PENSACOLA INTERNATIONAL AIRPORT

MASTER PLAN UPDATE

AIRPORT LAYOUT PLAN NARATIVE REPORT

NOVEMBER 2018

RS&H

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AIRPORT LAYOUT PLAN NARRATIVE REPORT

1 EXECUTIVE SUMMARY

The 2017 Airport Layout Plan (ALP) for Pensacola International Airport (PNS or the Airport) was prepared in conjunction with the 2017 Pensacola International Airport Master Plan Update to bring the 2007 ALP up-to-date with updated aeronautical forecasts and in accordance with Federal Aviation Administration (FAA) regulations, standards, and policies. The last Pensacola International Airport ALP was completed in 2007. The ALP update satisfies the FAA requirement of the Airport to keep the ALP current. This Narrative Report accompanies the ALP drawings and provides justification for the proposed development projects.

The ALP Narrative Report documents the existing conditions and all of the potential changes that the Airport could see over the 20-year planning horizon. This ALP Narrative Report includes a Basic Aeronautical Forecast for the Pensacola International Airport ALP. This ALP Narrative Report forecasts operations and passenger activity for the period 2015 through 2035 - and includes projections of passenger enplanements and operations. As part of the aviation activity forecasts, a Base (most likely) forecast, a Low forecast, and a High forecast that covers the period 2015 to 2035 were developed. Fiscal year 2015 is used as the base year for all forecasts. The forecast compares the FAA's Terminal Area Forecast (TAF) from 2015 which was published in January of 2016.

Section 4 Airport Development Summary provides details on the recently completed, planned, and proposed development projects for the Airport. *Table 1* describes the projects proposed for implementation throughout the Capital Improvement Project Costs 2025 Program.

TABLE 1
PROPOSED PROJECTS

Project	Estimated Project Total
T-Hangar Construction	$4,200,000
T-Hangar Taxilane Construction	$754,000
Taxiway/Apron, Removal	$969,000
Taxiway A1	$1,174,000
Taxiway A Extension	$1,723,000
Taxiway Removal	$215,000
GA Fuel Farm Construction	$646,000
Existing Fuel Farm Demolition	$100,000
Taxiway D Upgrade	$5,923,000
Runway 17-35 Extension	$3,123,000
New Parallel Taxiway Construction	$18,846,000
PBN/RNAV Commissioning	$108,000
Runway 26 MALSR Installation	$2,854,000
Runway 35 MALSR Installation	$2,854,000
GA Self-Service Fuel Station	$215,000
Helicopter Apron to Parking Lot Conversion	$162,000

Project	Estimated Project Total
Terminal Bag Claim Lobby Expansion	$2,800,000
GA CBP Facility Construction	$2,154,000
Helicopter Hard Stand Construction	$108,000
Heliworks Building Demolition	$22,000
Center Median Demolition	$108,000
Center Median Reconstruction	$108,000
Crosswalk Median Canopy Demolition	$108,000
Crosswalk Median Canopy Reconstruction	$646,000
North Crosswalk Canopy Demolition	$108,000
North Crosswalk Canopy Reconstruction	$108,000
Center Median to Traffic Lane	$108,000
Outer Curb Demolition	$108,000
APS	$6,557,000
Inbound Bag Room Relocation	$7,969,000
Paved Airside Perimeter Road	$754,000
Parking Structure Construction	$30,000,000
TRACON Building Removal and RON Construction	$5,000,000
Jet A Fuel Farm Construction	$1,250,000

Source: RS&H, Inc. 2018

2 INTRODUCTION AND AIRPORT BACKGROUND

The Pensacola International Airport ALP Update has been prepared in accordance with FAA ARP SOP No. 2.00 *ALP Review Checklist.* Pensacola International Airport is owned and operated by the City of Pensacola. The Airport operates as a department within the City. The public use airport has an airport elevation of 121.2 feet above mean sea level. The Airport is regulated under Federal Aviation Regulations Title 14 Part 139, *Airport Certification*. The Airport is designated as a Class I airport and is located three miles northeast of downtown Pensacola.

PNS is classified as a Primary, Small Hub Commercial Service airport within the National Plan of Integrated Airport Systems (NPIAS). The primary ground transportation access route to the Airport is via Interstate Highway 10 (I-10) and is located approximately two miles north of the Airport. The Airport occupies approximately 1,400 acres in the northeast portion of the City of Pensacola.

Pensacola is located within the Pensacola-Ferry Pass-Brent, FL Metropolitan Statistical Area (MSA). The MSA encompasses the combined area within Escambia County and Santa Rosa County. Pensacola International Airport is the only commercial service airport located within the MSA. In the case of the air travel market in Northwest Florida and Southeast Alabama, commercial air service is provided at four

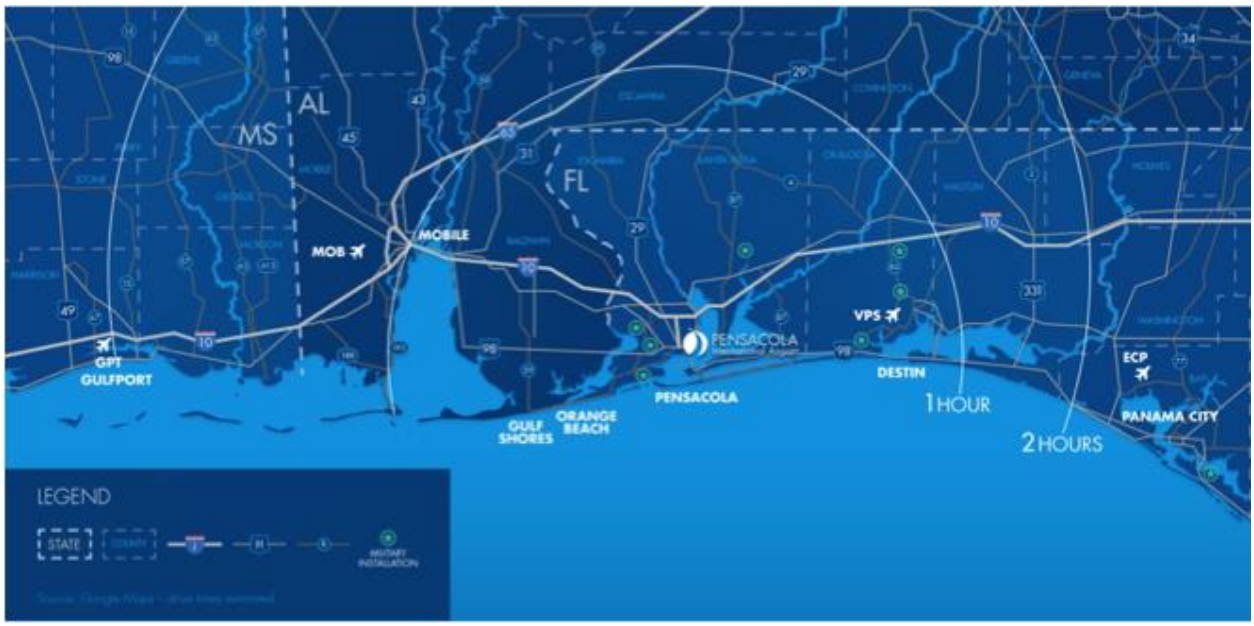
airports: Pensacola International Airport, Mobile Regional Airport (MOB), Destin Ft. Walton Beach Airport (VPS), and Northwest Florida Beaches International Airport (ECP), as shown in *Figure 1*.

PNS Air Traffic Control Tower (ATCT) controllers operate the airfield in parallel with Pensacola NAS operations when conditions permit, to avoid conflicts. PNS ATCT controllers will operate in parallel flows with Pensacola NAS up to an eight- or nine-knot crosswind.

Helicopter traffic is also prevalent at and near PNS, with a large proportion of helicopter traffic associated with military training flights. In addition, the following three hospitals are located with four miles of PNS and account for low flying helicopter operations near the Airport:

- Sacred Heart Hospital – approximately ¾ miles west of the Airport.
- West Florida Regional Medical Center – approximately 3 miles northwest of the Airport.
- Baptist Hospital – approximately 3.5 miles southwest of the Airport.

