rights of the Club members shall be equal, and no part of any revenues received by the Club shall inure to the direct benefit of any member (e.g., by salary or bonus). The Club

shall not derive greater revenue from the use of its aircraft than the amount necessary for the operation, maintenance and replacement of its aircraft and facilities.

C. The Club's aircraft shall not be used by any person other than the Club's members and shall not be used by any person for hire, charter, or air taxi. Flight instruction may be given in Club aircraft.

**Rule 7-5. Environmental Issues and Indemnification** - Any tenant of the Airport, its agents, employees, independent contractors, or sub lessee shall not install, store, use, treat, transport or dispose of any:

A. Asbestos in any form

B. Urea formaldehyde foam insulation.

C. Transformers or other equipment which contain dielectric fluid containing levels of polychlorinated biphenyls in excess of 50 parts per million; or

D. Any other chemical, material, air pollutant, toxic pollutant, waste, or substance which is regulated as toxic or hazardous or exposure to which is prohibited, limited or regulated by the Resource Conservation Recovery Act, the Comprehensive and Environmental Response Compensation and Liability Act, the Hazardous Materials Transportation Act, the Toxic Substances Control Act, the Clean Air Act, and/or the Clean Water Act or any other federal, state, county, regional, local or other governmental authority or which, even if not so regulated, may or could pose a hazard to the health and safety of the occupants of the Leased Premises, and which is either:

1. in amounts in excess of that permitted or deemed safe under applicable law;
2. or in any manner which is prohibited or deemed unsafe under applicable law. (The substances referred to in (A), (B), (C) or (D) are collectively referred to hereinafter as "Hazardous Materials").

**Rule 7-6. Environmental Cleanup Laws** – An Airport tenant will, at their own expense, comply with all existing or hereafter enacted laws relating to Hazardous Materials (collectively, "Cleanup Laws") in effect at the time of the lease, and all future laws thereafter. An Airport tenant will, at their own expense, make all submissions to provide all information to, and comply with all requirements of the appropriate governmental authority (the "Authority") under the Cleanup Laws. Should any Authority require that a cleanup plan be prepared and that a cleanup be undertaken because of the existence of Hazardous Materials which were installed, stored, used, treated, transported, disposed of or discharged on the leased premises, by an airport tenant, its agents, employees, independent contractors or sub lessees during the term of a lease, the Airport tenant will prepare and submit the required plans and financial assurances in accordance with such Cleanup Laws. The Airport shall be indemnified and held harmless from and against all obligations, damages, injunctions, fines, penalties, demands, claims, costs, expenses, actions, liabilities, suits, proceedings and losses of whatever nature (including, without limitation, attorneys' fees and court costs), and all cleanup or removal costs and all actions of any kind arising out of or in any way connected with the installation, storage, use, treatment, transporting, disposal or discharge of Hazardous Materials in or on the leased premises by an Airport tenant.

**Rule 7-7. Environmental Notices** – An Airport tenant shall promptly supply the City Council / Commissioners Court with copies of any notices, correspondence and

submissions made or received from any governmental authorities of the United States Environmental Protection Agency, the United States Occupational Safety and Health Administration, or any other local, state or federal authority that requires submission of any information concerning environmental matters or Hazardous Materials.

**Rule 7-8. Environmental Survival** – An Airport tenant's liability pursuant to any environmental issue shall survive the expiration or earlier termination of their lease.

**Rule 7-9. Storm Water Compliance**

**A.** The Airport is subject to federal storm water regulations, 40 C.F.R. Part 122 for “vehicle maintenance shops” (including vehicle rehabilitation, mechanical repairs, painting, fueling and lubrication), equipment cleaning operations and/or deicing operations that occur at the Airport as defined in these regulations and, if applicable, state storm water regulations. Each Airport tenant shall become familiar with these storm water regulations if it conducts “vehicle maintenance” or operates equipment cleaning operations and/or deicing activities as defined in the federal storm water regulations.

**B.** The City or County shall take steps necessary to apply for or obtain a storm water discharge permit as required by the applicable federal and/or state regulations, including the leased property occupied or operated by an Airport tenant. A storm water discharge permit issued to the City or County may name an Airport tenant as a co-permittee.

**C.** An Airport tenant’s close cooperation is necessary to ensure compliance with any storm water discharge permit terms and conditions, as well as to ensure safety and to minimize costs. An Airport tenant may have to implement and maintain “Best Management Practices”. to minimize the exposure of storm water (and snow melt) to “significant materials” generated, stored, handled or otherwise used as defined in the federal storm water regulations.

**D.** The City or County’s storm water discharge permit is incorporated by reference into each lease and any subsequent renewals.

**E.** The City or County will provide an Airport tenant with a written notice of those storm water discharge permit requirements that are in the City or County’s storm water permit, that a tenant will be obligated to perform from time to time, including, but not limited to:

1. certification of non-storm water discharges;
2. collection of storm water samples
3. preparation of storm water pollution prevention or similar plans
4. implementation of “good housekeeping” measures or best management practices; and maintenance of necessary records.

Such written notice shall include applicable deadlines and an opportunity to dispute any of the storm water discharge permit requirements.

**F.** Each Airport tenant shall participate in any organized task force or other work group established to coordinate storm water activities of the Airport.

**Rule 7-10. Non Discrimination Covenants**

**A.** Each lease will include as a covenant running with the land to insure that:

1. no person on the grounds of race, color, sex, or national origin shall be excluded from participation in, denied the benefits of, or be otherwise subjected to discrimination in the use of the leased property;
2. that in the construction of any improvements on, over or under such land and the furnishing of services thereon, no person, on the grounds of race, color, sex or national origin, shall be excluded from participation in, denied benefits of, or otherwise be subjected to discrimination.

**B.** The right to conduct aeronautical activities for furnishing services to the public is granted to an Airport tenant subject to the agreement:

1. To furnish said services on a fair, equal and not unjustly discriminatory basis to all users.
2. To charge fair, reasonable, and not unjustly discriminatory prices for each unit or service provided an allowance may be made to make reasonable and nondiscriminatory discounts, rebates or other similar types of price reductions to volume purchasers.

**Rule 7-11. Insurance** – An Airport tenant shall during the term of lease maintain at their cost and expense insurance relating to the leased premises as follows:

**A.** Insurance against loss or damage to improvements by fire, lightning, and other risks included under standard extended coverage policies.

**B.** General public liability insurance against claims for bodily injury, death or property damage occurring on, in, or about the leased premises, such insurance to afford protection to City or County of not less than \$500,000.00 with respect to any one person, \$1,000,000.00 with respect to any one accident and not less than \$200,000.00 with respect to property damage.

**C.** Hangar keeper's liability insurance providing coverage for aircraft not owned by the tenant in the following limits: \$200,000.00 per aircraft and \$400,000.00 per occurrence on property damage to aircraft in the care, custody, or control of tenant.

**D.** All such policies of insurance shall be issued by insurance companies acceptable to the City or County, shall name the City or County as an additional insured or loss payee, as the case may be, and shall provide for at least ten (10) days written notice prior to cancellation or modification.

**Rule 7-12. Hold Harmless** – The City or County shall not be liable to an Airport tenant's employees, agents, servants, customers, invitees, or to any other person whomsoever, for any injury to persons or damages to property on or about the leased premises or any adjacent area owned by the City or County.

### **Section 8. Knowledge of Rules Implied**

By publication and adoption of this ordinance / order, all persons shall be deemed to have knowledge of its contents. However, the Airport Manager is directed to have copies of the ordinance / order posted in paper or electronically, where appropriate. Copies shall be available at all times in the Airport Manager's office, and copies shall be furnished to all owners and operators of aircraft based at the airport.

### **Section 9. Conflict of Rules and Regulations**

If and where there are conflicts in the rules and regulations prescribed herein and the FAA's Federal Aviation Regulations (FAR), the latter shall prevail. If and where there exists a conflict

between any of the rules or regulations prescribed herein and any other City / County rules applicable to the same area, the more stringent limitation, or requirement shall govern and prevail.

**Section 10. Penalty for Violation**

The Airport Manager may deny use of the Airport for a period not exceeding fifteen (15) days for any person violating or refusing to comply with any of the rules or regulations prescribed herein pending a hearing by the City Council / Commissioners Court. Upon such hearing, such person may be deprived of the further use of the Airport and its facilities for a period of time as may appear necessary for the protection of life and property. Any violation of this ordinance / order shall be a misdemeanor, and upon conviction, be punishable by a fine not exceeding two-hundred (\$200) dollars, and each day a violation continues to exist shall constitute a separate offense. This section is cumulative of all other penalties for violation of Federal, State, and local laws, rules, regulations, ordinances, and orders. Citation for violation or issuance of a violation ticket of any of the rules and regulations prescribed herein may be made by any authorized police officer. The Airport Manager or City Council / Commissioners Court may request authorized police officers to investigate any suspected violation of these rules.

**Section 11. Severability**

If any of the provisions of this ordinance/order or the application thereof to any person or circumstances is held invalid, such invalidity shall not affect other provisions or applications of the ordinance/order which can be given effect without the invalid provision or application, and to this end the provisions of this ordinance are declared to be severable.

**Section 12. Emergency Enactment**

Whereas, the immediate operation of the provisions of this ordinance/order is necessary for the preservation of the public health, public safety, and general welfare, an EMERGENCY is hereby declared to exist, and this ordinance/order shall be in full force and effect from and after its passage by the City Council/Commissioners Court of the City/County of \_\_\_\_\_, Texas and publication and posting as required by law.

Read, passed and adopted by a vote of the City Council/Commissioners Court of the City/County of \_\_\_\_\_, Texas on the \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

Members voting Aye; \_\_\_\_\_ Members voting Nay; \_\_\_\_\_.

\_\_\_\_\_  
Mayor / County Judge

City / County of \_\_\_\_\_, Texas

Attest: \_\_\_\_\_

City Secretary/County Clerk of \_\_\_\_\_, Texas.



# TxDOT Model Minimum Standards (FBO)



Airport Action Plan

Lago Vista – Rusty Allen Airport





## **Model Minimum Standards for Fixed Base Operators (FBO)**

The attached “Model of Minimum Standards for Fixed Base Operators (FBO)” has been prepared to assist owners of public use airports in developing standards for the providers of airport services. This is a guideline only. The local situation will dictate if additional or fewer standards will be applicable.

The owner of a public use airport which has a grant or loan obligations with either the Federal Aviation Administration (FAA) or the State of Texas or has deed obligations under the Surplus Property Act is required to make that airport available to all qualified users and providers without an unjust bias or discrimination. These obligations also prohibit the airport owner from granting an exclusive right to offer services or products. However, the airport owner may retain the exclusive right to perform any of the functions of an FBO providing this is done with its own employees and resources. A third party may not be designated as the agent of the airport owner to satisfy this exemption.

If an airport owner elects not to retain the exclusive right to provide services and there is a “need” for additional FBO services or positions, the airport owner may not routinely deny an application without sufficient justification. “Need” would be established if a proponent requests approval for an additional FBO business and is willing and able to accomplish such request. No other justification for “need” is required. This establishment of need would require the airport owner to allow all qualified persons the opportunity to bid on the subsequent FBO position. No qualified bidder, including the incumbent FBO, should be excluded from participating. If all suitable facilities are currently under lease and being actively used by the incumbent FBO, subsequent requests may be denied on the grounds of insufficient space. The airport owner would not be required to void or alter existing contracts to provide space or other provisions. The incumbent FBO should not be required to relinquish leased space or hangars which are actively used in his business and likewise, should not be able to hold unused space or hangars, even if included in his lease, solely for the purpose of denying a subsequent FBO sufficient space to set up operation.

Any new FBO contracts should be written to standards applicable at that time. The new contract does not necessarily have to be equal or comparable to any existing contract; however, the airport owner **MUST** be able to adequately justify the differences. In such case, the airport owner should be willing to renegotiate existing contracts that would place an incumbent FBO at an economic or business disadvantage. If a previous contract required a level of service which is no longer applicable, under no circumstances should the airport owner be liable for or be required to pay damages to an FBO for having to provide those services under previous contracts.

# Model Minimum Standards for Fixed Base Operators (FBO)

This is a summary of the obligations and services which should be provided by a Fixed Base Operator (FBO). This guideline may be attached to and become part of an actual lease agreement between an FBO and the airport owner. Should the actual lease agreement be more or less restrictive than this guideline, the lease would take precedence.

## I. Definitions

- A. **Fixed Base Operator** – A Fixed Base Operator is a person, firm, or corporation performing any of the functions or furnishing any of the services listed herein on a commercial basis. No person, firm, or corporation may act in the capacity of an FBO without a valid contract with the City/County of \_\_\_\_\_ authorizing such activity at the airport.
- B. **Airport Tenant** – An airport tenant is a person, firm, or corporation leasing or using airport property solely for the purpose of storing an aircraft and is not engaged in or providing any aviation related commercial activity or service at the airport. An airport tenant is not authorized to function as or provide the services of an FBO.

