



Introduction & Summary



WHAT IS A MASTER PLAN?

The Federal Aviation Administration (FAA) recommends that airports update their long-term planning documents every seven to 10 years, or as necessary, to address local changes at the airport. The prior master plan update for Kerrville-Kerr County Airport (ERV) was completed in 2013. The City of Kerrville and Kerr County, which are the joint sponsors of the airport, received a grant from the Texas Department of Transportation (TxDOT) Aviation Division to update the airport master plan.

The co-sponsors are responsible for funding capital improvements at ERV, as well as obtaining FAA and TxDOT development grants. The master plan is intended to provide **a true vision for how ERV is developed, guidance for future development, and justification for projects** for which the airport may receive funding through an updated capital improvement program (CIP) to demonstrate the future investments required by the City of Kerrville, Kerr County, TxDOT, and the FAA.

The airport master plan follows a systematic approach outlined by the FAA to identify airport needs in advance of the actual need for improvements to ensure the city/county can coordinate environmental reviews, project approvals, design, financing, and construction to minimize the negative effects of maintaining and operating inadequate or insufficient facilities. An important outcome of the master plan process is a recommended development plan, which reserves sufficient areas for future facility needs. Such planning will protect development areas and ensure they will be readily available when required to meet future needs. The intended outcome of this study is a detailed on-airport land use concept that outlines specific uses for all areas of airport property, including strategies for revenue enhancement.



The preparation of this master plan is evidence that the city and county recognize the importance of the airport and the associated challenges inherent in providing for its unique operating and improvement needs. The cost of maintaining an airport is an investment that yields impressive benefits for the local community. With a sound and realistic master plan, the airport can maintain its role as an important link to the regional, state, national, and global air transportation systems. Moreover, the plan will aid in supporting decisions for directing limited and valuable city/county resources for future airport development. Continued investment in the airport will ultimately allow the co-sponsors to reap the economic benefits.

Some common questions regarding what a master plan is/is not are answered in the graphic below.

AN AIRPORT MASTER PLAN IS...	AN AIRPORT MASTER PLAN IS NOT...
<ul style="list-style-type: none"> ✓ A comprehensive, long-range study of the airport, including all air and landside components, that describes plans to meet FAA safety standards and future aviation demand. 	<ul style="list-style-type: none"> ✗ A guarantee that the airport will proceed with any planned projects. Master plans are guides that help airport staff plan for future airport development; however, the need/demand for certain projects might never materialize.
<ul style="list-style-type: none"> ✓ Required by the FAA to be conducted every 7-10 years to ensure plans are up to date and reflect current conditions and FAA regulations. The last master plan for ERV was completed in 2013. 	<ul style="list-style-type: none"> ✗ A guarantee that the City of Kerrville, Kerr County, TxDOT, or the AIP will fund any planned projects. Project funding is considered on a project-by-project basis and requires appropriate need and demand. Certain projects may require the completion of a benefit-cost analysis.
<ul style="list-style-type: none"> ✓ Funded by the FAA through the Airport Improvement Program (AIP), which provides 90% of the total project costs. The remaining 10% is funded jointly by the City of Kerrville and Kerr County. 	<ul style="list-style-type: none"> ✗ Environmental clearance for specific projects. The master plan includes an environmental overview, which identifies potential environmental sensitivities per <i>National Environmental Policy Act of 1969 (NEPA)</i> guidelines. Most planned projects will require a separate NEPA study (environmental impact statement/ environmental assessment/categorical exclusion) prior to construction.
<ul style="list-style-type: none"> ✓ A city and county document that will ultimately be presented for approval to the Kerrville City Council and Kerr County Commissioners' Court. The FAA and TxDOT approve only the airport layout plan (ALP) drawing set. 	
<ul style="list-style-type: none"> ✓ An opportunity for airport stakeholders and the general public to engage with airport staff on issues related to the airport, its current and future operations, and environmental and socioeconomic impacts. Up to two (2) public information workshops will be conducted during the master plan process to facilitate this public outreach effort. 	

WHO IS PREPARING THE MASTER PLAN?

