

Chapter Five

RECOMMENDED MASTER PLAN CONCEPT

The airport master planning process for the Corpus Christi International Airport (CRP or CCIA) has evolved through the development of forecasts of future demand, an assessment of future facility needs, and an evaluation of airport development alternatives to meet those future facility needs. The planning process has included three sets of draft working papers, which were presented to the technical advisory committee (TAC) and discussed at several coordination meetings. The planning process also included an analysis of pavement conditions with a pavement prevention plan under separate cover. The draft materials have also been presented at three public information workshops and have been made available on a dedicated project website throughout the process.

In the previous chapter, several development alternatives were analyzed to explore options that can accommodate the growth and development of the airport. The development alternatives have been refined into a single preferred development plan. This chapter describes, in narrative and graphic form, the recommended direction for the future use and development of the airport. Where appropriate, the selected alternative is summarized and a rationale is presented.

The next chapter includes the proposed capital improvement program (CIP) and financial plan for the short term (2026-2036) and long term (2037 and beyond). The CIP is a point-in-time analysis and projection of developmental staging to be considered as a general guide map only. The airport administration and sponsor should re-evaluate the CIP each year, as needs will likely change and the development plan will require updates to meet those evolving needs. As such, the CIP presented in Chapter Six outlines the likely development for the next 20+ years; however, it is plausible that only the short-term items presented will remain consistent over the next ten years. The next chapter will also consider the short-term CIP in a full financial model.

Finally, this chapter will conclude with an environmental overview of the recommended plan. The overview is not intended to replace a full environmental study process for the plan; it is only meant to serve as a general guide for future considerations that may be spurred by the National Environmental Policy Act (NEPA) guidelines and regulations. The intent is for the analysis to serve as red flags that may require future investigation for the overall plan.

AIRSIDE CONCEPT

The airside concept presents planned improvements to the runway and taxiway system. **Exhibit 5A** presents the long-term master plan development concept for CRP. The following sections discuss the preferred development plan in more detail.

CRITICAL AIRCRAFT AND RUNWAY DESIGN CODE REVIEW

The driving factor when planning the future runway and taxiway system is the critical aircraft determination for each runway, which then identifies the appropriate runway design code (RDC). The critical aircraft is the aircraft, or combination of aircraft with similar characteristics, that accounts for 500 or more annual operations at the airport.

The airport's current critical aircraft is the Boeing 737-800/900/MAX models. These aircraft fall within Airport Approach Category (AAC) C/D and Airplane Design Group (ADG) III.

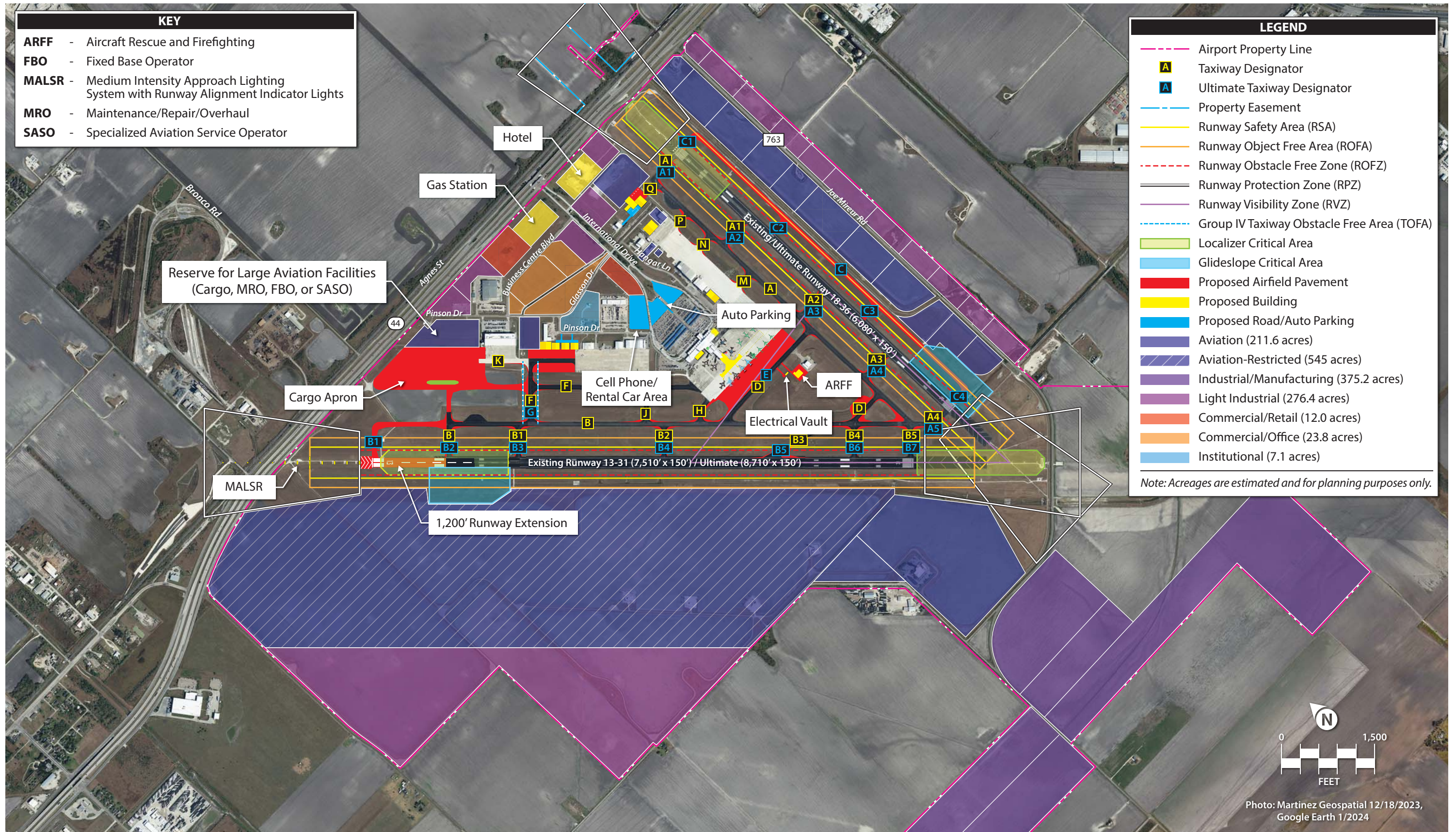
Primary Runway 13-31

Primary Runway 13-31 accounts for approximately 60 percent of all operations at CRP. It has an instrument landing system (ILS) approach to Runway 13 with visibility minimums as low as ½-mile (CAT-I). Runway 31 is served by a GPS LPV instrument approach with visibility minimums down to ½-mile. As mentioned, the critical aircraft for primary Runway 13-31 is currently best represented by the Boeing 737-800/900/MAX models; in the long term, this could include the Boeing 757-200. Therefore, the appropriate critical aircraft nomenclature is C/D-IV-2400. The RDC for this runway is not expected to exceed D-IV-2400 in the future. Runway 13 is the most frequently used runway for both takeoff and landing operations, with just under 60 percent of departures and just over 60 percent of arrivals.

Runway 18-36

Runway 18-36 is a crosswind runway that maintains a large share of total airport operations. Runway 18 is the second highest utilized runway (18 percent for both departure and arrival operations). Runway 36 is preferred over Runway 31 for landing; however, the opposite is true for departures. Historically, this runway has also been designed to C-III standards; however, the analysis presented in Chapter Two – Forecasts showed that there are more than 500 annual operations by these types of aircraft. Runway 36 is served by a CAT I ILS published instrument approach with not lower than 200-foot cloud ceilings. Both ends of the runway provide straight-in GPS LPV instrument approaches with not lower than ½-mile visibility minimums. Therefore, an RDC of C-III-2400 is applied to the runway for this master plan.

Table 5A summarizes the planned critical aircraft and runway design code for both runways.



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TABLE 5A | Planned Critical Aircraft and Runway Design Code

	Current	Future
RUNWAY 13-31		
Current Critical Aircraft	C/D-III	D-IV
Example Critical Aircraft	Boeing 737-800/900/MAX	Boeing 757-200/B737 MAX
Lowest Visibility	½-Mile	½-Mile
Runway Design Code	C/D-III-2400	D-IV-2400
Taxiway Design Group	3	4
RUNWAY 18-36		
Current Critical Aircraft	C/D-III	D-IV
Example Critical Aircraft	Boeing 737-800/900	Boeing 757-200/B737 MAX
Lowest Visibility	½-Mile	½-Mile
Runway Design Code	D-III-2400	D-IV-2400
Taxiway Design Group	3	4

Source: Current Airport Layout Plan; FAA AC 150/5300-13B, Airport Design, Change 1

RUNWAY GEOMETRY AND SAFETY STANDARDS REVIEW

Identifying the RDC of each runway leads to their safety area design standards; these are summarized in **Table 5B**. Each runway meets safety area design standards. The RSAs beyond the Runway 1R and 32 ends currently overlap, which is a design that is discouraged. The overlapping RSA was the focus of the comparative safety assessment (CSA) that was undertaken during the master plan project. While the RSAs do meet standard, the results of the CSA are discussed later in this chapter.

TABLE 5B | Runway Design Standards

AIRPORT DATA	Runway 13-31	Runway 18-36
Runway Design Code	Existing C/D-III-2400 Ultimate D-IV-2400	Existing & Ultimate C/D-III-2400
Visibility Minimums	½-Mile	½-Mile
Runway Width Standard	150'	150'
RUNWAY DESIGN STANDARDS		
Runway Safety Area (RSA)		
Width x Length Beyond End	500' x 1,000'	500' x 1,000'
Runway Object Free Area (ROFA)		
Width x Length Beyond End	800' x 1,000'	800' x 1,000'
Runway Obstacle Free Zone (ROFZ)		
Width x Length Beyond End	400' x 200'	400' x 200'

Source: FAA AC 150/5300-13B, Airport Design, Change 1

RUNWAY LENGTH

Primary Runway 13-31 currently measures 7,510 feet long and 150 feet wide. Analysis in Chapter Three – Facility Requirements showed that the existing runway length is appropriate for CRP and the aircraft fleet it experiences. No changes are planned to this runway unless the airport is ultimately served by larger cargo aircraft operations. Because of this potential, the proposed plan includes a 1,200-foot extension to accommodate the Boeing 757-200 for daily departures. Justification would be required prior to considering such an extension.

It is important to note that this extension would push the northern RSA and ROFA to the fenceline as depicted. As such, the Runway 13 runway protection zone (RPZ) would extend beyond airport property to areas north of State Highway 44. These areas should be acquired or mitigated through land use controls if possible; otherwise, the Runway 13 threshold could be displaced in its current location to keep the RPZ from shifting north. Airport administration should closely work with the FAA to determine best options if justification becomes available to extend the runway.

