MASTER PLAN UPDATE





INVENTORY OF EXISTING CONDITIONS

Inventory of Existing Conditions

Introduction

The City of Gunnison, located in the heart of the Colorado Rockies in west-central Colorado, offers year round amenities to both, visitors and local residents. Gunnison-Crested Butte Regional Airport is located south of U.S. Highway 50, within of the City of Gunnison. During the winter months, the Airport welcomes many visitors to the popular Crested Butte Mountain Resort, within the Gunnison National Forest and Elk Mountain Range, and Monarch Mountain Resort. The Airport provides a safe operating environment for all classes of aircraft, including small general aviation aircraft, corporate business jets, and commercial service passenger aircraft. The airport's relative location within the region is illustrated in the following figure, *AIRPORT LOCATION MAP*.

The Airport, along with the aviation related businesses and facilities, represents a vital and significant regional economic asset. In addition to the many aviation related assets, the Airport also provides benefits to local businesses and industry, promotes tourism, as well as encourages additional business development and expansion throughout the County, surrounding communities, and adjacent counties.

The *Gunnison-Crested Butte Regional Airport Master Plan* was completed in 1992. During the intervening years, changes have transpired within the aviation industry on a local, regional, and national level that impact the aviation facilities and services provided at the Airport. These changes necessitate a re-evaluation of the Airport's Master Plan as a means of analyzing current and forecast operational characteristics and facilities, as well as updating the program for airport development. The population growth and economic expansion that are occurring within the region have necessitated a long-range analysis and plan for the future needs of the Airport to accommodate aviation demand.

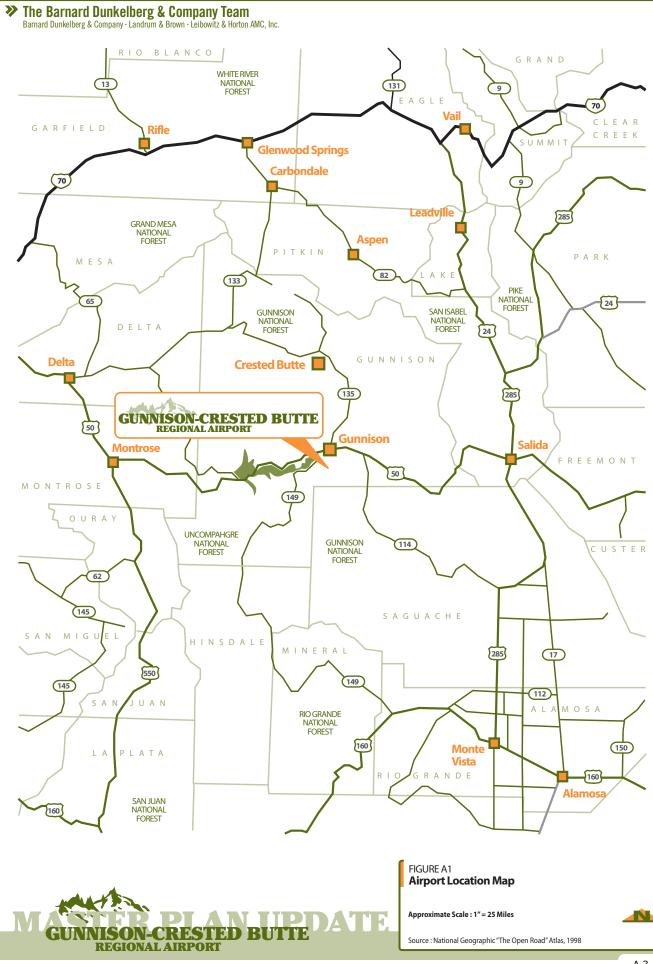
The focus of this document will be on the total aviation facility and its environs, with the overall planning goal being the development of an aviation facility that can accommodate future demand that is not significantly constrained by its environs. This initial *Inventory* chapter will examine three basic elements involved with the existing and future development of Gunnison-Crested Butte Regional Airport. These elements include: the airport facilities (runways, taxiways, aircraft parking aprons, hangars, maintenance facilities, ground access, etc.); the relationship to the airport/airspace system; and, the airport environs. Subsequent chapters will detail the airport's forecasts of aviation activity, the ability of airport facilities to safely and efficiently meet the needs associated with the projected aviation activity, the compatibility of the Airport with surrounding land uses, and recommended future development within and around airport property.

As illustrated in the following figure, *AIRPORT LOCATION MAP*, the City of Gunnison, with a population of approximately 5,409, is the county seat for Gunnison County, which has a population of 13,967. Gunnison is best known for its proximity to year-round outdoor recreation areas, such as ski resorts, hiking trails, fishing holes, golf courses, camping facilities, etc. However, other nearby attractions include Blue Mesa (the largest reservoir in Colorado), Curecanti Recreation Area, and The Black Canyon of Gunnison National Park.

Airport Role and Facilities

Gunnison-Crested Butte Regional Airport is owned by Gunnison County and operated by the Board of County Commissioners and operates as part of an Enterprise Fund that allows multi-year debt financing. The County Manager of the Board of County Commissioners provides recommendations concerning all airport matters and serves as the Airport Manager. The Director of Operations and Director of Administration have the day-to-day responsibility for the operation of the Airport. The Board of County Commissioners has ultimate responsibility for all airport policy considerations, as well as the compliance with all pertinent federal, state, and local regulations.

The Airport is located approximately one (1) mile southwest of the Central Business District (CBD) of Gunnison. The Airport Reference Point (ARP) is located at Latitude 38° 32' 02.200" N, and Longitude 106° 55' 58.900" W. Gunnison-Crested Butte Regional Airport, classified as a primary commercial service airport by the FAA's National Plan of Integrated Airport Systems (NPIAS), and commercial service by the Colorado Department of Transportation, has an elevation of 7,678.4 feet above mean sea level (AMSL) and has property consisting of approximately 1,600 acres.



