Chapter One
INVENTORY

The inventory chapter of exis. ng conditions is the initial step in the preparation of the Corpus Christi International Airport (CCIA or CRP) Master Plan. The inventory will serve as an overview of the airport's physical, operational, and environmental features. Information provided in this chapter serves as a baseline for the remainder of the master plan, which is compiled using a wide variety of resources, including applicable planning documents; on-site visits; interviews with airport staff, tenants, and users; aerial and ground photography; federal, state, and local publications; and project record drawings.

AIRPORT SETTING

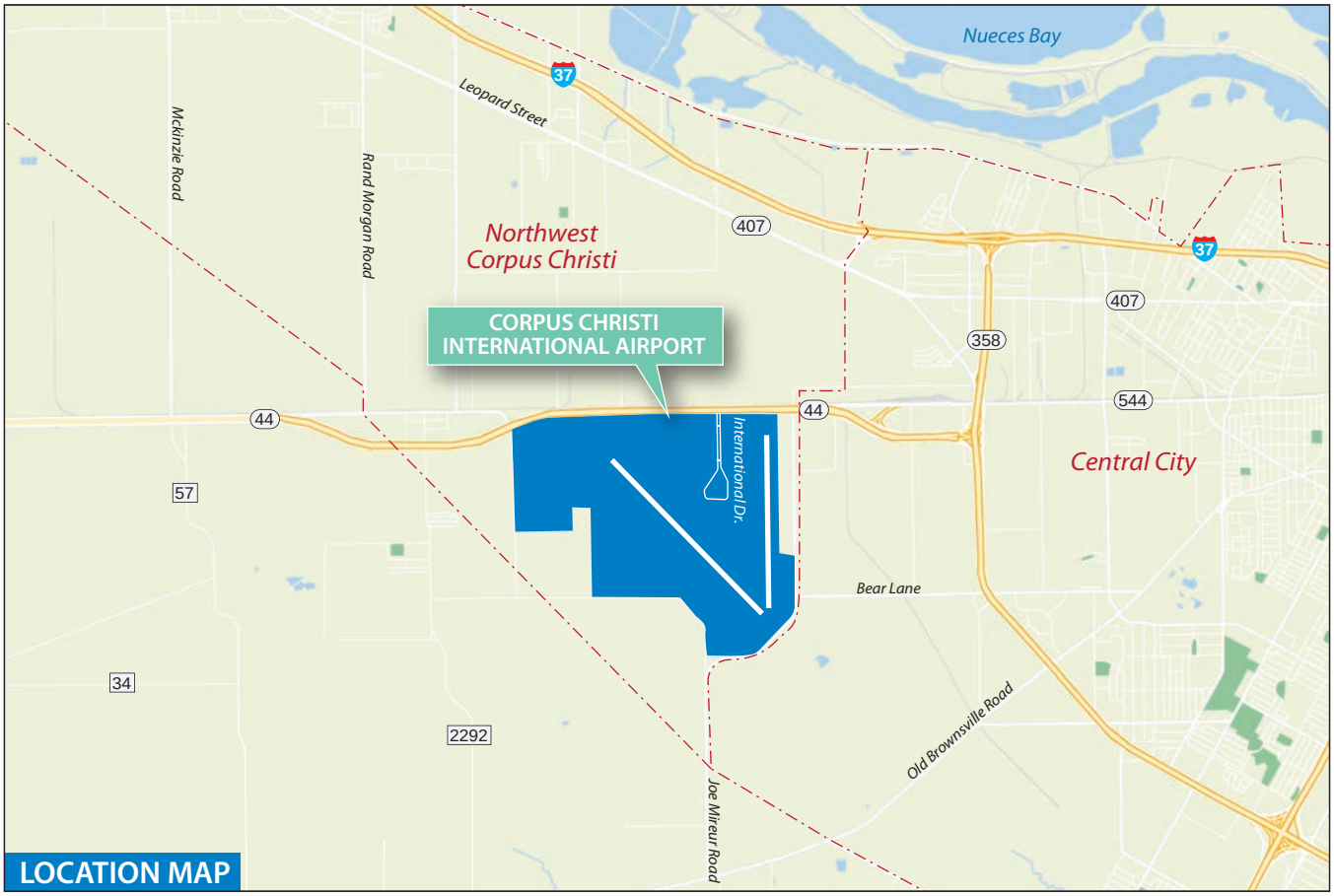
Corpus Christi International Airport (CCIA) is situated in Nueces County, Texas, serving the city of Corpus Christi and the surrounding coastal region. Located approximately seven miles west of downtown Corpus Christi, CCIA is easily accessible to residents and visitors alike. Its location along the Coastal Bend of the Gulf Coast of Texas provides convenient access to the coastal amenities and industries. The coastal location of Corpus Christi makes it a popular destination for tourists seeking beach vacations, fishing excursions, and water sports. CCIA serves as the primary entry point for visitors coming to explore the area's natural attractions and cultural landmarks.

The airport is supported by a network of highways and roads, providing convenient access for travelers from both urban and rural areas within the region. Immediate access to the airport is via International Drive which connects directly to State Highway 44, an east/west corridor aligned north of the airport. **Exhibit 1A** presents the airport in its regional setting.

As one of the primary airports in South Texas, CCIA connects travelers to and from the City of Corpus Christi with various domestic and international destinations. It provides essential air transportation services for the region, serving both leisure and business travelers. The airport plays a significant role in the region's economy by facilitating business and tourism. CCIA contributes to the local community by generating employment opportunities and supporting businesses operating within the airport's vicinity. It also serves as a transportation lifeline during times of emergencies or natural disasters, facilitating relief efforts and evacuations. It is a gateway for travelers coming to explore the Gulf Coast beaches, engage in recreational activities, or conduct business in the area. Corpus Christi is also known for its industrial presence, particularly in the oil and gas sector. CCIA plays a crucial role in supporting


COLORADO
KANSAS
MISSOURI
NEW MEXICO
OKLAHOMA
ARKANSAS
LOUISIANA
MEXICO
Amarillo
Lubbock
Abilene
Fort Worth
Dallas
El Paso
Odessa
Waco
Austin
San Antonio
Houston
Beaumont
Pasadena
Corpus Christi
CORPUS CHRISTI INTERNATIONAL AIRPORT
TEXAS


Wilson
Pleasanton
Kenedy
Karnes
Dewitt
Jackson
Victoria
Atascosa
Goliad
Port Lavaca
Calhoun
Three Rivers
Beeville
Bee
McMullen
Live Oak
Refugio
Aransas
Freer
Jim Wells
CORPUS CHRISTI INTERNATIONAL AIRPORT
Corpus Christi
Duval
Alice
Nueces
Kingsville
Kleberg
Hebbronville
Brooks
Kenedy
Jim Hogg
VICINITY MAP


Nueces Bay
Leopard Street
Mckinzie Road
Rand Morgan Road
Northwest Corpus Christi
CORPUS CHRISTI INTERNATIONAL AIRPORT
International Dr.
Central City
Bear Lane
Old Brownsville Road
Joe Mireur Road
LOCATION MAP

this industry by facilitating business travel and cargo shipments related to energy exploration and production. The presence of military installations, including Naval Air Station Corpus Christi and Naval Air Station Kingsville, adds to the airport's significance. CCIA accommodates military flights and personnel movements, contributing to its overall activity and importance.

Overall, Corpus Christi International Airport serves as a vital transportation hub for the region, connecting it to the broader air travel network while also playing a crucial role in supporting the local economy and community.

AIRPORT SYSTEM ROLE

Airport planning takes place at the local, state, and national levels, each of which has a different emphasis and purpose.

- **Local** | CCIA completed an Airport Master Plan previously in 2006.
- **State** | TxDOT created the *Texas Airport System Plan* (TASP) based on input from local planning documents (i.e., master plans and airport layout plans).
- **National** | The Airport is included in the *National Plan of Integrated Airport Systems* (NPIAS), which categorizes overall airport roles and responsibilities based on input from local and state planning efforts (i.e., master plans and state system plans).

LOCAL AIRPORT PLANNING

Airport Master Plan (2006) | The Airport Master Plan is the primary local planning document that provides a 20-year airport development vision based on aviation demand forecasts. Given the inevitable uncertainties as the master plan ages, the FAA recommends airports update their master plans every five to ten years, or as necessary to address any significant changes.

Taxiway Utilization Study (2012) | The Taxiway Utilization Study considered updating the airfield's geometry due to updated FAA airfield and taxiway design standards. At that time, the southern ends of the runways were very closely spaced with one "Y" shaped taxiway leading to each end. This layout was determined to have created multiple runway incursion events. The study proposed shifting the runways, thereby creating greater spacing for individual taxiways to each runway end. The study also proposed realigning several taxiways, all having been completed to date.

STATE AIRPORT PLANNING

The primary planning document for the State of Texas is the TASP, which was last updated in 2010 (the most recent published although the state is currently updating just not complete at the date of this documents publication). This document identifies the public-use aviation facilities in the state that perform a critical role in the economic and social development of Texas by providing adequate air access. At the time of this writing, the TASP included 292 airports and two heliports classified by the role provided. CCIA is classified as a primary commercial airport in the TASP. TASP facilities are broken down by service levels, as follows:

- **Primary Commercial Service** | These airports support scheduled passenger service by large and medium transport aircraft and enplane at least 10,000 passengers on an annual basis.
- **Non-Primary Commercial Service** | Airports capable of accommodating scheduled passenger service by smaller transport aircraft and enplane fewer than 10,000, but more than 2,500 passengers annually.
- **Reliever** | Airports designed primarily to relieve congestion at Commercial Service airports by providing alternative general aviation facilities.
- **General Aviation (Business/Corporate)** | These airports provide community access as they are capable of accommodating business jets.
- **General Aviation (Community Service)** | Airports that provide community access by single and light twin-engine aircraft and a limited number of business jets.
- **General Aviation (Basic Service)** | Airports capable of providing air access for communities less than 30 minutes (drive time) from Commercial Service, Reliever, Business/Corporate, and Community Service airports, and supports essential but low activity levels.
- **General Aviation (Heliport)** | A facility capable of accommodating helicopters used by individuals, corporations, and helicopter air taxi services. These facilities may support scheduled passenger service if demand exists.

The primary goals of the TASP are to develop a statewide airport system that provides adequate access via air to the population and economic activity centers in Texas, as well as provide timely development and maintenance of the aviation system. The TASP also seeks to maximize the economic benefit and return on investment to the State, local communities, counties, and cities from development of the airport system, as well as integrating the airport system with other transportation modes. **Table 1A** lists the minimum facility and service requirements for airports classified as primary commercial in the TASP. The current airport layout and available services at CCIA meet these minimum standards.

TABLE 1A | Facility and Service Criteria for TASP Primary Commercial Airports

Airport Criteria	Minimum Objective
Airport Reference Code	ARC C-II thru C-IV, DII thru D-VI
Design Aircraft	Heavy Transport
Runway Length	As required by critical aircraft
Runway Width	As required by critical aircraft
Runway Strength	As required by critical aircraft
Runway Lighting	High Intensity Runway Lighting
Runway Approach	Precision
Runway Visibility Minimums	200’ – 1/2-mile
Taxiway Type	Full Parallel
Services Available	Full Range

Source: Texas Airport System Plan (2010)

FEDERAL AIRPORT PLANNING

Many of the nation's existing airports were either initially constructed by the federal government or their development and maintenance was partially funded through various federal grant-in-aid programs to local communities. The system of airports existing today is therefore due, in large part, to federal policy that promotes the development of civil aviation. As part of a continuing effort to develop a national airport system, the U.S. Congress has maintained a national plan for the development and maintenance of airports.

The AIP is funded exclusively by user fees and user taxes, such as those on fuel and airline tickets.

The FAA maintains a database of airports that are eligible for AIP funding and are for public use called the *National Plan of Integrated Airport Systems* (NPIAS). The NPIAS is published and used by the FAA in administering the AIP, which is the source of federal funds for airport improvement projects across the country. The AIP is funded exclusively by user fees and user taxes, such as those on fuel and airline tickets. An airport must be included in the NPIAS to be eligible for federal funding assistance through the AIP.

The most current plan is the NPIAS 2023-2027, which identified 3,287 public-use airports that are important to national air transportation. The plan estimates that approximately $62.4 billion in AIP-eligible airport projects will require financial assistance between 2023 and 2027. **Table 1B** identifies the types of airports included in the NPIAS.

TABLE 1B | Activity and Development at NPIAS Airports

Airport Category	Number of Airports	Percent of Airports	Percent of 2021 Passenger Enplanements	Percent of All General Aviation Aircraft	Percent of Total Aircraft Operations
Large-Hub	30	1	68	1	10
Medium Hub	35	1	18	2	5
Small Hub	80	2	9	5	7
Non-Hub	238	7	3	10	10
Primary Subtotal	**383**	**11**	**99**	**18**	**32**
National	107	3	-	12	11
Regional	501	15	-	22	25
Local	1,179	36	-	20	23
Basic	904	28	-	3	7
Unclassified	213	7	-	1	2
Nonprimary Subtotal	**2,904**	**89**	**0.07**	**58**	**68**
Total NPIAS	**3,287**	**100**	**100**	**76**	**100**

The NPIAS categorizes airports by the type of activities that take place, including commercial service, cargo service, reliever operations, and general aviation. CCIA is currently classified as a nonhub, primary commercial airport in the FAA's NPIAS. Primary commercial service airports are grouped into four categories:

- **Large Hub** | Account for at least one percent of total U.S. passenger enplanements
- **Medium Hub** | Account for 0.25 percent to one percent of total U.S. passenger enplanements
- **Small Hub** | Account for between 0.05 percent and 0.25 percent of total U.S. passenger enplanements
- **Nonhub** | Account for less than 0.05 percent of all U.S. passenger enplanements, but more than 10,000 annual enplanements

Primary commercial airports are commercial service airports that have greater than 10,000 passenger boardings within the U.S. in the most current calendar year ending before the start of the current fiscal year. **Table 1C** explains the varying airport classifications and their associated requirements.[1]

TABLE 1C | Categories of Airport Activities

Airport Classifications	Hub Type: Percentage of Annual Passenger Boardings (enplanement)	Common Name
Commercial Service Primary	**Large:** 1% or more	**Large Hub**
Commercial Service Primary	**Medium:** At least 0.25%, but less than 1%	**Medium Hub**
Commercial Service Primary	**Small:** At least 0.05%, but less than 0.25%	**Small Hub**
Commercial Service Primary	**Nonhub:** More than 10,000, but less than 0.05%	**Nonhub Primary**
Commercial Service Nonprimary	**Nonhub:** At least 2,500 and no more than 10,000	**Nonprimary Commercial Service**
Nonprimary (Except Commercial Service)	Not Applicable	**Reliever General Aviation**
Commercial Service: Publicly owned airports that have at least 2,500 passenger boardings each calendar year and receive scheduled passenger service **Commercial Service Primary:** Have more than 10,000 passenger boardings each year **Commercial Service Nonprimary:** At least 2,500 passenger boardings but no more than 10,000		

Source: https://www.faa.gov/airports/planning_capacity/passenger_allcargo_stats/categories/

Airports that apply for and accept AIP grants must adhere to various grant assurances. These assurances include maintaining the airport facility safely and efficiently in accordance with specific conditions. The duration of the assurances depends on the type of airport, the useful life of the facility being developed, and other factors. Typically, the useful life for an airport development project is a minimum of 20 years. Thus, when an airport accepts AIP grants, they are obligated to maintain that facility in accordance with FAA standards for at least that long.

14 CFR Part 139 Certification

An airport must have an Airport Operating Certificate (AOC) if it is serving air carrier aircraft with more than nine seats or serving unscheduled air carrier aircraft with greater than 30 passenger seats. 14 Code of Federal Regulations (CFR) Part 139 (Part 139) describes the requirements for obtaining and maintaining an AOC. This includes meeting various FAA regulations.

[1] https://www.faa.gov/airports/planning_capacity/passenger_allcargo_stats/categories/

Airports are classified in the following categories based on the type of air carrier operations served:

- **Class I Airport** | an airport certificated to serve scheduled operations of large air carrier aircraft (31 passenger seats or more) that can also serve unscheduled passenger operations of large air carrier aircraft and/or scheduled operations of small air carrier aircraft. **CCIA is a Class I airport.**
- **Class II Airport** | an airport certificated to serve scheduled operations of small air carrier aircraft (10 to 30 passenger seats) and unscheduled passenger operations of large air carrier aircraft. A Class II airport cannot serve scheduled large air carrier aircraft.
- **Class III Airport** | an airport certificated to serve scheduled operations of small air carrier aircraft. A Class III airport cannot serve scheduled or unscheduled large air carrier aircraft.
- **Class IV Airport** | an airport certificated to serve unscheduled passenger operations of large air carrier aircraft. A Class IV airport cannot serve scheduled large or small air carrier aircraft.

The regulation (which implemented provisions of the *Airport and Airway Development Act of 1970*, as amended Nov. 27, 1971) set standards for: the marking and lighting of areas used for operations; firefighting and rescue equipment and services; the handling and storage of hazardous materials; the identification of obstructions; and safety inspection and reporting procedures. It also required airport operators to have an FAA-approved Airport Certification Manual (ACM). A Class I airport must comply with all sections of Part 139.

The ACM is a required document that defines the procedures to be followed in the routine operation of the airport and for response to emergency situations. The ACM is a working document that is updated annually. It reflects the current condition and operation of the airport and establishes the responsibility, authority, and procedures as required. There are required sections for the ACM covering administrative detail and procedural detail. Each section independently addresses who (primary/secondary), what, how, and when as it relates to each element.

The administrative sections of the ACM cover such elements as the organizational chart, operational responsibilities, maps, descriptions, weather sensors, access, and cargo. The procedural elements cover such items as paved and unpaved areas, safety areas, lighting and marking, communications and navigational aids, airport rescue and firefighting (ARFF), handling of hazardous material, utility protection, public protection, self-inspection program, ground vehicle control, obstruction removal, wildlife management, and construction supervision. CCIA has a current, approved ACM, which was most recently revised on July 11, 2023.

HISTORICAL DEVELOPMENT

Table 1D provides an overview of historical development projects completed at the airport since 2005. This data includes projects documented as part of the FAA's Airport Improvement Program (AIP), as well as projects funded through other sources, including Covid-related grant money and the Bipartisan Infrastructure Law (BIL).

Table 1D | Grant History

Fiscal Year	Project Description	AIP Entitlement	AIP Discretionary	CARES General	CARES Local Match	Covid Relief General	Covid Relief Local Match	BIL - Airport Terminal Program	Grand Total
FY 2005	Improve Airport Drainage	$300,000							$300,000
FY 2005	Rehabilitate Runway	$3,406,155	$4,081,933						$7,488,088
FY 2006	Acquire Equipment	$150,000							$150,000
FY 2006	Extend Runway	$75,000							$75,000
FY 2006	Improve Airport Drainage	$93,150							$93,150
FY 2006	Rehabilitate Apron	$2,478,150	$500,000						$2,978,150
FY 2006	Rehabilitate Runway		$5,920,000						$5,920,000
FY 2006	Rehabilitate Taxiway	$140,000							$140,000
FY 2007	Improve Airport Drainage	$130,364							$130,364
FY 2007	Rehabilitate Apron		$3,783,850						$3,783,850
FY 2008	Construct Building	$478,503							$478,503
FY 2008	Construct Service Road	$100,000							$100,000
FY 2008	Improve Airport Drainage		$2,682,680						$2,682,680
FY 2008	Modify Aircraft Rescue & Fire Fighting Building	$100,000							$100,000
FY 2008	Rehabilitate Taxiway	$2,334,346	$2,916,700						$5,251,046
FY 2009	Construct Building	$430,110							$430,110
FY 2009	Construct Service Road	$430,110	$50,000						$480,110
FY 2009	Modify Aircraft Rescue & Fire Fighting Building	$966,213							$966,213
FY 2009	Rehabilitate Building	$1,075,000							$1,075,000
FY 2009	Widen Taxiway	$75,000	$250,000						$325,000
FY 2010	Improve Terminal Building	$2,894,554							$2,894,554
FY 2011	Extend Runway	$2,596,792							$2,596,792
FY 2011	Security Enhancements	$32,913	$3,405,113						$3,438,026
FY 2012	Construct Taxiway	$445,505							$445,505
FY 2012	Runway 17-35 Extension/Displacement and Connecting Taxiway	$3,607,015	$13,900,000						$17,507,015
FY 2013	Runway 13-31 Extension/Displacement	$6,908,345	$18,400,000						$25,308,345
FY 2013	Runway 13-31 Connecting Taxiway Extension	$250,000							$250,000
FY 2013	Rehabilitate Apron	$350,000							$350,000
FY 2014	Runway 13-31 Connecting Taxiway Extension		$4,819,857						$4,819,857
FY 2014	Rehabilitate Taxiway		$6,334,649						$6,334,649
FY 2016	Install Perimeter Fencing required by 49 CFR 1542	$1,589,817	$5,337,804						$6,927,621
FY 2016	East GA Apron Reconstruction		$2,198,603						$2,198,603
FY 2017	Acquire Aircraft Rescue & Fire Fighting Vehicle	$765,790							$765,790
FY 2017	East GA and Terminal Apron Reconstruction	$876,215	$4,700,000						$5,576,215

Table 1D | Grant History (continued)

Fiscal Year	Project Description	AIP Entitlement	AIP Discretionary	CARES General	CARES Local Match	Covid Relief General	Covid Relief Local Match	BIL - Airport Terminal Program	Grand Total
FY 2018	Rehabilitate Terminal Apron Phase II and East GA Apron Phase III	$2,532,244	$4,000,000						$6,532,244
FY 2019	Rehabilitate Terminal Apron Phase III and East GA Apron Phase IV	$2,445,368	$7,000,000						$9,445,368
FY 2020	Acquire Aircraft Rescue & Fire Fighting Vehicle	$650,000			$72,222				$722,222
FY 2020	CARES Act Funds			$1,635,234					$1,635,234
FY 2020	Rehabilitate Terminal Apron Phase IV and East GA Apron Phase V	$1,858,995	$5,452,691		$812,409				$8,124,095
FY 2021	CRRSA Act Concessions					$70,272			$70,272
FY 2021	CRRSA Act Funds					$2,598,104			$2,598,104
FY 2021	General ARPA					$4,103,307			$4,103,307
FY 2021	Improve/ Modify/ Rehabilitate Terminal Building					$4,885,788			$4,885,788
FY 2021	Rehabilitate Runway 13-31	$2,000,000					$222,222		$2,222,222
FY 2021	Rehabilitate Taxiway B	$486,167	$492,834				$108,778		$1,087,779
FY 2022	Improve/ Modify/ Rehabilitate Terminal Building	$2,508,995	$8,200,000					$1,800,000	$12,508,995
FY 2022	Large Concessions					$56,218			$56,218
FY 2022	Small Concessions					$224,872			$224,872
FY 2023	Improve/ Modify/ Rehabilitate Terminal Building	$945,525							$945,525
FY 2023	Improve/ Modify/ Rehabilitate Terminal Building							$5,440,958	$5,440,958
FY 2023	Update Airport Master Plan or Study	$1,449,620							$1,449,620

Source: FAA AIP Grant Histories, 2024

AIRFIELD FACILITIES OVERVIEW

This section provides an overview of the current airfield facilities CRP including the runway system and taxiway system.