Crosswind Runway 18-36 is 6,080 feet long and 150 feet wide. The analysis in the Facility Requirements chapter indicated that the current length and width are needed to support current and future aircraft operations. At 150 feet wide, the runway meets the C-III design standards that have previously been applied to the runway.

AIRFIELD GEOMETRY

The CRP airfield system was previously designed in a manner that created significant runway incursions due to the southern runway end conversion and inefficient taxiway layouts. The airfield was substantively changed in the 2010s with a northerly shift of each runway, thereby “decoupling” them for better pilot situational awareness. Moreover, the majority of airfield taxiways were reconfigured to better meet current airfield design standards. The current airfield geometry is largely sufficient for meeting airfield design and should be maintained unless and/or until FAA design standards are modified.

RPZ LAND USE COMPATIBILITY

RPZ land use compatibility guidelines were presented in Chapter Three – Facility Requirements. RPZs are the trapezoidal areas off the runway ends. The RPZs should be clear of obstructions and incompatible land uses. Incompatible land uses are anything that may attract people, including buildings, roads, and recreational facilities.

If an airport sponsor is the advocate for a project that would introduce new incompatible land uses into an RPZ, the FAA may request a detailed alternatives analysis for review; however, “it is not the FAA’s decision whether the sponsor should accede to a new incompatible land use. Rather, the FAA’s assessment is limited to whether the airport has made an adequate effort to pursue and give full consideration to appropriate and reasonable alternatives” (Reference FAA AC 150/5190-4B, Airport Land Use Compatibility Planning, Section 2.2.5.9.3).

The shift planned for Runway 31 to the northwest would extend the RPZ farther beyond airport property and over State Highway 44. Airport administration and the City of Corpus Christi should pursue policies that protect RPZ lands and remove incompatible land uses where possible.

TAXIWAY GEOMETRY

Exhibit 5A reflects a taxiway geometry that meets current FAA design standards. The exhibit also shows a new taxiway designation system based on the new geometry.

Several new taxiways are planned, with the most significant being the extension of the commercial terminal apron to encompass Taxiway E. This extension would give ground controllers greater flexibility in aircraft movements. Taxiway B is also planned to be extended with Runway 13 if justified. Taxiway improvements would also be necessary to support aviation developments to the east of Runway 18-36 and west of Runway 13-31.

INSTRUMENT APPROACH PROCEDURES

As mentioned, CRP has instrument approaches to all runway ends. Runway ends 13 and 36 are served by sophisticated ILS precision instrument approaches with CAT-I minimums. These approaches allow properly equipped aircraft and pilots the ability to operate with weather minimums as low as 200-foot cloud heights and a 2,400-foot runway visibility range (RVR).

Instrument approaches based on GPS have become common across the country. All runway ends at CCIA are served by GPS approaches. A variant of GPS, required navigation performance (RNP), allows an aircraft to fly a specific path between two defined three-dimensional points in space. RNP instrument approaches allow for more efficient, curved flight paths through congested airspace, around noise-sensitive areas, or through difficult terrain. CCIA has RNP instrument approaches at the ends of Runways 13, 31, and 36. Runways 18 and 31 are served by a vertically guided GPS approach, the LPV, which offers CAT-I minimums. As a result, all four runway ends are served by vertically guided approaches with CAT-I minimums.

The ILS and GPS approaches are excellent instrument approach procedures that provide all-weather capability for CCIA. As such, these procedures should be maintained in the future.

VISUAL NAVIGATION AIDS

The airport beacon is located on top of the airport traffic control tower (ATCT). The beacon provides for rapid identification of the airport with a rotating light that is green on one side and white on the opposite side. The beacon should be maintained through the planning period.

All runway ends except Runway 36 are equipped with visual glideslope indicator light systems. Four-box precision approach path indicators (PAPI-4s) are available on Runways 13, 18, and 31. If feasible, the PAPI-4 system should be considered for the approach to Runway 36.

The FAA recommends an approach lighting system for instrument approaches with lower than $\frac{3}{4}$ -mile visibility minimums. All four runway ends are equipped with a medium intensity approach lighting system with runway alignment indicator lights (MALSR). These systems should be maintained in the future.

WEATHER REPORTING AIDS

The airfield is served by several weather reporting facilities. Four lighted wind cones are located on the airfield: two near Runways 13, 18, and one at the confluence of Runways 31 and 36. A fourth lighted wind cone is situated just south of the main commercial terminal apron. Runway 13 is served by a runway visual range (RVR) system that reports minimums in thousands of feet. This system consists of spaced

antenna along the southeast side of Runway 13-31 from the Runway 13 threshold to near the airport surveillance radar (ASR) antenna and ATCT. Finally, the airport surface observation system (ASOS) provides up-to-the-minute airfield weather data.

LANDSIDE CONCEPT

The landside concept relates to all airport elements except the runway/taxiway/airspace elements. This includes the passenger terminal complex, aircraft aprons, taxilanes, helicopter facilities, and support services.

TERMINAL COMPLEX

CCIA has experienced an increase in passenger activity in recent years, rebounding from COVID-19 pandemic losses. The FAA-approved forecast projects that the airport will reach nearly 540,000 enplanements within the next 20 years.

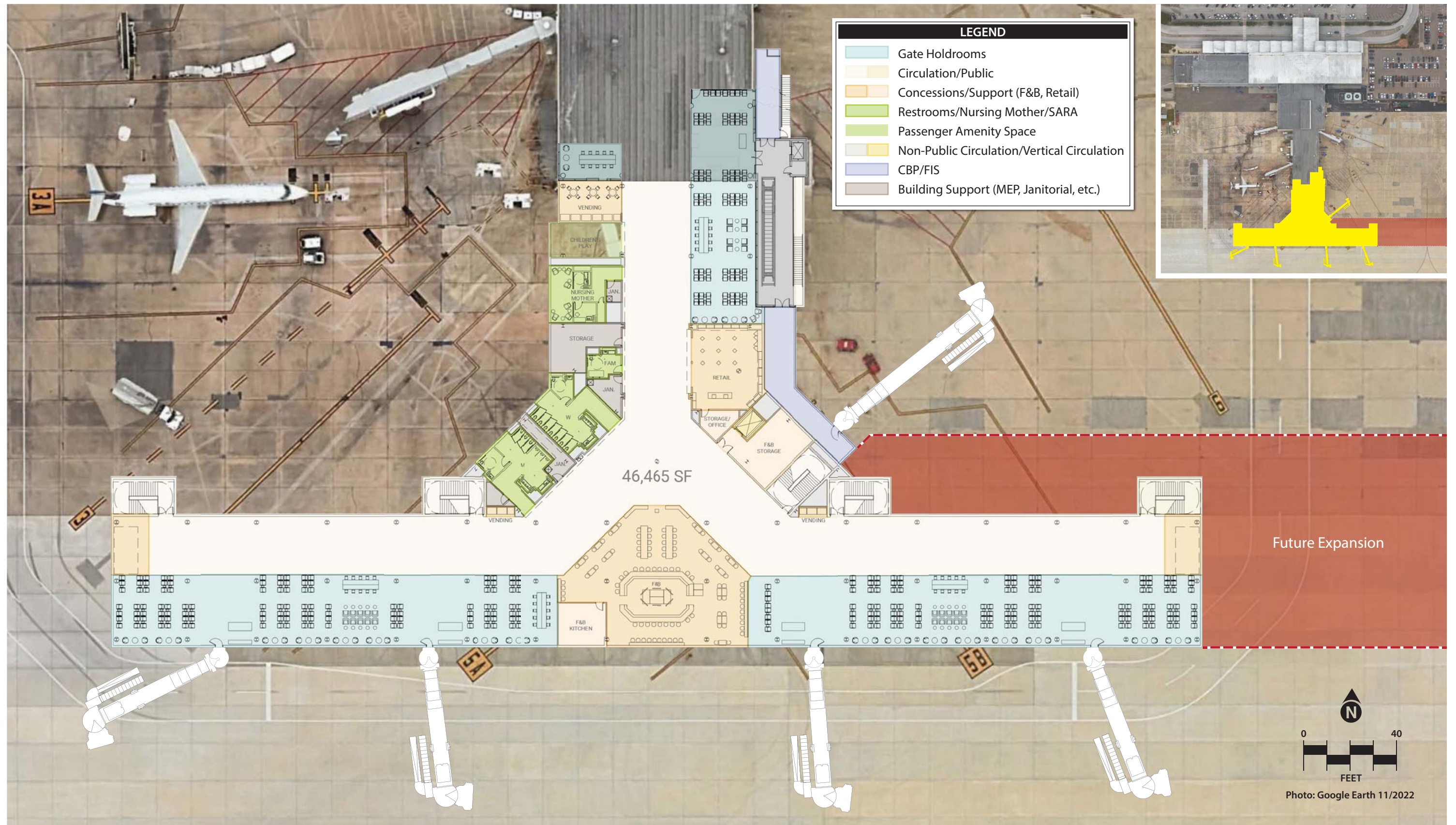
Analysis presented in Chapter Three indicated that the current terminal building is appropriately sized to accommodate much of the planned passenger growth. However, the analysis also showed that several functional areas in their current configurations will likely become undersized.

First and foremost, the existing baggage claim facility should be enlarged and improved to meet current demand levels. The demand requirements, as previously summarized in Table 3W, are considered the minimum generic facilities program recommended to support the design aircraft(s) and their associated peak hour passenger activity levels. **While projected demand is not expected to exceed current facility capacity until the projected 2033 activity levels (465,500 enplanements), individual spaces should be reviewed to determine when their capacity shortfalls will occur.** Industry best practice is to start planning for additional space that serves the public, airline, and baggage processing functions when demand reaches approximately 85 percent of the existing capacity. Crossing this capacity threshold triggers the need to begin planning, designing, and constructing replacement facilities in time to meet the growing passenger demand levels. Table 3Y presented the point at which these trigger points will be met.

The most critical of the future needs will be increases in the gate area, number of gates, TSA spaces, and airline administrative spaces. Other areas, such as concessions and additional circulation spaces, will also be required by the long-term activity levels.

Chapter Four presented terminal concourse expansion options. The recommended terminal expansion plan is depicted on **Exhibit 5B**. As shown, the plan is to extend the current “pier” to the south approximately 200 feet then allow for the pier to run perpendicular east/west for approximately 465 feet. As proposed, the plan would allow for several additional gates, larger circulation and gate areas, as well as increased concessionary spaces. The enlarged terminal would follow increased demand and would likely occur in phases as demand dictates.

