



2.0 INVENTORY

2.1 Introduction

Central Colorado Regional Airport is located in Chaffee County, Colorado, approximately two miles south of the Town of Buena Vista. The location of the Central Colorado Regional Airport is shown on **Figure 2-1**. Chaffee County is on the eastern slope of the Rocky Mountains in central Colorado. The County is bordered on the west by the Sawatch Range and to the east by the Mosquito Range. Located high in the Upper Arkansas Valley, the Arkansas River flows toward the southeast, between the two mountain ranges. Buena Vista is approximately 125 miles southwest of Denver, the state capital. The geographic coordinates of the Airport Reference Point (ARP) are 38°40'50.983"N latitude and 106°07'14.498"W longitude. The established airport elevation is 7,946 feet above Mean Sea Level (MSL).

The *National Plan of Integrated Airport Systems* defines the airport as a General Aviation airport. **Figure 2-1**, details the location of Central Colorado Regional Airport and surrounding airports in the region. In addition to the Central Colorado Regional Airport, Chaffee County is home to another general aviation airport, Harriet Alexander Field twenty-seven miles south of Buena Vista in Salida. A third general aviation airport, Lake County Airport, is located thirty-seven miles away in the town of Leadville. The closest airport providing scheduled passenger service is Gunnison County Airport in Gunnison, CO, which is approximately seventy miles to the Southwest by automobile

The Central Colorado Regional Airport encompasses approximately 184 acres of land located within Sections 21 and 28 of Township 14 South, Range 78 West of the 6th Principal Meridian. Major highways providing access to the airport include U.S. Highways 285 and 24.

2.2 Airport Facilities

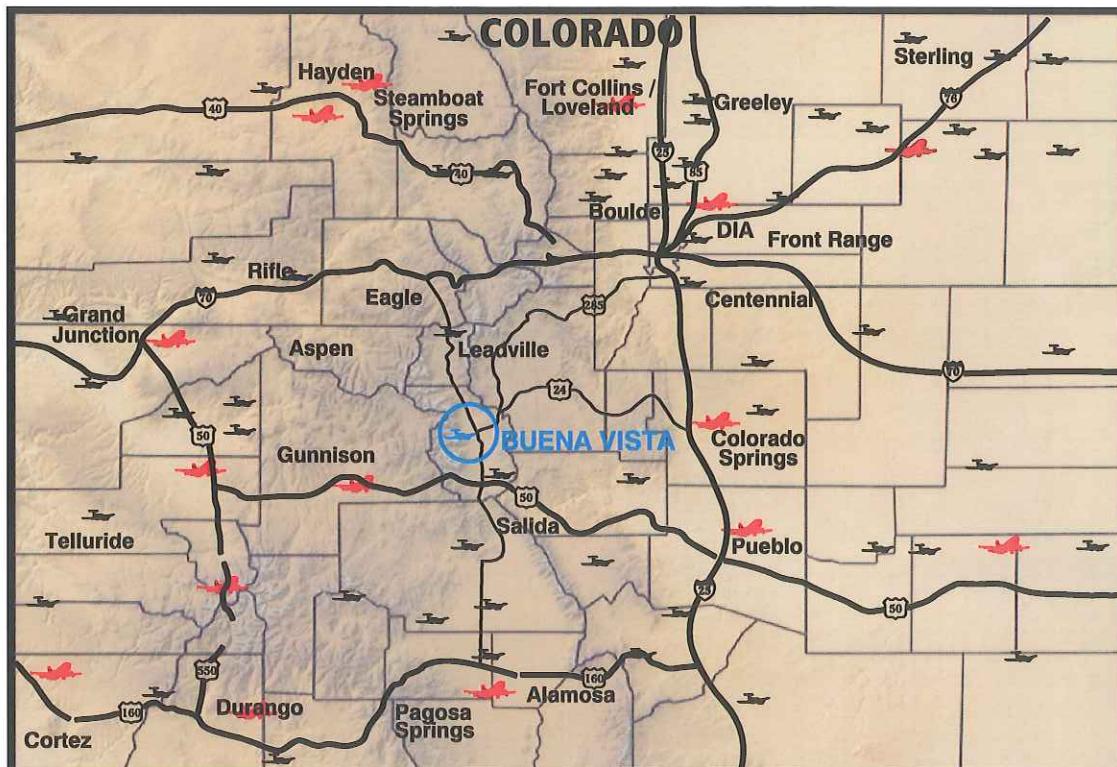
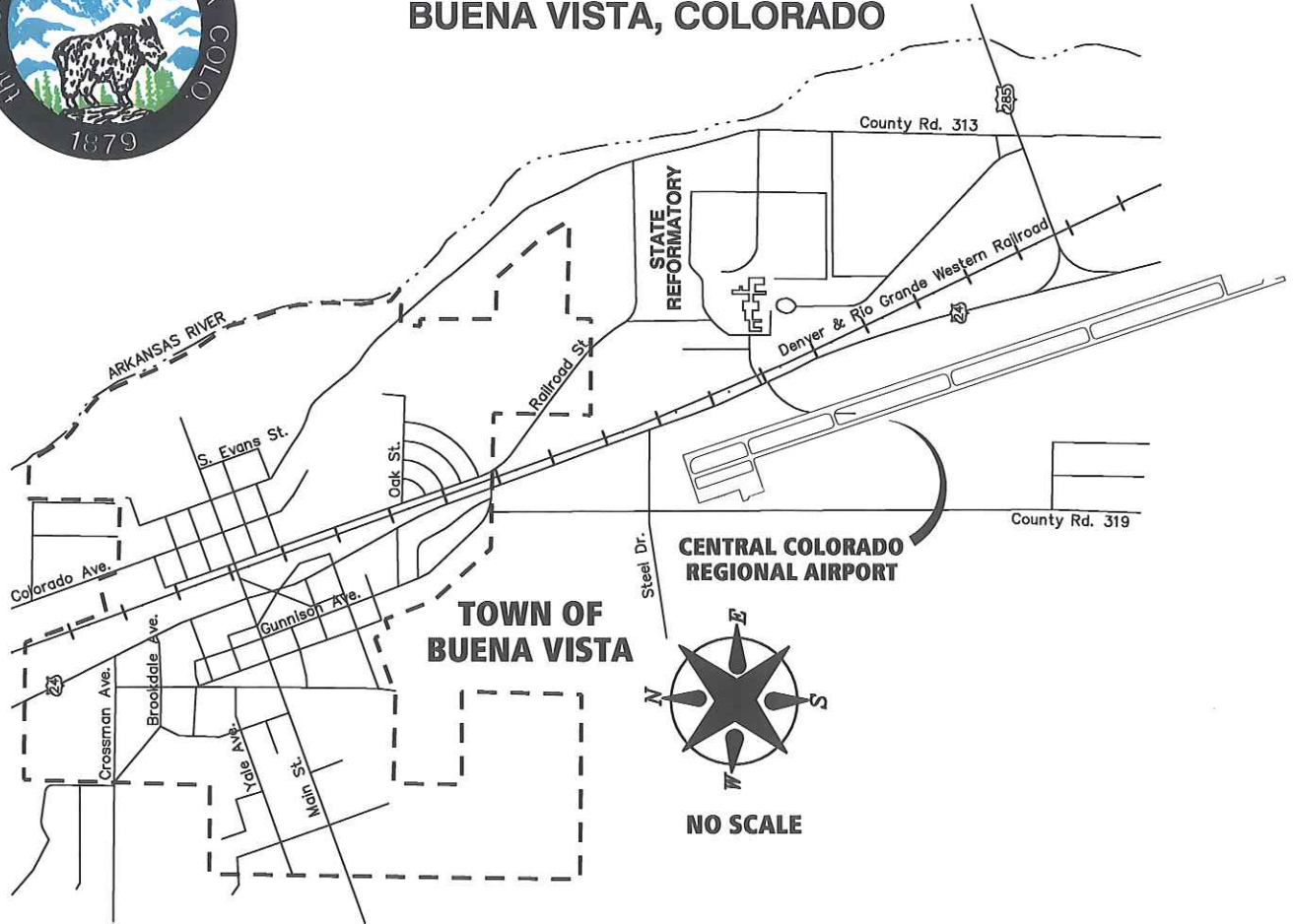
The following section describes existing airport facilities and land use adjacent to the airport. **Figure 2-2** depicts existing airport facilities.