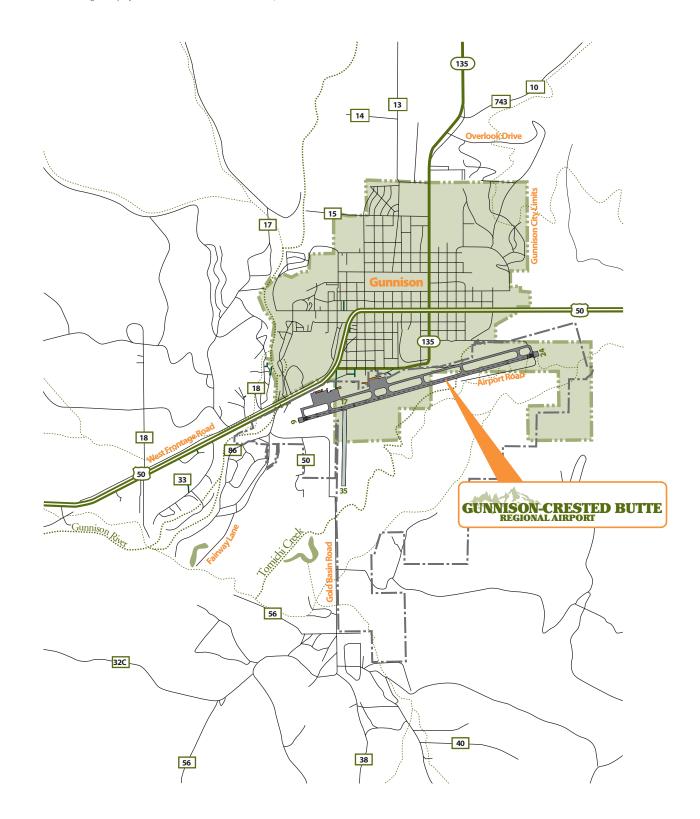




FIGURE A2 Airport Vicinity Map

Approximate Scale : 1" = 25 Miles

Source : Microsoft "Streets and Trips", 2004.



Currently, the Airport is served by two (2) airlines on a daily basis during the ski season, which begins the second week in December and ends the first weekend in April. United Express offers three (3) daily flights to Denver utilizing the De-Havilland Dash-8 aircraft; United Airlines offers one (1) daily flight to Denver utilizing the Airbus 319 (A-319) aircraft. Additionally, American Airlines offers one (1) daily flight to Dallas, Texas utilizing a Boeing 757 (B-757) aircraft. After the ski season, the community is served by United Express with two (2) daily flights to Denver utilizing the De-Havilland Dash-8 aircraft.

Airport Facilities Inventory

Airside Facilities

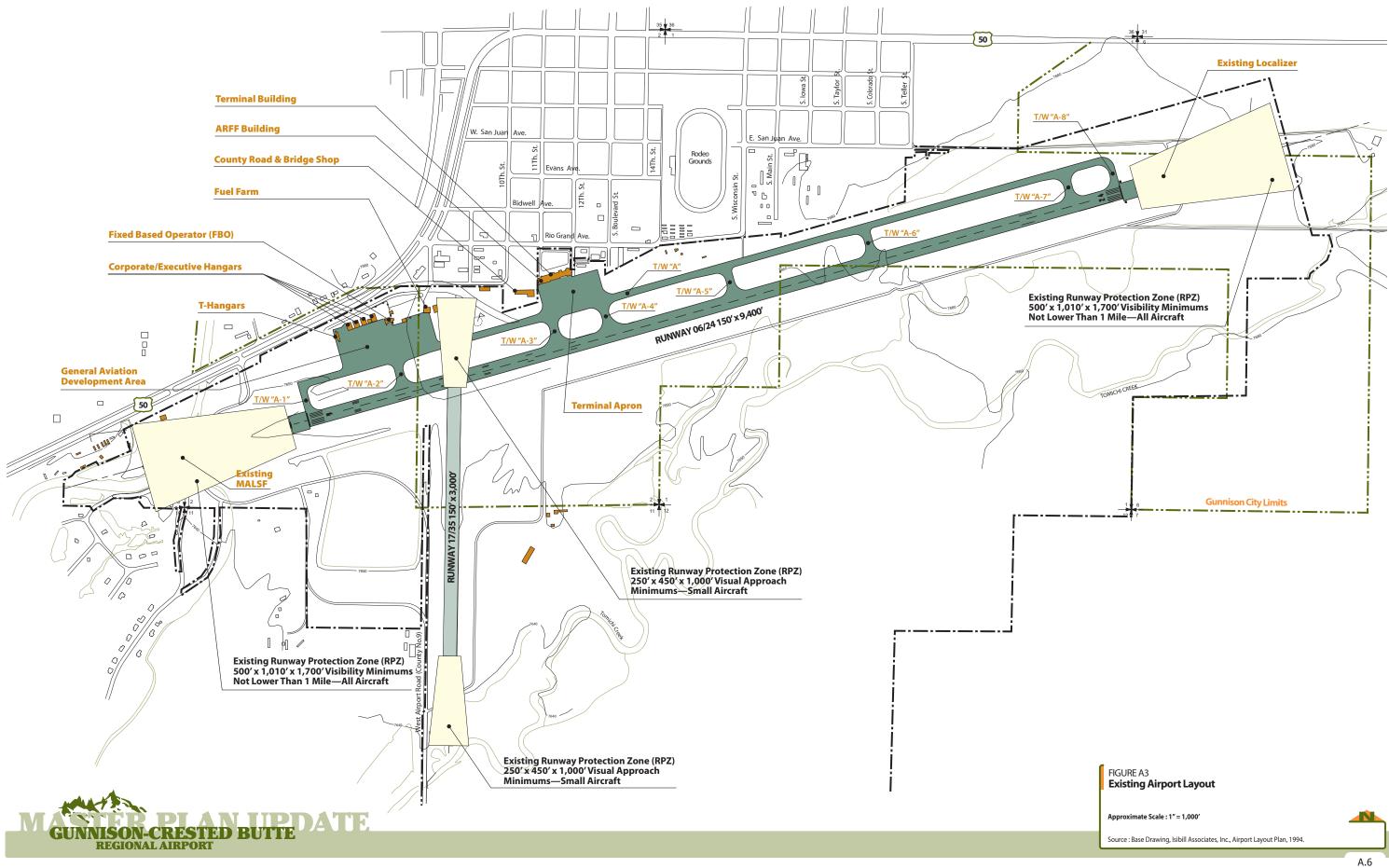
Gunnison-Crested Butte Regional Airport is operated with one runway, along with fulllength parallel and connecting taxiways, which serve that runway and provide aircraft access to the terminal and other facilities on the Airport. The following illustration, entitled *EXISTING AIRPORT LAYOUT*, provides a graphic presentation of the existing airport facilities.