RUNWAY SYSTEM

As shown in **Exhibit 1B**, the runway system at CRP consists of two runways (Runway 13-31 and Runway 18-36). Runway 13-31 is the primary runway and Runway 18-36 is the secondary runway. Both runways at CRP are available for air carrier aircraft use.

RUNWAY PAVEMENT OVERVIEW

Table 1E provides an overview of the pavement dimensions, surface material, and condition of all runways at CRP.

Table 1E | Runway Pavement

Pavement Attribute	Runway 13-31	Runway 18-36
Length (feet)	7,510	6,080
Width (feet)	150	150
Surface Material/Treatment	Asphalt	Asphalt
Grooved	Yes	Yes
Pavement Condition	Good	Good

Source: FAA Aeronautical Information Services Website – Pulled 02/22/2024

Both runways are constructed of asphalt, are 150 feet wide, and are grooved to improve surface friction when the runway is wet. Runway 13-31 is the longest runway at CRP with a total length of 7,510 feet. Both runways have 25 feet wide asphalt paved shoulders on each side. However, each runway does have an associated blast pad. Blast pads are paved areas located at the end of a runway that are established to protect against erosion related to jet blast. **Table 1F** provides an overview of the blast pad dimensions for each runway end.

Table 1F | Blast Pad Dimensions

Runway End	13	31	18	36
Blast Pad Width	200 feet	200 feet	200 feet	200 feet
Blast Pad Length	200 feet	1,200 feet	200 feet	800 feet

Source: Garver, 2024

The ends of Runways 31 and 36 were previously closer together but the ends of the runways were shifted in 2015. The pavement left behind after the shift was converted into an extended blast pad. There are no “hot spots” at CRP as designated by the FAA. According to the FAA Hot Spot Standardized Symbology website a hot spot is “a location on an airport movement area with a history of potential risk for collision or runway incursion, and where heightened attention by pilots and drivers is necessary.”

The runways at CRP do not have displaced thresholds. **Table 1G** provides an overview of the declared distances for all runways at CRP.

Table 1G | Declared Distances

Declared Distance	Runway 13	Runway 31	Runway 18	Runway 36
Takeoff Run Available (TORA)	7,510’	7,510’	6,080’	6,080’
Takeoff Distance Available (TODA)	7,510’	7,510’	6,080’	6,080’
Accelerate-Stop Distance Available (ASDA)	7,510’	7,510’	6,080’	6,080’
Landing Distance Available (LDA)	7,510’	7,510’	6,080’	6,080’

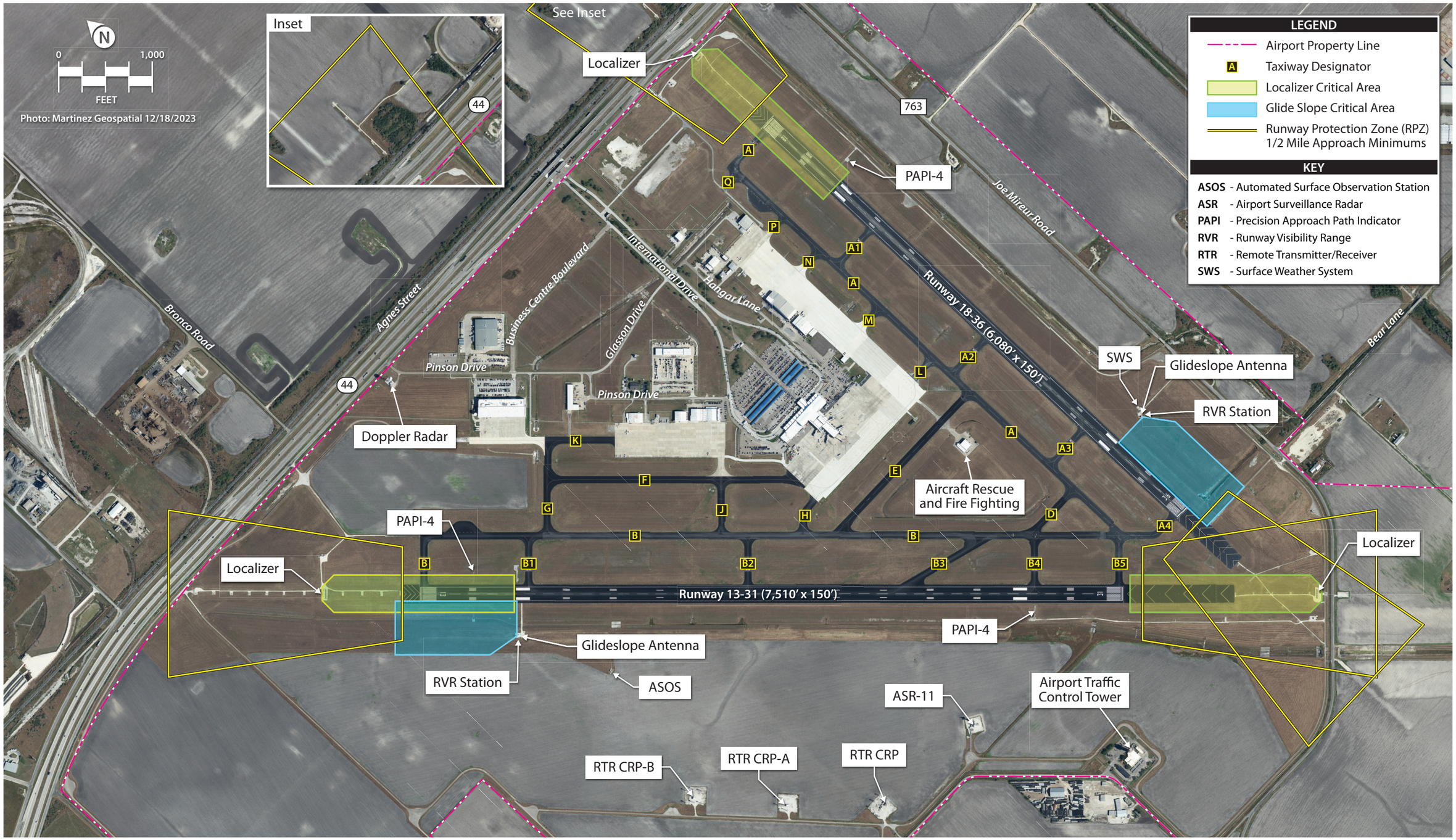
Source: FAA Aeronautical Information Services Website – Pulled 02/22/2024

Table 1H provides an overview of the runway markings for each runway end.

Table 1H | Runway Markings

Runway End	13	31	18	36
Runway Marking Pattern	Precision	Precision	Precision	Precision

Source: FAA Aeronautical Information Services Website– Pulled 02/22/2024


N
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FEET
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Inset
44
See Inset
Localizer
763
PAPI-4
Joe Mireur Road
LEGEND
Airport Property Line
A Taxiway Designator
Localizer Critical Area
Glide Slope Critical Area
Runway Protection Zone (RPZ)
1/2 Mile Approach Minimums
KEY
ASOS - Automated Surface Observation Station
ASR - Airport Surveillance Radar
PAPI - Precision Approach Path Indicator
RVR - Runway Visibility Range
RTR - Remote Transmitter/Receiver
SWS - Surface Weather System
Bronco Road
Agnes Street
Business Centre Boulevard
International Drive
Hangar Lane
Glasson Drive
Pinson Drive
Pinson Drive
Runway 18-36 (6,080' x 150')
Bear Lane
SWS
Glideslope Antenna
RVR Station
Doppler Radar
Aircraft Rescue and Fire Fighting
PAPI-4
Localizer
Runway 13-31 (7,510' x 150')
Localizer
PAPI-4
Glideslope Antenna
RVR Station
ASOS
ASR-11
Airport Traffic Control Tower
RTR CRP-B
RTR CRP-A
RTR CRP

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RUNWAY OPERATIONAL PATTERNS

Based on discussions with FAA Air Traffic Control Tower (ATCT) personnel, both runways are used interchangeably. There is no runway designated specifically for arrivals and departures in most circumstances. Based on seasonal wind patterns near CRP, a south flow is used 60-70% of the time. While on a south flow, Runways 13 and 18 are used for arriving and departing aircraft. When in a north flow, Runway 36 is typically identified as the primary runway in use for arrivals, but aircraft are usually allowed to operate on either runway by request.

Runway 18-36, Date 1.30.24

Runway 13-31; Date 1.30.24

ATCT personnel reported that when aircraft are arriving on Runway 13, the most common taxiways utilized for exiting the runway are Taxiways B2, B3, and B4. Taxiway B5 is rarely used by aircraft to exit Runway 13 after landing. When landing on Runway 31, the most common taxiways utilized for exiting the runway are Taxiways B2 or B1. Aircraft rarely roll out long enough to use Taxiway B at the runway end.

When aircraft are arriving on Runway 18, the most common taxiways utilized for exiting the runway are Taxiways A3 and A4, although smaller aircraft sometimes utilize A2. When aircraft are arriving on Runway 36, the most common taxiways utilized for exiting the runway are Taxiways A1 and A2.

TAXIWAY SYSTEM

An airport's taxiway system plays a critical role in supporting the movement of aircraft from their parking locations at the Airport to/from the runway system. Both Runway 13-31 and Runway 18-36 have full length parallel taxiways. Runway 13-31's full length taxiway is Taxiway B and Runway 18-36's full length parallel taxiway is Taxiway A. The centerline separation from each runway centerline to its associated parallel taxiway centerline is 620 feet. Based on discussions with ATCT, the capacity of the taxiway system is currently not an issue and minimal taxi delay occurs.

All of the taxiways, with the exception of the portion of Taxiway K located in front of the US Coast Guard apron, are constructed of asphalt. Additionally, most of the ramp space designated as a non-movement ramp area (i.e., not under the control of ATC) is constructed of concrete.

Similar to runways, taxiways have associated protected surfaces that are critical to the safe and efficient operation of aircraft. These surfaces include Taxiway Safety Areas (TSA) and Taxiway Object Free Areas (TOFA). **Table 1J** identifies the general width of each taxiway at CRP in addition to the total width of its associated TSA and TOFA. The width of runway exit taxiways vary depending on location and design.

The locations of all taxiways are shown on **Exhibit 1B**.

Table 1J | Taxiway Widths and Protected Surfaces

Taxiway Designation	Width (ft.)	Aircraft Design Group	Taxiway Safety Area (ft.)	Taxiway object Free Area (ft.)
A	75	IV	171	243
A1	75	IV	171	243
A2	75	IV	171	243
A3	75	IV	171	243
A4	75	IV	171	243
B	75	IV	171	243
B1	75	IV	171	243
B2	75	IV	171	243
B3	75	IV	171	243
B4	75	IV	171	243
B5	75	IV	171	243
D	75	IV	171	243
E	75	IV	171	243
F	75	IV	171	243
G	75	IV	171	243
H	75	IV	171	243
J	75	IV	171	243
K	75	IV	171	243
L	75	IV	171	243
M	75	IV	171	243
N	75	IV	171	243
P	75	IV	171	243
Q	75	IV	171	243

Source: ACM and 2020 ALP

PAVEMENT CONDITION INDEX

A pavement condition index (PCI) inspection was performed by Applied Pavement Technology for all airside and landside pavements at Corpus Christi International Airport with the exception of vehicle parking lots. According to the FAA's Advisory Circular 150/5320-6G, *Airport Pavement Design and Evaluation*, a pavement condition index is a numerical rating of the surface condition of pavement and indicates functional performance with implications of structural performance.

In conducting PCI inspections, each facility (e.g., runway, taxiway, apron, blast pad, and roadway) is subdivided into discrete sections. Each section is then divided into sample units, from which a subset of sample units is selected for detailed inspection.

The results of a PCI inspection provide an indication of the structural integrity and functional capabilities of the inspected pavement yet are only an indirect indicator of the overall condition of the pavement since only the surface of the pavement is examined. Nevertheless, the PCI does provide an objective basis for determining maintenance and rehabilitation needs and for establishing priorities in the face of constraints.

Furthermore, the results of repeated PCI monitoring over time can be used to determine the rate of deterioration and to estimate the time at which certain rehabilitation measures may be needed.

The PCI scale ranges from a value of 0 (representing a pavement in a completely failed condition) to a value of 100 (representing a pavement with no distress), as illustrated in **Exhibit 1C**. In general terms, pavements in satisfactory to good condition that are not exhibiting significant amounts of load-related distress will benefit from preventive maintenance actions, such as joint and crack sealing and patching. Pavements with a PCI between 40 and 70 (i.e., fair to poor condition) are more likely candidates for major rehabilitation activities, such as PCC repairs or an overlay, although preventive maintenance may still be beneficial. Often, when the PCI is less than 40, reconstruction is the most viable alternative due to substantial deterioration of the pavement structure. These guidelines are general PCI thresholds associated with level of work need. Airports can fine tune when work activities are appropriate.

RUNWAY DESIGN CODE AND RUNWAY PROTECTED SURFACES

Runways have a number of protected surfaces that are critical to ensuring the safety and efficiency of aircraft operations. Those surfaces include Runway Safety Areas (RSA), Runway Object Free Areas (ROFA), and Obstacle Free Zone (OFZ) surfaces. The size of the protected surfaces for a runway are based on the runway's established Runway Design Code (RDC). A runway's RDC is determined using the following variables:

- **Aircraft Approach Category (AAC)** – the approach speed of the runway's critical aircraft;
- **Aircraft Design Group (ADG)** – the wingspan and tail height of the runway's critical aircraft; and,
- **Approach Visibility Minimums** – lowest approach visibility minimums for the runway.

The critical aircraft is the largest single aircraft or classification of aircraft a runway is expected to serve on a regular basis (500 operations per year or more). **Tables 1K-1** through **Table 1K-3** define the criteria for identifying each component of the RDC for a runway.

Table 1K-1 | Aircraft and Runway Classification: Aircraft Approach Category (AAC)

AAC	V_{REF}/Approach Speed
A	Approach speed less than 91 knots
B	Approach speed 91 knots or more but less than 121 knots
C	Approach speed 121 knots or more but less than 141 knots
D	Approach speed 141 knots or more but less than 166 knots
E	Approach speed 166 knots or more

Source: FAA Advisory Circular 150/5300-13B, Airport Design

Table 1K-2 | Aircraft and Runway Classifications: Airplane Design Group (ADG)

ADG	Tail Height (ft. [m])	Wingspan (ft. [m])
I	< 20' (< 6.1 m)	< 49' (14.9m)
II	20' to < 30' (6.1 m to < 9.1 m)	49' to < 79' (14.9 m to < 24.1 m)
III	30' to < 45' (9.1 m to < 13.7 m)	79' to < 118' (24.1 m to < 36 m)
IV	45' to < 60' (13.7 m to < 18.3 m)	118' to < 171' (36 m to < 52 m)
V	60' to < 66' (18.3 m to < 20.1 m)	171' to < 214' (52 m to < 65 m)
VI	66' to < 80' (20.1 m to < 24.4 m)	214' to < 262' (65 m to < 80 m)

Source: FAA Advisory Circular 150/5300-13B, Airport Design

Table 1K-3 | Aircraft and Runway Classifications: Approach Visibility Minimums

RVR (ft.)	Instrument Flight Visibility Category (statute mile)
5000	Not lower than 1 mile
4000	Lower than 1 mile but not lower than ¾ mile
2400	Lower than ¾ mile but not lower than ½ mile
1600	Lower than ½ mile but not lower than ¼ mile
1200	Lower than ¼ mile

Source: FAA Advisory Circular 150/5300-13B, Airport Design

Based on a review of the existing Airport Layout Plan (ALP) and existing runway infrastructure, the current RDC for each runway at CRP is shown below in **Table 1L**

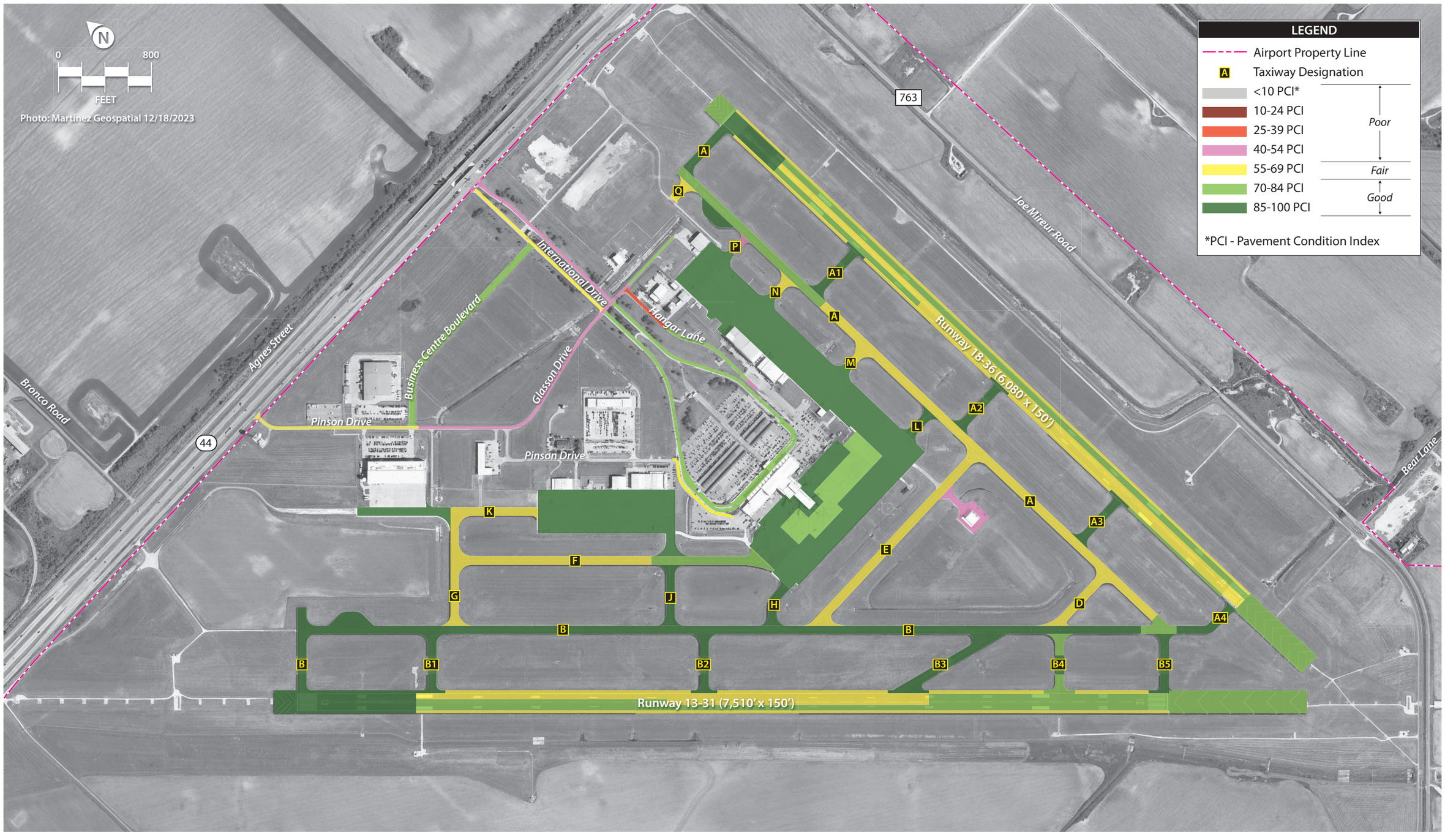
Table 1L | Runway Design Codes

RDC Variables	Runway 13-31	Runway 18-36
Aircraft Approach Category (AAC)	D	D
Aircraft Design Group (ADG)	IV	IV
Approach Visibility Minimums	2,400 ft.	2,400 ft.
RDC	D-IV-2400	D-IV-2400

Source: 2020 CRP ALP and Airfield Facilities Review

Utilizing these established RDCs for each runway, the dimensions of the RSA, ROFA, and Runway OFZ (ROFZ) for each runway can be established. Each of these surfaces and their primary purpose are discussed below:

- **Runway Safety Area (RSA)** – A defined area surrounding the runway consisting of a prepared surface suitable for reducing the risk of damage to aircraft in the event of an undershoot, overshoot, or excursion from the runway.
- **Runway Object Free Area (ROFA)** – A clear area limited to equipment necessary for air and ground navigation, and providing wingtip protection in the event of an aircraft excursion from the runway.
- **Runway Obstacle Free Zone (ROFZ)** – A defined volume of airspace centered on the runway centerline that is clear of obstacles for the protection of aircraft landing or taking off from the runway, whose base elevation is that of the highest runway elevation at that particular location.


N
0
800
FEET
Photo: Martinez Geospatial 12/18/2023
LEGEND
Airport Property Line
Taxiway Designation
<10 PCI*
10-24 PCI
25-39 PCI
40-54 PCI
55-69 PCI
70-84 PCI
85-100 PCI
Poor
Fair
Good
*PCI - Pavement Condition Index
763
Joe Mireur Road
Bronco Road
44
Agnes Street
International Drive
Business Centre Boulevard
Glasson Drive
Hangar Lane
Pinson Drive
Pinson Drive
Runway 18-36 (6,080' x 150')
Bear Lane
Runway 13-31 (7,510' x 150')
A
Q
P
A1
N
A
M
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A2
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A3
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B4
B5

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In addition to the ROFZ, there are other Obstacle Free Zone (OFZ) surfaces whose presence are dependent upon the instrument approach, visibility minimums, and approach lighting system associated with a runway end. These other OFZ surfaces include:

- **Inner Approach OFZ** – Applies to runways with an approach lighting system. The inner approach OFZ is the same width as the ROFZ and extends from the end of the ROFZ to 200 ft beyond the last light unit in the approach lighting system. It rises at a 50:1 slope beginning at the same elevation as the outer edge of the ROFZ.
- **Inner-Transitional OFZ** – Applies to runways with visibility minimums below ¾ statute mile. It extends from the sides of the ROFZ and the inner approach OFZ. The heights and slopes associated with the inner-transitional OFZ vary based on the type of aircraft the runway serves (e.g. small or large) and the runway's visibility minimums.
- **Precision OFZ** – Applies to runways with a precision instrument approach. It is a defined volume of airspace that begins at the end of the runway, extends 200 feet beyond the runway threshold, and extends 400 feet to each side of the extended runway centerline (800 feet in total width).