The Kerrville/Kerr County Joint Airport Board contracted with Coffman Associates, Inc., to undertake the airport master plan. Coffman Associates is an airport planning and consulting firm that specializes in master planning and environmental studies. Coffman Associates led the planning team with support from Parkhill for cost estimating and engineering support.

The airport master plan was prepared in accordance with FAA requirements, including FAA Advisory Circular (AC) 150/5300-13B, *Airport Design* (as amended), and AC 150/5070-6B, *Airport Master Plans* (as amended). The plan was closely coordinated with other planning studies relevant to the area and with aviation plans developed by the FAA and TxDOT. The plan was also coordinated with the City of Kerrville and Kerr County, as well as other local and regional agencies, as appropriate.



AIRPORT MISSION AND VALUES

As part of the airport's *Strategic Plan 2020–2024*, the Kerrville/Kerr County Joint Airport Board stated its core mission statement, values, and vision statement. Having these guiding principles in place helps ensure all members of the airport organization work toward common goals and share a unified sense of purpose. This alignment is crucial for maintaining consistency in actions, communication, and strategic decisions. Because the airport master plan is an important part of the airport's long-term actions and strategic decisions, these guiding principles were considered throughout its development.

ERV's guiding principles are as follows.

Mission Statement

"To provide aviation facilities and services to the Kerrville/Hill Country area by managing airport infrastructure for a safe, efficient, and convenient aviation gateway."

Values

- Safety and security
- Excellence in all we do
- Innovation
- Integrity in all dealings
- Accountability

Vision Statement

"To provide premier services and airport facilities through operational excellence and innovation, while also promoting commercial and local economic development."

STUDY GOALS, OBJECTIVES, AND ASSUMPTIONS

The primary goal of this master plan is to provide the framework needed to guide future airport development that will satisfy aviation demand in a cost-effective manner while considering potential environmental and socioeconomic impacts. Accomplishing this goal required evaluation of the existing airport to decide what actions needed to be taken to maintain a safe, adequate, and reliable facility. A long-range planning study also requires several baseline assumptions that were used throughout the analysis. Specific objectives and assumptions for this study are as follows.



STUDY OBJECTIVES

Aviation Demand Forecasts

- To research factors that are likely to affect all air transportation demand segments in Kerr County over the next 20 years
 - The analysis will include the development of forecasts of potential general aviation and air taxi activity elements.
- To determine the airport's current and future critical design aircraft per FAA AC 150/5300-17, *Critical Aircraft and Regular Use Determination*

Facility Requirements

- To analyze the existing airfield system to determine the existing and ultimate runway length required to satisfy the airport's critical aircraft now and into the future
- To assess the need for expanded airfield pavements, hangars, and apron to support existing and anticipated based aircraft and itinerant operations

Development Alternatives

- To evaluate the highest and best uses of airport property
- To recommend landside improvements that satisfy the anticipated operational growth, including fixed base operator (FBO), specialty aviation operator (SASO), and other aviation services

Capital Improvement Program (CIP)

- To develop a 20-year demand-based CIP, including a recommended phasing plan

Airport Layout Plan (ALP) Update

- To produce accurate base maps of existing and proposed facilities, as well as updated ALP drawings consistent with FAA Standard Operating Procedures (SOPs) No. 2.00 and 3.00
- To review future use and zoning of airport property, instrument approach areas, and nearby developments to ensure flight safety and land use compatibility
 - This step will involve the development of new noise exposure contours utilizing the FAA's *Aviation Environmental Design Tool* (AEDT), application of current land use compatibility guidelines; review of local land use controls and plans; and analysis of land use management techniques.
- To analyze all opportunities and develop strategies for incompatible land use encroachments



BASELINE ASSUMPTIONS

A long-range planning study requires several baseline assumptions that were used throughout this analysis. The baseline assumptions for this study are as follows.

- ERV will continue to accommodate general aviation tenants, as well as itinerant and local aircraft operations by air taxi, general aviation, and military operators, through the 20-year planning period.
- The aviation industry will develop through the planning period as projected by the FAA. Specifics of projected changes in national aviation industries are described in Chapter Two.
- The socioeconomic characteristics of the region will generally change as forecasted (Chapter Two).
- A federal and state airport improvement program will be in place through the planning period to assist in funding future capital development needs.