Primary Runway. The primary runway at the Airport, Runway 06/24, is 9,400 feet in length and 150 feet in width. The runway is constructed of asphalt (ASPH) with a Porous Friction Course (PFC) surface, considered to be in excellent condition (the runway was rehabilitated in 2004), and has a gross weight bearing capacity of 75,000 pounds single wheel, 160,000 pounds dual wheel, and 250,000 pounds dual tandem wheel main landing gear configuration. The runway is equipped with Medium Intensity Runway Lights (MIRL) and a four (4) Light Precision Approach Path Indicator (PAPI) serving both runway ends. Runway 06 is served by an Instrument Landing System (ILS) composed of a localizer, a glide slope, and a Medium Intensity Approach Lighting System with Sequenced Flashing Lights (MALSF). In addition, Runway 24 has Runway End Identifier Lights (REILs).

Crosswind Runway. There is also a compacted dirt runway, Runway 17/35, which is 3,000 feet in length and 150 feet in width. The runway offers no navigational or lighting equipment and has a 200-foot displaced threshold on the Runway 35 end.

Taxiways. In addition to the runways, the airside facilities at Gunnison-Crested Butte Regional Airport consist of taxiways that provide access between the runway surfaces and the landside aviation use areas.

Taxiway "A" and its eight (8) connectors provide a full-length parallel taxiway system on the north side of the runway and connect the runway with both, the passenger terminal



apron area and the general aviation facilities. This taxiway is equipped with Medium Intensity Taxiway Lights (MITLs), and is 75 feet in width.

Pavement Conditions. As part of the Colorado Division of Aeronautics continuing pavement management activities, the Colorado Division of Aeronautics hired Applied Pavement Technology, Inc. to conduct an evaluation of the condition of the pavements at Gunnison-Crested Butte Regional Airport. This report, entitled *Gunnison-Crested Butte Regional Airport 2003 Pavement Evaluation and Pavement Management System Update*, was completed in November 2003.

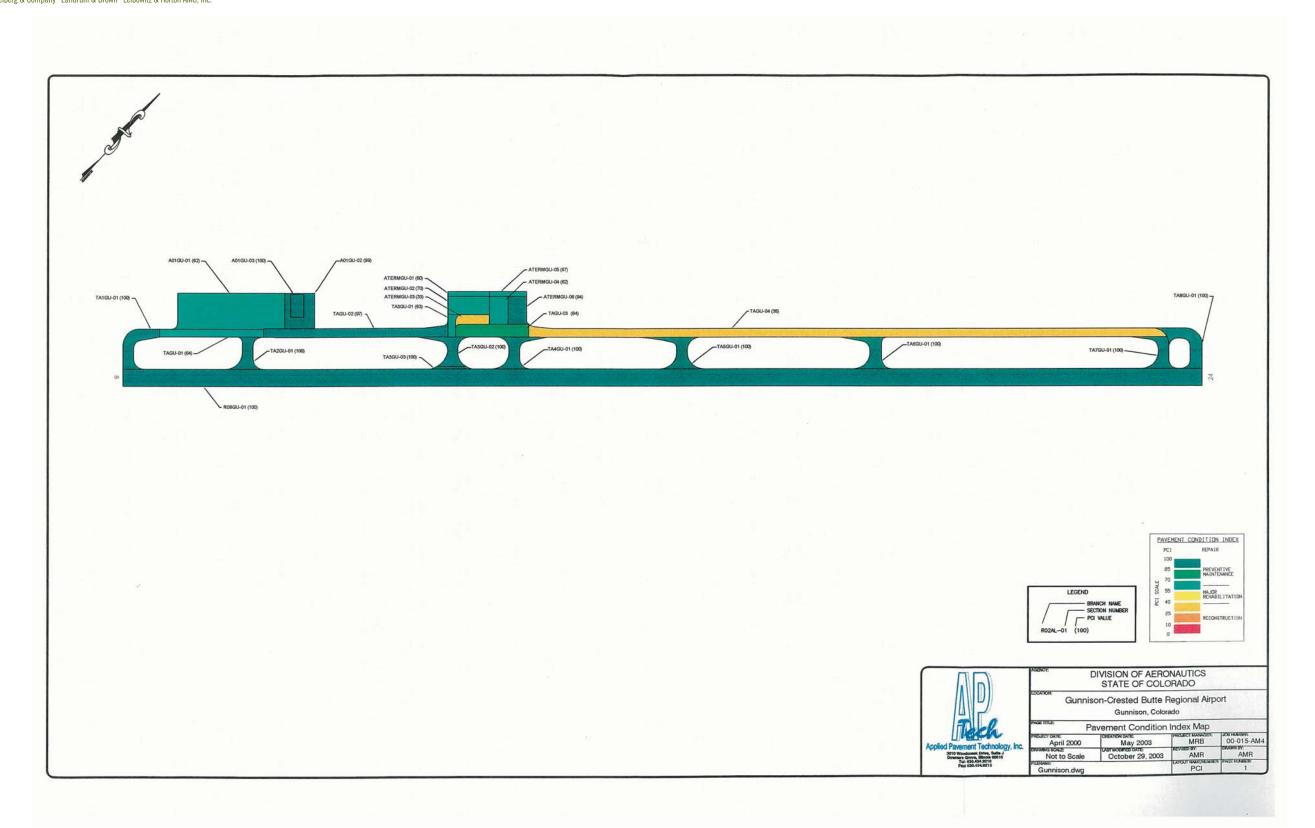
The pavement condition rating quantifies the various distresses measured in a pavement using seven classification ratings that range from an "excellent" rating (a maximum pavement condition index (PCI) of 100 typically associated with new pavement construction or new overlay construction) to a "failed" rating (minimum pavement condition index of 0).

