

## CHAPTER 5 – LAND USE PLAN

### 5.1 Existing Land Uses

All of the land uses on Gunnison-Crested Butte Regional Airport (GUC) are directly related to airport and aviation activities. The south side of the airport is primarily open space, including Tomichi Creek and wetlands (Figure 5-3). Further south, located off-airport, is Tenderfoot Mountain. The U.S. Bureau of Land Management (BLM) owns a large amount of property adjacent to GUC (Figure 5-5), which is open space. There are a variety of land uses in the vicinity of GUC (Figure 5-1, Figure 5-2, Figure 5-3), including single and multi-family residential, commercial, industrial, open/recreational space, as well as natural resources and environmentally-sensitive areas.

FIGURE 5-1 - MULTI- AND SINGLE-FAMILY RESIDENCES ADJACENT TO GUC



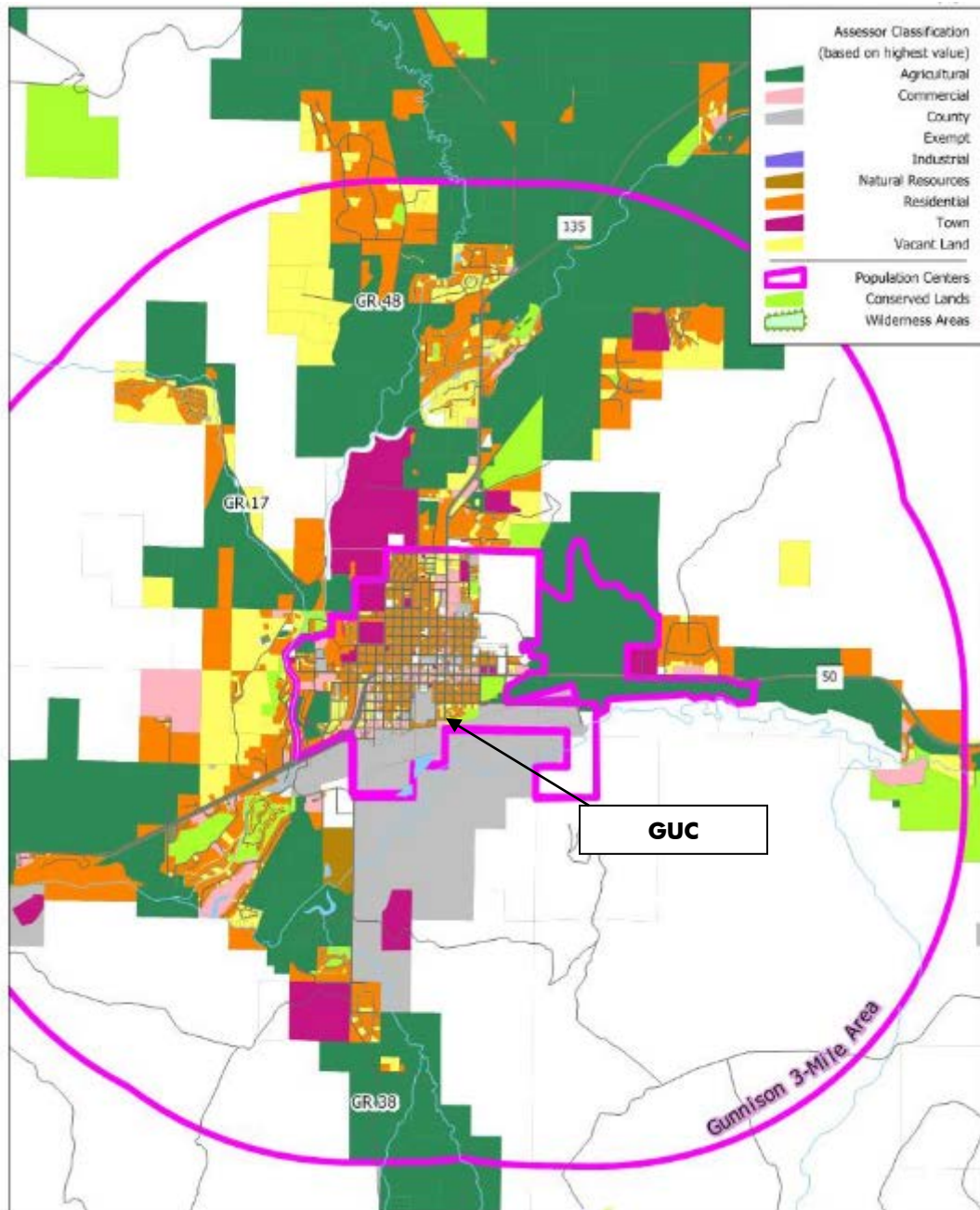
FIGURE 5-2 - MULTI- AND SINGLE-FAMILY RESIDENCES ADJACENT TO GUC



Source: Google Earth

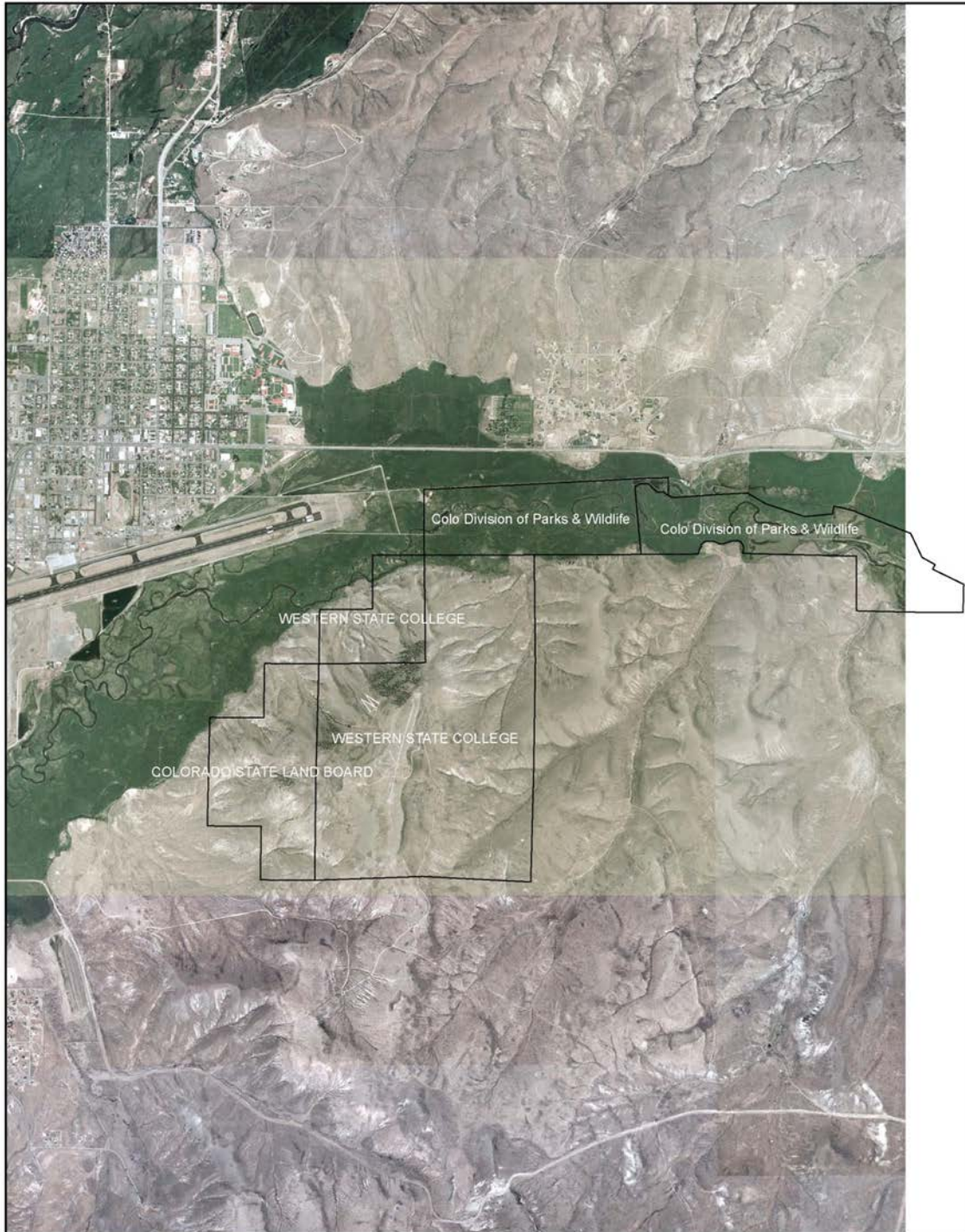
The Tomichi Creek State Wildlife Area is located to the east-southeast of the airport and is within the hay meadow floodplain. The 443-acre tract is owned and managed by the Colorado Division of Parks and Wildlife. The State of Colorado also owns W-Mountain and WSCU controls all rights for the communication equipment on the summit (Figure 5-4).