MASTER PLAN ELEMENTS AND PROCESS

The master plan includes nine elements that are intended to assist in the evaluation of future facility needs and provide the supporting rationale for their implementation. **Figure iA** provides a graphical depiction of the process involved in the study.

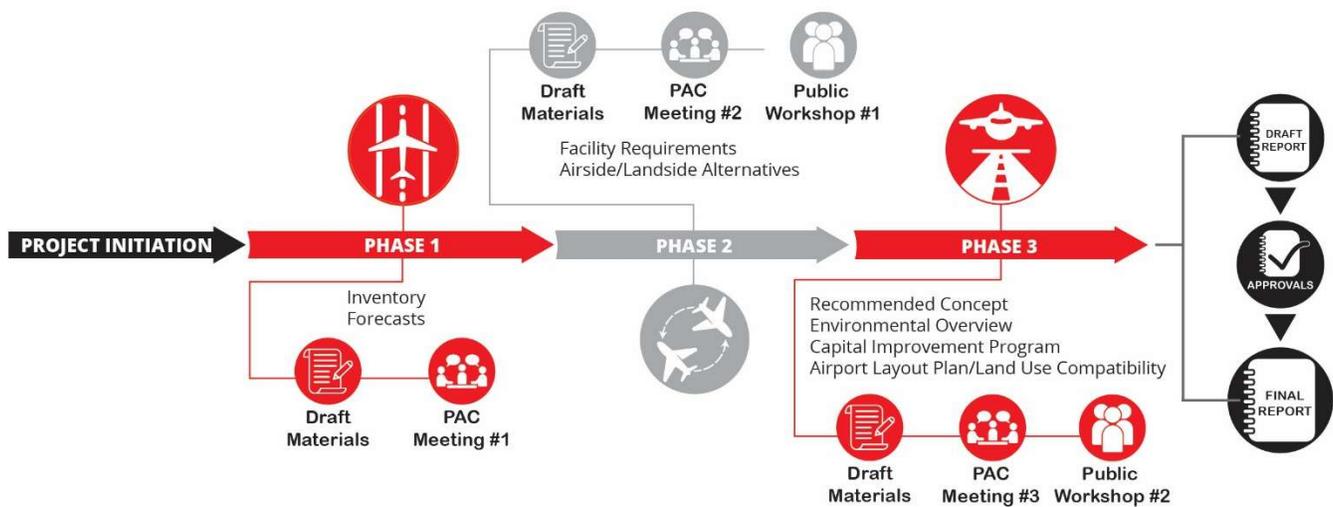


Figure iA – Project Workflow

Element 1 – Study Initiation and Organization includes the development of the scope of services, schedule, and study website. Study materials will be assembled in a workbook format. General background information will be established that includes and outlines the goals and objectives to be accomplished during the master plan.



Element 2 – Inventory of Existing Conditions is focused on the collection and assembly of relevant data pertaining to the airport and the area it serves. Information regarding existing facilities and operations is collected. Local economic and demographic data are collected to define the local growth trends, and environmental information is gathered to identify potential environmental sensitivities that might affect future improvements. Planning studies that may be relevant to the master plan are also collected.

Element 3 – Aviation Demand Forecasts examines the potential aviation demand at ERV. The analysis utilizes local socioeconomic information and national air transportation trends to quantify the levels of aviation activity that can reasonably be expected to occur at ERV over a 20-year period. An existing and ultimate critical design aircraft (based on AC 150/5000-17, *Critical Aircraft and Regular Use Determination*) is also established to determine future planning design standards. The results of this effort are used to determine the types and sizes of facilities that will be required to meet the projected aviation demand at the airport through the planning period. This element is one of two elements that are submitted to TxDOT for approval.

Element 4 – Facility Requirements determines the available capacities of various facilities at the airport, whether they conform with FAA standards, and what facility updates or new facilities will be needed to comply with FAA requirements and/or projected 20-year demand.

Element 5 – Airport Development Alternatives considers a variety of solutions to accommodate projected airside and landside facility needs through the long-term planning period. An analysis is completed to identify the strengths and weaknesses of each proposed development alternative, with the intention of determining a single direction for development.

