SECTION 2 - INVENTORY OF EXISTING CONDITIONS

2.1 INTRODUCTION

Stinson Municipal Airport is a general aviation airport owned and operated by the City of San Antonio. The FAA through the National Plan of Integrated Airport Systems (NPIAS) has designated Stinson Municipal Airport as a reliever airport. Reliever airports are those that provide pilots with attractive alternatives to using congested hub airports and provide general aviation access to the surrounding area[5]. To be eligible for reliever designation, an airport must be open to the public, have 100 or more based aircraft, or have 25,000 annual itinerant operations. The Texas Airport System Plan (TASP) also identifies Stinson as a reliever airport for San Antonio International. The airport's property encompasses approximately 360 acres and is home to approximately 115 based aircraft[6].

This section presents an overview of the existing facilities and operational areas of the Airport. The following topics are discussed in the remainder of this section:

- Airfield Facilities
- Meteorological Data
- Operations and Airspace Procedures
- General Aviation Facilities
- Airport Support and Other Facilities
- Airport Access and Circulation
- Airport Utilities
- Land Use/Zoning
- Environmental/Financial Overview

2.2 AIRFIELD FACILITIES

The existing facilities on the Airport property that generally serve an aviation function are described in the following sections and are shown on **Exhibit 2.1**.

2.2.1 AIRFIELD DESIGN CRITERIA

The FAA classifies airports according to the size of aircraft that typically operate at an airport. As contained in FAA Advisory Circular, (AC) 150/5300-13, this classification is the Airport Reference Code (ARC). This is what provides the overall planning and design criteria for the Airport, based on the aircraft wingspan or tail height, and approach speed. The ARC provides the guidelines for pavement surfaces, safety area, runway lengths, separations standards, as well as taxiway criteria, in an attempt to ensure the airfield layout and geometry provide a safe and efficient operating environment for the aircraft that typically use the Airport. The ARC consists of a letter, and a numeric identifier. The first is the letter, which represents the approach speed of the aircraft; the second is the number which represents the wingspan and tail height of the aircraft. **Table 2.1** summarizes the classifications for determining the ARC at an airport.

[5] National Plan of Integrated Airport Systems (2011-2015)
[6] Stinson Airport Records, October 2011.

Legend

- Property Line
- Runway Protection Zone
- Runway Safety Area

SAN JOSE BURIAL PARK
MISSION BURIAL PARK
HARLANDALE MEMORIAL STADIUM
ECHO ST.
MISSION RD.
96th ST.
L.C. AMOS
ROOSEVELT AVE.
99th ST.
99th ST.
TAXIWAY A
MAIN RAMP
RUNWAY 14-32 4,128 FEET
MOORING STATION
ASOS
TAXILANE D2
WEST RAMP
TAXIWAY C
TAXIWAY B
TAXIWAY D
S. FLORES ST.
RUNWAY 9-27 5,000 FEET
HELICOPTER PRACTICE PINNACLE
SIX MILE CREEK
COMMANDER'S HOUSE
TAXIWAY A
E. ASHLEY RD.

Scale: 1" = 600'

Source: City of San Antonio, 2011
Prepared by Williams CAD Consulting, Kimley-Horn and Associates, Inc., March 2012

STINSON MUNICIPAL AIRPORT

Exhibit 2.1

Existing Airfield Facilities

Stinson Municipal Airport
Master Plan Update

Table 2.1 - FAA Aircraft Classifications

Aircraft Approach Category	Approach Speed (knots)	Airplane Design Group	Wing Span (feet)	Tail Height (feet)
A	Less than 91	I	Less than 49	Less than 20
B	91 to 120	II	49 to 78	21 to 29
C	121 to 140	III	79 to 117	30 to 44
D	141 to 165	IV	118 to 170	45 to 59
E	166 or Greater	V	171 to 213	60 to 65
		VI	214 up to but less than 262	66 up to but less than 80

Source: FAA Advisory Circular 150/5300-13 *Airport Design*.

Aircraft approach speeds included in categories A and B are typically small, piston-engine aircraft, whereas C, D, and E are normally larger turboprop or turbine powered aircraft. Similarly, the wingspan and tail height of small, piston-engine aircraft normally correspond to design group category I. Typical aircraft in design group II would be a Beechcraft King Air, Cessna Citation, or smaller Gulfstream business jets. Design groups III, IV, and V would represent air carrier aircraft, such as Boeing 737, B-757, and B-747, respectively. Group VI would include the largest of aircraft, such as an Airbus A-380 or a C-5 military cargo aircraft. Based on the 2006 Airport Layout Plan for Stinson Municipal Airport, the ARC for the Airport is currently B-I.

2.2.2 RUNWAY SYSTEM

The existing airfield configuration at the Airport consists of two intersecting runways, designated Runway 9-27 and Runway 14-32. Runway 9-27 is 5,000 feet long and 100 feet wide and is oriented in an east/west direction. Runway 14-32 is 4,128 feet long and 100 feet wide and is oriented in a northwest/southeast direction. **Table 2.2** summarizes the physical characteristics of the existing runways.

Table 2.2 - Existing Runway Data

Item	Runway 9-27		Runway 14-32	
Length (feet)	5,000		4,128	
Width (feet)	100		100	
Effective Runway Gradient	0.26%		0.45%	
Runway Surface Type	Asphalt		Asphalt	
Runway Condition(1)	Good		Good	
Load Bearing Capacity (lbs)	30,000 – Single Wheel 75,000 – Dual Wheel		12,000 – Single Wheel 20,000 – Dual Wheel	
Aircraft Approach Category	B		B	
Airplane Design Group	I		I	
Runway End Elevations(2)	9 577	27 565	14 571	32 553

Notes:
(1) Based on Form 5010, Effective 2/9/2012
(2) Elevations in feet above MSL

Source: FAA Airport Master Record #5010, February 2012.
Stinson Municipal Airport, Airport Layout Plan, 2006

2.2.3 TAXIWAY SYSTEM

The existing taxiway system at the Airport consists of full-length parallel taxiways to both runways. Taxiway A is a parallel taxiway to Runway 14-32. The portion of Taxiway A, north of Runway 9-27, is an apron-edge taxiway, and is treated as a movement area by the air traffic control tower (ATCT). Moving south of the terminal building, the taxiway shifts to the east and no longer adjoins a ramp area. The northern portion of Taxiway A, which adjoins the ramp area, has a 185-foot centerline separation from Runway 14-32, and the southern portion which does not adjoin the ramp area has a 240-foot centerline separation.

Taxiway D is a full-length parallel taxiway to Runway 9-27, and is accessed from the main ramp via two connector taxiways, B and C. Taxiway D is also accessed from the west ramp. The Taxiway D centerline separation from Runway 9-27 is 210 feet, with the exception of the Runway 27 end, where a newly constructed portion has a 240-foot separation.

Taxiways D1 and D2 are connector taxiways near the west end of Runway 9-27. Taxiway D1 provides an entrance and exit for aircraft utilizing Runway 9-27, and allows aircraft to access Taxiway D. Taxiway D2 also provides an entrance and exit for Runway 9-27, and provides access to Taxiway D. In 2010, Taxilane D2 was extended north of Taxiway D, providing aircraft access to airport property further north near 99th Street. **Table 2.3** below shows the different taxiway widths and compositions at the Airport.

Table 2.3 - Existing Taxiway Data

Item	Taxiway A	Taxiway B	Taxiway C	Taxiway D	Taxiway D1	Taxilane/ Taxiway D2
Width (ft.)	40	40	40	40	50	50/35[1]
Composition	Asphalt	Concrete	Concrete	Concrete	Asphalt	Asphalt

Notes:
(1) Taxiway width is 50 feet as a connector to Runway 9-27, 35 feet as a taxilane north of Taxiway D.

Source: Stinson Municipal Airport Layout Plan, 2006
Airport Improvement Technical Drawings, Reynolds Smith & Hills, 2009

2.2.4 HELIPADS

There is a helicopter practice pinnacle located on the southwestern portion of the airfield, just south of the of the Runway 9 end. Additionally, the west ramp contains several helipads for the operations of the San Antonio Police Department (SAPD).

2.2.5 INSTRUMENT APPROACHES

Federal Aviation Regulation (FAR) Part 77 classifies runways as visual, precision instrument or non-precision instrument. A visual runway is intended only for aircraft using visual-approach procedures, which occur in good weather conditions. Instrument runways are classified as precision or non-precision based on the type of standard instrument approach procedure and navigational equipment available to that runway. A precision instrument approach provides a suitably equipped aircraft with both electronic horizontal and vertical guidance to the runway. A non-precision instrument approach provides only horizontal guidance to the runway. Various navigation equipment is required for the different types of instrument runway approaches. Only non-precision approaches exist at the Airport.

The Airport currently has two non-precision instrument approaches, both providing approach guidance to Runway 32. The Very High Frequency Omni-Directional Range (VOR) 32 approach is shown in **Exhibit 2.2,** and provides straight-in and circling minimums to Runway 32, utilizing off-airport navigational aids. The Global Positioning System (GPS) 32 approach also exists for Runway 32, providing both straight-in and circling minimums utilizing GPS satellites, and is shown on **Exhibit 2.3**.

2.2.6 NAVIGATIONAL AIDS

Navigational aids (NAVAIDS) are any visual or electronic devices airborne or on the surface which provide point-to-point guidance information or position data to aircraft in flight. The Airport does not contain any on-site NAVAIDS, but there are various NAVAIDS within the vicinity of the region which provide guidance to aircraft approaching or departing the Airport.

The Stinson VOR is a ground-based NAVAID located approximately 5 miles south of the Airport. This facility provides lateral guidance for aircraft executing the VOR 32 instrument approach to Runway 32 at the Airport, as well as general navigational guidance for aircraft operating under Instrument Flight Rules (IFR). Other VOR's in the area include the Randolph VOR, located approximately 15 miles northeast of the Airport, and the San Antonio VOR, located approximately 18 miles north of the Airport.

GPS satellites in orbit provide navigational guidance to aircraft for both en-route and approach phases of flight. GPS satellites, when used in conjunction with ground-based signal correction systems such as Wide Area Augmentation System (WAAS), are able to provide accuracy nearly matching that of a precision instrument approach.