The primary purpose of each of these additional OFZ surfaces is to protect aircraft during their arrival or departure to a runway. **Tables 1M** and **1N** identify the protected surfaces applicable to each runway and runway end at CRP.

Table 1M | Runway Protected Surfaces

Protected Surfaces	Runway 13-31	Runway 18-36
Runway Safety Area (RSA)	500 wide x 1,000 ft. off each runway end	500 wide x 1,000 ft. off each runway end
Runway Object Free Area (ROFA)	800 wide x 1,000 ft. off each runway end	800 wide x 1,000 ft. off each runway end
Runway Obstacle Free Zone (ROFZ)	400 wide x 200 ft. off each runway end	400 wide x 200 ft. off each runway end

Source: 2020 CRP ALP and Airfield Facilities Review

Table 1N | Obstacle Free Zone (OFZ) Surfaces – Per Runway End

OFZ Surface by Runway End	13	31	18	36
Inner Approach OFZ	Yes	Yes	Yes	Yes
Inner-Transitional OFZ	Yes	Yes	Yes	Yes
Precision OFZ	Yes	Yes	Yes	Yes

Source: 2020 CRP ALP and Airfield Facilities Review

RUNWAY PROTECTION ZONES

The purpose of a Runway Protection Zone (RPZ) is to enhance the protection of people and property on the ground and to prevent developments that are incompatible with aircraft operations. The RPZ is a two-dimensional trapezoidal area that normally begins 200 feet beyond the paved runway end and extends along the runway centerline. RPZ dimensions are determined by the type/size of aircraft expected to operate at an airport and the type of instrument approach for each runway end (visual,

precision, or non-precision). **Table 1P** delineates the RPZ dimensions for the four runway ends at CRP. Currently, all for RPZs extend beyond the airport's property line and public roadways are present. However, no non-aeronautical structures are present in any of the RPZs.

Table 1P | Runway Protection Zone Dimensions

Runway End	Approach Visibility Minimums	Length (ft)	Inner Width (ft)	Outer Width (ft)
Runway 13	Lower Than ¾ Mile	2,500	1,000	1,750
Runway 31	Lower Than ¾ Mile	2,500	1,000	1,750
Runway 18	Lower Than ¾ Mile	2,500	1,000	1,750
Runway 36	Lower Than ¾ Mile	2,500	1,000	1,750

Source: 2020 CRP ALP and Airfield Facilities Review

NAVIGATIONAL AIDS (NAVAIDS)

Navigational Aids (NAVAIDs) are ground-based systems that provide information to pilots for navigational purposes. In general, NAVAIDs can be segmented into two categories: visual and electronic. Visual NAVAIDs provide visual guidance to pilots to aid them in landing an aircraft, locating the airport, or locating a particular runway. Electronic NAVAIDs emit a signal that communicates with equipment in the cockpit of an aircraft that aids a pilot in navigating without using visual cues outside the aircraft. Electronic NAVAIDs are used for both enroute navigation and approaches to landing at an airport.

Exhibit 1B identifies the location of key visual and electronic NAVAIDs and other key support equipment at CRP.

VISUAL NAVAIDS

The only visual NAVAID at CRP owned by the Airport is the airport beacon. The airport beacon is located west of the ARFF station in the field south of Taxiway E. The beacon emits flashes of white and green light at night and during IFR weather to aid pilots in finding the airport.

In addition to the beacon, CRP has multiple Precision Approach Path Indicator (PAPI) systems. PAPIs provide a visual indication to pilots regarding whether they are too high, too low, or on the established glidepath when attempting to land on a runway. Runways 18, 13, and 31 are equipped with a 4-light PAPI system. No PAPI system is present for Runway 36. All PAPIs at CRP are calibrated to provide pilots with a 3-degree angle of descent and are owned and maintained by the FAA TechOps personnel based at CRP.

Runway 31 PAPIs

ELECTRONIC NAVAIDS

The primary electronic NAVAIDs at CRP are the glideslope and localizer/Distance Measuring Equipment (DME) systems associated with the Instrument Landing System (ILS) approaches for Runways 13 and 36 and localizer approach to Runway 31. The glideslope provides vertical guidance to instrumentation in the aircraft indicating whether the aircraft is above, below, or on the established glidepath to the runway. The localizer provides horizontal guidance to instrumentation in the aircraft, indicating whether the aircraft is in alignment with the extended runway centerline. The DME provides the slant range to pilots from the NAVAID. Glideslopes are located at the approach end of the landing runway while localizers/DMEs are located at the departure end. The localizers are a Mark 1F and the DMEs are Thales 415. The glideslopes are capture effect glideslopes.

The glideslopes and localizers have established critical areas that need to be protected from aircraft, vehicle parking, and any other objects that could potentially block the signals emitted by the equipment. The critical areas are depicted on **Exhibit 1B**.

Runway 36 Localizer

Runway 13 Glideslope

COMMUNICATION, WEATHER, AND RADAR FACILITIES

This section describes the communication, weather, and radar facilities located at CRP and their ownership. The locations of these facilities are depicted in **Exhibit 1B**.

AUTOMATED SURFACE OBSERVING SYSTEM (ASOS)

CRP has an Automated Surface Observing System (ASOS) that is the primary source of wind direction, velocity, and altimeter data for weather observation purposes for the Airport. The ASOS is an automated sensor suite that reports weather conditions over a discrete radio frequency for pilots to receive real time weather information. The CRP ASOS information can be received by turning to the CRP ATIS frequency of 126.8 MHz or by calling 361-289-0191. The National Weather Service (NWS) owns and maintains the ASOS.

The Office of the Federal Coordinator for Meteorological Services and Supporting Research FCM-S4-2019, *Federal Standard for Siting Meteorological Sensors at Airports,* provides guidance for critical areas for ASOS facilities. Within 100 feet of the visibility sensor, no grass or vegetation should be higher than 10 inches. The wind sensor should be at least 15 feet higher than any obstruction within 500 feet and 10 feet higher than any obstruction between 500 and 1,000 feet.

SURFACE WEATHER SYSTEM (SWS)

A Surface Weather System (SWS) is a secondary weather system used to support aircraft operations. Ultrasonic sensors are used to measure wind velocity and direction as opposed to a cup and vane system that rotates around a point. The SWS is owned and maintained by the FAA.

According to the FAA Order JO 6560.20C, *Siting Criteria for Automated Weather Observing Systems*, the critical area for the SWS is the same as that for the ASOS, described previously.

REMOTE TRANSMITTER/RECEIVER (RTR)

Remote Transmitter/Receiver (RTR) towers are communication towers that can be used for ground-to-air communication. There are currently three RTR tower sites located at CRP. The towers are 40 feet tall and were established within the last 10 years. The RTR tower set closest to the ATCT is denoted as CRP and is used for ATCT transmittal frequencies. The second closest RTR tower to the ATCT is denoted as CRP-A and it contains ultra-high frequency (UHF) antennas for military communications. There are two Back Up Emergency Communication (BUEC) facilities co-located at this site that support Houston Center. The ATIS transmitter is also located at this site. The third tower is denoted as CRP-B, and it is used for ATCT receiver frequencies.

After speaking with FAA Tech Ops personnel, it was advised that a 500-foot protected area be used with the towers for planning purposes.

AIRPORT'S AIRPORT SURVEILLANCE RADAR (ASR-11)

The Airport's Airport Surveillance Radar (ASR) – 11 provides radar coverage for the ATCT and TRACON. It is located northwest of the ATCT. The ASR-11 is owned by the US Navy but is maintained by FAA Tech Ops.

DOPPLER RADAR

Doppler radars are used to determine the type of particles in the air (e.g., rain), the particles' intensity, and the direction in which the particles are moving. CRP has a Weather Surveillance Radar-1988 (WSR-88D) Doppler radar located on airport property. The WSR-88D is owned and maintained by the NWS.

After speaking with NWS personnel, the radar requires an unobstructed line-of-sight that increases by 1/3 of a degree outwards in all directions starting from the top of the radar, which is located 100 feet from the ground.

BUILDINGS/FACILITIES - AIRSIDE

The following section discusses the existing developments at CCIA that have airside access. **Exhibit 1D** identifies the airside access tenants.

ID Number	Building/Facility
1	Passenger Terminal
2	Atlantic Aviation (FBO Building and Hangar 1)
3	Atlantic Aviation Hangar 2
4	Atlantic Aviation Hangar 3
5	Berry Contracting Aviation Department
6	United States Coast Guard
7	Lavatory Cart Servicing Facility
8	Sterling Air FBO Terminal (Future – Facility Under development)
9	Sterling Air Hangar 1
10	Ocean Air Hangar
11	Sterling Air Hangar 2
12	Sterling Air Office
13	Sterling Air Hangar 3
14	Del Mar College Hangar
15	Driscoll Children's Hospital Critical Care Transport
16	FedEx Ground
17	Carr's Delivery Service
18	National Weather Service (NWS)
19	NWS Weather Balloon Release Facility
20	Rental Car Facility
21	Atlantic Aviation Fuel Farm
22	Sterling Aviation Fuel Farm
23	Airport Maintenance Shop
24	Airport Electrical Shop

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PASSENGER TERMINAL BUILDING

The Hayden W. Head terminal building opened on November 3, 2002. The Airport is currently undergoing a $17.9M Terminal Rehabilitation Project which will be complete in Summer 2024. The project includes renovations to all three public restrooms, a new nursing mother's room, and an outdoor covered patio which also includes a Service Animal Relief Area (SARA) with views to the airfield. The outdoor area is accessed from the concourse level between gates 1 and 3. Additionally, a $1.6M food and beverage program upgrade by Tailwind Concessions will be started in 2024.

The terminal is located in the northeast corner of the airport property situated between Runway 13-31 to the west and Runway 18-36 to the east, as depicted on **Exhibit 1D**. The total area of the two-level building is approximately 166,000 square feet, as summarized in **Table 1Q**. The following sections describe the terminal and associated concourse along with the various passenger processing functions.

Table 1Q | Passenger Terminal Area

Level	Terminal	Concourse	Total (sf)
Level 1 (Ticketing/Baggage Claim)	65,490	26,356	91,846
Level 2 (Concourse/Gates)	50,988	23,111	74,099
Total Gross (sf)	**116,478**	**49,467**	**165,945**

Source: Alliiance, May 2024

The terminal building provides approximately 116,480 square feet on two levels, as shown in **Exhibit 1E:**

- **Level 1**: Airline and Airport operations, Passenger check-in and baggage claim, Federal Inspection Services (FIS), Cargo, Rental Car agencies, Transportation Security Administration (TSA) offices, and Mechanical/Electrical rooms
- **Level 2**: Airport Administration, Passenger security screening and TSA offices, Concessions, Airline gates, and an Airline lounge

Level 1 consists of all the areas associated with both the public and non-public airline and airport operational support spaces. The west side of the terminal includes the high-volume passenger check-in lobby and public seating areas, airline offices (ATO), and individual baggage makeup rooms by airline. The western lower volume end of the ticket lobby is flanked by the airport maintenance offices, restrooms, mechanical and electrical rooms, and a large storage building containing leasable tenant "cages", cargo offices, and loading dock. TSA checked baggage screening occurs in two separate locations, one within Southwest Airlines ticket counter queue area and the other behind American and United Airlines ticket counters.

The central high-volume public portion of the terminal includes the vertical circulation core to the Level 2 concourse gate holdroom areas, exhibit space, restrooms, and the public safety office. Non-public areas include TSA offices, Airport Command and Dispatch and Emergency Operations Center along with multiple mechanical and electrical rooms. The FIS exit corridor also enters the general public circulation space from this area of the terminal.

The east end of the terminal includes the high-volume arrivals area including eight rental car counters and associated offices. Tucked underneath the airport administration offices above, the baggage claim area provides space for two claim devices and public seating. A vehicle service road (VSR) loop provides access to an exterior covered inbound baggage laydown area adjacent to the airport HVAC cooling towers.

Level 2 of the terminal building consists of airport administration offices both on the western and eastern ends of the building overlooking the ticketing and arrivals lobbies below. The central core includes the TSA passenger security screening checkpoint (SSCP) and associated offices, restrooms, public seating, a meeter & greeter area, and pre-security concessions. **Table 1R** details the space allocated to each functional area.

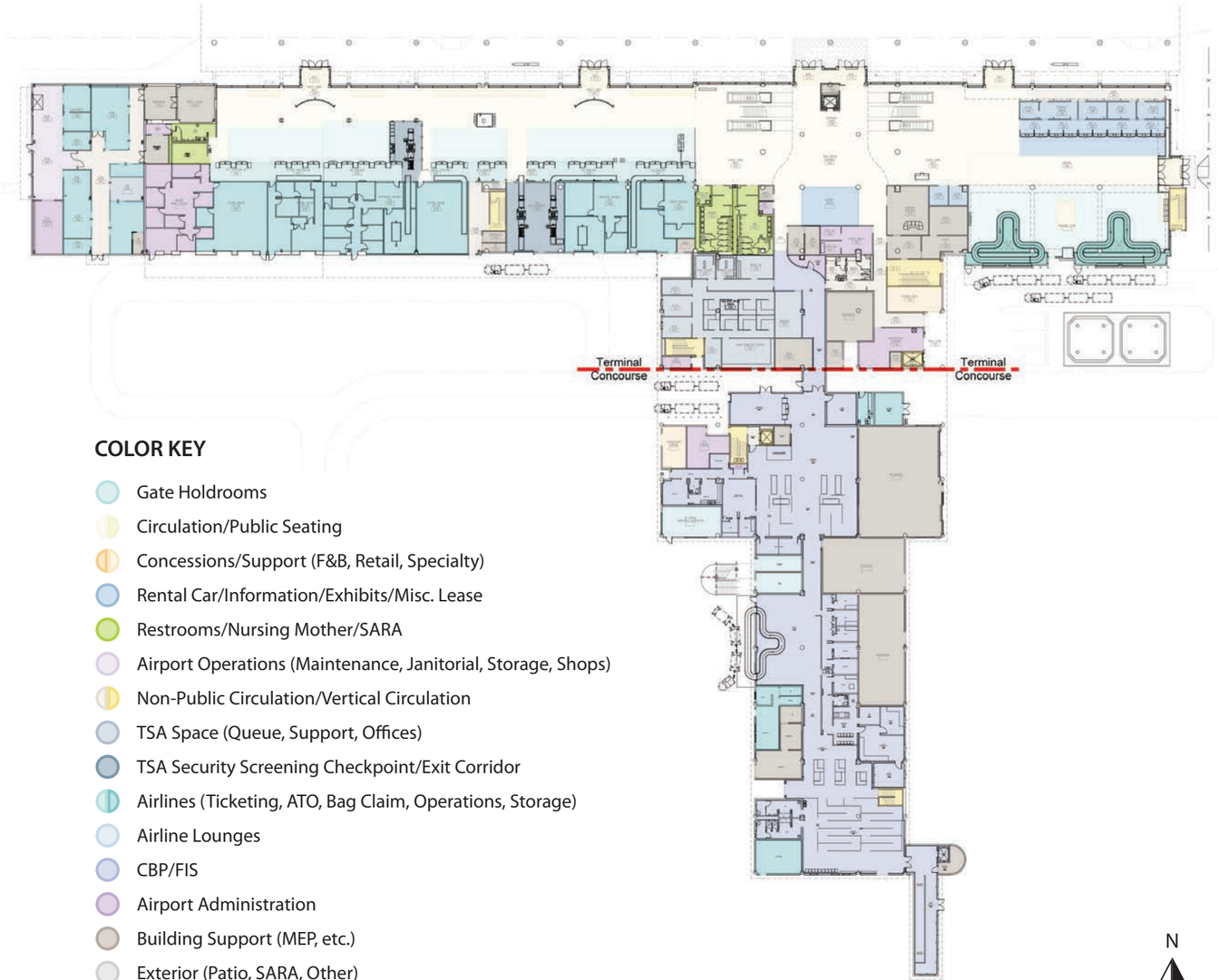
Table 1R | Terminal Area by Level

Public Area in Square feet	**Level 1**	**Level 2**	**Total (sf)**
Circulation[1]	18,415	7,257	25,672
Ticket Lobby Queue	4,032	0	4,032
TSA Passenger Security Screening & Offices	3,641	6,853	10,494
Baggage Claim (retrieval, device, meeter & greeter)	3,622	0	3,622
Restrooms, SARA, Nursing Mothers (pre/post security)	1,772	1,028	2,800
Other (information, displays)2	826	559	1,385
Public Area Subtotal	***32,308***	***15,697***	***48,005***
Airline Area in Square feet	**Level 1**	**Level 2**	**Total (sf)**
Ticketing (counter, ATO)	8,775	0	8,775
TSA Outbound Baggage Screening	1,633	0	1,633
Outbound Baggage Makeup	1,517	0	1,517
Inbound Baggage Claim Laydown[3]	630	0	630
Landside Operations/Storage	2,366	0	2,366
Airline Area Subtotal	***14,921***	***-***	***14,291***
Concessions Area in Square feet	**Level 1**	**Level 2**	**Total (sf)**
Concessions F&B/Retail (BOH, Storage)	406	2,034	2,440
Concessions Rental Car[4]	2,270	0	2,270
Concessions Area Subtotal	***2,676***	***2,034***	***4,710***
US Customs & Border Protection Area in Square feet	**Level 1**	**Level 2**	**Total (sf)**
US Customs & Border Protection/FIS[5] Subtotal	***838***	***0***	***838***
Non-Public Area in Square feet	**Level 1**	**Level 2**	**Total (sf)**
Non-Public Non-Airline Tenant Space[6]	477	0	477
Non-Public Airport Administration	0	11,964	11,964
Non-Public Restrooms/Circulation	4,048	1,192	5,240
Non-Public Airport Operations[7]	2,898	54	2,952
Non-Public Building Systems (MEP, Communications/IT, Structure)[8]	7,324	20,047	27,371
Non-Public Area Subtotal	***14,747***	***33,257***	***48,004***
Total Terminal Area	***65,490***	***50,988***	***116,478***

Note: Totals based on areas measured to the inside edge of exterior walls and center of interior walls, rounded to the nearest square foot.
[1] Includes public seating, ticketing, bag claim, and general circulation
[2] Includes exhibit, displays, and leasable spaces
[3] Laydown belts are enclosed, staging and circulation within exterior covered space
[4] Includes rental car counters, queues, and associated offices
[5] Includes the sterile circulation corridor
[6] Includes Airport Police/Public Safety office and vacant space
[7] Incudes maintenance, janitorial, storage, and shops
[8] Includes cargo loading dock and leasable storage spaces

Source: Alliiance, May 2024

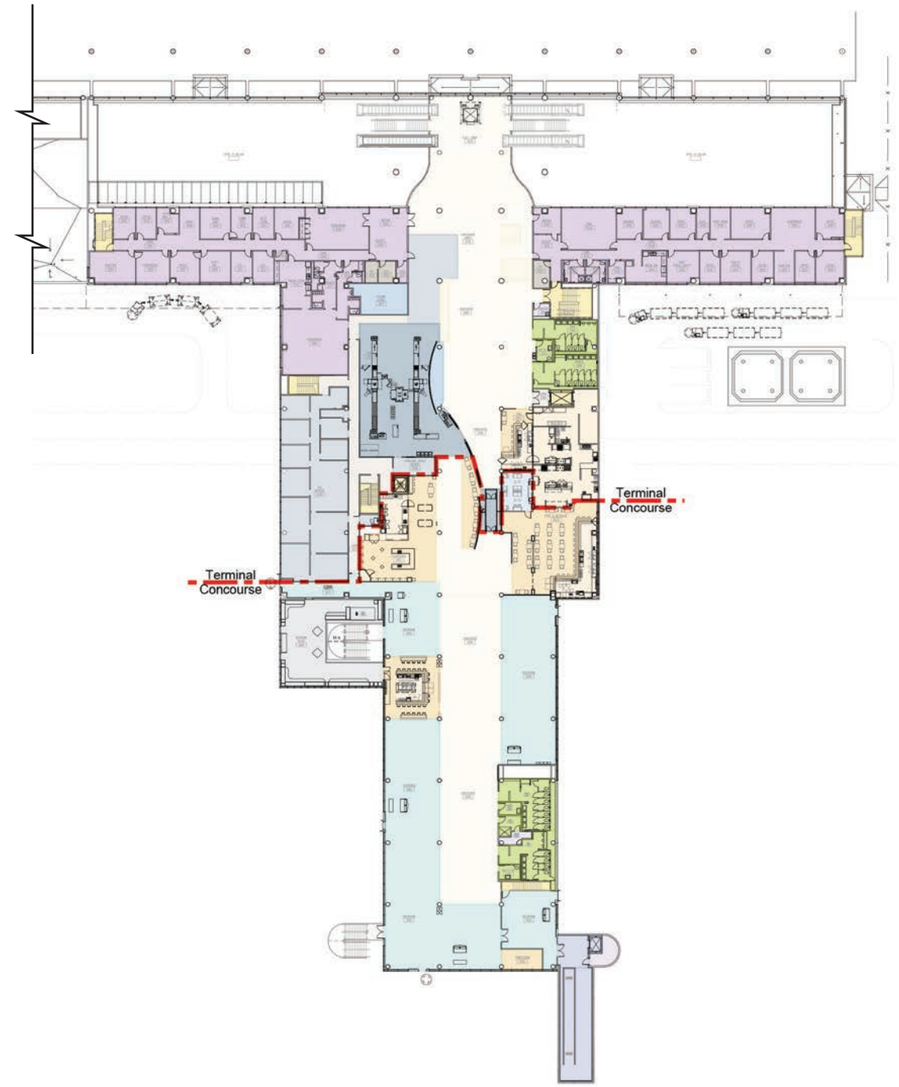
LEVEL 1



COLOR KEY

- Gate Holdrooms
- Circulation/Public Seating
- Concessions/Support (F&B, Retail, Specialty)
- Rental Car/Information/Exhibits/Misc. Lease
- Restrooms/Nursing Mother/SARA
- Airport Operations (Maintenance, Janitorial, Storage, Shops)
- Non-Public Circulation/Vertical Circulation
- TSA Space (Queue, Support, Offices)
- TSA Security Screening Checkpoint/Exit Corridor
- Airlines (Ticketing, ATO, Bag Claim, Operations, Storage)
- Airline Lounges
- CBP/FIS
- Airport Administration
- Building Support (MEP, etc.)
- Exterior (Patio, SARA, Other)

LEVEL 2



N

NTS

Source: ALLIANCE, May 2024

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Ticketing functions are located on the west side of the terminal lobby providing both full-service agent positions and self-service devices (SSD) to support the check-in process for passengers and their baggage. There are a total of 42 possible agent check-in positions, 22 of which are currently unassigned and sitting vacant, and eight SSDs for an overall total of 50 possible check-in positions. However, not all airline positions are currently staffed. United has computer positions at five of their six total positions, American has four, and Southwest uses six. Depending on each airline's lease agreements, ticket queues extend out between 18 and 22 feet from the face of the existing counters. The total number of positions by airline is tabulated in **Table 1S**.