Element 6 – Airport Layout Plans/Land Use Compatibility involves coordination with airport staff and the planning advisory committee (see Element 9) to result in the selection of a recommended development concept. Airport layout plans will be developed to depict the recommended development concept. The drawings will meet the requirements of FAA SOP No. 2.00, *Standard Procedure for FAA Review and Approval of Airport Layout Plans (ALPs)* (effective date 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.

Element 7 – Financial Management and Development Program analyzes the benefits and costs associated with the recommended plan. Specific project costs are established for the development of a CIP that ensures logical staging of improvements.

Element 8 – Final Reports produces the draft final report and ALP drawings in print and digital form. These materials will be presented to the City of Kerrville/Kerr County, the FAA, and TxDOT for review and approval. Once approved, a final report will be prepared and made available in print and digital formats.

Element 9 – PAC Meeting and Public Outreach includes tasks related to the establishment of a planning advisory committee (PAC) for the master plan and the conducting of periodic public information workshops with the aim of engaging the community in the study process. The study materials and notices of public meetings will be distributed on the study website.



COORDINATION AND OUTREACH

This study is of interest to many within the local community and region, including local citizens, local businesses, community organizations, city officials, airport users/tenants, and aviation organizations. As a component of the regional, state, and national aviation systems, ERV is of importance to state and federal agencies responsible for overseeing the air transportation system.

To assist in the development of the master plan, a PAC was established to act in an advisory role. PAC members met three times at designated points during the study to review study materials and provide comments to help ensure that a realistic, viable plan was developed.

Draft phase reports were prepared at various milestones in the planning process. The phase report process allows for timely input and review during each step within the master plan to ensure all issues are fully addressed as the recommended program develops.

Two open-house public information workshops were held as part of the study coordination and outreach efforts. Workshops are designed to allow all interested persons to become informed and provide input concerning the master plan process. Notices of meeting times and locations were advertised through local media outlets. All draft phase reports, meeting notices, and materials were made available to the public on a study-specific website: **ERV.airportstudy.net**

SUMMARY

Planned development at ERV is focused on accommodating projected growth in activity and meeting FAA airfield design standards. The CIP that has been developed identifies both airside (runways, taxiways, navigational aids, etc.) and landside (terminal area, aprons, hangar, access roads, vehicle parking, etc.) facility needs.

Aviation demand forecasts were prepared to properly plan for future demand that may occur. Because of the cyclical nature of the economy, it is virtually impossible to predict with certainty year-to-year fluctuations in activity five, 10, and 20 years into the future. The master plan is keyed realistically toward potential demand horizon levels, rather than future dates in time. These planning horizons were established as levels of activity that will call for consideration of the implementation of the next step in the airport development program. By developing the airport to meet the aviation demand levels instead of specific points in time, the airport will serve as a safe and efficient aviation facility that will meet the operational demands of its users while being developed in a cost-effective manner. This program allows the City of Kerrville and Kerr County to change specific developments in response to unanticipated needs or demand.

The forecast approach utilized historical and forecasted general aviation and economic trends, resulting in modest growth projections for ERV through the planning period of the study. The aviation demand forecast is summarized in **Table iB**. TxDOT issued its approval of the forecasts prepared in this master plan on December 17, 2024. The TxDOT forecast approval letter is included in **Appendix B** of the master plan.


TABLE iB | Aviation Demand Forecasts

	Base Year (2024)	Short Term (1-5 Years)	Intermediate Term (6-10 Years)	Long Term (11-20 Years)
BASED AIRCRAFT				
Single-Engine	59	65	72	93
Multi-Engine	2	2	2	1
Turboprop	4	5	6	9
Jet	18	22	25	31
Helicopter	5	6	7	9
Other	0	0	1	2
Total Based Aircraft:	88	100	113	145
ANNUAL OPERATIONS				
Itinerant				
Air Carrier	0	0	0	0
Air Taxi	1,164	1,300	1,600	2,400
General Aviation	33,314	38,800	43,700	54,200
Military	62	46	46	46
Total Itinerant	34,540	40,146	45,346	56,646
Local				
General Aviation	10,334	11,900	13,300	16,400
Military	0	0	0	0
Total Local	10,334	11,900	13,300	16,400
Total Annual Operations:	44,874	52,046	58,646	73,046