## II. Services and Requirements

- A. An FBO is authorized to offer or perform any or all of the following services or functions for the public. The guidelines for each service or function are listed.
1. Airframe or power plant repair: Sufficient hangar space, FAA certified mechanic on duty, paved outside parking area for aircraft, and paved access to the runway-taxiway system (if connecting runway or taxiway is paved).
  2. Fueling: Avgas and jet fuel storage tanks (tanks must be State approved and registered if required), fuel delivery by means of pumps and/or trucks, trained and qualified fueling technician, plan of action in case of a massive fuel spill, and at least the minimum number of working fire extinguishers and bonding cables as recommended in the latest edition of the National Fire Protection Association booklet, Manual 407 – “Standard for Aircraft Fuel Servicing, 2001 edition,” (or as revised) published by the National Fire Protection Association, 1 Batterymarch Park, P.O. Box 9101, Quincy MA 02269-9101, 800-344-3555. Fuel pumps and trucks must meet all applicable local and State codes and be approved for use by the local fire marshal.

3. Line service: Properly trained personnel; ropes, chains, or other restraining devices and wheel chocks for each tie down position.
4. Aircraft sales and/or rental: Sufficient office space, aircraft display area, telephone, and aircraft inventory.
5. Flight instruction: Trained and certified instructor, classroom, telephone and restrooms, and aircraft available for instruction.
6. Avionics: Shop area, office space with telephone and restrooms, and trained and certified personnel on duty.
7. Aircraft storage: Sufficient hangar, T-hangar, and tie down spaces.
8. Air taxi and charter: FAA Part 135 certification, aircraft with sufficient hangar, T-hangar, or tie down space, office with telephone and restrooms, and aircraft loading or unloading area.
9. Agricultural spraying operation: Qualified pilot, aircraft designed for such purpose, qualified personnel on duty to properly handle dangerous chemicals, secure area to store chemicals, and properly designed and constructed wash down pad.
10. Other as agreed on by contract: Telephone for public use, ground transportation into town, pilot and passenger lounge with restrooms, retail business area with restrooms, and coffee and/or soft drinks.

Hangar space, shop areas, restrooms, and other equipment as well as sufficient personnel shall not necessarily be accumulative for each service provided. For example, if an FBO provides both flight instruction and aircraft sales, both functions could be serviced by the same restrooms and telephone. The actual contract agreement between an FBO and the airport owner shall spell out the required services of each FBO and the square footage, number of personnel, etc. which must be provided by that FBO.

B. An FBO is required to perform the following functions or abide by the following rules:

1. Install, operate, maintain, repair, and store all equipment necessary for the conduct of the FBO's business subject to the approval of the airport owner.
2. Use, with others so authorized, any common areas or equipment on the airport including, but not limited to, the runways, taxiways, public aircraft and auto parking aprons, roadways, and navigational aids.
3. Upon termination of the lease, return any leased property to the airport owner in the same condition as it was at the start of the lease, normal wear

excluded. Any improvements or additions made to real property during the term of the lease will become property of the airport owner at the termination of the lease.

4. Will not prevent any person, company, or employee of a company from servicing, maintaining, or fueling their own aircraft that might be parked or hangared at the airport.
5. Make its business open to all forms and classes of aeronautical use.
6. Submit to and abide by periodic safety inspections by the Airport owner, the FAA, and/or the Texas Department of Transportation.
7. Maintain all leased areas and the interior and exterior of any leased or constructed buildings to an acceptable standard.
8. Remove and properly dispose of any trash from the leased property.
9. Notify and gain approval of the airport owner of any intended reduction of services which are included in the FBO's lease agreement.
10. Furnish all applicable services in a fair, equal, and nondiscriminatory manner to all airport users.
11. Abide by any and all rules, requirements, or mandates placed upon the airport owner by the FAA or the State of Texas including, but not limited to, the Grant Assurances of FAA grants and the Terms and Conditions of State of Texas grants.
12. An FBO does not have the right to perform any service or business on the Airport unless such service or business is included in the current lease agreement with the airport owner.
13. An FBO's rights do not supercede the airport owner's rights and obligations.

### **III. Airport Owner's Rights and Obligations**

The airport owner retains the right and/or obligation to do the following:

- A. Perform any or all of the functions of an FBO. If so inclined, the airport owner may retain a proprietary right to offer any or all FBO services and/or products and allow no FBO to offer the same services or products at the airport.
- B. Enter into contracts with other FBO's to operate similar or competitive businesses at the airport without regard to the wishes or desires of existing FBO's. Any new contracts will be written to standards applicable at that time.

If a new contract agreement gives an economic advantage to the new FBO, the airport owner may renegotiate its contract with the disadvantaged FBO; however, under no circumstances will the airport owner be held liable or required to pay damages for services, equipment or any other obligations which were required by past or current contracts.

- C. Approve an FBO's placement of buildings, parking areas, or equipment to assure such development is accomplished in an orderly fashion and does not impede the future development or expansion of the airport as shown on an FAA or Texas Department of Transportation approved Airport Layout Plan or Master Plan.
- D. Maintain the airport in a safe and serviceable condition.
- E. Collect all fees for the use of the airport; these fees include lease of hangar space, office space, T-hangar space, aircraft or auto parking areas, fuel flowage fees, and tie-down fees. The airport owner may charge these fees as long as such fees are fair and appropriate and not intended to discriminate for or against any FBO or airport user or type of user.
- F. Increase or decrease the fee or required services of an FBO at any time the FBO's contract is renegotiated or at any such time as authorized by the lease contract.
- G. Impound any personal property, tools, furniture, aircraft, or equipment located on the leased property and hold or liquidate such until all fees and taxes due the airport owner are paid, subject to a court judgement.
- H. Reserve the right to take any actions necessary to protect the safety and usability of the airport and the approach surfaces to all runway ends.

#### **IV. Payment and Fees**

- A. **Service Charge** – An FBO must pay all responsible rentals, fees, or charges in a timely manner. The airport owner retains the right to assess a service charge for any late payments dues to the owner.
- B. **Bond** – An FBO must show proof of financial responsibility or be properly bonded with the airport owner listed as beneficiary in the event the FBO cannot or will not return the property to an acceptable condition after the term to the lease or if the lease is prematurely terminated.
- C. **Utilities** – An FBO must arrange for water and waste water, gas, electricity, telephone, and any other utilities it uses on the airport and pay all responsible charges in a timely manner throughout the term of the lease.
- D. **Taxes** – An FBO will pay all responsible taxes in a timely manner.

E. **Other Bills** – An FBO will pay all responsible bills in a timely manner. Under no circumstances will the airport owner be responsible for payment of any taxes or bills owed by an FBO.

## **V. Insurance**

The airport owner will provide insurance for all real property located at the airport under the owner's policy. This policy will be for the sole benefit and protection of the airport owner. The FBO will be required to provide adequate insurance coverage for his personal property and the contents of any buildings under lease. The FBO must furnish current proof of these policies to the airport owner and any changes in those policies must have prior written approval of the airport owner.

## **VI. Solicitation and Conduct**

- A. An FBO will not engage in the solicitation of its fueling or other services on or about the airport in a loud, offensive, or objectionable manner. In the event of such questionable conduct, the airport owner will be the sole judge in determining if said conduct is a violation of the lease agreement and take any and all necessary steps to eliminate the undesirable condition, up to and including the termination of the FBOs lease contract.
- B. An FBO will conduct business on the airport in such a manner as to maintain a friendly and cooperative, though competitive, relationship with other operators engaged in similar businesses on the airport. An FBO will not engage in open public disputes, disagreements, or conflicts which would tend to deteriorate the quality of service of either party involved or which would be incompatible with the best interest of the public or the airport. The airport owner has the right to resolve all such disputes, disagreements, or conflicts and the airport owner's determination will be binding upon all FBO's operating at the airport.

## **VII. Use and Use Conflict**

Any land, building, paved area, and other infrastructure leased to an FBO are to be used and occupied solely for the purpose of operating a Fixed Base Operation and no other. The leased airport property cannot be sublet or divided, except for parking aircraft in hangars, T-hangars, or tie down spaces without the written permission of the airport owner. Should the FBO become deceased, be adjudged to be incompetent, or his business declared bankrupt or become insolvent, the leased property and the executed lease contract shall not be considered as a part of the FBO's estate or an asset of any appointed or assigned guardian, trustee, or receiver. In such cases, the FBO's lease will immediately terminate and all rights and property returned to the airport owner.

## **VIII. Unauthorized Use**

An FBO may not park vehicles, trailers, motor homes, mobile homes, or any other vehicle or trailer on airport property without written approval of the airport owner.

## **IX. Rules**

An FBO must abide by all laws, rules, regulations, guidelines, terms, and conditions of the airport owner, the Texas Department of Agriculture, the Environmental Protection Agency, the National Fire Protection Association, the local and State fire marshals, the Texas Department of Transportation, the Federal Aviation Administration, and any other applicable agencies in regard to the use and storage of pesticides, or other dangerous chemicals, the storage and dispensing of aircraft fuel, the storage, dispensing, and disposal of engine oil, the maintenance and upkeep of the airport facilities, the operation of the FBO's business, and the general safety and operation of the airport.



# TxDOT Model Lease Agreement



Airport Action Plan

Lago Vista – Rusty Allen Airport





# FAA Form 7460



Airport Action Plan

Lago Vista – Rusty Allen Airport





## NOTICE OF PROPOSED CONSTRUCTION OR ALTERATION

### § 77.7 Form and time of notice.

(a) If you are required to file notice under §77.9, you must submit to the FAA a completed FAA Form 7460-1, Notice of Proposed Construction or Alteration. FAA Form 7460-1 is available at FAA regional offices and on the Internet.

(b) You must submit this form at least 45 days before the start date of the proposed construction or alteration or the date an application for a construction permit is filed, whichever is earliest.

(c) If you propose construction or alteration that is also subject to the licensing requirements of the Federal Communications Commission (FCC), you must submit notice to the FAA on or before the date that the application is filed with the FCC.

(d) If you propose construction or alteration to an existing structure that exceeds 2,000 ft. in height above ground level (AGL), the FAA presumes it to be a hazard to air navigation that results in an inefficient use of airspace. You must include details explaining both why the proposal would not constitute a hazard to air navigation and why it would not cause an inefficient use of airspace.

(e) The 45-day advance notice requirement is waived if immediate construction or alteration is required because of an emergency involving essential public services, public health, or public safety. You may provide notice to the FAA by any available, expeditious means. You must file a completed FAA Form 7460-1 within 5 days of the initial notice to the FAA. Outside normal business hours, the nearest flight service station will accept emergency notices.

### § 77.9 Construction or alteration requiring notice.

If requested by the FAA, or if you propose any of the following types of construction or alteration, you must file notice with the FAA of:

(a) Any construction or alteration that is more than 200 ft. AGL at its site.

(b) Any construction or alteration that exceeds an imaginary surface extending outward and upward at any of the following slopes:

(1) 100 to 1 for a horizontal distance of 20,000 ft. from the nearest point of the nearest runway of each airport described in paragraph (d) of this section with its longest runway more than 3,200 ft. in actual length, excluding heliports.

(2) 50 to 1 for a horizontal distance of 10,000 ft. from the nearest point of the nearest runway of each airport described in paragraph (d) of this section with its longest runway no more than 3,200 ft. in actual length, excluding heliports.

(3) 25 to 1 for a horizontal distance of 5,000 ft. from the nearest point of the nearest landing and takeoff area of each heliport described in paragraph (d) of this section.

(c) Any highway, railroad, or other traverse way for mobile objects, of a height which, if adjusted upward 17 feet for an Interstate Highway that is part of the National System of Military and Interstate Highways where overcrossings are designed for a minimum of 17 feet vertical distance, 15 feet for any other public roadway, 10 feet or the height of the highest mobile object that would normally traverse the road, whichever is greater, for a private road, 23 feet for a railroad, and for a waterway or any other traverse way not previously mentioned, an amount equal to the height of the highest mobile object that would normally traverse it, would exceed a standard of paragraph (a) or (b) of this section.

(d) Any construction or alteration on any of the following airports and heliports:

(1) A public use airport listed in the Airport/Facility Directory, Alaska Supplement, or Pacific Chart Supplement of the U.S. Government Flight Information Publications;

(2) A military airport under construction, or an airport under construction that will be available for public use;

(3) An airport operated by a Federal agency or the DOD.

(4) An airport or heliport with at least one FAA-approved instrument approach procedure.

(e) You do not need to file notice for construction or alteration of:

(1) Any object that will be shielded by existing structures of a permanent and substantial nature or by natural terrain or topographic features of equal or greater height, and will be located in the congested area of a city, town, or settlement where the shielded structure will not adversely affect safety in air navigation;

(2) Any air navigation facility, airport visual approach or landing aid, aircraft arresting device, or meteorological device meeting FAA-approved siting criteria or an appropriate military service siting criteria on military airports, the location and height of which are fixed by its functional purpose;

(3) Any construction or alteration for which notice is required by any other FAA regulation.

(4) Any antenna structure of 20 feet or less in height, except one that would increase the height of another antenna structure.

Mail Processing Center  
Federal Aviation Administration  
Southwest Regional Office  
Obstruction Evaluation Group  
2601 Meacham Boulevard  
Fort Worth, TX 76193  
Fax: (817) 321-7765  
Phone: (817) 321-7750

Website: <https://oeaaa.faa.gov>

## INSTRUCTIONS FOR COMPLETING FAA FORM 7460-1

PLEASE TYPE or PRINT

ITEM #1. Please include the name, address and phone number of a personal contact point as well as the company name.

