

## INTRODUCTION

This Airport Layout Plan (ALP) Update and Narrative for Port Isabel-Cameron County Airport (PIL) serves as an update to the previous ALP that was completed in 2006. The primary focus of this study is to provide the airport sponsor (Cameron County, Texas), the Texas Department of Transportation (TxDOT) – Aviation Division, and the Federal Aviation Administration (FAA) with a strategic plan and vision for short-term and long-term operations, as well as any necessary improvements that may be needed over the next 20 years. The report will include an updated ALP set, which serves as a blueprint of the current and future conditions at the airport. These updates will focus on the development direction and facility changes that have taken place since the completion and approval of the previous planning study. The development of a height hazard zoning map for the sponsor's implementation will also be completed with this study.

This study was designed to guide future development and update justification for projects that may qualify for funding through federal and state airport improvement programs. Coffman Associates, an airport consulting firm specializing in master planning and environmental studies, is preparing this plan.

This ALP Update and Narrative is being prepared in accordance with FAA requirements, including Advisory Circular (AC) 150/5300-13B, *Airport Design*; AC 150/5070-6B, *Airport Master Plans*; and FAA ARP Standard Operating Procedures (SOPs) 2.00 and 3.00 – Appendix A – ALP Review Checklist. The following goals and objectives have been determined for the ALP Update and Narrative.

1. Prepare an ALP with Narrative report consistent with the most current Federal Aviation Administration (FAA) Advisory Circulars and Standard Operating Procedures.
2. Use the most current FAA obstacle data file and collect any additional survey data necessary to complete the Inner Approach Surface Drawings sheets of the ALP set.
3. Develop a Capital Improvement Plan, including a recommended phasing plan and financial overview that considers local, state, federal, and alternative funding sources.
4. Prepare/update the airport property map (Exhibit A) to be consistent with the most current FAA Advisory Circulars and Standard Operating Procedures.
5. Establish phased, attainable goals for airport improvements and development. These goals should be based on the selected forecast of aviation demand, taking into account the current and future critical aircraft as well as airport geometry and taxiway distances from the terminal area to the most used primary and secondary runway departure ends.
6. Per FAA SOP 8.00, review any existing RSA determinations and update these as needed, or complete a determination for any runway that does not have one. If an RSA determination study is needed, that study will be conducted as part of this planning effort. A list of recommended RSA mitigation projects, if any, is a deliverable of this task.