The terminal aircraft parking apron at CRP is generally large enough to facilitate the parking of commercial aircraft based on current activity levels; however, it is not adequately sized through the 20-year planning horizon. If the terminal building concourse were expanded, then the terminal apron would become undersized. Additional terminal apron can be constructed to abut/envelop Taxiway E, providing for additional aircraft parking area as well as two-way circulation for aircraft movements.



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INTERNATIONAL TERMINAL/FEDERAL INSPECTION SERVICES

The terminal plan accounts for the potential for Federal Inspection Services (FIS) facilities. These facilities could be developed if demand for international connections becomes more prevalent.

AIRCRAFT RESCUE AND FIREFIGHTING/ADMINISTRATION BUILDING

The recommended master plan concept considers constructing a new aircraft rescue and firefighting (ARFF) building immediately west of the existing structure and allows for the existing building to serve as support for airport maintenance and other operational needs.

AIR CARGO

Air cargo activity is projected to grow at CRP; however, there is no current demand for large jet aircraft support. If there were increased demand, an area north of the Coast Guard hangar is reserved by large air cargo aircraft and supporting facilities. The largest aircraft utilized is expected to remain the Boeing 757.

GENERAL AVIATION FACILITIES

General aviation (GA) activity is a significant sector at the airport; thus, planning to meet the demand for additional facilities is prudent. Existing general aviation activity is located both northeast and northwest of the commercial terminal building. The plan allows for additional hangar development in both GA locales, as shown on **Exhibit 5A**. The plan also shows an enlarged GA apron that would envelop Taxiway K to meet demand for additional hangar spaces.

LAND USE COMPATIBILITY – ON-AIRPORT

CCIA has an abundance of land beyond the current and even long-term need based on operational activity demands. As a result, the planning process considered the long-term designation of excess land for specific opportunity development. As shown on **Exhibit 5A**, all property west of Runway 13-31 and east of Runway 18-36 is proposed for either aviation or non-aviation development. The areas closest to the runways must be reserved for future aviation uses, per FAA obligations. Areas more distant from the runway or those areas islandized due to developments/roads/etc. can be planned for non-aviation uses such as commercial and/or industrial development opportunities. This plan will be formalized with the FAA's concurrence on the land use plan and airport layout drawings. Current development plans include the allowance for a gas station and hotel to be developed on the corners of International Drive and Agnes Street. Additional parcels for commercial/light industrial are identified in adjacent areas, as shown on the exhibit.

LAND USE COMPATIBILITY – OFF AIRPORT

Land use planning around Corpus Christi International Airport occurs through regulatory and non-regulatory means. The primary regulatory tool for directing land use is the zoning ordinance, which limits the type, size, and density of land uses in various locations. Examples of land use types include residential, commercial, industrial, and agricultural. Non-regulatory means of land use controls include the comprehensive or strategic land use plan. These documents can be adopted for the greater municipality or for specific areas. In most states, including Texas, zoning ordinances are required to be created in accordance with the City or County's comprehensive plan.

It is important to note the distinction between primary land use concepts used in evaluating development with the airport environs and existing land use, comprehensive plan, and zoning land use. Existing land use refers to property improvements as they exist today, according to city records. The comprehensive plan land use map identifies the projected or future land use, according to the goal and policies of the locally adopted comprehensive plan. This document guides future development within the city planning area and provides the basis for zoning designations.

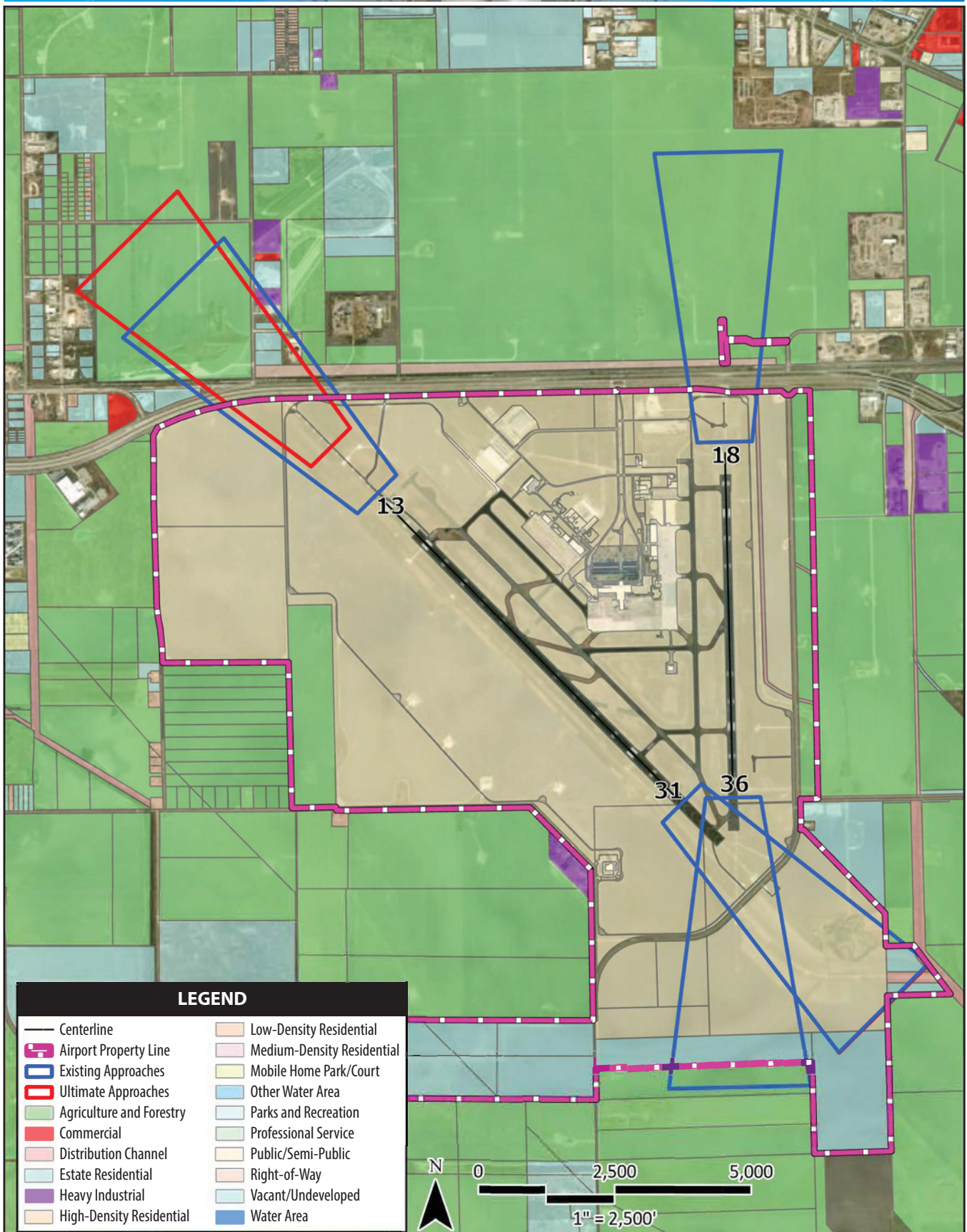
Zoning identifies the type of land use permitted on a given piece of property, according to the city zoning ordinances and maps. Local governments are required to regulate the subdivision of all lands within their corporate limits. Zoning ordinances should be consistent with the comprehensive plan where one has been prepared. In some cases, the land use prescribed in the zoning ordinance or depicted in the comprehensive plan may differ from the existing land use.

The following sections describe the applicable land use policies for the area within the vicinity of the airport. Specifically, these sections pertain to the lands within the 65 day-night noise level metric (DNL) contours and the FAA Title 14 Code of Federal Regulations (CFR) Part 77 Approach Surface within one mile of the runway ends.

EXISTING LAND USE

As discussed in Chapter One, CRP is located within the city limits of Corpus Christi, TX. The existing and future runway approach surfaces for both runways clipped to one mile remain entirely within the City of Corpus Christi land use planning and zoning jurisdiction.

Exhibit 5C depicts the existing land use designations within the airport approach surfaces out to one-mile for the existing and future conditions. The airport is located on the western boundary of the City of Corpus Christi city limits, along the State Highway 44 (SH 44) corridor. The area surrounding the airport is largely undeveloped and consists of agriculture and forestry land uses or vacant land, except for some commercial and heavy industrial land uses to the north of SH 44. The existing approach surfaces for both runways include airport property, vacant/undeveloped land, and agricultural and forestry land uses. The approach surfaces to Runway 13 and Runway 18 also include an out-of-service railroad right-of-way, identified as such, in addition to the SH 44 right-of-way. Furthermore, the existing and future approach surfaces to Runway 13 contain a portion of one parcel designated for heavy industrial use.



Source: City of Corpus Christi GIS Services, accessed July 14, 2026; Coffman Associates analysis

*Existing and ultimate approaches are clipped to one mile

ZONING

When used in conjunction with subdivision regulations, zoning regulations are an essential tool to achieve goals and policies outlined in the comprehensive plan. These regulations divide land into districts, or zones, and regulate land use activities in those districts, specify permitted uses, the intensity and density of each use, and the bulk sizes of each building. Traditional zoning ordinances separate land into four basic uses: residential, commercial (including office), industrial, and agricultural.

The current City of Corpus Christi Unified Development Code was adopted on May 10, 2011, by the City of Corpus Christi, Texas, under authority granted to it by the State of Texas¹. It was last updated in December 2022. As previously mentioned, the City of Corpus Christi's extraterritorial zoning jurisdictions (ETJ) extend beyond the existing city municipal boundary. All land within the runway approach surfaces out to one mile are within the jurisdiction of the City of Corpus Christi and are therefore subject to the city's Unified Development Code.

As shown on **Exhibit 5D**, the zoning districts present within the existing and future runway approach surfaces out to one mile are limited to industrial and farm rural land uses. **Table 5C** summarizes the types of land uses allowed in each zoning district, maximum allowable height for structures, maximum building coverage for lots, and overall minimum lot areas.

TABLE 5C | City of Corpus Christi, TX Zoning Classifications

	Approach Surface Location	Residential Allowed?	Maximum Building Height	Minimum Open Space	Minimum Lot Area
Heavy Industrial	Airport property; Runways 13, 31, 18 & 36	No ¹	None ²	None	None
Light Industrial	Runways 13 & 18	No ¹	None ²	None	None
Farm Rural	Yes	45 feet	45 feet	None	5 acres

¹ Except for development of caretaker's quarters, which must meet development standards for Single Family 6 zoning district in a conventional subdivision.

² Must meet requirements of Section 4.2.8.C.