ITEM #2. Please include the name, address and phone number of a personal contact point as well as the company name.

ITEM #3. New Construction would be a structure that has not yet been built.

Alteration is a change to an existing structure such as the addition of a side mounted antenna, a change to the marking and lighting, a change to power and/or frequency, or a change to the height. The nature of the alteration shall be included in ITEM #21 "Complete Description of Proposal".

Existing would be a correction to the latitude and/or longitude, a correction to the height, or if filing on an existing structure which has never been studied by the FAA. The reason for the notice shall be included in ITEM #21 "Complete Description of Proposal".

ITEM #4. If Permanent, so indicate. If Temporary, such as a crane or drilling derrick, enters the estimated length of time the temporary structure will be up.

ITEM #5. Enter the date that construction is expected to start and the date that construction should be completed.

ITEM #6. Please indicate the type of structure. DO NOT LEAVE BLANK.

ITEM #7. In the event that obstruction marking and lighting is required, please indicate type desired. If no preference, check "other" and indicate "no preference" DO NOT LEAVE BLANK. NOTE: High Intensity lighting shall be used only for structures over 500' AGL. In the absence of high intensity lighting for structures over 500' AGL, marking is also required.

ITEM #8. If this is an existing tower that has been registered with the FCC, enter the FCC Antenna Structure Registration number here.

ITEM #9 and #10. Latitude and longitude must be geographic coordinates, accurate to within the nearest second or to the nearest hundredth of a second if known. Latitude and longitude derived solely from a hand-held G P S instrument is NOT acceptable. A hand-held GPS is only accurate to within 100 meters (328 feet) 95 percent of the time. This data, when plotted, should match the site depiction submitted under ITEM #20.

ITEM #11. NAD 83 is preferred; however, latitude and longitude may be submitted in NAD 27. Also, in some geographic areas where NAD 27 and NAD 83 are not available other datum may be used. It is important to know which datum is used. DO NOT LEAVE BLANK.

ITEM #12. Enter the name of the nearest city and state to the site. If the structure is or will be in a city, enter the name of that city and state.

ITEM #13. Enter the full name of the nearest public-use (not private-use) airport or heliport or military airport or heliport to the site.

ITEM #14. Enter the distance from the airport or heliport listed in #13 to the structure.

ITEM #15. Enter the direction from the airport or heliport listed in #13 to the structure.

ITEM #16. Enter the site elevation above mean sea level and expressed in whole feet rounded to the nearest foot (e.g. 17'3" rounds to 17', 17'6" rounds to 18'). This data should match the ground contour elevations for site depiction submitted under ITEM #20.

ITEM #17. Enter the total structure height above ground level in whole feet rounded to the next highest foot (e.g. 17'3" rounds to 18'). The total structure height shall include anything mounted on top of the structure, such as antennas, obstruction lights, lightning rods, etc.

ITEM #18. Enter the overall height above mean sea level and expressed in whole feet. This will be the total of ITEM #16 + ITEM #17.

ITEM #19. If an FAA aeronautical study was previously conducted, enter the previous study number.

ITEM #20. Enter the relationship of the structure to roads, airports, prominent terrain, existing structures, etc. Attach an 8-1/2" x 11" non-reduced copy of the appropriate 7.5 minute U.S. Geological Survey (USGS) Quadrangle Map MARKED WITH A PRECISE INDICATION OF THE SITE LOCATION. To obtain maps, contact USGS at 1-888-275-8747 or via internet at "<http://store.usgs.gov>". If available, attach a copy of a documented site survey with the surveyor's certification stating the amount of vertical and horizontal accuracy in feet.

ITEM #21.

- For transmitting stations, include maximum effective radiated power (ERP) and all frequencies.
- For antennas, include the type of antenna and center of radiation (Attach the antenna pattern, if available).
- For microwave, include azimuth relative to true north.
- For overhead wires or transmission lines, include size and configuration of wires and their supporting structures (Attach depiction).
- For each pole/support, include coordinates, site elevation, and structure height above ground level or water.
- For buildings, include site orientation, coordinates of each corner, dimensions, and construction materials.
- For alterations, explain the alteration thoroughly.
- For existing structures, thoroughly explain the reason for notifying the FAA (e.g. corrections, no record or previous study, etc.).

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Filing this information with the FAA does not relieve the sponsor of this construction or alteration from complying with any other federal, state or local rules or regulations. If you are not sure what other rules or regulations apply to your proposal, contact local/state aviation's and zoning authorities.

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**Paperwork Reduction Work Act Statement:** This information is collected to evaluate the effect of proposed construction or alteration on air navigation and is not confidential. Providing this information is mandatory or anyone proposing construction or alteration that meets or exceeds the criteria contained in 14 CFR, part 77. We estimate that the burden of this collection is an average 19 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, completing and reviewing the collection of information. A federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to a penalty for failure to comply with a collection of information subject to the requirements of the Paperwork Reduction Act unless that collection of information displays a currently valid OMB Control Number. The OMB control number associated with this collection is 2120-0001. Comments concerning the accuracy of this burden and suggestions for reducing the burden should be directed to the FAA at: 800 Independence Ave SW, Washington, DC 20591, Attn: Information Collection Clearance Officer, AES-200.





# TxDOT RAMP Program Information



Airport Action Plan

Lago Vista – Rusty Allen Airport







## **Texas Department of Transportation**

### **2015 Routine Airport Maintenance Program (RAMP) Grants**

- State funding is a \$50,000 match per airport for each fiscal year. The State fiscal year begins September 1<sup>st</sup>. The local government match is 50% of actual costs plus any excess of \$100,000 total costs.
- The program includes “lower cost” airside and landside airport improvements. These items can be more than just maintenance and may be new or additional items of work. Examples are: construction of airport entrance roads; pavement of airport public parking lots; installation of security fencing, replacement of rotating beacon, etc. TxDOT will determine the eligibility of specific items. **Keep in mind that airside improvements are of first priority before requesting assistance with landside maintenance and improvements.**
- Local governments are allowed to issue their own contracts for scope of services, or TxDOT local districts can perform services within their capabilities. TxDOT will not participate in contracts for any ineligible scope items or for costs that are unreasonable for the type of service. Local government force account work is NOT ELIGIBLE, but purchase of materials for construction with sponsor labor is eligible.
- **A Grant must be executed each state fiscal year, prior to work being performed.** To initiate the grant the City or County should contact Aviation Division with a description of the project for which the grant is being requested and the estimated cost of the project, if available. The contact may be in the form of a written letter, electronic mail, facsimile, by telephone, or personal contact with staff.
- **Work as described on the Scope of Services of the grant shall be completed during the State fiscal year (September 1<sup>st</sup> – August 31<sup>st</sup>)**

**Call the Aviation Division at 1-800-687-4568 (68-PILOT) for more information or go to Aviation on the TxDOT Web Site: <http://www.txdot.gov/business/aviation/default.htm>**

## ELIGIBLE WORK ITEMS UNDER RAMP GRANTS

<b>AIRSIDE MAINTENANCE</b>
Pavement crack sealing
Pavement Slurry Seal/Fog Seal/Rejuvenator
Pavement markings
Limited pavement failure repairs
Drainage maintenance
Sweeping
Herbicide – fire ant control – mesquite tree eradication
Replacement bulbs/lamps for airside lighting fixtures and approach aids
Beacon, lighting, approach aids – repair and maintenance
Parts replacement for AWOS not covered under warranty
<b>AFTER AIRSIDE MAINTENANCE HAS BEEN ADDRESSED</b>
Seal coats/chip seal/crack seal for non-airside pavement, repair/maintenance of airport public auto parking
Hangar/terminal building painting and repairs -sponsor owned facilities only
Security camera systems
Game proof or security fencing and gates, electric gate openers
Access roads for AWOS installations
Navigational aids purchase and installation
AWOS NADIN interface monthly charge
Airport entrance signs & landscaping
Repairs to airport owned fuel systems, including replacement of tanks
Professional Services for preparation of Storm Water Pollution Prevention, Spill Prevention Control & Countermeasure Plans and maintenance/update of these plans
<b>SMALL CAPITAL IMPROVEMENT PROJECTS</b>
New public auto parking areas - engineering/design costs included
New entrance roads, hangar access roads - engineering/design costs included
Design and Construction of aircraft wash racks as indicated by SWPPP
Expansion of apron areas or new apron areas - engineering/design costs included
Pilot lounge/small general aviation terminal buildings
Drainage improvements - engineering/design costs included
Extension of runway lighting systems- engineering/design costs included
Beacon/tower replacements
Water wells, lines/sewer lines & septic systems - compliance with EPA and TCEQ responsibility of Sponsor
Preparation of FAA form 7460-1 “Notice of Proposed Construction or Alteration” for RAMP projects
<b>INELIGIBLE WORK ITEMS UNDER RAMP GRANTS</b>
Mowing - may be done by TxDOT or TxDOT contract forces but the cost is 100% Sponsor responsibility
Purchase of Capital Outlay Equipment except as allowed above
Operating Expenditures
Consumables - unless listed above
Force Account work by sponsor
<i>Work performed or purchases made prior to the grant being fully executed</i>

# FAA Guide to TTF Rate Setting Methodology



Airport Action Plan

Lago Vista – Rusty Allen Airport







**FAA  
Airports**

## **Examples of Residential Through-the-Fence Access Rate-Setting Methodologies**

Section 136 of P.L. 112-95 requires residential through-the-fence (RTTF) users to pay access charges that the airport sponsor determines to be comparable to those fees charged to tenants and operators on-airport making similar use of the airport as a minimum. However, airport sponsors are not precluded from charging RTTF users a rate that is higher than rates charged to on-airport users and tenants. RTTF users are not protected by Grant Assurance 22, Economic Nondiscrimination, and the FAA will not entertain allegations of unreasonableness for residential through-the-fence access.

The FAA has identified the following examples of rate-setting methodologies which may be used to satisfy the requirement contained in the law:

- Requiring RTTF users to pay fees which are equal to tenant tie-down charges.
- Establishing a fee for RTTF users that is based on the methodology used to establish tenant rates for land rental on the airport. For example, if on airport users pay 25 cents per square foot of land on which they build a hangar, RTTF users would pay a minimum of 25 cents per square foot of the land their off-airport hangar occupies.
- Establishing a ground lease for dedicated taxiway connections to off-airport properties.
- Charging an assessment of capital costs for general infrastructure.
- A local tax assessment or levy on off-airport aircraft owners that is dedicated to airport's account.

A methodology which results in an RTTF user paying an access fee which is less than the fee charged to on-airport tenants and users making similar use of the airport may not be consistent with the law.



# Appendix 3: Other Reference Documents

Existing Minimum Standards

Existing TTF Master Agreement with Rusty Allen Airport Property Owners Association (RAAPOA)

City Zoning for Airport Environ

Existing Height Hazard Zoning Ordinance

City 2030 Comprehensive Plan Future Land Use Map

City 2030 Comprehensive Plan Future Transportation Map

AWOS Protection Exhibit



Airport Action Plan

Lago Vista – Rusty Allen Airport





# Existing Minimum Standards



Airport Action Plan

Lago Vista – Rusty Allen Airport





# City Minimum Standards Ordinance

	Lighting	Materials	Support Structure	Landscaping
Freestanding, single business	Direct or indirect	Synthetic, wood or stone	Wood or stone	Required <sup>2</sup>
Freestanding, multitenant	Direct or indirect	Synthetic, wood or stone	Wood or stone	Required <sup>2</sup>
Projecting wall	Direct or indirect	Synthetic, metal or wood	Metal mounting hardware	Not required
Hanging wall	Direct or indirect	Synthetic, metal or wood	Metal mounting hardware	Not required
Residential subdivision	Indirect	Wood or stone	Wood or stone	Required <sup>2</sup>
Political	Indirect	Synthetic, wood or paper	Wood or metal	Not required
Commercial real estate	Indirect	Synthetic, wood or paper	Wood or metal	Not required
Government, utility, institutional	Direct or indirect	Synthetic, wood or stone	Wood or stone	Required <sup>2</sup>
Sandwich board	Indirect	Synthetic or wood	Wood	Not required
Menu board	Direct or indirect	Synthetic or wood	Wood or stone	Not required
Temporary banner	Indirect	Synthetic	Metal mounting hardware	Not required
Residential real estate	Indirect	Synthetic, metal or wood	Wood or metal	Not required
Window	Indirect	Paint	Glass or plexiglass	Not required
Awning, canopy and marquee sign	Indirect	Synthetic	Metal mounting hardware	Not required
Public information	Direct or indirect	Wood or stone	Wood, stone or metal	Required <sup>2</sup>
Residential nameplate	Indirect	Wood, metal or stone	Metal mounting hardware	Not required

<sup>2</sup> Required xeriscaping with native Central Texas plantings.

(Ordinance O-03-15 adopted 1/15/15)

## ARTICLE 4.900 MINIMUM AIRPORT STANDARDS

### Sec. 4.901 Definitions

Unless otherwise provided herein, the following terms shall be defined in this article as follows:

**Airport.** Properties currently owned or as may be acquired by the city for the purpose of operating an airport and including but not limited to lots 48, 49, 50, 52, and 57 of Bar-K Airport Subdivision, Lago Vista, Texas and all public rights-of-way and/or public easements as set forth on plats filed with the county clerk.