The pavement condition index provides a general sense of the pavement condition and the magnitude of work that will be required to rehabilitate the pavement. To put this rating into perspective, it is helpful to consider its relationship in the PMS. In general, a pavement section with a PCI ranging from 0 to 40 is considered to be in such poor condition that reconstruction is usually the only feasible repair alternative. On the other hand, a pavement section with a PCI value ranging from 75 to 90 is a prime candidate for preventative maintenance techniques such as crack sealing and patching.

The pavement condition index and associated pavement rating for Gunnison-Crested Butte Regional Airport in 2003 is presented in the following illustration, entitled *2003 PAVEMENT CONDITION DRAWING.* According to this data, Runway 06/24 was rated in excellent condition, with a pavement condition index (PCI) of 100. Overall, the parallel taxiway system, the passenger terminal apron, and the general aviation apron rated in good condition with a PCI of 69. The general aviation apron rated in the good category, with a PCI ranging between 64 and 70. It should be noted that the programming and phasing of future airfield pavement maintenance projects have been premised upon the findings of this pavement evaluation, and the runway was rehabilitated in 2004 in conjunction with the runway shift project.

Landside Facilities

Landside development at the Airport includes commercial passenger terminal facilities, aircraft parking aprons, Fixed Base Operator (FBO) hangars, general aviation facilities, fuel storage facilities, and access roadways.









Passenger Terminal Facilities. The passenger terminal is located on the north side of the runway, directly across from Taxiways "A-3" and "A-4". The terminal is a generalpurpose facility utilized by all scheduled airlines, which consists of two (2) passenger boarding bridges, two (2) ground level gates, and one (1) arrival gate. The terminal is approximately 38,400 square feet with facilities consisting of airline ticket counters and administrative offices, a baggage handling area, rental car counters, a gift shop, a restaurant service area, and airport administrative offices. It should be noted that additional information and analysis regarding the existing passenger terminal is currently being conducted by an architectural sub-consultant and will be included in a later chapter of this planning document.

Hangar Facilities. The Airport is currently served with a full-service Fixed Based Operator (FBO), Gunnison Valley Aviation, Inc. The FBO is located on the west end of the Airport, north of the parallel taxiway, and is comprised of six (6) separate corporate size hangars, the largest comprised of 14,000 square feet. General aviation hangar aircraft storage areas are located on the west end of the Airport, adjacent to the FBO, and include two T-hangar facilities providing a total of ten (10) storage units. Approximately twenty (20) based aircraft are stored in hangars within this area of the Airport.

Aprons. There are two (2) aircraft parking aprons at Gunnison-Crested Butte Regional Airport. The passenger terminal apron is co-located with the terminal facility and consists of approximately 150,164 square feet of aircraft parking and movement space. This apron serves the air carrier and commuter fleet. The second apron, the general aviation apron, is located in conjunction with the general aviation hangar facilities, north of Runway 06/24, west of the passenger terminal apron, and directly across from Taxiway "A-2". This apron provides roughly 298,908 square feet of space and serves the FBO and general aviation facilities (i.e., T-hangars), and includes thirty-six (36) aircraft tiedown parking spaces.

Fuel Storage Facility. There are currently four (4) fuel storage tanks located on the northeast corner of the general aviation apron. All tanks are aboveground and consist of two (2) 25,000-gallon tanks containing Jet A fuel, one (1) 10,000-gallon tank containing Jet A, and one (1) 10,000-gallon tank containing AVGAS fuel.

Aircraft Rescue and Fire Fighting (ARFF) Facility. The ARFF facility, which was colocated with the terminal facility and occupied the west end of the building, was relocated in the summer of 2004 to a new development site on the east side of the passenger terminal building. The Airport maintains an Index B ARFF facility, which is required by airports that accommodate five daily departures by aircraft at least 90 feet and less than 126 feet in length.

Air Traffic Control Tower (ATCT). The Airport does not currently have an ATCT on the field.

Vehicular Access. Access to the Airport is provided by 12th St and Boulevard, via U.S. Highway 50, from the north, and, Rio Grande Ave., via U.S. Highway 50, from the west.