FIGURE 1
PNS SERVICE AREA



Source: InterVISTAS Consulting, Inc. 2016

3 BASIC AERONAUTICAL FORECASTS

This aviation activity forecast for Pensacola International Airport (PNS) includes a Base (most likely) forecast, a Low forecast, and a High forecast that cover the period 2015 to 2035. These forecasts outline anticipated:

- Fiscal year passenger enplanements
- Fiscal year air cargo volumes
- Fiscal year air transport movements (commercial, general aviation, and military)
- Peak hour and peak month forecasts

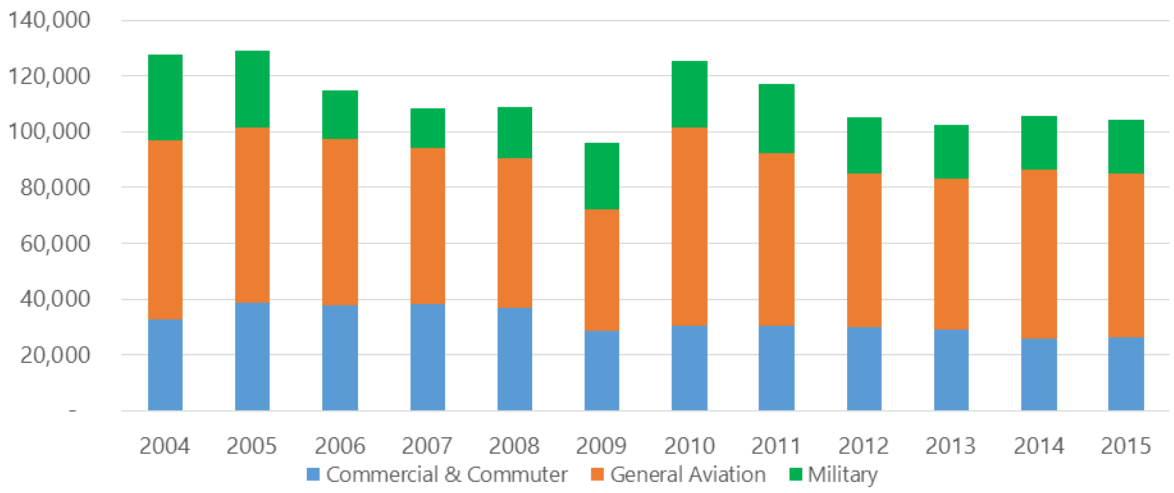
The forecasts are based on the FAA's 2015 Terminal Area Forecast (TAF) as well as information regarding economic outlook, market developments, and other industry intelligence. The analysis developed projections of passenger enplanements, aircraft movements, and cargo volumes. Fiscal year 2015 is used as the base year for all forecasts. An econometric model was developed to relate actual enplanements between 2002 and 2015 and an estimate of 2016 enplanements to actual socioeconomic variables. This model includes measures of the economic growth in Pensacola and Florida, population growth and income growth in both of these areas, airline fare levels, and other relevant factors.

The *FAA Aerospace Forecast* projects a 4.2 percent growth rate year-over-year for 2015 to 2016 in the domestic enplanement passenger sector, with an average annual growth rate of 1.9 percent over the full forecast period. Additionally, the FAA TAF Forecast for PNS projects a compound annual growth rate of 2.0 percent for enplanements for 2015 through 2035.

3.1 Annual Aircraft Operations

Aircraft operations at PNS, shown in *Figure 2* reflect the airline industry's rapid retirement of small regional jets in favor of larger aircraft. Fluctuations in military activity at PNS were greatest between 2004 and 2007.

FIGURE 2
AIRCRAFT OPERATIONS

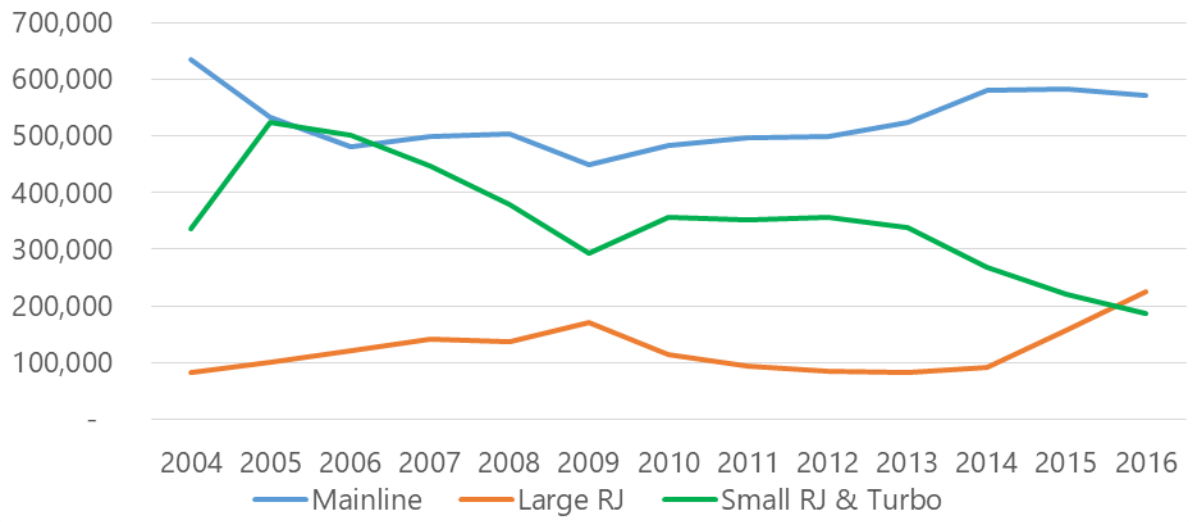


Source: Pensacola International Airport

3.2 Aircraft Fleet Mix

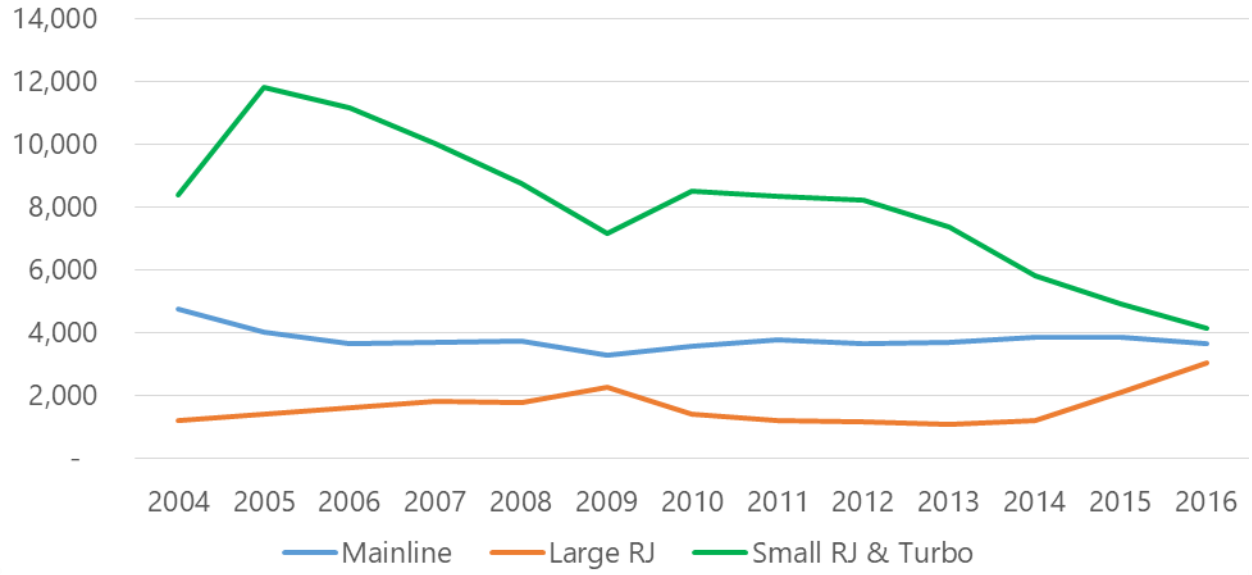
Figure 3 and *Figure 4* demonstrate the shift from smaller aircraft to larger aircraft. In 2009, these operations represented 53 percent of the annual departures, and by 2016 they accounted for only 38 percent.

FIGURE 3
ANNUAL OUTBOUND SEATS



Source: Innovata Schedules

FIGURE 4
ANNUAL DEPARTURE OPERATIONS

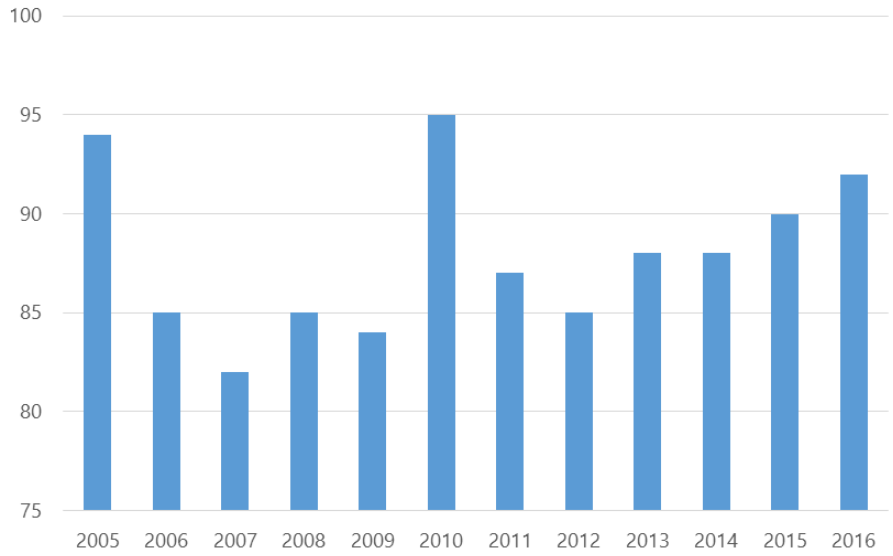


Source: Innovata Schedules

3.3 Based Aircraft

Figure 5 shows the Based Aircraft at PNS from 2005 to 2016.This information is sourced from the FAA Terminal Area Forecast, January 2016, which is the best available source for this data.