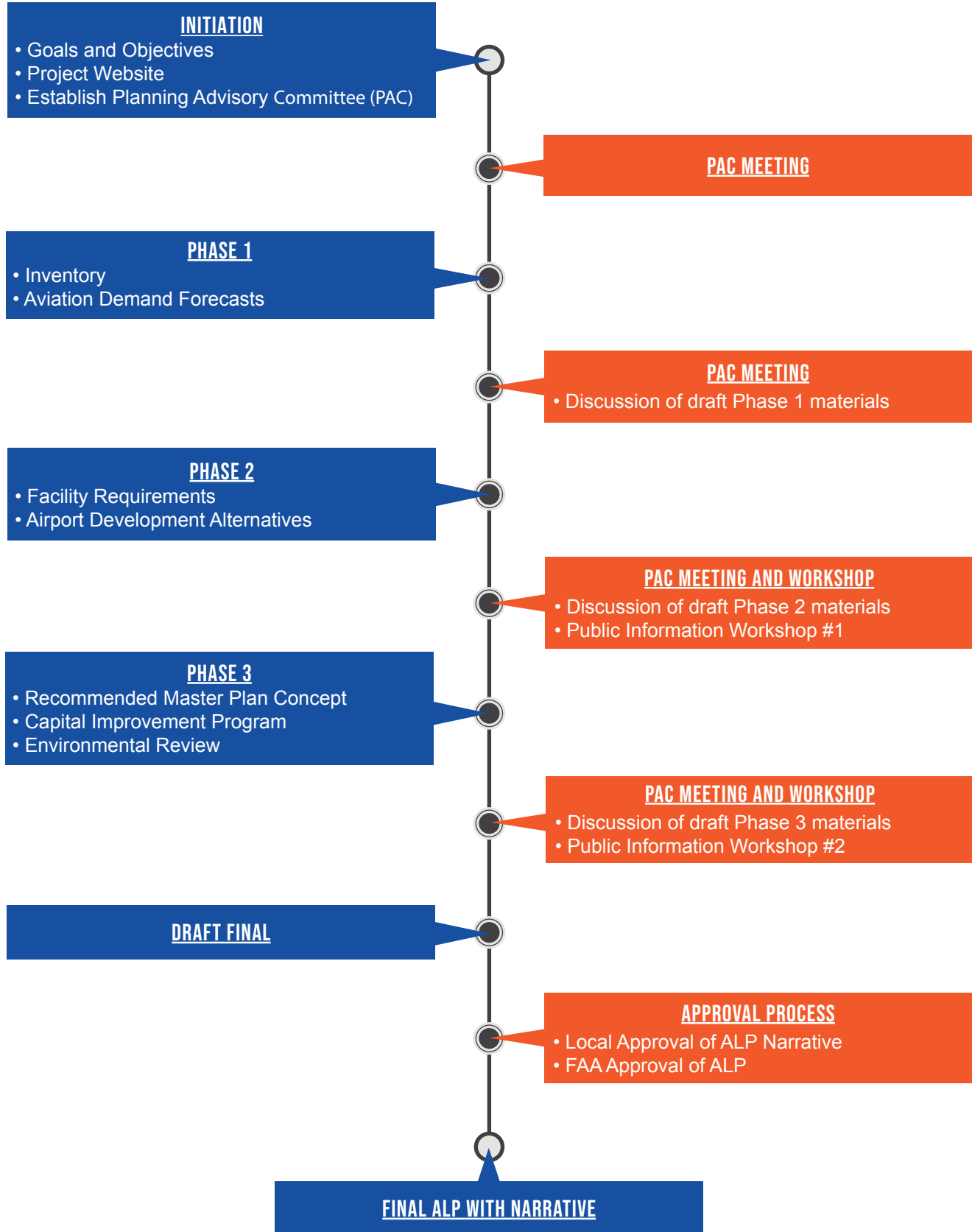
## STUDY PARTICIPATION

The ALP Update and Narrative is of interest to many within the local community and region, including local citizens and businesses, community organizations, county officials, airport users and tenants, and aviation organizations. To assist in the development of the study, Cameron County has identified a group of stakeholders to act in an advisory role as the plan progresses. The planning advisory committee (PAC) is comprised of individuals and organizations with a vested interest in the future development of PIL. Members of the PAC will meet at designated points during the planning process to review draft study materials and provide input to help ensure a realistic and viable plan is developed. A community outreach program will also be established to allow members of the public to review and comment on the study as it develops.

## PROCESS

The ALP Update and Narrative is prepared in a systematic fashion pursuant to the scope of services that was outlined in coordination with Cameron County and TxDOT Aviation. The study includes several elements, which are described below and depicted on **Exhibit i**:

- **Study Initiation** includes development of the scope of services, budget, and schedule.
- **Inventory** involves the collection of facility and operational data and wind data. This step identifies the conditions and capacities of existing airfield facilities as well as the existing environmental conditions at the airport.
- **Forecasts** of aviation demand levels at the airport (based aircraft and operations) are prepared to establish the existing and ultimate critical aircraft, per FAA AC 150/5000-17. The forecasting approach utilizes the FAA's *Terminal Area Forecast* (TAF), as well as regional and local socioeconomic and aviation trends. The forecasts will ultimately be submitted to TxDOT and the FAA for review and approval.
- **Facility Requirements** are determined for the airport for existing, short-term, intermediate-term, and long-term timeframes, based on both the critical aircraft and updated forecasts.
- **Alternatives** involves evaluation of various development alternatives to accommodate current and forecasted facility needs for airside and landside facilities.
- **Airport Plans and Land Use Compatibility** will result in the selection of a recommended development concept through coordination with airport staff and the PAC. Airport layout plans will be developed to depict the recommended development concept. The drawings will meet the requirements of FAA SOP 2.00, *Standard Procedure for FAA Review and Approval of Airport Layout Plans (ALPs)* (effective October 1, 2013). The updated ALP set will be included as an appendix to this study. The airport's noise exposure and land use compatibility will also be evaluated. An environmental overview will identify any potential environmental concerns that must be addressed prior to the implementation of the recommended development program.



- **Airport Development Schedules and Cost Estimates** includes the preparation of development schedules for the recommended concept and identification of potential federal and state aid for specific projects. A five-year CIP will be prepared to identify capital funds required by Cameron County to accomplish each proposed stage of improvements for the airport.
- **Final Drawings and Reports** will include a technical report (printed and digital formats) and full-size/full-color copies of report exhibits in final report documentation, as well as drawings produced for the study.

## SWOT ANALYSIS

A SWOT analysis is a strategic business planning technique used to identify **Strengths**, **Weaknesses**, **Opportunities**, and **Threats** associated with an action or plan. This exercise involves identifying an action, objective, or element, and then identifying the internal and external forces that are positively and negatively impacting it. The internal forces include attributes of the airport and market area that may be considered strengths or weaknesses, while the external forces are those outside the airport's control, such as the aviation industry as a whole or the economy. These manifest as opportunities or threats.