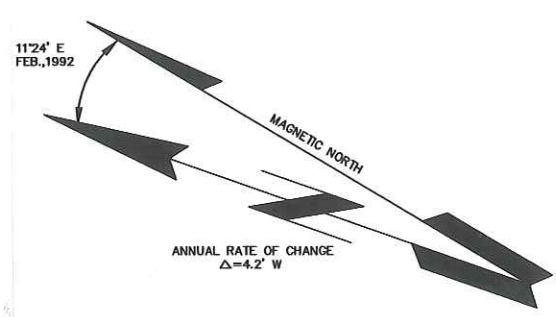
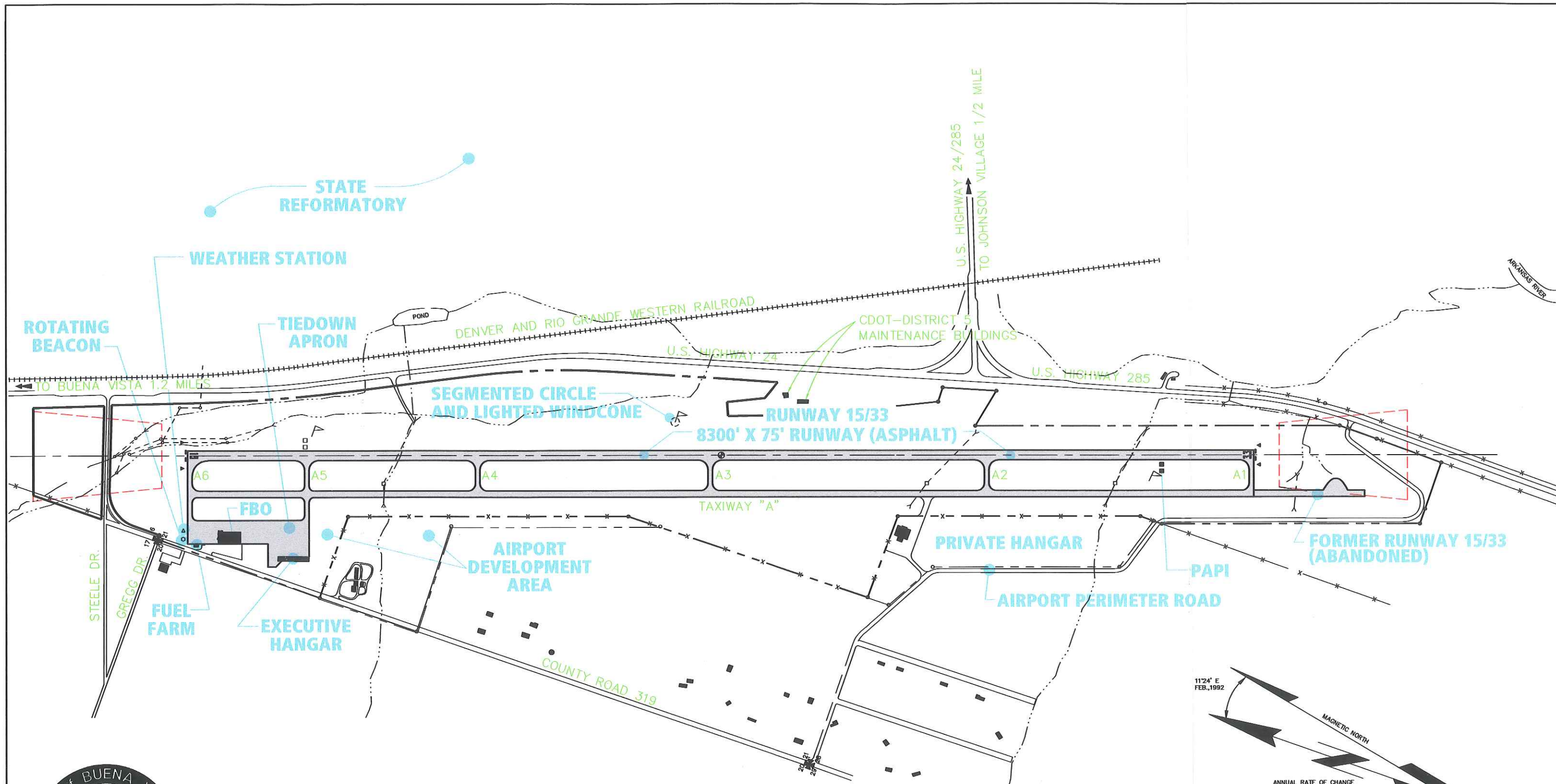
2.2.1 Runways and Taxiways

