



CORPUS CHRISTI  
INTERNATIONAL  
**AIRPORT**

MASTER PLAN UPDATE  
EXECUTIVE SUMMARY  
2007

PREPARED BY:

**PGAL / PB PARSONS  
BRINCKERHOFF**  
100 YEARS

**PGAL / PB PARSONS  
BRINCKERHOFF**  
100 YEARS

## MASTER PLAN BACKGROUND

The Corpus Christi International Airport Master Plan Update provides:

- ✈ Direction for near-term and long-term Airport development.
- ✈ Financially realistic plans to meet regional aviation demand, economic needs and community vision.



Located in south Texas, the Airport sits on more than 2,400 acres of land and lies approximately eight miles southwest from downtown Corpus Christi in Nueces County.

The Airport provides key access to air transportation for the south Texas coastal region, including airline service, general aviation facilities and air freight service.

The goal of the master planning process for airports is to provide general facility development guidelines that will satisfy aviation demand while remaining compatible with the environment, community and other modes of transportation. This Master Plan Update for Corpus Christi International Airport (CCIA or the Airport) is being conducted to prepare for projected growth in operations and total enplanements to be handled over a 20-year planning horizon.

The overall objective of the CCIA Master Plan Update is to produce a sound, long-range planning document that presents study findings in a clear and concise format, providing the Airport with a flexible tool that can be modified to respond to changes in the Airport's growth over the 20-year planning period. To accomplish this objective, the master planning process involves the following steps:

- ✈ Inventory
- ✈ Activity Forecasts
- ✈ Facility Requirements/Demand Capacity
- ✈ Alternatives
- ✈ Preferred Alternative
- ✈ Capital Plan
- ✈ Airport Layout Plan

The CCIA Master Plan Update followed these steps and the findings are highlighted in this Executive Summary.



## CORPUS CHRISTI INTERNATIONAL AIRPORT BOARD

Jerry Kane, *Chairman*  
Capt. Frank “Rocco” Montesano, *Vice-chairman*  
Glenn Lyons  
J. C. Ayala  
Donald Feferman  
Sylvia Whitmore  
William Dodge, III  
Jesse Olivares  
Sam J. Susser  
Jay Wise  
Ed Hicks, *Advisory*

## CITY OF CORPUS CHRISTI CITY COUNCIL

Mayor Henry Garrett  
Brent Chesney, *At Large*  
Melody Cooper, *At Large*  
Jerry Garcia, *At Large*  
Bill Kelly, *District 1*  
John Marez, *District 2*  
Jesse Noyola, *District 3*  
Mark Scott, *District 4*  
Rex Kinnison, *District 5*

## AIRPORT STAFF

Dave Hamrick, *Director of Aviation*  
Debra Keller, *Assistant Director of Aviation*  
John Hyland, *Chief of Public Safety*  
Carl Gross, *Airport Operations Manager*  
Roel Rodriguez, *Facilities Manager*  
Ralph Zapata, *Airport Engineer*  
Gary Williams, *Maintenance Superintendent*  
Mario Tapia, *Finance/Administration Manager*  
Amy Gazin, *Public Relations/Marketing*