FIGURE 5-3 - GUNNISON COUNTY LAND USE MAP



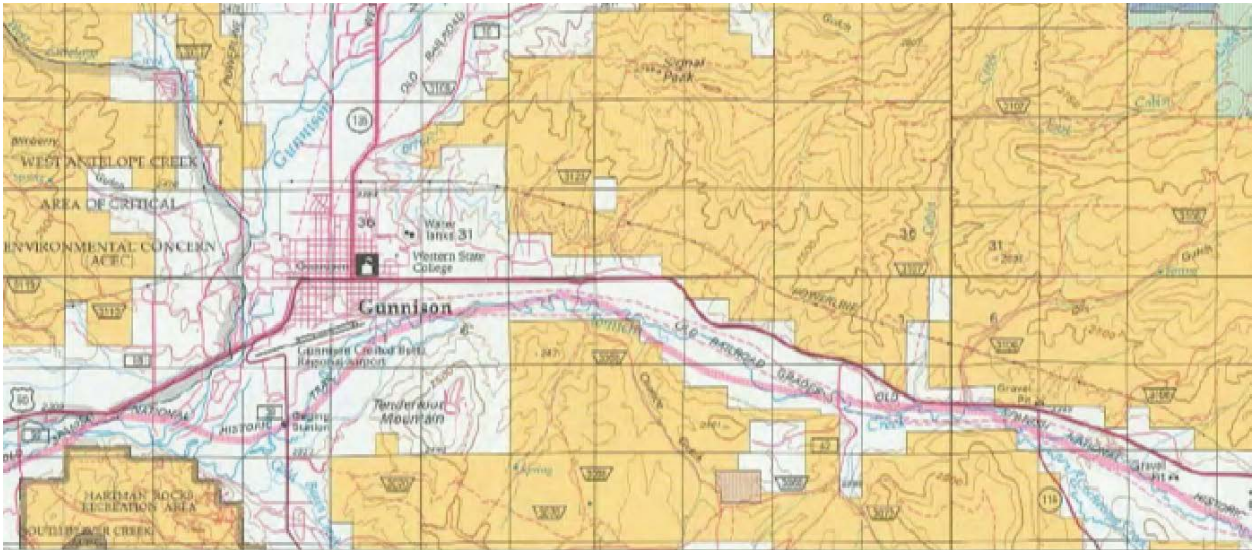
Source: Gunnison County

FIGURE 5-4 - PROPERTY OWNERSHIP



Source: City of Gunnison

FIGURE 5-5 - BUREAU OF LAND MANAGEMENT (BLM) PUBLICLY OWNED LAND (IN YELLOW)



Source: Bureau of Land Management (BLM)

## 5.2 Land Use Controls

GUC is owned and operated by Gunnison County, and is located within the limits of the City of Gunnison. The County controls land uses on the airport, in compliance with the FAA Grant Assurances. The City has jurisdiction over land uses adjacent to the airport. Under the State of Colorado’s constitution, the City of Gunnison is a home rule municipality, meaning that it can exercise all land use powers unless specifically prohibited by the state or federal government.

As noted in the City’s Land Use Development Code, 2014: “All other powers authorized by statute or by common law for the regulation of land uses, land development and subdivision, including, but not limited to, the power to abate nuisances.” As a result, GUC is directly affected by the planning and land use controls exercised by the County and the City.

The City and County of Gunnison have distinct authority over the real property surrounding the airport. County land use authority is primarily on the southern and western flanks of the airport facilities, and the city boundary encompasses the vast majority of the air-operation facilities, the airport terminal building, and the land uses north and east of the airport.