Central Colorado Regional Airport has one non-precision instrument runway, Runway 15/33, oriented northwest/southeast. The runway was relocated 300 feet to the east in 1996 in order to provide for a full-length parallel taxiway. The runway is constructed of asphalt and its dimensions are 8,300 feet long by 75 feet wide. The pavement strength is rated at 12,500 lbs. (gross takeoff weight) for aircraft with Single Wheel Gear (SWG).



CENTRAL COLORADO REGIONAL AIRPORT BUENA VISTA, COLORADO





NO SCALE



**CENTRAL COLORADO REGIONAL AIRPORT
 BUENA VISTA, COLORADO**



Full Parallel Taxiway “A”, along with six connector taxiways, serves Runway 15/33. The taxiway is located 300 feet from the runway centerline and is 50 feet wide. Connector Taxiways “A-5” and “A-6” connect Runway 15/33 to the apron area. All connector taxiways are 35 feet in width.

2.2.2 FBO Terminal and Apron Area

Arkansas Valley Aviation is a full service Fixed Base Operator (FBO) and the only one on the airport. They are located in the apron area on the north end of the airport, west of Runway 15/33. They provide aircraft maintenance, aircraft storage and tiedown, fueling, sales, and service. Arkansas Valley Aviation operates the airport through a lease agreement with the Town of Buena Vista. The terminal/administration building consists of 5,900 square feet of space, including a public lobby, FBO line shack, customer service counter, FBO offices, vending machines, conference room, and pilot’s lounge.

The FBO hangar, constructed in 1985, is adjacent to the terminal/administrative building and is approximately 12,900 square feet in size. The hangar provides for aircraft storage and maintenance.

The apron consists of approximately 14,000 square yards of asphalt pavement, except for the fueling apron, which is concrete. Approximately 4,700 square yards of apron and 20 tiedown positions are available for based aircraft. The remainder of the apron is available for itinerant aircraft parking, taxiing, and aircraft fueling.

There is one existing hangar located south of the FBO building. This executive hangar is 8,800 square feet in size and provides space for six aircraft storage units. There is also a private executive hangar located just north of Connector Taxiway “A-2”.

2.2.3 Airfield Lighting

Runway 15/33 is equipped with a Medium Intensity Runway Lighting (MIRL) system. Pilots can activate the system on Common Traffic Advisory Frequency (CTAF) 122.8. Each runway end is equipped with Precision Approach Path Indicator’s (PAPI). There is also a rotating beacon to assist pilots in locating the airport facility during nighttime operations or periods of inclement weather. Taxiway A and all associated connector taxiways do not currently possess a taxiway lighting system. All taxiway pavement edges are marked with blue and yellow reflectors.