Source: Coffman Associates analysis

AIRFIELD RECOMMENDATIONS

The recommended airport development concept includes improvements to the airfield and landside area to satisfy FAA design and safety standards and meet current and forecast needs. Runway design standards are based on the characteristics of the critical design aircraft for the runway. Runway 18L-36R is planned to an ultimate runway design code (RDC) of C/D-III-2400, which accommodates all general aviation aircraft, including the largest and fastest business jets in the national fleet. Runway 18R-36L is planned to an RDC of B-II-4000, which accommodates most small and mid-sized business jets.

The following summarizes the recommended airport development concept, which is depicted on **Exhibit iA**. A more detailed discussion of the recommended development concept can be found in Chapter Five.

Runway 12-30 (Primary Runway)

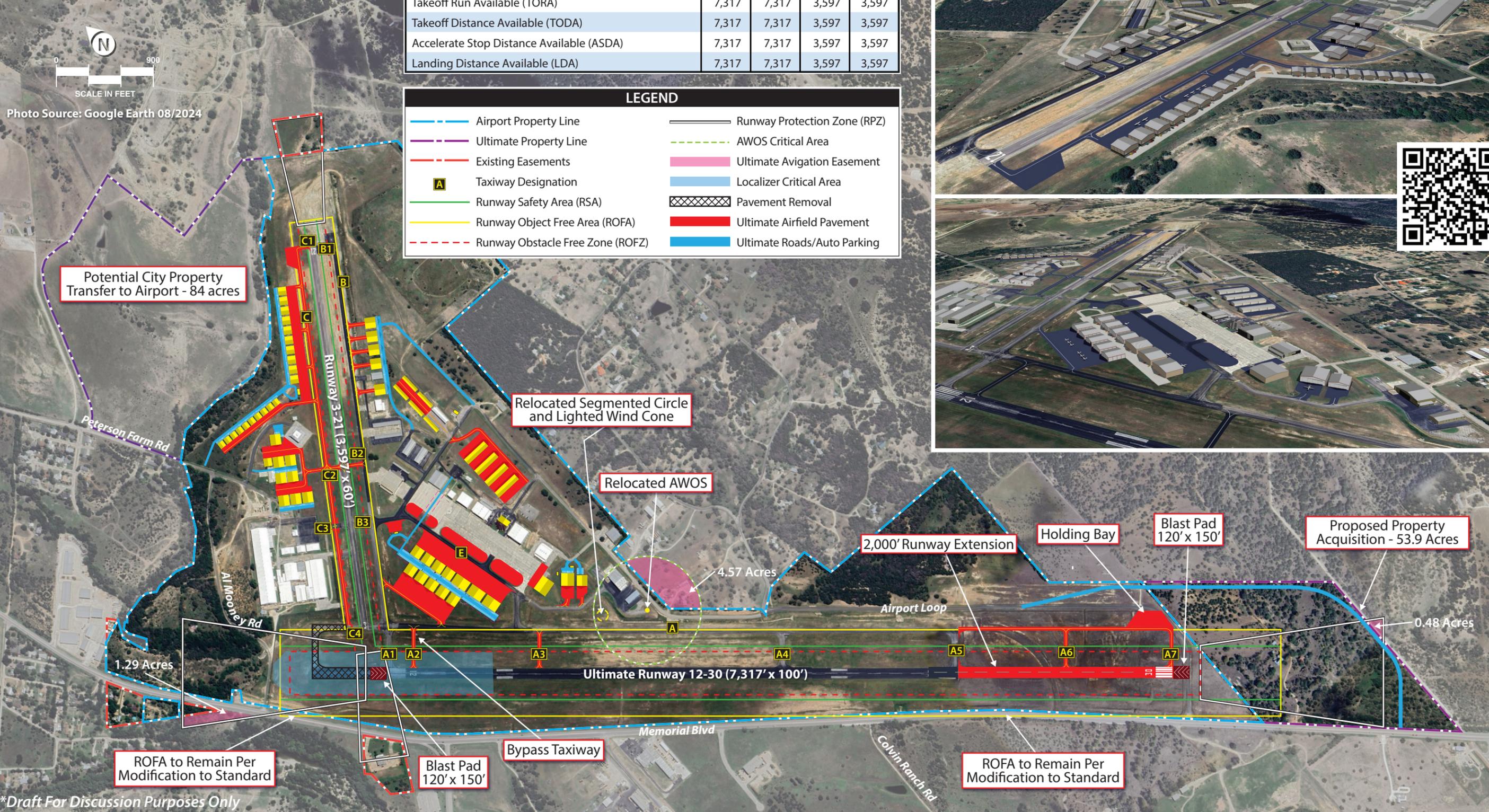
- Extend Runway 12-30 by 2,000 feet to a total length of 7,317 ft to better support the Falcon 900 and larger business jets.
- Remove the displaced threshold on Runway 12 to meet Runway Design Code (RDC) C-II-5000 standards without declared distances.
- Incorporate the recent acquisition of approximately 53.9 acres southeast of Runway 30 to support the planned shift/extension and for control of the ultimate runway protection zone (RPZ).

