

# CHAPTER FIVE – CAPITAL IMPROVEMENT PROGRAM

While the Texas Department of Transportation (TxDOT) – Aviation Division requires the airport to submit a five-year airport capital improvement program (ACIP) each year, the planning effort affords the opportunity to examine projects and their potential financing beyond the short-term planning horizon. Several factors, such as funding availability and justification, may influence the timing of projects in the long-term planning period; therefore, greater flexibility must be considered regarding their implementation. The timing for capacity-related projects, such as hangar construction or terminal expansion, will need to be based on demand and the types of aircraft using the facility. Other projects, such as corrections to airfield geometry, focus on meeting FAA design standards and providing a safe operating environment. This planning study has been developed in a manner to provide Cameron County with maximum flexibility to adapt the concepts presented to potential changes over time. The short-term and long-term capital improvement program (CIP) for Cameron County Airport (PIL) is listed in **Table 5A** and shown graphically on **Exhibit 5A**.

The list of necessary projects was identified and refined, and project-specific cost estimates were prepared by the Brannon Corporation. The cost estimates also include design, construction administration, and contingencies that may arise on the project. The majority of hangar development is assumed to be funded by private developers through ground lease agreements with the sponsor. For this reason, hangar development has been excluded from the airport's CIP. Capital costs presented here should be viewed only as "order-of-magnitude" estimates that are subject to further refinement during design; nevertheless, they are considered sufficient for planning purposes. It should be noted that each project should only be undertaken after further refinement of its design and costs through detailed architectural or engineering analyses.

Project funding sources are also identified, including the federal Airport Improvement Program (AIP), which is administered by TxDOT. For projects that are eligible for federal/state funding, AIP/TxDOT grants provide up to 90 percent of the total project cost. The remaining 10 percent (or more) of project costs are funded locally by Cameron County. Another source for federal grants is the Infrastructure Investment and Jobs Act (IIJA), which was signed into law in 2022 and plans for \$25 billion to be invested into America's airports over the next five years.

The State of Texas distributes funding to general aviation airports from the Highway Trust Fund as the Texas Aviation Facilities Development Program. These funds are appropriated each year by the state legislature. State funding sources include the Routine Airport Maintenance Program (RAMP), which matches local government grants up to \$100,000 for maintenance of airside and landside needs, and a terminal building program that funds terminal building construction on a 50/50 basis up to a total project cost of \$1 million.

As detailed in the CIP, many of the projects listed are eligible for federal or state funding. Demand and justification for these projects must be provided prior to a grant being issued. Some projects identified in the CIP will require environmental documentation. The level of documentation necessary for each project must be determined in consultation with TxDOT. There are three major levels of environmental review to be considered under the *National Environmental Policy Act* (NEPA): categorical exclusion (CatEx), environmental assessment (EA), and environmental impact statement (EIS). Each level requires more time