Existing Utilities

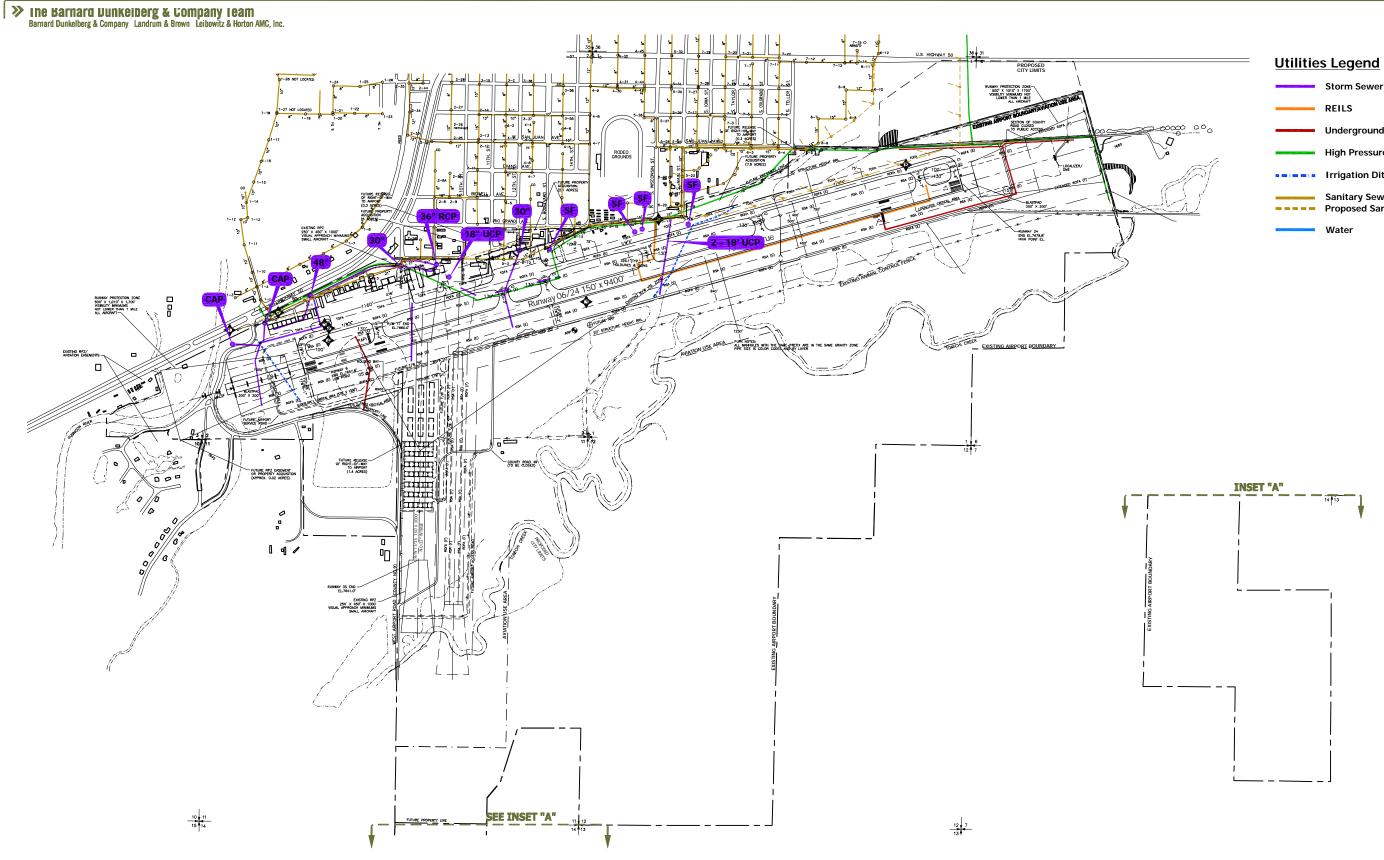
The Utility Services at Gunnison-Crested Butte Regional Airport, which include Water Supply/ Distribution, Sanitary Sewer Collection/Treatment, Storm Water Facilities, Natural Gas Distribution, Electric Power Distribution, and Telephone/Communications are briefly identified and generally described in the following paragraphs.

Water Supply/Distribution

The Water Supply and Distribution system is owned and operated by the City of Gunnison. The system, which consists of seven (7) wells and distribution pipes, provides City residents with an abundance of water. All facilities at the Airport are serviced by this water system, which includes 6" service lines that extend southward from 8" main lines that are located along Rio Grande and Railroad Avenues. The contact for the water system is the City of Gunnison Public Works Department, 201 W. Virginia Ave., Gunnison, CO 81230, (970) 641-8330.

Sanitary Sewer Collection/Treatment

The sanitary sewer system at the Gunnison-Crested Butte Regional Airport is owned and operated by the City of Gunnison. The sanitary system includes a wastewater treatment facility located three miles west of Gunnison at 524 County Road 32 that is surrounded by an airport mitigation wetlands study area. The Plant is a 4.2 MGD extended air activated sludge process, which services the Gunnison and Dos Rios living area. All sanitary sewer system facilities at the Airport are serviced by this sanitary sewer system. Existing service lines to the Airport are located along Rio Grande and Railroad Avenues, with the passenger terminal building being served from a line 15" line that extends under the terminal apron pavement. The City is currently planning to relocate this service line to the north side of terminal building, within the area of the future terminal access road serving the Airport. In addition, a Septic Dump Station is located on airport property at the west end of the existing general aviation ramp area. Use of the facility, which is accessed through locked gates, is by appointment only for a specified fee. The contact for the sewer system is the City of Gunnison Public Works Department, 201 W. Virginia Ave., Gunnison, CO 81230, (970) 641-8040.







Storm Sewer
REILS
 Underground Electric
 High Pressure Gas
Irrigation Ditch
Sanitary Sewer Proposed Sanitary Sewer
Water





Storm Water Facilities

All storm water on the Airport is collected in local drainage basins and discharged southerly and westerly from the Airport site. The facilities are owned by the City of Gunnison and maintained by Gunnison-Crested Butte Regional Airport personnel. The airport's airfield pavement (i.e., the runway, taxiways, and aprons) are crossed underground in five (5) locations with drainage pipes that range in diameter size from 18-48". The majority of the facilities discharge into the Tomichi Creek drainage basin; however the storm water facilities at the west end of the Airport discharge into the Gunnison River. The contact for the airport's storm water facilities is the City of Gunnison Public Works Department, 201 W. Virginia Ave., Gunnison, CO 81230, (970) 641-8040.

Natural Gas Distribution

The north side and mid-field section of the Airport are serviced with a High Pressure (200+ psi) natural gas line, which is owned and operated by Atmos Energy. The contact for natural gas distribution is Atmos Energy, 1-888-442-1313.