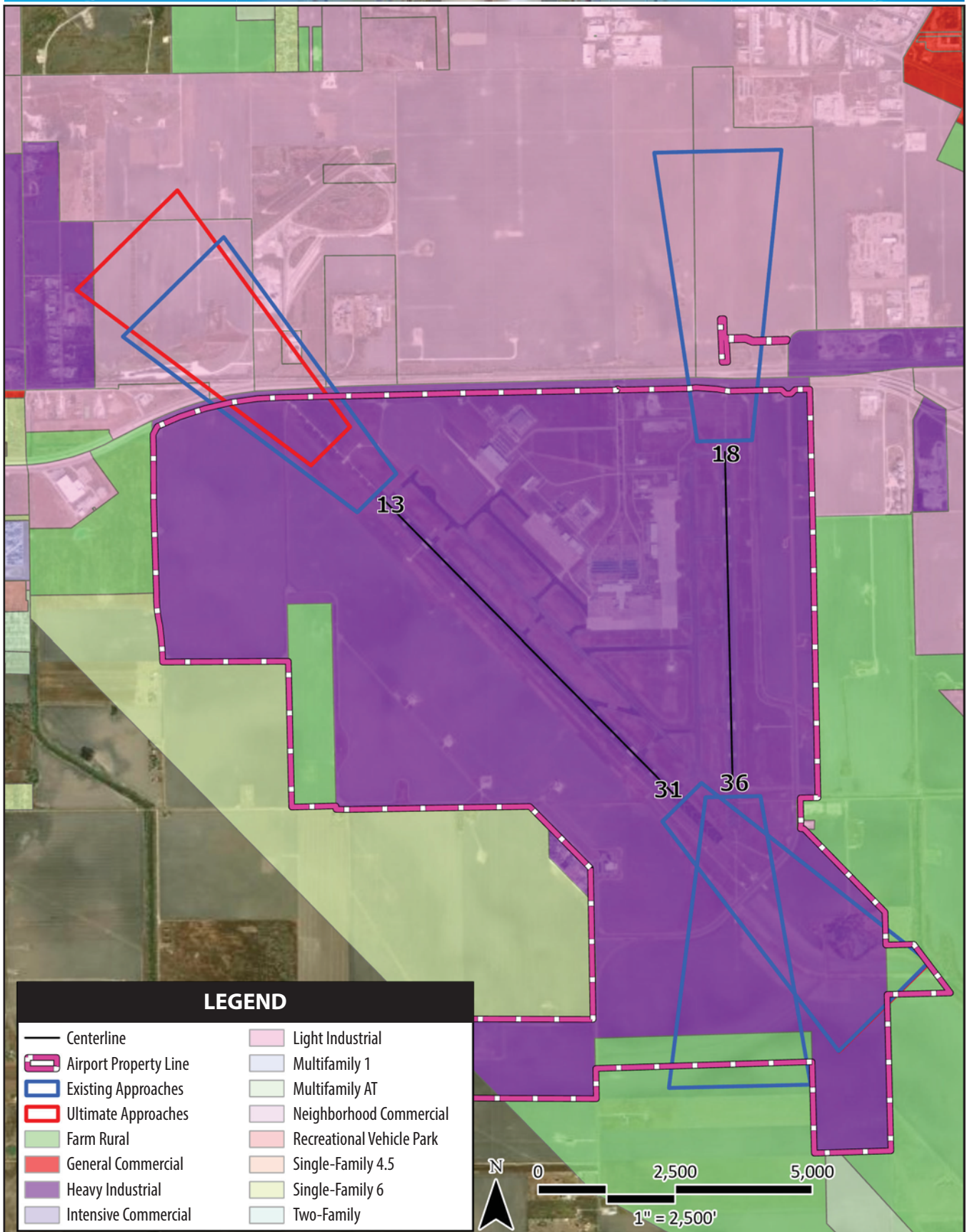
Sources: City of Corpus Christi, TX, Unified Development Code; Coffman Associates analysis

In 2017, in accordance with Section 241.002 of the Texas Local Government Code, Ordinance 031307, the City of Corpus Christi established an Airport Zoning Commission in order to preserve, protect, and maintain the importance of the operations of CCIA and of the military flight training mission of Naval Air Station Corpus Christi. The Airport Zoning Commission is comprised of city planning commissioners and meets on an as-needed basis, and possesses and exercises all the jurisdiction, powers, and procedures as set out in the Airport Zoning Act. The City has adopted a zoning ordinance overlay district addressing development and height of structures near its naval air facilities. However, existing regulations do not indicate that there is an Airport Hazard Overlay District in place specific to CCIA.

FUTURE LAND USE PLAN

The future land use plan is a general policy document used by a government agency to identify and describe the community's characteristics, articulate goals and policies, and explore alternative plans for future growth, which, in turn, will be used to produce zoning ordinances and subdivision regulations to carry out the plan's goals. Often, a municipality will incorporate goals and policies for their airports in

¹ TX Loc Govt Code § 211 (1987) <https://statutes.capitol.texas.gov/?tab=1&code=LG&chapter=LG.211&artSec=>



Source: City of Corpus Christi GIS Services, accessed July 14, 2026; Coffman Associates analysis

*Existing and ultimate approaches are clipped to one mile

the future land use plan, typically separate from an airport master plan. Generally, the future land use plan assists local decision-makers regarding complicated issues during the development process or maintenance issues. The most current planning documents of this type for the land near the airport is the Plan CC Comprehensive Plan (Plan CC), adopted in September 2016.

Plan CC Comprehensive Plan

The City of Corpus Christi's comprehensive plan, adopted in September 2016 under authority granted to it by the State of Texas² and accompanying City Ordinance No. 030978, serves as the policy guide for the physical and economic growth of the City and its extra-territorial jurisdiction. The goal of the plan is to promote sound development of the City and promote the public health, safety, and welfare of its citizens. The comprehensive plan establishes a recommended concept for land development, as depicted on Plan CC's future land use maps. It is important to note that land use planning efforts for the future extend beyond the existing city limits into its extraterritorial jurisdictions (ETJ), which broadens the city's land use planning authority to 1 mile outside of the existing city limits, as established by Texas Local Government Code³.

Airport property is contained within the CC Airport Planning District and on the associated CC Airport Planning District Future Land Use Map. Element 5 – Transportation & Mobility of the plan identifies the following goal strategies for decision makers regarding the airport:

Goal 4 — Corpus Christi International Airport is the aviation gateway to the Coastal Bend and supports economic development.

Strategies for Decision Makers:

1. Support implementation of the Airport Master Plan.
2. Support enhancements to and expansion of airline service.
3. Encourage development of areas adjacent to the Corpus Christi International Airport in compliance with the Joint Land Use Study in order to minimize the impact on the airport and its operations.

Element 7 – Future Land Use, Zoning & Urban Design of the plan also prioritizes regulations to protect the airport use, with the following goal and strategies identified:

Goal 4 — Regulations to protect military and civilian airfield and airport use are in place.

Strategies for Decision Makers:

1. Adopt appropriate regulations consistent with the recommendations of the Joint Land Use Study.

² TX Loc Govt Code § 213.002 (2024) <https://statutes.capitol.texas.gov/Docs/LG/htm/LG.213.htm>

³ <https://statutes.capitol.texas.gov/Docs/LG/htm/LG.42.htm>

2. Continue to consider the compatibility of proposed uses with military airfield operations when making decisions on rezoning requests.
3. Avoid development that is incompatible with the operation of military airfields and the airport.

Additionally, the airport is identified as “the aviation gateway to the Coast Bend” in the plan, and the plan acknowledges that the airport contributes significantly to regional economic development.⁴

Exhibit 5E depicts the future land use designations within the airport’s existing and future Part 77 approach surfaces clipped to one mile. Future land uses identified within the one-mile approach surfaces include transportation, light industrial, and permanent open space. **Table 5D** presents the runway approach location where each land use is planned and the purpose of each land use designation as stated in the comprehensive plan.

TABLE 5D | Future Land Use Designations Within the Ultimate Approach Surfaces Clipped to 1-Mile

Future Land Use Designation	Description	Location
Transportation	Airports, railroads, highway and interstate right-of-way	Airport property; Approach to Runways 13, 31, 18 & 36
Light Industrial	Light industrial and office uses, potentially in “business park” settings, and typically near major transportation routes and services including highways, railroads, and airport facilities	Approach to Runways 13, 31, 18 & 36
Permanent Open Space	Parks and playgrounds, recreational fields and facilities, greenways, and other green areas managed for public access and recreation	Approach to Runway 31 & 36

Sources: Plan CC Comprehensive Plan (September 2016); Coffman Associates analysis.