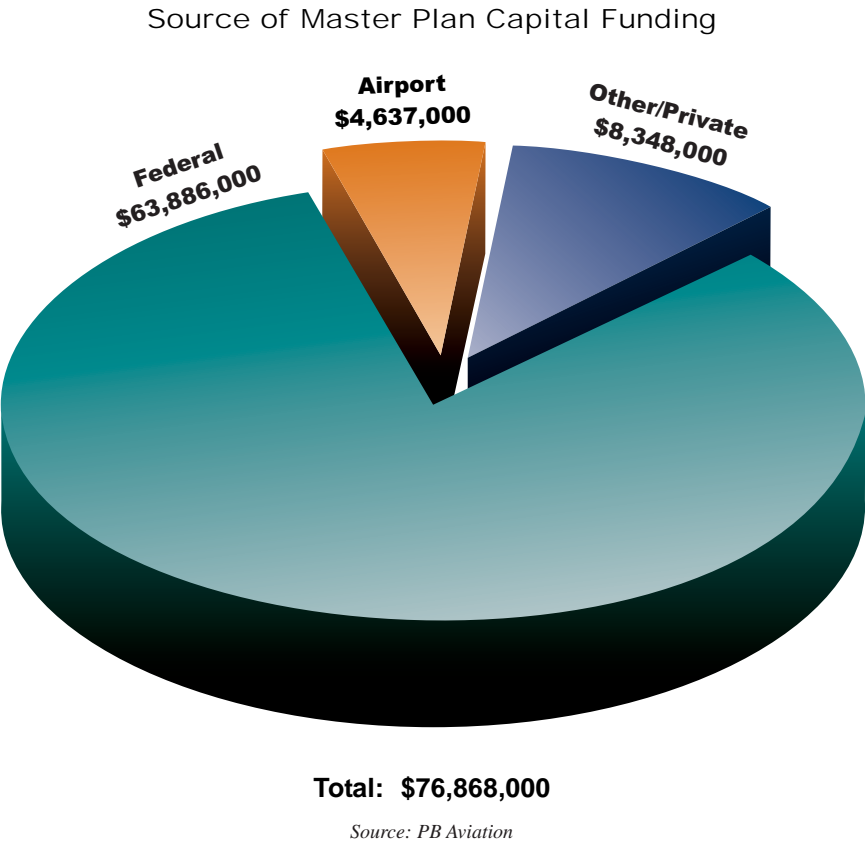
CAPITAL PLAN

The Airport has excellent existing facilities. The long-term capital projects identified in this Master Plan Update can be described as relatively modest from a cost perspective, easing the Airport’s ability to fund new projects.

The total proposed Master Plan Update capital program is estimated to cost \$76.9 million over 20 years. The principal projects are two runway extensions and related airfield development. All the proposed projects are based upon continued long-term growth in aviation activity.

Analysis of the potential sources of capital funds for the Master Plan Update projects indicates that the money can be made available if demand warrants. FAA grants are the principal source of anticipated funding because most of the projects are currently eligible for 95 percent FAA funding. “Other/Private” funds come from tenants such as concessionaires and FBOs. The source of the local or Airport share of these capital funds includes Passenger Facility Charges and operating revenue. Borrowing to pay for some or all of the projects is also an option.

The financial impact on users (i.e., airlines, general aviation, and cargo) will need to be calculated on an annual basis as projects are implemented. In general, the outlook is positive, and the airline cost per enplaned passenger should remain below \$6.00 at the Airport.



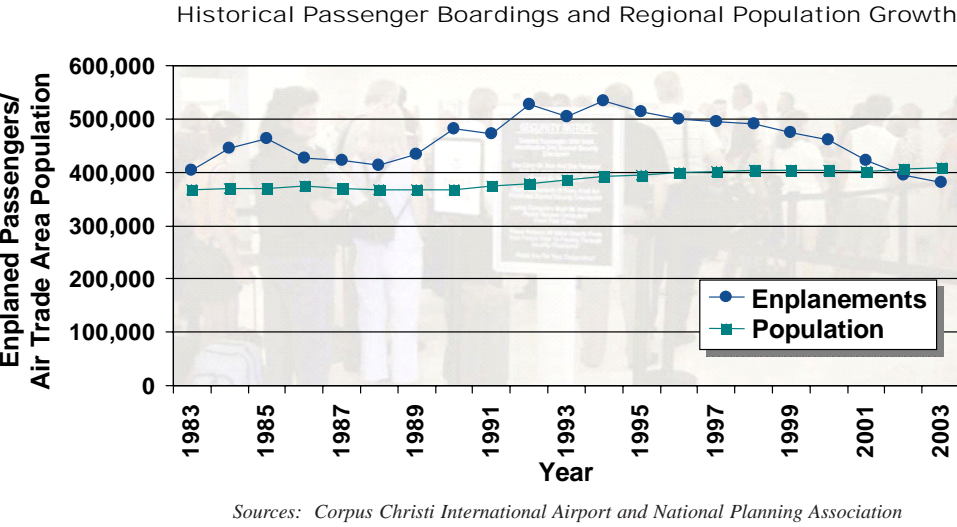
The Airport is expected to retain its relatively low cost per passenger and thereby continue to attract new airline service by:

- ✈ Controlling changes in operating expenses
- ✈ Increasing non-airline revenue
- ✈ Seeking external grants
- ✈ Limiting growth of expenses