The County uses a performance based planning approach which is distinct from traditional district zones. On the other hand, the City uses a more traditional district zone approach, and that portion of the airport within the city limits is within the City’s Industrial District zone. The real property is not exempt from City development standards. In 2003, the City and County entered into an agreement concerning shared Land Use authority (see Appendix 2-1 for a complete copy of the agreement):

“STATUTORY AUTHORITY FOR SHARED LAND USE PERMITTING REVIEW:

The State of Colorado specifically allows cities and counties to enter into intergovernmental agreements to encourage cooperative land use planning between the two. It also requires municipalities to plan for land uses, utilities and roads within the area three miles outside of their boundaries, so that if those lands are annexed, the infrastructure and land uses are compatible with those already in the City.”

“The County has jurisdiction over permitting land uses in that area, until they are annexed into the City. The City of Gunnison and Gunnison County adopted the Three Mile Plan/Urban Growth Boundary Intergovernmental Agreement July 3, 2001. As part of that Agreement, the entities agreed to jointly review Land Use Change Permit applications for projects proposed within the Three Mile Plan area and Urban Growth Boundary outside the City limits. The Agreement directed that processes be designed to review projects that are located in the Area and outlined different requirements for review in the Urban Growth Boundary and outside it.”

“These Guidelines for reviewing Land Use Change Permit Applications Within the Gunnison Three-Mile Are, describe the County’s general Land Use Change Permit application review process, and outline the review processes required by the IGA including flow charts that illustrate the timelines and key actions of the City’s review.”

Gunnison County set specific goals for the Airport as part of its Strategic Plan (2013):

“C. Promote Prosperous, Collaborative and Healthy Communities

Strategic Results:

2. By December 31, 2014, the Gunnison County airport general and commercial aviation operations will meet the needs of our community and visitors by ensuring year-round operations and multiple daily flights to Denver.

Lead: Airport Manager Richard Lamport

Team: Public Works Director Marlene Crosby and Facilities and Grounds Director John Cattles”

Gunnison County’s Land Use Resolution, amended August 19, 2014, specifically protects the area around the airport: “**NO INTERFERENCE WITH AIRPORT PATHS OR ZONES.** There shall be no interference with established airport flight paths or structural height restrictions within airport influence zones.” (Section 13-103, D, 3 H, 3d). FAA requires airport sponsors to restrict the concentration of people in runway protection zones (RPZ) for safety reasons. FAA has expressed concern that the concentration of people in the White Water Park on the Gunnison River, situated in the Runway 6 RPZ, violates FAA policy. The City and County have agreed to shift the concentration of people in the White Water Park out of the Runway 6 RPZ.

The *City of Gunnison Master Plan, 2007*, noted that one of the city's strengths was: "A functional airport capable of handling commercial passenger jet aircraft." In 2014 the City initiated a process to develop a new Master Plan. The first two phases of the process, including initial citizen input and development of the *Community Analysis* were completed in February 2015. The next phase includes the development of a community vision statement, conducting future trend analyzes associated with the transportation system functions, land use and development patterns and economic development.

In April 2015, the city initiated an urban highway design project that will focus on developing a "Complete Streets" design concept for the city's urban highway corridors. The emphasis of the project will be to develop preliminary construction plans for the highway corridor that focus on pedestrian, bike and automobile functions and urban streetscape design – highway corridor entrances will also be an emphasis of the design project. The City's Master Plan also noted:

"This (west) entrance to the City provides the best view of the "W" on Tenderfoot Mountain, but is characterized by the presence of large airport hangars on the south side of Highway 50. To the north is a mix of residential uses, followed by commercial strip development. Efforts continue by City staff and the County Beautification Committee and the Colorado Department of Transportation (CDOT) to create more pleasing entrances to the airport and to the City. This entrance should be monitored so that the community edge is clearly defined."

"Although not connected by a major arterial, the south entrance to the City is the entrance for those entering Gunnison by air. Gunnison County has made significant improvements in recent years to improve the aesthetics in the vicinity surrounding the airport. However, this remains an area of concern for the Gunnison County Beautification Committee and the City. Residents in this vicinity are encouraged to pursue CityScape grant funds."