Ticket Lobby

Table 1S | Ticketing Check-in Summary by Airline

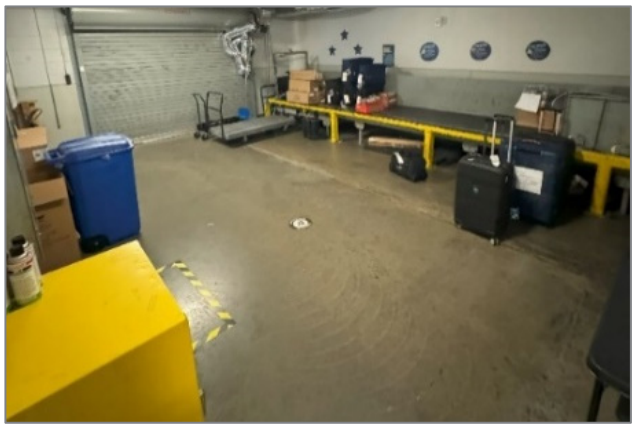
Airline	Agent	SSD	Total
United (UA)	6	4[1]	10
American (AA)	6	2[2]	8
Southwest (WN)	8	2[3]	10
Vacant	22	-	22
Total	**42**	**8**	**50**

Note: Totals for "Agent" are all possible agent counter positions, not necessarily a staffed/computer position.
[1] United SSDs located in the queue area
[2] American SSDs are located in line with the ticket counter
[3] Southwest SSDs are located in line with the ticket counter

Source: Alliiance, May 2024

TSA Checked Baggage Screening and Outbound Baggage Makeup

TSA checked baggage screening as previously mentioned is currently located in two separate areas of the terminal. American and United's baggage is currently screened behind the counters utilizing two Leidos Reveal CT-80XL EDS devices, one for each airline. Baggage for American is conveyed behind the ticket counter to the screening room and into the device. Upon checking in, passengers on United Airlines must carry their baggage from the check-in counter and drop them onto a conveyor located west of American's ticket counter. The conveyor then feeds baggage through the wall and into the second EDS device. Cleared baggage is then



Typical Baggage Makeup Room

conveyed from the separate devices to each makeup area, American to its adjacent baggage makeup room to the east, and United out to a covered cart staging area. Due to the location of the EDS screening room to United's baggage makeup area, the airline stages their baggage carts outside next to the EDS outfeed conveyor rollup door. Southwest passengers must take their checked baggage to a single Leidos CT-80XL EDS device located in the queue area adjacent to the Airlines ticketing area. Cleared baggage is then transferred from the EDS device to the takeback conveyor belt which feeds the airline's baggage makeup room. Due to the size of the makeup room Southwest is only able to stage a single cart at a time and typically has one to two additional carts parked outside.

TSA Passenger Security Screening

The TSA SSCP is located in the central core of the terminal on Level 2. The area currently consists of two screening lanes utilizing two Smiths CT X-rays, a single Leidos Advanced Imaging Technology (AIT) body scanner, and a single walkthrough metal detector (WTMD). The queue provides access for both TSA PreCheck® and Standard passengers leading to three ticket document checkers (TDC). During heavier periods of activity, TSA operates one lane for dedicated PreCheck passengers, otherwise both are utilized in a blended environment where PreCheck passengers are provided with a green card to hand to the TSOs.

Baggage Claim

The baggage claim area is located at the eastern end of the terminal across from the rental car counters. The space contains two flat plate claim devices providing approximately 148 linear feet of total public claim frontage. Located between each of the claim devices is a rollup door for oversize baggage leading from the non-public laydown area.

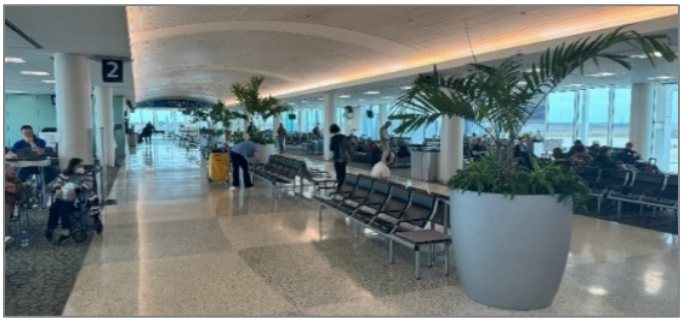
Baggage Claim, Rental Car Counters, and Administration Offices

Inbound baggage delivery is located directly behind the claim wall where airline ramp personnel place baggage directly on the claim belt which re-circulates through the wall until all baggage has been claimed. Late arriving baggage is stored in each of the airline's ATO offices.

Concourse

The double-loaded linear airside concourse consists of five gates extending south of the terminal headhouse. Each gate is served by a passenger boarding bridge (PBB). The airside or post-security area of Level 2 consists of concessions just outside of the SSCP area, one on each side of the concourse circulation. Further down the concourse between Gate 1 and Gate 3 is an open bar concessions area with soft seating

zones. As previously mentioned, a new concessions plan is underway which will renovate and expand the current program. This includes adding an Amazon Go store located near Gate 6. One set of restrooms recently renovated is located across from Gate 3 and Gate 5.



Concourse & Gate Areas

Level 1 of the concourse includes the FIS international processing facility served via Gate 6. Passengers deplane through the sterile corridor and down the escalator to primary processing, onto baggage reclaim, and then through secondary processing and onto the exit corridor leading to the central area of the landside terminal. Currently no commercial activity is processed in the facility unless the airport receives international flight diversions. At this time only general aviation and private flights are processed through the facility. Additional areas include multiple large mechanical and electrical rooms, airline operations offices, and storge rooms for CCIA, the airlines, and concessions. The concourse space allocation by level is tabulated in **Table 1T**.

Table 1T | Concourse Area by Level

Public Space Area	Level 1	Level 2	Total (sf)
Circulation[1]	0	5,891	5,891
Passenger Gate holdrooms	0	8,493	8,493
Restrooms, SARA, Nursing Mothers (pre/post security)	0	1,280	1,280
Other (Frequent Flyer Club)	0	301	301
Public Space Subtotal (sf)	***0***	***15,965***	***15,965***
Airline Space Area	**Level 1**	**Level 2**	**Total (sf)**
Airside Operations/Storage	1,442	0	1,442
Other Offices/Support Space	1,042	0	1,042
Airline Space Subtotal (sf)	***2,484***	***0***	***2,484***
Concessions Space Area	**Level 1**	**Level 2**	**Total (sf)**
F&B/Retail (BOH, Storage)	297	4,718	5,015
Concessions Space Subtotal (sf)	***297***	***4,718***	***5,015***
US Customs & Border Protection/FIS[2]Space Area	**Level 1**	**Level 2**	**Total (sf)**
US Customs & Border Protection Subtotal (sf)	***15,573***	***241***	***15,814***
Non-Public Space Area	**Level 1**	**Level 2**	**Total (sf)**
Restrooms/Circulation	452	0	452
Airport Operations[3]	396	210	606
Building Systems (MEP, Communications/IT, Structure)	7,154	1,977	9,131
Exterior (Outdoor Patio/SARA)[4]	0	1,572	1,572
Non-Public Space Subtotal (sf)	***8,002***	***2,187***	***10,189***
Total Gross (sf)	**26,356**	**23,111**	**49,467**

Note: Totals based on areas measured to the inside edge of exterior walls and center of interior walls, rounded to the nearest square foot.

[1] Includes public seating, concourse, and general circulation
[2] Includes sterile corridor, primary and secondary inspection, baggage reclaim area, and CBP offices
[3] Incudes maintenance, janitorial, storage, and shops
[4] Area is exterior and excluded from totals

Source: Alliance, May 2024

Gate Holdrooms

The airport currently operates Gate 1 and Gate 6 on a Common Use basis. The remaining three gates are operated on a Preferential Use lease agreement with each assigned to the three airlines serving the airport. Each gate includes traditional beam style seating with additional seating located within the concourse circulation corridor running the length of the concourse. A summary of airline gate assignments, aircraft parking capability, and PBB types are provided in **Table 1U**.

Table 1U | Aircraft Parking and Gate Summary

Gate	1	2	3			5		6
Lead-in Line	1	2	3	3A	3B	5A	5B	6
Assignment	CCIA[1]	Southwest	United			American		CCIA
PBB[2] Manuf.	ThyssenKrupp	ThyssenKrupp	ThyssenKrupp			ThyssenKrupp		ThyssenKrupp
PBB Model No.	TB 39/19.0-3	TB 41/19.5-3	TB 45/21.0-3			TB 45/21.0-3		TB 43/20.5-3
ADG[3]	III	III	IV	III	III	III	III	III
Fleet Mix	**1**	**2**	**3**	**3A**	**3B**	**5A**	**5B**	**6**
B767-300/400			✓					
B757-300W			✓					
B757-200W			✓					
B737-3/5/7/8/9W	✓	✓	✓				✓	✓
A319	✓	✓	✓				✓	✓
A320-200	✓	✓	✓				✓	✓
A321-NEO	✓	✓	✓				✓	✓
E195	✓			✓	✓	✓	✓	✓
E190	✓	✓		✓	✓	✓	✓	✓
E175W	✓	✓		✓	✓	✓	✓	✓
E175	✓	✓		✓	✓	✓	✓	✓
E170	✓	✓		✓	✓	✓	✓	✓
ERJ-135/145	✓	✓		✓	✓	✓	✓	✓
CRJ-900	✓	✓		✓	✓	✓	✓	✓
CRJ-700	✓	✓		✓	✓	✓	✓	✓
CRJ-200	✓	✓		✓	✓	✓	✓	✓

Notes:
[1] CCIA = Corpus Christi International Airport
[2] PBB = Passenger Boarding Bridge
[3] ADG = Aircraft Design Group

Source: Alliiance, May 2024 & CCIA PBB Record Drawings 12/2022

Aircraft Apron Parking Area

The terminal apron located within the obstacle free area (OFA) consists of approximately 15 acres for aircraft parking, ground service equipment (GSE) storage and aircraft and GSE maneuvering. The apron is sized to accommodate aircraft ranging from medium regional aircraft (CRJ200, ERJ135/145) up to widebody aircraft (B767-400) with all gates capable of serving large narrowbody aircraft (B737-900, A321 NEO). The five PBBs serve eight parking positions. Gate 3 contains three possible lead-in lines 3, 3A and 3B with the ability to swing the PBB to each parking position. Positions 3A and 3B allow for simultaneous

parking capabilities. Gate 5 includes lead-in lines 5A and 5B with the ability to also swing the PBB to each of the parking positions. An FAA Aircraft Design Group (ADG) IV taxilane runs around the apron parking area and accessed via Taxiway "L" to the east and Taxiways "H" and "F" to the west. **Exhibit 1F** depicts the existing aircraft apron parking plan.

Exhibit 1F: Aircraft Apron Parking Plan

ATLANTIC AVIATION

Atlantic Aviation is a national Fixed Based Operator (FBO) company with over 100 locations at the time of this report. Atlantic Aviation provides fueling, hangar storage, executive terminal space, gourmet catering, lavatory service, and Ground Support Equipment (GSE) for itinerant and based aircraft.

Atlantic Aviation

At CRP, Atlantic Aviation has 38,800 square feet of hangar space between three co-located hangars. Hangars 1 and 2 are 14,400 square feet each and Hangar 3 is 11,000 square feet. The hangars currently operate over capacity, meaning the total square footage of aircraft leasing space within the hangar is greater than the total hangar space. Based on an interview with the FBO manager in January 2024, the hangar space currently operates at 132% of the existing hangar capacity. Operating above capacity is possible because the aircraft stored in the hangar are highly utilized and frequently gone. The hangar doors are 20 feet and one inch in height, except at the apex where they are 29 feet. The hangars were originally developed in 1961.

Atlantic operates from approximately a 7,000 square foot terminal building that provides approximately 1,750 square foot of public space and 5,250 square foot of office space for FBO operations as well as areas that are subleased to various sub-tenants including a flight school. The terminal was recently refurbished in 2018.

Atlantic Aviation leases 116,629 square feet of ramp immediately in front of their facilities. The leased ramp does not have any designated tie-down spaces and is utilized to park a wide array of business jets and other aircraft. Any large aircraft that utilize the apron are typically parked in front of Hangar 3.

Atlantic Aviation operates a fuel farm that is owned by the Airport and leased to Atlantic. Atlantic Aviation's fueling operations are discussed in the Fuel Farm section of this Chapter.

Landside access to Atlantic is from Pinson Drive. Atlantic Aviation has 30 parking spaces and two ADA parking spaces adjacent to the terminal building. There are 19 additional parking spaces for customers and employees behind the hangars along Pinson Drive.

During an interview with the FBO manager, it was identified that the facility does not have any existing back-up generators for electrical power. A potential need for electric vehicle charging stations was also identified.

STERLING AIR

In January 2024, the City of Corpus Christi City Council approved a lease with Sterling Aviation to begin operations as an FBO.

Sterling Air Hangar 2

Sterling Air currently provides fueling services, air ambulance services, aircraft management, and aircraft charter services. Sterling Air has 54,080 square feet of hangar space between four hangars, and an office building that is roughly 2,500 square feet. Hangar 1 is 15,000 square feet. Hangar 2 is 30,000 square feet. Hangar 3 is 4,200 square feet. Sterling is also the primary lessee for the Ocean Air Hangar which is 4,880 square feet. The hangars are currently at 100% capacity. Sterling Air leases 87,292 square feet of ramp space located directly in front of the leased hangars and fuel farm.

Sterling Air leases a small terminal building facility that they are planning to renovate to use as their FBO terminal.

Sterling Air operates a fuel farm that is leased from the Airport. Sterling Air's fueling operations are discussed in the Fuel Farm section of this inventory chapter.

Landside access to Sterling Air is from Hangar Lane. There are 16 painted parking spaces in front of the office building. Sterling also leases an additional 24,025 sq. ft. of vehicle parking area that is a combination of marked and unmarked parking spaces adjacent to the southern hangar facilities.

UNITED STATES COAST GUARD

The United States Coast Guard (USCG) Air Station Corpus Christi is located in the northwest portion of the airfield. The USCG hangar/office facility is roughly 90,500 square feet. Approximately 50,000 of the facility is hangar space where three C-130s and 3 MH-65s are stored.

U.S. Coast Guard

Landside access to the USCG Air Station Corpus Christi is from Pinson Drive and requires passing through a guard house located at the entrance to the parking lot. There are 196 painted parking spaces and seven ADA parking spaces in front of the building and 80 painted parking spaces located in the auxiliary/overflow lot.

DRISCOLL CHILDREN'S HOSPITAL

The Driscoll Children's Hospital Critical Care Transport Team is located on the northern portion of the airfield at CRP. The facility is roughly 9,000 square feet. Driscoll operates a Bell 407 in and out of the facility. There is also a garage to station ambulance and EMS response vehicles.

Driscoll Children's Hospital

Landside access to the Driscoll Children's Hospital Critical Care Transport Team location is via International Drive. There are 21 painted parking spaces and 1 ADA parking space.

DEL MAR COLLEGE – AVIATION TECHNOLOGY

Del Mar College is a public community college in Corpus Christi that offers a Part 147 Airframe Applied Technology degree. The college leases a hangar from the Airport that is roughly 15,000 square feet with an additional 2,500 square feet from a lean-to add on. The aircraft housed in this hangar operate only in the immediate vicinity of the hangar. None of the aircraft taxi beyond the non-movement area.


Del Mar College

Landside access to the Del Mar College hangar is via Glasson Drive. There are 29 painted parking spaces and 2 ADA parking spaces. Del Mar has an off-site classroom/administration facility that they are interested in relocating to CRP.

BUILDINGS/FACILITIES – LANDSIDE

The following section discusses the facilities at CRP that do not have access to the AOA. **Exhibit 1D** depicts the locations of each facility.

NATIONAL WEATHER SERVICE

The National Weather Service (NWS) has offices in a building located northwest of the terminal on Pinson Drive. The facility is approximately 6,200 square feet. The NWS also maintains a small facility where weather balloons are filled and released daily.

Weather Balloon Inflation Facility

RENTAL CAR QUICK TURNAROUND FACILITY

The Rental Car Quick Turnaround (QTA) Facility is located northwest of the terminal on Pinson Drive. The building is approximately 13,700 square feet and is used for washing, cleaning, and serving returned rental cars. The paved lot in front of the building is approximately 100,000 square feet and is used for vehicle queuing.

Rental Car QTA

FEDEX GROUND FACILITY

The FedEx Ground facility is located northwest of the terminal on Pinson Drive. The building is approximately 70,000 square feet. This facility is exclusively a FedEx Ground facility and does not receive any air cargo shipments.

FedEx Ground

CARR'S DELIVERY SERVICE

The Carr's Delivery Service facility is located northwest of the terminal on Pinson Drive. The building is approximately 20,000 square feet. This facility serves as a ground transportation distribution center.

TERMINAL CURB AREA

This section describes the utilization of the traffic lanes in front of the CRP terminal building. **Exhibit 1G** identifies the lanes and designated curb locations.

In general, the terminal curb is segmented into two general areas:

- **Commercial** – The commercial curb is used by commercial vehicles (e.g. buses, taxis, etc.) to pick-up and drop-off passengers and for parking airport vehicles.
- **Passenger Pick-Up and Drop-Off** – This curb is used by the public to pick-up and drop-off passengers.

Signage exists along International Drive directing individuals to both curbs.

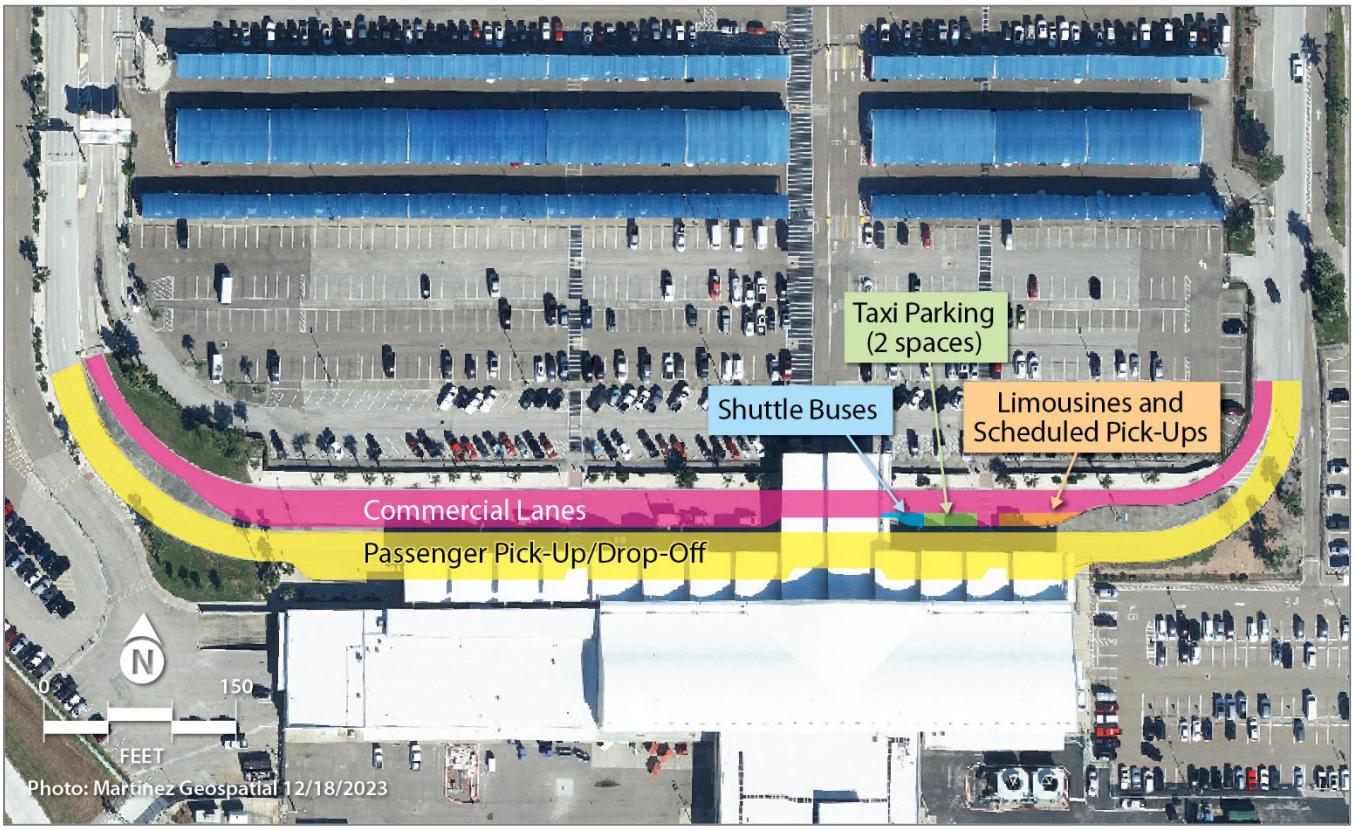


Exhibit 1G: Terminal Curb Front

Commercial Lanes

In order to access the commercial lanes, a vehicle must pass through an access gate located off of International Drive. The commercial lane has a single lane at the entry and exit and transitions to two traffic lanes along the frontage of the terminal building. The lane closest to the terminal building is widened to allow vehicles to park adjacent to the curb while allowing two vehicles to pass on the roadway. The entire length of the curb is approximately 610 ft. Along the curb, there are three areas designated for different classifications of commercial vehicles. The designates and approximate curb lengths are:

- Shuttle Buses – 33 ft.
- Taxi (2 spaces) – 41.5 ft.
- Limousines and Scheduled Pick-Ups – 67 ft.

Signage is in place identifying the location of each of the designated curb locations. The remainder of the curb is used for airport vehicle parking and on-demand commercial vehicle operations. No congestion issues were noted related to the commercial lanes.