FIGURE 5
BASED AIRCRAFT 2005-2016

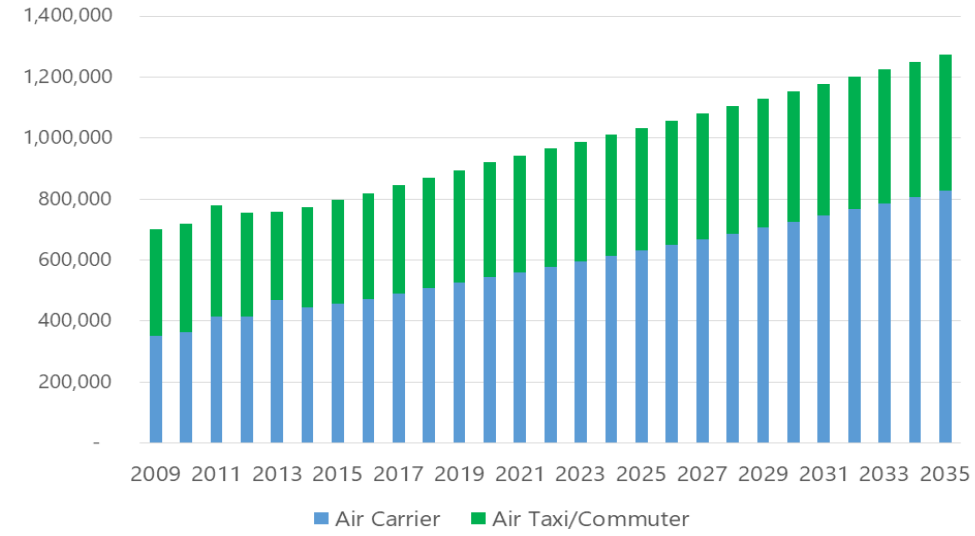


Source: FAA Terminal Area Forecast, January 2016

3.4 Passenger Enplanement Forecast

In 2015, the Air Carrier category represented 43 percent of all enplanements, which is forecast to grow to 65 percent by 2035. *Figure 6* breaks down the Base Case enplaned passenger forecast by commercial carrier category type: Air Carrier and Air Taxi/Commuter.

FIGURE 6
ENPLANED PASSENGERS BY COMMERCIAL CATEGORY



Source: InterVISTAS Consulting, Inc. 2016

The Low Case utilizes the Base Case GDP growth reduced by 10 percent, while the High Case applies a 10 percent increase to the forecast GDP growth rate. The Base Case of enplaned passengers at PNS and the subsequent sensitivity analysis forecasts for the Low and High Cases are displayed in *Table 2*.

TABLE 2
ENPLANED PASSENGER FORECAST

Year	Base Case	Low Case	High Case
2002	632,379	632,379	632,379
2005	799,759	799,759	799,759
2010	719,648	719,648	719,648
2015	797,854	797,854	797,854
2016	819,396	819,396	819,396
2017	844,722	839,516	850,005
2018	870,048	859,635	880,614
2019	895,373	879,755	911,223
2020	920,699	899,874	941,832
2025	1,033,956	982,753	1,087,206
2030	1,152,239	1,065,651	1,244,523
2035	1,274,815	1,147,731	1,413,625
Compound Annual Growth Rate (CAGR)			
2002-2015	1.80%	1.80%	1.80%
2015-2016	2.70%	2.70%	2.70%
2015-2020	2.91%	2.44%	3.37%
2015-2025	2.63%	2.11%	3.14%
2015-2030	2.48%	1.95%	3.01%
2015-2035	2.37%	1.83%	2.90%

Source: InterVISTAS Consulting, Inc. 2016

3.5 Forecast Case and TAF Comparison (2015)

Table 3 summarizes the forecasts and growth rates put forth in the Base Case forecast. *Table 4* compares the airport planning forecast to the TAF forecast.

TABLE 3
ENPLANEMENTS AND OPERATIONS FORECAST SUMMARY

						Ave Compound Annual Growth Rates			
Passenger Enplanements	**2015**	**2016**	**2020**	**2025**	**2030**	**2016**	**2020**	**2025**	**2030**
Air Carrier	455,708	471,242	544,018	631,317	726,247	3.41%	3.61%	3.31%	3.16%
Commuter	342,146	348,154	376,681	402,639	425,992	1.76%	1.94%	1.64%	1.47%
Total Enplanements	797,854	819,396	920,699	1,033,956	1,152,239	2.70%	2.91%	2.63%	2.48%
Operations									
Itinerant									
Air carrier	11,487	15,232	17,213	19,454	21,804	32.60%	8.43%	5.41%	4.36%
Commuter/air taxi	14,858	11,491	11,400	10,893	10,236	-22.66%	-5.16%	-3.06%	-2.45%
Total Commercial	**26,345**	**26,722**	**28,613**	**30,348**	**32,039**	**1.43%**	**1.67%**	**1.42%**	**1.31%**
General aviation	25,935	26,039	26,353	26,750	27,154	0.40%	0.32%	0.31%	0.31%
Military	18,323	18,323	18,323	18,323	18,323	0.00%	0.00%	0.00%	0.00%
Local									
General aviation	32,656	32,787	33,182	33,683	34,191	0.40%	0.32%	0.31%	0.31%
Military	1,141	1,141	1,141	1,141	1,141	0.00%	0.00%	0.00%	0.00%
Total Operations	104,400	105,012	107,611	110,244	112,848	0.59%	0.61%	0.55%	0.52%
Cargo (million tons) (enplaned + deplaned)	12.8	14.0	14.8	16.0	16.9	9.26%	3.01%	2.25%	1.84%
Based Aircraft									
Single Engine	64	65	69	76	81	1.10%	0.66%	0.44%	0.36%
Multi Engine	5	5	7	10	15	7.10%	7.39%	5.97%	5.21%
Jet	18	19	22	25	30	10.00%	8.45%	6.63%	5.71%
Helicopter	3	3	3	3	3	0.00%	0.00%	0.00%	0.00%
Total	90	92	101	114	129	2.22%	2.33%	2.39%	2.43%
Operational Factors									
Ave aircraft size (seats)	72	73	78	82	87				
Ave enplaning load factor									
Air carrier	84%	83%	83%	83%	83%				
Commuter	82%	83%	83%	83%	83%				

Source: InterVISTAS Consulting, Inc. 2016

TABLE 4
COMPARISON OF BASE CASE FORECAST TO TAF

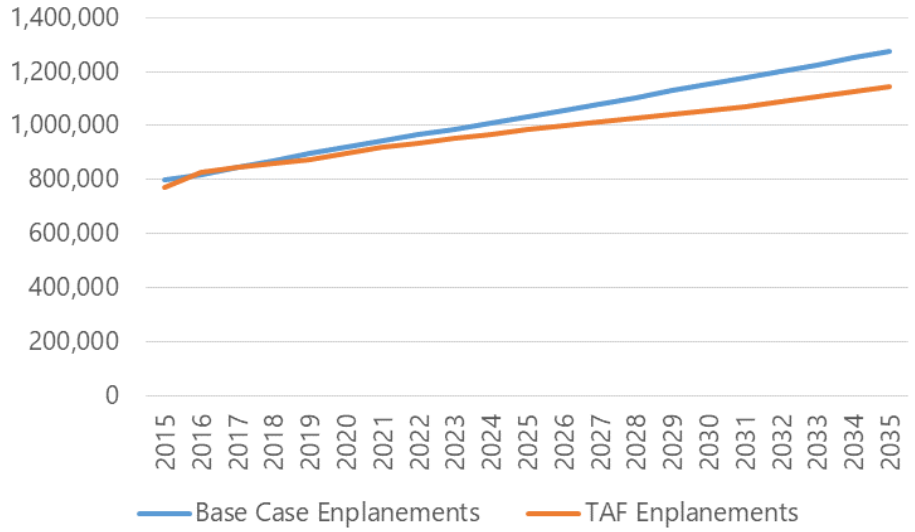
Year	Forecast	TAF	% Difference)
Passenger Enplanements			
2015	797,854	772,649	3.26%
2020	920,699	896,255	2.73%
2025	1,033,956	983,507	5.13%
2030	1,152,239	1,057,190	8.99%
Commercial Operations			
2015	26,345	26,345	0.00%
2020	28,613	29,310	-2.38%
2025	30,348	32,229	-5.84%
2030	32,039	34,589	-7.37%
Total Operations			
2015	104,400	104,400	0.00%
2020	107,611	107,919	-0.28%
2025	110,244	111,430	-1.06%
2030	112,848	114,389	-1.35%

Source: InterVISTAS Consulting, Inc. 2016

3.6 Air Passengers

The Base Case Enplaned Passenger Forecast is the most likely projection of forecasted enplanements at PNS. *Figure 7* shows that in the near-term, the two forecasts diverge at a rate of less than 3 percent.

FIGURE 7
PASSENGER ENPLANEMENTS FORECAST COMPARED TO FAA TAF



Source: InterVISTAS Consulting, Inc., FAA TAF 2015, published January 2016

3.7 Air Cargo Forecast

During the forecast period, total air cargo at PNS is expected to increase 27 percent, from 14.0 million pounds in 2016 to 17.8 million pounds in 2035, as shown in *Table 5*. All-cargo aircraft will continue to carry the majority of PNS air cargo – 96 percent in 2016 and 94 percent in 2035.

TABLE 5
AIR CARGO FORECAST SUMMARY

Year	Air Cargo (pounds)	Compound Avg. Growth Rate (relative to Base Year)
Historic		
2011	2,747,535	
2012	12,625,683	
2013	12,818,948	
2014	13,038,818	
2015	13,062,249	
Base Year		
2016	14,005,129	
Forecast		
2020	14,863,418	0
2025	16,017,562	1.50%
2030	16,859,185	1.30%
2035	17,754,388	1.30%

Source: InterVISTAS Consulting, Inc. 2016

3.8 Critical Aircraft

The Boeing 757-200 (used for passenger operations) and Airbus A300-600 (used for cargo operations) represent the two largest aircraft that regularly operate at PNS. Both the 757 and the A300 are included in Aircraft Approach Category (AAC) C and Airplane Design Group (ADG) IV. The A300 is slightly more demanding on taxiway design, falling into Taxiway Design Group (TDG) 5, as shown in *Table 6*. Therefore, the Composite Design Aircraft recommendation is C-IV with TDG 5.