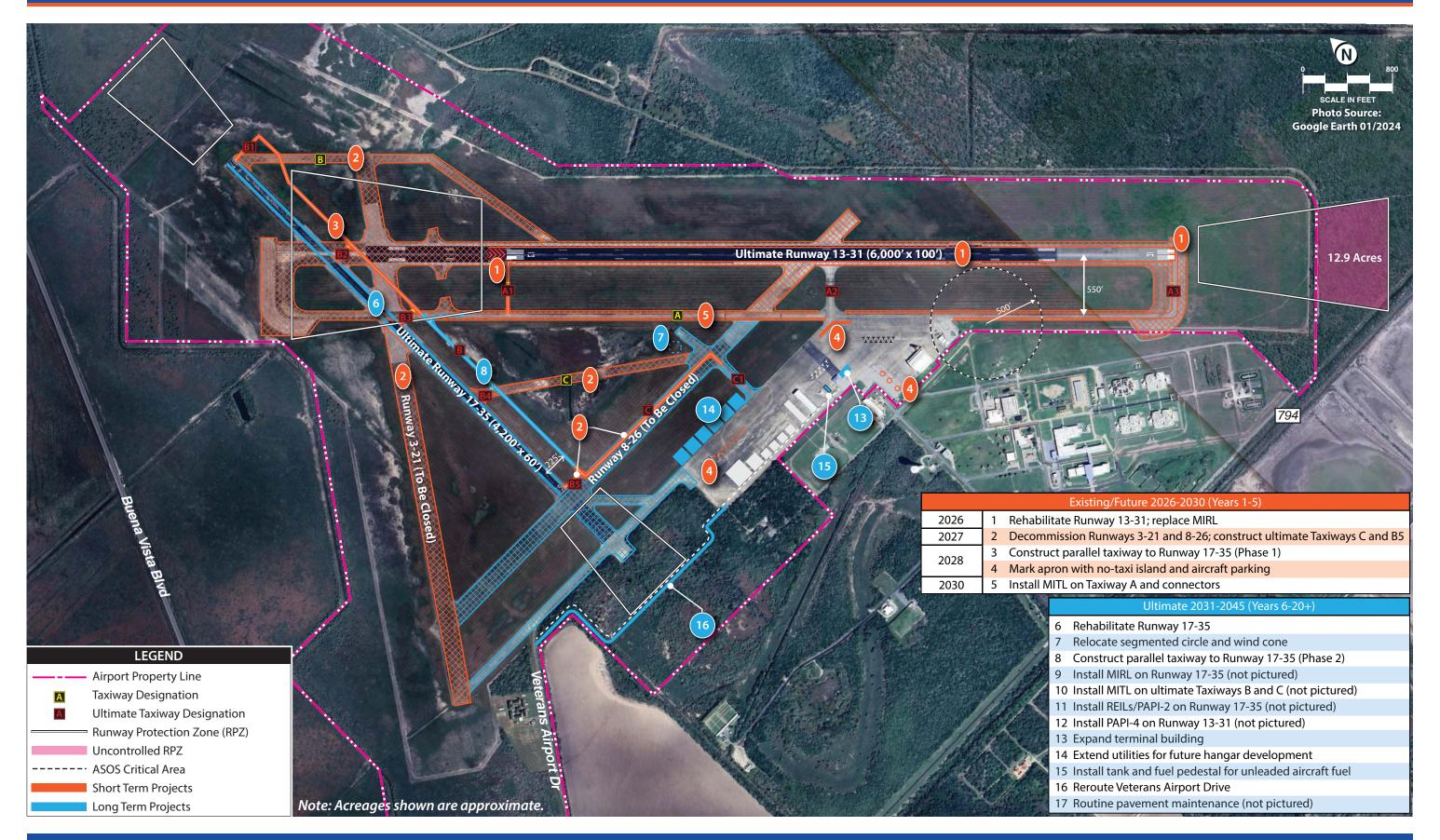
to complete and more detailed information than the previous level. Guidance on what level of documentation is required for a specific project is provided in FAA Order 1050.1G, FAA National Environmental Policy Act Implementing Procedures. The environmental overview presented in the previous chapter addresses NEPA and provides an evaluation of various environmental categories for PIL.

There are several local financing options to fund future development at airports, including airport revenue, issuance of a variety of bond types, and leasehold financing. These strategies could be used to fund the local matching share or complete a project if grant funding cannot be arranged.

As shown in **Table 5A**, the total CIP is estimated at approximately \$26.9 million. The share eligible for FAA/TxDOT funding is estimated at \$22.6 million, while the local share is estimated at \$4.3 million. Project details are summarized below. In some cases, particularly in the ultimate term, projects have been grouped together for ease of long-range planning.