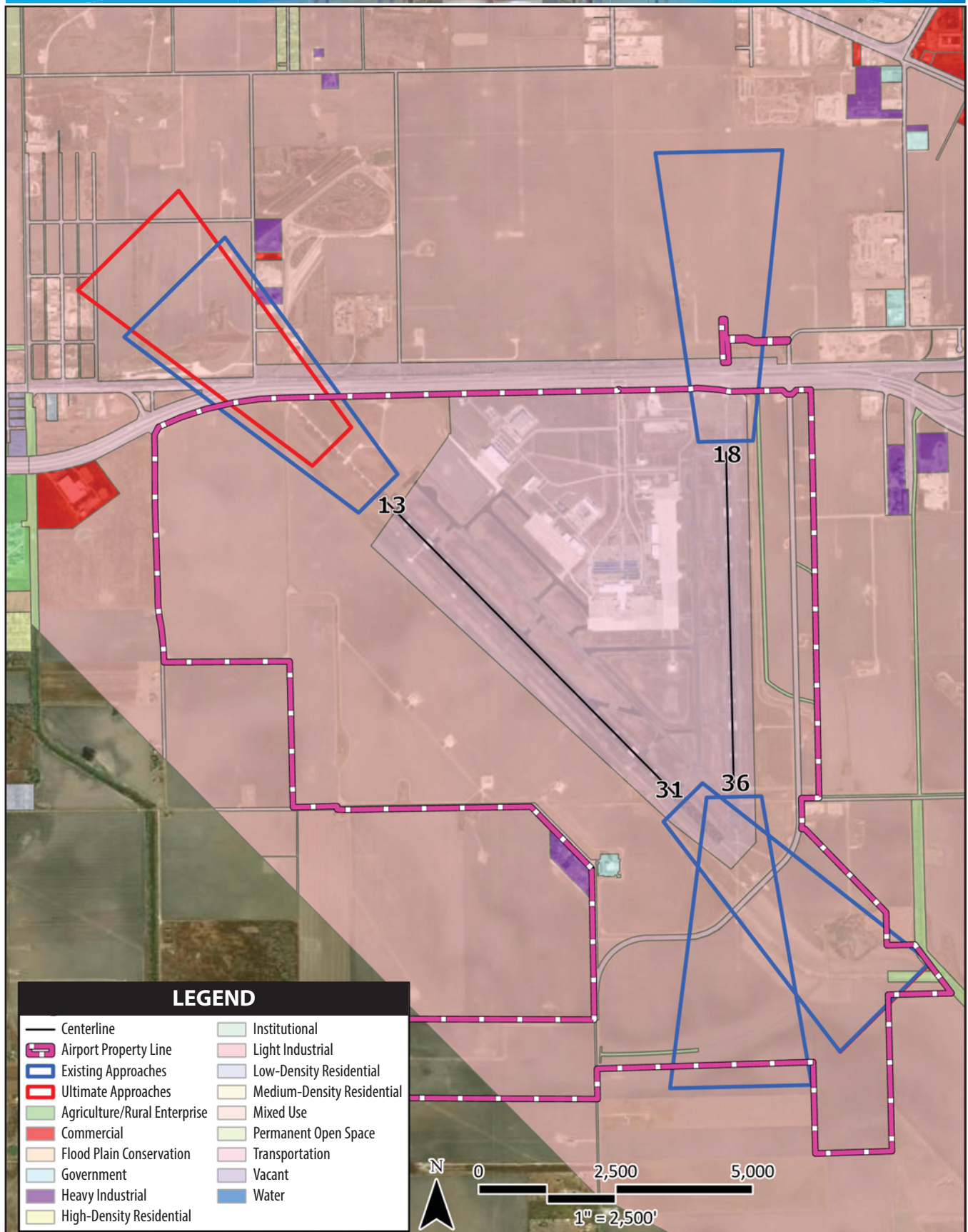
SUBDIVISION REGULATIONS

Subdivision regulations are legal devices employed to administer the process of dividing land into two or more lots, parcels, or sites for the building and location, design, and installation of supporting infrastructure. The subdivision regulations are one of two instruments commonly employed to carry out the goals and policies outlined in the comprehensive plan. The land subdivision ordinance of the City of Corpus Christi is codified within Article 8 – Subdivision Design and Improvements of the City of Corpus Christi Unified Development Code.⁵

Subdivision regulations can be used to specify requirements for airport-compatible land development by requiring developers to plat and develop land in ways that minimize noise impacts or reduce noise exposure. Subdivision regulations can also be used to protect the airport proprietor from litigation for noise impacts. The most common requirement is the dedication of a noise or aviation easement to the airport sponsor by the land developer as a condition of the development approval. Easements typically authorize overflights of property, with noise levels attendant to such operations.

⁴ Plan CC Comprehensive Plan (September 2016). <https://www.corpuschristitx.gov/departments-directory/planning-economic-development/planning/plan-cc/#docaccess-049c340ff74e3f4f76432bf33d7fd9a006474aba00f5877aef3ed7de377021ca>

⁵ Article 8 – Subdivision Design and Improvements of the City of Corpus Christi Unified Development Code (2022) <https://online.encodeplus.com/regs/corpuschristi-tx/doc-viewer.aspx#secid-1499>



Source: City of Corpus Christi GIS Services, accessed July 14, 2026; Coffman Associates analysis

*Existing and ultimate approaches are clipped to one mile

BUILDING CODE

Building codes were established to provide minimum standards to safeguard life, limb, health, and public welfare by regulating and controlling the design, construction, quality of materials, use and occupancy, location, and maintenance of all buildings and structures. Building codes may be required to provide sound insulation in new residential, office, and institutional buildings when warranted by existing or projected high aircraft noise levels.

The current City of Corpus Christi Building Code, adopted August 1, 2023, consists of the International Building Code (IBC), 2021 edition, with specific amendments. The IBC generally does not include noise attenuation requirements in the building code. Jurisdictions can pass additional regulations in their building code to require additional building requirements, such as reacting to unique threats of regional natural disasters. These regulations serve to help developers build structures “right” at the beginning of construction when it matters most, as it can be expensive and difficult to change. For new construction near an airport, incorporating noise attenuation can be especially important. Noise attenuation measures can include increasing the thickness of windows or implementing sound-absorbing building materials.

NON-COMPATIBLE DEVELOPMENT ANALYSIS

In addition to evaluating areas with the potential for non-compatible development based on future land use plans and zoning, the airport’s noise exposure contours have been evaluated in comparison with the recommended height restrictions within the Part 77 approach surfaces out to one mile. This was accomplished by evaluating city-adopted land use plans and zoning designations for those parcels encompassed by the noise contours to determine if noise-sensitive land uses could be developed in those areas. Both noise contours and height restrictions within the Part 77 approach surface area are addressed below.

Noise Exposure Contours

The standard methodology for analyzing noise conditions at airports involves the use of a computer simulation model. The purpose of the noise model is to produce noise exposure contours that are overlaid on a map of the airport and surrounding vicinity to graphically represent aircraft noise conditions. When compared to land use, zoning, and comprehensive plan maps, the noise exposure contours may be used to identify areas that are currently, or have the potential to be, exposed to aircraft noise.

To achieve an accurate representation of an airport’s noise conditions, the noise model uses a combination of industry-standard information and user-supplied inputs specific to the airport. The software provides noise characteristics, standard flight profiles, and manufacturer-supplied flight procedures for aircraft which commonly operate at CRP. As each aircraft has different design and operating characteristics (number and type of engines, weight, and thrust levels), each aircraft emits different noise levels. The most common way to spatially represent the noise levels emitted by an aircraft is a noise exposure contour.

Airport specific information, including runway configuration, flight paths, aircraft fleet mix, runway use distribution, local terrain and elevation, average temperature, and numbers of daytime and nighttime operations, are also used in modeling inputs.

Based on assumptions provided by the user, the noise model calculates average 24-hour aircraft sound exposure within a grid covering the airport and surrounding areas. The grid values, representing the DNL at each intersection point on the grid, signify a noise level for that geographic location. To create noise contours, an isoline similar to those on a topographic map is drawn connecting points of the same DNL noise value. In the same way that a topographic contour represents the same elevation, the noise contour identifies areas of equal noise exposure.

DNL is the metric currently accepted by the FAA, U.S. EPA, and Department of Housing and Urban Development (HUD) as an appropriate measure of cumulative noise exposure. These three agencies have each identified the 65 DNL noise contour as the threshold of incompatibility.

The guidelines summarized in Table 1 of 14 CFR Part 150 indicate that all land uses are acceptable in areas below 65 DNL.⁶ At or above the 65 DNL threshold, residential uses (including RV parks and campgrounds), educational and religious facilities, health and childcare facilities, and outdoor sport, recreation and park facilities are all incompatible. Educational, healthcare, and religious facilities are also generally considered to be incompatible with noise exposure above 65 DNL. As with residential development, communities can make a policy decision that these uses are acceptable with appropriate sound attenuation measures. Hospitals and nursing homes, places of worship, auditoriums, and concert halls are structures that are generally compatible if measures to reduce noise level are incorporated into the design and construction of structures. Outdoor music shells and amphitheaters are not compatible and should be prohibited within the 65 DNL noise contour. Agricultural uses and livestock farming are generally considered compatible except for related residential components of these uses, which should incorporate sound attenuation measures.

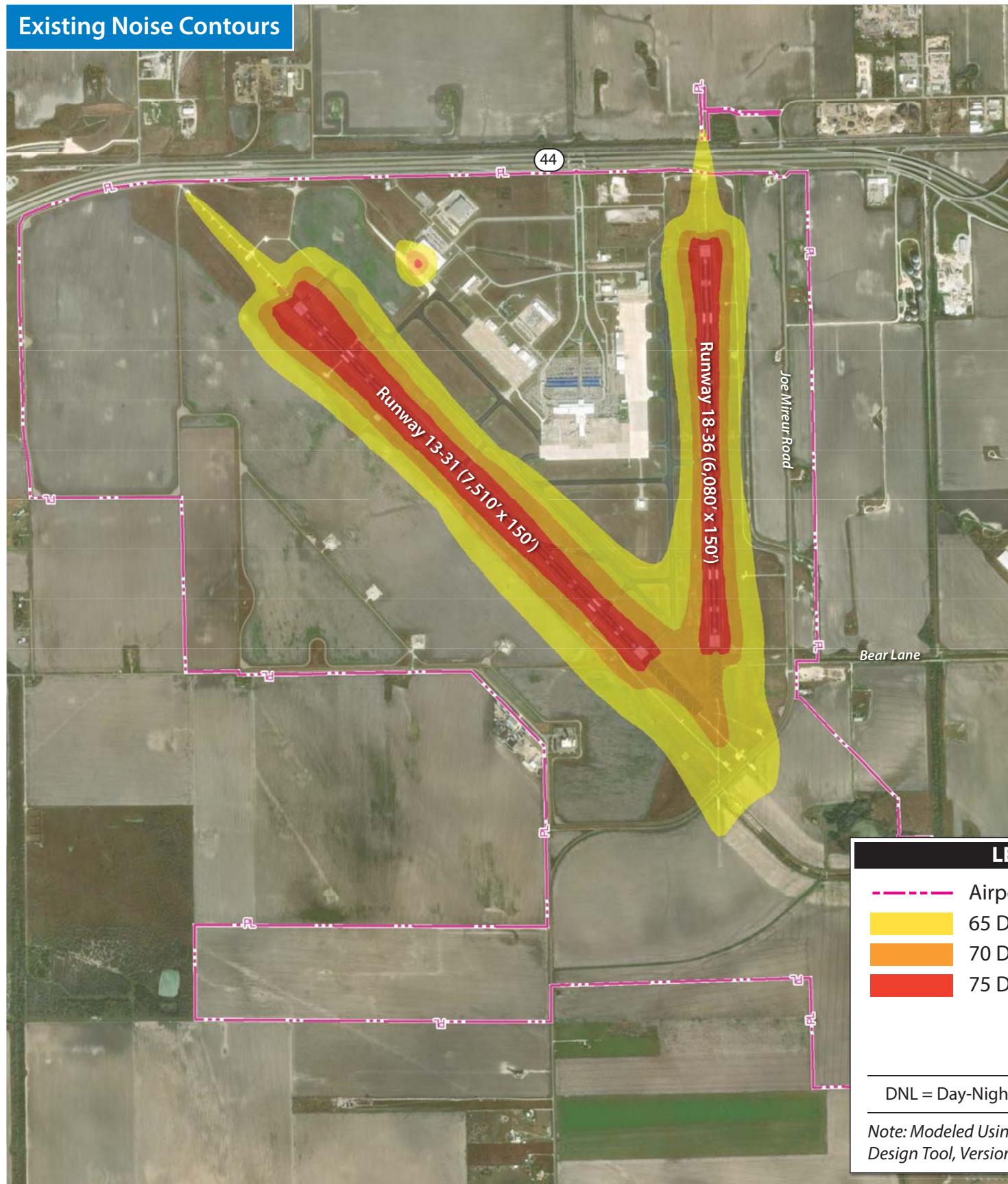
As part of this master plan, noise exposure contours were prepared for CRP for a baseline condition (2023) and future condition (2043). The fleet mix utilized for noise modeling is based on the aviation demand forecast presented in Chapter Two of this document, which was approved by the FAA on July 17, 2024 (Appendix D). The resulting contours are shown on **Exhibit 5F**. As shown on the exhibit, noise contours out to the 65 DNL largely remain on airport property for both the existing and future forecast conditions, except for small portions of the 65 DNL noise contour that extend off airport property to the north of Runway 13 and Runway 18 into the SH 44 corridor.