TABLE 6
CRITICAL AIRCRAFT

				Annual Operations		
				Estimate	Forecast	
Aircraft	AAC	ADG	TDG	2016	2020	2025
Boeing 757-200	C	IV	4	1,407	1,359	1,486
Airbus 300-600	C	IV	5	505	517	530

Source: InterVISTAS Consulting, Inc. 2016

3.9 General Aviation Operations

This forecast uses the projected GA growth rates published in the FAA Aerospace Forecast, Fiscal Year 2016-2035, which estimates GA growth nationally to be 0.4 percent for 2015 to 2016 and then roughly 0.3 percent per year through the end of the forecast period in 2035, as shown in *Table 7*.

TABLE 7
GENERAL AVIATION OPERATIONS FORECAST

Year	Operations
2005	63,083
2010	71,369
2015	58,591
2016	58,825
2017	59,002
2018	59,179
2019	59,356
2020	59,534
2025	60,433
2030	61,345
2035	62,270

Source: InterVISTAS Consulting, Inc. 2016

3.10 Annual Military Operations

The general practice in estimating military operations is to hold the most recent year level of operations constant throughout the planning period, as shown in *Table 8*.

TABLE 8
MILITARY OPERATIONS FORECAST

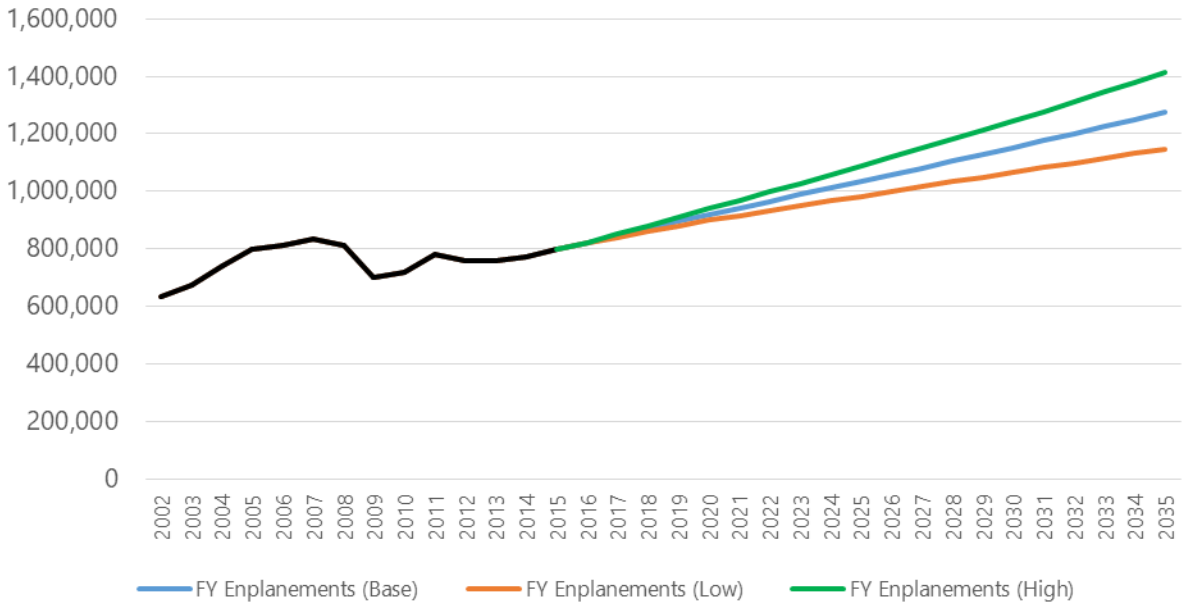
Year	Operations
2005	27,580
2010	23,979
2015	19,464
2016	19,464
2017	19,464
2018	19,464
2019	19,464
2020	19,464
2025	19,464
2030	19,464
2035	19,464

Source: InterVISTAS Consulting, Inc. 2016

3.11 Forecast Summary

In summary, the forecasts presented should be considered the most probable unconstrained cases of airport activity at PNS, given the most recent data available. A compound annual growth rate of 2.37 percent for annual enplanements is expected over the forecast period. The PNS annual enplanements forecast summary is presented in *Figure 8*.

FIGURE 8
ANNUAL ENPLANEMENTS FORECAST SUMMARY



Source: InterVISTAS Consulting, Inc. 2016

3.12 Runway Requirements

FAA Advisory Circular 150/5300-13A – Change 1, *Airport Design*, indicates that the primary runway should be orientated in the direction of the prevailing wind. A crosswind runway is recommended when the primary orientation provides less than 95 percent wind coverage. The 95 percent wind coverage is computed based on the crosswind component not exceeding the allowable value determined by the Runway Design Code.

3.12.1 Runway Orientation

The visual meteorological conditions (VMC) wind analysis indicates that Runway 17-35 provides sufficient wind coverage for all crosswind components. Runway 8-26 does not provide sufficient wind coverage for the 10.5-knot or 13-knot crosswind components in a single runway configuration in VMC. However, the combined runway configuration provides sufficient wind coverage for all crosswind components in VMC as described in *Table 9*.

The instrument meteorological conditions (IMC) wind analysis indicates that Runway 17-35 does not provide sufficient wind coverage for the 10.5-knot component in a single runway configuration in IMC. Runway 8-26 also does not provide sufficient wind coverage for the 10.5-knot or 13-knot crosswind

components. Therefore, sole use of either runway does not provide sufficient coverage for the 10.5-knot crosswind component as described in *Table 10*.

The all-weather analysis indicates that Runway 17-35 provides sufficient wind coverage for all crosswind components in a single runway configuration when averaged for all weather conditions. Runway 8-26 does not provide sufficient wind coverage for the 10.5-knot or 13-knot crosswind components in a single runway configuration when averaged for all weather conditions. The all-weather wind coverage is described in *Table 11*.

TABLE 9
VMC WIND ROSE

	Crosswind Component (Knots)			
Runway	**10.5**	**13**	**16**	**20**
Runway 17-35	96.30%	98.35%	99.64%	99.94%
Runway 8-26	86.93%	92.80%	98.50%	99.70%
Combined	99.30%	99.88%	99.98%	100.00%

Source: NCDC, 2017
Notes: Based on 70,929 observations between 0530-2300 when the ATCT is operational.

TABLE 10
IMC WIND ROSE

	Crosswind Component (Knots)			
Runway	**10.5**	**13**	**16**	**20**
Runway 17-35	94.11%	96.99%	98.92%	99.74%
Runway 8-26	84.87%	90.98%	96.93%	99.21%
Combined	98.49%	99.51%	99.86%	99.99%

Source: NCDC, 2017
Notes: Based on 15,195 observations between 0530-2300 when the ATCT is operational.

TABLE 11
ALL-WEATHER WIND ROSE

	Crosswind Component (Knots)			
Runway	**10.5**	**13**	**16**	**20**
Runway 17-35	95.91%	98.11%	99.51%	99.90%
Runway 8-26	86.57%	92.48%	98.22%	99.61%
Combined	99.16%	99.81%	99.96%	100.00%

Source: NCDC, 2017
Notes: Based on 86,124 observations between 0530-2300 when the ATCT is operational.

3.12.2 Runway Design Standards

The runway design standards are defined by FAA regulations and best planning practices to optimize airfield safety. The existing and future runway design standards at PNS are based on AAC-C and ADG-IV aircraft. The detailed runway design standards and existing dimensions are described in *Table 12, Table 13*, and *Table 14*.

TABLE 12
RUNWAY 8-26 DESIGN STANDARDS

Design Component	RUNWAY 8-26 FAA Stnd. (ft.)	RUNWAY 8-26 Exist. Dim. (ft.)	RUNWAY 8-26 Standard Met (✓)
Runway Width	150	150	✓
Shoulder Width	25	25	✓
Blast Pad Width	200	200	✓
Blast Pad Length	200	200	✓
Crosswind Component	20 knots	20 knots	✓
RSA Length Beyond Departure End	1,000	1,000	✓
RSA Length Prior to Threshold	600	600	✓
RSA Width	500	500	✓
ROFA Length Beyond Departure End	1,000	1,000	✓
ROFA Length Prior to Threshold	600	600	✓
ROFA Width	800	800[1]	✓
ROFZ Length Beyond End	200	200	✓
ROFZ Width	400	400	✓

	RUNWAY 8 End			RUNWAY 26 End		
	FAA Stnd. (ft.)	Exist. Dim. (ft.)	Stnd. Met (✓)	FAA Stnd. (ft.)	Exist. Dim. (ft.)	Stnd. Met (✓)
POFZ Length	n/a	n/a	-	n/a	n/a	-
POFZ Width	n/a	n/a	-	n/a	n/a	-
Approach RPZ Length	1,700	1,700	✓	1,700	1,700	✓
Approach RPZ Inner Width	500	500	✓	1,000	1,000	✓
Approach RPZ Outer Width	1,010	1,010	✓	1,510	1,510	✓
Departure RPZ Length	1,700	1,700	✓	1,700	1,700	✓
Departure RPZ Inner Width	500	500	✓	500	500	✓
Departure RPZ Outer Width	1,010	1,010	✓	1,010	1,010	✓
Runway Centerline to Parallel Runway Centerline	n/a	n/a	-	n/a	n/a	-
Runway Centerline Holding Position	251	251	✓	251	251	✓
Runway Centerline to Parallel Taxiway Centerline	400	400	✓	400	400	✓
Runway Centerline to Aircraft Parking Area	500	755	✓	500	466	✗
Runway Centerline to Helicopter Touchdown Pad	700	825	✓	700	825	✓