Passenger Lanes

The passenger drop-off and pick-up lanes are the closest lanes to the terminal. There are two traffic lanes that continue the entire length of the terminal curb before merging with the commercial lanes as they exit the terminal area. The total length of the passenger pick-up/drop-off curb is approximately 520 feet. The entire length of the curb is used to pick-up/drop-off passengers. There are no designated locations just for passenger pick-up or drop-off operations. No congestion issues were noted related to the passenger drop-off and pick-up lanes. However, extensive observation of this area was not completed.

Crosswalks

Three crosswalks exist that extend from the terminal building curb front to the Terminal/Short Term parking lot. The center crosswalk is covered.

VEHICLE PARKING

The following section details the parking lots at CRP, their utilization rates, and their purpose.

Parking Lot Utilization

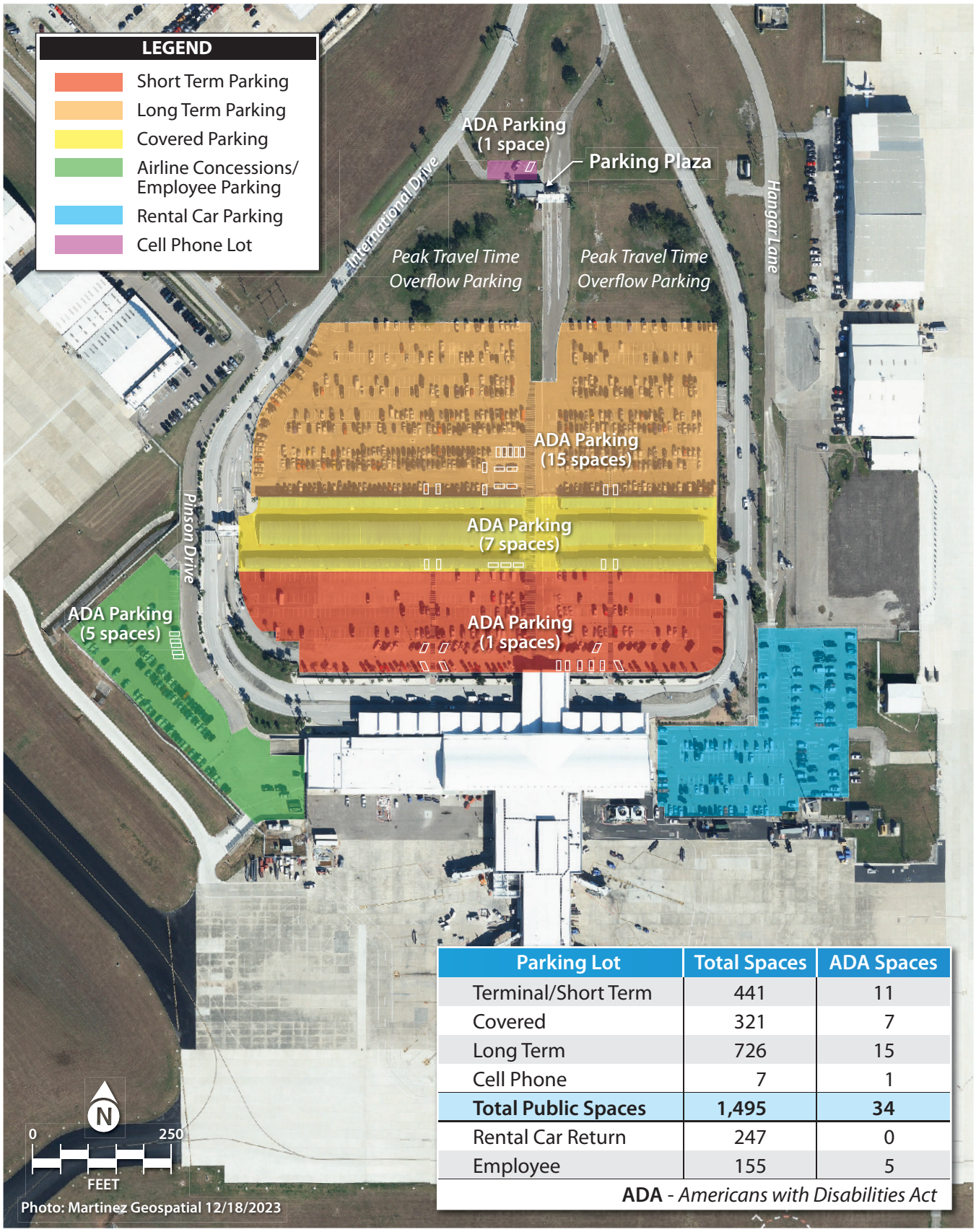
There are six parking lots located in the terminal area: Terminal/Short Term, Covered, Long Term, Rental Car Return, Cell Phone, and Airline/Concession Employee parking. The locations and capacities of these lots as well as the location of Americans with Disabilities Act (ADA) spaces and Transportation Network Company (TNC) spaces are shown on **Exhibit 1H**.

The Terminal/Short Term, Covered, and Long Term parking lots are segmented alphanumerically. Each lot has an initial alpha designation that corresponds to the lot's name:

- S – Terminal/Short Term
- C – Covered
- L – Long Term

The lots are then segmented into five sub-sections using numbers (1-5) from west to east. Therefore, the furthest west parking spaces in the Terminal/Short Term parking lot will be identified as Section S1 whereas the furthest east parking spaces be identified as Section S5.

A parking access control system is in place that requires individuals utilizing the lots to obtain a parking access ticket to gain access to the lot Terminal/Short Term, Covered, and Long Term lots. The same ticket is presented when the individual exits the lot to determine the duration of the vehicle's time in the parking lot and the commensurate parking fee.



Parking Lot	Total Spaces	ADA Spaces
Terminal/Short Term	441	11
Covered	321	7
Long Term	726	15
Cell Phone	7	1
Total Public Spaces	**1,495**	**34**
Rental Car Return	247	0
Employee	155	5

ADA - *Americans with Disabilities Act*

Signage exists along International Drive directing passengers to all parking lots with the exception of the employee lot. The majority of the signage is overhead, but some signage is mounted along either side of the road. Surface painted signage exists on International Drive directing vehicles to the primary parking lots (Terminal/Short Term, Covered, and Long Term) and the passenger terminal building.

Terminal/Short Term Parking

The Terminal/Short Term Parking lot is the closest lot to the terminal and costs the most per day ($12). Parking spaces within the lot are not covered. There are three TNC pick-up spaces in this parking lot, adjacent to the covered crosswalk from the terminal building. The utilization of this lot is typically not over 70% on a normal day and is around 40% on average. The naming conventions for the sections in this lot are S1 through S5.

Covered Parking

This parking lot is the next furthest lot from the terminal but costs the same as the Terminal/Short Term parking lot ($12 per day). Parking spaces in this lot are covered. The utilization rate of this lot is approximately 90-95% daily. The naming conventions for the sections in this lot are C1 through C5.

Terminal/Short Term Parking

Covered Parking

Long Term Parking

This parking lot is the furthest paved parking lot from the terminal and costs the least ($9 per day). Parking spaces in this lot are not covered. The utilization for this parking lot is typically 85% on a normal day. During peak travel days, when the paved parking lots fill to capacity, the grass areas north of the Long Term parking lot are used for overflow parking.

Cell Phone Lot

A small cell phone parking lot is located north of the parking administration building adjacent to International Drive. This lot is used by individuals waiting to pick up arriving passengers.

Rental Car Return

Rental cars are returned to the parking lot directly east of the terminal building. Each rental car company operating at the airport has their own section for cars to be dropped off. Passengers take the keys for cars that are dropped off to the rental car counters inside the terminal. A guard booth is present at the entry to the lot.

Airline/Concession Employee Parking

This parking lot is not open to the public. It is utilized by the employees of the airlines and concessionaires. This lot is directly west of the terminal building. The lot is access controlled by a card reader.

TRAFFIC FLOW

The traffic flow into and out of the airport is crucial for efficient access to the passenger terminal and supporting facilities. **Exhibit 1J** shows the flow of traffic on all of the roads surrounding the airport once a vehicle has exited State Highway 44 to access the airport.

International Drive is a one-way road that the Corpus Christi International Airport Hayden W. Head Terminal is situated on. Traffic flows south on International Drive around the primary vehicle parking lots, in front of the terminal, and then north toward State Highway 44. There are a couple of turnaround points in the event a vehicle needs to recircle in front of the terminal or access the parking lots again. All other roads surrounding the airport are bidirectional.

AIRCRAFT RESCUE AND FIRE FIGHTING

CRP maintains Aircraft Rescue and Fire Fighting (ARFF) capabilities as required by Title 14 Code of Federal Regulations (CFR) Part 139. Based on the current air carrier fleet mix at CRP, the airport is required to maintain ARFF Index B capabilities. An airport's ARFF index is determined by the length of the largest air carrier aircraft averaging five or more daily departures at the airport. As the length of aircraft increases the amount of ARFF equipment increases as well. ARFF index classifications range from Index A (lowest classification requiring the least amount of ARFF equipment/agents) to Index E (highest classification requiring the highest amount of ARFF equipment/agents). The ARFF station, staffing, equipment, and operations at CRP are discussed in this section.

ARFF Station

This section discusses the details of the ARFF station, including location, design, and staffing. **Exhibit 1K** shows the location of the ARFF station and the distance from the station to the mid-point of each runway.


LEGEND
One-Way Traffic Flow
Two-Way Traffic Flow
Glasson Dr
Glasson Dr
Hangar Ln
International Dr
International Dr
Pinson Dr
Pinson Dr
N
0
300
FEET
Photo: Martinez Geospatial 12/18/2023

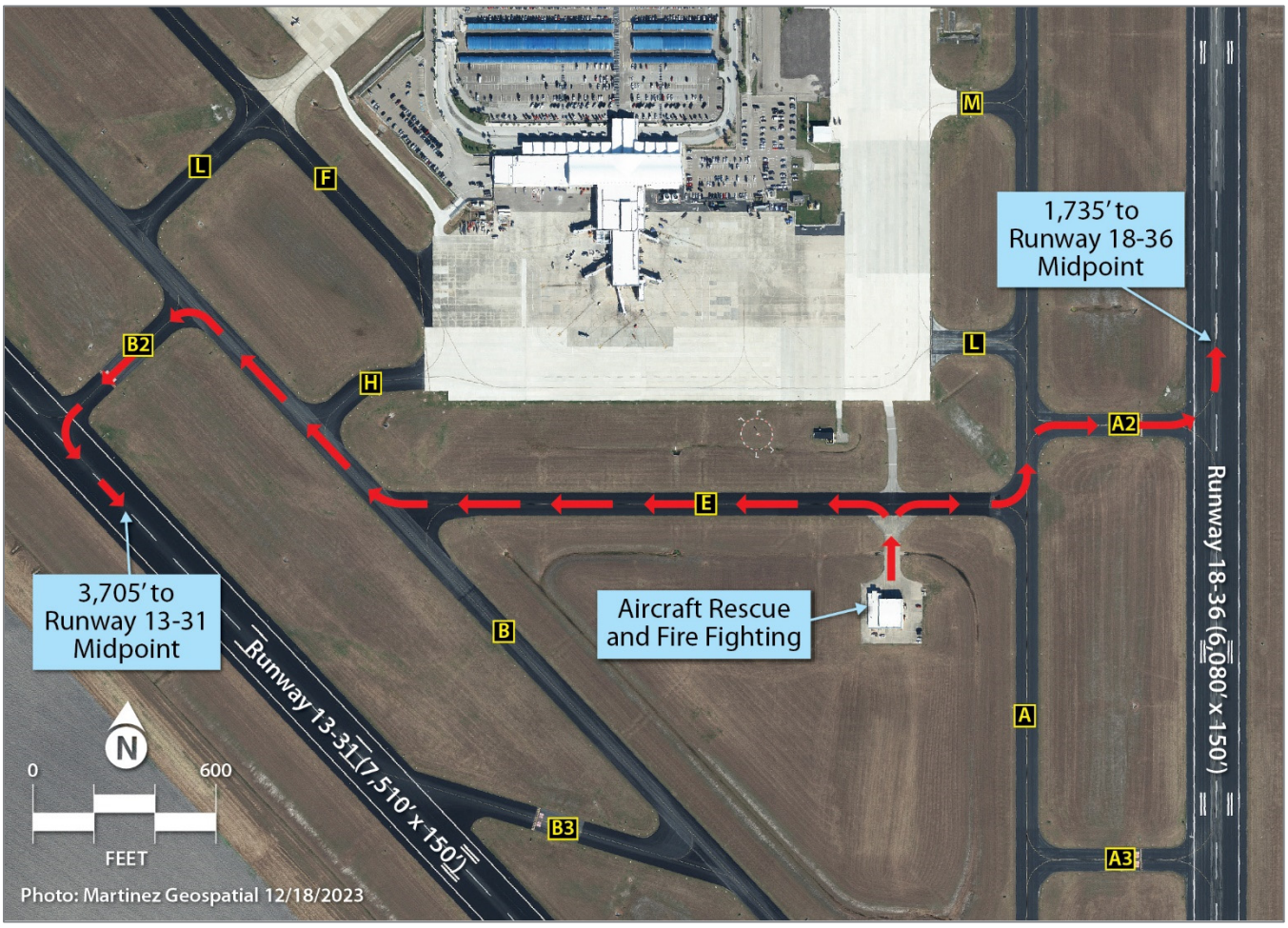


Exhibit 1K: ARFF Station and Distance to Runway Midpoints

Station Location and Design

The current ARFF station was opened in 1995 and is located southeast of the terminal. Part 139 mandates that the first responding ARFF vehicle must be able to reach the farthest runway serving air carrier operations within three minutes of an alarm, and all other required vehicles must reach the same point within four minutes. The current location of the ARFF station provides sufficient airfield access and enables ARFF units to meet response time requirements prescribed under 14 CFR Part 139. The station has six bays that are not pull-through. Three bays face the north, and three bays face the south. There are a limited number of in-ground water hydrants available throughout the airfield. The hydrants are located at the ARFF station and then at the Airport Traffic Control Tower. The station has not been renovated since its construction, aside from a door overhaul more than ten years ago. Discussions with staff indicated the following deficiencies:

- Lack of a diesel recovery system,
- Voids under the slabs in front of bay doors
- Living quarters are not properly separated,

- An upgraded sewer system is needed,
- Restrooms are outdated, and
- Kitchen is outdated.

ARFF personnel must cross Taxiway E to access the ARFF station.

Station Staffing

The minimum staffing for the ARFF station is five personnel on any given shift. Two are strictly ARFF personnel, two are strictly Law Enforcement Officers (LEOs), and one supervisor for every shift. Each shift is normally 24 hours long.

ARFF Operations and Apparatuses

Table 1V provides an inventory of the current ARFF fleet used to meet Index B requirements. CRP maintains a fleet of three vehicles to support ARFF index requirements. The minimum number of vehicles required under Part 139 for Index B is one or two. The additional vehicles are used to accommodate maintenance requirements and to maintain ARFF index if a vehicle goes out of service unexpectedly. The ARFF vehicles are supplied with water by the station's house water system and Aqueous Film Forming Foam (AFFF) drums which are housed at the station. The typical response to an aircraft incident includes two ARFF vehicles and the command vehicle.

Table 1V | CRP ARFF Vehicle Inventory

Make & Model	Year	Condition	Water (gal)	AFFF (gal)	Dry Chemical (gal)	Portable Extinguishers
Oshkosh Striker 1500	2021	Excellent	1500	200	500	3
Oshkosh Striker 1500	2021	Excellent	1500	200	500	3
Ford F-450	2008	Good	97	3	500	N/A

Source: CRP Airport Certification Manual

MAINTENANCE, ELECTRICAL, AND FUELING FACILITIES

This section examines the facilities on the northern side of the AOA which support airport maintenance and airfield electrical operations. The two facilities in this area include the airport maintenance building and the airfield electrical building. Each of these facilities will be further discussed in this section. **Exhibit 1D** depicts the locations of these facilities.

AIRPORT MAINTENANCE BUILDING

The airport maintenance building is a single-story facility that is roughly 11,700 square feet. It was built in 2011 and is comprised of office space, a breakroom, storage rooms for airfield equipment, and garage/workshop space. The facility is adequate for the size of the current airfield maintenance team and could handle minor growth.

The garage/workshop space consists of roughly 8,500 square feet of the total facility. It is comprised of three large drive-through bays. The facility provides sufficient space to meet the Airport's existing vehicle maintenance needs.

Airport Maintenance Building

AIRFIELD ELECTRICAL BUILDING

The airfield electrical building is located directly east of the maintenance building. The electrical shop is roughly 1,900 square feet and is sufficient for the current electrical staff. The building is over 30 years old.

Airfield Electrical Building

FUEL FARMS

There are two aircraft fuel facilities located at CRP. One fuel farm is operated by Atlantic Aviation while the other fuel farm is operated by Sterling Air. Both fuel facilities were depicted earlier on **Exhibit 1D**.

Atlantic Aviation Fuel Farm

CRP owns an above-ground fuel storage facility located northwest of Atlantic Aviation's FBO office. The facility is leased and operated by Atlantic Aviation. Atlantic Aviation provides fuel to general aviation, military, and air carrier aircraft at CRP.

Atlantic Fuel Farm

Capacity and Condition

The facility has one 25,000-gallon Jet A tank, two 12,000-gallon Jet A tanks, and one 10,000-gallon 100LL tank. Based on interviews with FBO staff there are no concerns with the condition of the fuel tanks, but an additional 25,000-gallon Jet A tank was requested to support increased fuel consumption. The tanks are all double walled.

Operation and Utilization

The Jet A tanks are resupplied daily; roughly 38 full loads are taken a month. This equates to about 319,000 gallons taken monthly. The 100LL tank is resupplied once every two months. Fuel is transferred from the tanks to fuel trucks. The fuel trucks transfer fuel to the aircraft. Atlantic Aviation currently owns four Jet A fuel trucks and two 100LL fuel trucks. There is no self-serve option at this fuel farm.

Sterling Air

The Sterling Air fuel storage facility is located directly north of the Sterling Air office. The City of Corpus Christi City Council approved a lease in January 2024 to allow Sterling Air to begin operating as an FBO.

Sterling Air Fuel Farm and Truck

Capacity and Condition

The facility has two 10,000-gallon Jet A tanks and one 10,000-gallon 100LL tank. The tanks are owned by the airport and leased to Sterling Air.

Operation and Utilization

There is one Jet A fuel truck that will transfer fuel to an aircraft. A self-serve fuel option is also available at this fuel farm for Jet A and 100LL.

UTILITIES

As part of the scope of this project, research was conducted to document utility lines located within airport property, which are shown on **Exhibit 1L**. The utilities that were identified as part of this process were water, sewer, gas lines, and pipelines. An exhibit showing the location of electrical lines and infrastructure is provided in the electrical infrastructure appendix of this report (**Appendix B**). Communication and fiber optic lines are not shown.

In-ground field verification of utility locations was not conducted and therefore the utilities are shown in their approximate location based on the historical data that was available for review.

AIRSPACE

All flights operations conducted at Corpus Christi International Airport are governed by regulations established by the FAA for the National Airspace System (NAS). The NAS is made up of airspace, navigation facilities, airports, regulations/procedures, and ATC facilities. The following sections describe the airspace system associated with Corpus Christi International Airport.

NATIONAL AIRSPACE STRUCTURE

Airspace can be generally categorized as either controlled or uncontrolled. The area over and surrounding CRP is controlled airspace. Controlled airspace is defined as airspace with positive navigational control, meaning the pilot is communicating with the Airport Traffic Control Tower (ATCT) who is providing directions to takeoff, land, or transition through the airspace. The different classes of controlled airspace are defined as follow:


LEGEND
Airport Property Line
Pipelines (in service)
Pipelines (abandoned)
Gas Main Lines
Water Main Lines
Sewer Main Lines
N
0
1,500
FEET
Photo: Martinez Geospatial 12/18/2023, Google Earth 1/2024
763
Joe Mineur Rd
Bear Ln
Bronco Rd
Agnes St
44
Business Centre Blvd
International Drive
Hangar Ln
Glasson Dr
Pinson Dr
Pinson Dr
Runway 18-36 (6,080' x 150')
Runway 13-31 (7,510' x 150')

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- **Class A Airspace** – Generally includes all airspace between 18,000 feet Mean Sea Level (MSL) and 60,000 feet MSL. All operations in Class A airspace are conducted under Instrument Flight Rules (IFR) unless otherwise authorized.
- **Class B Airspace** – Generally consists of airspace from the surface to 10,000 feet MSL. The dimensions of this type of airspace are tailored to specific airport conditions based on the airport's environment. ATCT clearance is required to enter Class B airspace and all aircraft within it receive separation services. Class B airspace typically surrounds the nation's busiest airports.
- **Class C Airspace** – Generally consists of airspace from the surface to 4,000 feet above an airport's field elevation. The airspace usually consists of a surface area with a five nautical mile (NM) radius and an outer circle with a ten NM radius that extends from 1,200 feet to 4,000 feet above the airport's elevation. Two-way radio communication is required with the ATCT.
- **Class D Airspace** – Generally extends from the surface to 2,500 feet above an airport's elevation at airports with an operational ATCT. Each configuration is tailored to the specific airport but usually, Class D airspace spans a five NM radius.
- **Class E Airspace** – Controlled airspace that is not defined as A, B, C, or D is Class E. Class E also typically surrounds many non-towered airports. Class E airspace extends up to, but not including, 18,000 feet MSL, and all airspace above 60,000 feet MSL is categorized as Class E.

CRP AIRSPACE STRUCTURE

The airspace surrounding CRP is Class C. All aircraft entering CRP are required to obtain ATCT clearance prior to entering, establish and maintain two-way radio communication with ATCT while in the airspace, and have all navigational equipment required to operate in the airspace.

The FAA requires aircraft operating in CRP's airspace to be equipped with an operable radar beacon transponder with automatic altitude reporting capability and operable Automatic Dependent Surveillance – Broadcast (ADS-B) Out at a minimum. Ultimately, the ADS-B is designed to increase pilot situational awareness by displaying the locational data of nearby aircraft. ADS-B equipment is designed with two functions, the ability to broadcast data to (ADS-B Out) and receive data from (ADS-B In) other ADS-B equipment. ADS-B Out equipment in an aircraft broadcasts information such as the aircraft's position, identification, and velocity as well as other details to ground stations and other aircraft equipped with ADS-B In equipment.

SURROUNDING AIRPORTS

There are two other airports located within the CRP Class C airspace. Cabaniss Field Naval Outlying Field (NOLF) and Dean, a privately owned airport.

CRP FAA ATCT personnel noted that there have been some operational impacts with Cabaniss Field NOLF and Naval Air Station Corpus Christi. When CRP is operating in a north flow, aircraft have become confused and have tried to land at Cabaniss Field NOLF. Some aircraft have landed at Cabaniss Field NOLF inadvertently. This distance between the two airports is shown on **Exhibit 1M**.