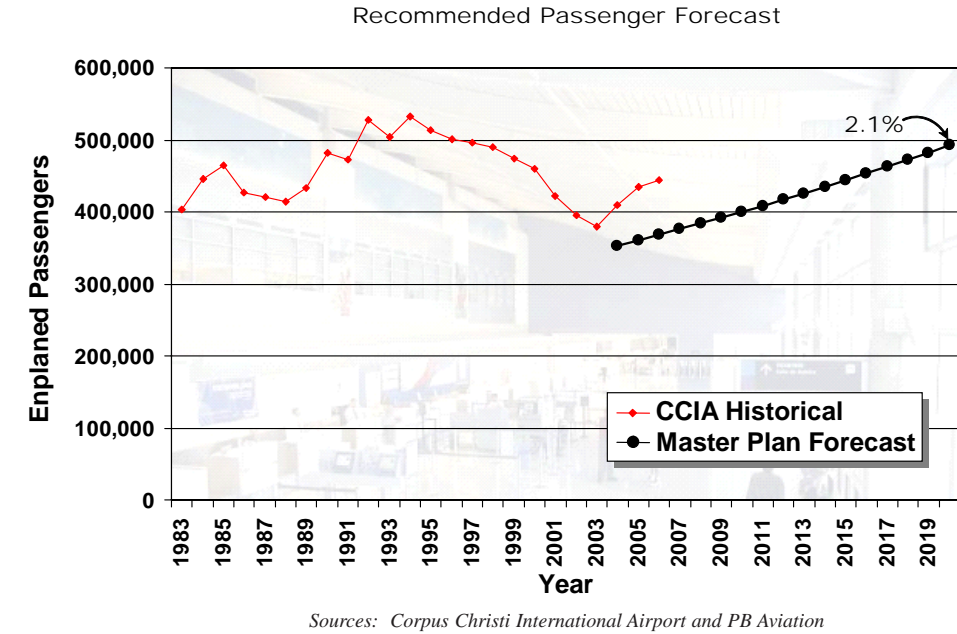
There are a variety of funding sources for any airport’s capital improvements and each project is normally funded from several sources.

AIRPORT ACTIVITY FORECASTS

The process of master planning, as required by the FAA, takes place over several years. The forecast was prepared and completed in 2004 using the last full year (2003) as the “base” year. The forecast was approved by the FAA in 2005 for use in this Master Plan Update. However, in the case of CCIA, the year of 2003 turned out to be the end of nine consecutive years of annual passenger traffic decline.



CCIA’s Master Plan Update is focused on the long-term facility needs and the near-term demands, not the specific activity in any given year. The passenger forecast overall predicts growth of passengers and the Master Plan Update indicates the facility needs to accommodate that growth.



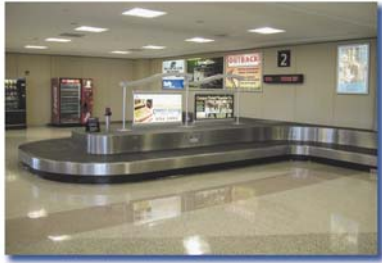
Passenger Enplanements in 2005 were 434,567 - a 6 percent increase from 2004.



Population growth is typically one of the principal driving factors for air service; therefore, it is a key element in the forecast analysis.



PB Aviation projects that passenger enplanements will grow by an average annual rate between 2.1 and 4.2 percent over the 20-year planning period.



## FACILITY REQUIREMENTS

The facility requirements portion of the Master Plan Update presents an analysis of the capacities and conditions of the Airport’s airside and landside facilities when challenged by forecast demand levels. Facility requirements were identified so the Airport can accommodate future demand at acceptable levels of delay.

An important goal for the Airport is to maintain effective operational balance between the various airport functional elements. Using Planning Activity Levels, or PALs, to determine the need for enhancements to various system elements will allow the Airport to plan in a timely manner to meet demand and provide the necessary facility requirements.

PALs can also be referred to as short-term planning goals (PAL 1), medium-term planning goals (PAL 2), and long-term planning goals (PAL 3). Using PALs allows the master planning process to be responsive to the overall trends without specifying the exact year in which the PALs might occur. Future requirements for airport facilities are tied to future growth in the specific demand that “triggers” the requirement for expanding or upgrading specific facilities at the airport and not to a specific future year.