Source: RS&H, 2017

TABLE 13
RUNWAY 17-35 DESIGN STANDARDS

Design Component	RUNWAY 17-35		
	FAA Stnd. (ft.)	Exist. Dim. (ft.)	Standard Met (✓)
Runway Width	150	150	✓
Shoulder Width	25	25	✓
Blast Pad Width	200	200	✓
Blast Pad Length	200	200	✓
Crosswind Component	20 knots	20 knots	✓
RSA Length Beyond Departure End	1,000	1,000	✓
RSA Length Prior to Threshold	600	600	✓
RSA Width	500	500	✓
ROFA Length Beyond Departure End	1,000	1,000	✓
ROFA Length Prior to Threshold	600	600	✓
ROFA Width	800	800	✓
ROFZ Length Beyond End	200	200	✓
ROFZ Width	400	400	✓

	RUNWAY 17 End			RUNWAY 35 End		
	FAA Stnd. (ft.)	Exist. Dim. (ft.)	Stnd. Met (✓)	FAA Stnd. (ft.)	Exist. Dim. (ft.)	Stnd. Met (✓)
POFZ Length	200	200	✓	n/a	n/a	-
POFZ Width	800	800	✓	n/a	n/a	-
Approach RPZ Length	2,500	2,500	✓	1,700	1,700	✓
Approach RPZ Inner Width	1,000	1,000	✓	1,000	1,000	✓
Approach RPZ Outer Width	1,750	1,750	✓	1,510	1,510	✓
Departure RPZ Length	1,700	1,700	✓	1,700	1,700	✓
Departure RPZ Inner Width	500	500	✓	500	500	✓
Departure RPZ Outer Width	1,010	1,010	✓	1,010	1,010	✓
Runway Centerline to Parallel Runway Centerline	n/a	n/a	-	n/a	n/a	-
Runway Centerline Holding Position	251	251	✓	251	251	✓
Runway Centerline to Parallel Taxiway Centerline	400	486	✓	400	488	✓
Runway Centerline to Aircraft Parking Area	500	665	✓	500	500	✓
Runway Centerline to Helicopter Touchdown Pad	700	1,914	✓	700	1,914	✓

Source: RS&H, 2017

TABLE 14
RUNWAY DATA

Item	Runway 8-26		Runway 17-35	
Runway Length	7,000 ft.		7,004 ft.	
Runway Width	150 ft.		150 ft.	
Pavement Surface	Grooved Asphalt		Grooved Concrete	
Pavement Condition	Satisfactory		Good	
Pavement Strength				
Pavement Classification	65/F/B/W/T		74/R/B/W/T	
Edge Lighting Intensity	High		High	
	Runway 8	**Runway 26**	**Runway 17**	**Runway 35**
True Alignment	77°	258°	167°	347°
Magnetic Alignment	78°	257°	166°	346°
End Elevation (MSL)	97 ft.	114 ft.	121 ft.	103 ft.
Gradient	0.2% Up	0.2% Down	0.3% Down	0.3% Up
Markings	Non-Precision	Non-Precision	Precision	Precision
Markings Condition	Good*	Good*	Good*	Good*
Visual Approach Aids	REIL	REIL	MALSR	REIL
Part 77 Approach	Non-Precision	Non-Precision	Precision	Non-Precision
Declared Distances	None	None	None	None
Modification to Standards	None	None	None	None

Source: RS&H, 2017

3.13 Navigational Aids

The PNS rotating beacon is located atop the ATCT cab. The PNS segment circle is located in the northeast quadrant, just north of Taxiway B and east of Runway 17-35 and is collocated with a wind cone. The ASOS equipment is located in the northeast quadrant, east of Taxiway A3.

3.14 Annual Instrument Approaches

The FAA designation for the PNS Terminal Radar Approach Control (TRACON) is P31. At PNS the ATCT and TRACON are operated as independent facilities. The PNS TRACON is operational 24 hours per day. The PNS TRACON controls terminal approach for Pensacola Naval Air Station/Sherman Field, Pensacola International; Airport, Whiting Naval Air Station, Choctaw Naval Outlying Station, and Santa Rosa Naval Air Station.

3.14.1 Departure Reference Code and Runway Design Code

The Departure Reference Code (DPRC) distinguishes an AAC and ADG for a runway based on its runway to parallel taxiway separation. Runway 17-35 and Runway 8-26 have a current DPRC of D-IV and D-V. Runway 17 has a Runway Design Code (RDC) of C-IV-2400. Runway 35 has a RDC of C-IV-4000. Runway 8 has a RDC of C-IV-5000. Runway 26 has a RDC of C-IV-4000.

3.14.2 Approach Reference Code

The Approach Reference Code (APRC) is composed of three components that include AAC, ADG, and visibility minimums. The current APRC of Runway 17 is D-IV 2400 and D-V-2400. Runway 35 has a current APRC of D-IV-4000 and D-V-4000. Runway 8 has a current APRC of D-IV-5000 and Runway 26 has a current ARPC of D-IV-4000 and D-V-4000.

4 AIRPORT DEVELOPMENT SUMMARY

4.1 Projects since Last ALP

The Airport has had several projects completed since the last ALP in 2007. This section describes those development projects.

Vehicle Parking Facilities

Two economy lots were constructed and completed between 2009 and 2013. Due to their proximity, both economy lots do not require shuttle service.

Runway 17-35 Repaved

In 2008, Runway 17-35 was repaved with concrete. Runway 17-35 is the longest runway at PNS.

Passenger Terminal Expansion

In 2011, the passenger terminal was expanded and renovated to include additional space for passenger screening and concessions. The Airport name was changed from Pensacola Gulf Coast Regional Airport to Pensacola International Airport.

Hotel Construction

The Hyatt Place Pensacola Airport Hotel was constructed in 2013 and is located west of the Airport Terminal on Airport Boulevard.

Remain Overnight (RON)

RON aircraft parking apron was constructed in the passenger terminal apron, south of Gate 1 and Gate 3. The RON parking apron was completed in 2011 and accommodates three ADG II aircraft, two ADG-III aircraft, or one ADG-IV aircraft

Rental Car Service Center

The Rental Car Service Center was constructed in 2009 and is located north of the terminal complex on Service Center Road. The Service Center is used to service and store the rental operator fleets.

TRACON

The TRACON facility became operational in 2010 and replaced the previously collocated ATCT/TRACON facility that is located north of the passenger terminal concourse and west of Taxiway A3.

4.2 Proposed Airport Development

The City has said it intends to implement Airport capital improvements that have been combined with the Master Plan Update recommended improvements. The combined list of CIP (Program 2025) consists of the following projects.

- Master Planning recommended Phase 1 projects
- Terminal Building HVAC system replacement
- TRACON building removal and RON Construction
- Parking Structure Construction
- Airfield Pavement Rehabilitation
  - APS – Section Identification 4510
  - TW A1 – Section Identification 120

The costs of these projects are listed in *Table 1*. It was assumed that the City would proceed with an Airport revenue financing of Program 2025 in FY 2021, with most construction to be completed within two years. This section below summarizes the project elements, as documented in the Capital Improvement Project Costs 2025 Program.

T-Hangar Construction

An additional 58 T-hangar units are anticipated to accommodate the existing and demand forecast at PNS. The T-hangar construction may be located adjacent to the existing T-hangar development. The project has a total estimated cost of $4,200,000.

T-Hangar Taxilane Construction

The construction of a new taxilane would provide access to the T-hangar expansion area. This project has a total estimated cost of $754,000.

Taxiway/Apron Removal

Segments of taxiways and an apron at PNS are recommended to accommodate proposed airside alternatives. The project has a total estimated cost of $969,000.

Taxiway A1

The Taxiway A1 project will resolve non-conforming design principles. This project has a total estimated cost of $1,174,000.

Taxiway A Extension

This project consists of extending Taxiway A eastward to the new parallel taxiway. This project has a total estimated cost of $1,723,000.

Taxiway Removal

Taxiway C, D1, and A7 are proposed to be removed. This project has a total estimated cost of $215,000.

GA Fuel Farm Construction

This project consists of constructing a GA fuel farm to enhance efficiency of fueling operation for GA users at PNS. In addition, the GA fuel farm will reduce fuel traffic. This project has a total estimated cost of $646,000.

Existing Fuel Farm Demolition

Demolishing the existing fuel farm will allow for the development of a new site for a higher and better use. This project has a total estimated cost of $100,000.

Taxiway D Upgrade

This project will extend Taxiway D to enhance the taxiway network for greater utility and flexibility of PNS. This project has a total estimated cost of $5,923,000.

Runway 17-35 Extension

This project is to extend Runway 17-35 to 7,700 feet in the near-term. Extension to 8,000 feet will not be required until a longer runway length is required by fleet and is not anticipated until beyond the 20-year planning horizon. The project has a total estimated cost of $3,123,000.

New Parallel Taxiway Construction

This project consists of constructing a new full-length parallel taxiway east of Runway 17-35. This project has a total estimated cost of $18,846,000.

PBN/RNAV Commissioning

The PBN/RNAV Commissioning consists of installing PBN/RNAV approaches for Runway 35 and Runway 26. The PBN/RNAV will provide for greater efficiency for arriving aircraft. This project has a total estimated cost of $108,000.