2.2.7 AIRPORT LIGHTING, MARKINGS AND SIGNAGE

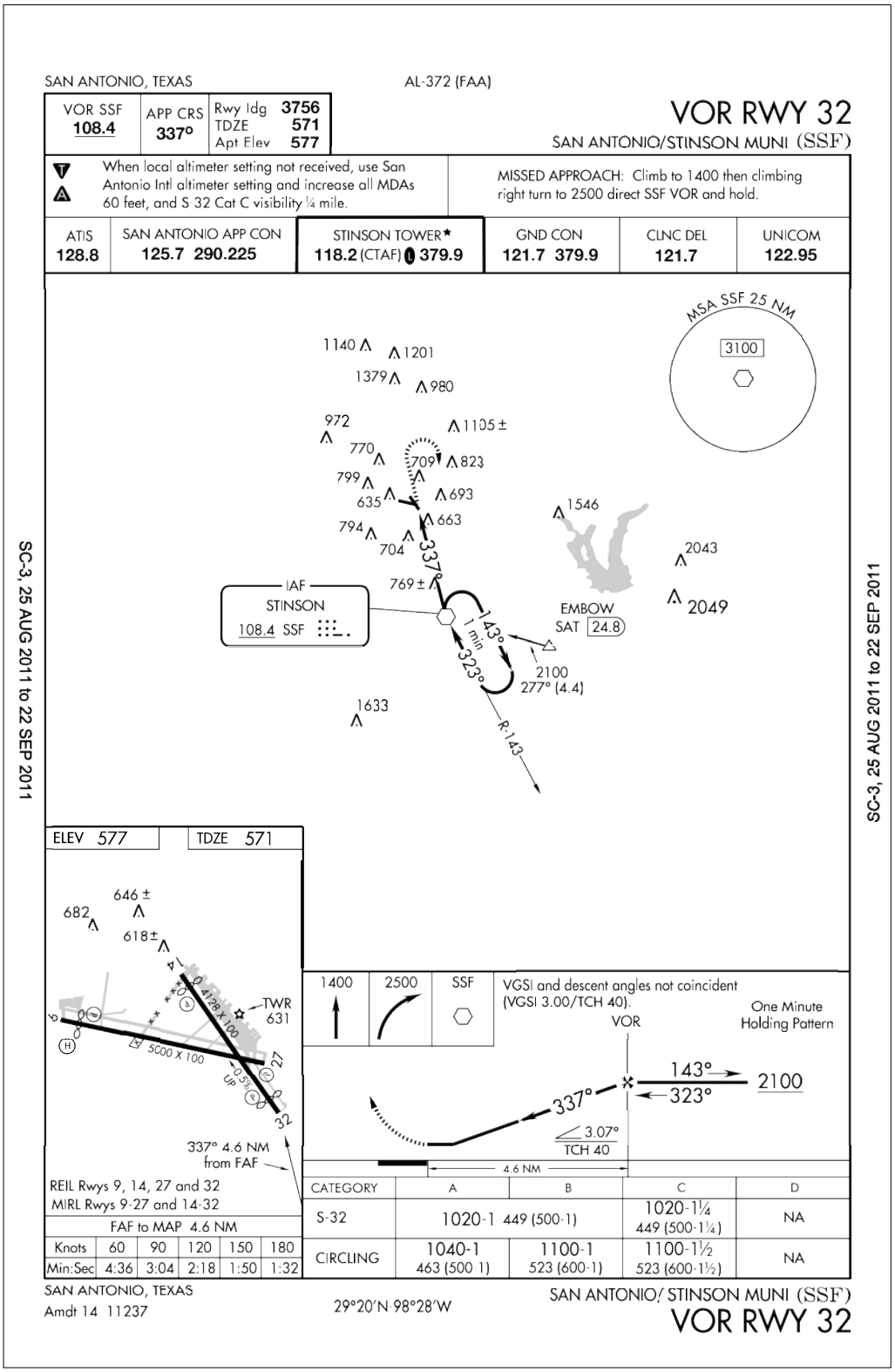
The Airport contains various lighting, markings, and signage systems to aid pilots not only in ground way finding around the movement and non-movement areas, but also in the approach and departure phases of flight. The airport beacon is located on top of the ATCT, and is a rotating light projecting an alternating green and white beam of light, 180 degrees apart.

Both of the Airport's runways are equipped with Medium Intensity Runway Lighting (MIRL) and Runway End Identifier Lights (REIL). Both runways are also equipped with Precision Approach Path Indicator Lighting (PAPI), which aids pilots in the proper glide path to the runway. **Table 2.4** summarizes the runway lighting and marking systems.

Table 2.4 - Runway Lighting and Marking Systems

Item	Runway 14-32	Runway 9-27
Runway Lighting	MIRL	MIRL
Runway Markings	Non-Precision	Non-Precision
Visual Approach Aids	PAPI	PAPI
Runway End Lighting	REIL	REIL

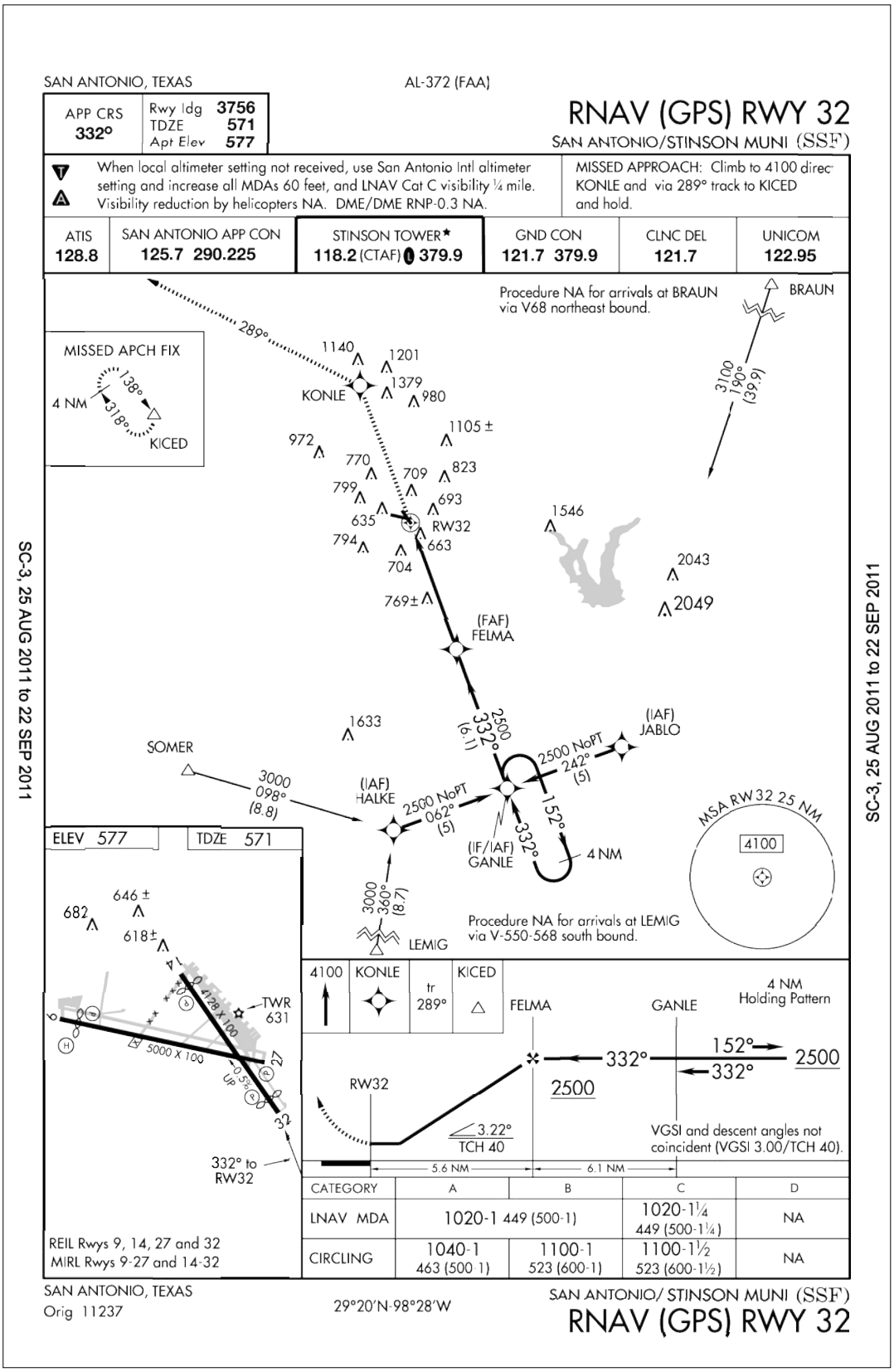
Source: FAA Airport Master Record #5010, Effective February 2012



SOURCE: AL-372 (FAA), Accessed 09/19/2011
Prepared by: Kimley-Horn and Associates, Inc., March 2012

Exhibit 2.2

VOR RWY 32 Approach



SOURCE: AL-372 (FAA), Accessed 09/19/2011
Prepared by: Kimley-Horn and Associates, Inc., March 2012

Exhibit 2.3

RNAV (GPS) RWY 32 Approach

2.2.8 AIRCRAFT CIRCULATION

The majority of aircraft movement originates and terminates on the main ramp, which is where most of the airport tenants are located. Taxiway A provides primary access to Runway 14-32. Aircraft wishing to access Runway 9-27 must utilize Taxiway B or Taxiway C to cross Runway 14-32. Taxiway D provides full length parallel access to Runway 9-27, and access to the west ramp.

2.3 METEOROLOGICAL DATA

2.3.1 TEMPERATURE AND PRECIPITATION

San Antonio is located on the northwest edge of the Gulf Coastal Plain, and experiences a modified subtropical climate. The average monthly temperatures range from 50°-60° F during winter, and 80°-90° F during summer. Mild weather prevails during most of the winter, with freezing temperatures only occurring on an average of 20 days per year. During the summer, the climate becomes tropical in nature with prevailing south and southeast winds. Summers are usually long, with mean daily temperatures above 90° F over 80 percent of the time. Many years, the summer temperatures extend well into September and October.

San Antonio is situated between a semi-arid area to the west and a much wetter and humid area to the east. This location allows for large variations in monthly and annual precipitation amounts. Average annual precipitation for San Antonio is around 29 inches, although this may vary from 10 inches to near 50 inches. Tropical storms occasionally affect the city, due to its location only 140 miles from the Gulf of Mexico.[7]

2.3.2 WIND DATA

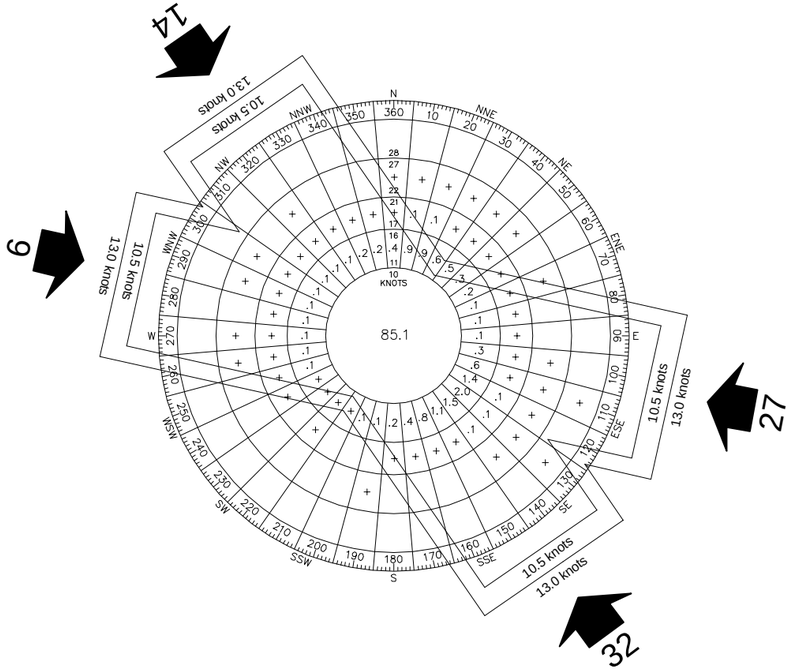
The prevailing winds for the San Antonio area are predominantly southern and southeast, and wind rose summaries of wind data at the Airport from 2000-2009 are shown in **Exhibit 2.4.**

2.4 OPERATIONS AND AIRSPACE PROCEDURES

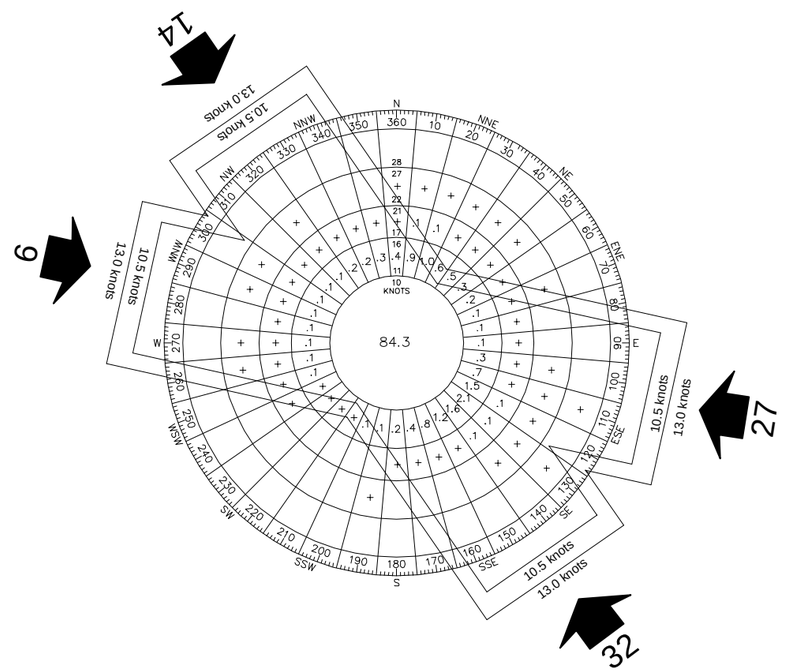
2.4.1 AIRPORT ROLE

Stinson Municipal Airport serves as a GA reliever to San Antonio International Airport. Historically, the principal component of activity at the Airport has consisted of GA operations (take-offs and landings). In 2010, GA activity accounted for 93.7% of total operations, followed by Military operations at 6.2%, and air taxi accounting for less than 0.1% of total operations[8].

