

1.0 INTRODUCTION

1.1 STUDY GOALS

The purpose of this study is to update the Eagle County Regional Airport (EGE) Master Plan, Airport Layout Plan (ALP), and to determine the extent, type, and schedule of development needed to not only maintain current service levels but to grow the airport in a healthy and feasible way. The Master Plan was last officially updated in 1989. A Master Plan update study was performed in 2002 but the study was never adopted by the Board of County Commissioners (BOCC). The aviation industry and the country as a whole have experienced significant change since the last official Master Plan for EGE was completed. This study will serve to update both the Master Plan and the ALP. The terrain constraints and existing land uses surrounding the airport limit what growth can be accomplished. Therefore, an achievable and realistic plan will be developed to accommodate- future growth and expansion, within the limited space available. This study's main objectives are to:

- 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.

1.2 LOCAL INFORMATION

Eagle County (County) is located on the western slope of Colorado and has a total area that covers approximately 1,700 square miles. The County is located approximately 131 miles west of downtown Denver, Colorado. The County is best known for its recreation and tourism activities, specifically winter skiing. Several resorts, including Vail and Beaver Creek are located



in Eagle County and are the primary economic drivers for the region. There are 53,653 residents and 26,635 household units¹. The 2010 assessed valuation for the County was \$3,624,891,290².

Eagle County was first used by the Ute Indians as their summer hunting and fishing grounds. The first documented European presence in the area was in 1840's, primarily for mining purposes.

The first permanent mining camp was established in 1879 which later became the town of Red Cliff. In 1883, Eagle County was sectioned off of Summit County and was established as an official Colorado County. Red Cliff became the first county seat and remained so until 1921 when it moved west to the Town of Eagle, where it remains to date.

The County flourished with the creation of the Vail Ski Resort. During World War II, the United States 10th Mountain Division ski troops trained for alpine warfare at nearby Camp Hale. After the war, several members of the 10th Mountain Division returned to the area and developed the Vail Ski Resort, which has since grown to be one of the top international ski destinations and a leader in the ski industry. The Town of Vail is the most recognized town in Eagle County, due to its ski resort, and while it only has 4,832 residents, visitors to this resort town account for 60% of enplanements at Eagle County Regional Airport.

Eagle County is made up of small communities spread throughout the county. The Town of Eagle, besides being the county seat, is known for the ranches that surround the town and has a population of approximately 6,000. The Town of Gypsum, with an approximate population 4,600, is the closest town to the airport and is best known for its moderate climate, western flair, and its hometown feel. Further east along I-70 is the town of Avon, with an approximate population of 6,100. The town is widely considered the commercial hub of the Eagle River Valley. South of I-70 along Highway 24 is the Town of Minturn, population 1,120. WThe Town of Red Cliff, population 299, sits nine miles south of Minturn on Highway 24. As the original county seat, Red Cliff is the oldest town in the county. Finally, located in southwest Eagle County is the Town of Basalt, with 3,169 residents. Although Basalt is technically in the county, it is geographically separated by Red Table Mountain and is located in the Roaring Fork Valley adjacent to State Highway 82.

1.3 AIRPORT MANAGEMENT AND OWNERSHIP STRUCTURE

EGE is a publically owned facility consisting of 632 acres. The airport is located in portions of unincorporated Eagle County and the Town of Gypsum and is located 30 miles west of Vail and 25 miles east of Glenwood Springs. The airport is approximately 136 miles west of downtown Denver, Colorado.

² Quick Facts, Official Website of Eagle County: http://www.eaglecounty.us/localinfo/Quick_Facts/



2/11/2014 1-2

¹ Source: U.S. Census



The airport is owned and operated by Eagle County, which is governed by a three-member Board of County Commissioners (BOCC). The County owns and maintains the airport facilities, and functions as the airport sponsor for FAA grant funding purposes. The commercial passenger terminal is owned and operated by the Eagle County Air Terminal Corporation (ECAT). ECAT is a non-profit corporation created under Colorado law that is owned and controlled by Eagle County and is authorized to both issue bonds to finance the terminal and to impose and collect Passenger Facility Charges (PFC) to discharge the debt. The BOCC designates an Aviation Director to oversee the day-to-day operation and development of the airport. Airport staff is responsible for terminal operations, airfield operations, aircraft rescue and fire fighting, and administration.

1.4 AIRPORT HISTORY AND ACTIVITY

EGE began as a plot of land purchased by Louise Ellen Cooley.³ Barnstormers would land at this location to give rides and perform demonstrations for the local residents. In the 1930s, Harry A. Nottingham, a noted airport supporter, began his term as County Commissioner and the concept of developing an airport gained momentum. In 1939, E.G. Berry, an engineer with FAA's Denver Airports District Office, found the location for a new airport on Cooley Mesa to be ideal, filling the gap between Leadville and Grand Junction. Around the same time, a County Commissioner and a local resident borrowed equipment to create a proper road to the airstrip at a cost of less than \$20.004.

In 1942, the Civil Aeronautics Authority (CAA) acquired the additional airport property from the Herin Family. The CAA leveled the land and constructed a 300 foot wide by 3,000 foot long emergency grass landing strip. This strip was used as an emergency landing facility for aircraft travelling to the West Coast across the central Colorado Rocky Mountains⁵.