**City.** The City of Lago Vista, Texas.

**CTAF/Unicom.** Common traffic advisory frequency which the radio frequency that all ground vehicles and airport residents with airplanes shall be turned to when entering, exiting or using in any way the runway or taxiway.

**FAA.** The Federal Aviation Administration of the United States Department of Transportation.

**Person.** Any corporation, partnership, association or other artificial entity; or any individual; or any agent or employee of the foregoing.

**Pilot.** Any person possessing an FAA pilot's license, including a student pilot's license.

### Sec. 4.902 Minimum Standards

The standards adopted herein are the minimum standards for the maintenance and operation of the airport. The terms set forth herein shall apply uniformly to all persons operating on or desiring to operate from the airport.

### Sec. 4.903 Federal Aviation Administration Rules to be Observed

The Federal Air Traffic Rules promulgated by the FAA shall be observed by all persons utilizing the airport.

### Sec. 4.904 Overriding Right of City and FAA

Any clause herein to the contrary notwithstanding, the city reserves the right to develop and make any improvements to the airport or make any repairs to the airport and amend, modify or repeal any of the standards set forth herein at any time. Any section of this article which is in conflict with FAA regulations, either currently or in the future, shall be superseded by the FAA regulations.

### Sec. 4.905 Airport Layout Plan

The airport manager and city shall have prepared and shall maintain a copy of a current airport layout plan ("ALP") approved by the city council. The ALP shall provide for the orderly development and maximization of revenues from the operation of the airport. All development, leases and activities concerning the use and operation of the airport shall conform with the ALP.

 **Sec. 4.906 Taxiways**

- (a) Extension. Taxiways will be extended according to the airport layout plan (ALP). Property owners seeking access to the airport shall extend and construct the taxiway across the taxiway frontage portion of the property in accordance with this code and this article prior to being granted access.
- (b) Pavement Bearing Strength. Taxiways shall be constructed in accordance with TxDOT standards.

 **Sec. 4.907 Aircraft Weight Limits**

No person shall operate any aircraft on the airport which exceeds the weight limits identified in either the current official "Airport/Facility Directory" published by the National Oceanic and Atmospheric Administration of the U.S. Department of Commerce or by a Notice to Airmen (NOTAM) issued by the city.

 **Sec. 4.908 Nondiscrimination**

Public facilities at the airport shall be open to all classes of users on a fair and nondiscriminatory basis. Persons using the airport shall comply with all provisions of federal and state law, as amended from time to time, as they pertain to discrimination and are hereby specifically prohibited from discrimination against any group or individual on the basis of race, religion, color, creed, national origin, sex or disability.

 **Sec. 4.909 Commercial Operations**

No person may conduct any commercial aviation activity, offer any goods or services for compensation, or provide any goods or services for compensation to the public at the airport unless such person is duly licensed and in compliance with all requirements of the FAA and this article.

 **Sec. 4.910 Compliance with Health, Fire, Building and Zoning Codes**

All persons utilizing the airport shall comply with the requirements of all city, county or state health, fire, building and zoning codes as they are amended from time to time.

 **Sec. 4.911 Damages**

Notwithstanding any clause herein or lease provision to the contrary, any person damaging the airport or public property shall be responsible for all damages incurred. The city may take whatever legal action is necessary to recover compensation for damages to the airport or public property.

 **Sec. 4.912 Fees**

All transient aircraft must pay for overnight parking of aircraft.

 **Sec. 4.913 Licenses, Certifications and Authorizations**

It shall be illegal for a person to operate any aircraft on or from the airport, whether for compensation or not, unless he/she possesses all licenses, certificates and authorizations required by the FAA Safeguard of Persons and Property. The airport manager is authorized to take necessary and reasonable action to safeguard the persons, equipment and aircraft at the airport. Children under twelve (12) years of age shall not be allowed anywhere on the airport premises unless supervised by a responsible adult.

 **Sec. 4.914 Vehicular and Pedestrian Traffic**

All vehicular traffic at the airport shall not exceed fifteen (15) miles per hour.

 **Sec. 4.915 Authority of Airport Manager to Suspend or Restrict Operations**

The airport manager may suspend or restrict airport operations in the event of an emergency, including but not limited to poor weather conditions, which threaten the safety of persons using the airport.

 **Sec. 4.916 Aircraft Repairs**

No aircraft shall be repaired on any part of the runway area or taxiway, ramps or parking areas except for emergencies and for necessary maintenance, testing or cleaning.

 **Sec. 4.917 Vehicle Requirements for Crossing Primary Landing Area**

- (a) Any ground vehicles desiring to cross the primary landing area shall have the following equipment:
- (1) A rotary amber beacon that has the ability to flash in the four cardinal directions mounted permanently or magnetically.
  - (2) A two-way radio inside the vehicle that has the ability to contact the appropriate CTAF/Unicom frequency associated with the airport.
- (b) All ground vehicles crossing into and exiting the primary landing area shall radio their intentions in accordance with recommended FAA regulations for nontowered airports and have their beacon lights attached to the top of the vehicle and activated for the duration.
- (c) The best practices for operating a ground vehicle on a nontowered airport set out by the FAA are as follows:

- (1) When you approach the runways and taxiways, stop, look both ways, and listen for aircraft that are landing or taking off. Vehicle windows should be open to do this properly.
- (2) Alert others when you are using a taxiway or runway by always making an announcement on the radio before you enter. Be specific with your location and intentions.
- (3) Always yield the right-of-way to taxiing aircraft and give them plenty of room. If an aircraft is headed toward you on the same taxiway, move out of the aircraft's way.
- (4) Always carry a radio tuned to the airport's common traffic advisory frequency (CTAF) or Unicom.
- (5) If an aircraft is about to land on a runway that you need to cross, stop well clear of the runway. Continue to yield to the aircraft until it has landed and taxied off of the runway.
- (6) Be aware that some aircraft at nontowered airports are not equipped with radios.
- (7) Before you cross a runway, ensure that no potentially conflicting aircraft are taxiing, landing or taking off. Be aware of aircraft at nontowered airports that frequently make touch-and-go landings (immediately after landing, full power is applied and the aircraft takes off again).
- (8) If your vehicle has a rotating beacon, be sure to turn it on anytime you are on the airport surface. Turn on headlights as well, being careful not to blind any pilots in the area.
- (9) Generally, it is good practice to cross runways at their ends. If one is available, a perimeter road or taxiway is the recommended route for crossing a runway at a nontowered airfield.

#### **Sec. 4.918 Fueling of Aircraft**

The following regulations shall govern the fueling of aircraft:

- (1) Aircraft shall not be fueled while an engine is running.
- (2) Smoking or open flames are prohibited while fueling within one hundred (100) feet of any aircraft or fuel truck.
- (3) All aircraft shall be fueled at the fueling station or at such locations reasonably clear of hangars and other structures.
- (4) All aircraft shall have a proper electrical ground wire in place at all times when being serviced with fuel.

#### **Sec. 4.919 Starting or Running of Aircraft Engines**

The following regulations shall govern the starting of aircraft engines:

- (1) If an aircraft is not equipped with adequate brakes, the engines of such aircraft shall not be started unless the wheels have been set with blocks attached to ropes or other suitable means for removing them.
- (2) No engine shall be started unless a pilot is in control of the aircraft.
- (3) No engine shall be started in any area in which the propeller stream presents a danger to the safety of other persons or property.
- (4) Pilots of aircraft at the airport shall take such actions as to prevent the propeller stream from blowing rocks, soil and other debris into any hangar, parked aircraft or other vehicles.
- (5) Aircraft are prohibited from loading or unloading passengers with any engine running unless a pilot is at the control of the aircraft.
- (6) No aircraft shall be left running without a pilot at the controls of the aircraft.

#### **Sec. 4.920 Taxiing of Aircraft**

The following regulations shall govern the taxiing of aircraft:

- (1) No person shall taxi an aircraft until such time as the pilot of the aircraft has determined there is no danger of collision with another aircraft, person or object.
- (2) All aircraft shall taxi at a safe rate of speed and in such a manner as to be under the control of the pilot at all times.
- (3) Aircraft not equipped with adequate brakes shall not taxi near buildings or parked aircraft unless an attendant is at each wingtip of the aircraft to assist the pilot.
- (4) Aircraft shall not taxi onto the runway from the ramp, taxi area or grass if there is an aircraft approaching to land or on the runway in take-off position.

#### **Sec. 4.921 Take-Off, Landing, Flying Rules and Procedures**

All pilots are required to call on the published CTAF/Unicom to determine the runway favored by the wind and to announce their position and intentions for take-off and landing. Wind and runway information, if given, is of an advisory nature only and the final decision as to which runway to use or whether or not to take-off or land, is at the sole discretion of the pilot. Any deviation from the runway in use shall be announced to aircraft traffic and the right-of-way yielded. No take-offs or landings shall be made on the apron, parking ramp or taxiways at any time except for emergencies and for rotary wing aircraft associated with helicopter operations.

#### **Sec. 4.922 Parking of Aircraft and Vehicles**

No part of any vehicle or aircraft shall be parked at any time within the hold line (100 feet of the centerline of the runway). No vehicle or aircraft shall be parked anywhere on Lot 57 (the airport environment) in such a manner as to inhibit the taxiing of an aircraft (parking means no qualified operator at the controls). Parking is allowed in designated areas. The following properties are designated as aircraft or vehicle parking: Lots 48, 49, 50 and 52 of Bar-K Airport Subdivision as shown on exhibit A to Ordinance O-32-14; provided that no aircraft shall be parked so as to obstruct access to the aircraft fueling area and no aircraft may be parked in an existing taxiway easement. The city manager, or his/her designee, may allow parking in nondesignated areas for special events at the airport. It shall be the responsibility of the pilot, upon leaving a parked aircraft, to properly chock the wheels or tie down the aircraft. All transient aircraft shall pay the fee for parking. Aircraft may be parked and tied down on unimproved surfaces including grass. Improved or paved aircraft parking may be constructed without the presence of a hangar or other principal building on the lot with the parking.

#### **Sec. 4.923 Aircraft Tie-Downs**

All aircraft shall be tied down or secured at night and during inclement weather at the sole responsibility of the pilot. The aircraft owner, pilot, or his/her agent is responsible for the tie-down or security of the aircraft at all times and particularly during inclement weather. The owner, pilot or his/her agent shall be responsible for securing tie-down chains and/or ropes suitable for the aircraft.

#### **Sec. 4.924 Airport Maintenance**

The occupant of property or facilities within the airport shall keep such property or facilities in a neat and orderly manner such as not to cause a health or safety hazard to the users of the airport.

#### **Sec. 4.925 Student Training**

Flying instructors shall inform their students of the provisions of this article upon commencement of flying lessons. No aircraft shall be permitted to remain on landing or take-off areas for the purpose of student instruction.

#### **Sec. 4.926 Actions Prohibited**

The flying of model and UAV drone aircraft at the airport is prohibited and no person shall use or occupy the airport for any purpose that is inconsistent with the operation and use of the airport for aviation purposes.

(Ordinance O-32-14 adopted 12/18/14)

#### **Sec. 4.927 Permitting Requirements**

All vehicles desiring to cross the primary landing area are required to have a permit from the city for items in [Section 4.917\(a\)](#). All permit stickers must be affixed to the equipment as described in [Section 4.917\(a\)](#). The permit verifies all requirements in [Section 4.917](#) are being met and all equipment is in operational condition. Permits granted from the city shall be good for the life of the equipment. (Ordinance 15-04-16-01 adopted 4/16/15)

#### **Sec. 4.928 Penalty**

Any person who shall violate any of the provisions of this article, or shall fail to comply therewith, or with any of the requirements thereof, shall be deemed guilty of an offense and shall be liable for a fine in accordance with the general penalty provision set forth in [Section 1.109](#) of this code. Each day the violation exists shall constitute a separate offense. Such penalty shall be in addition to all the other remedies provided herein. (Ordinance O-32-14 adopted 12/18/14)

### **ARTICLE 4.1000 LAGO VISTA COMMUNITY RADIO**

#### **Sec. 4.1001 Standard Operating Procedures**

All text to be broadcast must be submitted to the city manager in writing. The submission should contain the desired start date and end date for the message. Requests for non-emergency public announcements will be approved or denied by the city manager. The city manager's decision is final and not subject to appeal. Live broadcasts may be initiated by the mayor, city manager, chief of police and emergency management coordinator. Access to the transmitter, in normal and emergency situations, is assigned to the chief of police or his designated representative (dispatcher). Emergency messages will be entered into the transmitter after approval of the chief of police or emergency management coordinator. Messages involving community or school items will be entered upon receipt from the city manager. Emergency or time sensitive announcements that need to be broadcast during non-work hours may be called in directly to the police dispatcher. Other access to the transmitter outside of this procedure will be on an emergency basis when time is critical. Emergency messages will be broadcast during the duration of the emergency. Community and school announcements will be broadcast on a 24 hour basis, with interruptions at 8:00 a.m., 12:00 noon and 6:00 p.m. for NOAA weather broadcasts. During periods when there are no community or school announcements, the NOAA weather broadcast will run 24 hours a day. (Ordinance 03-04-17-04 adopted 4/17/03)

# Existing TTF Master Agreement with Rusty Allen Airport Property Owners Association (RAAPOA)



Airport Action Plan

Lago Vista – Rusty Allen Airport







- conditions and pay for the electricity to operate same.
4. Maintaining the AWOS (Automatic Weather Observing System) in an operable condition and all associated equipment and paying for the electricity and telephone service to operate same. In addition, keep and pay for the AWOS maintenance agreement with TxDot.
  5. Maintain drainage on City owned airport property in an operable manner

**Section 2. Capital Improvements.** The City may, as appropriate in the judgment of the city council, from time to time seek state and federal grants for improvement of the Airport.