It was also noted that when CRP is utilizing Runway 31 and Naval Air Station Corpus Christi is using the RNAV (GPS) to Runway 4, the separation of aircraft using the two facilities must be monitored closely.

Exhibit 1M: CRP Location Related to Cabaniss Field NOLF; Source: Garver, 2024.

SPECIAL USE AIRSPACE

Multiple special use airspace classifications are in use around CRP including Alert Areas and Military Operations Areas (MOA).

Alert Areas are areas where there will be a high volume of pilot training or unusual types of aerial activity. These areas are not restricted but pilots are advised to be more alert than normal. The Alert Areas surrounding CRP are Alert Area A-632A through A-632F and they are meant to alert pilots of concentrated student jet training in the area.

A MOA contains airspace designated and used for military operations. There are three separate MOAs located on the northern and western portions of the CRP terminal area. The shape and sizes of the MOAs vary. One MOA is the Kingsville 4 MOA which is north of CRP. Another MOA is the Kingsville 2 MOA which is west of CRP. The last MOA is the Kingsville 3 MOA and is located northwest of CRP. **Exhibit 1N** shows the CRP Terminal Area as well as the location of surrounding airports.

VFR AND IFR PROCEDURES

Within the NAS, aircraft operate under Visual Flight Rules (VFR) or Instrument Flight Rules (IFR). VFR flights use visual ques outside the aircraft for flight and navigation purposes. IFR flights use instrumentation inside the aircraft for flight and navigation purposes.

VFR FLIGHT PROCEDURES

Aircraft operating under Visual Flight Rules (VFR) are provided air traffic control services by either Corpus Christi Tower or Corpus Christi TRACON. Aircraft departing VFR are assigned a departing runway based on their current location on the airfield, destination, current wind direction, and the volume of traffic at the time of their request. Aircraft depart from the runway on a heading assigned by ATCT.

VFR aircraft requesting to land at CRP must contact and receive authorization from Corpus Christi TRACON to enter the CRP Class C airspace. Arrival procedures will vary depending upon the location of the aircraft in relation to CRP, current wind direction, the runway in use, and volume of traffic at the time of the request.

IFR APPROACH PROCEDURES

Aircraft approaching CRP during Instrument Flight Rules (IFR) conditions fly through the airspace to land on runways using predetermine routes called Instrument Approach Procedures (IAPs). **Table 1W** summarizes the instrument approaches available at CRP and the minimum visibility and the DA (Decision Altitude)/DH (Decision Height) associated with each approach.

Table 1W | Instrument Approaches

Runway 13 Instrument Approaches	Visibility Minimums	Decision Altitude (AGL) (ft)
ILS or LOC	½ mile	200’
RNAV (RNP) Z	5/8 mile	400’
RNAV (GPS) Y	1/2 mile	200’

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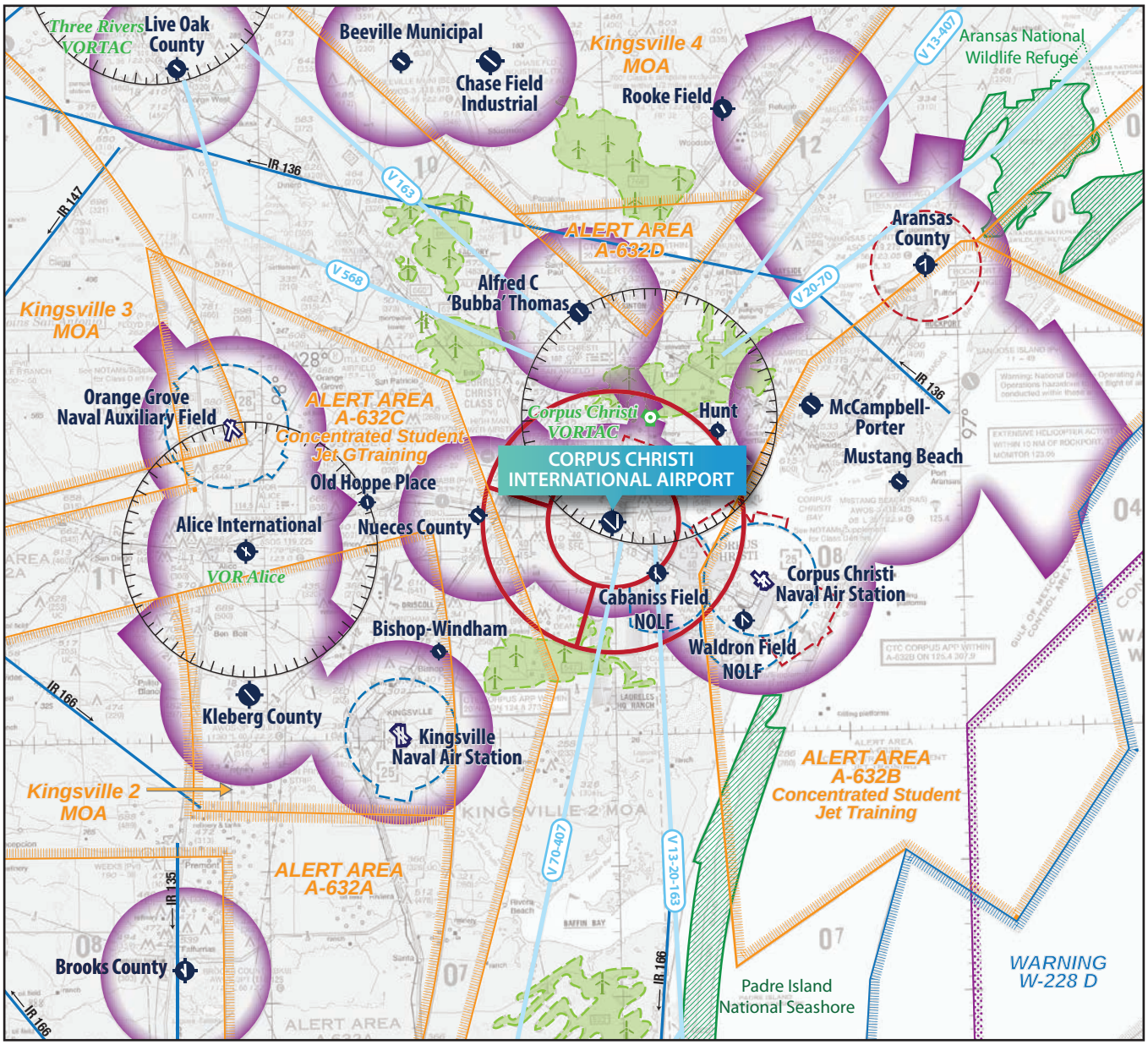

LEGEND

- Airport with hard-surfaced runways greater than 8,069' or some multiple runways less than 8,069'.
- Airport with hard-surfaced runways 1,500' to 8,069' in length
- Compass Rose
- VORTAC
- Wind Turbine Farm
- Nature Preserve
- ADIZ - Air Defense Identification Zone
- Class C Airspace
- Class D Airspace
- Class E Airspace with floor 700 ft. above surface that laterally abuts 1200 ft. or higher Class E airspace
- Class E Airspace (SFC)
- Victor Airways
- Military Training Route
- Alert Area and Military Operations Area (MOA)
- Warning Areas

Source:
Brownsville and San Antonio Sectional Charts,
US Department of Commerce | National Oceanic and AtmosphericAdministration | June 15, 2023

Table 1W | Instrument Approaches (continued)

Runway 31 Instrument Approaches	Visibility Minimums	Decision Altitude (AGL) (ft)
RNAV (RNP) Z	1/2 mile	300’
RNAV (GPS) X	1/2 mile	500’
RNAV (GPS) Y	1/2 mile	200’
LOC	1/2 mile	400’
Runway 18 Instrument Approaches	**Visibility Minimums**	**Decision Altitude (AGL) (ft)**
RNAV (GPS)	1/2 mile	200’
VOR or TACAN	1 mile	700’
ILS or LOC	1/2 mile	200’
RNAV (RNP) Z	1/2 mile	300’
RNAV (GPS) Y	1/2 mile	200’

Source: FAA Aeronautical Information Services, Pulled 2/22/24.

FAA AIRPORT TRAFFIC CONTROL TOWER

The current FAA Airport Traffic Control Tower (ATCT) is located south of the AOA off McGloin Road. The facility opened in 2002 and the top of the tower is 184 feet MSL. The facility houses air traffic control services for CRP as well as the Corpus Christi Terminal Radar Approach Control (TRACON), which provides air traffic control services for aircraft arriving and departing the area airspace. The facility is attended continuously. Typically, there are three responsibilities within the tower cab:

CRP ATCT

- **Tower/Local Control** – Responsible for the airspace in the immediate vicinity of the airport and providing takeoff and landing clearances.
- **Ground Control** - Responsible for providing taxi clearances to aircraft operating in the movement area.
- **Clearance Delivery** - Responsible for providing routing clearances for IFR departures.

In the TRACON, there are multiple controllers that are responsible for various segments of the airspace surrounding CRP. These positions are typically referred to as approach/departure control.

There are currently no line-of-sight issues from the ATCT cab to any portions of the movement area.

The facility also houses the FAA’s local Systems Support Center, commonly known as TechOps. FAA TechOps is responsible for the maintenance of various NAVAIDs and FAA communication equipment located at CRP and in the surrounding area. There are approximately 117 vehicle parking spots at this facility, including 4 ADA spaces. The facility has its own access control infrastructure, including perimeter fencing, and vehicle gates.

ENVIRONMENTAL INVENTORY

The purpose of the following environmental inventory is to identify potential environmental sensitivities that should be considered when planning future improvements at the airport. Research was performed for each of the 14 environmental impact categories described within FAA Order 1050.1F, *Environmental Impacts: Policies and Procedures*:

- Air Quality
- Biological Resources (including fish, wildlife, and plants)
- Climate
- Coastal Resources
- *Department of Transportation Act*, Section 4(f)
- Farmlands
- Hazardous Materials, Solid Waste, and Pollution Prevention
- Historical, Architectural, Archeological, and Cultural Resources
- Land Use
- Natural Resources and Energy Supply
- Noise and Compatible Land Use
- Socioeconomics, Environmental Justice, and Children's Environmental Health and Safety Risks
- Visual Effects (including light emissions)
- Water Resources (including wetlands, floodplains, surface waters, groundwater, and wild and scenic rivers)

AIR QUALITY

The concentration of various pollutants in the atmosphere defines the local air quality. The significance of a pollutant's concentration is determined by comparing it to the state and federal air quality standards. In 1971, the U.S. Environmental Protection Agency (EPA) established standards that specify the maximum permissible short- and long-term concentrations of various air contaminants. The National Ambient Air Quality Standards (NAAQS) consist of primary and secondary standards for criteria pollutants: ozone (O_3), carbon monoxide (CO), sulfur dioxide (SO_2), nitrogen dioxide (NO_2), coarse particulate matter (PM_{10}), fine particulate matter ($PM_{2.5}$), and lead (Pb). Based on federal air quality standards, a specific geographic area can be classified as an attainment, maintenance, or nonattainment area for each pollutant. The threshold for nonattainment designation varies by pollutant.

Corpus Christi International Airport (CRP) is in Nueces County, Texas, which is in attainment for all federal criteria pollutants, as of March 31, 2024.[2]

[2] U.S. EPA – Green Book – Texas Nonattainment/Maintenance Status for Each County by Year for All Criteria Pollutants (https://www3.epa.gov/airquality/greenbook/anayo_tx.html)

BIOLOGICAL RESOURCES

Biological resources include the various types of plants and animals that are present in an area. The term also applies to rivers, lakes, wetlands, forests, and other habitat types that support plants and animals. The airport is flat with elevations ranging from roughly 34 to 40 feet above mean sea level across the airport. Habitat includes ruderal vegetation, grasses, and agricultural fields. There are no trees, except those used in landscaping within the developed landside and roadway areas. Drainage is captured in manmade ditches and swales.

The U.S. Fish and Wildlife Service (USFWS) is charged with overseeing the requirements contained within Section 7 of the *Endangered Species Act* (ESA). The ESA provides a framework to conserve and protect animal or plant species whose populations are threatened by human activities. The FAA and USFWS review projects to determine if a significant impact to protected species will result from the implementation of a proposed project. Significant impacts occur when a proposed action could jeopardize the continued existence of a protected species or would result in the destruction or adverse modification of federally designated critical habitat in the area. The USFWS Information for Planning and Consultation (IPaC) resource list describes species and habitats protected under the ESA within the vicinity of the airport (**Table 1Y**).

TABLE 1Y | U.S. Fish and Wildlife Service List of Federally Endangered, Threatened, and Candidate Species to be Considered for Airport Development Actions

Mammals Common Name (*Scientific Name*)	Federal/State Status	Habitat and Range	Potential for Occurrence
tricolored bat (*Perimyotis subflavus*)	Federal Proposed Endangered	Tricolored bats spend the winter hibernating in caves and mines. In the southern U.S., where caves are sparse, tricolored bats often hibernate in culverts and sometimes hibernate in tree cavities and abandoned water wells. During the spring, summer, and fall, tricolored bats primarily roost among leaf clusters of live or recently dead deciduous hardwood trees. Tricolored bats have been observed roosting during summer within artificial roosts, like barns, as well as beneath porch roofs, bridges, and concrete bunkers.	**May occur.** The airport and land in proximity to the airport contain trees that could be used for roosting habitat. Additionally, there are manmade structures on airport property and nearby residences that could be used as artificial roosts for this species.
Birds Common Name (*Scientific Name*)	**Federal/State Status**	**Habitat and Range**	**Potential for Occurrence**
eastern black rail (*Laterallus jamaicensis* ssp. *jamaicensis*)	Federal Threatened/ State Threatened	Salt, brackish, and freshwater marshes, pond borders, wet meadows, and grassy swamps; nests in or along edge of marsh, sometimes on damp ground, but usually on mat of previous years' dead grasses.	**Not likely to occur.** The airport is four miles from the nearest marshes, which occur along Nueces Bay.
northern aplomado falcon (*Falco femoralis septentrionalis*)	Federal Endangered/ State Endangered	Open country, especially savanna and open woodland, and sometimes in very barren areas; grassy plains and valleys with scattered mesquite, yucca, and cactus; nests in old stick nests of other bird species.	**Unknown.** A biological survey is needed to determine the presence of this species.
piping plover (*Charadrius melodus*)	Federal Threatened/ State Threatened	Live on beaches, sandflats, and dunes along the Gulf Coast beaches and adjacent offshore islands.	**Not likely to occur.** The airport is over 20 miles from the coastline of the Gulf of Mexico.

Continues on next page

TABLE 1Y | U.S. Fish and Wildlife Service List of Federally Endangered, Threatened, and Candidate Species to be Considered for Airport Development Actions (continued)

Birds Common Name (*Scientific Name*)	Federal/State Status	Habitat and Range	Potential for Occurrence
rufa red knot (*Calidris canutus rufa*)	**Federal Threatened/ State Threatened**	**Prefers sandy beaches and mud flats. In general, nests are found in sparsely vegetated, dry, sunny, slightly elevated tundra locations, often on windswept ridges or slopes with low cover. Known to occur in Nueces County during migration.**	Not likely to occur**. The airport is four miles from the nearest marshes, which occur along Nueces Bay.**
whooping crane (*Grus americana*)	Federal Endangered/ State Endangered	Whooping cranes reside in wetlands, marshes, mudflats, wet prairies, and fields. Spends winters in Texas in the coastal marshes of Aransas, Calhoun, and Refugio Counties, including at Aransas National Wildlife Refuge, which is roughly 40 miles to the northeast of the airport.	**May occur.** Although the airport is four miles from the nearest marshes, it is surrounded by agricultural fields that could attract cranes when water is present.
Reptiles Common Name (*Scientific Name*)	**Federal/State Status**	**Habitat and Range**	**Potential for Occurrence**
green sea turtle (*Chelonia mydas*)	Federal Threatened/ State Threatened	Inhabits tropical and subtropical waters worldwide, including the Gulf of Mexico. Adults and juveniles occupy inshore and nearshore areas, including bays and lagoons with reefs and seagrass.	**Would not occur.** The airport is over 20 miles from the coastline of the Gulf of Mexico.
Atlantic hawksbill sea turtle (*Eretmochelys imbricata*)	Federal Endangered/ State Endangered	Inhabits tropical and subtropical waters worldwide, including in the Gulf of Mexico, especially Texas. Hatchlings and juveniles are found in open, pelagic ocean and are closely associated with floating algae/seagrass mats.	**Would not occur.** The airport is over 20 miles from the coastline of the Gulf of Mexico.
Kemp's Ridley sea turtle (*Lepidochelys kempii*)	Federal Endangered/ State Endangered	Inhabits, tropical, subtropical, and temperate waters of the northwestern Atlantic Ocean and Gulf of Mexico. Adults are found in coastal waters with muddy or sandy bottoms. Juveniles often congregate near floating algae/seagrass mats offshore.	**Would not occur.** The airport is over 20 miles from the coastline of the Gulf of Mexico.
leatherback sea turtle (*Dermochelys coriacea*)	Federal Endangered/ State Endangered	Inhabit tropical, subtropical, and temperate waters worldwide, including the Gulf of Mexico. Are able to dive to depths of 4,000 feet.	**Would not occur.** The airport is over 20 miles from the coastline of the Gulf of Mexico.
loggerhead sea turtle (*Caretta caretta*)	Federal Threatened/ State Threatened	Inhabits tropical, subtropical, and temperate waters worldwide, including the Gulf of Mexico. Beaches that are narrow and steeply sloped with coarse-grain sand are preferred for nesting. Newly hatched individuals depend on floating algae/seaweed for protection and foraging.	**Would not occur.** The airport is over 20 miles from the coastline of the Gulf of Mexico.
Insects Common Name (*Scientific Name*)	**Federal/State Status**	**Habitat and Range**	**Potential for Occurrence**
monarch butterfly (*Danaus plexippus)*	Federal Candidate	A migratory species found in a variety of habitats. The monarch butterfly requires milkweed (*Asclepias* spp.) for breeding. Migrating monarch butterflies often occur near water sources (e.g., rivers, creeks, riparian corridors, roadside ditches, and irrigated gardens).	**May occur.** The airport is surrounded by agricultural fields that could provide habitat for foraging.

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TABLE 1Y | U.S. Fish and Wildlife Service List of Federally Endangered, Threatened, and Candidate Species to be Considered for Airport Development Actions (continued)

Flowering Plants Common Name (*Scientific Name*)	Federal/State Status	Habitat and Range	Potential for Occurrence
slender rush-pea (*Hoffmannseggia tenella*)	Federal Endangered/ State Endangered	Coastal prairie grasslands on level uplands and on gentle slopes along drainages, usually in areas of shorter or sparse vegetation; soils often described as Blackland clay, but at some of these sites, soils are coarser textured and lighter in color than the typical heavy clay of the coastal prairies; flowers April-November.	**Unknown.** A botanical survey during the flowering period is needed to determine the presence of this species.
South Texas ambrosia (*Ambrosia cheiranthifolia*)	Federal Endangered/ State Endangered	Grassland and mesquite-dominated shrublands on various soils ranging from heavy clays to lighter textured sandy loams, mostly over the Beaumont Formation on the Coastal Plain; in modified unplowed sites, such as railroad and highway rights-of-way, mowed fields, and erosional areas along small creeks; perennial; flowers July-November.	**Unknown.** A botanical survey during the flowering period is needed to determine the presence of this species.

*USFWS Status Definitions for Federally Listed Species:
- Endangered = an animal or plant species in danger of extinction throughout all or a significant portion of its range
- Threatened = an animal or plant species likely to become endangered within the foreseeable future throughout all or a significant portion of its range
- Candidate = an animal or plant species for which the USFWS has sufficient information on biological vulnerability and threats to support proposals to list the species as endangered or threatened under the ESA, but the development of a proposed listing regulation is precluded by other higher priority listing activities; candidate species are not protected by the take prohibitions of Section 9 of the ESA

Sources: USFWS, IPaC (https://ipac.ecosphere.fws.gov/); Texas Parks & Wildlife Department, Annotated County Lists of Rare Species (Nueces County) (https://tpwd.texas.gov/gis/rtest/)

Section 3 of the ESA is used to protect critical habitat areas. Designated critical habitat areas are geographically defined and have been determined to be essential to the recovery of a specific species. There are no critical habitats at or near the airport.

The federal *Migratory Bird Treaty Act* (MBTA) protects migratory birds and their eggs, nests, and feathers. Potential impacts to species protected under the MBTA are evaluated by the USFWS in consultation with other federal agencies. Habitat for migratory birds may occur if bushes or other ground nesting substrate is present. The typical breeding season for migratory birds that would be present is from March through September.

Terrestrial and avian species identified for Nueces County on the Texas Parks & Wildlife Department's (TPWD) *Annotated County Lists of Rare Species* that are state listed, but not federally listed, are listed below. There is no aquatic habitat at the airport that is suitable to support marine mammals or fish listed by TPWD for Nueces County.

Amphibians

- black-spotted newt (*Notophthalmus meridionalis*) – state threatened
- sheep frog (*Hypopachus variolosus*) – state threatened
- South Texas siren (large form) (*Siren sp. 1*) – state threatened

Birds

- sooty tern (*Onychoprion fuscatus*) – state threatened
- swallow-tailed kite (*Elanoides forficatus*) – state threatened
- Texas Botteri's sparrow (*Peucaea botterii texana*) – state threatened
- tropical parula (*Setophaga pitiayumi*) – state threatened
- white-faced ibis (*Plegadis chihi*) – state threatened
- white-tailed hawk (*Buteo albicaudatus*) – state threatened
- wood stork (*Mycteria americana*) – state threatened

Mammals

- ocelot (*Leopardus pardalis*) – state endangered
- white-nosed coati (*Nasua narica*) – state threatened

Reptiles

- Texas horned lizard (*Phrynosoma cornutum*) – state threatened
- Texas scarlet snake (*Cemophora lineri*) – state threatened
- Texas tortoise (*Gopherus berlandieri*) – state threatened

Plants

- black lace cactus (*Echinocereus reichenbachii* var. *albertii*) – state endangered

CLIMATE

Increasing concentrations of greenhouse gases (GHGs) can affect global climate by trapping heat in Earth's atmosphere. Scientific measurements have shown that Earth's climate is warming with concurrent impacts, including warmer air temperatures, rising sea levels, increased storm activity, and greater intensity in precipitation events. Climate change is a global phenomenon that can also have local impacts. GHGs – such as water vapor (H_2O), carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), and ozone (O_3) – are both naturally occurring and anthropogenic (human-made). Research has established a direct correlation between fuel combustion and GHG emissions. GHGs from anthropogenic sources include CO_2, CH_4, N_2O, hydrofluorocarbons (HFC), perfluorocarbons (PFC), and sulfur hexafluoride (SF_6). CO_2 is the most important anthropogenic GHG because it is a long-lived gas that remains in the atmosphere for up to 100 years.