Regarding the "soundscape" element in the City Master Plan, it was noted: "Particularly, the Gunnison County Airport (which is located in the City limits) creates the most significant impacts with respect to noise pollution."

As noted elsewhere, the BOCC adopted a voluntary curfew at the airport that runs between 10:30pm and 6am local time.

GUC is zoned by the County as "County Exempt"/industrial. Land uses adjacent to GUC include:

- Single- and multi-family residential, including apartments and condos adjacent to airport property
- Commercial/retail/business
- Light industrial
- Open space (primarily to the south and northeast)
- Conservation/Public - Bureau of Land Management (BLM)
- Recreational
- Institutional

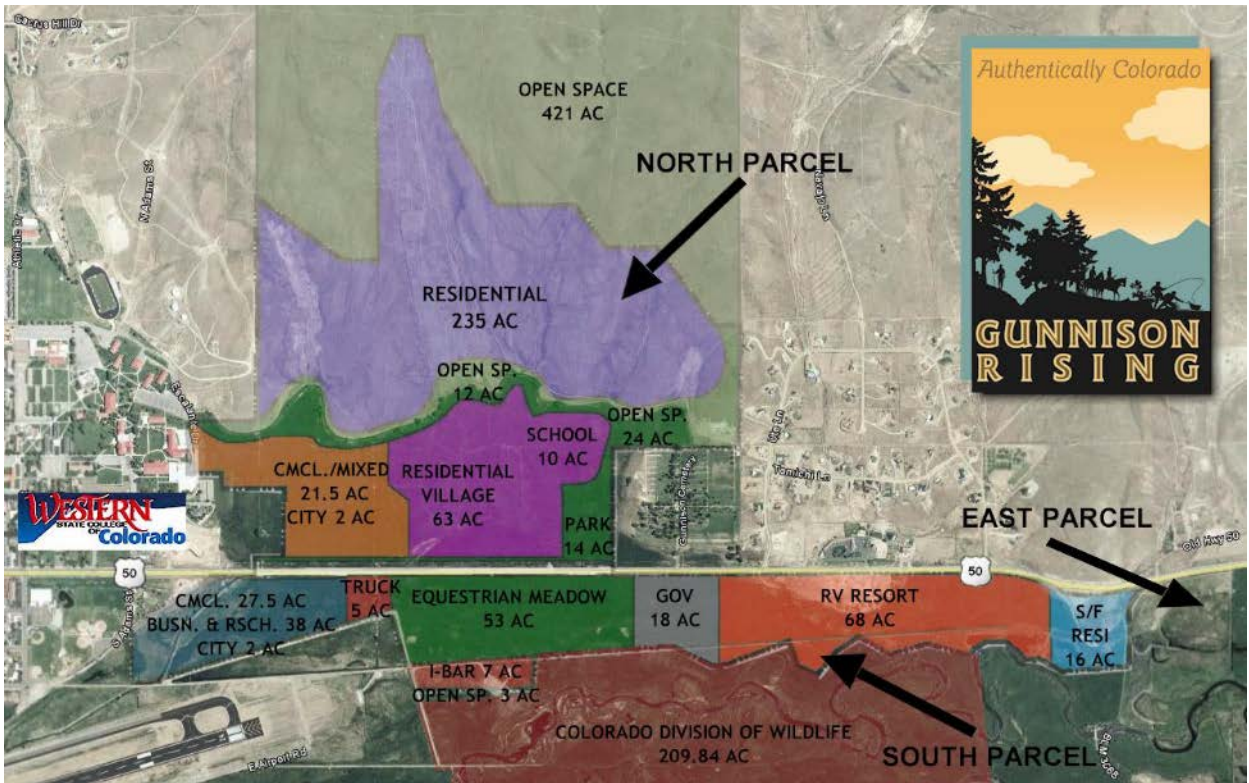
### 5.3 Future Land Uses

The area south of Runway 6-24 is not available for development, in large part because of Tomichi Creek, as well as wetlands and floodplains. There are hills and mountains further south, all of which significantly limits development. However, there are proposed off-airport commercial and residential developments to the east and north of GUC.