## **Article 2. Consideration And Performance By the RAAPOA.**

**Section 1. Cancellation of Agreements.** The RAAPOA agrees the City's cancellation of the Lease and the O&M Agreement were material benefits to the RAAPOA and continue as good and sufficient consideration for the promises, covenants, agreements and commitments by the RAAPOA pursuant to this Agreement. The RAAPOA further agrees the modifications and amendments made to the First Agreement by this Agreement are good and sufficient consideration for this Agreement.

**Section 2. Operating Payments to City.** The RAAPOA shall, annually during the term of this Agreement, assess and collect funds and dues from its members sufficient for RAAPOA to pay the annual use fee provided in Section 3 to be paid by RAAPOA to the City.

**Section 3. Annual Use Fee.** The RAAPOA shall pay the City the sum of Twenty Thousand Dollars (\$20,000.00) on or before July 1<sup>st</sup> each year during the term of this Agreement. Such use fee shall be used by the City to fund and pay a portion of the annual operating and maintenance expenses of the Airport, runways and taxiways.

The first payment will be due sixty days after this agreement is signed and all payments thereafter will be due on July 1<sup>st</sup> through 2019.

**Section 4. Additional Maintenance Assessments.** During the term of this Agreement, in addition to the annual use fee described in Section 3, the RAAPOA will pay the City one half of the cost and expense incurred by the City in excess of two thousand dollars (\$2,000.00) but not reimbursed through some other means of any necessary major maintenance or repair of the runway, taxiway or related facilities; provided; however, that the City will make all reasonable efforts to secure funding for such maintenance and repairs through TxDot or other grants or insurance claims. The RAAPOA will assess and collect such additional funds and dues from its members sufficient for RAAPOA to make any payments required under this Section.

**Section 5. Cost of Improvements.** The RAAPOA shall during the term of this Agreement collect from its members and pay to the City sufficient funds and monies to fund and pay the cost of all necessary and useful capital improvements that are made to the existing Airport environment that are not paid and funded by a state or federal grant. As a general rule financial participation by the RAAPOA on grant supported Capital Projects shall be limited to five percent (5%) of the total project cost unless both parties agree to other financial arrangements. Nothing herein, shall preclude the City or the RAAPOA from funding Capital Improvement on or around the Airport which are not supported by grants or that may be funded in entirety by the City or the RAAPOA; however, all Capital Improvements undertaken at the Airport are subject to the approval of the City.

**Section 6. Collection of Funds.** The RAAPOA shall during the term of this Agreement use all reasonably available lawful means, including but not limited to filing suit, enforcement of liens, foreclosure and denial of membership privileges, to collect from its members funds sufficient to meet its obligations pursuant to this Article 2.

The RAAPOA shall have the authority to determine and collect tenant aircraft parking fees from all property owners and airplane owners utilizing the airport; provided that fees charged to non-property owners shall be approved by the City Council.

### **Article 3. General Provisions.**

**Section 1. Term.** The term of this Agreement shall be 120 months, beginning on the 1st day of March 2009, and expiring at 12:00 P.M. local time on the last day of February 2019.

**Section 2. City Funding.** Any and all funding by the City of Lago Vista under this agreement is subject and limited to annual appropriations as approved by the City Council. If for any fiscal year the City does not appropriate funds sufficient in the judgment of the City Council to perform the City's obligations under Article 1, Section 1, the RAAPOA may terminate this Agreement.

If the city ,materially reduces, or does not provide. the services listed in Article 1, Section 1. the Annual use fee as stated in Article 2, Section 3, shall be amended accordingly.

**Section 3. Airport Property.** All property, real or personal, and all assets, equipment, furniture and fixtures presently or hereafter located on the grounds and property of the Airport shall, as between the City and the RAAPOA, be and remain the property of the City. All assets, equipment, furniture, fixtures and supplies purchased with funds and monies paid by the RAAPOA to the City pursuant to this

Agreement shall be and become assets and property of the City immediately upon the purchase or other acquisition of such assets or property.

**Section 4. Entire Agreement.** This Agreement embraces the entire agreement between the parties hereto and no statement, remark, agreement, or understanding either oral or written, not contained herein shall be recognized or enforced, except that this Agreement may be modified by a written addendum by and between the City and the RAAPOA. Effective as of the date of the execution of this Agreement by both parties, all other contracts, agreements and leases by and between the City and the RAAPOA are cancelled.

**Section 5. Miscellaneous.** (a) For the purpose of this Agreement, the singular number shall include the plural and the masculine shall include the feminine and vice-versa, whenever the context so admits or requires.

(b) The captions and headings are inserted solely for convenience of reference and are not part of nor intended to govern, limit, or aid in the construction of any provision hereof.

(c) The parties to this Agreement acknowledge and agree that they are the principals to the Agreement and have the power, right, and authority to enter into this Agreement and are not acting as an agent for the benefit of any third party.

(d) This Agreement shall be governed by the laws of the State of Texas and construed thereunder and venue of any action brought under this document shall be in Travis County, Texas.

(e) If any section, paragraph, sentence, or phrase entered in this Agreement is held to be illegal or unenforceable by a court of competent jurisdiction, such illegality or unenforceability shall not affect the remainder of this Agreement which can be given effect without the illegal or unenforceable section, paragraph, sentence, or phrase and to this end, the provisions of this Agreement are declared to be severable.

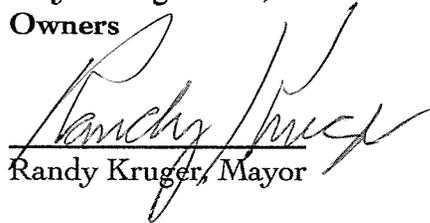
(f) The recitals hereinabove are incorporated herein and made a part of this contract.

(g) Save and except for conduct, e.g. intentional wrongful action, that may not be insured against, or that is commonly excepted from insurance coverage, the City shall be solely responsible for any liabilities or claims that may arise from or with respect to the performance, or non-performance, of the duties and responsibilities of the Parties with respect to the operation and maintenance of the Airport; provided that this provision shall not be construed to create, establish or support any benefit, right or claim for or on behalf of any third party. This provision is solely for the benefit of the City and the RAAPOA,

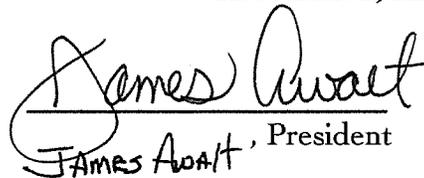
and the City will obtain and maintain such liability insurance or risk pool coverage as the City finds necessary and reasonable to insure the City and its officers and employees against any claim or cause of action arising out of the operation and maintenance of the Airport.

EXECUTED and effective, as of the 1st day of July 2009.

**City of Lago Vista, Texas  
Owners**

  
Randy Kruger, Mayor

**Rusty Allen Airport Property  
Association, Inc.**

  
James Awaat, President



# City Zoning for Airport Environ



Airport Action Plan

Lago Vista – Rusty Allen Airport





## ZONING DISTRICTS

### ABBREVIATED DESIGNATION

R-O  
R-1 A through G  
R-1M  
R-2  
R-4  
  
RR-A  
C-1 A through C-1C  
C-2  
C-3  
C-4  
C-6  
C-R  
MI  
LI  
U-1  
  
P, P-1A, P-1B, P-1C, P-2  
G-1  
PDD  
TR-1

### ZONING DISTRICT

Zero Lot Line  
Single-family residential  
Mobile Home  
Two-Family Residential  
Multi-family Residential (Apartments, Townhouses  
and cottages)  
Restricted Single Family With Aircraft  
Professional, Business Office, Low Density Retail  
Commercial; Large Scale  
Commercial, Marina  
Commercial, Airport  
Large Commercial/Retail Zoning District  
Commercial. Resort  
Minimal Impact District  
Light Industrial Zoning  
Governmental, Educational, Industrial, Utility and  
Institutional, including any required equipment  
storage areas  
Park Districts  
Golf Courses & Supporting Facilities  
Planned Development District  
Temporary Zoning designation, no development or  
building authorized until permanent zoning  
approved

**R-1A through R-1G-Single-Family Residential District.**

**Purpose.** This districts are intended to include lands within, the corporate limits of the City being used, or intended to be used, for single-family residential purposes and associated uses. The district is designed to provide sufficient, suitable residential neighborhoods, protected from incompatible uses, and provided with necessary facilities and service.

**Development Standards.**

RESIDENTIAL	Max Impervious Cover %	Min. Living Area (sq. ft.)	Front Setback (ft.)	Rear Setback (ft.)	Min. Side Yard Setback (ft.)	Total Side Yard Setback (ft.)	Corner Setback (ft.)	Building Height (ft.)
Single Family								
R-1A	50	1200	25	25	5	15	15	15
R-1B	50	1500	25	25	5	15	15	15
R-1C	50	1700	25	25	5	15	15	15 (see note)
R-1D	50	1200	25	25	5	15	15	18
R-1E	50	1500	25	25	5	15	15	18
R-1F	50	1500	25	25	Within Lot Lines		15	18 (above 722')
R-1G	50	1800	25	25	5	15	15	18

Note-18' at The Cove

**Permitted Uses.**

Accessory Building or Use	Park – Passive
Bed and Breakfast Establishment – Special Use Permit	Playground
Churches, Temples	Police Station
Community Home	Pumping Plant-Public
Dwelling – Single Family	**Realty Office – temporary
Family Home Facility – must be authorized per ordinance	School-Public/Private
Fire Station	***Short Term Occupancy
Golf Course	Substation-public utility
*Home Based Business	Swimming Pool-private
Library	Telephone Exchange
Livestock or Poultry shelter or care, Stable-Special Use Permit	Water tank-surface, subsurface, public

\* Permitted only in accordance with Zoning Ordinance, Exhibit A [Section 16](#), Home Occupations.

\*\* For additional requirements, see the building code.

\*\*\* Permitted only in accordance with Zoning Ordinance, Exhibit A, [Section 23](#), Short-Term Occupancy

**RR-A Restricted Residential with Aircraft**

**Purpose.** This district is available only to residential property that abuts the municipal airport at a location at which a permit may be issued in compliance with the applicable rules and regulations of the Federal Aviation Administration, the Rusty Allen Airport Property Owners Association, and the applicable restrictive covenants, if any, provided in any grant or contract with a Federal or State agency. The purpose of this district is to provide an appropriate zoning district so that qualifying property may be used for a single family dwelling with a hangar, and has “through the fence” access to the municipal airport.

**Development Standards.**

RESTRICTED RESIDENTIAL WITH AIRCRAFT	Lot Area %	Min. Living Area (sq. ft.)	Front Setback (ft.)	Rear Setback (ft.)	Min. Side Yard Setback (ft.)	Total Side Yard Setback (ft.)	Corner Setback (ft.)	Building Height (ft.)
RR-A	Res w/aircraft	1800	25	25	5	15	15	28

**Permitted Uses.**

Accessory Building or Use
Community Home
Dwelling-single family with hangar
Family home facility
Fire Station
*Home Based Business
Livestock or Poultry Shelter of Care, Stable-Special Use Permit
Pump Station-Public

\* Permitted only in accordance with Zoning Ordinance, Exhibit A [Section 16](#), Home Occupations.

**C-4 Airport District.**

**Purpose.** This district is intended to include lands within, the corporate limits of the City to be used for the commercial development of an airport, to include aircraft operating and refueling facilities, hangars and ramp space related to aviation. This district also provides space for financial, administrative, and business services compatible with the district’s function as one focal point of community activity.

**Development Standards.**

COMMERCIAL C-4 Airport Buildings meet C-1C standards	Lot Area %	Min. Living Area (sq. ft.)	Front Setback (ft.)	Rear Setback (ft.)	Min. Side Yard Setback (ft.)	Total Side Yard Setback (ft.)	Corner Setback (ft.)	Building Height (ft.)
Lots 1-21	100	750 if provided	25*	0	0			
Lots 22-43	100	750 if provided	7.5	0	0			
Lots 44-47	100	750 if provided	25*	0	0			
Lots 48-56	100	750 if provided	0	20	0			
Lot 15100 Rezoned 03-04-17-03			25	25	5	15		
(includes 12 un-platted parcels between 44 & 52 contiguous to Lot 57)								

**See Zoning Ordinance for Restrictions**

**Permitted Uses:**

<b>STRUCTURE/USE</b>	
Accessory Building or Use	Parking lot, commercial
Aircraft hangar, servicing, repair, operations	Plumbing, HVAC, roofing supply
Cabinet shop/commercial	Police station
Canvas goods fabrication	Pumping plant-public
Carpentry shop	Restaurant
Drapery manufacturing	School-business/commercial
Electric appliance shop/repair	Studio-artist
Expressing, baggage, delivery service	Substation-public utility
Fire Station	Telephone exchange
Fuel storage	Tinsmith & sheet metal
Heliports	Upholstery shop
Helistops	Warehouse
Marina	Water tank-surface, subsurface, public
Museums	Wireless Communications Systems
	Whole sale distribution

**LI Light Industrial Zoning District**

**Purpose.** This district is intended to include those lands and improvements within the corporate limits of the City used, or intended to be used, for functions related to the development of manufacturing or assembly facilities, warehouse or self storage facilities, machine shop or fabrication facility, automotive repair or body shop facilities, salvage or recycling facilities, cargo unloading or transfer facilities, electrical substations or generation facilities, asphalt or concrete production facilities, quarry, mining or rock crushing facilities, and any undertakings that might involve multi-shift employment and might require a large parcel of land.