Runway 12-30 Runway Design Code: C-II-5000
Runway 3-21 Runway Design Code: B-I-5000

Declared Distances (measurements in feet)	Runway			
	12	30	3	21
Takeoff Run Available (TORA)	7,317	7,317	3,597	3,597
Takeoff Distance Available (TODA)	7,317	7,317	3,597	3,597
Accelerate Stop Distance Available (ASDA)	7,317	7,317	3,597	3,597
Landing Distance Available (LDA)	7,317	7,317	3,597	3,597

LEGEND

Airport Property Line	Runway Protection Zone (RPZ)
Ultimate Property Line	AWOS Critical Area
Existing Easements	Ultimate Avigation Easement
Taxiway Designation	Localizer Critical Area
Runway Safety Area (RSA)	Pavement Removal
Runway Object Free Area (ROFA)	Ultimate Airfield Pavement
Runway Obstacle Free Zone (ROFZ)	Ultimate Roads/Auto Parking



*Draft For Discussion Purposes Only

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- Reroute the Airport Loop road to avoid intrusion into the expanded safety areas.
- Increase pavement strength to 100,000 pounds for aircraft with dual-wheel main landing gear to accommodate heavier aircraft (e.g., Gulfstream G650).
- A previously established modification to standard where Memorial Boulevard (TX-27) extends through small portions of the ROFA remains due to prohibitive relocation costs.

Runway 3-21 (Crosswind Runway)

- Maintain existing 3,597-foot length; no extension required for small-aircraft design group users.
- Revalidate and correct published runway width. Width is published at 58 feet when actual is 60 feet.
- No changes to pavement strength or approach procedures; it remains a visual/circling-only runway.

Taxiway Improvements

- Adopt updated alphanumeric taxiway designations for improved pilot situational awareness.
- Taxiway A is enhanced with new exits (A2, A3, A6, A7) to reduce occupancy time and improve efficiency. The taxiway will be shifted south to coincide with the removal of the Runway 12 displaced threshold and extended to coincide with the extension on the south end. The pavement strength of Taxiway A is planned to be increased to support 100,000 pound aircraft on dual-wheel main landing gear.
- Taxiway B: Taxiway F is planned to be redesignated as Taxiway B. A new connecting taxiway (Taxiway B2) is added to access planned hangar developments on the north side.
- Taxiway C: new parallel taxiway on the north side of Runway 3-21 with a new holding apron at Runway 21. This taxiway will support hangar developments planned for the north side of the airport.

Navigation & Weather Aids

- Relocate the segmented circle, lighted wind cone, and automated weather observation system (AWOS) equipment southeast of their current positions to enable apron and hangar development in the midfield area of the airfield.

LANDSIDE CONCEPT

The primary goal of landside facility planning is to provide adequate space to meet reasonably anticipated needs of the various users while optimizing operational efficiency and land use. Achieving these goals yields a development scheme that segregates functional uses while maximizing the airport's revenue potential. The landside development plans are depicted on **Exhibits iB** and **iC**.



All landside development should occur only as dictated by demand. The locations and sizes of new facilities (aprons, hangars, etc.) proposed in the recommended plans are conceptual and may not reflect the needs of future developers and their customers. The recommended concept is strictly intended to be used as a guide for ERV staff when considering new developments.