The U.S. EPA's *Inventory of U.S. Greenhouse Gas Emissions and Sinks 1990-2021* shows a two percent decrease in total U.S. GHG emissions from 1990 to 2021, down from a high 15.8 percent above 1990 levels in 2007. During 2020 to 2021, the U.S. saw an increase in economic activity driven by businesses and persons rebounding after the COVID-19 pandemic. This resulted in an increase in total U.S. GHG emissions, of which CO_2 emissions accounted for the majority.

In 2021, the transportation sector and power generation accounted for 79.3 percent of total CO_2 emissions; however, the overall aviation industry has shown a decrease in CO_2 emissions by 18 percent between 1990 and 2021.[3] Commercial aircraft emissions have highly fluctuated over the past thirty years, with a 27 percent increase between 1990 and 2007, a two percent decrease from 2007 to 2019, and a 33 percent decrease from 2019 to 2020, followed by a 23 percent increase from 2020 to 2021. This represents an overall eight percent difference between 1990 and 2021 commercial aircraft emissions. Between 1990 and 2021, emissions from military aircraft decreased by 65 percent.

Texas does not have a statewide climate adaptation or action plan, nor do Nueces County or the City of Corpus Christi[4]; however, the *2023 Texas Coastal Resiliency Master Plan* was developed by the Texas General Land Office (GLO) to address climate impacts and coastal hazards (as were the 2017 and 2019 versions of the plan).[5] The airport is outside of the various sea level rise scenarios, which estimate an increase of 12-20 percent in open water between the intermediate-low scenario (1.6 feet of sea level rise) and the intermediate-high scenario (4.9 feet of sea level rise) by 2100. (See Coastal Resources below.)

COASTAL RESOURCES

Federal activities involving or affecting coastal resources are governed by the *Coastal Barriers Resource Act*, the *Coastal Zone Management Act*, and Executive Order (E.O.) 13089, *Coral Reef Protection.*

The airport is located within a coastal zone[6] and is in Region 3 of the *2023 Texas Coastal Resiliency Master Plan*. Region 3 is comprised of Aransas, Kleberg, Nueces, Refugio, and San Patricio Counties. Tier 1 projects are those that have been selected for their collective ability to mitigate coastal vulnerabilities identified in the plan and its previous versions. The Texas GLO is partnering with the U.S. Army Corps of Engineers to complete various projects, including habitat restoration and shoreline stabilization.

There are seven barrier islands that protect the Texas coastline along the edge of the Gulf of Mexico; Padre Island and Mustang Island protect the Corpus Christi Bay. The nearest National Marine Sanctuary is the Flower Garden Bank National Marine Sanctuary, located 196 miles away from the airport.[7]

DEPARTMENT OF TRANSPORTATION ACT, SECTION 4(F)

Section 4(f) of the *Department of Transportation Act*, which was recodified and renumbered as Section 303(c) of Title 49 United States Code, provides that the Secretary of Transportation will not approve any program or project that requires the use of any publicly or privately owned historic sites, public parks or

[3] U.S EPA, Inventory of U.S. Greenhouse Gases: Chapter 3 Energy (https://www.epa.gov/ghgemissions/inventory-us-greenhouse-gas-emissions-and-sinks-1990-2021); includes consumption of jet fuel and aviation gasoline but does not include emissions from international aviation, i.e., international bunker fuels (https://unfccc.int/topics/mitigation/workstreams/emissions-from-international-transport-bunker-fuels)

[4] Georgetown Climate Center, Preparing for Climate Change in Texas (https://www.georgetownclimate.org/adaptation/state-information/texas/overview.html)

[5] The Texas General Land Office, Texas 2023 Coastal Resiliency Master Plan (https://www.glo.texas.gov/coast/coastal-management/coastal-resiliency/index.html)

[6] The Texas Coastal Zone (www.glo.texas.gov/coast/coastal-management/forms/files/CoastalBoundaryMap.pdf)

[7] Google Earth Aerial Imagery, National Marine Sanctuary (https://sanctuaries.noaa.gov/about/maps.html)

recreation areas, or waterfowl and wildlife refuges of national, state, regional, or local importance, unless there is no feasible and prudent alternative to the use of such land, and the project includes all possible planning to minimize harm resulting from the use.

There is only one potential Section 4(f) resource within one mile of the airport: San Juan Park, which is located 0.9 miles west of the airport at 9125 County Road (CR) 36. This small county park includes playground equipment and picnic tables (**Exhibit 1P**).

The nearest historic feature listed on the National Register of Historic Places (NRHP) is Old St. Anthony's Catholic Church at the intersection of Violet Road and Highway 44, which is over four miles away from the airport.[8]

The nearest waterfowl and wildlife refuge, wilderness area, and national recreation area are:

- Wildlife/Waterfowl Refuge – Aransas National Wildlife Refuge (40 miles from the airport)
- Wilderness Area – Little Lake Creek Wilderness (213 miles from the airport)
- National Recreation Area – Amistad National Recreation Area (235 miles from the airport)

FARMLANDS

Under the *Farmland Protection Policy Act* (FPPA), federal agencies are directed to identify and consider the adverse effects of federal programs on the preservation of farmland, consider appropriate alternative actions that could lessen adverse effects, and assure that such federal programs are (to the extent practicable) compatible with state or local government programs and policies to protect farmland. The FPPA guidelines, developed by the U.S. Department of Agriculture (USDA), apply to farmland classified as prime, unique, or of state or local importance, as determined by the appropriate government agency with concurrence by the Secretary of Agriculture.

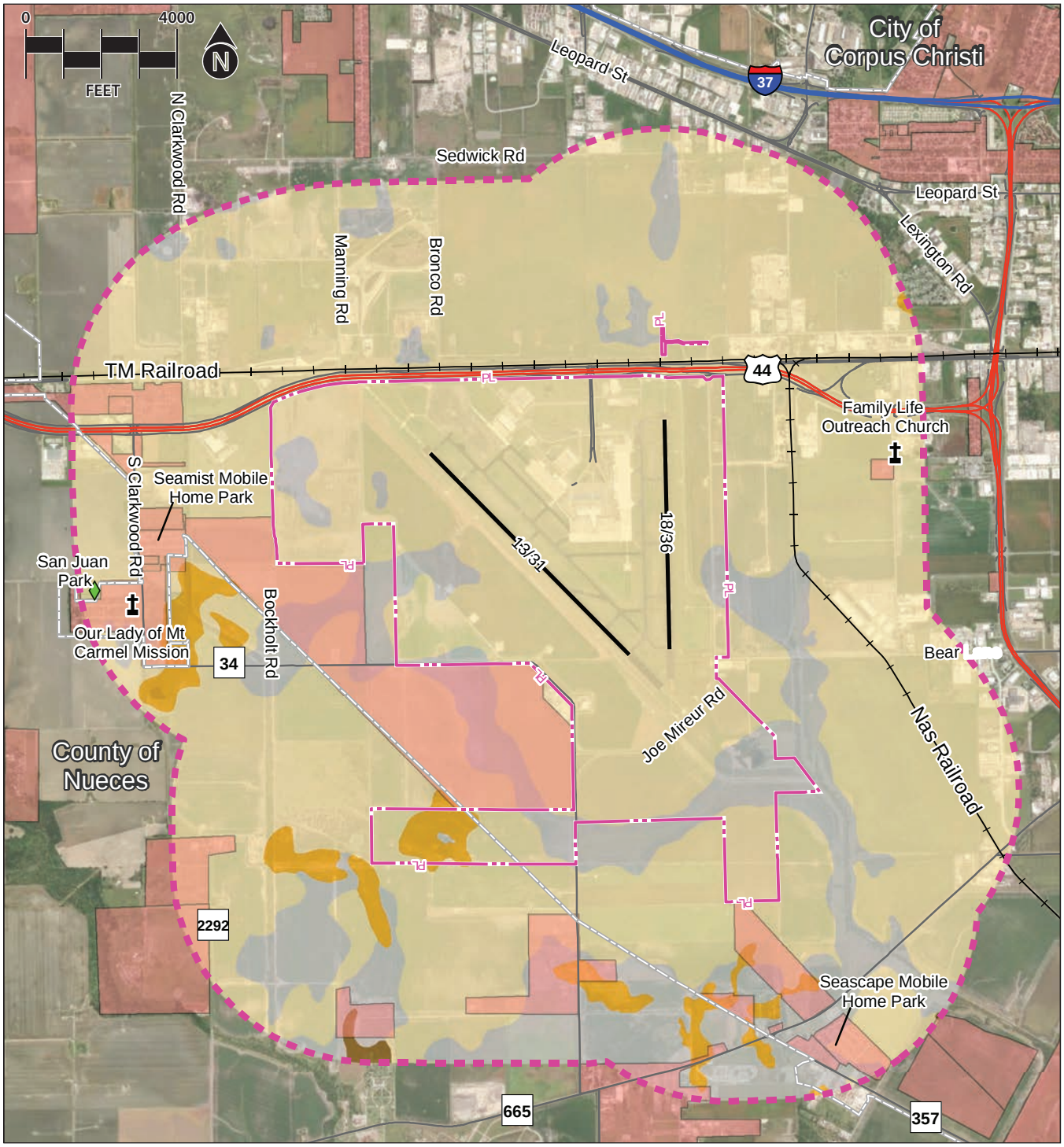
The U.S. Department of Agriculture Natural Resources Conservation Service (USDA-NRCS) Web Soil Survey shows the types of soils and their farmland classifications on and adjacent to the airport (**Exhibit 1P**). Most of the airport is located within a census-designated urbanized area,[9] which is not typically subject to the FPPA; however, a portion of airport property east and south of Joe Mireur Road is outside the census-designated urbanized boundaries and contains farmland that is classified as prime farmland. The area of the airport to the southwest of the airfield and the areas east and south of Joe Mireur Road are under agricultural production (corn).

The airport has two types of farmland classification: "all areas are prime farmland" and "not prime farmland." Most of the land within the airport is recognized as prime farmland (**Table 1Z**).

Exhibit 1P also shows the soils rating for the area within one mile of the airport. Much of this land is farmed and is rated as either prime farmland or farmland of statewide importance.

[8] U.S. Department of the Interior, National Park Service, National Register of Historic Places (https://www.nps.gov/maps/full.html?mapId=7ad17cc9-b808-4ff8-a2f9-a99909164466)

[9] U.S. EPA, EJScreen (Version 2.2), Boundaries – Urban Areas (https://ejscreen.epa.gov/mapper/)



LEGEND

- Airport Property Line
- Runway Centerline
- Municipal Boundaries
- Railroad
- Interstate
- Highway
- 1-Mile Property Line Buffer
- Places of Worship
- Park
- Rural/Residential

Farmland Rating*

- Prime Farmland
- Farmland of Statewide Importance
- Prime Farmland if Irrigated
- Not Prime Farmland

*per USDA-NRCS Web Soil Survey

Sources: ESRI Basemap Imagery (2022), USDA, City of Corpus Christi, Coffman Associates Analysis

TABLE 1Z | Farmland Classification – Summary Map Unit – Nueces County, Texas (TX355)

Web Soil Survey Symbol	Soil Type	Farmland Rating
Oa	Oil-waste land	Not prime farmland
VcA	Victoria clay, 0 to 1 percent	All areas are prime farmland
Vt	Victoria clay, 0 to 1 percent, low	Not prime farmland

Source: USDA-NRCS, Web Soil Survey (https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx)

HAZARDOUS MATERIALS, SOLID WASTE AND POLLUTION PREVENTION

Federal, state, and local laws regulate hazardous materials use, storage, transportation, and disposal. These laws may extend to past and future landowners of properties containing these materials. Disrupting sites containing hazardous materials or contaminants may cause significant impacts to soil, surface water, groundwater, air quality, and the organisms using these resources.

The two statutes of most importance to airport projects are the *Resource Conservation Recovery Act* (RCRA), as amended by the *Federal Facilities Compliance Act of 1992*, and the *Comprehensive Environmental Response, Compensation, and Liability Act* (CERCLA), as amended (also known as Superfund). The RCRA governs the generation, treatment, storage, and disposal of hazardous wastes. The CERCLA provides for the cleanup of any release of a hazardous substance that may endanger public health or the environment. These laws may extend to past and future landowners of properties containing these materials. Locations identified as Superfund sites are listed on the National Priorities List (NPL). According to the U.S. EPA's *EJScreen* online tool, there are no Superfund or brownfield sites within one mile of the airport.[10]

Leaking petroleum storage tanks have been present at the airport in the past. Based on the Texas Commission on Environmental Quality's (TCEQ) database, leaking petroleum storage tanks were present at the airport traffic control tower and along International Drive and Pinson Drive; however, all cases have been closed.[11]

The airport has aboveground aircraft fuel facilities that are operated by two of its FBOs. When all fuel tanks are full, the airport can store 59,000 gallons of Jet A fuel and 20,000 gallons of 100 low lead (LL) fuel. Spill prevention, control, and countermeasure (SPCC) plans are required for these facilities, per U.S. EPA regulations.

National Pollutant Discharge Elimination System (NPDES) permits outline the regulatory requirements of municipal stormwater management programs and establish requirements to help protect the beneficial uses of the receiving waters. The program requires permittees to develop and implement best management practices (BMPs) to control/reduce the discharge of pollutants to waters of the United States, to the maximum extent practicable. In Texas, the Texas Pollutant Discharge Elimination System (TPDES) program has federal regulatory authority over discharges of pollutants to Texas surface waters.

[10] U.S. EPA, EJScreen (Version 2.2), EJSCreen Community Report (https://ejscreen.epa.gov/mapper/)
[11] Texas Open Data Portal, TCEQ Leaking Petroleum Storage Tank Sites (https://data.texas.gov/dataset/Texas-Commission-on-Environmental-Quality-Leaking-/hedz-nn4q/data_preview)

This program is administered by the TCEQ, except for those permits associated with oil, gas, and geothermal exploration, which are regulated by the Railroad Commission of Texas.[12]

TCEQ also administers Title 30 Texas Administrative Code (TAC) Part 1, Chapter 330, *Municipal Solid Waste*, which regulates waste management. The closest landfill to the airport is Gulley Hurst Landfill, located at 1435 CR 26, two miles south of the airport. This landfill accepts most types of construction waste that are not considered hazardous.

The City of Corpus Christi transfers its municipal solid waste at the J.C. Elliot Transfer Station (located at Highway 286 at Ayers) before sending non-recycled waste to the Cefe Valenzuela Landfill, which is located eight miles southwest of the airport in Robstown, Texas.[13]

HISTORICAL, ARCHITECTURAL, ARCHAEOLOGICAL, AND CULTURAL RESOURCES

Determination of a project's environmental impact to historic and cultural resources is made under guidance in the *National Historic Preservation Act of 1966* (NHPA), as amended, the *Archaeological and Historic Preservation Act of 1974* (AHPA), the *Archaeological Resources Protection Act* (ARPA), and the *Native American Graves Protection and Repatriation Act of 1990* (NAGPRA). The *Antiquities Act of 1906*, the *Historic Sites Act of 1935*, and the *American Indian Religious Freedom Act of 1978* also protect historic, architectural, archaeological, and cultural resources. Impacts may occur when a proposed project causes an adverse effect on a resource that has been identified (or is identified after being unearthed during construction) as having historic, architectural, archaeological, or cultural significance.

From the information available at the time this report was prepared, no systematic airport-wide cultural surveys have been conducted. Much of the airport has been developed or disturbed by construction or agricultural practices; however, there is still a chance that intact cultural resources may be present either on the ground surface or subsurface.

The airport was opened on August 6, 1960, and buildings or structures of historic age (i.e., 50 years or older) may still be present within airport property. For example, based on a review of historic aerials, there may be historic-age structures along Pinson Drive and along a road that accesses the west portion of the airport from CR 34.[14] The East General Aviation Hangar One, which was constructed in 1961, has been demolished due to unsafe conditions, and the original terminal building was replaced in 2002.[15]

LAND USE

Land use regulations near airports are achieved through local government codes, city policies, and plans that include airport districts and planning areas. Regulations are used to avoid land use compatibility conflict around airports.

[12] TCEQ, Wastewater and Stormwater, What Is the "Texas Pollutant Discharge Elimination System (TPDES)"? (https://www.tceq.texas.gov/permitting/wastewater/pretreatment/tpdes_definition.html)
[13] Gulley Hurst Landfill (https://gulleyhurst.com/services); City of Corpus Christi, Solid Waste Services (https://www.cctexas.com/sws)
[14] Historic Aerials (https://www.historicaerials.com/viewer)
[15] CCIA Corpus Christi International Airport, Explore History (https://corpuschristiairport.com/en/explore/history/)

According to the City Map Layers view of the City of Corpus Christi Viewer,[16] the airport is zoned as IH (Heavy Industrial). Based on the city's Unified Development Code, an IH area is not appropriate adjacent to a residential zoning district, as industrial uses allowed may be noxious or offensive due to odors, smoke, dust, noise, fumes, or vibrations; however, zoning for lands adjacent to the airport includes FR (Farm-Rural), RS-6 (Single-Family 6 [6,000-square-foot minimum lot size]), and IL (Light Industrial). The IL zoning district accommodates light manufacturing, fabricating, warehousing, and wholesale distributing in buildings with access by major arterials, freeways, or railroads.

The airport's land use is categorized as Public/Semi-Public. Future land use is mapped as Transportation for the active airport property and Light Industrial for airport property outside the airfield and adjacent lands (**Exhibit 1Q**).[17]

The airport is currently surrounded by agricultural land, mostly in production for corn, with scattered rural residential and industrial land uses. Highway 44 and the Texas Mexican (TM) Railroad border the airport on its north side, while a small drainage and the Nas Railroad spur are to the east of the airport. General land uses within one mile of the airport – including those that could be sensitive to airport noise or other effects – are identified in **Exhibit 1P**.

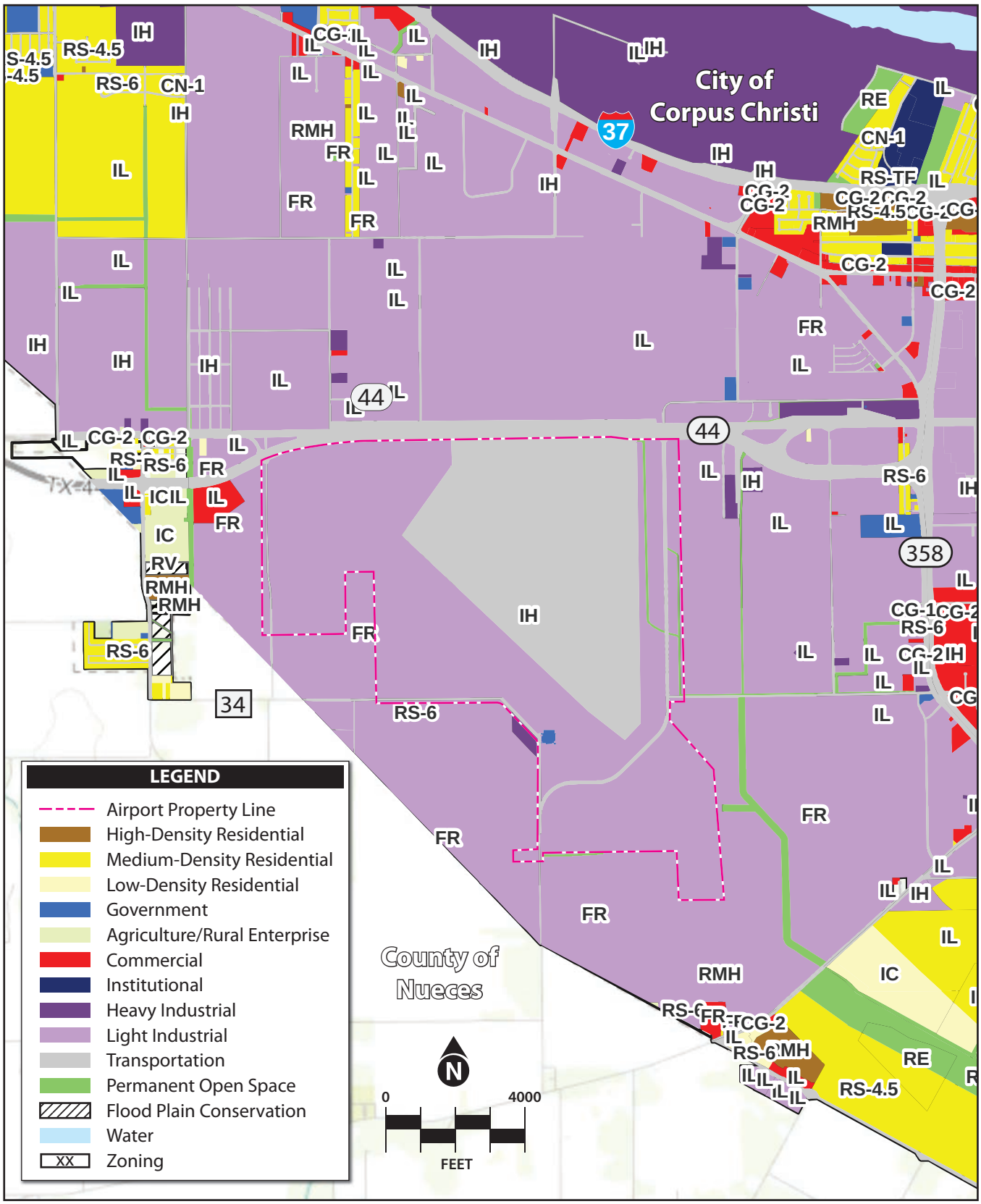
Plan CC, Corpus Christi's comprehensive plan, was adopted by the City of Corpus Cristi in 2016. Goal 4 of the Transportation and Mobility element (Element 5) affirms the airport's role as both a gateway for the region and an economic engine. The airport is in the CC Airport Planning District and was the subject of a joint land use study with Naval Air Station Corpus Christi (NAS-CC), which was adopted in 2013. The development of areas adjacent to the airport are to follow the joint land use study to minimize impacts on the airport and its operations.[18]

NATURAL RESOURCES AND ENERGY SUPPLY

It is the policy of FAA Order 1053.1C, *Energy and Water Management Program for FAA Buildings and Facilities*, to encourage the development of facilities that exemplify the highest standards of design, including principles of sustainability.