**Development Standards.**

Light Industrial	Lot Area %	Min.Living Area (sq.ft.)	Front Setback (ft.)	Rear Setback (ft.)	Min. Side Yard Setback (ft.)	Total Side Yard Setback (ft.)	Corner Setback (ft.)	Building Height (ft.)
	60		25	25	10	20	25	35

**Permitted Uses:**

<b>STRUCTURE/USE</b>	Florist
Accessory Building or Use	Food store-convenience
Amphitheater	Food store-supermarket
Amusement arcade	Fuel storage
Amusement Park	Furniture, appliance store
Antique shop	Greenhouse-wholesale
Arcades-Special Use Permit	Greenhouse-retail
Asphalt and Concrete Production	Hardware, paints, wallpaper
Auditorium	Health club/spa
Auto Sales and Service	Heliports-Special Use Permit
Auto wash, Tune-Up, Repair	Helistops-Special Use Permit
Bakery	Hobby shop

Bank, Savings and Loan	Hospital
Barber, Beauty Shop	Hotel
Bars, Taverns, retail liquor	Meat Markets
Beverage, Bottling or distribution	Mini warehouse (inside storage only)
Bike/motorbike sales & service	Mini warehouse (with outside storage)
Billiard/Pool Rooms	Mortuary
Boat storage (outside)	Motel
Boat Sales or Service	Museums
Book/stationary shop	Office building--commercial, governmental
Bowling alley establishment	Open storage
Building material sales	Park-and-ride facilities
Bus depot	Parking lot, Commercial
Cabinet shop/commercial	Pet boarding with outside run
Cafeterias	Pet store-no outside run
Camera store	Photo studio
Canvas goods fabrication	Plumbing, HVAC, roofing supply
Carpentry shop	Police station
Carpet, rug cleaners	Pumping plant-public
Carting, hauling, storage warehouse	Printing shop
Catering establishments	Quarry, Mining, Rock Crushing
Clinics (medical)	Radio, TV, VCR sales/service
Clothing store--men's and/or women's	Radio, TV studio
Club, not nightclub	Realty office
Coal, sand, gravel yards	*Realty office-temporary
Craft, hobby shop	Recreation facility, commercial
Dance halls	Recreation Vehicle Park
Dept. store, sporting goods, novelty, toy shops	Restaurant
Dog and cat grooming	Retail store-general
Drug store, soda fountain, tobacco, candy shops	Service station
Dry cleaning	Sign Shop
Electric appliance shop/repair	Specialty and novelty establishments
Employment agency	Storage & sale of autos, trailers, farm implements & equipment, & similar equipment on open lot
Exhibition and rodeo grounds	Substation-public utility
Expressing, baggage, delivery service	Swimming pool-private
Fabric shop	Tailor & dressmaking shop

Farmers markets	Theater-indoor
Fire Station	Tinsmith & sheetmetal
Ice cream store	Trailer, truck, bus sales
Interior Decorator	Upholstery shop
Jewelry, optical goods	Veterinary hospital, no outside run
Junk & salvage yards, all open air storage of junk, waste and salvage material-Special Use Permit	Vocational & Private School
Kennels-Special Use Permit	Warehouse
Laboratory	Water tank-surface, subsurface, public
Laundromat	Wildlife sanctuaries
Laundry-commercial	Wireless Communications Systems
Library	Whole sale distribution
Livestock or Poultry shelter or care, Stable-Special Use Permit	
Machine shop, metal products, welding	
Manufactured housing sales	
Manufacturing and Assembly	

**U-1 Utility, Governmental, Educational, and Institutional District.**

**Purpose.** This district is intended to include those lands and improvements within the corporate limits of the City used, or intended to be used, for those functions which are normally supportive of governmental, educational, religious, public or City-wide activities which benefit the citizenry as a whole and often require large amounts of land.

**Development Standards.**

UTILITY, GOVERNMENTAL, EDUCATIONAL, INSTITUTIONAL	Lot Area %	Min. Living Area (sq. ft.)	Front Setback (ft.)	Rear Setback (ft.)	Min. Side Yard Setback (ft.)	Total Side Yard Setback (ft.)	Corner Setback (ft.)	Building Height (ft.)
U-1	60	N/A	25	25	10	20	25	60

**Permitted Uses:**

Accessory Building or Use	Park-Active
Chapel	Park-Passive
Cemetery	Parking Lot-Commercial
Churches, Temples	Pet boarding with outside run
Clinics (medical)	Playground
College or University	Police Station
Community Center	Pumping plant-public
Fire Station	Recreation facility-Commercial
Golf Course	School-public/private
Heliports-Special Use Permit	School-business/commercial
Helistops-Special Use Permit	Substation-public utility
Library	Swimming pool-public
Livestock or Poultry, shelter or care, Stable-Special Use Permit	Telephone exchange
Museums	Water tank-surface, subsurface, public
Office , Medical & General	Wireless Communications Systems

# Existing Height Hazard Zoning Ordinance



Airport Action Plan

Lago Vista – Rusty Allen Airport





**Lago Vista TX-Rusty Allen Airport  
Hazard Zoning Ordinance  
No. 99-10-18-01**

An ordinance regulating and restricting the height of structures and objects of natural growth and otherwise regulating the use of property in the vicinity of the Lago Vista TX-Rusty Allen Airport, Lago Vista, Texas, by creating the appropriate zones and establishing the boundaries thereof, providing for restrictions of such zones and the enforcement of such restrictions, defining certain terms used herein, referring to the Lago Vista TX-Rusty Allen Airport Hazard Zoning Map prepared by the Texas Department of Transportation, Aviation Division, dated June 8, 1999, which is incorporated in and made a part of this ordinance, establishing a board of adjustment, and imposing penalties.

This ordinance is adopted pursuant to the authority conferred by the Airport Zoning Act, Tex. Local Gov't. Code Ann., §§241.001 *et seq.*

It is hereby found that an airport hazard has the potential for endangering the lives and property of users of the Lago Vista TX-Rusty Allen Airport and property or occupants of land in its vicinity, that an obstruction may affect existing and/or future instrument approach minimums at the Lago Vista TX-Rusty Allen Airport, and that an obstruction may reduce the size of areas available for the landing, takeoff, and maneuvering of aircraft thus tending to destroy or impair the utility of the Lago Vista TX-Rusty Allen Airport and the public investment therein. Accordingly, it is declared that:

- the Lago Vista TX-Rusty Allen Airport fulfills an essential community purpose; and
- the creation or establishment of an airport hazard has the potential of being a public nuisance and may injure the region served by the Lago Vista TX-Rusty Allen Airport; and
- it is necessary in the interest of the public health, safety, and general welfare that the creation or establishment of airport hazards be prevented; and
- the prevention of these airport hazards should be accomplished, to the extent legally possible, by the exercise of the police power without compensation.

It is further declared that the prevention of the creation or establishment of airport hazards; the elimination, removal, alteration, or mitigation of airport hazards; and the marking and lighting of obstructions are public purposes for which a political subdivision may raise and expend public funds and acquire land or interests in land.

**Be it ordained by the Lago Vista-Jonestown-Travis County Joint Airport Zoning Board of the City Council of Lago Vista, Texas; the City Council of Jonestown, Texas; and the Commissioners Court of Travis County, Texas:**

**Section 1. Short Title** — This ordinance shall be known and may be cited as the “Lago Vista TX-Rusty Allen Airport Hazard Zoning Ordinance.”

**Section 2. Definitions** — As used in this ordinance, unless the context otherwise requires:

- A. **Administrative Agency** — The appropriate office of a political subdivision which is responsible for the administration and enforcement of the zoning regulations prescribed by this ordinance. The office of the City Manager of Lago Vista, Texas, is the Administrative Agency.
- B. **Airport** — The Lago Vista TX-Rusty Allen Airport, Lago Vista, Texas.
- C. **Airport Advisory Board** — A board which advises the Administrative Agency on airport and aeronautical matters.
- D. **Airport Elevation** — The established elevation of the highest point on the usable landing area, either existing or planned, measured in feet above mean sea level (MSL). The airport elevation of the Lago Vista TX-Rusty Allen Airport is one-thousand two-hundred thirty and three-tenths (1230.3) feet above mean sea level (MSL).
- E. **Airport Hazard** — Any structure, object of natural growth, or use of land that obstructs the airspace required for the flight of aircraft or obstructs or interferes with the control, tracking, and/or data acquisition in the landing, takeoff, or flight at an airport or any installation or facility relating to flight, tracking, and/or data acquisition of the flight craft; is hazardous to, interferes with, or obstructs such landing, takeoff, or flight of aircraft; or is hazardous to or interferes with tracking and/or data acquisition pertaining to flight and flight vehicles.

- F. **Airport Hazard Area** — An area of land or water upon which an airport hazard might be established if not prevented as provided by this ordinance.
- G. **Approach Surface** — A surface longitudinally centered on the extended runway centerline, extending outward and upward from each end of the primary surface and at the same slope as the approach zone height limitation slope set forth in Section 4 of this ordinance. In plan, the perimeter of the approach surface coincides with the perimeter of the approach zone.
- H. **Approach, Transitional, Horizontal, and Conical Zones** — These zones are set forth in Section 3 of this ordinance.
- I. **Board of Adjustment** — A board so designated or appointed by the City Council of Lago Vista, Texas, as provided by Tex. Local Gov't. Code Ann., §241.032.
- J. **Conical Surface** — A surface extending outward and upward from the periphery of the horizontal surface at a slope of twenty (20) feet horizontally for each one (1) foot vertically for a horizontal distance of four-thousand (4,000) feet.
- K. **Hazard to Air Navigation** — An obstruction or use of land determined to have a substantial adverse effect on the safe and efficient utilization of navigable airspace.
- L. **Height** — For the purpose of determining the height limits in all zones set forth in this ordinance and shown on the hazard zoning map, the datum shall be height above mean sea level (MSL) elevation as measured in feet.
- M. **Horizontal Surface** — A horizontal plane one-hundred fifty (150) feet above the established airport elevation which in plan coincides with the perimeter of the horizontal zone.
- N. **Nonconforming Structure or Use** — Any pre-existing structure, object of natural growth, or use of land which is inconsistent with the provisions of this ordinance.
- O. **Nonprecision Instrument (NPI) Runway** — A runway having an existing instrument approach procedure utilizing air navigation facilities with only horizontal guidance or area type navigation equipment or a runway for which a nonprecision instrument approach procedure has been approved or planned.
- P. **Obstruction** — Any structure, tree, or other object, including a mobile object, which exceeds a limiting height set forth in Section 4 of this ordinance or is an airport hazard.
- Q. **Person** — An individual, firm, partnership, corporation, company, association, joint stock association, or body politic and includes a trustee, receiver, assignee, administrator, executor, guardian, or other representative.
- R. **Primary Surface** — A surface longitudinally centered on a runway. When a runway has an existing or planned specially prepared hard surface, the primary surface extends two-hundred (200) feet beyond each end of that runway. The width of the primary surface will be that width prescribed in Part 77 of the Federal Aviation Regulations (FAR) for the most precise approach, existing or planned, for either end of that runway. The elevation of any point on the primary surface is the same as the nearest point on the runway centerline. The width of the primary surface is five-hundred (500) feet for a utility runway having an existing or planned nonprecision instrument approach.
- S. **Runway** — A defined area on an airport prepared for the landing and taking off of aircraft along its length. The zoned length of Runway 15-33 at the Lago Vista TX-Rusty Allen Airport is four-thousand two-hundred (4,200) feet.
- T. **Structure** — An object, including a mobile object, constructed or installed by man including, but not limited to buildings, towers, cranes, smokestacks, earth formations, and overhead transmission or power lines.
- U. **Transitional Surfaces** — Surfaces extending outward at ninety (90) degree angles to the runway centerline and the runway centerline extended at a slope of seven (7) feet horizontally for each one (1) foot vertically from the sides of the primary surface and the approach surfaces to where they intersect the horizontal surface.
- V. **Tree** — Any object of natural growth.
- W. **Utility Runway** — A runway constructed for and intended to be used by propeller driven aircraft of twelve-thousand five-hundred (12,500) pounds maximum gross weight and less. Runway 15-33 at the Lago Vista TX-Rusty Allen Airport is considered as a utility runway.