Demand Component	Planning Activity Levels		
	PAL 1	PAL 2	PAL 3
Enplaned Passengers	426,000	473,000	525,000
Total Cargo (freight and mail, pounds)	4,594,000	5,458,000	6,481,000
Total Aircraft Operations	125,400	127,500	128,700

- ✈ **PAL 1** — Extension of Runway 13-31
  - Additional checked baggage security screening
  - Additional walk-thru metal detector and X-ray machine (to 2 lanes)
  - Added rental car ready/return spaces
  - Added general aviation storage hangars
  - ARFF improvements
- ✈ **PAL 2** — Extension of Runway 17-35
  - Additional ticket counter positions
  - Additional walk-thru metal detector and X-ray machine (to 3 lanes)
  - Added baggage claim area
  - Added rental car ready/return spaces
  - Added GA storage hangars
- ✈ **PAL 3** — Additional ticket counter positions
  - Additional concessions
  - Added baggage claim area
  - Added rental car ready/return spaces
  - Additional jet fuel storage
  - Additional air cargo facilities and apron

Based on the facility requirements, a list of recommended projects for the future was developed. These future projects are organized in PALs and should be planned for implementation when demand warrants.

## Access and Parking

CCIA’s roadway system is excellent and can meet the PAL 3, long-term planning demand requirements. No further circulation improvements are required within the planning period.

An additional 130 long-term parking spaces and 75 covered parking spaces will be necessary beginning in PAL 2, with continued expansion in PAL 3.

## Cargo

The demand for air cargo at CCIA is expected to increase significantly. Consequently, the preferred alternative designates new air cargo facilities and associated apron areas. The proposed additional cargo facilities are planned to be located in the northwest portion of the Airport.

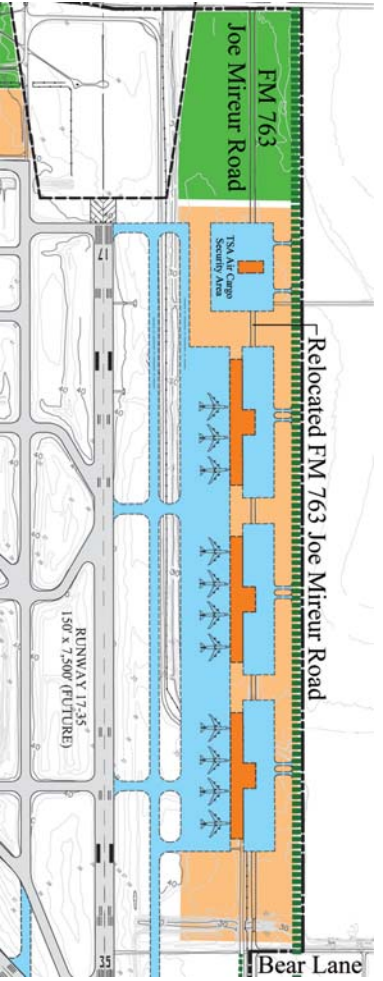
## Aviation Support Facilities

Support facilities requiring improvements or additions in order to meet the forecasted demand include the ARFF, fuel farms, general aviation aircraft storage areas, and helicopter takeoff and landing areas. The enhancements to the ARFF facility should be a PAL 1 priority.

## Commercial/Industrial Development

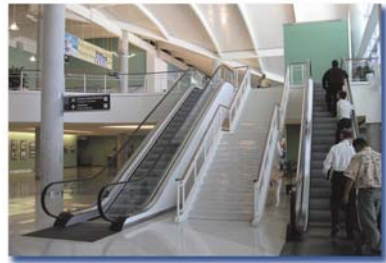
There are currently four parcels of land located within Airport property that are potential future development sites. The location of these four development parcels are located on the preferred alternative exhibit in this Executive Summary (Pg. 5-6). To the right is one development option for Parcel D.

- ✈ A commercial business park, currently known as Corpus Christi International Business Centre is proposed for **Parcel A**, located to the west of the Airport entrance.
- ✈ **Parcel B**, located to the east of the Airport’s entrance, is appropriate for a hotel and convenience store.
- ✈ **Parcel C** is appropriate for a light industrial and commercial park.
- ✈ Given its flight line location, **Parcel D** is appropriate for specialty cargo facilities or other uses requiring airside access.