2.2.4 Navigational Aids / Instrument Approaches

Navigational Aids are defined as any facility used by pilots to assist in the navigation of an aircraft while in flight, taking-off or landing. The airport rotating beacon is white and green and indicates a lighted land airport during the hours of dusk to dawn. The rotating beacon helps pilots to identify the airport's location and is located 650 feet west of Runway End 15.

A segmented circle and lighted wind cone is located approximately 3,780 feet south of Runway End 15 and 255 feet east of the runway centerline. The wind cone provides a visual indication of wind direction and velocity and is located in the center of the segmented circle. The segmented circle has landing runway indicators which, installed in pairs, indicate the alignment of the runway. Traffic pattern indicators are also arranged in pairs in conjunction with the landing runway indicators and indicate the direction of turns for aircraft making a landing approach.

Precision Approach Path Indicators are installed on each end of Runway 15/33. The PAPIs provide the pilot with a safe and accurate slope on final approach to the runway. PAPI Light Housing Assemblies (LHA's) are located fifty feet off runway centerline and perpendicular to the approach path approximately 900 and 700 feet off of Runway Ends 15 and 33 respectively. PAPIs are seen by an approaching pilot in combinations of red and white lights, which indicate a path that is too high, too low, or correctly on slope.

Flights into Central Colorado Regional Airport are conducted using both Non-Precision Instrument Approach and Visual Flight Rules (VFR). A Non-Precision Instrument Approach is governed by procedures which permit aircraft to approach the airport under minimum visual distance during final descent. Visual Flight Rules govern the procedures for flight under visual conditions. Published procedures for non-precision instrument approaches outline the aircraft's required flight path and altitude.

There is one non-precision approach into the airport. **Table 2-1** shows the available approaches to Central Colorado Regional Airport in addition to neighboring airports in the region. Runway 33 has a non-precision Global Positioning System (GPS) approach, which allows aircraft to descend to as low as 1,619 feet Above Ground Level (AGL) before visual contact must be established with the airport at a distance of 1½ miles. The GPS system uses a number of earth-orbiting satellites to provide position information to the pilot. Runway 15 is a Visual Approach runway only.



**Table 2-1
Instrument Approaches and Departures**

Airport	Runway	Approach	Visibility Minimum	Decision Height	
	End	Type		MSL	AGL
Central Colorado Regional	15	GPS	Departure Procedure		
	33	GPS	>1 ½ Mile	9,540'	1,619'
Lake County	16	GPS	> 1 ¼ Mile	11,360	1,433'
Harriet Alexander Field	No instrument approaches are currently available				

Source: Jeppesen, April 4, 2002

In comparison to other airports in the region Central Colorado Regional Airport holds a distinct advantage over Harriet Alexander Field and is comparable to Lake County Airport. The absence of an instrument approach at Harriet Alexander Field would essentially close the airport during periods of inclement weather and require inbound traffic to divert to an alternative airport. Central Colorado Regional and Lake County Airports both have a published GPS instrument approaches with similar visibility minimums.

2.3 Air Traffic Control and Airspace

Central Colorado Regional Airport is located in the FAA's Northwest Mountain Region headquartered in Renton, Washington. The National Airspace System covers the common network of U.S. airspace, including air navigation facilities; airport and landing area; aeronautical charts; associated rules, regulations, and procedures; technical information; personnel and material. The system also includes components shared jointly with the military.

2.3.1 Air Route Traffic Control Center (ARTCC)

The FAA has established 21 Air Route Traffic Control Centers (ARTCC) in the continental United States to control aircraft operating under Instrument Flight Rules (IFR) within controlled airspace and during the enroute phase of flight. An ARTCC assigns specific routes and altitudes along federal airways to maintain separation and orderly air traffic flow. Centers use radio communication and long-range radar with automatic tracking capability to provide enroute air traffic services. Typically, the ARTCC splits its airspace into sectors and assigns a controller or team of controllers to each sector. As an aircraft travels through the ARTCC, one hands off control to another. Each sector guides the aircraft using discrete radio frequencies.

The Longmont ARTCC located in Longmont, Colorado controls IFR aircraft entering and leaving the Central Colorado Regional Airport airspace. The area of jurisdiction for the Longmont Center

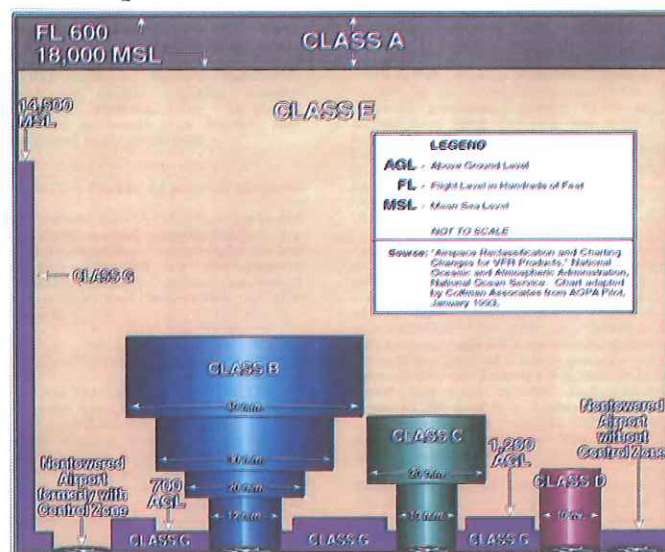


includes western Nebraska, southwest South Dakota, eastern Wyoming, eastern Utah, northeast Arizona, northeast New Mexico and the entire state of Colorado.