Height Restrictions

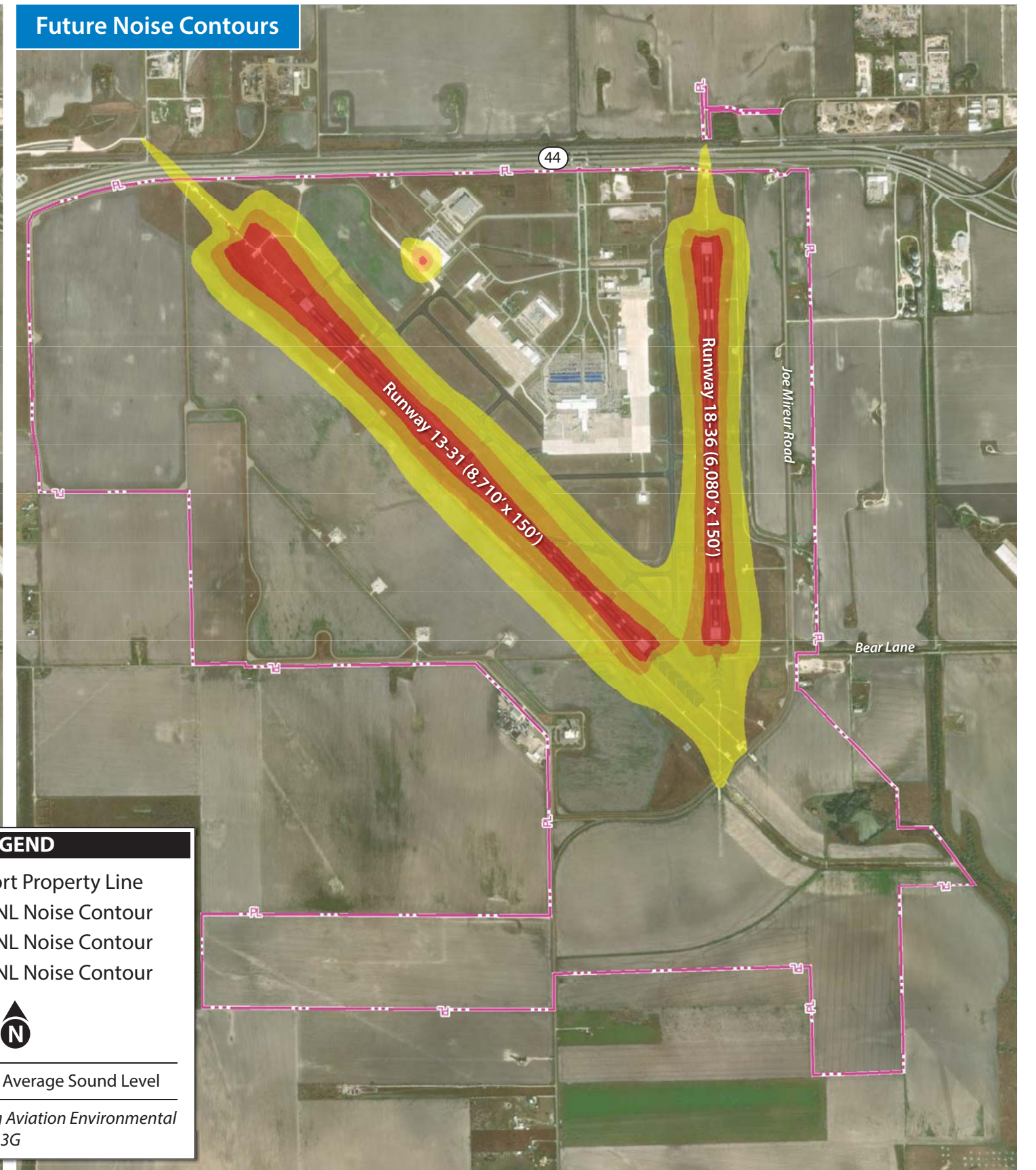
To analyze the potential for non-compatible development of land off airport property, zoning within the Part 77 approach surface area out to one mile from the end of the runways were evaluated. **Table 5C** above notes the maximum height limit for zoning of the underlying permitted land use.

⁶ 14 CFR Part 150 <https://www.ecfr.gov/current/title-14/chapter-I/subchapter-I/part-150>

Existing Noise Contours



Future Noise Contours



LEGEND

- Airport Property Line
- 65 DNL Noise Contour
- 70 DNL Noise Contour
- 75 DNL Noise Contour



DNL = Day-Night Average Sound Level

Note: Modeled Using Aviation Environmental Design Tool, Version 3G

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RECOMMENDATIONS

Based on the information presented above and the non-compatible development analysis, the following recommendations are provided to maintain airport land use compatibility in the vicinity of CRP. The below recommendations are in accordance with the recently published FAA Advisory Circular 150/5190-4B, which identifies compatible land use development tools, resources, and techniques to protect surrounding communities from adverse effects associated with airport operations.⁷

Adopt Airport Hazard Zoning Overlay – An Airport Hazard Zoning Overlay Ordinance could be adopted by the City of Corpus Christi Airport Zoning Commission. This would reference CRP’s existing, ultimate, and/or future approach surfaces and provide descriptions of the approach, transition, horizontal, and conical zones, which may change as the Part 77 airspace drawing for the airport is updated. Additionally, noise contours could be included in the hazard overlay boundaries to ensure future development is compatible with airport operations.

Implement FAA 7460-1 Airspace Analysis – The above-referenced Airport Hazard Zoning Overlay ordinance and/or building permit application process could be modified so that airport hazards are identified through an FAA 7460-1 airspace analysis. The FAA notice criteria tool (<https://oeaaa.faa.gov/oeaaa/external/gisTools/gisAction.jsp?action=showNoNoticeRequireGLEolForm>) allows users (airport sponsor, developer, and local municipality) to input location and dimensional information about a proposed development to determine if they are required to file notice with the FAA. If a notice is required, the proponent would be required to submit FAA Form 7460-1, “Notice of Construction or Alteration”, to the FAA for review as a local project review standard.

Consult FAA Advisory Circular for Wildlife Hazard Review – Land uses that create bird strike hazards are currently not prohibited near the airport by the City of Corpus Christi Unified Development Code. Certain land uses that attract birds and other wildlife hazards should not be permitted on or near the airport according to FAA Advisory Circular 15/5200-33C.⁸

Use Conservation Easement – Conservation easements may be established for vacant land within the approach surfaces that are designated as open space on the Future Land Use Maps.

Special Exceptions/Conditional Uses – The FAA advises in their most recent circular that if a community located near an airport allows some land use control through conditional uses, that community should make certain that such uses do not create a hazard for the community, the airport, or the user of the subject property. The City of Corpus Christi could modify its change-of-zone requirements and/or conditional use requirements within the airport’s vicinity to have a designation which triggers extraordinary review of these exceptions because of the location of the property being near an airport.

Adopt Fair Disclosure Requirements for Real Estate Transactions within the Vicinity of CRP – Fair disclosure regulations in real estate transactions are intended to ensure that prospective buyers of property are informed that the property is, or will be, exposed to potentially disruptive aircraft noise or

⁷ Federal Aviation Administration, Advisory Circular 150/5190-4B – Airport Land Use Compatibility Planning (September 16, 2022)

⁸ Federal Aviation Administration, Advisory Circular 15/5200-33C – Hazardous Wildlife Attractants on or near Airports (February 21, 2020)

overflights. It is not uncommon, around even the busiest airports, for newcomers to report having bought property without having been informed about airport noise levels. At the most formal level, fair disclosure can be implemented through a city ordinance requiring a deed notice for property within the vicinity based on an existing boundary, such as the Part 77 Horizontal Imaginary Surface. The following is an example of deed notice language that would notify the property owner of the proximity of an airport and expectations for living in the vicinity of the airport:

The subject property is within the vicinity of Corpus Christi International Airport, located at 1000 International Dr, Corpus Christi, TX 78406. Properties within this area are routinely subject to overflights by aircraft using this public-use airport and, as a result, residents may experience inconvenience, annoyance, or discomfort arising from the noise of such operations. Residents also should be aware that the current volume of aircraft activity may increase in response to the population and economic growth within the Corpus Christi International Airport vicinity. Any subsequent deed conveying this parcel or subdivisions thereof shall contain a statement in substantially this form.

Airport and FAA Participation in Local and Regional Planning – The authority to develop, implement, and enforce land use programs and decisions rests predominantly with local governments. Therefore, it is recommended that airport operators be involved in the preparation of city, county, and regional comprehensive plans so that they can advocate for airport interests and provide their specialized expertise to the planning team. Airport coordination with local governments ensures that they are routinely provided information about proposed development activity in the airport environs, allowing the airport operators the opportunity to review and comment on those proposals. This would include engagement with all jurisdictions in the airport vicinity.

ENVIRONMENTAL OVERVIEW

An analysis of potential environmental impacts associated with proposed airport projects is an essential consideration in the airport planning process. The primary purpose of this discussion is to review the recommended development concept depicted on **Exhibit 5A** and associated capital program at the airport to determine whether the projects identified in the ALP narrative report could, individually or collectively, significantly impact existing environmental resources. Information contained in this section was obtained from previous studies, official internet websites, and analysis by the consultant.

The environmental inventory included in the first chapter of this master plan provides baseline information about the airport environs. This section provides an overview of potential impacts to existing resources that could result from implementation of the planned improvements outlined in the recommended development concept.

If the FAA retains approval authority over a project, then the project is typically subject to the National Environmental Policy Act (NEPA). For projects not categorically excluded under FAA Order 1050.1G, *FAA National Environmental Policy Act Implementing Procedures*, compliance with NEPA is generally satisfied through the preparation of environmental assessment (EA). In instances where significant environmental impacts are expected, an environmental impact statement (EIS) may be required.

The Act has also introduced a variety of updated and new environmental guidelines. The primary environmental-related updates are outlined in two sections: Section 743 and Section 783.

Section 783 outlines that airport capacity enhancement projects, terminal development projects, and general aviation airport improvement projects will be subject to coordinated and expedited environmental review requirements. Additionally, Section 783 introduces a new process for determining which safety-related projects should be prioritized during the environmental review process.