One Development Option for Parcel D





## PREFERRED ALTERNATIVE

The preceding evaluations established the preferred alternative for improving airside and landside facilities at CCIA to accommodate the growth in passengers and aircraft operations that is likely to occur over the planning period. These facilities recommendations for improving and expanding form the preferred Airport's development alternative.

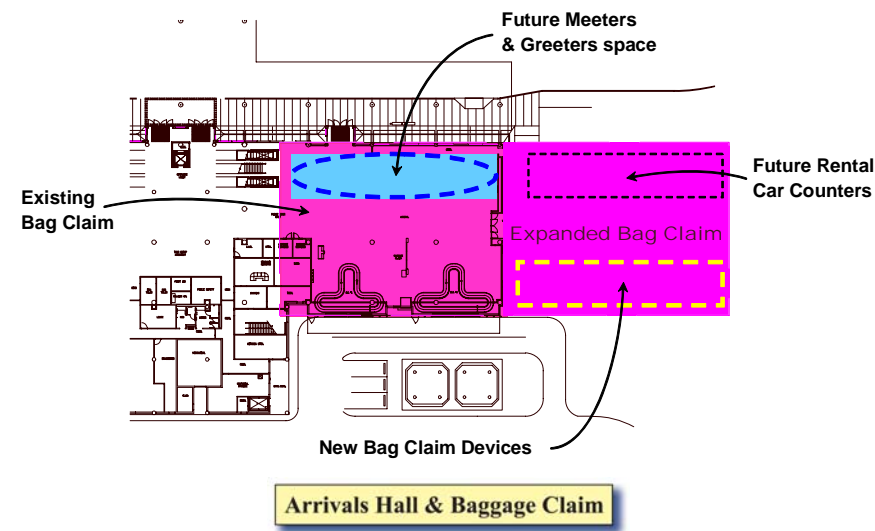
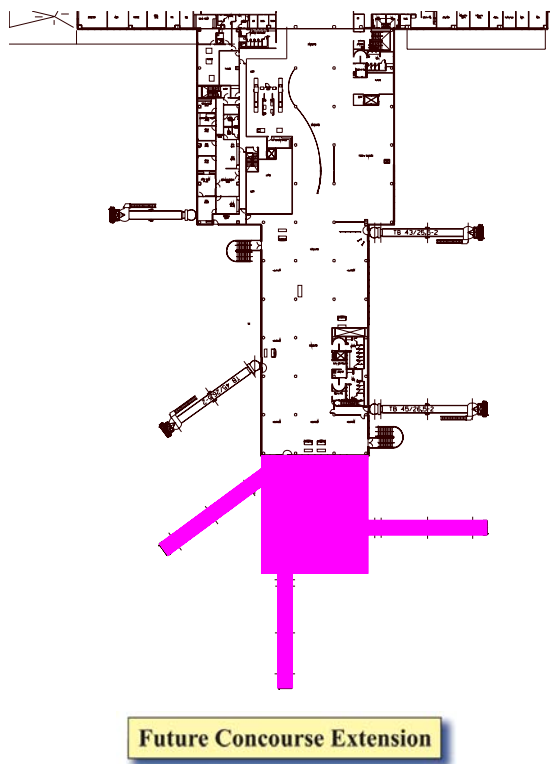
### Airfield

In the short-term time frame of PAL 1, Runway 13-31 should be extended to 9,000 feet in length to meet aircraft takeoff requirements during hot day weather conditions. In PAL 2, the Master Plan Update recommends the extension of Runway 17-35 to a full length of 7,500 feet so that it can effectively serve as a backup to Runway 13-31. Drainage improvements on the airfield will be required to support both of these runway projects.

### Terminal

With the recent construction of the Hayden W. Head International Terminal, available terminal space exceeds current demand and provides efficiency in terms of component location, adjacency, and passenger service. However, future planning for the short-term (PAL 1), the medium-term (PAL 2), and the long-term (PAL 3), is included for a complete Master Plan Update.