2.3.2 Airspace Structure

Airspace structure currently falls into two primary categories: Controlled and Uncontrolled. Ground to air communications, navigation aids and air traffic services govern controlled airspace. **Figure 2-3** is reproduced from the FAA Aeronautical Information Manual and illustrates airspace structure for the contiguous United States.

Figure 2-3
Airspace Structure for The United States



Source: FAA Aeronautical Information Manual (AIM)

2.3.2.1 Class E Airspace

This classification designates a broad area of airspace with upper realms at and above 14,500 MSL, terminating at the base of Class A Airspace, and lower realms terminating at various levels.

Class E Airspace extends upward from the surface at non-towered airports with control zones to the overlying or floor of adjacent controlled airspace. It also includes controlled airspace designed to contain IFR operations during portions of the terminal operation and while transitioning between the terminal and enroute environments. Class E Airspace also extends upward from 700 feet above the surface of a non-towered airport that has an instrument approach procedure, or from 1,200 feet above the surface when established in conjunction with airway route structures or segments. This airspace



terminates at the base of the overlying airspace. Airspace converts from Class D to Class E at a towered airport when the air traffic control tower is closed.

2.3.2.2 Class G Airspace

Uncontrolled Airspace is designated as Class G Airspace. Air Traffic Control does not have the authority or responsibility to exercise control over aircraft within this airspace. Class G airspace exists to the south and west of Central Colorado Regional Airport. (see **Figure 2-4**)

2.3.3 Airspace Central Colorado Regional Airport

Figure 2-4 is reproduced from the Denver Sectional Aeronautical Chart and details controlled airspace surrounding Central Colorado Regional Airport. Controlled airspace is airspace of defined dimensions within which Air Traffic Control (ATC) service is provided to controlled flights. It includes the following subdivisions that are designated by regulation: Class A, Class B, Class C, Class D, Class E, and Class G. Within any of these areas, some or all aircraft may be subject to air traffic control. Central Colorado Regional Airport is surrounded by Class E airspace. Participating aircraft are controlled by FAA Regional Air Route Traffic Control Center (ARTCC) in lieu of air traffic control towers at individual airports.

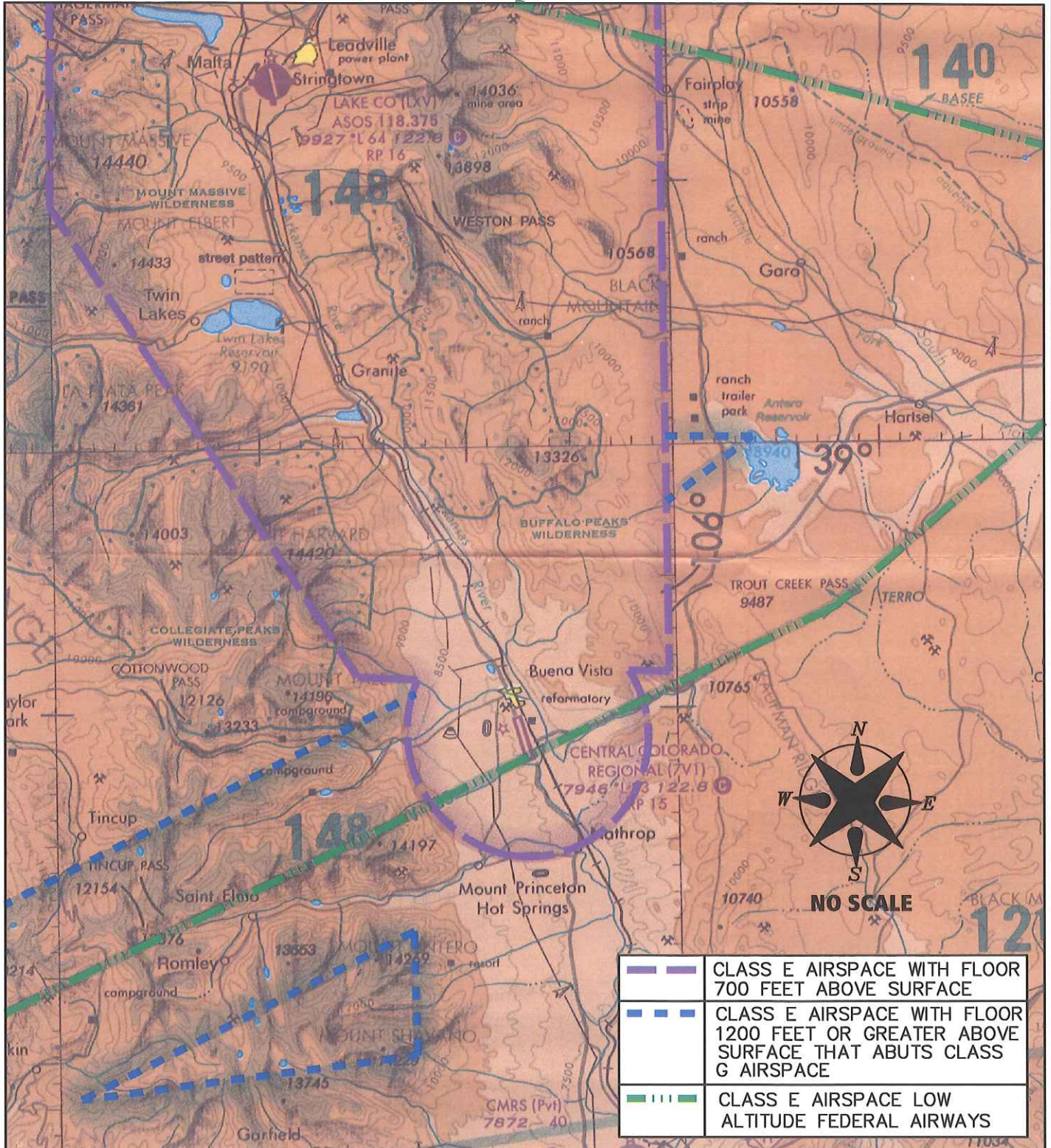
Figure 2-4 identifies boundaries for operational airspace in the region surrounding Central Colorado Regional Airport. The magenta line established the boundary for Class E surface area airspace for Central Colorado Regional Airport, which is shared with Lake County Airport. The floor of the surface area airspace is located at 700 feet Above Ground Level (AGL), and is configured to contain all instrument approach procedures for both airports. The blue line represents boundaries for Class E low altitude Federal airways and green lines represent vectors for air travel within the airways. These airways extend upward from 1,200 feet AGL to an altitude of 18,000 feet mean sea level.