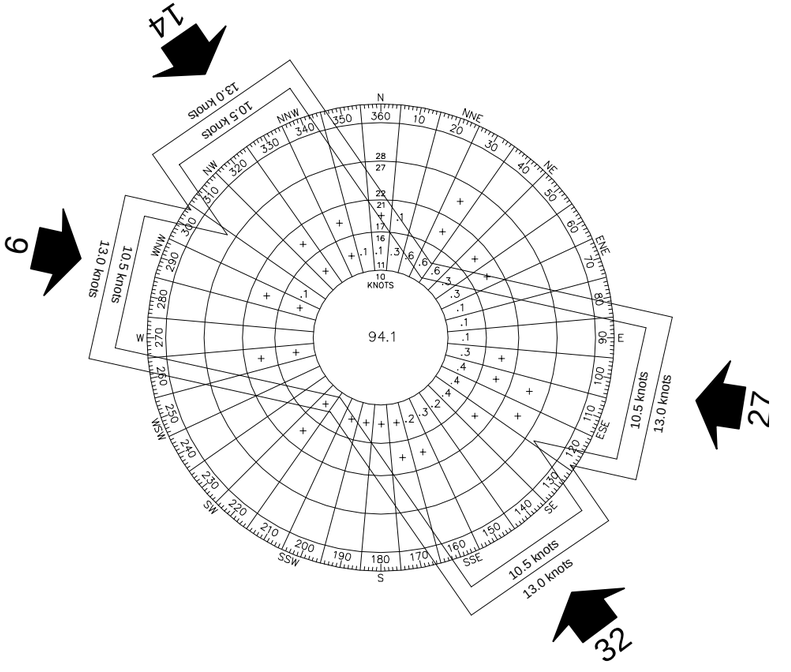
[7] San Antonio Climate Summary, NOAA National Weather Service Forecast Office
[8] Stinson ATCT Hourly Operations Count Data, 2008-2010



All Weather Wind Rose				
Runway(s)	Crosswind Component (knots)			
	10.5	13.0	16.0	20.0
14-32	96.55%	98.50%	99.77%	99.97%
9-27	93.86%	96.91%	99.44%	99.90%
14-32 & 9-27	97.59%	99.18%	99.85%	99.98%



VFR Wind Rose				
Runway(s)	Crosswind Component (knots)			
	10.5	13.0	16.0	20.0
14-32	96.45%	98.47%	99.76%	99.97%
9-27	93.55%	96.76%	99.42%	99.90%
14-32 & 9-27	97.52%	99.16%	99.88%	99.99%



IFR Wind Rose				
Runway(s)	Crosswind Component (knots)			
	10.5	13.0	16.0	20.0
14-32	97.34%	98.73%	99.83%	99.97%
9-27	97.10%	98.51%	99.74%	99.95%
14-32 & 9-27	98.14%	99.34%	99.95%	99.98%

Source: National Climatic Data Center, 2000-2009
Prepared by: Williams CAD Consulting, Kimley-Horn and Associates, Inc. December 2011

STINSON MUNICIPAL AIRPORT

Exhibit 2.4

Stinson Wind Rose

Stinson Municipal Airport
Master Plan Update

There are three alternative general aviation facilities in proximity to the Airport. New Braunfels Municipal Airport is located approximately 35 miles northeast of the Airport, and has 132 based aircraft and approximately 26,000 annual operations[9]. Castroville Municipal Airport is located approximately 25 miles west of the Airport, and has 39 based aircraft and 29,000 annual operations[10]. Boerne Stage Field is located approximately 30 miles northwest of the Airport, and has 125 based aircraft and approximately 29,400 annual operations.[11] Although these three facilities provide additional alternatives for general aviation activity for the region, Stinson Municipal Airport is anticipated to continue to be the primary general aviation reliever to SAT.

2.4.2 AIRSPACE

The airspace surrounding the Airport is classified as Class D airspace from the surface of the ground to 3,100 feet MSL during the hours of Air Traffic Control Tower operation. However, in a Letter of Agreement (LOA) with the SAT Terminal Radar Approach Control (TRACON), the Class D airspace above 2,000 feet MSL is controlled by SAT TRACON.[12] In the hierarchy of airspace, Class D airspace generally describes the airspace that surrounds airports with an operational control tower, but limited or no air carrier operations. The hours of control tower operation are 7:00AM to 10:00PM daily. When the control tower closes, the airspace reverts to Class G airspace, which is uncontrolled airspace. **Exhibit 2.5** highlights the airspace surrounding the Airport.

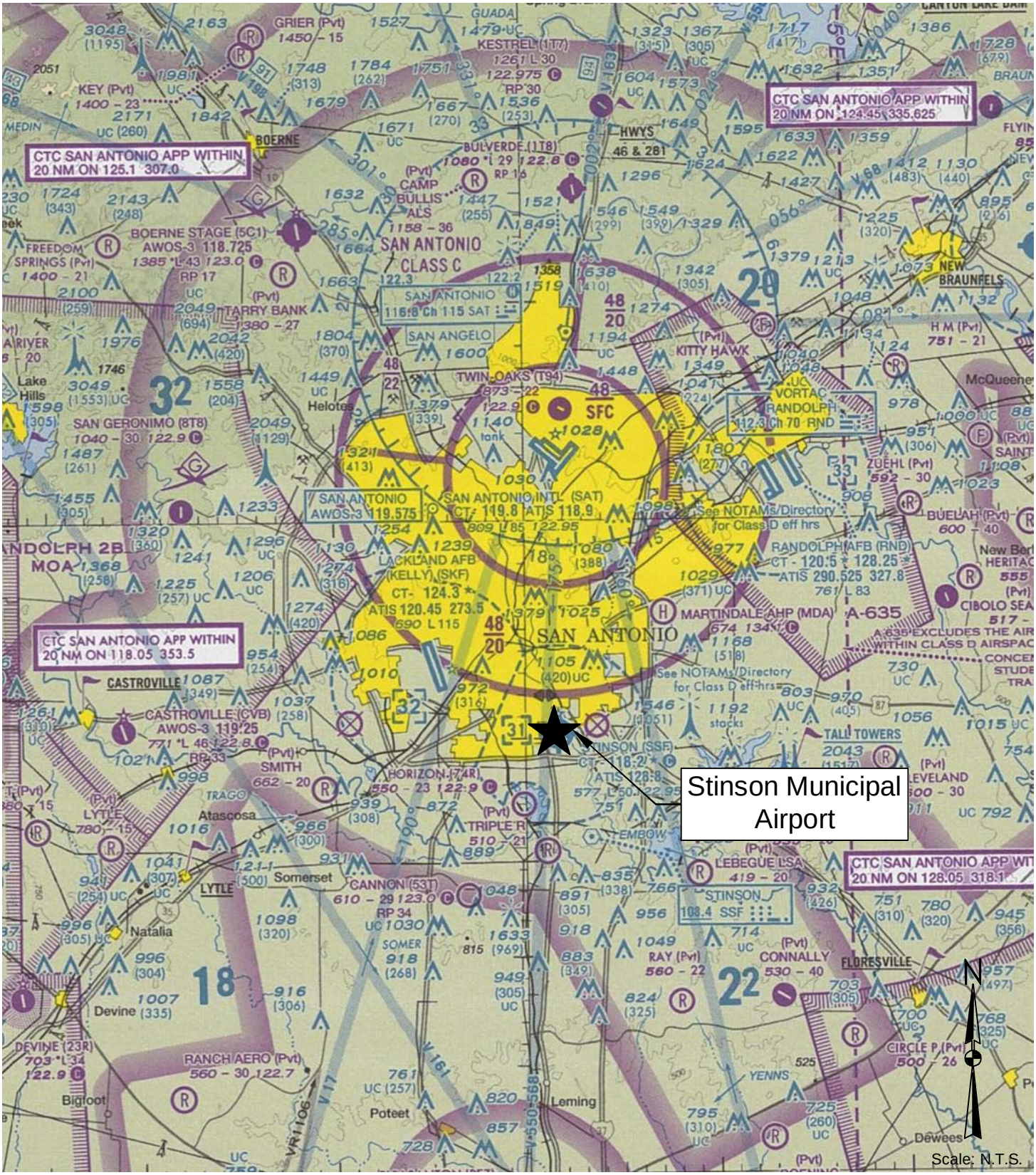
2.4.3 AIR TRAFFIC CONTROL FACILITIES

There are three facilities that provide air traffic control (ATC) services to aircraft arriving or departing the Airport or flying in the immediate vicinity. These facilities include the following:

- Houston Air Route Traffic Control Center (ARTCC)
- San Antonio Terminal Radar Approach Control
- Stinson Air Traffic Control Tower

The Stinson ATCT authorizes aircraft to land or take-off at the Airport or to transit the Stinson Class D airspace. The Stinson ATCT is operated by a private operator in conjunction with the FAA Contract Tower program, and is open daily from 7:00AM to 10:00PM. The San Antonio TRACON provides radar services to aircraft approaching or departing the region, and the Houston ARTCC provides en route radar services to aircraft.

[9] BAZ Airport Master Record Form 5010, effective 02/09/2012
[10] CVB Airport Master Record Form 5010, effective 02/09/2012
[11] 5C1 Airport Master Record Form 5010, effective 02/09/2012
[12] Per conversation with SAT TRACON, 04/23/12



Source: FAA San Antonio Sectional Chart, November 2011
Prepared by: Williams CAD Consulting, December 2011

Exhibit 2.5

Stinson Airspace Map

2.4.4 AIRFIELD OPERATING CONFIGURATIONS[13]

The Airport has two different operation configurations, based on current predominant weather conditions. Runways 9 and 14 are utilized in the east operating configuration, while Runways 27 and 32 are utilized in the west operating configuration. These configurations can be used concurrently, but generally only upon pilot request.

2.4.4.1 East Operating Configuration

In the east operating configuration, ATC will usually instruct aircraft to depart on Runway 14. Runway 14 is located close to the main ramp area, requiring a short taxi for departure. Runway 14 has 4,128 feet available for takeoff. Should an aircraft require a longer takeoff roll, Runway 9 provides 5,000 feet for takeoff.

Aircraft that arrive at the Airport in the east configuration will utilize Runway 9 or Runway 14. Runway 14 provides easy access to Fixed Base Operators (FBO's) and GA facilities located on the east side of the airfield. Runway 9 provides a greater landing distance for aircraft with higher performance requirements, and aircraft arriving on Runway 9 must cross Runway 14 to access GA facilities.

2.4.4.2 West Operating Configuration

When the Airport is in the west operating configuration, Runway 27 is most frequently used for departures because of its length and short taxi distance from the main ramp and GA facilities. Runway 27 also provides an expeditious departure for aircraft departing to the west. Aircraft arriving into the Airport most frequently request Runway 32 because of convenient access to the main ramp area, and its instrument approaches. Runway 27 can accommodate aircraft that require a greater landing distance than Runway 32. However, these arrivals must taxi across Runway 14-32 in order to access the main ramp area.