The following portion of the ALP narrative report is not designed to satisfy the NEPA requirements for a specific development project, but it provides a preliminary review of environmental issues that may need to be considered in more detail within the environmental review processes. It is important to note that the FAA is ultimately responsible for determining the level of environmental documentation required for airport actions.

Table 5E summarizes potential environmental concerns associated with implementation of the recommended development concept for CRP. Analysis under NEPA includes effects or impacts a proposed action or alternative may have on the human environment (see 40 Code of Federal Regulations [CFR] §1508.1). FAA Order 1050.1F provides information on FAA thresholds of significance, factors to consider, and other FAA policies related to the implementation of NEPA.

TABLE 5E | Summary of Potential Environmental Concerns

AVIATION AND AIR QUALITY	
FAA Order 1050.1G, Significance Threshold/ Factors to Consider	<i>The action would cause pollutant concentrations to exceed one or more of the National Ambient Air Quality Standards (NAAQS), as established by the United States (U.S.) Environmental Protection Agency (EPA) under the Clean Air Act, for any of the time periods analyzed, or to increase the frequency or severity of any such existing violations.</i>
Potential Environmental Concerns	No Impact. An increase in operations could occur over the 20+ year planning horizon of the master plan that would likely result in additional emissions. Nueces County is currently in attainment for all federal criteria pollutants. For construction and operational emissions, project-specific qualitative or quantitative emissions inventories or the application of screening thresholds may be required under NEPA, depending on the type of environmental review needed for specific projects defined on the development plan concept. <i>Source: 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), data current as of February 28, 2025</i>
BIOLOGICAL RESOURCES (INCLUDING FISH, WILDLIFE, AND PLANTS)	
FAA Order 1050.1G, Significance Threshold/ Factors to Consider	<i>The U.S. Fish and Wildlife Service (USFWS) or the National Marine Fisheries Service (NMFS) determines that the action would be likely to jeopardize the continued existence of a federally listed threatened or endangered species or would result in the destruction or adverse modification of federally designated critical habitat.</i> <i>The FAA has not established a significance threshold for non-listed species; however, factors to consider include whether an action would have the potential for:</i> • Long-term or permanent loss of unlisted plant or wildlife species; • Adverse impacts to special status species or their habitats; • Substantial loss, reduction, degradation, disturbance, or fragmentation of native species' habitats or populations; or • Adverse impacts on a species' reproductive rates, non-natural mortality, or ability to sustain the minimum population levels required for population maintenance.
Potential Environmental Concerns	<u>Federally Protected Species</u> Potential Impact. Based on the USFWS Information for Planning and Consultation (IPaC) report, there is potential for twelve proposed endangered, endangered, proposed threatened, and threatened species at CRP: • tricolored bat – federal proposed endangered • eastern black rail – federal threatened / state threatened • northern aplomado falcon - federal endangered / state endangered • piping plover – federal threatened / state threatened • rufa red knot – federal threatened / state threatened • whooping crane – federal endangered / state endangered • green sea turtle – federal threatened / state threatened • hawksbill sea turtle – federal endangered / state endangered • Kemp's Ridley sea turtle – federal endangered / state endangered • monarch butterfly – federal proposed threatened • slender rush-pea – federal endangered / state endangered • south Texas ambrosia – federal endangered / state endangered Of these twelve species listed above, the tricolored bat, whooping crane, and monarch butterfly may occur at the airport.

(Continues)

TABLE 5E | Summary of Potential Environmental Concerns (continued)

Potential Environmental Concerns (continued)	<u>Designated Critical Habitat</u> No Impact. There are no designated critical habitats with airport boundaries. <u>Non-Listed Species</u> Potential Impact. Non-listed species of concern include those protected by the <i>Migratory Bird Treaty Act</i> (MBTA) and the <i>Bald and Golden Eagle Protection Act</i>. Bird species protected by the MBTA could be adversely affected if construction occurs during the nesting and breeding seasons (February-September). Pre-construction surveys of vegetated areas at the airport are recommended for projects that involve ground clearing unless such projects occur outside the nesting and breeding seasons. <u>State Protected Species</u> Potential Impact. According to a record search conducted in the Texas Parks & Wildlife Department’s Annotated County Lists of Rare Species, the species listed below have been identified as state listed but not federally listed in Nueces County. • black-spotted newt – state threatened • sheep frog – state threatened • South Texas siren – state threatened • sooty tern – state threatened • swallow-tailed kite – state threatened • Texas Botteri’s sparrow – state threatened • tropical parula – state threatened • white-faced ibis – state threatened • white-tailed hawk – state threatened • wood stork – state threatened • ocelot – state endangered • white-nosed coati – state threatened • Texas horned lizard – state threatened • Texas scarlet snake – state threatened • Texas tortoise – state threatened • black lace cactus – state endangered Impacts to these species should be assessed prior to development on a project-by-project basis. Airport activities that involve tree-maintenance or removal activities could impact species listed above. <i>Source: USFWS, IPaC (https://ipac.ecosphere.fws.gov/location/X3YZNYOQXRHCLGUHK4UFYWRCZM/resources), accessed March 2025</i>
COASTAL RESOURCES	
FAA Order 1050.1G, Significance Threshold/ Factors to Consider	<i>The FAA has not established a significance threshold for Coastal Resources. Factors to consider include whether an action would have the potential to:</i> • <i>Be inconsistent with the relevant state coastal zone management plan(s);</i> • <i>Impact a coastal barrier resources system unit;</i> • <i>Pose an impact on coral reef ecosystems;</i> • <i>Cause an unacceptable risk to human safety or property; or</i> • <i>Cause adverse impacts on the coastal environment that cannot be satisfactorily mitigated.</i>

(Table continues)

TABLE 5E | Summary of Potential Environmental Concerns (continued)

Potential Environmental Concerns	No Impact. While the airport is located within Region 3 of the Texas Coastal Zone, no projects outlined on the recommended development concept plan would be inconsistent with the Texas Coastal Resiliency Master Plan. Furthermore, the closest coastal barrier resource system unit is more than 19 miles west of the airport. <i>Sources: USFWS, Coastal Barrier Resources System Mapper (https://fwsprimary.wim.usgs.gov/CBRS Mapper-v2/), accessed March 2025; Texas General Land Office, Coastal Planning (https://www.glo.texas.gov/coastal/protecting-coast/coastal-planning), accessed March 2025</i>
DEPARTMENT OF TRANSPORTATION ACT, SECTION 4(f) (NOW CODIFIED IN 49 UNITED STATES CODE [U.S.C.] § 303)	
FAA Order 1050.1G, Significance Threshold/ Factors to Consider	<i>The action involves more than a minimal physical use of a Section 4(f) resource or constitutes a “constructive use” based on an FAA determination that the aviation project would substantially impair the Section 4(f) resource. Resources that are protected by Section 4(f) are publicly owned land from a public park, recreation area, or wildlife and waterfowl refuge of national, state, or local significance and publicly or privately owned land from a historic site of national, state, or local significance. Substantial impairment occurs when the activities, features, or attributes of the resource that contribute to its significance or enjoyment are substantially diminished.</i>
Potential Environmental Concerns	No Impact. No wilderness areas, public recreation facilities, or National Register of Historic Place (NRHP)-listed resources would be impacted by proposed development at the airport. The closest potential Section 4(f) resource is San Juan Park, located 0.9 miles west of the airport. Due to the distance of this resource from the airport, airport improvements delineated in the recommended concept plan will not result in physical or constructive use of Section 4(f) properties.
FARMLANDS	
FAA Order 1050.1G, Significance Threshold/ Factors to Consider	<i>The total combined score on Form AD-1006, Farmland Conversion Impact Rating, ranges between 200 and 260. Form AD-1006 is used by the U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) to assess impacts under the Farmland Protection Policy Act (FPPA).</i> <i>The FPPA applies when airport activities meet the following conditions:</i> • <i>Federal funds are involved;</i> • <i>The action involves the potential for the irreversible conversion of important farmlands to non-agricultural uses. Important farmlands include pastureland, cropland, and forest considered to be prime, unique, or statewide or locally important land; or</i> • <i>None of the exemptions to the FPPA apply. These exemptions include:</i> ○ <i>Land that is not considered “farmland” under the FPPA, such as land that is already developed or already irreversibly converted (these instances include when land is designated as an urban area by the U.S. Census Bureau or the existing footprint includes rights-of-way);</i> ○ <i>Land that is already committed to urban development;</i> ○ <i>Land that is committed to water storage;</i> ○ <i>Construction of non-farm structures necessary to support farming operations; and</i> ○ <i>Construction/land development for national defense purposes.</i>
Potential Environmental Concerns	No Impact. A significant portion of airport property is classified as prime farmland (Exhibit 1P). Proposed changes to the airside areas of the airport (i.e., proposed 1,200-foot extension to Runway 13) would occur in areas identified as prime farmland; however, this project area has been designated as a recognized urban area, and therefore would not be subject to the FPPA.

(Table continues)

TABLE 5E | Summary of Potential Environmental Concerns (continued)

HAZARDOUS MATERIALS, SOLID WASTE, AND POLLUTION PREVENTION

FAA Order 1050.1G, Significance Threshold/ Factors to Consider	<i>The FAA has not established a significance threshold for Hazardous Materials, Solid Waste, and Pollution Prevention; however, factors to consider include whether an action would have the potential to:</i> • Violate applicable federal, state, tribal, or local laws or regulations regarding hazardous materials and/or solid waste management; • Involve a contaminated site; • Produce an appreciably different quantity or type of hazardous waste; • Generate an appreciably different quantity or type of solid waste or use a different method of collection or disposal and/or would exceed local capacity; • Use a different method of waste collection, treatment, storage, or disposal that, as an action, would adversely impact the site, surroundings, or affected community, and/or would exceed state, tribal, or local capacity; or • Adversely affect human health and the environment.
Potential Environmental Concerns	No Impact. The airport has two fuel farms and provides opportunities for aircraft maintenance activities that involve fossil fuels or other types of hazardous materials or wastes. These operations are regulated and monitored by the appropriate regulatory agencies, such as the U.S. EPA and the Texas Department of Natural Resources. The recommended development concept plan does not include land uses that would produce an appreciably different quantity or type of hazardous waste; however, if this type of land use is proposed, further NEPA review and/or permitting will be required. Leaking petroleum storage tanks have occurred at the airport in the past; however, all cases are currently closed. A solid waste and recycling assessment that establishes formal guidelines and recommendations was prepared to guide solid waste, electronic waste, and recycling efforts at the airport in compliance with the <i>FAA Modernization and Reform Act of 2012</i>.