2.3.4 Airspace Conflicts

There are no airspace conflicts in the area surrounding Central Colorado Regional Airport. However, Central Colorado Regional Airport is centered in the Rocky Mountain Range at an elevation of 7,946 feet above Mean Sea Level (MSL). Within a 20-mile radius of Central Colorado Regional Airport, terrain elevations rise quickly ranging between 12,100 feet MSL to the southeast to 14,800 feet MSL to the north and northwest.



CENTRAL COLORADO REGIONAL AIRPORT BUENA VISTA, COLORADO





2.4 Support Facilities

2.4.1 Snow Removal Equipment

Snow Removal Equipment (SRE) used to clear the runway, taxiway, and apron area at Central Colorado Regional Airport consists of one city owned 1987 Ford L-8000 Dump Truck 200. The plow truck is in good condition and equipped with an eight-foot plow blade.

2.4.2 Fuel Storage Facilities

The airport's fuel farm, located approximately 150 feet north of the FBO building, consists of two 15,000-gallon above-ground tanks; one Jet A tank and one 100 Low Lead AVGAS tank. These tanks were installed approximately 17 years ago and are in good condition. Fuel dispensing pumps are above-ground and located directly east of the storage tanks. A 72-foot by 66-foot concrete apron surrounds the fuel pumps where aircraft park for fueling.

The airport has seen fuel sales remain fairly consistent from about 1988 to 1998, ranging from approximately 20,000 to 25,000 gallons of fuel sold. Fuel sales over the past three years have seen a large jump from previous years due to the increase in jet fuel sales from itinerant traffic. **Table 2-2** provides a fuel flowage summary for the airport for the last six years.

Table 2-2
Central Colorado Regional Airport Fuel Sales

Year	Jet Fuel (gallons)	AVGAS (gallons)	Total Fuel
1996	7,781	19,051	26,832
1997	5,253	16,126	21,379
1998	5,625	15,904	21,530
1999	8,403	19,652	28,055
2000	14,350	22,758	37,108
2001	9,471	20,983	30,454
2002	32,981	21,508	54,509

Source: Central Colorado Regional Airport records



2.4.3 Utilities

All utility lines serving the airport are buried underground and provide service to the building area and airfield facilities. A four-inch sanitary sewer line provides wastewater discharge into the airport's wastewater treatment facilities, which consist of a 1,500-gallon septic tank and associated leach field. The septic tank and leach fields are located directly east of the building area, between the apron and Runway 15/33.

Electricity is provided by the Sangre de Cristo Electric Association. Water lines serving the airport from the Buena Vista Municipal Water Plant provide potable water and fire protection. Two fire hydrants are located on the east edge of the apron edge taxiway opposite the northeast corner of the FBO administration building and west of the building along the edge of the auto parking lot. Comfort Gas, Inc. provides natural gas for heating fuel. Qwest provides telephone service.