2.4.5 AIRFIELD MOVEMENT PROCEDURES

The following sections describe the typical airfield movement procedures used at the Airport. The movement area consists of the runways, taxiways, and any other areas of the airfield used for taxiing or takeoff. All aircraft and ground vehicle operations within the movement area must be authorized by the Stinson ATCT during its operating hours.

2.4.5.1 East Operating Configuration Ground Movement Procedures

When the Airport is in the east operating configuration, Runways 14 and 9 are utilized. Below is information about the common taxi routes used in this configuration.

- **Runway 14 Arrivals –** Upon roll-out, single-engine aircraft generally exit left onto Runway 27, while multi-engine aircraft typically use the full length of the runway. In the latter case, multi-engine aircraft usually exit onto Taxiway A at the south end of the runway and taxi either directly

[13] Data excerpted from 2002 Stinson Municipal Airport Master Plan, verified October 2011 by Stinson ATCT Personnel.

to the main ramp or to the west ramp via Taxiway D. Aircraft taxiing to the west ramp area must cross Runway 14-32.

- **Runway 9 Arrivals** - Aircraft exit the runway at either Taxiway B or Taxiway C. Once clear of the runway, aircraft may access the west ramp via Taxiway D, or the main ramp via Taxiways B, C, or D, depending on what area of the ramp is desired.

- **Runway 14 Departures** - Aircraft departing from the main ramp taxi north via Taxiway A to the runway end. Aircraft departing from west ramp taxi via Taxiway D must turn left onto either Taxiway C or B and cross Runway 14-32. After crossing Runway 14-32, aircraft must turn left onto Taxiway A and proceed north to the runway end.

- **Runway 9 Departures** - Aircraft departing from the main ramp will taxi via Taxiway A to either Taxiway B or C. Regardless of which taxiway is used, aircraft must cross Runway 14-32. After crossing Runway 14-32, aircraft will taxi west on Taxiway D to Runway 9. Aircraft departing from the west ramp will taxi via Taxiway D to the end of Runway 9.

2.4.5.2 West Operating Configuration Ground Movement Procedures

When the Airport is in the west configuration, Runway 32 and Runway 27 are utilized. Typical taxi routes used under this configuration are described below.

- **Runway 32 Arrivals** – Aircraft landing on Runway 32 will exit to the right via Taxiway B, C, or A, if they are destined to the main ramp. After clearing the runway, aircraft will taxi via Taxiway A to the main ramp. Aircraft wishing to proceed to the west ramp must either exit left onto Taxiway B or C, or right on Taxiway A. In the latter situation, aircraft are required to taxi south on Taxiway A and turn right on Taxiway B to cross Runway 14-32. After clearing Runway 14-32, all aircraft proceed to Taxiway D and taxi west to the west ramp area.

- **Runway 27 Arrivals** – Aircraft landing on Runway 27 exit the runway to the right via Taxiway D1, D2, or D (at the west end of the runway). Upon exiting, aircraft destined to the main ramp turn right onto Taxiway D and taxi eastbound. Aircraft may turn left on Taxiway B or C depending on which portion of the main ramp is desired. Aircraft must cross Runway 14-32, and then can access the main ramp area via Taxiway A.

- **Runway 32 Departures** – Aircraft departing from the main ramp taxi south via Taxiway A to the Runway 32 end. Aircraft departing from the west ramp will taxi east on Taxiway D and cross Runway 14-32. Once clear of the runway, aircraft turn right onto Taxiway A and taxi south to the Runway 32 end.

- **Runway 27 Departures** – Aircraft departing from the main ramp will taxi via Taxiway A to Runway 27. Aircraft departing from the west ramp will taxi east via Taxiway D to the Runway 27 end.

2.4.6 VFR PROCEDURES

The Stinson ATCT provides ATC services to aircraft operating in the local vicinity of the Airport. The ATCT ensures aircraft operating in the local traffic pattern are separated from other aircraft in the pattern, as well as from itinerant arrival and departure traffic.

As stated in Section 2.4.2, the airspace surrounding the Airport is Class D airspace during hours of ATCT operation. Arriving aircraft flying under visual flight rules (VFR) must establish contact with the Stinson ATCT prior to entering the Class D airspace. Aircraft arriving from the south use several general landmarks to report their position to the tower. Aircraft arriving from the north must transition through the San Antonio Class C airspace by contacting the San Antonio TRACON.

The Airport has a standard traffic pattern consisting of five components:

- **Upwind Leg** – Flight path parallel to the landing runway in the direction of landing.
- **Crosswind Leg** – Flight path at right angles to the landing runway off of its take-off end.
- **Downwind Leg** – Flight path parallel to the landing runway in the opposite direction of landing.
- **Base Leg** – Flight path at right angles to the landing runway off of its approach end, extending from the downwind leg to the intersection of the extended runway centerline.
- **Final Approach** – Flight path in the direction of landing along the extended runway centerline from the base leg to the runway.

Both left and right traffic patterns are used at the Airport. Generally, left traffic is used on Runway 14, while right traffic is generally used for Runway 32 so air traffic controllers may keep both the airfield and the traffic pattern in sight. Opposite traffic patterns are also used to segregate aircraft with varying speeds. Similarly, right traffic may be used on Runway 27 to minimize interactions with aircraft executing an instrument approach to Runway 32.

There are no official approach or departure routes or agreements currently established with the tower to control helicopter operations. In general, the most frequent helicopter users at the Airport utilize Roosevelt Avenue as an arrival corridor in order to mitigate noise impacts on surrounding properties. This arrangement is voluntary and informal; there are no penalties for noncompliance.[14]

2.4.7 IFR PROCEDURES

2.4.7.1 Arrivals

Aircraft that arrive or depart the Airport under Instrument Flight Rules (IFR) must utilize radar services provided by the San Antonio TRACON. This facility also provides air traffic services to other airports in the San Antonio region, including SAT, Lackland Air Force Base (SKF) and Randolph Air Force Base (RND). Arriving aircraft are guided by radar vectors and altitude clearances issued by the TRACON. These instructions allow aircraft to align with a runway for landing while being separated from other air traffic. The TRACON will also authorize an aircraft to execute an instrument approach. Aircraft arriving into the Airport under IFR may execute the VOR Runway 32 approach, or the RNAV (GPS) Runway 32 approach. Once aircraft are aligned on the final approach course to Runway 32 and are cleared to execute the instrument approach, radio communication with the TRACON ceases and are handed off to the Stinson ATCT for landing clearance.

Several Standard Terminal Arrival (STAR) procedures exist for air traffic arriving into the San Antonio region. These procedures are used to expedite the flow of air traffic arriving into San Antonio area airports. There are procedures for arrivals from all four cardinal directions, and all utilize navigational

[14] Based on conversation with Stinson ATC personnel, 10/19/2011

fixes. The MARCS NINE arrival utilizes the MARCS intersection, which is a major intersection located approximately 35 miles northeast of San Antonio, and feeds air traffic from the north and east. Arrivals from the south generally will utilize the LEMIG ONE arrival, and pass through the LEMIG intersection before being issued vectors to the aircraft's destination airport.

Other STAR's that exist for the San Antonio area include the CENTERPOINT ONE arrival, which feeds traffic from the west and northwest through the BENEY intersection, and the STONEWALL ONE arrival, which feeds traffic from the north and northwest through the Stonewall VORTAC. The RODIO ONE arrival is an Area Navigation (RNAV)-based procedure, which utilizes RNAV fixes and intersections. Traffic arriving from the east and northeast may utilize the RODIO ONE arrival.

2.4.7.2 Departures

Aircraft that depart the Airport under IFR will be issued a route clearance on the ground prior to departure from the San Antonio TRACON. After takeoff, aircraft will be handed off from the Stinson ATCT to the San Antonio TRACON for departure vectors in accordance with the aircraft's filed flight plan route. Departing aircraft may utilize one of several Departure Procedures.

2.5 GENERAL AVIATION FACILITIES

The existing facilities on the Airport property that generally serve an aviation function are described in the following sections and are shown on **Exhibit 2.6** and **Exhibit 2.7**

2.5.1 FIXED BASED OPERATORS

FBO's are facilities that provide aircraft services such as fuel, hangar space and passenger amenities to transient and based aircraft. There are currently two FBO's at the Airport: San Antonio Aviation and Stinson Jet Center. Both provide aircraft and passenger services such as:

- Aviation Fuel Sales (Jet A and 100LL Avgas)
- Aircraft Storage
- Aircraft parking (ramp or tie-down)
- Aircraft Maintenance
- Courtesy Cars
- Rental Cars
- Flight Planning

In addition to FBO's, several aviation-related businesses operate on the airport property. These include Red Wing Aerial Photography, Sky Safety Flight Training, Alamo Helicopter Tours, and i3 Global Flight Training.

2.5.2 AIRCRAFT STORAGE FACILITIES

The Airport contains many aircraft storage facilities, including community hangars and T-hangars. The airport contains a cumulative 14 buildings totaling 118,243 square feet (SF) of hangar space, including both community and T-hangars. In addition to hangar space, there is aircraft storage space within the Texas Air Museum, which is located on 99th Street, west of Mission Road. Other buildings include the airport maintenance facility and airport terminal building. A listing of airport buildings, storage space and associated square footages are detailed in **Table 2.5**.

Source: Stinson Airport Staff, 2011
Prepared by: Williams CAD Consulting, Kimley-Horn and Associates, Inc., March 2012

STINSON MUNICIPAL AIRPORT

Exhibit 2.6

General Aviation Facilities-East

Stinson Municipal Airport
Master Plan Update

Source: Stinson Airport Staff, 2011
Prepared by: Williams CAD Consulting, Kimley-Horn and Associates, Inc., March 2012

STINSON MUNICIPAL AIRPORT

Exhibit 2.7

General Aviation Facilities - West

Stinson Municipal Airport
Master Plan Update

Table 2.5 - Airport Buildings and Aircraft Storage Space

Building #	Hangar #	Tenant	Facility Type	Building Area (Square Feet)		
				Airport Records	ALP Exhibit	2002 Master Plan
600		Airport Terminal	Other	30,241		
601	1	San Antonio Piper	Hangar	21,911		
602	2	San Antonio Aviation	Hangar	27,212		
604	3	San Antonio Aviation	Hangar	6,610		
605	4	Air Methods	Hangar	9,180		
608	5	Red Wing Aerial	Hangar	9,300		
609	6	Red Wing Aerial	Hangar	5,000		
610	7	Texas DPS	Hangar	8,400		
612	8	Stinson Aviation Corporation	Hangar	2,488		
614	9	Sky Safety	Hangar	9,998		
616	10	Sky Safety	Hangar	9,645		
618-620	11, 12	Ocotillo East Hangars	Hangar			21,828
658		Airport Maintenance	Maint.	22,978		
665		Texas Air Museum	Other	32,964		
673		Ocotillo West Hangars	Hangar		30,921	
675		Civil Air Patrol	Other	10,621		
565A,565B		Texas Air Museum (other)	Other	13,947		
660A		VACANT	Hangar			12,242
660B		San Antonio Police Dept.	Hangar	8,499		
			Subtotals			
			Hangar	118,243	S.F.	
			Maintenance	22,978	S.F.	
			Other	87,773	S.F.	
			Overall	**228,994**	S.F.	

