



EXECUTIVE SUMMARY

The Eagle County Regional Airport (EGE) is known as a gateway into the heart of the Colorado Rocky Mountains, providing access to some of the nation's top ski resort towns (Vail, Beaver Creek, and to some degree, Aspen). Although the winter season has historically been the busiest time of year for the local area, the summer recreation activities have started to attract a warm weather crowd, as well.

A wide variety of aircraft use the airport as both commercial and general aviation (GA) operations occur year-round and draw visitors from all areas of the United States. The diverse use of the Airport can create development challenges as the Airport must plan for commercial growth and expansion while at the same time accommodate the existing GA operators.

EGE is owned and operated by Eagle County, Colorado. The County maintains and develops capital improvements to EGE facilities and functions as the airport sponsor for FAA grant funding and PFC approval purposes. Eagle County Air Terminal Corporation (ECAT) was established in 1996 by the County as a Colorado non-profit corporation to acquire, construct, operate, improve and maintain certain airport facilities. ECAT owns and operates the commercial passenger terminal building and other related improvements on behalf of the County. The Master Plan for the Eagle County Regional Airport was completed under the counsel of the Eagle County Regional Airport Aviation Director and the Board of County Commissioners, with financial assistance from the Federal Aviation Administration. The Plan discusses what type of growth is anticipated in the next twenty years and what facilities will be needed to accommodate existing and future demands. In addition to identifying the basic needs of the Airport, the Master Plan also evaluates the cost implications to complete the recommended improvements. The objectives of the Master Plan include the following:

- Determine the current condition of existing facilities and their efficiencies.
- Provide a planning document for the next 20 years that is technically accurate, realistically executable, and financially feasible. This plan will also be completed to achieve financial and environmental sustainability.
- Prepare forecasts of aviation activity to include commercial passenger enplanements, aircraft operations, and international traffic potential.
- Review the land use, lease agreements, rates and charges, and guiding documents for FAA compliance.
- Prepare a financial plan that considers the operating budget, revenue, expenses, and potential FAA grant funding. This plan will serve as a road map in order for Bond Ratings to be kept, at a minimum, at their current level.
- Incorporate public involvement throughout the process to ensure that the future of the airport aligns with the values and vision of the community.



The Master Plan achieved these goals through the extensive coordination with the local community, County Officials, and Airport Management. Ten meetings were held to gain insight from the community and users of the airport as well as explain the master plan process and what it's meant to be used for. A key focus of the Master Plan was to develop future plans to meet the activity demands while doing so in a financially feasible manner. In doing this, three primary components came from the Plan – an analysis of existing and future activity, facility needs and preferred alternatives, and a financial implementation plan.

FORECASTING FUTURE ACTIVITY

The Master Plan's Aviation Activity Forecast was developed by Jviation Inc., in partnership with The Boyd Group. The Forecast provided a detailed analysis of aviation activity levels at EGE over a 20-year period (2010 through 2030). The data used as the basis for the Forecast allows for educated future planning decisions; however, the activity at EGE will likely experience short-term fluctuations over the 20-year period.

Traditional forecasts are typically influenced by metrics such as passenger demand, airline operations, fleets utilized, flight schedules, peak period determinations and other factors that are based on economic and demographic data. However, this is not the case at EGE as their activity is significantly impacted based on resort industry trends. Based on the forecast study conducted by Boyd Group International, primary factors influencing the trends at EGE are:

- Flights generated and supported (in some way) by the resort community
- Decisions made by the resort industry do not always align with national trends
- Weather patterns can alter the levels of risk the resorts may be willing to take in committing in advance to air service programs
- Passenger base is a result of the capacity that the resort industry chooses to incentivize

In addition to the unique factors influencing the forecast at EGE, there are three primary passenger traffic segments:

- Seasonal influx of commercial traffic and resort visitors during the winter and summer.
- Locally – Generated Traffic: local residents and second home owners.
- Non-Resort, Non-Locally-Generated Passengers: primarily generated by off-season visitors (2nd through 4th quarter traffic)

A third component to the Forecast for EGE is the Market profile, which includes the service area, demographic and economic characteristics, hub access, and seasonal trends.