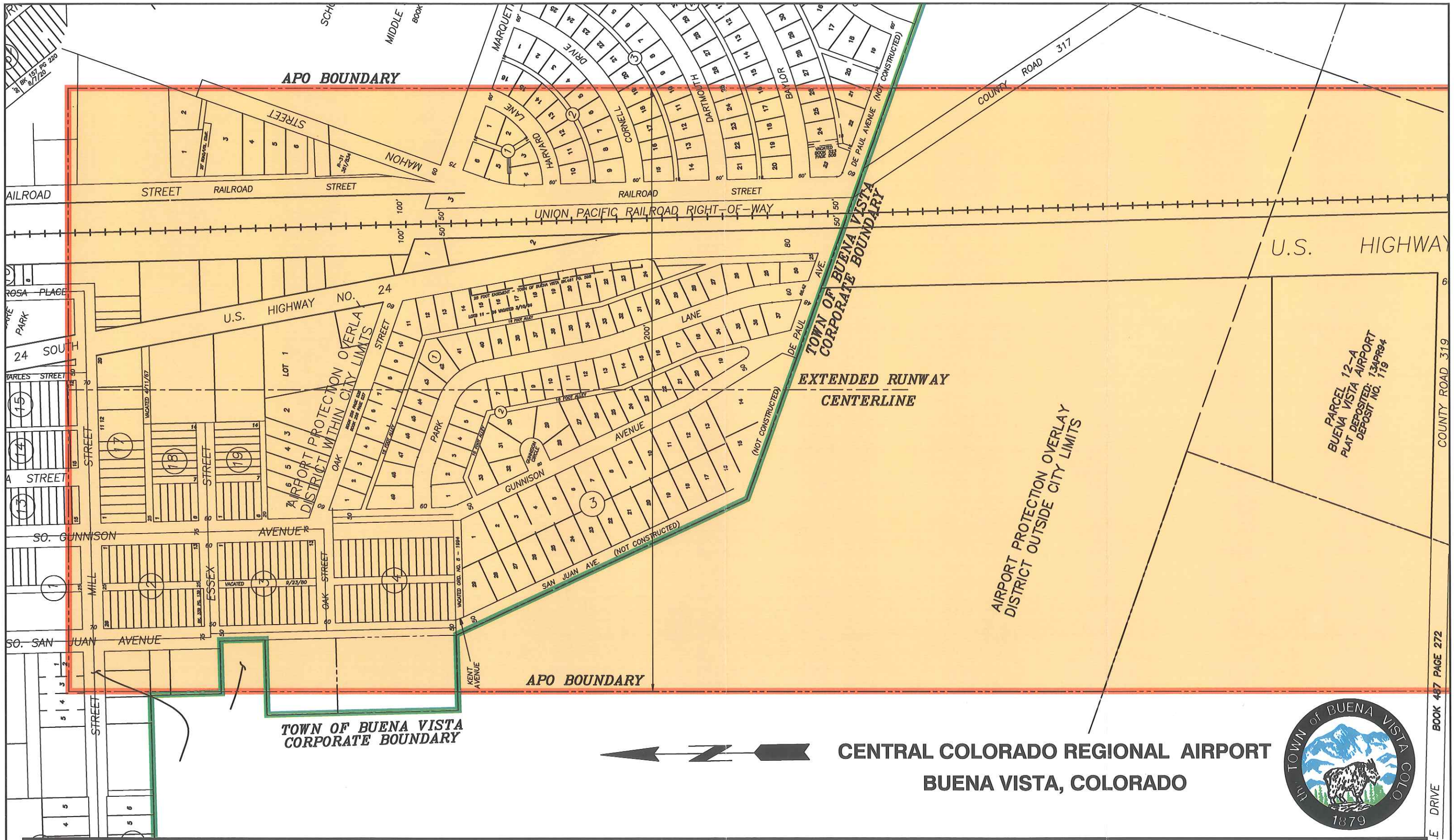
2.5 Land Use

The existing airport site encompasses 184 acres of land owned in fee simple and through long-term leases with the State of Colorado Departments of Corrections and Natural Resources Division of Wildlife. Eighty-three acres of this land was donated to the Town in 1983 for airport purposes. In addition, both the Colorado Department of Corrections and Natural Resources have provided long-term land leases for 73.6 and 27.2 acres of land respectively for airport purposes. The Town of Buena Vista owns in fee simple a total of 83 acres of land for the airport.

The Town of Buena Vista and Chaffee County have adopted zoning ordinances that control the type and placement of development within their jurisdictions. The Town of Buena Vista controls the incorporated areas of the Town and the actual airport property on which the building area is situated. The remaining areas are controlled by Chaffee County.

The airport property has been zoned as industrial use. The land west, south, and east of the airport are zoned as Rural, and the land north of the airport has been zoned as Rural Residential. A zoning ordinance was amended in 1991 by the Town to establish an Airport Protection Overlay (APO) district detailed in **Figure 2-5**. The description of the APO is detailed in Municipal Code Sections 16-167 – 16-171. This district was created in order to minimize exposure of sensitive land uses to aircraft noise area; avoid danger from aircraft accidents; reduce the possibility of such accidents; discourage traffic congestion within the area of the district; and restrict noncompatible land uses in the proximity of and within the APO.

The APO includes areas within the existing airport properties in addition to privately owned land adjacent to airport property up to 1,250 feet from the runway centerline. The APO also extends 5,000 feet beyond each end of the primary surface.





There has been interest expressed during public involvement meetings in re-evaluating the dimensions of the APO. Noise contours depicting forecast activity are discussed in subsequent sections of this report. Should noise contours for forecast activity extend beyond the current boundaries of the APO, the airport protection zone should be reconstituted to insure the safety of both the general community and Central Colorado Regional Airport.

2.6 Community Profile

Chaffee County is located in the central mountains of Colorado and is the forty-third (43rd) largest county by area with the twenty-sixth (26th) largest population in the state. Salida is the county seat of Chaffee County.

2.6.1 Climate

The mountains that surround the area can have a dramatic effect on the climate. Average snowfall in the valley is 43 inches, while the surrounding mountains and ski areas can see snowfall of 400 inches or more. Annual rainfall in the valley is 9 to 10 inches and there are approximately 330 days of sunshine per year with humidity ranging between 20 to 30 percent. The average mean monthly temperature for Chaffee County is 42.8 Degrees F., while the mean maximum temperature of the hottest month, July, is 80.1 degrees F.