Source: Airport Records, 2011
Stinson Master Plan Report, 2002, Ricondo & Associates
Airport Layout Plan, 2006

2.5.3 APRON AREAS

Existing aircraft apron areas include aircraft tie-down storage facilities and circulation areas for general aircraft movement. The existing apron storage areas are provided to accommodate both based and itinerant aircraft parking. There are two distinct apron areas. The largest apron is known as the main ramp, which provides approximately 586,750 square feet of ramp area for aircraft parking and tie-down space. It is parallel to Runway 14-32, and is surrounded to the east by various hangar facilities and the terminal building. The other apron area is located on the western portion of the airfield, and is known as the west ramp. This apron area provides approximately 107,300 square feet of ramp space. The apron area locations are shown on Exhibit 2.6 and Exhibit 2.7.

2.5.4 AIRCRAFT FUELING FACILITIES

Each fuel provider at Stinson Municipal Airport maintains its own fuel storage, inventory, and distribution system. There is no common use fuel storage facility or fuel distribution system maintained by the Airport. There are three entities on the field that manage fuel: San Antonio Aviation, Stinson Jet Center, and the San Antonio Police Department. Both San Antonio Aviation and Stinson Jet Center sell Avgas (100 LL) and Jet A fuel. San Antonio Aviation manages fuel trucks with a combined capacity of 9,200 gallons of aviation fuel. A self-service fuel farm is located on the northeast corner of the Airport, which has a capacity of 10,000 gallons 100LL fuel and 10,000 gallons Jet A fuel. The San Antonio Police Department facility only dispenses Jet A fuel, and is dispensed solely for their own consumption.

2.5.5 AUTOMOBILE PARKING

A general airport parking lot is provided on the east side of Mission Road. This lot contains 71 spaces and is paved with asphalt. The terminal building contains 11 parking spaces on the west side of Mission Road. In addition to these paved parking spaces, an unpaved gravel lot across from the terminal building entrance provides approximately 26,000 square feet of parking area. While this gravel lot is unmarked, it is frequently utilized as airport parking. At the time of this report's publication, the Airport was planning to improve this parking lot with paved surfaces.

2.5.6 TERMINAL BUILDING

The terminal building at the Airport is a two-story unit terminal design that was originally constructed in 1936. It is located on the west side of Mission Road, and provides passenger and user access to the main ramp area. It serves as the central hub of the Airport, including housing airport administration offices, meeting/conference spaces, passenger waiting areas, a sit-down restaurant, Palo Alto College classroom space, and tenant space for flying clubs and other aviation organizations.

In 2009, the existing terminal building was significantly updated with a 24,000 S.F. building addition and renovation. This addition created two wings that connect to the existing terminal building. The additions of the wings create a courtyard entrance to the terminal from Mission Road. The design process recognized the original terminal building is a historic structure, and lies within the confines of a historical district. Therefore, the final design incorporated materials and architectural elements to complement the existing historic structure and harmonize with the historical district[15].

2.6 AIRPORT SUPPORT AND OTHER FACILITIES

2.6.1 AIRPORT WEATHER INFORMATION

The Airport has an on-site Automated Surface Observation System (ASOS), which provides a continuous broadcast of weather information at the surface of the Airport, including temperature, dew point, precipitation intensity and type, cloud cover, visibility, and various other measures. This facility is located between Runway 9-27 and Runway 14-32, adjacent to the airship mooring station. The weather

[15] San Antonio Aviation Department, December 2011

information can be accessed by aviation radio, Automated Terminal Information System (ATIS), or by telephone.

2.6.1 AIRPORT SECURITY

The Airport perimeter is enclosed with 6-foot chain link fencing with barbed wire that has 27 gates along its length. Security gates are either controlled and maintained by the Aviation Department or controlled by an adjacent tenant and maintained by the Aviation Department. Passage through these gates is by code entered on a keypad. Access gates are kept closed and secured by chain and lock. These gates are solely used by the Aviation Department or COSA for maintenance or emergency access. Additionally, the SAPD conducts after-hours nightly patrols of the Airport.

2.6.2 AIRPORT MAINTENANCE

The Airport has one airfield maintenance building located opposite Hangar 5 on the east side of Mission Road. This building is approximately 23,000 square feet and houses a wide variety of equipment for performing Airport maintenance, including trucks, tool equipment, a wheel loader, backhoe, and various other machines. The Airport has its own maintenance staff which handles nearly all facets of airfield maintenance, including maintaining airfield lighting, airfield pavement, and facilities.

2.6.3 THE COMMANDER'S HOUSE

The abandoned Stinson Airport Manager's House, also known as the Commander's House, is located south of Six Mile Creek, north of Ashley Road. The facility consists of a single-story native stone house and native stone two-car garage and storeroom. An aerial survey of the area from 1928 documents the presence of the house, and it is believed the structure was built in the latter half of the 1920's[16]. The structure is in need of repair, and has been boarded up. It may be eligible for historical significance status.

2.6.4 AIRSHIP MOORING

The Airport provides mooring for airships approximately four to eight times per year. The airships are typically flown for advertising purposes at local events or during cross-country trips. They are moored on the north end of the airfield to the east or west of the cul-de-sac roadway. The Airport can accommodate two airships at one time in this area.

2.7 AIRPORT ACCESS AND CIRCULATION

2.7.1 ACCESS ROADWAYS

Mission Road provides the main access to the Airport, since the terminal building and the majority of tenant facilities and hangars are located along this road. It is a two lane, bi-directional local road with no curb, gutter or sidewalks. Access to Mission Road is provided from Southeast Military Highway, which is a major east-west thoroughfare. Roosevelt Avenue is a major north-south thoroughfare that provides

[16] Stinson Airport Manager, 6-1-2012

access to the west airfield and tenant areas. Persons wishing to access the eastern Airport facilities from Roosevelt Avenue must utilize 96th Street and Echo Street to access Mission Road.

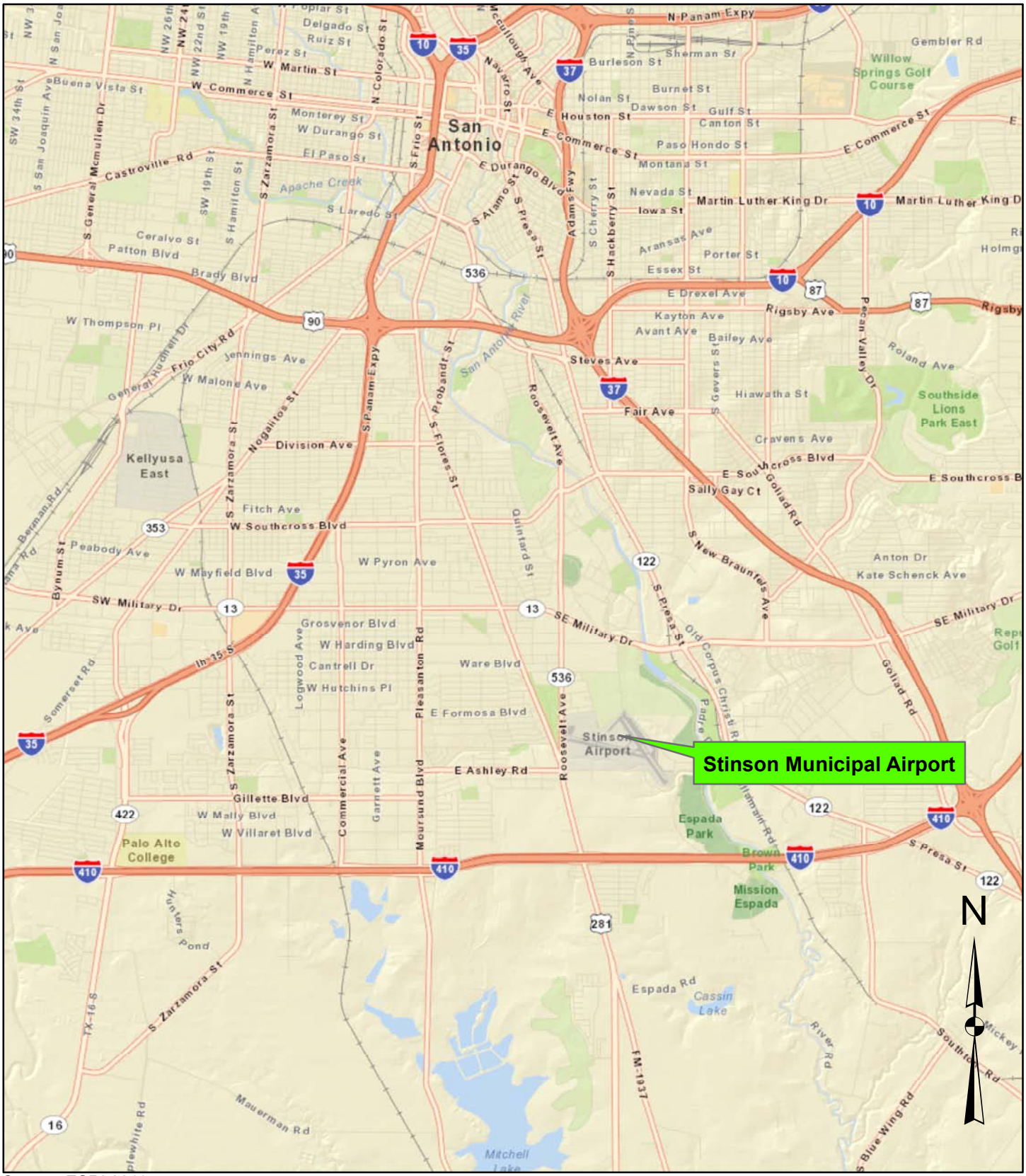
On a regional scale, Interstate 37 provides multi-lane divided freeway access to Southeast Military Highway from downtown San Antonio and northern areas, as well as from southeastern areas. Interstate 410 is a beltway interstate freeway that provides access to Roosevelt Avenue from the southern and western areas of San Antonio and Bexar County. Additionally, Interstate 35 provides access to Southeast Military Highway from the western portions of San Antonio. **Exhibit 2.8** provides an overview of regional roadway access to the Airport, and **Exhibit 2.9** provides an overview of local roadway access.

Table 2.6 provides a summary of the surrounding roadways and their capacities and average daily traffic (ADT). According to current data obtained from the City of San Antonio and TxDOT, the surrounding roadways that provide access to the Airport have ample capacity.

Table 2.6 - Stinson Area Traffic Count Data

Location	Annual Average Daily Traffic (ADT)	Capacity (ADT)	Street Width (feet)	Posted Speed Limit (mph)	Lane Configuration
Roosevelt Avenue north of March	15,910	40,000	86	45	4-lane undivided
Roosevelt north of Loop 410 South - (NB/SB) - Counted 5/5/08	21,146	40,000	86	45	4-lane undivided
Roosevelt north of Ashley	11,180	40,000	86	45	4-lane undivided
99th Street east of Roosevelt	1,040	20,000			2-lane undivided
Mission Road south of March	2,280	20,000	27	30	2-lane undivided
Ashley west of Roosevelt (EB/WB) - Counted 8/26/08	6,459	20,000	44	35	4-lane undivided
Mission Road north of Ashley (NB) - Counted 9/10/03	615	20,000	27	30	2-lane undivided
Mission Road north of Ashley (SB) - Counted 9/10/03	587	20,000	27	30	2-lane undivided
Mission Road south of 99th St. (SB) - Counted 9/10/03	698	20,000	27	30	2-lane undivided
Mission Road south of 99th St. (NB) - Counted 9/10/03	728	20,000	27	30	2-lane undivided

Source: Texas Department of Transportation, 2005
San Antonio Urban Traffic Counts, Sheet 66 of 133, 2005
City of San Antonio Public Works, Traffic Count Database, 3/2011



Source: ESRI 2011
Prepared by: Kimley-Horn and Associates, Inc., March 2012

Scale: 1" = 1.5 Miles

Exhibit 2.8

Regional Roadway Access

Stinson Municipal Airport
Master Plan Update

Source: City of San Antonio, 2012
Prepared by: Kimley-Horn and Associates, Inc., March 2012

Scale: 1" = .25 Miles

STINSON MUNICIPAL AIRPORT

Exhibit 2.9

Local Roadway Access

Stinson Municipal Airport
Master Plan Update

2.7.2 AIRPORT SERVICE ROADS

There is one airfield service road at the Airport, which is located along the main ramp near Taxiway A. This road is indicated by pavement markings. In order to reach other areas of the airfield, operations and maintenance personnel must utilize either the runway and taxiway system, or surrounding roadways and fence gates to gain access for maintenance purposes.