GROWTH IN ACTIVITY

FAA approved forecasts predict steady growth over the 20-year planning period. Specifically, passenger enplanements are projected to increase at a 1.7% annual growth rate, while airport operations will increase at an annual growth rate of 0.6%. As indicated by Boyd Group International, due to the variation in recent



years of historical passenger enplanements and airline capacity at EGE, a medium growth rate of 1.7% was considered the most likely growth scenario for the next 20 years. Passenger enplanement growth is driven by a combination of local population growth, tourism growth, and projected national enplanements. It is also assumed that international traffic at EGE will remain stable at 7%-8% of the total traffic base. The 0.6% annual growth rate is due to the decline in GA operations at EGE. Although commercial airline operations are anticipated to grow steadily over the next 20 years, the 0.6% overall growth in operations is due to a decrease in local GA operations per based aircraft. Forecasted GA operations take into consideration the trend toward reduced flight hours for single-engine aircraft on a macro-basis, as well as an increased percentage of based jet aircraft that tend to operate fewer, but longer average segment lengths than propeller-driven aircraft.

DEVELOPMENT RECOMMENDATIONS

Following an examination of required facility improvements, several alternatives, and input from the Planning Advisory Committee, the public, County staff, and the FAA, a recommended airport development plan was established, which is shown in the figure, FUTURE DEVELOPMENT PLAN (to be included). The key features of this plan include the following:

RUNWAY 7/25 – HIGH SPEED TAXIWAY EXIT

It was determined that Taxiway A5 is used most often by arriving aircraft on Runway 25 exiting the runway after landing and rollout. Adding a high speed taxiway exit increases runway capacity by allowing aircraft to exit the runway at higher speeds, facilitating increased use of the runway for both landing and departing aircraft. The placement of an acute angled taxiway exit 6,000 feet from the displaced threshold of Runway 25 could permit the highest percentage of aircraft capable of utilizing the exit. At 6,000 feet from the displaced threshold, this location permits 48 percent of large aircraft to exit the runway during wet conditions. During dry conditions, 98 percent of large aircraft can utilize this exit.

TAXIWAY A – HOLDING BAY FOR RUNWAY 25

The Master Plan identified the need to improve airfield capacity. Airport Staff and the Planning Advisory Committee selected the Holding Bay to Taxiway A due to its increased operational benefits. Additionally, the aircraft holding bay has less of a potential to impact aircraft taxi time, which results in greater potential improvement to airfield capacity.

TAXIWAY B – FULL PARALLEL TAXIWAY

The Master Plan determined that a future parallel taxiway will support existing and future GA development on the north side of the airport. The north side of the airport represents one of the few areas available for future GA development.

TERMINAL IMPROVEMENTS

Several improvements to the commercial terminal were identified in the Master Plan, which include expanding the curbside check-in; installing a dedicated loading dock and Passenger Boarding Bridges; and,



expanding the holdrooms, baggage claim area, secured concessions, rental car counters and queuing, TSA Security Checkpoint, and terminal storage space.

SOUTHSIDE DEVELOPMENT AREA

The south side development area addresses the future development of additional apron, a potential second FBO, and additional support roadway to support growth on the south airfield. The proposed development location is in the land adjacent to the Commercial Terminal and west until it reaches the Airport property line. This area is currently undeveloped with the exception of the ARFF station, equipment storage, and overflow parking for public and rental car parking.

Construction of this development area is proposed through a phased development to ensure that development occurs as demand dictates. Development of the second FBO facility is conceptual and reserves adequate space for future development. Construction of this facility will occur through private development, and will be required to meet standards dictated in the Airport Minimum Standards.

- Phase one of this development is the relocation of the existing stormwater detention facilities to an area on the north airfield. Relocation of this detention facility allows for full west expansion of the apron.
- Phase two of this development proposes to expand the commercial apron approximately 1,050 feet to the west. This allows for additional aircraft parking for the Commercial Terminal and future corporate hangar development adjacent to a proposed SRE Storage facility. Access roadway is also incorporated with this phase. This roadway provides access to the future 757 maintenance hangar location, proposed corporate hangars, as well as the ARFF and SRE Storage facilities. This roadway is required to be installed to reduce the impact to airport employees and ARFF personnel when reconfiguration of the main access roadway begins.
- The third and final phase of this development is the apron area adjacent to the proposed 757 maintenance hangar leasehold and potential second FBO site. This phase of the development will not occur without an identified private developer that meets minimum qualifications under the Airport Minimum Standards.

GENERAL AVIATION

The Master Plan identified three key elements for General Aviation (GA) facility improvements, which include rehabilitating GA apron pavement, providing additional aircraft storage, as well as additional private facilities as dictated by demand. A phased development is proposed for providing additional GA Facilities on the north airfield. Phasing will ensure that demands in both the 2020 and 2030 planning periods are adequately met, as well as future development locations beyond the 20 year planning period.

- Phase one proposes hangar development on the east end of the north GA apron, and relocates the existing airport T-Hangar shelters currently adjacent to the HAATS apron to an area directly east of the self-serve fuel farm. This relocation allows for additional ramp area for aircraft tie-down, staging, or future development.