Water for the airport is provided by Corpus Christi Water, which has four water sources that are dependent on rainfall and are purified at a single water treatment facility. The city is pursuing a seawater desalination plant as a possible way to diversify its water sources. (See also the later section on Water Resources – Groundwater for a discussion of aquifer storage and recovery.) Corpus Christi Water is currently enforcing Stage 2 water restrictions, which mandate a watering schedule of once every other week for all residential, commercial, and industrial developments.[19]

[16] Corpus Christi Viewer (https://corpus.maps.arcgis.com/apps/webappviewer/index.html?id=364701d357474326839d4099aa526473)
[17] Ibid.
[18] City of Corpus Christi Comprehensive Plan, Plan CC, Element 5, Transportation and Mobility (https://www.cctexas.com/plancc)
[19] Corpus Christi Water – Stage 2 Water Restrictions are in Effect (https://www.cctexas.com/departments/water-department); Inner Harbor Seawater Desalination – Frequently Asked Questions (https://www.desal.cctexas.com/)



Source: corpus.maps.arcgis.com, Texas Parks & Wildlife, Esri, HERE, Garmin, USGS, NGA, EPA, USDA, NPS

Texas has a deregulated electricity market, so there are numerous electricity providers within the City of Corpus Christi. Over 30 percent of the energy produced in Texas is from renewable sources, such as wind and solar, and most Texas energy providers have about 20 percent green energy in their mix of energy sources.[20] The airport's existing main utility service is the American Electric Power Company. Natural gas is available from Corpus Christi Gas.

NOISE AND NOISE-COMPATIBLE LAND USE

Federal land use compatibility guidelines are established under Title 14 Code of Federal Regulations (CFR) Part 150, *Airport Noise Compatibility Planning*. According to 14 CFR Part 150, residential land and schools are noise-sensitive land uses that are not considered compatible with a 65 decibel (dB) day-night average sound level (Ldn or DNL). Other noise-sensitive land uses (such as religious facilities, hospitals, or nursing homes), if located within a 65 dB DNL contour, are generally compatible when an interior noise level reduction of 25 dB is incorporated into the design and construction of the structure. Special consideration should also be given to noise-sensitive areas within Section 4(f) properties where the land use compatibility guidelines in 14 CFR Part 150 do not account for the value, significance, and enjoyment of the area in question.[21]

Table 1AA identifies noise-sensitive land uses within one mile of the airport. These land uses are also shown on **Exhibit 1P**. A few scattered rural residences are immediately south of the airport boundaries along Bockholt Road, McGloin Road (CR 34), and Old Brownsville Road (CR 665) within the agricultural areas surrounding the airport. The closest residential neighborhoods are located 0.42 to 0.74 miles west of the airport boundary, where the Seamist Mobile Home Park and single-family homes, respectively, are located off S. Clarkwood Road (CR 2292).

Other noise-sensitive land uses within one mile of the airport borders are two places of worship: Family Life Outreach Church and Our Lady of Mount Carmel Mission. There are no schools, hospitals, or live-in medical care facilities within one mile of the airport.

TABLE 1AA | Noise-Sensitive Land Uses Within One Mile of Airport

Mobile Home Parks	Location	Distance from Airport Boundary (miles)	Direction from Airport
Seascape Mobile Home Park	6301 Old Brownsville Road	0.42	South
Seamist Mobile Home Park	692 S. Clarkwood Road	0.45	West
Places of Worship	**Location**	**Distance from Airport Boundary (miles)**	**Direction from Airport**
Family Life Outreach Church	270 Heinsohn Road	0.94	East
Our Lady of Mount Carmel Mission	1080 S. Clarkwood Road	0.72	West

Source: Google Earth Aerial Imagery (April 2024)

[20] Texas Electricity Ratings – Corpus Christi Electricity Rates, Plans & Supplies (https://www.texaselectricityratings.com/electricity-rates/texas/corpus-christi)

[21] 49 U.S. Code § 47141 – Compatible land use planning and projects by state and local governments

SOCIOECONOMICS, ENVIRONMENTAL JUSTICE, AND CHILDREN'S ENVIRONMENTAL HEALTH AND SAFETY RISKS

Socioeconomics | *Socioeconomics* is an umbrella term used to describe aspects of a project that are either social or economic in nature. A socioeconomic analysis evaluates how elements of the human environment – such as population, employment, housing, and public services – might be affected by the proposed action or alternative(s).

Environmental Justice | *Environmental justice* is the fair treatment and meaningful involvement of all people, regardless of race, color, national origin, or income, with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. Fair treatment means that no group of people should bear a disproportionate share of the negative environmental consequences resulting from industrial, governmental, and commercial operations or policies.

Meaningful involvement ensures that:

- People have an opportunity to participate in decisions about activities that may affect their environment and/or health;
- The public's contribution can influence the regulatory agency's decision;
- Their concerns will be considered in the decision-making process; and
- The decision-makers seek out and facilitate the involvement of those potentially affected.[22]

FAA Order 1050.1F, *Environmental Impacts: Policies and Procedures*, specifically requires that a federal action causing disproportionate impacts to an environmental justice population (i.e., a low-income or minority population) be considered.

As described previously under Noise and Noise-Compatible Land Use, the closest residents live immediately south of the airport boundaries along Bockholt Road, McGloin Road (CR 34), and Old Brownsville Road (CR 665) within the agricultural areas surrounding the airport. The closest residential neighborhoods are located 0.42 to 0.74 miles west of the airport boundary.

According to the five-year 2017-2021 American Community Survey (ACS), the population within one mile of the airport is estimated at 2,592 persons, of which 54 percent of the population is considered low-income and 82 percent are people of color (which can include Hispanic populations of any race). Approximately 74 percent of the population has identified as Hispanic (**Table 1BB**).

TABLE 1BB | Population Characteristics Within One Mile of the Airport

Population by Race[1]	Percentage of Population
White	18%
Black	8%
American Indian	0%
Asian	0%
Pacific Islander	0%
Some Other Race	0%
Population Reporting Two or More Races	0%
Total Hispanic population (of any race)	74%
Total Population	**2,592**

[1] Percentages do not add up to 100 percent. Hispanic is treated by the U.S. Census as a question separate from Race.

Source: U.S. EPA, EJScreen ACS Summary Report (5-Year, 2017-2021) (https://ejscreen.epa.gov/mapper/)

[22] U.S. EPA website – Environmental Justice (https://www.epa.gov/environmentaljustice)

Children's Environmental Health and Safety | Federal agencies are directed, per E.O. 13045, *Protection of Children from Environmental Health Risks and Safety Risks*, to make it a high priority to identify and assess the environmental health and safety risks that may disproportionately impact children. Such risks include those that are attributable to products or substances that a child is likely to encounter or ingest (i.e., air, food, water – including drinking water) or to which they may be exposed.

According to the 2017-2021 ACS estimates, 27 percent of the population within one mile of the airport is between the ages of one to 18 years old (roughly 700 children). There is one park (San Juan Park) located within one mile of the airport; there are no schools or other recreational facilities.

VISUAL EFFECTS

Visual effects deal broadly with the extent to which a proposed action or alternative(s) would either (1) produce light emissions that create an annoyance or interfere with activities; or (2) contrast with or detract from the visual resources and/or the visual character of the existing environment. Each jurisdiction will typically address outdoor lighting, scenic vistas, and scenic corridors in its zoning ordinances and general plan.

Light Emissions | These impacts typically relate to the extent to which any light or glare results from a source that could create an annoyance for people or would interfere with normal activities. Section 7.6 of the city's Unified Development Code contains outdoor lighting design requirements to ensure that direct light emissions are not visible from adjacent areas.

Airfield lighting at the airport includes high-intensity runway edge lights, medium-intensity taxiway edge lights, and lighted guidance signs. Navigation lights include a rotating beacon, which emits flashes of white and green light, and four-light precision approach path indicator lights (PAPI-4) on Runways 18, 13, and 31. Runway 36 is not equipped with approach lighting. (For further information, see Existing Airfield Lighting and Visual Navigational Aids (NAVAIDs) earlier in the inventory.) Landside outdoor lighting includes building and parking lot security lighting; most of the airport's landside outdoor light fixtures use light-emitting diodes (LED).

The airport is not surrounded by land uses (such as residential neighborhoods) that would be sensitive to light pollution. The closest residential neighborhoods are located 0.42 to 0.74 miles west of the airport boundary where the Seamist Mobile Home Park and single-family homes are located off S. Clarkwood Road (CR 2292).

Visual Resources and Visual Character | *Visual character* refers to the overall visual makeup of the existing environment where a proposed action or its alternative(s) would be located. For example, areas near densely populated areas generally have a visual character that could be defined as urban, whereas less developed areas could have a visual character defined by the surrounding landscape features, such as open grass fields, forests, mountains, deserts, etc.

Visual resources include buildings, sites, traditional cultural properties, and other natural or manmade landscape features that are visually important or have unique characteristics. Visual resources may include structures or objects that obscure or block other landscape features. In addition, visual resources can include the cohesive collection of various individual visual resources that can be viewed at once or in concert from the area surrounding the site of the proposed action or alternative(s).

The airport is primarily within an agricultural area with pockets of residential, commercial, and industrial land uses scattered within one mile of its borders. Visually, the airport is not only characterized by airport development, but by flat open land, some of which is farmed. Views of the airport are accessible from surrounding roadways; long-range views of the airport are not readily available from off airport property due to the relatively flat topography of the airport environs.

There are no national scenic byways in Texas[23]; however, the State of Texas has a State Scenic Byways Program that has 30 potential state scenic byways. None of these byways are located near the airport; the closest designated Scenic Texas Byway is a segment of Interstate 77, south of Corpus Christi from Robstown to Raymondville.[24] There are no scenic corridors identified in *Plan CC*, the city's comprehensive plan, which was adopted in 2016.

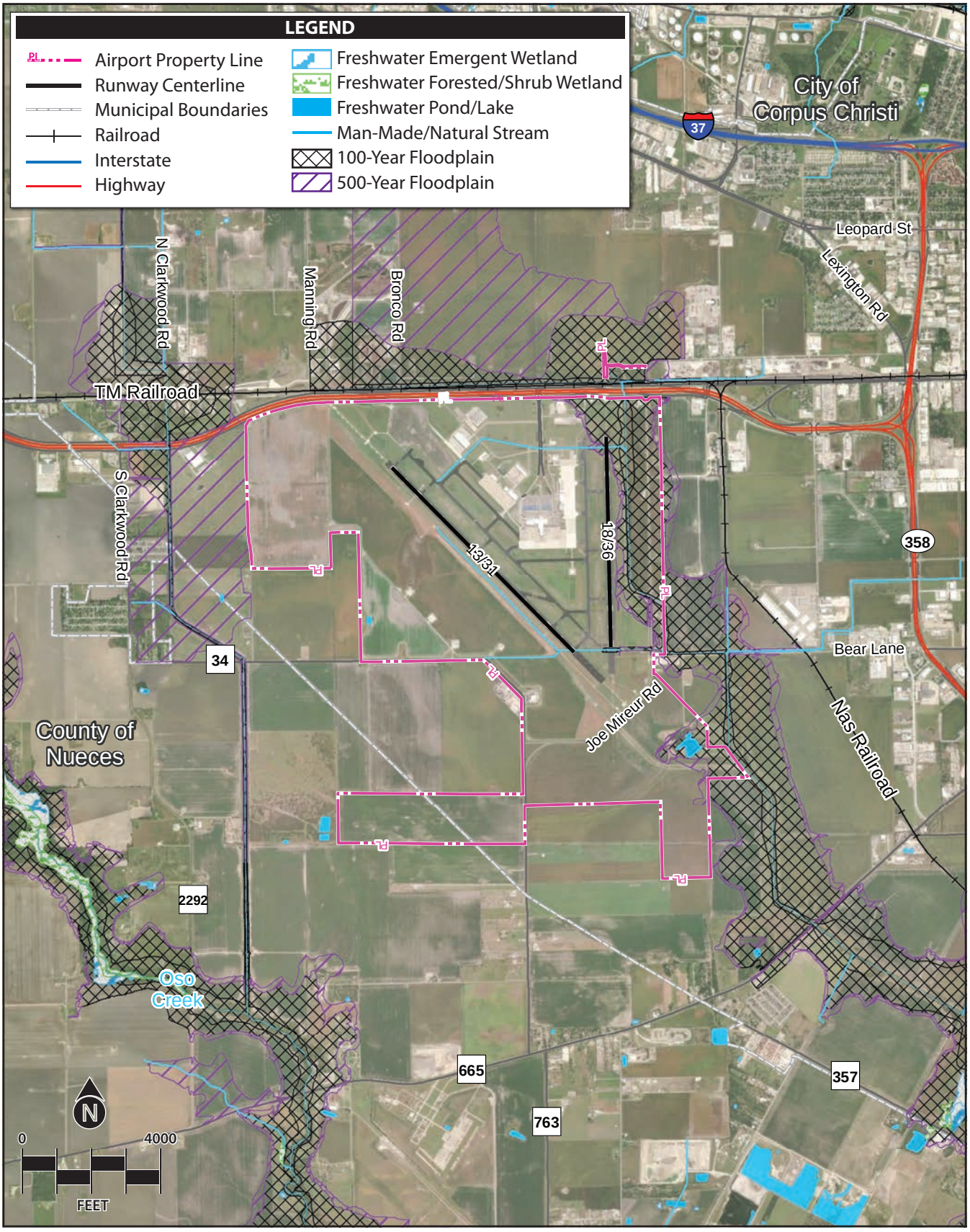
WATER RESOURCES

Wetlands | The U.S. Army Corps of Engineers regulates the discharge of dredged and/or fill material into waters of the United States, including wetlands with a continuous surface connection to a traditional navigable water, under Section 404 of the *Clean Water Act* (CWA). Wetlands are defined in E.O. 11990, *Protection of Wetlands.* Wetlands can include swamps, marshes, bogs, sloughs, potholes, wet meadows, river overflows, mudflats, natural ponds, estuarine areas, tidal overflows, and shallow lakes and ponds with emergent vegetation. Wetlands exhibit three characteristics: the soil is inundated or saturated to the surface at some time during the growing season (hydrology), the soil has a population of plants that are able to tolerate various degrees of flooding or frequent saturation (hydrophytes), and the soil is saturated enough to develop anaerobic (absent of air or oxygen) conditions during the growing season (hydric).

The USFWS manages the National Wetlands Inventory (NWI), which identifies surface waters and wetlands in the nation at a macro level based on aerial photography.[25] Based on the NWI and Google Earth aerial maps, there are several freshwater ponds located on or near the airport (**Exhibit 1R**). These ponds appear to be isolated and are not likely to fall under Section 404 of the CWA, as currently implemented by the U.S. Army Corps of Engineers, as a jurisdictional water.

Small drainage along eastern property line. (Source: Google Earth Street View)

[23] U.S. Department of Transportation, Federal Highways Administration, National Scenic Byways & All-American Roads (https://fhwaapps.fhwa.dot.gov/bywaysp/States/Show/TX), April 2024
[24] Scenic Texas, State Scenic Byway Program (https://www.scenictexas.org/state-scenic-byway-program), April 2024
[25] National Wetlands Inventory (https://fwsprimary.wim.usgs.gov/wetlands/apps/wetlands-mapper/)



Sources: ESRI Basemap Imagery (2022), USSDA, FEMA, FWS, Coffman Associates Analysis

Freshwater emergent wetlands and freshwater forested/shrub wetlands are mapped by the NWI within a small drainage along Joe Mireur Road both on and off the airport along its eastern property line. This drainage is channelized in several areas within the airport. Based on a review of aerial photography, it appears to join Oso Creek downstream. Oso Creek ultimately connects to Oso Bay; therefore, the on-airport drainage might be considered a jurisdictional water under Section 404 of the CWA.

Floodplains | E.O. 11988, *Floodplain Management*, directs federal agencies to take action to reduce the risk of flood loss; minimize the impact of floods on human safety, health, and welfare; and restore and preserve the natural and beneficial values served by the floodplains. U.S. Department of Transportation (DOT) Order 5650.2, *Floodplain Management and Protection*, implements the guidelines contained in E.O. 11988.

E.O. 14030, *Climate-Related Financial Risk*, was established on May 25, 2021. Section 5(e) of E.O. 14030 reinstates E.O. 13690, *Establishing a Federal Flood Risk Management Standard and a Process for Further Soliciting and Considering Stakeholder Input* (originally set forth on January 30, 2015). E.O. 13690 amends E.O. 11988 and mandates the creation of a Federal Flood Risk Management Standard (FFRMS). One of the primary purposes of the FFRMS is to expand the management of floodplains from a base flood evaluation to include a higher vertical elevation (and the corresponding floodplain) to protect against future flood risks for federally funded projects.

Under E.O. 13690 and its guidelines, one of several approaches should be used to identify floodplains and their risks to critical[26] or noncritical federally funded actions:

- Climate-Informed Science Approach (CISA) – the elevation and flood hazard area (i.e., 100-year floodplain) using data that integrate climate science with an emphasis on possible future effects on critical actions;
- Freeboard Value Approach – the elevation and flood hazard area and an additional two or three feet above the base flood elevation, depending on whether the proposed federal action is critical or noncritical;
- 500-Year Floodplain Approach – all areas subject to the 0.2 percent annual chance flood; or
- Other methods resulting from updates to the FFRMS.

Of the four approaches listed above, federal departments and agencies should use the CISA approach when data to support such an analysis are available.

The Federal Emergency Management Agency's (FEMA) Flood Insurance Rate Map (FIRM) panel numbers 48355C0300G and 48355C0315G, effective October 13, 2022, indicate that, while most of the airport is in Zone X, an area of minimal flood hazard, there are both 100-year and 500-year floodplains along the channel that traverses the eastern airport property line (**Exhibit 1Q**).[27]

[26] A critical action is defined in E.O. 13690 and the 2015 Guidelines for Implementing E.O. 11988 as any activity for which even a slight change of flooding is too great.

[27] FEMA Flood Map Service Center (https://msc.fema.gov/portal/search?AddressQuery=Corpus%20Christi%20International%20Airport)

Surface Waters | The CWA establishes water quality standards, controls discharges, develops waste treatment management plans and practices, prevents or minimizes the loss of wetlands, and regulates other issues concerning water quality. Water quality concerns related to airport development most often relate to the potential for surface runoff and soil erosion, as well as the storage and handling of fuel, petroleum products, solvents, etc. Additionally, Congress has mandated (under the CWA) the NPDES.

As previously discussed under Hazardous Materials, Solid Waste, and Pollution Prevention, the TPDES program has federal regulatory authority over discharges of pollutants to Texas surface waters. The airport is in the Corpus Christi International Airport-Oso Creek Watershed.[28] There is one impaired waterbody within this watershed: Oso Creek, south of the airport.

Groundwater | Groundwater is subsurface water that occupies the space between sand, clay, and rock formations. The term aquifer is used to describe the geologic layers that store or transmit groundwater, such as wells, springs, and other water sources. Examples of direct impacts to groundwater could include withdrawal of groundwater for operational purposes or reduction of infiltration or recharge area due to new impervious surfaces.

The U.S. EPA's Sole Source Aquifer (SSA) program was established under Section 1424(e) of the *Safe Drinking Water Act* (SDWA). Since 1977, the program has been used by communities to help prevent contamination of groundwater by federally funded projects and has increased public awareness of the vulnerability of groundwater resources. The SSA program is authorized by Section 1424(e) of the SDWA (Public Law 93-523, 42 U.S.C. 300 et. seq), which states:

"*If the Administrator determines, on his own initiative or upon petition, that an area has an aquifer which is the sole or principal drinking water source for the area and which, if contaminated, would create a significant hazard to public health, he shall publish notice of that determination in the Federal Register.*"[29]

According to the U.S. EPA *Sole Source Aquifer for Drinking Water* website, there are no sole source aquifers located within airport boundaries. The nearest sole source aquifer is the Edwards Aquifer I Sole Source Aquifer, located 136 miles away from the airport.[30]

The Corpus Christi Aquifer Storage and Recovery Conservation District manages groundwater resources within the local area. The district has the authority to permit water wells within its boundaries; residential wells using less than 25,000 gallons per day are exempt but should be registered with the district. In 2019, a final report for the Corpus Christi Aquifer Storage and Recovery Feasibility Project was completed. Two test wells were located on the south side of the airport and two permanent monitoring wells are located along the southeastern airport boundary south of Bear Lane. Based on the study results, the airport is within the area identified as most favorable for aquifer storage and recovery (ASR); the optimal storage intervals are between 350 and 800 feet below ground surface.[31]

[28] U.S. EPA – How's My Waterway (https://mywaterway.epa.gov/community/corpus%20christi%20international%20airport/overview)
[29] U.S. EPA, Overview of the Drinking Water Sole Source Aquifer Program (https://www.epa.gov/dwssa/overview-drinking-water-sole-source-aquifer-program#Authority)
[30] U.S. EPA, Sole Source Aquifers (https://epa.maps.arcgis.com/apps/webappviewer/index.html?id=9ebb047ba3ec41ada1877155fe31356b)
[31] Texas Water Development Board, Corpus Christi Aquifer Storage and Recovery Feasibility Project (https://www.twdb.texas.gov/innovativewater/asr/projects/Corpus/index.asp)

If an ASR project moves forward, treated water would be pumped underground, where it would remain available to be used when needed as a potable or non-potable water source (depending on the quality of the water). In this case, numerous wells could be located within airport property. The state rules governing most facets of ASR project implementation are administered by the TCEQ and are contained in TAC 30, Chapter 331, *Underground Injection Control (UIC)*.

Wild and Scenic Rivers | The *National Wild and Scenic Rivers Act* was established to preserve certain rivers with outstanding natural, cultural, and recreational values in a free-flowing condition for the enjoyment of present and future generations.

The Nationwide River Inventory is a list of over 3,400 rivers or river segments that appear to meet the minimum *National Wild and Scenic Rivers Act* eligibility requirements, based on their free-flowing status and resource values. The development of the Nationwide River Inventory resulted from Section 5(d)(1) in the *National Wild and Scenic Rivers Act*, which directs federal agencies to consider potential wild and scenic rivers in the comprehensive planning process.

The closest designated National Wild and Scenic River identified is the Rio Grande River, located more than 291 miles from the airport.[32] The nearest Nationwide River Inventory feature is the Guadalupe River, located 152 miles away from the airport.[33]

[32] U.S. Department of the Interior, National Park Service, National Wild and Scenic River System in the U.S. (https://nps.maps.arcgis.com/apps/MapJournal/index.html?appid=ba6debd907c7431ea765071e9502d5ac#)

[33] U.S. Department of the Interior, National Park Service, Nationwide River Inventory (https://www.nps.gov/maps/full.html?mapId=8adbe798-0d7e-40fb-bd48-225513d64977)