2.8 AIRPORT UTILITIES

2.8.1 WATER SYSTEM

San Antonio Water System (SAWS) provides water service to the Airport. Water service is provided to the eastern Airport facilities along Mission Road by a 12-inch Poly Vinyl Chloride (PVC) pipeline. This line connects to a 12-inch Asbestos Cement (AC) main line at the corner of Mission Road and Ashley Road, and also to an 8-inch Cast Iron (CI) line at the corner of Mission Road and 99th Street. Water service for the western general aviation facilities is provided via a grid of CI lines of both 8- and 6-inch diameters, which runs in the area north of 99th Street.[17]

2.8.2 SANITARY SEWER

SAWS provides sanitary sewer service to the Airport. There are two 72-inch outfall main lines that run from northwest to southeast in the area west of the Airport. They cross from northwest to southeast under Roosevelt Avenue, and change into siphon mains just south of 96th Street. From there, they run south along Roosevelt Avenue. On the southeast corner of the Airport, two parallel sewer mains run under the existing threshold of Runway 32, and flow in a southwest direction.

A 12-inch PVC gravity sewer line runs from west to east along 99th Street, and turns southeast on Mission Road. This line, and an 8-inch gravity sewer line, which flows northwest along Mission Road past the general aviation facilities, both connect into a 15-inch gravity sewer line which flows directly east.[14]

2.8.3 NATURAL GAS

CPS Energy provides natural gas service to the Airport and surrounding vicinity. Gas is supplied to the eastern general aviation facilities along Mission Road by a 4-inch supply line which runs along Mission Road from March Avenue. Gas is supplied to the western general aviation facilities along 99th Street by a 2-inch pipeline, which is fed from a 4-inch line that runs parallel with Roosevelt Avenue.[18]

2.8.4 ELECTRICAL SERVICE

CPS Energy is the primary supplier of electrical service for the San Antonio Region, which includes the area around the Airport. Electric power for the eastern general aviation facilities along Mission Road is provided via an overhead electric line which originates off airport property to the southeast, and terminates at the corner of 99th Street and Mission Road. Service to the western general aviation facilities is provided via overhead lines that originate from a line that runs parallel with Roosevelt Avenue. Various

[17] San Antonio Water System Block Maps, February 2012
[18] CPS Gas Service Map, March 2012

overhead lines split off of Roosevelt Avenue to provide service to the facilities between 99th Avenue and 96th Avenue. Electrical service for the facilities in the southern Airport vicinity along Ashley Road is provided via an overhead line fed from a line that runs east-west along Braubach Avenue.[19]

2.8.5 TELEPHONE/INTERNET SERVICE

Currently, AT&T is the only provider of landline telephone service and internet service at the Airport. Consultation with this provider revealed that only basic landline telephone service is available in the area.

2.8.6 CABLE TELEVISION SERVICE

There is currently no cable television service available at the Airport. Television service can be obtained via satellite service providers such as DirecTV® or Dish Network®, or via over-the-air antenna service.

2.9 LAND USE

The following sections provide a description of the physical, political and socio-economic aspects of the areas that surround the Airport. The specific sections include a discussion of area land uses surrounding the Airport, area land use plans, as well as an inventory of land use controls and future land use actions in the vicinity of the Airport. A map of existing land uses is shown on **Exhibit 2.10,** and a map of proposed future land uses is shown on **Exhibit 2.11.**

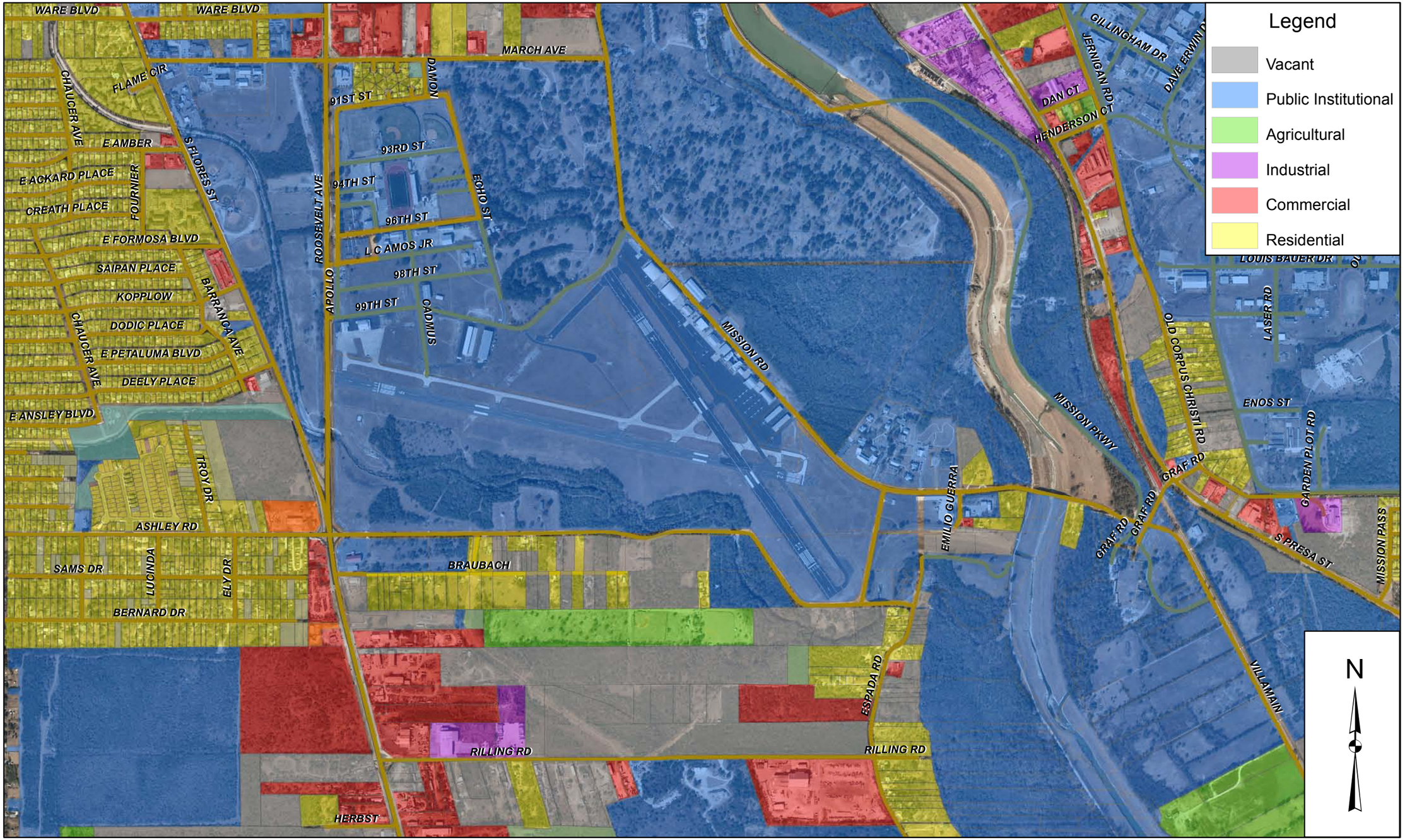
2.9.1 ON-AIRPORT LAND USES

The City of San Antonio property on which the Airport resides is zoned Industrial, and consists of institutional land uses.

2.9.2 OFF-AIRPORT LAND USES

- **Northern Airport Vicinity** – There are primarily institutional land uses north of the Airport. The San Jose Burial Park and Mission Cemetery account for a significant portion of land north of the Airport. In addition, there is a municipal vehicle storage facility, and a public school athletic facility. There are also commercial and single-family residential land uses north of the Airport.
- **Eastern Airport Vicinity** – East of the Airport, the majority of land use is commercial, vacant, or institutional. Brooks City Base accounts for a majority of land use east of the Airport. The San Antonio River is also in the eastern Airport vicinity.
- **Southern Airport Vicinity** – While the majority of the land in this area is undeveloped, land uses that exist in the southern airport vicinity include industrial facilities north of Interstate 410, and single family residential uses south of Interstate 410. Additionally, there are a few agricultural land uses in this vicinity.
- **Western Airport Vicinity** – West of the Airport, the majority of the land use is single family residential, with sporadic commercial and institutional land uses.

[19] CPS Energy Electrical Service Map, March 2012



Source: City of San Antonio, 2009
Prepared by: Kimley-Horn and Associates, Inc., March 2012

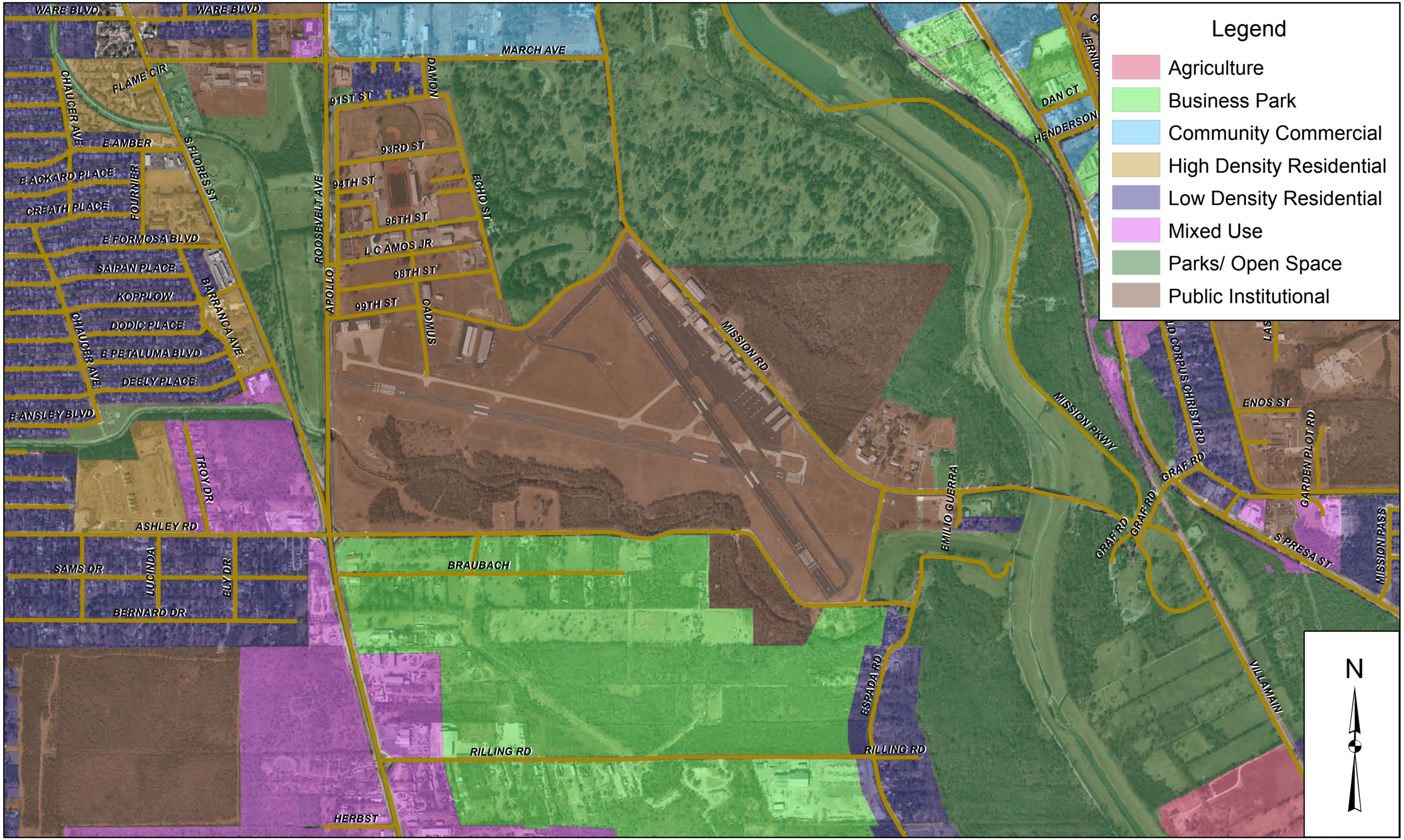
Scale: 1" = 1,000'