- Phase two redevelops the apron area between the current HAATS facility and Taxiway B3. Additional hangars proposed in this phase would serve to replace existing structures that will be nearing the end of their useful service life. Replacement of these structures will not occur prior to the end of a buildings service life.
- The third and final phase proposed for the north GA development area is located north of the future parallel taxiway between Taxiways B4 and B5. Development in this location would serve demand beyond the 2030 planning period. However, this development area can be constructed earlier based on future demand.

FINANCIAL IMPLEMENTATION

The 20-year Capital Improvement program incorporates a phased implementation of the improvements identified in the Master Plan. The FAA uses the CIP to determine what priority to fund projects within the entire state airport system. It should be noted that capital improvements do not occur on a set schedule, and are based on actual demand. Since EGE and ECAT are separate entities from a legal and financial standpoint, the Master Plan financial analysis treated them as such and provided separate Financial Implementation Plans for each. The primary objective of the Financial Implementation Analysis for the EGE and ECAT Master Plan is to evaluate the Airport's capability to fund the Capital Improvement Programs and to finance Airport operations. The program is planned for implementation through three phases of development including a five-year Short Term period (2013-2017), a five-year Intermediate Term period (2018-2022) and a ten-year Long Term period (2023-2032). The following tables provide a snapshot of the summary of the total escalated costs for both the EGE and ECAT Master Plan Capital Improvement Programs.

SUMMARY OF 2013 BASE YEAR & TOTAL ESCALATED COSTS FOR THE EGE MASTER PLAN CIP

Planning Periods	2013 Base Year Costs	Total Escalated Costs
Short Term Projects (2013-2017)	\$25,114,000	\$26,659,315
Intermediate Term Projects (2018-2022)	\$28,890,000	\$35,290,548
Long Term Projects (2023-2032)	\$135,250,000	\$204,577,760
Total Project Costs	\$189,254,000	\$266,527,623

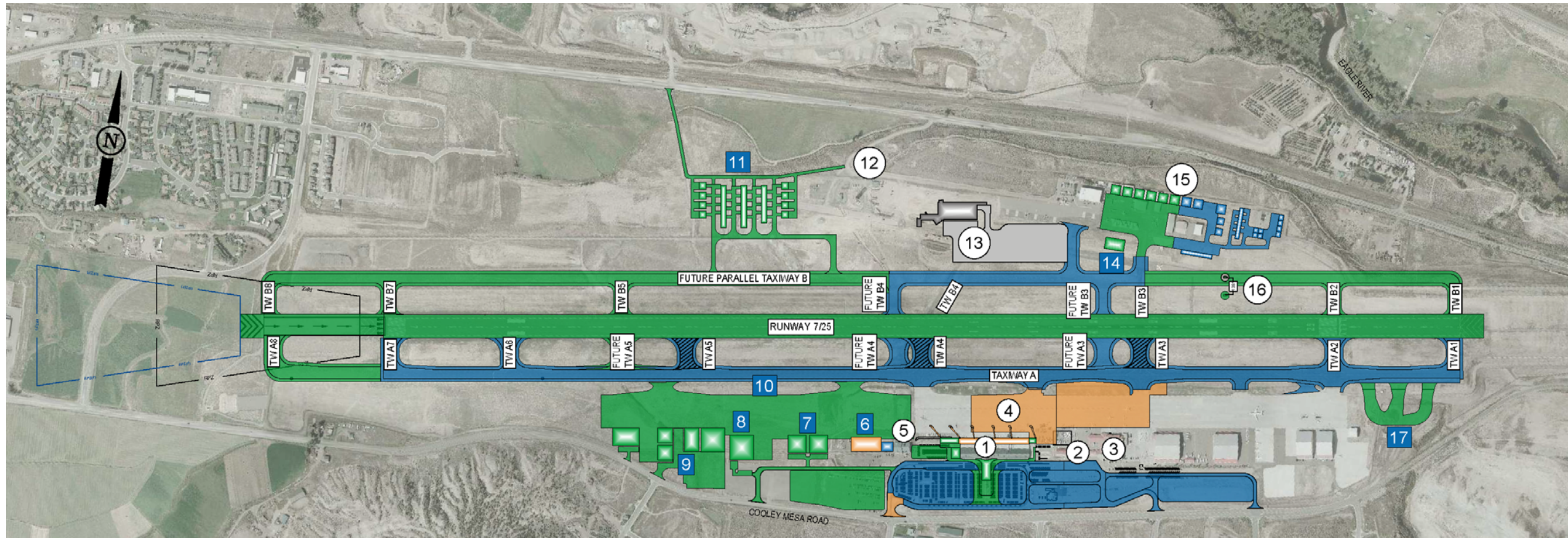
Source: Leibowitz & Horton AMC analysis

SUMMARY OF 2013 BASE YEAR & TOTAL ESCALATED COSTS FOR THE ECAT MASTER PLAN CIP

Planning Periods	2013 Base Year Costs	Total Escalated Costs
Short Term Projects (2013-2017)	\$31,100,000	\$34,577,317
Intermediate Term Projects (2018-2022)	\$12,500,000	\$15,147,884
Long Term Projects (2023-2032)	\$27,400,000	\$41,444,958
Total Project Costs	\$71,000,000	\$91,170,159