Three years later, in 1945, Eagle County purchased 111.23 acres of land on the original Cooley property for the price of \$1,390. With this purchase, the county took over the maintenance of the airfield from the CAA. At the time, the cost to run the airport was \$300 per year.

In 1946, a Flight Service Station (FSS) was commissioned on the airfield grounds. This facility provided weather advisories to aircraft flying over Central Colorado, and for aircraft departing and arriving at EGE. The FSS facility operated until 1994, when it was relocated to Denver⁷.

On September 14, 1947, the airport was officially dedicated as the Eagle County Airfield⁸. This was the start of the modern day EGE as the airport started to grow over the next two decades.

⁷ Eagle County Aviation Association and Taylor, 12-13.



2/11/2014 1-3

³ Eagle County Aviation Association and Jennifer L. Taylor, <u>History of Eagle County Airport: How Love of Aviation Formed the Airport</u> (Gypsum, CO: The Old Gypsum Printer, Inc, 2007) 9.

⁴ Eagle County Aviation Association and Taylor, 10.

⁵ Eagle County Aviation Association and Taylor, 11.

⁶ Eagle County Aviation Association and Taylor, 11.



In 1962, Runway 8/26 was upgraded to 50 feet wide by 5,000 feet long and paved with asphalt. The first airline began operations at EGE when Rocky Mountain Airways of Denver opened an office for its new Vail Airways in January 1966. During this period, the first hangar facility with a paved apron was built in 1968. Additionally, a non-directional beacon (NDB) was purchased from Frontier Airlines. An NDB is a radio transmitter set at an exact location that emits a signal that is able to follow the curvature of the earth. This allows the signal to be received at greater distances and lower altitudes. This NDB provided the first instrument facility and procedures, establishing a direct flight route between Denver and Eagle for all weather arrivals and departures.

Commercial development continued in the 1970s. The first Fixed Base Operator (FBO) opened in 1973 when Mountain Flying Service opened its doors in two double wide trailers. A second FBO followed in 1977 which offered aircraft mechanic services and was an authorized Piper Aircraft dealership. The first flight school began operating on the airfield in 1978; its goal was to teach students to fly safely in the demanding mountainous terrain surrounding EGE. ¹⁰ EGE, as seen today, started to take shape in 1996 when the commercial terminal was opened with three aircraft gates.

In 1985, a National Guard Armory was added to the airport to serve as a high altitude training facility for aviators, known as the High Altitude Army Training Station (HAATS). Due to increasing aircraft operations, the Airport was expanded in 1986. New Runway 7/25 opened on October 11, 1986, and Runway 8/26 was officially closed. The new runway was built 150 feet wide by 8,000 feet long, with a weight bearing capacity of 70,000 pounds (lb) for Dual Wheel Gear (DWG) aircraft. This new runway also had a full parallel taxiway system and allowed EGE to be approved for major commercial flights by the FAA. The following year, a radar facility was placed on Red Table Mountain that allowed for enhanced monitoring of aircraft departing and arriving at EGE.¹¹

With all this expansion and growth, including major commercial airline service, EGE still operated without proper water and sanitary sewer services. This changed in 1992 when the Town of Gypsum water and sewer services were extended to the airport.

In 2003, the current Air Traffic Control Tower (ATCT) was built and operated under the FAA Contract Tower Program. Improved navigational aids were added including a new Instrument Landing System (ILS) installed in 2006, and a new BI-6 aircraft surveillance system capable of picking up signals from aircraft below 10,500 feet. These improvements allow the FAA Denver

¹¹ Eagle County Aviation Association and Taylor, 22-25.



2/11/2014

⁸ Eagle County Aviation Association and Taylor, 13.

⁹ Eagle County Aviation Association and Taylor, 14-16.

 $^{^{\}rm 10}$ Eagle County Aviation Association and Taylor, 15-18



Air Route Traffic Control Center (ARTCC) facility to monitor aircraft all the way to the runway¹².

Expansion to Runway 7/25 occurred in 2009 when the runway was reconstructed and extended along with Taxiway A by 1,000 feet to 9,000 feet. This expansion allows the airlines to take on additional payload (e.g. passengers and/or fuel) for their destination.

Today, EGE is the major conduit for commercial airline passengers to and from the Vail Valley. The airport's location provides access to the heart of the Colorado Rocky Mountains and is a short drive to the Vail & Beaver Creek Ski Resorts, making EGE a primary gateway for tourists enjoying both winter and summer recreation activities. While the airport is located in the Vail Valley, it is surrounded on all sides by hills and high-mountain peaks. This terrain makes the airport scenic, yet challenging for aircraft operators.

EGE is a destination for many aircraft throughout the United States. Instrument flight plans filed with the FAA over the course of one year are depicted in **Figure 1-1**. Instrument flight plans are typically filed for the business segment of GA rather than the pleasure fliers, and often represent flights of turboprop and business jet aircraft.

Figure 1-1 shows flights to and from the Airport from all over the U.S. This broad reach is a significant asset for the viability and economic health of Eagle County and neighboring towns in the Vail Valley.

¹² Eagle County Aviation Association and Taylor, 38-43.



2/11/2014 1-5



FIGURE 1-1 – GA IFR FLIGHT PLANS (MAY 2010 – MAY 2011) **LEGEND Departures & Arrivals Departures Only** Source: Jviation, Inc.



2/11/2014