Terminal Building

- The existing 5,000 square foot (sf) terminal is adequate for now but may require a future expansion for office, lobby, and amenities.

Apron Expansion

- Current apron area totals approximately 32,200 square yards (sy). The plan includes approximately 41,500 sy of new apron area in multiple phases, made possible by relocating the AWOS and segmented circle. A new vehicle access road that is planned to access the midfield area will cross the existing terminal apron to provide public access to the new hangar facilities. The new access road will create a single access/egress point to the main terminal apron via Taxiway A. The northern segregated portion of the terminal apron will be accessible via Taxiway B.

Hangar Development

- Current hangar capacity at ERV totals approximately 498,625 sf. The master plan projects a need to expand capacity by 127,730 sf over the next 20 years. Three hangars are already in the development phase that will add approximately 45,125 sf. The airport has adequate developable property to support an increase in total hangar capacity of 498,625 sf, well above the projected need. Due to the rising terrain in some areas of the airport, several hangar development sites will require moderate to significant grading work before development.

Fueling Facilities

- Expand main fuel farm by adding a 12,000-gallon Jet A tank to meet the growing demand of turbine aircraft.
- Relocate self-service fuel to the north side of terminal apron.
- Add second self-service fuel station north of Runway 3-21 to avoid cross-airfield fuel truck travel.
- Preserve the option for future unleaded aviation fuel storage once it is more widely adopted and available.

Vehicle Access & Parking

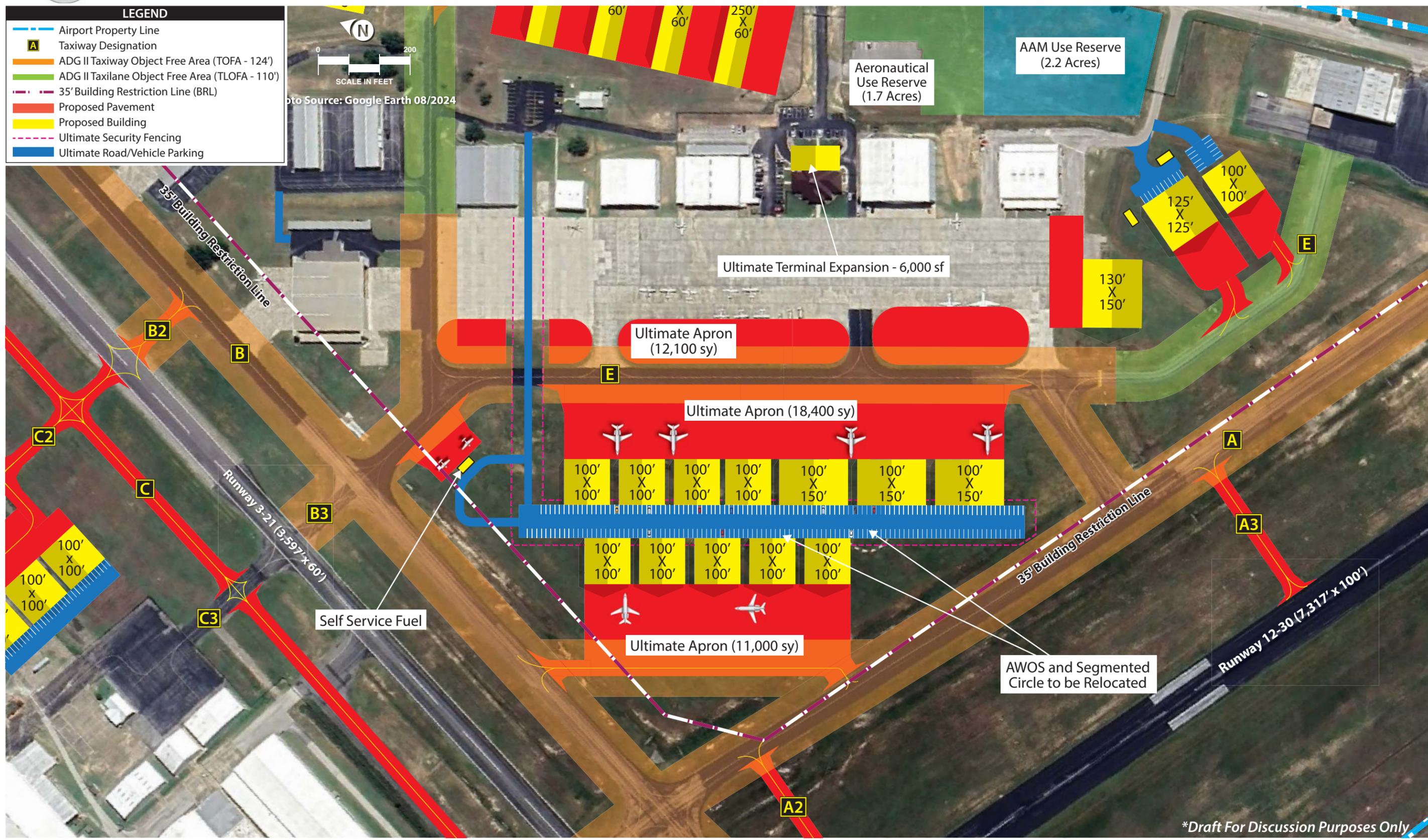
- New access roads and parking areas are planned to be integrated with each new hangar cluster.