Electric Power Distribution

Electric service to the City of Gunnison is a Public Power entity, and the Airport is primarily served with underground electric power provided by the City of Gunnison Municipal Light & Power. All airport facilities are serviced by this organization and the City purchases this power from the Western Area Power Administration (WAPA) and the Nebraska Municipal Power Pool (NMPP). The contact for electrical power is the City of Gunnison Public Works Department, 201 W. Virginia Ave., Gunnison, CO 81230, (970) 641-8329.

Telephone/Communications

Telephone and communications, which are mostly underground facilities, are furnished to the Airport by Qwest Communications. The contact for Qwest is at (800) 244-1111.

FAA Facilities/Utilities/Cables

The FAA has several facilities on, or adjacent to, the Gunnison-Crested Butte Regional Airport. These facilities are owned and operated by the Federal Aviation Administration (FAA), Airway Facilities Division. Runway 06 is equipped with an Instrument Landing System (ILS), which consists of both localizer and glide slope facilities. The runway includes PAPIs serving both ends, a MALSF on the Runway 06 end, and REILs serving the

Runway 24 end. Each of these facilities are owned and maintained by FAA Airway Facilities division.

Airspace System and NAVAIDS

Gunnison-Crested Butte Regional Airport, as with all airports, functions within the local, regional, and national system of airports and airspace. The following illustration, entitled *AIRSPACE/NAVAIDS SUMMARY*, and narrative provide a brief description of Gunnison-Crested Butte Regional Airport's role as an element within these systems.

Air Traffic Service Areas and Aviation Communications

FAA air traffic controllers, stationed in Air Route Traffic Control Centers (ARTCC), provide positive air traffic control within defined geographic jurisdictions. There are some twenty-two geographic ARTCC jurisdictions established within the continental United States. Gunnison-Crested Butte Regional Airport is contained within the Denver ARTCC jurisdiction. The Denver ARTCC includes the airspace in all of Colorado and portions of Kansas, Nebraska, Wyoming, Utah, Arizona, and New Mexico.

Aviation communication facilities associated with the Airport include an Aeronautical Advisory Station (UNICOM) on frequency 122.7. In addition, the Airport has an on-the-field Automated Weather Observing System (AWOS-3), which can be accessed on frequency 135.075. Approach and departure control is provided by the Denver Center on frequency 125.35.

Airspace

Local airspace surrounding Gunnison-Crested Butte Regional Airport is designated as Class E airspace. The configuration of each Class E airspace area is tailored to individual airports. Generally, Class E airspace consists of the immediate controlled airspace at airports without control towers and is intended to provide a transition area for instrument approaches. Radio communications and transponders are not required to operate under VFR conditions; however, IFR flights must be capable of communicating with ATC, currently Denver Center, and be Mode C Transponder equipped (capable of reporting altitude). The floor of the Class E airspace at Gunnison-Crested Butte Regional Airport is established at 700 feet above ground level (AGL).

Navigational Aids

A variety of navigational facilities is currently available to pilots around Gunnison-Crested Butte Regional Airport, whether located at the field or at other locations in the

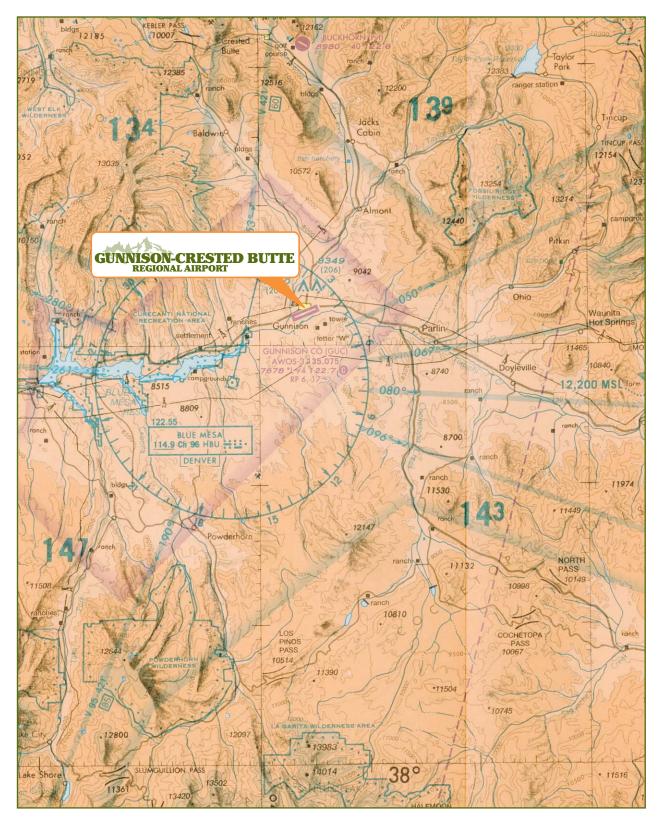




FIGURE A6 **Airspace/NAVAIDS Summary**

Approximate Scale : 1" = 7.5 Nautical Miles

Source : Denver Sectional Aeronautical Chart, 68th Edition, January 2003.

region. Many of these navigational aids are available to en-route air traffic as well. In addition, there is a compliment of navigational aids (NAVAIDS) that allows a variety of instrument approaches to the Airport.

Airport and regional navigational and landing aids available for Gunnison-Crested Butte Regional Airport include the Blue Mesa (HBU) VHF Omnidirectional Radial/Distance Measuring Equipment (VOR/ DME, frequency 114.90), located seven (7) nautical miles southwest of the field.

Presently, there is one published public-use, straight in instrument approach procedure and two (2) circling approaches at Gunnison-Crested Butte Regional Airport. In addition, there is one "special-use" instrument approach procedure that is authorized for use by American Airlines. Details on the public-use procedures are presented in the following table, entitled *INSTRUMENT APPROACH PROCEDURES*.