STINSON MUNICIPAL AIRPORT

Exhibit 2.10

Stinson Area Existing Land Use

Stinson Municipal Airport
Master Plan Update



Source: City of San Antonio, 2012
Prepared by: Kimley-Horn and Associates, Inc., March 2012

Scale: 1" = 1,000'

Exhibit 2.11

Stinson Area Future Land Use

Stinson Municipal Airport
Master Plan Update

2.9.3 AREA LAND USE PLANS

The Airport lies in the COSA Stinson Airport Vicinity planning area. In 2009, the COSA adopted the Stinson Airport Vicinity Land Use Plan, which identified future land use goals and development strategies for the area. The plan identifies a preferred development strategy for the area, including improving transportation capacity, discouraging residential development north of the Airport, promoting business park uses south of the Airport, and protection of airport operations.[20]

The Airport also lies within the confines of the East Sector planning area for the purposes of the San Antonio Comprehensive Master Plan. The COSA initiated an update to this plan in 2010, and as of this report's publication, the East Sector Plan had not yet been completed.[21]

2.9.4 LAND USE CONTROL PROCESS

Article IV of the City of San Antonio Unified Development Code identifies the development approval procedures by which the City is able to maintain control over land use. In general, these procedures include an application process, public notice, public hearing, city commission review and approval or recommendation, and, when required, city council review and approval. These procedures evaluate the proposed development in light of the zoning classification and applicable overlay districts impacting the property in question. Proposed development is ultimately approved or disapproved by the appropriate decision-making authority within the City of San Antonio based on its compliance with these directives. Following the approval or disapproval of a proposed development, there are appeal procedures in place to enable additional review if a citizen is aggrieved or affected by the decision. In addition, the Code provides a variance process to make exceptions for proposed development that may not fully comply with the zoning applied to a particular development parcel.

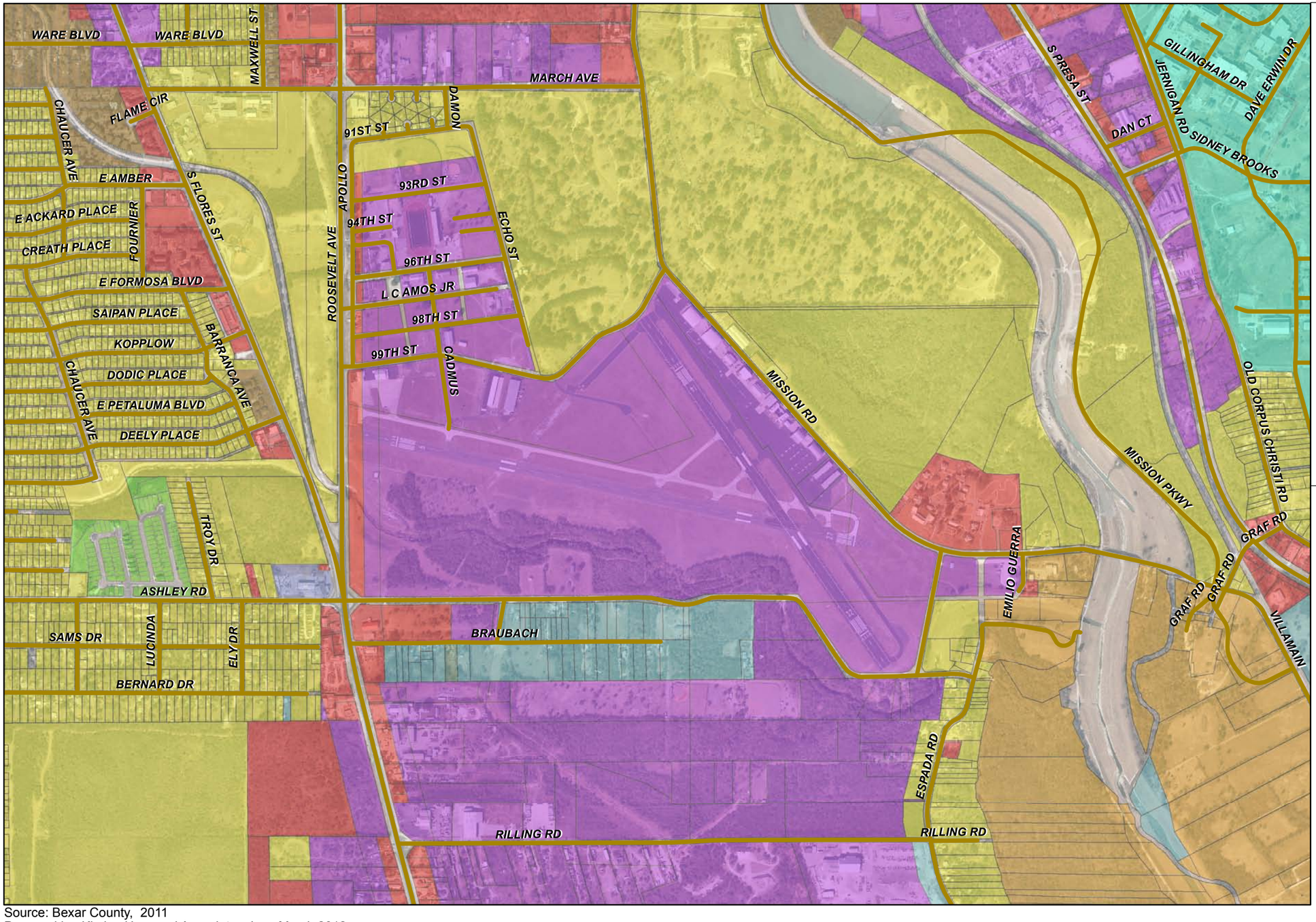
2.9.5 POTENTIAL INCOMPATIBLE LAND USES

It is important to consider existing land uses in the vicinity of the Airport for the purpose of future development. There are several noise sensitive land uses, primarily residential, which are located to the north, west, and south of the Airport. Some potential incompatible uses include the Harlandale Alternative School, located north of the Airport, the Mission San Juan Capistrano, located east of the Airport, and heavy residential development west of the Airport.

2.9.6 ZONING

The City of San Antonio regulates land use through the use of zoning code. In general, there are three zoning designations within the City of San Antonio: Residential, Commercial, and Industrial. There are several sub-designations that exist within each category. The Airport property base zoning is classified as General Industrial (I1H) under the San Antonio Unified Development Code. The area immediately surrounding the airport consists of primarily Single Family Residential, Mixed Residential, and Commercial zoning. **Exhibit 2.12** highlights the zoning surrounding the Airport.

[20] Stinson Airport Vicinity Land Use Plan, April 2009
[21] City of San Antonio Department of Planning and Community Development, March 2012



Legend

- Commercial
- Industrial
- Light Industrial
- Manufactured Housing
- Military Reservation
- Multi-Family Residential
- Neighborhood Preservation
- Planned Unit Development
- Residential Mixed
- Residential Multi-Family
- Residential Single-Family

N

Scale: 1" = 1,000'

Source: Bexar County, 2011
Prepared by: Kimley-Horn and Associates, Inc., March 2012

STINSON MUNICIPAL AIRPORT

Exhibit 2.12

Stinson Area Zoning

Stinson Municipal Airport
Master Plan Update

In addition to base zoning, there are several zoning overlay districts that may affect land use and development around the airport. These overlay zoning districts address special siting and compatibility issues that require regulation in addition to base zoning districts. The Airport and surrounding area lie in several San Antonio Overlay Districts. These include Historic Districts, the Airport Hazard Overlay District (AHOD), and the River Improvement Overlay Districts (RIO)[22].

2.9.6.1 Historic District

The Airport lies within the confines of the Mission Historic District of the City of San Antonio, which is recognized for its outstanding historic and cultural significance. This district primarily includes the lower four missions in the San Antonio Area. The location of the Airport within this district results in airport development being subject to historic preservation ordinances contained within Article VI of the Unified Development Code of the City of San Antonio. **Exhibit 2.13** shows the location of historic districts around the Airport.

2.9.6.2 Airport Hazard Overlay District

The Airport and much of the surrounding community falls within the Airport Hazard Overlay District (AHOD). This district regulates land uses on the affected properties to minimize obstructions to air navigation in accordance with Part 77 of the Federal Aviation Regulations (FAR Part 77). Hazard areas include not only the areas surrounding Stinson Municipal Airport, but also San Antonio International Airport, Lackland Air Force Base, and Randolph Air Force Base.

2.9.6.3 River Improvement Overlay District

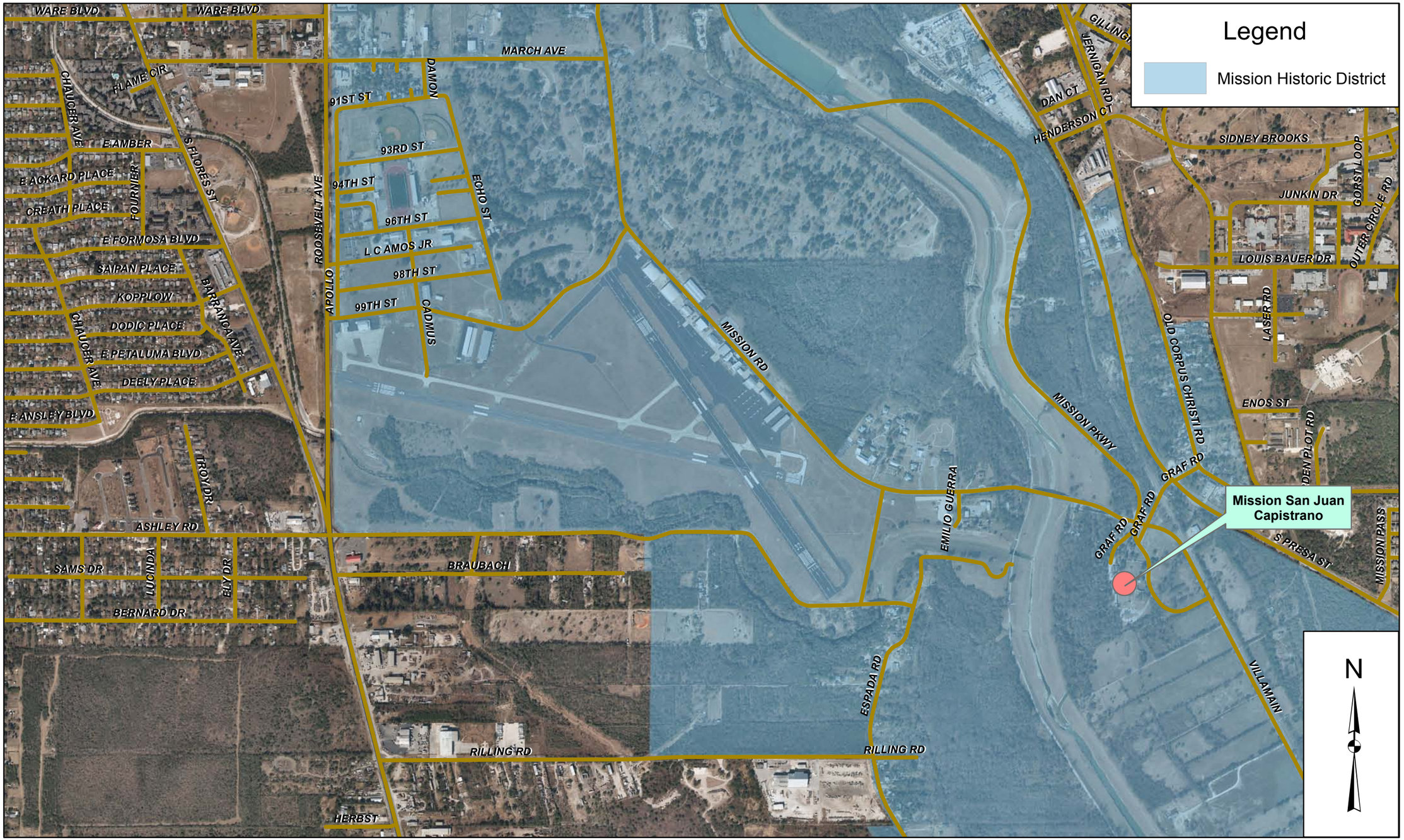
The property immediately east of the airport lies within RIO District 6. As stated in the San Antonio Unified Development Code, "The purpose of these districts is to establish regulations to protect, preserve and enhance the San Antonio River and its improvements by establishing design standards and guidelines for properties located near the river…a unique and precious natural, cultural, and historic resource." The location of the RIO District is shown on **Exhibit 2.14.**