2.6.2 Population

The most recent U.S. Census count completed in 2000 indicated Chaffee County's population to be 16,331 people, compared to 12,864 people in 1991. This is a dramatic turnaround from the previous 10 years when the County saw population decrease from 13,277 in 1980 to 12,684 in 1990. The most recent estimates for 2001 indicate a population of 16,599 according to **Table 2-3**, which represents a 2.54-percent average annual growth rate from 1991 to 2001. This compares to a 2.92-percent average annual growth rate for the State of Colorado over the same period. According to the Colorado Department of Local Affairs, Chaffee County is projected to have a growth rate for the next 20 years of approximately 1.43-percent per year totaling nearly 22,000 residents.

The Town of Buena Vista has seen population grow from 1,725 in 1991 to an estimated 2,245 in 2001, a 2.28-percent average annual growth rate. **Table 2-3** presents historical and projected population figures for the State of Colorado, Chaffee County and the Town of Buena Vista.



Table 2-3
Population Estimates and Forecasts

Year	Colorado	Chaffee County	Buena Vista
Historical			
1991	3,830,952	12,864	1,725
1992	3,489,830	13,121	1,792
1993	3,605,038	13,700	1,833
1994	3,712,063	14,107	1,875
1995	3,811,074	14,656	1,917
1996	3,902,450	15,125	1,961
1997	3,995,923	15,406	2,006
1997	4,102,491	15,526	2,051
1999	4,215,984	15,936	2,098
2000 (census)	4,324,920	16,331	2,195
2001	4,407,305	16,599	2,245
Forecast			
2002	4,487,727	16,882	2,176
2003	4,567,642	17,153	2,207
2004	4,647,072	17,418	2,238
2005	4,731,144	17,682	2,270
2006	4,815,842	17,940	2,303
2011	5,242,838	19,258	2,472
2016	5,681,334	20,627	2,654
2021	6,125,033	21,999	2,849

Source: Colorado Department of Local Affairs

2.6.3 Employment

The services industry provides the largest percentage (27.1 %) of the total employment within Chaffee County, according to 1999 statistics. This is followed by the retail trade sector (22.3%), Government sector (17.3%), and the Construction sector (10.9%). The County has a total labor force of 7,528 with 7,318 persons employed, which results in an unemployment rate of 2.8-percent for Fiscal Year 2001.

The unemployment rate has seen a dramatic turnaround since the 1980's when unemployment rates ranged from 5.8- to 15.6-percent. Much of this turnaround can be attributed to increased tourism to the area and an increase in housing construction.



2.6.4 Income

Chaffee County has enjoyed very strong and steady growth in both personal income and industry earnings. Between 1992 and 1999, total personal income grew at an average rate of 7.8-percent, which was slightly lower than the State average of 9.2-percent. Per Capita income increased steadily to an average of \$20,474, an average growth of 5.0-percent per year over the same period. Industry earnings grew at an average rate of 8.1 percent per year with the finance and construction sectors showing the most growth. **Table 2-4** shows personal income and industry earnings growth from 1992 to 1999.

Table 2-4
Personal Income & Industry Earnings
Chaffee County

Year	Total Personal Income (Thousands)	Per Capita Income (Dollars)	Industry Earnings (Thousands)
1992	\$189,251	\$14,584	\$103,627
1993	\$201,323	\$14,954	\$110,018
1994	\$216,616	\$15,690	\$121,593
1995	\$243,627	\$17,101	\$132,020
1996	\$258,464	\$17,571	\$138,358
1997	\$277,854	\$18,546	\$148,956
1998	\$298,225	\$19,654	\$162,171
1999	\$319,418	\$20,754	\$178,949
Average Annual Growth Rate	7.80%	5.00%	8.10%

Source: U.S. Department of Commerce, Bureau of Economic Analysis (BEA); Regional Economic Analysis Division

2.7 Summary

The Town of Buena Vista and the surrounding region has maintained consistent socioeconomic growth during the past ten years with a 2.28 percent average annual increase in population and 5.0 percent average annual increase in per capita income. Historic socioeconomic data and the discussion of existing facilities detailed in this section, serves as the basis for *Chapter III - Forecast of Aviation Demand*. **Table 2-5** summarizes existing facilities at Central Colorado Regional Airport.



Table 2-5
Existing Airport Facilities

Main Runway	
Direction	15/33 (Northwest/Southeast)
Length	8,300 Feet
Width	75 Feet
Surface	Asphalt
Departure Procedure	Visual on Rwy End 33 & GPS on Rwy End 15
Approaches	Visual on Rwy end 15 & GPS on Rwy End 33
Marking	Basic
Lighting	MIRL
Pavement Strength	12,500 Lbs. Single Wheel Gear
Hangar & Apron Area	
General Aviation Apron Area	14,000 Sq. Yd.
Tie Down Spaces	20
Executive Hangars	1
Fuel Storage Facilities	
Tanks	2 Above Ground Tanks
AvGas Capacity	(1) 15,000 Gallons
Jet-A Capacity	(1) 15,000 Gallons

Source: Arkansas Valley Aviation