Table A1 INSTRUMENT APPROACH PROCEDURES

Gunnison-Crested Butte Regional Airport Master Plan Update

Approach	Designated Runway(s)	Ceiling Minimum (AGL)	Visibility Minimums ⁽¹⁾
ILS	Runway 06	840' AGL	2 ³ / ₄ Mile
GPS-B	Circling	1,507' AGL	1 ¹ / ₄ , 1 ¹ / ₂ , or 3 Miles
VOR or GPS-A	Circling	1,587' AGL ⁽¹⁾	2 or 3 Miles

Source: U.S. Terminal Procedures, Southwest (SW), Vol. 1 of 4, 21 February 2002. ⁽¹⁾ Depending on category of aircraft.

In addition, several existing visual navigational aids are located on the Airport and available to pilots. These include a rotating beacon located just west of the terminal and a lighted wind cone with segmented circle, which is located between the general aviation and terminal aprons, on the north side of the runway. Additionally, windsocks are located just southwest of the Runway 24 threshold and northeast of the Runway 06 threshold. A network of low-altitude published airways (victor airways), in the vicinity of Gunnison-Crested Butte Regional Airport, also traverse the area, which spans between the regional ground based VOR/DME equipment. Victor airways include the airspace within parallel lines located 4 NM on either side of the airway and extend 1,200 feet above the terrain to, but not including, 18,000 feet AMSL.

Due to the mountainous terrain in the vicinity of the Airport, which limits radar coverage from the Denver Air Route Traffic Control Center (ARTCC) below

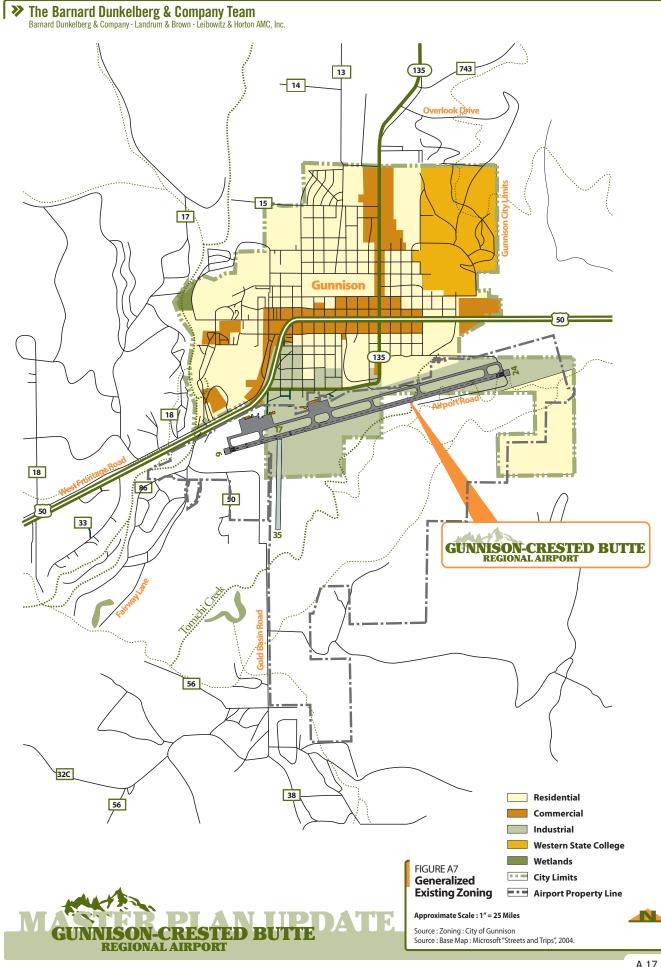
approximately 14,000 feet above mean sea level, the Airport experiences restricted arrival and departure rates during instrument flight rules. According to the FAA's Airspace and Procedures Specialist with the Denver ARTCC, the current IFR acceptance rate is estimated at 5-6 operations per hour. This issue will be investigated further in the *Capacity Analysis* and *Facility Requirements* chapters of this document.

Airport Environs

The City of Gunnison has adopted various land use planning and control documents to guide development within the city limits. An inventory of the existing land uses and zoning patterns surrounding the Airport is an important element in the planning process. Land use compatibility with airport development can be facilitated with a thorough knowledge of what land uses are proposed and what, if any, changes need to be made.

Existing Zoning

The City of Gunnison has adopted a zoning ordinance that controls the development of land within the city and sets criteria for different types of land uses to be developed within certain zones. In conjunction with the zoning ordinance, the City has also adopted a zoning map that divides the City into different zones consistent with the zoning ordinance. The Airport, located on the south side of the City, coincidently has a portion of its property outside the existing city limits boundary, and has been zoned Industrial. North, and adjacent to the Airport, Commercial, Industrial, and Residential zoning abounds. Commercial zoning parallels U.S. Highway 50 on the west before intersecting Central Business District zoning. North of U.S. Highway, zoning consists mostly of various densities of Residential zoning and Western State College. Zoning that parallels State Highway 135 consists of Professional Business and Commercial. Generalized existing zoning within the vicinity of Gunnison-Crested Butte Regional Airport is illustrated in the following figure, entitled GENERALIZED EXISTING ZONING. Additionally, it is recommended that the existing City Zoning Ordinance and Map incorporate and adopt the recommendations of the proposed Airport Influence Overlay Zone district map. The purpose of the Airport Influence Overlay Zone (AIOZ) district is to establish standards for development within the influence area of Gunnison-Crested Butte Regional Airport to protect residents from aircraft noise impacts, to protect aircraft operators from encroachment of obstacles into the navigable airspace, and to protect the Airport from the encroachment of non-compatible land uses. This is accomplished by restricting the type and height of development within certain designated and defined areas surrounding the Airport.