MALSR Installation

The Runway 26 and Runway 35 MALSR installation project will support the PBN/RNAV approach. The Runway 35 MALSR installation has a total estimated cost of $2,854,000. The Runway 26 MALSR installation has a total estimated cost of $2,854,000.

Helicopter Apron to Parking Lot Conversion

The existing helicopter apron will be impacted by the proposed terminal expansion. To accommodate terminal layout, the helicopter apron will be converted to a surface parking lot. This project has a total estimated cost of $162,000.

Bag Claim Lobby Expansion

The terminal bag claim lobby expansion will provide more circulation area and will accommodate existing and future demand. This project has a total estimated cost of $2,800,000.

GA CBP Facility Construction

The construction of the GA CBP facility will accommodate existing and future demand. The CBP location will allow for near-term development without apron construction. This project has a total estimated cost of $2,154,000.

Helicopter Hard Stand Construction

The helicopter hard stand construction would accommodate helicopter operations and helicopter parking. This project has a total estimated cost of $108,000.

Heliworks Building Demolition

The demolition of the Heliworks would provide for significant additional terminal-proximate parking. This project has a total estimated cost of $22,000.

Curbside Reconfiguration

This project consists of separate projects including the center median demolition and reconstruction, crosswalk median canopy demolition and reconstruction, north crosswalk demolition and construction, center median to traffic lane, and outer curb demolition. These projects will occur incrementally throughout the planning horizon and will expand the curbside to resolve existing congestion and poor level of service. These eight projects have a total estimated cost of $1,402,000.

APS

The FDOT issued a Pavement Evaluation Report for major rehabilitation through 2024. Project APS will mill and overlay the south apron and has a total estimated cost of $6,557,000.

Inbound Bag Room Relocation

Relocation of the inbound bag room will allow for the curbside development and terminal building expansion. This project has a total estimated cost of $7,969,000.

Paved Airside Perimeter Road

A paved airside perimeter road is proposed at PNS. A paved, continuous airside service road would provide enhanced access to Runway 8-26. The project has a total estimated cost of $754,000.

Parking Structure Construction

This project provides significant additional parking with close proximity to the terminal. The parking structure construction will also be beneficial as it is a more efficient use of land adjacent to the terminal building. This project has a total estimated cost of $30,000,000.

Jet A Fuel Farm Construction

The construction of a new Jet A fuel farm would provide storage tanks for Jet A and Avgas fuel. This project has a total estimated cost of $1,250,000.

5 NON-STANDARD CONDITIONS AND MODIFICATION TO STANDARDS

5.1 Non-Standard Conditions

The analysis results indicate that Runway 17-35 satisfies all existing design standards for existing critical aircraft. There is one existing nonstandard condition associated with Runway 8-26. The general aviation apron, adjacent to Taxiway D, is closer to Runway 8-26 than permitted. A minimum of 500 feet is required between the Runway 8-26 centerline and aircraft parking areas, per the Advisory Circular. The existing separation is 466 feet measured from the Runway 8-26 centerline.

The nonstandard runway design condition is depicted in *Figure 9*. The detailed runway design standards and existing dimensions are described in *Table 12* and *Table 13*.

5.2 Modification to Standards

There are no existing modifications to FAA Standards for the Airport and a request for a new modification to standards is not anticipated.

FIGURE 9
NON-STANDARD RUNWAY CONDITIONS

Legend

1 - RUNWAY TO AIRCRAFT PARKING AREA

0 125 250 500
Feet

N

PENSACOLA International Airport

Source: Esri Imagery, 2017; RS&H, 2017

RS&H

6 OBSTRUCTION SURFACES

6.1 14 CFR Part 77

Under Title 14 of the Code of Federal Regulations, Federal Aviation Regulation (FAR) Part 77, *Safe and Efficient Use, and Preservation of Navigable Airspace*, the FAA has created 3-dimensional imaginary surfaces within airport airspace to visually guide Airport's in compatible land use development, as well as the removal of objects that pose a hazard to airspace.

Within the ALP set developed in conjunction with this Master Plan Update, an airport airspace sheet will illustrate the various obstructions and objects located within the Part 77 areas. *Table 15* lists the surfaces and their specific slopes for each existing runway and future runway end.

The surfaces identified on the approach surface and profiles sheets are:

- Departure Surface
- PAPI Obstacle Clearance Surface
- Part 77 Approach Surface
- Threshold Siting Surface

All runway ends have an approach slope associated with them. Approach surfaces are designed to protect the use of the runway in both visual and instrument meteorological conditions near the airport. Part 77 imaginary surfaces use criteria to identify airport obstacles to those surfaces. Part 77 approach surfaces at PNS are 50:1 or 34:1 and are longitudinally centered on the extended runway centerline and extend outward and upward from each end of the primary surface.

Departure surfaces allow pilots to follow standard departure procedures and typically have a trapezoidal shape that begins at the departure end runway (DER) and extends along the extended runway center line. All runway ends have a departure surface slope of 1 foot vertically for every 40 feet horizontally (40:1).

The Precision Approach Path Indicator (PAPI) system provides visual approach slope information. At PNS, the threshold siting surface is either 20:1 or 34:1 and include the beginning of useable pavement for an aircraft to land.

The obstructions can be found in the ALP Update on Sheets 13 and 14.

TABLE 15
OBSTRUCTION SURFACES

Runway	Departure Surface	PAPI Obstacle Clearance Surface	Part 77 Approach Surface	Threshold Siting Surface
Runway 17-35	N/A	N/A	N/A	N/A
Runway 8-26	N/A	N/A	N/A	N/A
Runway 17 End	40:1	N/A	50:1	34:1
Runway 35 End	40:1	3-Degrees	34:1(E) 50:1(F/U)	20:1(E) 34:1(F/U)
Runway 8 End	40:1	3-Degrees	34:1	20:1
Runway 26 End	40:1	3-Degrees	34:1(E) 50:1(F/U)	20:1(E) 34:1(F/U)

*Notes: F= Future, E=Existing, U=Ultimate.

7 RUNWAY PROTECTION ZONES

A Runway Protection Zone (RPZ) is a trapezoidal area extending outward from the runway end, starting 200 feet[1] from a runway end. Runway 8 has a visibility minimum of not less than 1 mile and Runway 26 has a visibility minimum of not less than ¾ of a mile. The Runway 8-26 Approach RPZ dimensions are described in *Table 16*. The Runway 17 end has a visibility minimum of not less than ½ mile and the Runway 35 end has a visibility minimum of not less than ¾ of a mile. The Runway 17-35 Approach RPZ dimensions are described in *Table 16*.

TABLE 16
APPROACH RUNWAY PROTECTION ZONE DIMENSIONS

		Visibility Minimum (mi)	RPZ Dimensions (ft)
Runway 8	Existing	1	500 x 1,700 x 1,010
	Future/Ultimate	1	500 x 1,700 x 1,010
Runway 26	Existing	3/4	1,000 x 1,700 x 1,510
	Future/Ultimate	1/2	1,000 x 2,500 x 1,750
Runway 17	Existing	1/2	1,000 x 2,500 x 1,750
	Future/Ultimate	1/2	1,000 x 2,500 x 1,750
Runway 35	Existing	3/4	1,000 x 1,700 x 1,510
	Future/Ultimate	1/2	1,000 x 2,500 x 1,750

Source: RS&H, 2018

Land uses in the immediate vicinity of the Airport include industrial, commercial, and residential land uses. Existing Runway 8 end, Runway 17 end, and Runway 26 end have public roadways within the RPZs. Runway 26 end also has existing residential land uses within the RPZ. Future Runway 35 end will have incompatible land uses including public roadways, residential land uses and an inhabitable building (fire station) within the RPZ. Future Runway 26 end will have additional residential land uses within the RPZ. For future land uses within the RPZ, the Airport will coordinate with Regional and ADO staff regarding the evaluation of land uses within the proposed RPZs.

8 LETTERS OF COORDINATION

Letters of coordination for recommended projects will be coordinated and reviewed with the City of Pensacola.

9 RUNWAY SAFETY ACTION ITEMS

The Airport has not received any action items from the Runway Safety Program Office or Runway Safety Action Team.

10 TOWER LINE-OF-SIGHT STUDY

The ATCT visibility performance analysis results are described in *Table 17*. The analysis results conclude that the existing ATCT is sufficient to meet the needs of PNS. The analysis determined that controllers

[1] The RPZ may begin at a location other than 200 ft. beyond a runway end, but two RPZs are required—an approach RPZ and departure RPZ. (FAA, 2014)

have an unobstructed view of each runway end and the farthest point that the terminal apron intersects with the movement area from the tower cab. No line of sight shadows were identified to obstruct visibility of the movement areas. The analysis also determined that the tower cab allows for sufficient viewing perspective angles to each key site as measured by the line of sight angle of incidence.