Many of the future requirements for the forecasted demand can be absorbed into the existing terminal. Minor improvements, such as additional rental car space and hold room improvements, may be required in the short-term (PAL 1) and the medium-term (PAL 2). The expansion needs for the terminal, such as extending the concourse and expanding the baggage claim area, will not be required until the long-term (PAL 3) planning stage.



## AIRFIELD ALTERNATIVES

In order to best meet the Airport's needs, the airfield alternatives were identified according to short-term and long-term requirements. The alternatives were screened to determine if they met the goals and objectives of the Master Plan Update. Following the screening, an additional analysis was conducted using criteria developed from the following categories; operational, financial, and environmental.

In the short-term, an increase in runway length to 9,000 feet is recommended to meet aircraft takeoff requirements during hot day weather conditions. This can best be accomplished by extending Runway 13-31. For the long-term, an effective backup runway is needed because the length of Runway 17-35 is insufficient to meet airline needs so Runway 17-35 should be extended to 7,500 feet.

### Short-term Alternatives

#### Airfield Alternative A

##### Runway 13-31 North Extension with Relocated Threshold

Alternative A provides an additional 1,862 feet to the northern end of Runway 13 and relocates the Runway 31 threshold 370 feet to the north for a usable total of 9,000 feet.

#### Airfield Alternative B

##### Runway 13-31 North Extension

Alternative B is an extension of Runway 13 to the north by 1,492 feet, establishing a total runway length of 9,000 feet.

#### Airfield Alternative C

##### Runway 13-31 South Extension

Alternative C provides an additional 1,492 feet to the south end of Runway 31, extending the total length of Runway 13-31 to 9,000 feet.

### Long-term Alternatives\*

#### Airfield Alternative D

##### New Parallel Runway

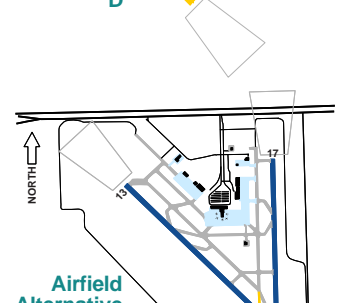
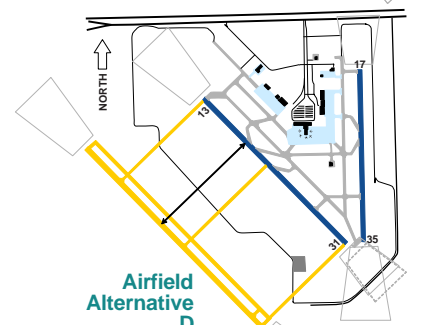
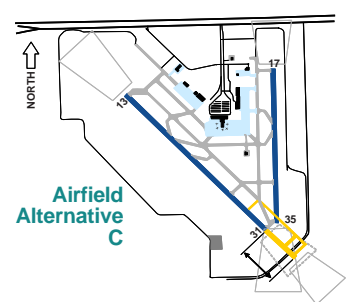
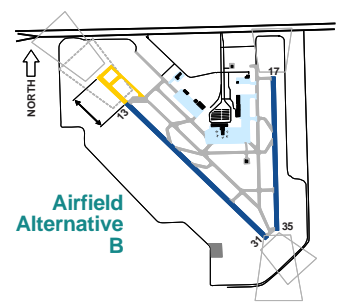
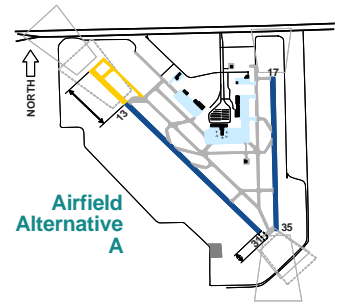
Alternative D places a new parallel runway on the west side the of Airport, 9,000 feet in length, outboard of and parallel to Runway 13-31 and separated by a distance of 4,300 feet.

#### Airfield Alternative F

##### Runway 17-35 South Extension

Alternative F extends Runway 35 to the south by 1,419 feet, establishing a total runway length of 7,500 feet.

\*Alternative E provides an additional 519 feet to the north end of Runway end 17, extending the total length of Runway 17-35 to 6,600 feet. Since Alternative E cannot meet the Airport's goals and objectives of 7,500 feet in length for Runway 17-35, Alternative E was eliminated from further analysis and evaluation.





PREFERRED ALTERNATIVE