TABLE 5A   Capital Improvement Program				
#	Project Description	Cost Estimate	Federal/TxDOT Share	Airport Sponsor/ Local Share
Existing/Future Projects (1-5 Years)				
FY 2026				
1	Rehabilitate Runway 13-31; replace MIRL	\$7,500,000	\$7,125,000	\$375,000
FY 2027				
2	Decommission Runways 3-21 and 8-26; construct ultimate Taxiways C and B5	\$975,000	\$877,500	\$97,500
FY 2028				
3	Construct parallel taxiway to Runway 17-35 (Phase 1)	\$1,875,000	\$1,687,500	\$187,500
4	Mark apron with no-taxi island and aircraft parking	\$25,000	\$22,500	\$2,500
FY 2030				
5	Install MITL on Taxiway A and connectors	\$1,500,000	\$1,350,000	\$150,000
	Short-Term Projects Subtotal:	\$11,875,000	\$11,062,500	\$812,500
Ultimate Projects (6-20+ Years)				
6	Rehabilitate Runway 17-35	\$2,500,000	\$2,250,000	\$250,000
7	Relocate segmented circle and wind cone	\$75,000	\$67,500	\$7,500
8	Construct parallel taxiway to Runway 17-35 (Phase 2)	\$2,700,000	\$2,430,000	\$270,000
9	Install MIRL on Runway 17-35	\$1,250,000	\$1,125,000	\$125,000
10	Install MITL on ultimate Taxiways B and C	\$1,500,000	\$1,350,000	\$150,000
11	Install REILs/PAPI-2 on Runway 17-35	\$400,000	\$360,000	\$40,000
12	Install PAPI-4 on Runway 13-31	\$350,000	\$315,000	\$35,000
13	Expand terminal building	\$2,000,000		\$2,000,000
14	Extend utilities for future hangar development	\$250,000		\$250,000
15	Install tank and fuel pedestal for unleaded aircraft fuel	\$400,000	\$360,000	\$40,000
16	Reroute Veterans Airport Drive	\$1,100,000	\$990,000	\$110,000
17	Routine pavement maintenance	\$2,500,000 <b>\$15,025,000</b>	\$2,250,000	\$250,000
	Ultimate Projects Subtotal:		\$11,497,500	\$3,527,500
CIP Total:		\$26,900,000	\$22,560,000	\$4,340,000









# SHORT-TERM PLANNING PROJECTS

Projects identified in the short term are those anticipated to be needed within the next five years and are primarily related to "right-sizing" the airport and improving safety.

# #1 - Rehabilitate Runway 13-31; replace MIRL

This project plans for the relocation of the existing Runway 13-31 thresholds, including construction of new runway pavement at the Runway 31 end. A new threshold connector (Taxiway A1) is included as well as relocation/replacement of medium intensity runway lighting (MIRL), runway end identifier lights (REILs), precision approach path indicators (PAPI-2s), and the electrical vault.

# #2 - Decommission Runways 3-21 and 8-26; construct ultimate Taxiways C and B5

This project includes closure markings for runway/taxiway pavements that are noted as decommissioned/abandoned on **Exhibit 4A**. Construction of ultimate Taxiway C and threshold connector B5 is also included. Where feasible, existing pavement associated with Runway 8-26 will be utilized in the construction of Taxiway C.

# #3 - Construct Parallel Taxiway to Runway 17-35 (Phase 1)

This project plans for the construction of a new 25-foot-wide parallel taxiway to serve Runway 17-35. Phase 1 includes construction of the northern segment, which includes taxiway pavement extending from ultimate Taxiway B1 to Taxiway B3.

#### #4 - Mark apron with no-taxi island and aircraft parking

A no-taxi island is planned at the entrance to ultimate Taxiway A2 to mitigate the direct access point that currently exists. This project includes marking of this safety feature along with new/existing tiedowns for fixed wing aircraft. Marking for dedicated helicopter parking is also included.

#### #5 – Install MITL on Taxiway A and connectors

This project plans for the installation of medium intensity taxiway lighting (MITL) on Taxiway A and its connectors to enhance visibility and safety for taxiing aircraft. The lighting is planned to be located based on a 35-foot-wide taxiway.

#### **ULTIMATE-TERM PLANNING PROJECTS**

Projects identified in the ultimate term are those anticipated to be needed beyond the next five years; some may exceed the 20-year timeframe of this planning project.