A SWOT analysis was conducted with the PAC in July 2024. A summary of this exercise and discussion is included in **Table i**. It is important to note that some attributes may fall into more than one category.

**TABLE i | SWOT Analysis**

<p><b>S</b></p> <p><b>STRENGTHS</b></p>	<ul style="list-style-type: none"> <li>• Runway 13-31 is 8,001 feet long, making it the second-longest runway in the Rio Grande Valley and capable of accommodating operations from small general aviation aircraft up to larger cabin class aircraft</li> <li>• Pavement strength can accommodate heavy aircraft</li> <li>• Concrete surfaces</li> <li>• Runway 17-35 was rehabilitated in 2015</li> <li>• There is good drainage on the airfield, so standing water on the runways is rare</li> <li>• PIL remains open during natural disasters, with two generators to maintain electricity; AEP uses airport for staging when necessary</li> <li>• There is limited competition with other airports in the region</li> <li>• Well-built community hangar</li> <li>• TxDOT's Routine Airport Maintenance Program (RAMP) provides additional funding opportunities</li> <li>• New water line serves airport</li> <li>• PIL is installing ADS-B tracker</li> <li>• Recent fuel reduction project to provide fire setback outside the fence</li> <li>• Good location; PIL is the closest airport to South Padre Island</li> <li>• There are currently four runways, which allows pilots to operate in all wind conditions (Note: two runways are in the process of being decommissioned)</li> <li>• 24-hour terminal/fuel availability</li> <li>• Terminal building is well-equipped with a lobby, pilots' lounge, flight planning room, and conference room.</li> <li>• Perimeter is fully fenced; fencing is new and was installed in 2023</li> <li>• Ample pavement for aircraft movements</li> <li>• All hangars are occupied, with 14-16 individuals on a waitlist</li> <li>• Lots of property (~820 acres) on which to expand facilities</li> <li>• County leaders are supportive of PIL and led new projects to improve airport; PIL was voted Most Improved Airport in Texas in 2013</li> <li>• Adjacent detention center provides an added layer of security to the airport</li> <li>• FBO operator/services</li> </ul>
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TABLE i | SWOT Analysis (continued)

<p><b>W</b> WEAKNESSES</p>	<ul style="list-style-type: none"> <li>• Cameron County has three airports, which could lead to some competition for demand/usage and funding</li> <li>• There is only one instrument approach at the airport (Runway 13) and an approach to Runway 31 is needed</li> <li>• Nearby wind farm raised the circling minimums, which has limited corporate traffic</li> <li>• Two runways (3-21 and 8-26) are closing</li> <li>• Termite damage present in community hangar</li> <li>• PIL is served by a septic system rather than sewer</li> <li>• There is no on-site or nearby car rental agencies, although rental cars can be delivered to the airport</li> <li>• Airport is somewhat remote, making it less accessible from Port Isabel and other communities in the county</li> <li>• There is a lack of gas stations, restaurants, etc. around the airport</li> <li>• Pavement maintenance/rehabilitation is needed on Runway 13-31</li> <li>• There is a lot of pavement to maintain, both in terms of runway dimensions and pavement strength</li> <li>• Adjacent wildlife refuge creates risk of wildlife accessing the airfield</li> <li>• Upgraded utilities necessary for new development</li> </ul>
<p><b>O</b> OPPORTUNITIES</p>	<ul style="list-style-type: none"> <li>• Second causeway connecting South Padre Island is planned just south of PIL, anticipated to bring new business and demand at airport</li> <li>• Cargo/passenger air service; potential for increased air taxi services once causeway is constructed</li> <li>• New/improved zoning to protect airport</li> <li>• Available property for development/growth (aeronautical and non-aeronautical)</li> <li>• Island shuttle stop at airport</li> <li>• Improved access road and signage to airport</li> <li>• SpaceX headquarters is relocating to area; this is a growing industry that will attract new employees/residents, and launches attract tourists</li> <li>• LNG plant (\$18 billion investment) is under construction</li> <li>• Community is growing</li> <li>• I-69 connector could attract new businesses/cargo</li> </ul>
<p><b>T</b> THREATS</p>	<ul style="list-style-type: none"> <li>• Wind farms</li> <li>• Wildlife access to airfield from neighboring Laguna Atascosa National Wildlife Refuge</li> <li>• Property outside the fence is being converted to coastal prairie, which could attract more wildlife</li> </ul>