**Section 3. Zones** — In order to carry out the provisions of this ordinance, there are hereby created and established certain zones which include all of the land lying beneath the approach surfaces, transitional surfaces, horizontal surface, and conical surface as they apply to the Lago Vista TX-Rusty Allen Airport, Lago Vista, Texas. Such surfaces are shown on the Lago Vista TX-Rusty Allen Airport Hazard Zoning Map consisting of one (1) sheet, prepared by the Texas Department of Transportation, Aviation Division, Austin, Texas, and dated June 8, 1999, which is attached to this ordinance and made a part hereof. An area located in more than one of the following zones is considered to be only in the zone with the more restrictive height limitation. The various zones are hereby established and defined as follows:

- A. **Approach Zones** — Approach zones are hereby established beneath the approach surfaces at each end of Runway 15-33 at the Lago Vista TX-Rusty Allen Airport for a utility runway with ultimate nonprecision instrument landings and takeoffs. Each approach zone shall have an inner edge width of five-hundred (500) feet, which coincides with the width of the primary surface at a distance of two-hundred (200) feet beyond each runway end, widening thereafter uniformly to a width of two-thousand (2,000) feet at a horizontal distance of five-thousand (5,000) feet beyond each end of the primary surface. The centerline of the approach zones are the continuation of the centerline of the runway.
- B. **Transitional Zones** — Transitional zones are hereby established beneath the transitional surfaces for the runway. Transitional surfaces, symmetrically located on either side of the runway, have variable widths as shown on the hazard zoning map. Transitional surfaces extend outward at right angles to the runway centerline and the runway centerline extended from the periphery of the primary surface and the approach surfaces to where they intersect the horizontal surface.
- C. **Horizontal Zone** — A horizontal zone is hereby established beneath the horizontal surface which is a plane one-hundred fifty (150) feet above the established airport elevation, the perimeter of which is constructed by swinging arcs of five-thousand (5,000) feet radii from the center of each end of the primary surface and connecting the adjacent arcs by lines tangent to those arcs.
- D. **Conical Zone** — A conical zone is hereby established beneath the conical surface which extends outward from the periphery of the horizontal surface for a horizontal distance of four-thousand (4,000) feet.

**Section 4. Height Limitations** — Except as otherwise provided in this ordinance, no structure shall be erected, altered, or maintained and no tree shall be allowed to grow in any zone created by this ordinance to a height in excess of the applicable height limit herein established for such zone or as excepted in Paragraph E. of this Section. Such applicable height limitations are hereby established for each of the zones in question as follows:

- A. **Approach Zones** — Slope one (1) foot in height for each twenty (20) feet in horizontal distance beginning at each end of and at the same elevation as the primary surface and extending to points five-thousand (5,000) feet from each end of primary surface.
- B. **Transitional Zones** — Slope one (1) foot in height for each seven (7) feet in horizontal distance beginning at the sides of and at the same elevation as the primary surface and the approach surfaces and extending to a height of one-hundred fifty (150) feet above the airport elevation, or to a height of one-thousand three-hundred eighty and three-tenths (1380.3) feet above mean sea level.
- C. **Horizontal Zone** — Established at one-hundred fifty (150) feet above the airport elevation, or at a height of one-thousand three-hundred eighty and three-tenths (1380.3) feet above mean sea level.
- D. **Conical Zone** — Slopes one (1) foot in height for each twenty (20) feet in horizontal distance beginning at the periphery of the horizontal zone and at one-hundred fifty (150) feet above the airport elevation and extending to a height of three-hundred fifty (350) feet above the airport elevation, or to a height of one-thousand five-hundred eighty and three-tenths (1580.3) feet above mean sea level.
- E. **Excepted Height Limitation** — *Nothing in this ordinance shall be construed as prohibiting the growth, construction, or maintenance of any structure or tree to a height of up to fifty (50) feet above the surface of the land at its location.*

**Section 5. Land Use Restrictions** — Notwithstanding any other provision of this ordinance, no use may be made of land or water within any zone established by this ordinance in such a manner as to create electrical interference with navigational signals or radio communications between the airport and aircraft, make it difficult for pilots to distinguish between airport lights and others, result in glare in the eyes of pilots using the airport, impair visibility in the vicinity of the airport, create potential bird strike hazards, or otherwise in any way endanger or interfere with the landing, taking off, or maneuvering of aircraft intending to use the airport.

## Section 6. Nonconforming Uses

- A. Regulations not Retroactive** — The regulations prescribed by this ordinance shall not be construed as to require the removal, lowering, or other change or alteration of any structure or tree or use of land not conforming to the regulations as of the effective date of this ordinance or otherwise interfere with the continuance of any nonconforming use. Except as provided in the following provision of this Section, nothing herein contained shall require any change in the construction, alteration, or intended use of any structure, the construction or alteration of which was begun prior to the effective date of this ordinance and is diligently prosecuted.
- B. Lighting, Marking, and Trimming** — Notwithstanding the preceding provision of this Section, the owner of any nonconforming structure or tree is hereby required to permit the installation, operation, and maintenance thereon of such markers and lights as shall be deemed necessary by the Administrative Agency to indicate to the operators of aircraft in the vicinity of the airport the presence of such airport hazards. Such markers and lights shall be installed, operated, and maintained at the expense of the City of Lago Vista, Texas. Should any tree exempted from the zoning regulations by Section 6, par. A, grow to a greater height than it was on the effective date of this ordinance, the owner of such tree is hereby required to trim or cut such tree to a height equal to or less than it was as of the effective date of this ordinance.

Such trimming or cutting shall be at the expense of the owner of such tree or, if deemed appropriate by the Administrative Agency or the board of adjustment, at the expense of the City of Lago Vista, Texas.

## Section 7. Permits and Variances

- A. Future Uses** — Except as specifically provided hereunder, no structure shall be erected or otherwise established and no tree shall be permitted to grow in any zone hereby created in excess of the excepted height limitation allowed in Section 4, par. E, and no material change shall be made in the use of land that would create a hazardous condition as described in Section 5 unless a permit therefor shall have been applied for and granted by the Administrative Agency. Each application for a permit shall indicate the purpose for which the permit is desired with sufficient particularity to allow it to be determined whether the resulting structure, tree, or use would conform to the regulations herein prescribed. If such determination is in the affirmative, **the permit shall be granted**. No permit allowing inconsistency with the provisions of this ordinance shall be granted unless a variance has been applied for and granted in accordance with Section 7, par. D.

In the area lying within the limits of the horizontal zone and conical zone, no permit shall be required for any structure or tree less than seventy-five (75) feet of vertical height above the ground, except when, because of terrain, land contour, or topographic features, such structure or tree would extend above the height limits prescribed for such zones.

Nothing contained in the foregoing exception shall be construed as permitting or intending to permit any construction or alteration of any structure or growth of any tree in excess of the height limits established by this ordinance except as set forth in Section 4, par. E.

- B. Existing Uses** — No permit shall be granted that would allow a nonconforming use, structure, or tree to be made or become higher or become a greater hazard to air navigation than it was on the effective date of this ordinance.
- C. Nonconforming Uses Abandoned or Destroyed** — Whenever the Administrative Agency determines that a nonconforming structure or tree has been removed, torn down, physically deteriorated, or decayed, the owner of such structure or tree **must apply for and receive a permit to rebuild or repair such structure or replace such tree, and the permit shall be granted**. However, no permit shall be granted which would allow such structure or tree to exceed its original height or otherwise deviate from the zoning regulations.

**D. Variances** — Any person desiring to erect or increase the height of any structure, permit the growth of any tree, or use his property in violation of the regulations prescribed in this ordinance must apply to the board of adjustment for a variance from such regulations in question. The application for variance shall be accompanied by a determination from the Federal Aviation Administration as to the effect of the proposal on the operation of air navigation facilities and the safe, efficient use of navigable airspace. Such variances may be allowed where it is duly found that a literal application or enforcement of the regulations will result in unnecessary hardship and the relief granted would not be contrary to the public interest, but do substantial justice, and be in accordance with the spirit of this ordinance. If an airport advisory board exists for the City of Lago Vista, Texas, no application for variance to the requirements of this ordinance may be considered by the board of adjustment unless a copy of the application has been furnished to that airport advisory board for advice as to the aeronautical effects of the requested variance. If an airport advisory board does not exist or does not respond to the application within fifteen (15) days after receipt, the board of adjustment may act on its own to grant or deny said application.

**E. Obstruction Marking and Lighting** — Any permit or variance granted may, if such action is deemed advisable by the Administrative Agency or the board of adjustment, be so conditioned as to require the owner of the structure in question to install, operate, and maintain such markings and lights as may be necessary. Such marking and lighting to be installed, operated, and maintained at the expense of the owner of such structure or tree or, if deemed proper by the board of adjustment, this condition may be modified by the board of adjustment to require the City of Lago Vista, Texas, to install, operate, and maintain, at its own expense, such markings and lights.

**Section 8. Enforcement** — It shall be the duty of the City Manager of Lago Vista, Texas, to administer and enforce the regulations prescribed herein and is designated as the Administrative Agency. Applications for permits shall be made to the office of the Administrative Agency and shall be promptly considered and granted or denied. Applications for variances shall be made to the board of adjustment by first filing said application for variance with the office of the Administrative Agency who shall forthwith transmit said application to the board of adjustment for determination.

**Section 9. Board of Adjustment**

**A.** The Board of Adjustment of the City of Lago Vista is hereby designated as the board of adjustment for the purposes of this ordinance and shall have and exercise the following powers:

- (1) to hear and decide appeals from any order, requirement, decision, or determination made by the Administrative Agency in the administration or enforcement of this ordinance;
- (2) to hear and decide special exceptions to the terms of an airport zoning regulation when the regulation requires the board to do so; and
- (3) to hear and decide specific variances.

**B.** The board of adjustment shall adopt rules for its governance and procedure in harmony with the provisions of this ordinance. Meetings of the board of adjustment shall be held at the call of the chairman and at such times as the board of adjustment may determine. The chairman, or in his/her absence the acting chairman, may administer oaths and compel the attendance of witnesses. All hearings of the board of adjustment shall be public. The board of adjustment shall keep minutes of its proceedings showing the vote of each member upon each question or if any member is absent or fails to vote, indicating such fact and shall keep records of its examinations and other official actions, all of which shall immediately be filed in the office of the board of adjustment or in the office of the City Secretary of Lago Vista, Texas. All such records shall be a public record.

**C.** The board of adjustment shall make written findings of fact and conclusions of law stating the facts upon which it relied when making its legal conclusions in reversing, affirming, or modifying any order, requirement, decision, or determination which comes before it under the provisions of this ordinance.

- D. The concurring vote of four (4) members of the board of adjustment shall be necessary to reverse any order, requirement, decision, or determination of the Administrative Agency, to decide in favor of the applicant on any matter upon which it is required to pass under this ordinance, or to effect any variation in this ordinance as provided in the Tex. Local Gov't. Code Ann., §241.032 (d).

**Section 10. Appeals**

- A. Any person aggrieved or any taxpayer affected by any decision of the Administrative Agency made in the administration of this ordinance may appeal to the board of adjustment. The same right of appeal is extended to the governing bodies of the City of Lago Vista, Texas; the City of Jonestown, Texas; and Travis County, Texas.
- B. All appeals hereunder must be taken within a reasonable time as provided by the rules of the board of adjustment by filing a notice of appeal with the Administrative Agency specifying the grounds for the appeal. The Administrative Agency shall forthwith transmit to the board of adjustment all papers constituting the record upon which the action appealed was taken.
- C. An appeal shall stay all proceedings in furtherance of the action appealed unless the Administrative Agency certifies to the board of adjustment, after the notice of appeal has been filed with it, that by reason of the facts stated in the certificate, a stay would, in the opinion of the Administrative Agency, cause imminent peril to life or property. In such case, proceedings shall not be stayed except by order of the board of adjustment on notice to the Administrative Agency and on due cause shown.
- D. The board of adjustment shall fix a reasonable time for hearing appeals, give public notice and due notice to the parties in interest, and decide the same within a reasonable time. Upon the hearing, any party may appear in person, by agent, and/or by attorney.
- E. The board of adjustment may reverse or affirm, in whole or in part, or modify the Administrative Agency's order, requirement, decision, or determination from which an appeal is taken and make the correct order, requirement, decision, or determination, and for this purpose the board of adjustment has the same authority as the Administrative Agency.

**Section 11. Judicial Review** — Any person who is aggrieved or any taxpayer affected by any decision of the board of adjustment may appeal to a court of competent jurisdiction as provided by Tex. Local Gov't. Code Ann., §241.041. This same right of appeal is extended to the governing bodies of the City of Lago Vista, Texas; City of Jonestown, Texas and Travis County, Texas.

**Section 12. Enforcement and Remedies** — The City of Lago Vista, Texas, may institute in a court of competent jurisdiction an action to prevent, restrain, correct, or abate any violation of this ordinance or of any order or ruling made in connection with its administration or enforcement including, but not limited to, an action for injunctive relief as provided by Tex. Local Gov't. Code Ann., §241.044.

**Section 13. Penalties** — Each violation of this ordinance or of any regulation, order, or ruling promulgated hereunder shall constitute a misdemeanor and upon conviction shall be punishable by a fine of not more than \$200; and each day a violation continues to exist shall constitute a separate offense.

**Section 14. Conflicting Regulations** — Where there exists a conflict between any of the regulations or limitations prescribed in this ordinance and any other regulation applicable to the same area, whether the conflict be with respect to the height of structures or trees, the use of land, or any other matter, the more stringent limitation or requirement shall govern and prevail as provided by Tex. Local Gov't. Code Ann., §241.901 and §241.902.