TABLE 17
ATCT VISIBILITY PERFORMANCE ANALYSIS RESULTS

Visibility Performance Criteria		RWY 8 End	RWY 26 End	RWY 17 End	RWY 35 End	Terminal Apron
Unobstructed View	Criteria Met (✓)	✓	✓	✓	✓	✓
Object Discrimination	Tower Results	100.00%	99.30%	99.60%	100.00%	100.00%
(Detection Test)	Criteria Met (✓)	✓	✓	✓	✓	✓
Object Discrimination	Tower Results	98.10%	45.50%	56.90%	95.70%	93.70%
(Recognition Test)	Criteria Met (✓)	✓	✓	✓	✓	✓
Object Discrimination	Tower Results	79.30%	5.84%	8.94%	62.52%	52.54%
(Identification Test)	Criteria Met (✓)	✓	✓	✓	✓	✓
Line of Sight	Tower Results	4.74	1.55	1.64	3.73	3.25
Angle of Incidence	Criteria Met (✓)	✓	✓	✓	✓	✓

Source: RS&H, 2017

11 PRELIMINARY IDENTIFICATION OF ENVIRONMENTAL FEATURES

The following description of environmental features follows those outlined on ARP SOP No. 2.00, Appendix A, ALP Review Checklist. The statutes, regulations, and Executive Orders that apply to each resource category can be found in the FAA Order 1050.1F Desk Reference.

11.1 Major Airport Drainage Ditches

There are ditches that run through the cleared/grassland areas that are part of the Airport's stormwater management system.

11.2 Historic or Cultural Features

The closest NRHP-listed resource is the Crystal Ice Company building, about two miles southwest of mile west of the Airport. The closest Florida historical marker is the Hyer-Knowles Planing Mill, about one-half mile east of the Airport.

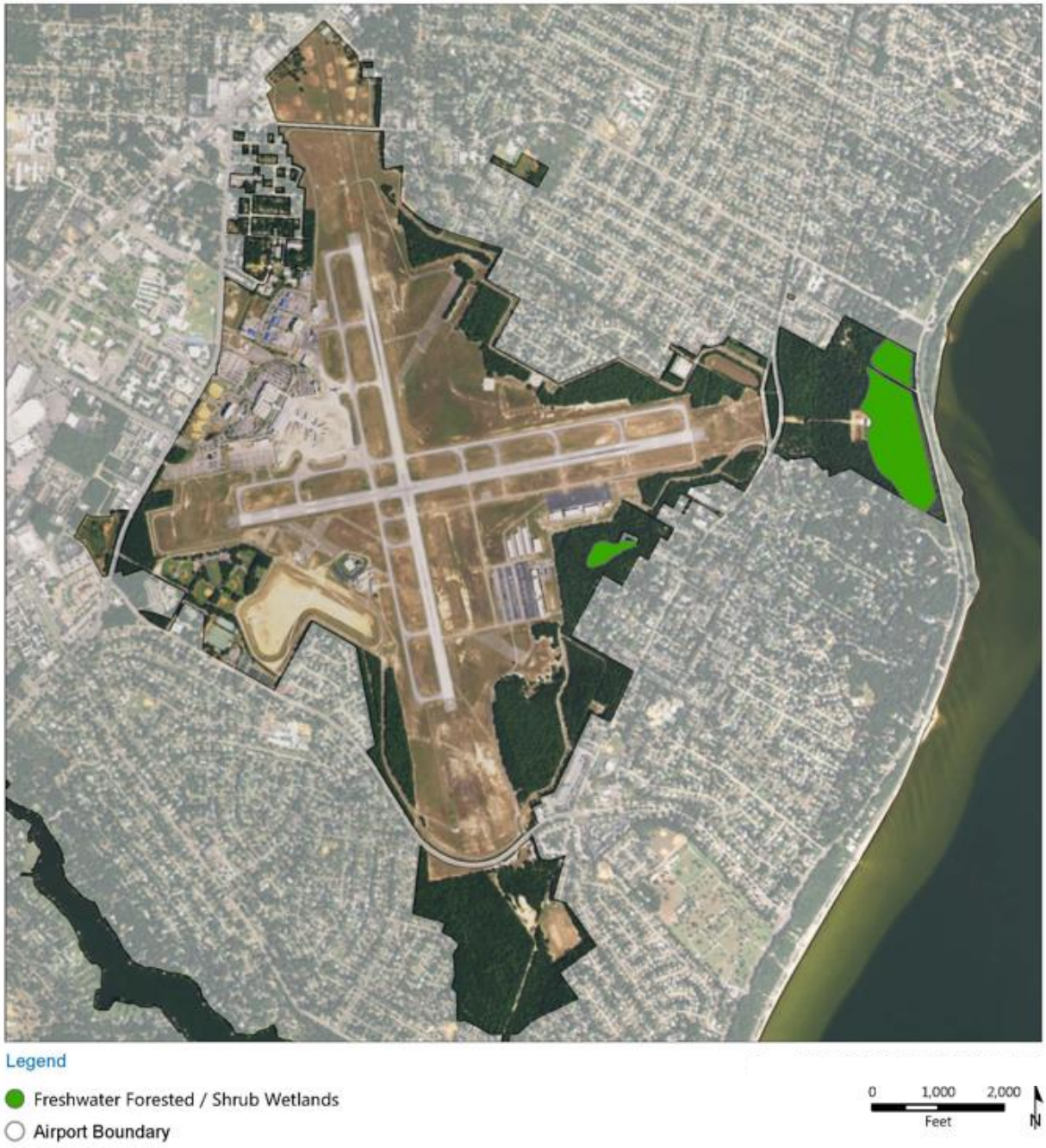
11.3 Water Resources

According to the USFWS National Wetland Inventory, there are freshwater forested/shrub wetlands on Airport property (see *Figure 10*). According to current FEMA Flood Insurance Rate Maps for the Airport area, there are no 100-year floodplains on or around the Airport property.

There are freshwater ponds on Airport property. Carpenter Creek is about 0.75-mile west of the Airport and Escambia Bay is about 0.50-mile east of the Airport. The Airport is in the Graveyard Branch-Bayou Texas Frontal watershed. The Emerald Coast Utilities Authority manages three well houses on the Airport.

The North Well House is located in the northeast quadrant of the Airport, the Hagler Well House is located in the southwest quadrant of the Airport, and the Spanish Trail Well House is located in the southeast quadrant of the Airport.

FIGURE 10
ON AIRPORT WETLANDS



Source: USFWS, 2016; Esri, 2016; RS&H, 2016

11.4 Section 4(f) Features

Aviation Discovery Park is located in the southeast quadrant of Airport property. The Park was approved by the FAA and constructed with the understanding that it is on Airport property and is subject to closure and redevelopment for Airport purposes in the future, should the need arise.

Other parks near the Airport include the Roger Scott Athletic Complex, and Lavallet Park. Land and Water Conservation funds have been used at two parks in Escambia County. Of those parks, the William Bartram Memorial Park (about four miles southwest of the Airport) is the closest to the Airport.

11.5 Natural Resources

Water is the primary natural resource used at the Airport on a daily basis (see the Water Resources section for further details). Asphalt, aggregate, and other natural resources have also been used in various construction projects at the Airport. None of the natural resources that the Airport uses, or has used, are in rare or short supply. Energy use at the Airport is primarily in the form of electricity required for the operation of Airport-related facilities (e.g., terminal building, hangars, airfield lighting) and fuel for aircraft, aircraft support vehicles/equipment, and Airport maintenance vehicles/equipment. Gulf Power supplies electricity services to the Airport.

11.6 Flora/Fauna

Table 18 lists the federally threatened and endangered species that the U.S. Fish and Wildlife Service (USFWS) identifies as having a potential to occur in Escambia County. *Table 19* lists the stated threatened and endangered species that the Florida Natural Areas Inventory (FNAI) identifies as having the potential to occur in Escambia County.

TABLE 18
FEDERALLY LISTED SPECIES WITH THE POTENTIAL TO OCCUR

Common Name (*Scientific Name*)	**Federal Status**
Amphibians	
Reticulated flatwoods salamander (*Ambystoma bishop*)	Endangered
Birds	
Wood stork (*Mycteria americana*)	Threatened
Piping Plover (*Charadrius melodus*)	Threatened
Red knot (*Calidris canutus rufa*)	Threatened
Clams	
Choctaw bean (*Villosa choctawensis*)	Endangered
Round Ebonyshell (*Fusconaia rotulata*)	Endangered
Southern kidneyshell (*Ptychobranchus jonesi*)	Endangered
Narrow pigtoe (*Fusconaia Escambia*)	Threatened
Southern sandshell (*Hamiota australis*)	Threatened
Fuzzy pigtoe (*Pleurobema strodeanum*)	Threatened
Fishes	
Atlantic sturgeon (Gulf subspecies) (*Acipenser oxyrinchus (=oxyrhynchus) desotoi*)	Threatened
Lichens	
Florida perforate cladonia (*Cladonia perforate*)	Endangered

Common Name (*Scientific Name*)	Federal Status
Mammals	
West Indian Manatee (*Trichechus manatus*)	Endangered
Perdido Key beach mouse (*Peromyscus polionotus trissyllepsis*)	Endangered
Reptiles	
Hawksbill sea turtle (*Eretmochelys imbricate*)	Endangered
Leatherback sea turtle (*Dermochelys coriacea*)	Endangered
Kemp's ridley sea turtle (*Lepidochelys kempii*)	Endangered
Loggerhead sea turtle (*Caretta caretta*)	Threatened
Eastern indigo snake (*Drymarchon corais couperi*)	Threatened

Sources: USFWS. (2016, June). Escambia, Florida. Retrieved June 2016, from Species by County Report