2.10 ENVIRONMENTAL CONSIDERATIONS

2.10.1 100-YEAR FLOODPLAIN

Airport property is impacted by the 100-year floodplain associated with the South Flores Tributary of the San Antonio River. Much of the impacted area falls on the property east of Mission Road. The floodplain for the area is shown on the National Flood Insurance Rate Map (FIRM) number 48029C0580G, dated September 29, 2010, and is shown in **Exhibit 2.15**.

[22] City of San Antonio Unified Development Code, August 2011



Source: City of San Antonio, 2012
Prepared by: Kimley-Horn and Associates, Inc., March 2012

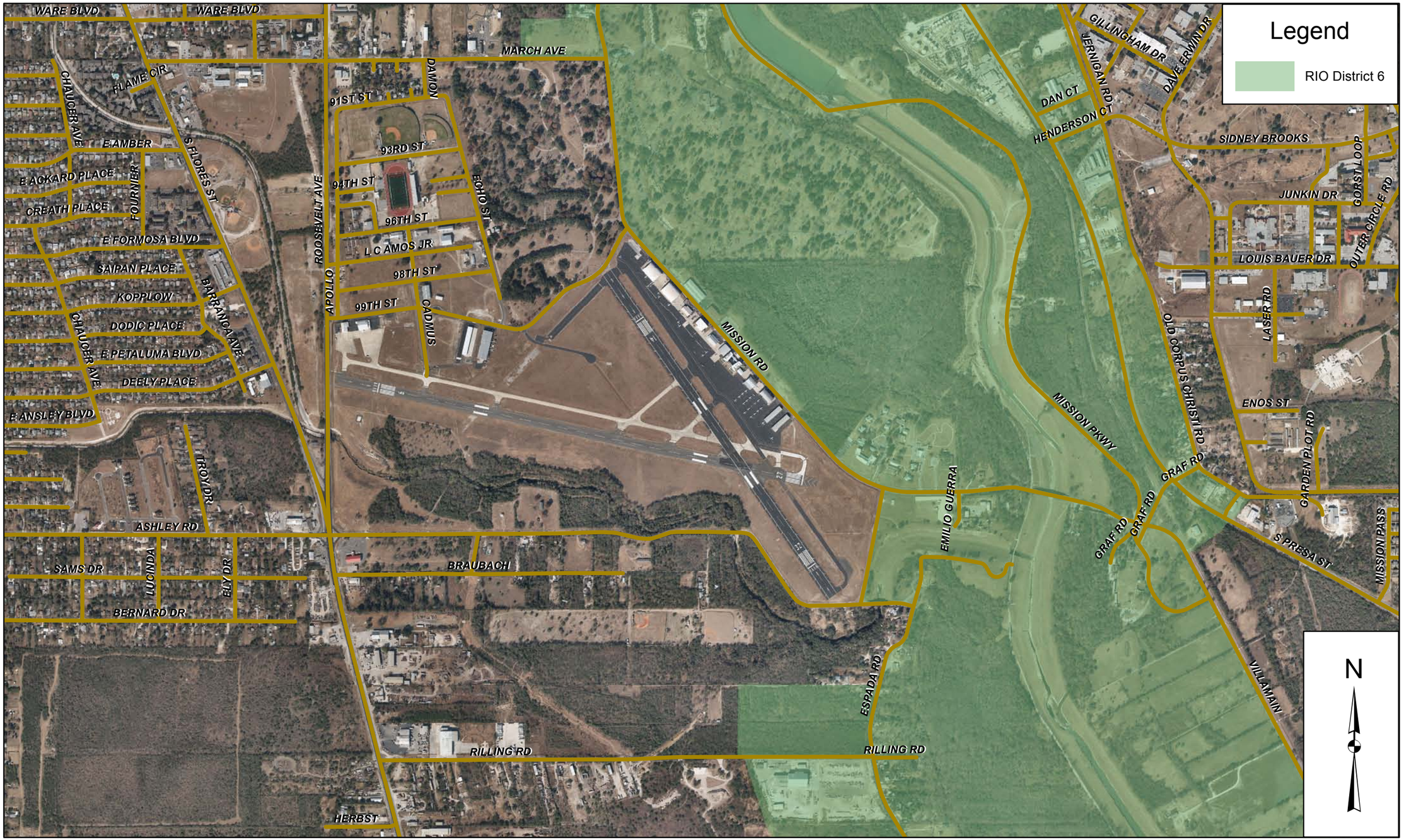
Scale: 1" = 1,000'

STINSON MUNICIPAL AIRPORT

Exhibit 2.13

Historic Districts

Stinson Municipal Airport
Master Plan Update



Source: City of San Antonio, 2012
Prepared by: Kimley-Horn and Associates, Inc., March 2012

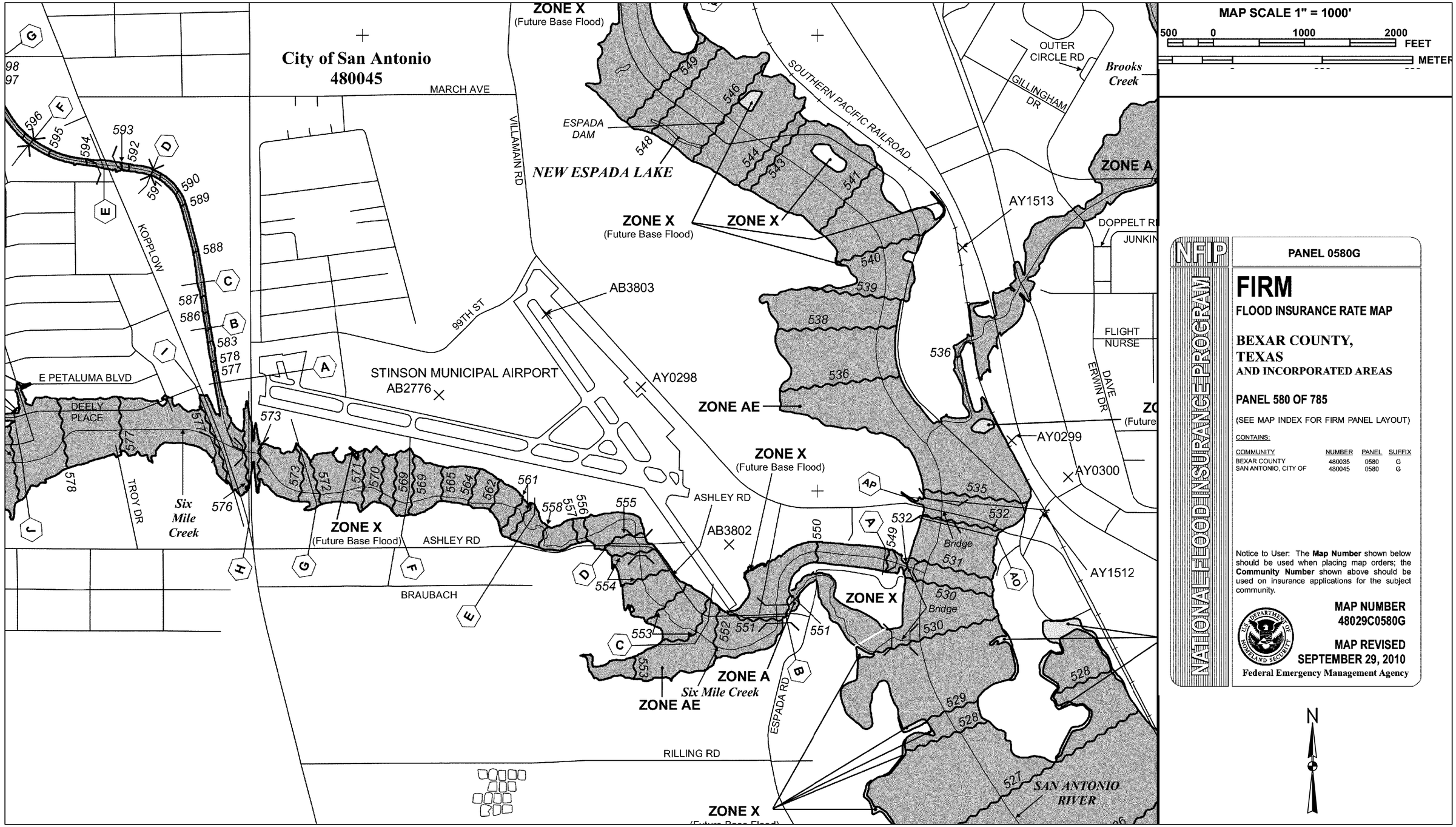
Scale: 1" = 1,000'

STINSON MUNICIPAL AIRPORT

Exhibit 2.14

River Improvement Overlay Districts

Stinson Municipal Airport
Master Plan Update



Source: National Flood Insurance Program, 2010
Prepared by: Williams CAD Consulting, December 2011

STINSON MUNICIPAL AIRPORT

Exhibit 2.15

Floodplain Exhibit

Stinson Municipal Airport
Master Plan Update

2.10.2 NOISE RELATED CONSIDERATIONS

2.10.2.1 Noise Exposure

Aircraft noise is generally one of the most prominent and controversial environmental issues associated with airport development. Considering the Airport's location within a historic district and within close proximity to historic religious landmarks, noise impacts are of great concern.

As a result of the EA process for the extension of Runway 9-27, Noise Exposure Maps (NEMS) for the Airport were generated in order to determine noise impacts with the runway extension. These maps show contours of Day Night Level (DNL) sound exposure at intervals of 60 decibels (db.), 65 db., 70 db., and 75 db.

The NEMS were generated during this study for the years 2003, 2008, and 2013. The 2013 maps indicated that a small portion of the San Antonio Missions Historical Park would be affected by the 65 DNL contour, as well as a small portion of Stinson Park to the west of the Airport. [23]

2.10.2.2 Airport Awareness Zone

The City of San Antonio has established an Airport Awareness Zone surrounding Stinson Municipal Airport and San Antonio International Airport. The zone is a 3-mile radius surrounding San Antonio International Airport, and a 1.5-mile radius surrounding Stinson Municipal Airport. This boundary requires all development and zoning changes to be reviewed by the Aviation Department to help maintain airport-compatible land uses[24].

[23] Environmental Assessment for Stinson Municipal Airport, Ricondo and Associates, May 2007
[24] City of San Antonio Aviation Department, August 2011