LEGEND

- Airport Property Line
- A Taxiway Designation
- ADG II Taxiway Object Free Area (TOFA - 124')
- ADG II Taxilane Object Free Area (TLOFA - 110')
- 35' Building Restriction Line (BRL)
- Proposed Pavement
- Proposed Building
- Ultimate Security Fencing
- Ultimate Road/Vehicle Parking



Photo Source: Google Earth 08/2024



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Advanced Air Mobility (AAM)

- AAM is an emerging industry that involves next-generation aviation technologies designed to move people and goods more efficiently using innovative aircraft, such as electric vertical takeoff and landing (eVTOL) vehicles, autonomous drones, and hybrid systems. The plan includes reserving a 2.2-acre site for a vertiport and any supporting facilities (taxilane, apron, terminal, vehicle access and parking, firefighting facilities, etc.) southeast of the terminal building along Airport Loop.

Non-Aeronautical Development

- **Non-Aeronautical Development** | The plan for ERV includes reserving approximately 16.3 acres along Airport Loop for future non-aeronautical use (office, storage, industrial, etc.). This property is segregated from airfield operations and cannot be developed for aeronautical uses.

DEVELOPMENT FUNDING

The full implementation of the master plan is likely to take more than two decades, at a cost of \$109.5 million in 2025 dollars. However, it is not unusual for the capital plan and phasing program presented in Chapter Six to change over time due to funding limitations or changes in the aviation industry. 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 review the five-year CIP on an annual basis.

The breakdown of funding over the planning horizons is presented in **Table iC**. Approximately 78 percent of the total cost is eligible for grant funding from the FAA’s Airport Improvement Program (AIP) or TxDOT. The funding source for the AIP is the Aviation Trust Fund, which is funded through user fees and taxes on airline tickets, aviation fuel, and aircraft parts. **New hangar construction, private parking lots, and taxiways for private developments are anticipated to be funded by private developers.** A more detailed discussion of the CIP can be found in Chapter Six of the study.

With the study completed, the most important challenge is implementation. The cost of developing and maintaining aviation facilities is an investment that yields impressive benefits for the City of Kerrville and Kerr County. This plan and associated development program provide the tools the airport sponsor will require to meet the challenges of the future.

TABLE iC | Development Funding Summary

Planning Horizon	Total Cost	Federal/TxDOT Eligible	Sponsor
Short Term	\$10,936,680	\$7,754,473	\$3,182,206
Intermediate Term	\$55,786,372	\$45,530,841	\$10,255,531
Long Term	\$42,790,507	\$31,694,635	\$11,095,872
Total Program Costs	\$109,513,558	\$84,979,949	\$24,533,610
Federal = Airport Improvement Program			
TxDOT = Texas Department of Transportation Aviation Division			
Sponsor = City of Kerrville and Kerr County			

Sources: Cost estimates prepared by Parkhill; Project staging prepared by Coffman Associates