TABLE 19
STATE LISTED THREATENED AND ENDANGERED SPECIES WITH THE POTENTIAL TO OCCUR

Common Name (*Scientific Name*)	Federal Status
Birds	
Piping Plover (*Charadrius melodus*)	Threatened
Snowy Plover (*Charadrius nivosus*)	Threatened
Southeastern American Kestrel (*Falco sparverius paulus*)	Threatened
Wood stork (*Mycteria americana*)	Threatened
Least Tern (*Sternula antillarum*)	Threatened
Fishes	
Gulf Sturgeon (*Acipenser oxyrinchus desotoi*)	Threatened
Crystal Darter (*Crystallaria asprella*)	Threatened
Plants and Lichens	
Incised Groove-bur (*Agrimonia incisa*)	Threatened
Pine-woods Bluestem (*Andropogon arctatus*)	Threatened
Sweet-shrub (*Calycanthus floridus*)	Endangered
Baltzell's Sedge (*Carex baltzellii*)	Threatened
Godfrey's Goldenaster (*Chrysopsis godfreyi*)	Endangered
Cruise's Goldenaster (*Chrysopsis gossypina ssp. cruiseana*)	Endangered
Trailing Arbutus (*Epigaea repens*)	Endangered
Heartleaf (*Hexastylis arifolia*)	Threatened
Serviceberry Holly (*Ilex amelanchier*)	Threatened
Mountain Laurel (*Kalmia latifolia*)	Threatened
Bog Button (*Lachnocaulon digynum*)	Threatened
Little-people (*Lepuropetalon spathulatum*)	Endangered
Panhandle Lily (*Lilium iridollae*)	Endangered
Turk's Cap Lily (*Lilium superbum*)	Endangered
Bog Spicebush (*Lindera subcoriacea*)	Endangered
Hummingbird Flower (*Macranthera flammea*)	Endangered
Green Adder's-mouth Orchid (*Malaxis unifolia*)	Endangered
Primrose-flowered Butterwort (*Pinguicula primuliflora*)	Endangered

Common Name (*Scientific Name*)	Federal Status
Yellow Fringeless Orchid (*Platanthera integra*)	Endangered
Large-leaved Jointweed (*Polygonella macrophylla*)	Threatened
Florida Flame Azalea (*Rhododendron austrinum*)	Endangered
Sweet Pitcherplant (*Sarracenia rubra*)	Threatened
Thorne's Buckthorn (*Sideroxylon thornei*)	Endangered
Silky Camellia (*Stewartia malacodendron*)	Endangered
Harper's Yellow-eyed Grass (*Xyris scabrifolia*)	
Mammals	
West Indian Manatee (*Trichechus manatus*)	Endangered
Perdido Key beach mouse (*Peromyscus polionotus trissyllepsis*)	Endangered
Reptiles	
American Alligator (*Alligator mississippiensis*)	Threatened
Loggerhead sea turtle (*Caretta caretta*)	Threatened
Green Sea Turtle (*Chelonia mydas*)	Threatened
Leatherback sea turtle (*Dermochelys coriacea*)	Endangered
Eastern indigo snake (*Drymarchon corais couperi*)	Threatened
Gopher Tortoise (*Gopherus polyphemus*)	Threatened
Kemp's ridley sea turtle (*Lepidochelys kempii*)	Endangered

Sources: FNAI. (2016, June). Escambia County. Retrieved June 2016, from FNAI Tracking List

11.7 Other Environmental Features

Air Quality: According to the USEPA, the Airport property is located in an attainment area for all criteria pollutants.

Soils: According to the Natural Resources Conservation Service (NRCS) Web Soil Survey, a majority of the Airport property is poarch sandy loam soil with 0 to 2 percent slopes. The 2010 U.S. Census identifies the entire Airport property as an "urbanized area." There are no prime, unique, state, or locally important farmland soils on the Airport property.

Hazardous Sites/Materials: Aircraft fuel constitutes the largest quantity of hazardous substances stored and consumed at the Airport. The USEPA identifies the Airport (Handler ID: FLR000145185) as a hazardous waste site under RCRA.[2] According to the USEPA, the Airport is a small quantity hazardous waste generator. [3]

The USEPA also identifies eight hazardous waste sites on Airport property:[4]

- Continental Airlines Pensacola Reg (Handler ID: FLD984227967).
- DOT FAA (Handler ID: FLT950053579).
- Pensacola Aeromotive (Handler ID: FLD059653295).

[2] USEPA. (2016). *NEPAssist*. Retrieved June 2016, from https://nepassisttool.epa.gov/nepassist/nepamap.aspx?wherestr=pensacola
[3] USEPA. (2016). *Pensacola Regional Airport, 2430 Airprot Blvd. Pensacola, FL 32504*. Retrieved June 2016, from Envirofacts: https://oaspub.epa.gov/enviro/multisys2_v2.get_list?facility_uin=110006658820
[4] USEPA. (2016). *NEPAssist*. Retrieved June 2016, from https://nepassisttool.epa.gov/nepassist/nepamap.aspx?wherestr=pensacola

- Transportation Security Admin at Pensacola Reg Airport (Handler ID: FLR000108019).
- United Parcel Service (Handler ID: FLR000181222).
- 350th CA BDE CMD – P (Handler ID: FLT980060453).
- Engineering Cooling Services (Handler ID: FLD982144875).
- Pensacola Aerotech (Handler ID: FLD984175919).

There are no CERCLA superfund sites on or around the Airport.[5] Additionally, there are no known contaminated sites on Airport property.

The Perdido Landfill is the closest landfill to the Airport (about six miles northwest of the Airport).[6] Based on the most recent USEPA data, the Perdido Landfill is not expected to reach capacity for 8 years.[7]

Visual Environment: As previously described, the Airport is zoned as a heavy commercial limited manufacturing district. The Airport is developed in a manner that is consistent with this zoning. Vegetation (e.g., trees and shrubs) helps to reduce light emissions from the Airport to nearby residential areas and block a direct line of sight from most residential areas to the Airport. Commercial land uses have a direct line of sight to the Airport; however, the visual effects of the Airport to commercial or industrial land uses are not typically considered a nuisance.

Land Use: The City of Pensacola classifies the Airport as an airport restricted zoning district within its zoning code.[8] According to the City's Code of Ordinances, Title XII, Chapter 12-2, the intent of the Airport restricted zoning district classification is to regulate land that the Pensacola International Airport owns and sensitive land immediately adjacent to that land. Adjacent land is considered sensitive because of its distance from the runways and its location within designated noise zones (established by the City's Code of Ordinances, Title XII, Chapter 12-11). The City of Pensacola owns the land classified as an airport restricted zoning district and only allows open space, recreational, or commercial and industrial uses typically related to airport operations.

Land uses in the immediate vicinity of the Airport include industrial, commercial, and residential land uses. The closest residential area is about 875 feet west of the northern end of the Runway 17/35 centerline. This land is outside of the City of the Pensacola limits but within Escambia County.

Noise: Noise is the most apparent environmental effect from an airport, and at most airports accounts for the majority of comments from nearby residents. There are residential land uses near the Airport. These areas may be sensitive to aircraft noise associated with the Airport. The Airport's aviation last noise contours were updated in 1997 as part of the Airport's previous Master Plan. The City of Pensacola has established noise zone boundaries around the Airport.

[5] USEPA. (2016). *NEPAssist*. Retrieved June 2016, from https://nepassisttool.epa.gov/nepassist/nepamap.aspx?wherestr=pensacola
[6] MyEscambia. (2014). *The Perdido Landfill*. Retrieved June 2016, from My Community: http://myescambia.com/community/perdido-landfill
[7] USEPA. (2016, March). Landfill-level data only (all landfills) – Updated March 2016 (XLS). Retrieved June 2016, from National and State Lists of Landfills and Energy Projects: https://www3.epa.gov/lmop/projects-candidates/index.html
[8] City of Pensacola. (2016). City View. Retrieved June 2016, from Initiatives: http://cityofpensacola.com/222/CityView

Socioeconomics, Environmental Justice, and Children's Health and Environmental Safety Risks: *Table 20* provides the socioeconomic and environmental justice characteristics of the area around the Airport. This data is from the U.S. Census Bureau 2010-2014 American Community Survey at the tract level (the tract that the Airport is in and the adjacent tracts). Concerning children's environmental health and safety risks, the closest school to the Airport is the Cordova Park Elementary School, about 2,000 feet southwest of the southern end of Runway 17-35 centerline.

TABLE 20
SOCIOECONOMIC AND ENVIRONMENTAL JUSTICE CHARACTERISTICS

Characteristics	
Total Population	29,874
Percent Minority	20.57%
Percent Living Below the Poverty Level	6.13%
Percent of the Population below 18 Years of Age	21.25%
Percent Unemployed (above 16 Years of Age)	8.60%
Total Housing Units	13,857
Vacant Housing Units	1,434

Source: U.S. Census Bureau American Community Survey 2001-2014

Climate: Research has shown there is a direct correlation between fuel combustion and greenhouse gas (GHG) emissions. In terms of U.S. contributions, the U.S. Government Accountability Office (GAO) reports that "domestic aviation contributes about three percent of total CO2 emissions, according to EPA data," compared with other industrial sources, including the remainder of the transportation sector (20%) and power generation (41%).

12 DECLARED DISTANCES

Table 21 shows the declared distances for Runway 8-26 and Runway 17-35. In all cases, the Declared Distances equal the total runway length.

TABLE 21
DECLARED DISTANCES

Declared Distance	Runway 8	Runway 26	Runway 17	Runway 35
TORA	7,000'	7,000'	7,004'	7,004'
TODA	7,000'	7,000'	7,004'	7,004'
ASDA	7,000'	7,000'	7,004'	7,004'
LDA	7,000'	7,000'	7,004'	7,004'

Source: FAA Airport Master Record Form 5010