### #6 - Rehabilitate Runway 17-35

As airfield pavements deteriorate over time, rehabilitation must be performed to extend their lifespan until a full reconstruction is necessary. This item includes rehabilitation of the crosswind runway at a width of 60 feet.



# #7 - Relocate Segmented Circle and Wind Cone

In their existing locations, the segmented circle and wind cone are located within the ultimate C-II runway object free area (ROFA). The ROFA is intended to be cleared of all objects, except for those mounted on frangible bases, such as airfield lighting or signage. This project plans for the relocation of this equipment to a site outside the ROFA.

### #8 - Construct Parallel Taxiway to Runway 17-35 (Phase 2)

This project plans for the second phase of construction of the parallel taxiway serving Runway 17-35. Phase 2 includes construction of the southern segment, which includes taxiway pavement extending from ultimate Taxiway B3 to Taxiway B5 (previously constructed as part of Project #2).

### #9 - Install MIRL on Runway 17-35

This project plans for installation of MIRL on crosswind Runway 17-35 to enhance visibility.

### #10 - Install MITL on Ultimate Taxiways B and C

This project plans for installation of MITL on ultimate Taxiways B and C to enhance visibility.

# #11 - Install REILs/PAPI-2 on Runway 17-35

Runway 17-35 is not currently equipped with visual approach aids. This project plans for the installation of two-box PAPIs and REILs on each runway end.

#### #12 - Install PAPI-4 on Runway 13-31

Runway 13-31 is currently equipped with a PAPI-2 system on each runway end. An upgrade to a four-box PAPI on the primary runway is planned to better accommodate increased jet traffic.

#### #13 - Expand Terminal Building

Previous analysis determined that the existing terminal building may become constrained in the future. This project plans for a 5,000 square foot expansion to better accommodate pilots, passengers, and other visitors to the airport.

### #14 – Extend Utilities for Future Hangar Development

Additional box hangars are planned to be constructed on the north side of the terminal apron in an area that has not previously been developed. Utility infrastructure, including electric, gas, water, and sewer, will be necessary to serve these users.

#### #15 – Install Tank and Fuel Pedestal for Unleaded Aircraft Fuel

A third tank and fuel pedestal is planned for the addition of unleaded aviation fuel, if/when demand for this fuel type arises.

#### #16 – Reroute Veterans Airport Drive

Veterans Airport Drive traverses the Runway 35 runway protection zone (RPZ), which is not an FAA-preferred condition. This project includes the potential reroute of this road outside of the RPZ, if considered by TxDOT/FAA to be necessary.



#### #17 – Routine Pavement Maintenance

As airfield pavements deteriorate over time, rehabilitation must be performed to extend their lifespan until a full reconstruction is necessary. This item serves as a placeholder for miscellaneous pavement maintenance projects that are anticipated to be needed in the ultimate period (years 6-20).

#### **PLAN IMPLEMENTATION**

To implement the plan recommendations, it is key to recognize that planning is a continuous process and does not end with approval of this document. The airport should implement measures that allow it to track various demand indicators, such as based aircraft, hangar demand, and operations. The issues on which this study is based will remain valid for a number of years. The primary goal is for PIL to best serve the air transportation needs of the region while achieving economic self-sufficiency.

The CIP and phasing program presented will change over time. An effort has been made to identify and prioritize all major capital projects that would require federal or state grant funding; nevertheless, the airport and TxDOT should review the five-year CIP on an annual basis.

The value of this study lies in keeping the issues and objectives at the forefront of the minds of decision-makers. In addition to adjustments in aviation demand, decisions regarding when to undertake the improvements recommended in this study will impact how long the plan remains valid. The format of this plan reduces the need for formal and costly updates by simply adjusting the timing of project implementation. Updates can be performed by airport management, thereby improving the plan's effectiveness; nevertheless, airports are typically encouraged to update their master plans and/or airport layout plans (ALPs) every seven to 10 years, or sooner if significant changes occur in the interim.

In summary, the planning process requires Cameron County to consistently monitor the progress of the airport. The information obtained from continually monitoring activity will provide the data necessary to determine if the development schedule should be accelerated or decelerated.