Source: Leibowitz & Horton AMC analysis

FUTURE DEVELOPMENT PLAN



- | | | |
|---|---|--|
| <p>Phase I / Short Term Projects (2013-2017)</p> <p>Airfield
SRE Facility (Design/Construct)
Wildlife Study*
Min. Standards/Rules & Regs*
RW, T/W Pavement Maintenance
Air Carrier Apron (Construct Phase II)
North GA Area Infrastructure (Phase I)
Air Carrier Apron (Construct Phase III)
ARFF Equipment*</p> <p>Terminal
Landscaping/Entry/Exit
Terminal Area Plan*
Interior Renovations*
Restaurant Expansion (Design/Construct)*
Baggage Carousel Rehab*
Interior Renovations*
Terminal Expansion (Design)*
EA Terminal Entrance/Loop Road Expansion*
Terminal 2nd Floor Holdroom
Loading Bridges</p> <p>* Project not depicted
** Includes relocation of Taxiway Connectors A3 & A4</p> | <p>Phase II / Mid Term Projects (2018-2022)</p> <p>Airfield
SRE Equipment*
Parallel T/W B (Construct Phase I)
T/W A Overlay/Paved Shoulders (Design)
Airfield Lighting & Signage Rehab (Design)*
Airfield Lighting & Signage Rehab (Construct)
Concrete Joint Maintenance
T/W A Overlay/Paved Shoulders (Construct)**
North GA Apron (Phase I)
ARFF Building Expansion (Design)*
ARFF Building Expansion (Construct)
Airport Master Plan Update*
Runway Overlay (Design)*
Taxiway Connector A5 Relocation (Design)*</p> <p>Terminal
ECAT-Expand/Reconfigure Terminal Road (Phase II)
ECAT-Expand/Reconfigure Terminal Parking (Phase II)</p> | <p>Phase III / Long Term Projects (2023-2032)</p> <p>Airfield
Runway Overlay (Construct)
South Side Development Area (Phase I-Drainage)
Taxiway Connector A5 Relocation (Construct)
Parallel T/W B (Construct Phase II)
ARFF Vehicle*
Terminal Apron Rehab (Phase I)
South GA Apron Rehab (Phase I)
East Aircraft Holding Bay (Design/Construct)
South GA Apron Rehab (Phase II)
SRE Equipment*
South Side Development Area (Phase II-Apron)
Airport Master Plan*
South Side Development Area (Phase III-Apron)
EA/BCA Runway Extension 1,000' West*
Runway Extension 1,000' West (Design)*
North GA Development Area (Phase II)
Parallel T/W B (Construct Phase III)
Runway Extension 1,000' West (Construct)
North GA Development Area (Phase III)</p> <p>Terminal
Terminal Expansion (Construct T Configuration)
Terminal Entrance/Loop Road Improvements
Terminal Parking Improvements
Terminal Expansion</p> |
|---|---|--|

AIRPORT FACILITIES LIST			
①	COMMERCIAL TERMINAL	⑩	FUTURE SOUTH SIDE DEVELOPMENT AREA
②	TERMINAL B / FUTURE INTERNATIONAL TERMINAL	⑪	FUTURE NORTH GA DEVELOPMENT AREA
③	VAIL VALLEY JET CENTER (FBO)	⑫	AIR TRAFFIC CONTROL TOWER
④	AIR CARRIER APRON	⑬	HAATS FACILITY
⑤	ARFF BUILDING	⑭	FUTURE SATELLITE FBO BUILDING
⑥	FUTURE SRE STORAGE FACILITY	⑮	GA HANGAR AREA
⑦	FUTURE CORPORATE HANGAR	⑯	ILS GLIDESLOPE
⑧	FUTURE 757 MAINTENANCE HANGAR	⑰	FUTURE AIRCRAFT HOLDING BAY
⑨	FUTURE SECOND FBO DEVELOPMENT SITE		

○ EXISTING DEVELOPMENT
 ■ FUTURE DEVELOPMENT
 X PAVEMENT TO BE REMOVED

Sources: Leibowitz & Horton AMC analysis; Jviation, Inc.