**Section 15. Severability** — If any of the provisions of this ordinance or the application thereof to any person or circumstance is held invalid, such invalidity shall not affect other provisions or application of this ordinance which can be given effect without the invalid provision or application and to this end, the provisions of this ordinance are declared to be severable.

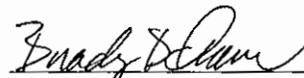
**Section 16. Duties of Joint Airport Zoning Board** — Six (6) months following the date of adoption of this Lago Vista TX-Rusty Allen Airport Hazard Zoning Ordinance, the duties, responsibilities, and authority of the Lago Vista-Jonestown-Travis County Joint Airport Zoning Board will cease and the Lago Vista-Jonestown-Travis County Joint Airport Zoning Board shall be dissolved.

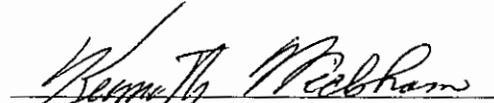
**Section 17. Effective Date** — Whereas, the immediate operation of the provisions of this ordinance is necessary for the preservation of the public health, safety, and general welfare, an **emergency** is hereby declared to exist and this ordinance shall be in full force and effect from and after its passage by the Lago Vista-Jonestown-Travis County Joint Airport Zoning Board and its publication and posting as required by law.

Adopted by the Lago Vista-Jonestown-Travis County Joint Airport Zoning Board

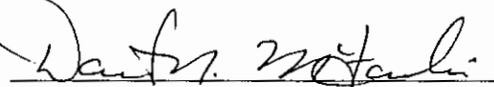
this 18<sup>th</sup> day of October 1999.

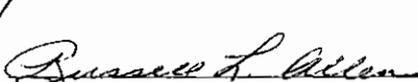
  
Chairman, Lago Vista-Jonestown-Travis County  
Joint Airport Zoning Board JAMES GILCHRIST

  
Member BRADY OMAN

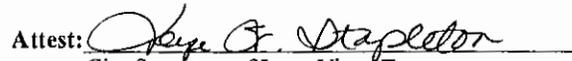
  
Member KENNETH WICKHAM

  
Member JAMES QUINN

  
Member DAVID MCFARLIN

  
Member RUSSELL ALLEN

  
Member JIMMY JOHNSON

Attest:   
City Secretary of Lago Vista, Texas  
JOYCE W. STAPLETON



# City 2030 Comprehensive Plan Future Land Use Map

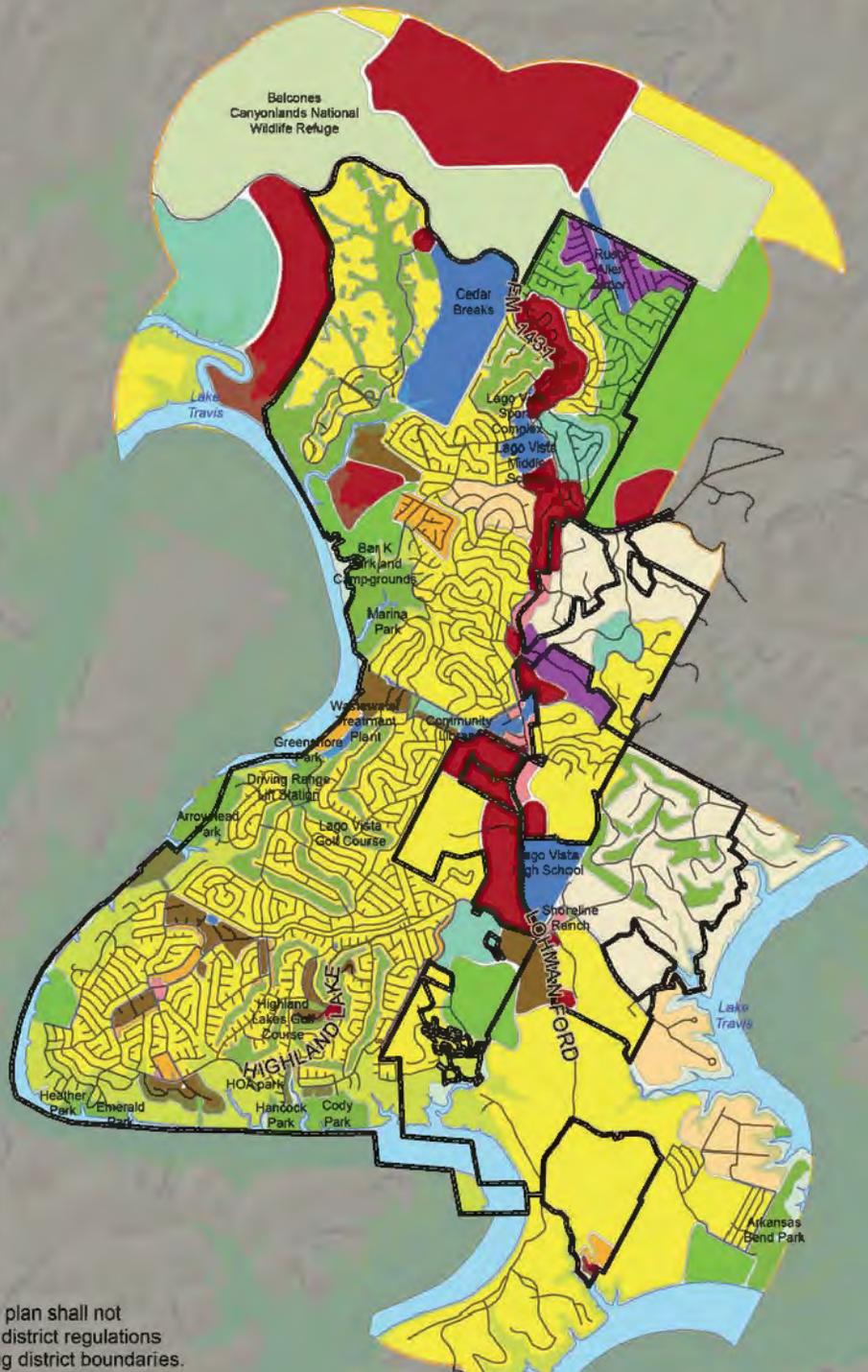


Airport Action Plan

Lago Vista – Rusty Allen Airport



# Figure 9. Future Land Use Map



Note:  
A comprehensive plan shall not constitute zoning district regulations or establish zoning district boundaries.



Sources: Esri, HERE, DeLorme, USGS, Intermap, increment P Corp., NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), TomTom, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

- Rural Residential
- Estate Residential
- Low Density Residential
- Medium Density Residential
- High Density Residential
- City Park
- POA Park
- Balcones Canyonlands
- Mixed Use
- Neighborhood Retail/Office/Commercial
- Regional Retail/Office/Commercial
- Public/Semi-Public
- Industrial
- Lago Vista City Limits
- Lago Vista ETJ
- Flood Prone



**City of Lago Vista**

From 2030 Comprehensive Plan

# City 2030 Comprehensive Plan Future Transportation Map

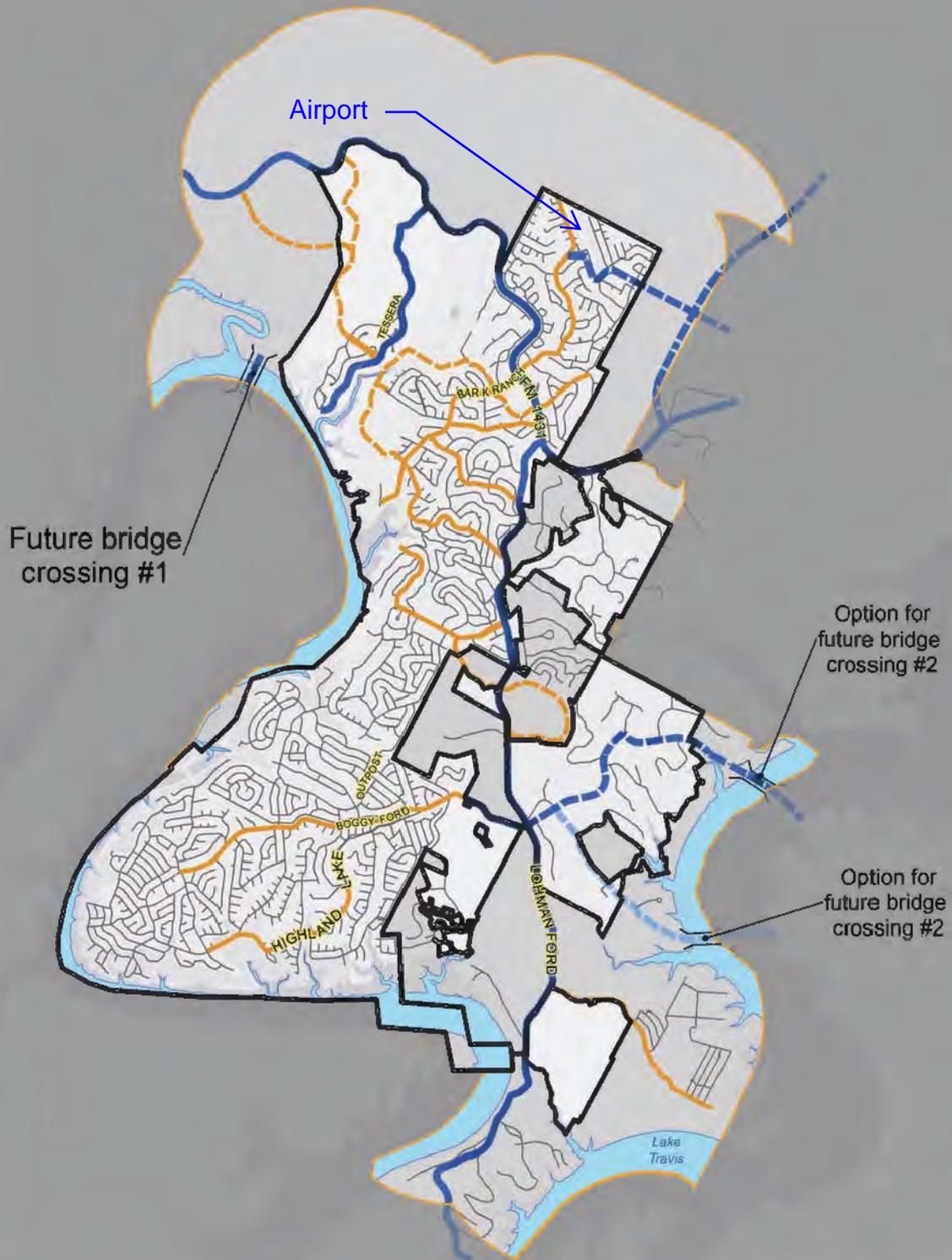


Airport Action Plan

Lago Vista – Rusty Allen Airport



# Figure 29. Future Transportation Map



Esri, HERE, DeLorme, MapmyIndia, © OpenStreetMap contributors, and the GIS user community

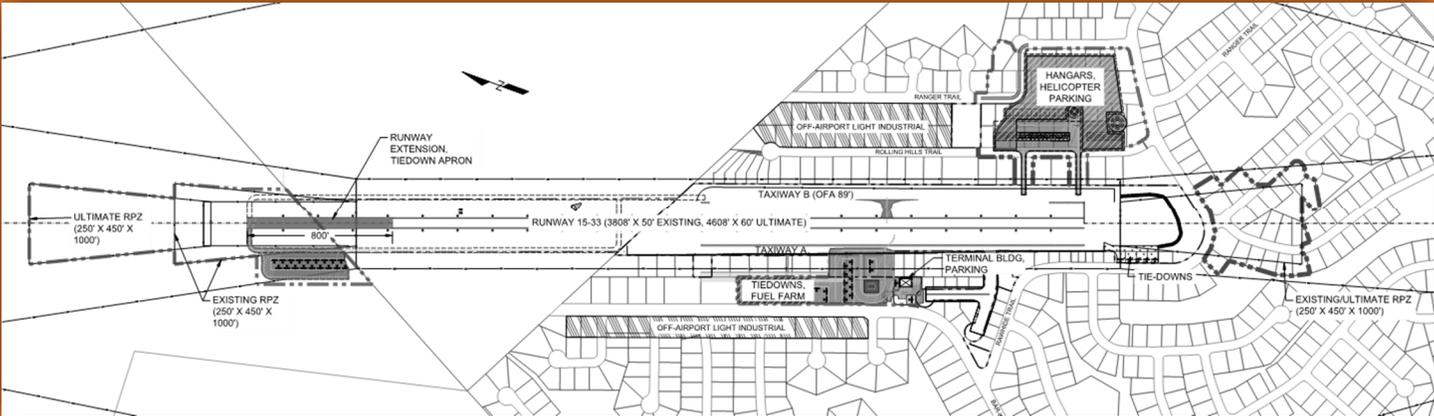
-  Minor Arterial Undivided
-  Future Minor Arterial
-  Future Collector
-  Collector
-  Residential Street
-  Lake Travis
-  Lago Vista City Limits
-  Lago Vista ETJ



**City of Lago Vista**

From 2030 Comprehensive Plan





Prepared by



**PARKHILLSMITH&COOPER**

with



**McFarland Architects**  
Designs that Inspire Community.

The City of  
**Lago Vista**