A.17

Existing Land Use

The existing land uses in the vicinity of the Airport primarily follow the existing zoning patterns of the City and are presented in the following figure entitled *GENERALIZED EXISTING LAND USE*. The major developed portion of the City of Gunnison is north of the

Airport. The Airport has been classified as Public/Institutional land use, while south of the Airport, land use consists of Industrial and City Parks. West of the Airport, land use consists of Low and Moderate Density Residential, as well as Tourist Accommodations. North of the Airport, south of U.S. Highway 50, land use exhibits Industrial, City Parks, and Moderate Density. North of U.S. Highway 50, Low-, Moderate-, and High-Density Residential is the primary land use. However, pockets of Public/Institutional, City Parks, and Wetland abound as well. Commercial land use parallels both U.S. Highway 50 and State Highway 135.

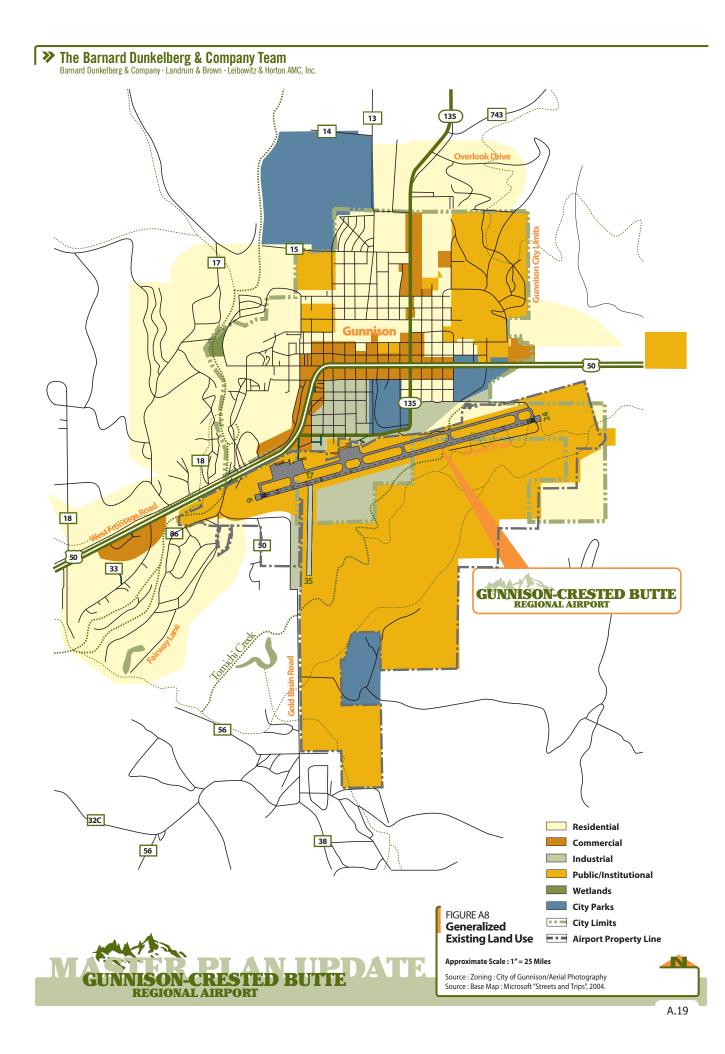
Future Land Use

The City of Gunnison currently has a future land use map as part of its Comprehensive Plan. An additional important element to consider as part of the future land use planning is the Gunnison Sage Grouse Conservation Plan. This plan, initiated by the Gunnison Resource Area and Bureau of Land Management, consists of a Conservation Assessment and Conservation Strategy. In an attempt to best protect the Airport, the County, and the Sage Grouse, this plan should become a part of the adopted future Comprehensive Plan.

Financial Inventory

The primary goal of this task is to gather materials that summarize the financial management of the Airport. In addition, it is important to develop an understanding of the financial structure, constraints, requirements, and opportunities for airport activities as related to the development of a capital improvement program. The documents that have been gathered and reviewed for this financial inventory will be used to formulate a reasonable and financially sound Capital Improvement Program with which to fund projects identified in the master planning process.

The review of the financial documentation for Gunnison-Crested Butte Regional Airport indicates that the facility is self-supporting. Airport revenues and expenses are recognized and accounted for under the County's Enterprise Fund. Airport capital projects are funded from the Airport Improvement Fund (AIF). Funding sources for the AIF include bond debt, federal and state grants, and operating transfers from the county's Airport Capital Improvements Fund. As identified in the 2002 income and expenses



report, major sources of revenue for the Airport include: airline fees, terminal and hangar rent, parking fees/fines, FBO rent and fees, and fuel tax fees. Major expenditures include: salaries and wages, personnel benefits, terminal operations, airport maintenance, security, utilities, snow removal, and debt payments.

Some of the improvements indicated in the current 5-year Capital Improvement Program (CIP) for the Airport include: Runway Safety Area improvements, relocate navigational aids, replace airport lighting, runway rehabilitation, replace runway broom, SRE/ARFF facility, and rehabilitate Taxiway A4-A7.

Table A2**REVENUE AND EXPENSE SUMMARY, 1998-2002***Gunnison-Crested Butte Regional Airport Master Plan Update*

Year	Revenues	Expenses
1998	\$676,396	\$671,951
1999	\$749,101	\$535,738
2000	\$784,493	\$865,303
2001	\$740,358	\$498,736
2002	\$934,188	\$615,910

Source: Gunnison County Airport Personnel.

Summary

The goal of this chapter is to provide general background information pertaining to the Airport, its aviation-operating environment, its physical surroundings, and its financial situation. The *Inventory* chapter is vital from the standpoint that it will be used as a reference in the analysis and design process that is required to prepare the airport's future development plan.

The next step in the planning process is to formulate forecasts for the quantity and type of future aviation activity expected to occur at Gunnison-Crested Butte Regional Airport during the forthcoming twenty years.