HISTORICAL, ARCHITECTURAL, ARCHAEOLOGICAL, AND CULTURAL RESOURCES

FAA Order 1050.1G, Significance Threshold/ Factors to Consider	<i>The FAA has not established a significance threshold for Historical, Architectural, Archaeological, and Cultural Resources. Factors to consider include whether an action would result in a finding of “adverse effect” through the Section 106 process; however, an adverse effect finding does not automatically trigger the preparation of an EIS (i.e., a significant impact).</i>
Potential Environmental Concerns	Potential Impact. There are no listed NRHP resources on airport property. As mentioned in Chapter One of the master plan, no systematic airport-wide cultural surveys have been conducted, and while much of the airport has been developed or disturbed by construction, there is still a chance that intact cultural resources may be present either on the ground surface or subsurface. If previously undocumented buried cultural resources are identified during ground-disturbing activities for future airport development, all work must immediately cease within 30 meters (100 feet) until a qualified archaeologist has documented the discovery and evaluated its eligibility for the NRHP, as appropriate. Work must not resume in the area without approval of the FAA. <i>Source: National Register of Historic Places (https://www.nps.gov/maps/full.html?mapId=7ad17cc9-b808-4ff8-a2f9-a99909164466), accessed July 2025</i>

LAND USE

FAA Order 1050.1G, Significance Threshold/ Factors to Consider	<i>The FAA has not established a significance threshold for Land Use. There are also no specific independent factors to consider. The determination that significant impacts exist is normally dependent on the significance of other impacts.</i>
Potential Environmental Concerns	Potential Impact. The proposed extension of Runway 13 may generate short-term noise during the construction of this project. See the Noise and Noise-Compatible Land Use Section (below) for information regarding noise-sensitive land uses and proposed development at the airport.

(Table continues)

TABLE 5E | Summary of Potential Environmental Concerns (continued)

NATURAL RESOURCES AND ENERGY SUPPLY	
FAA Order 1050.1G, Significance Threshold/ Factors to Consider	<i>The FAA has not established a significance threshold for Natural Resources and Energy Supply; however, factors to consider are if the action would have the potential to cause demand to exceed available or future supplies of these resources.</i>
Potential Environmental Concerns	No Impact. Planned development at the airport could increase demands on energy utilities, water supplies and treatment, and other natural resources during construction; however, significant long-term impacts are not anticipated. If long-term impacts become a concern, coordination with local service providers is recommended.
NOISE AND NOISE-COMPATIBLE LAND USE	
FAA Order 1050.1G, Significance Threshold/ Factors to Consider	<i>The significance threshold applies to all civil aviation activities, including aircraft and airports, UAS and hubs, AAM and vertiports, and commercial space vehicles and launch and reentry sites.</i> <i>The action would result in noise exposure from impulsive noise sources (e.g., sonic booms) that meet or exceed 60 CDNL – equivalent to DNL 65 dBA.</i> <i>The action would increase noise by a day-night average sound level (DNL) of 1.5 decibels (dB) or more for a noise-sensitive area that is exposed to noise at or above the 65-dB DNL noise exposure level, or that will be exposed at or above the 65-dB DNL due to an increase of 1.5 dB DNL or greater, when compared to the no action alternative for the same timeframe.</i> <i>Another factor to consider is that special consideration should be given to the evaluation of the significance of noise impacts on noise-sensitive areas within Section 4(f) properties where the land use compatibility guidelines in Title 14 Code of Federal Regulations (CFR) Part 150 are not relevant to the value, significance, and enjoyment of the area in question.</i>
Potential Environmental Concerns	Potential Impact. As outlined in Chapter One in Table 1AA, there are several noise-sensitive land uses within one mile of the airport. It is important to note that operational growth, unless tied to a specific project, will not result in noise impacts under FAA Order 1050.1G. Impacts to noise-sensitive land uses are evaluated through NEPA documentation for specific projects or through the voluntary Part 150 process.
SOCIOECONOMICS AND CHILDREN'S ENVIRONMENTAL HEALTH AND SAFETY RISKS	
Socioeconomics	
FAA Order 1050.1G, Significance Threshold/ Factors to Consider	<i>The FAA has not established a significance threshold for Socioeconomics; however, factors to consider include whether an action would have the potential to:</i> • <i>Disrupt or divide the physical arrangement of an established community;</i> • <i>Cause extensive relocation when sufficient replacement housing is unavailable;</i> • <i>Cause extensive relocation of community businesses that would cause severe economic hardship for affected communities;</i> • <i>Disrupt local traffic patterns and substantially reduce the levels of service of roads serving the airport and its surrounding communities; or</i> • <i>Produce a substantial change in the community tax base.</i>
Potential Environmental Concerns	No Impact. Proposed development would not relocate or disrupt current businesses or residents. No division of existing neighborhoods or relocation of housing/businesses would occur due to the proposed development on the airport.
Children's Health and Safety Risks	
FAA Order 1050.1G, Significance Threshold/ Factors to Consider	<i>The FAA has not established a significance threshold for Children's Environmental Health and Safety Risks; however, factors to consider include whether an action would have the potential to lead to a disproportionate health or safety risk to children.</i>
Potential Environmental Concerns	No Impact. No disproportionately high or adverse impacts are anticipated to affect children living near the airport because of the proposed ultimate development. The airport is an access-controlled facility and children are not allowed within the fenced portions of the airport without adult supervision. All construction should be controlled to prevent unauthorized access.

(Table continues)

TABLE 5E | Summary of Potential Environmental Concerns (continued)

VISUAL EFFECTS	
Light Emissions	
FAA Order 1050.1G, Significance Threshold/ Factors to Consider	<i>The FAA has not established a significance threshold for Light Emissions; however, a factor to consider is the degree to which an action would have the potential to:</i> • Create annoyance or interfere with normal activities from light emissions; or • Affect the nature of the visual character of the area due to light emissions, including the importance, uniqueness, and aesthetic value of the affected visual resources.
Potential Environmental Concerns	No Impact. Proposed lighting would include the relocation of a medium intensity approach light system (MALSR) associated with the Runway 13 extension. This modification would not result in significant changes and would be similar to other lighting systems installed within the existing runway environment.
Visual Resources/Visual Character	
FAA Order 1050.1G, Significance Threshold/ Factors to Consider	<i>The FAA has not established a significance threshold for Visual Resources/Visual Character; however, a factor to consider is the extent to which an action would have the potential to:</i> • Affect the nature of the visual character of the area, including the importance, uniqueness, and aesthetic value of the affected visual resources; • Contrast with the visual resources and/or visual character in the study area; and • Block or obstruct the views of the visual resources, including whether these resources would still be viewable from other locations.
Potential Environmental Concerns	No Impact. The proposed runway extension on Runway 13 is not anticipated to visually alter the line of sight to the runway for nearby land uses, as the parcels of land to the north are buffered from Highway 44, and the land surrounding the airport is flat so that long-range views of the proposed ground improvements are not visible.
WATER RESOURCES	
Wetlands	
FAA Order 1050.1G, Significance Threshold/ Factors to Consider	<i>The action would:</i> 1. Adversely affect a wetland's function to protect the quality or quantity of municipal water supplies, including surface waters and sole source and other aquifers; 2. Substantially alter the hydrology needed to sustain the affected wetland system's values and functions or those of a wetland to which it is connected; 3. Substantially reduce the affected wetland's ability to retain floodwaters or storm runoff, thereby threatening public health, safety or welfare (the term welfare includes cultural, recreational, and scientific resources or property important to the public); 4. Adversely affect the maintenance of natural systems supporting wildlife and fish habitat or economically important timber, food, or fiber resources of the affected or surrounding wetlands. 5. Promote the development of secondary activities or services that would cause the circumstances listed above to occur; or, 6. Be inconsistent with applicable state wetland strategies.
Potential Environmental Concerns	No Impact. As shown on Exhibit 1R, there are freshwater emergent wetlands and freshwater/shrub wetlands within a small drainage that are mapped along Joe Mireur Road on and off the airport along its eastern property line; however, the proposed runway extension on Runway 13 would not traverse this area. If wetlands are encountered within the proposed project areas, coordination with the U.S. Army Corps of Engineers may be required. Removal or relocation of wetlands may require a Section 404 permit under the <i>Clean Water Act</i>, which regulates the discharge of dredged or fill material into waters of the United States, including wetlands. <i>Source: USFWS, National Wetlands Inventory (https://fwsprimary.wim.usgs.gov/wetlands/apps/wetlands-mapper/), accessed March 2025</i>

(Table continues)

TABLE 5E | Summary of Potential Environmental Concerns (continued)

Floodplains	
FAA Order 1050.1G, Significance Threshold/ Factors to Consider	<i>The action would cause notable adverse impacts on natural and beneficial floodplain values. Natural and beneficial floodplain values are defined in Paragraph 4.k of DOT Order 5650.2, Floodplain Management and Protection.</i>
Potential Environmental Concerns	No Impact. Based on the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM), the majority of the airport is identified as an area of minimal flood hazard, with the exception of 100-year and 500-year floodplains along the channel that traverses the eastern airport property line (Exhibit 1R). The proposed extension to Runway 13 would not traverse this area. <i>Source: FEMA, Flood Map Service Center (https://msc.fema.gov/portal/search?AddressQuery=corpus%20christi%20international%20airport), accessed March 2025</i>
Surface Waters	
FAA Order 1050.1G, Significance Threshold/ Factors to Consider	<i>The action would:</i> <i>1. Exceed water quality standards established by federal, state, local, and tribal regulatory agencies; or</i> <i>2. Contaminate public drinking water supply such that public health may be adversely affected.</i> <i>Factors to consider include whether a project would have the potential to:</i> <i>• Adversely affect natural and beneficial water resource values to a degree that substantially diminishes or destroys such values;</i> <i>• Adversely affect surface waters such that the beneficial uses and values of such waters are appreciably diminished or can no longer be maintained and such impairment cannot be avoided or satisfactorily mitigated; or</i> <i>• Present difficulties based on water quality impacts when obtaining a permit or authorization.</i>
Potential Environmental Concerns	Potential Impact. The airport is located in the Oso Creek Watershed. There is one impaired waterbody (Oso Creek) within this watershed, over ten miles south of the airport. There are a few scattered freshwater ponds and riverines located within airport boundaries. Long-term impacts to water quality from the proposed airfield improvements may need to be assessed depending on the extent of new impervious surfaces and how stormwater runoff is conveyed to airport stormwater infrastructure. A National Pollutant Discharge Elimination System (NPDES) general construction permit would be required for all projects that involve ground disturbance over one acre. FAA AC 150/5371-10H, Standards for Specifying Construction of Airports, Item C-102, <i>Temporary Air and Water Pollution, Soil Erosion, and Siltation Control</i>, should also be implemented during construction projects at the airport. <i>Source: U.S. EPA, How's My Waterway (https://mywaterway.epa.gov/community/corpus%20christi%20international%20airport/overview), accessed March 2025</i>