One of the largest proposed is Gunnison Rising, which would encompass a total of 1,245 acres for residential, mixed use, and recreational development (Figure 5-6). Gunnison Rising was annexed into the City in 2010. The annexation is governed by two principal documents which include the *Gunnison Rising PUD Development Standards* (2010, amended) and the *Gunnison Rising Annexation Agreement* (2010).

The PUD Development standards, which can be found on the city’s web-site, is a combination of use and design standards directing the development of the master plan area. The Annexation Agreement is a contractual document addressing a variety of issues including, but not limited to, future land dedications, development financing responsibilities, water right conveyances, and service responsibilities. Exhibit J of the recorded *Annexation Agreement* is an established aviation easement dedicated to the Board of County Commissioners.

FIGURE 5-6 - PROPOSED GUNNISON RISING DEVELOPMENT



Source: City of Gunnison

Gunnison Rising stated that it will be “divided into three distinct parcels separated by Highway 50—the North, South, and East Parcels. Developer has completed the annexation of 633 acres:

- 406 acres—North Parcel
- 187 acres—South Parcel
- 40 acres—CDOT roadway and other contiguous parcels”

It is also recommended that the City of Gunnison’s plans to develop a multi-use trail system, as described in the City’s report; *Non-Motorized Transportation Plan, 2013*, particularly the along the W. Rio Grande Boulevard, as well as to the south side of the airport, be accommodated to the extent feasible consistent with airport operations. The on-airport multi-use trail system will be required to meet all appropriate airport and FAA requirements, and receive prior approvals from the airport and FAA.

## 5.4 Land Use and Aircraft Noise

Gunnison County, as the airport sponsor, is legally encumbered by the FAA’s Sponsor Grant Assurances. FAA defines compatible land uses based a number of factors, discussed in more detail below. In general, residential and institutional (e.g. schools and hospitals, etc.) land uses on or immediately adjacent to an airport are often considered not compatible with noise generated by aircraft operations.

The FAA has been working for many years with airport sponsors to promote and enhance compatible land uses adjacent to airports. The FAA acknowledges that airport sponsors typically do not have jurisdiction or authority over land uses situated off-airport. The FAA, however, expects airport sponsors to work with agencies that do control land uses situated off-airport and promote compatible land uses where feasible. The FAA grant assurances are legally binding on airport sponsors (including Gunnison County). The pertinent assurances dealing with land uses state:

Grant Assurance # 6. Consistency with Local Plans.

“The (airport) project is reasonably consistent with plans (existing at the time of submission of this application) of public agencies that are authorized by the State in which the project is located to plan for the development of the area surrounding the airport.”

Grant Assurance # 21. Compatible Land Use.

“It (i.e. the airport sponsor) will take appropriate action, to the extent reasonable, including the adoption of zoning laws, to restrict the use of land adjacent to or in the immediate vicinity of the airport to activities and purposes compatible with normal airport operations, including landing and takeoff of aircraft. In addition, if the project is for noise compatibility program implementation, it will not cause or permit any change in land use, within its jurisdiction, that will reduce its compatibility, with respect to the airport, of the noise compatibility program measures upon which Federal funds have been expended.”






The primary tool used by the FAA and other federal agencies, including the Environmental Protection Agency (EPA) and Housing and Urban Development (HUD), to determine land use compatibility are computer-generated noise contours. The noise contours are based on a large number of factors including specific types of aircraft and engines, total number of takeoffs and landings by each type of aircraft, flight tracks, climb rates, altitudes, time of day, noise abatement procedures, etc.

The noise contours are developed using the FAA’s Environmental Design tool (AEDT) Version 2b. The contours are expressed as Day-Night Sound Levels (DNL). Federal agencies use the 65 DNL contour as the threshold to determine whether certain land uses are compatible or are non-compatible with aviation activity. FAA’s Land Use Noise Sensitivity Matrix is shown below (Figure 5-7).

There are both single- and multi-family residential units adjacent to the airport property boundary (Figure 5-1, Figure 5-2, Figure 5-3) and also proposed future residential development near Runway 24. There is a large planned residential and commercial development (Gunnison Rising) proposed adjacent to GUC, north and east of Runway 6-24, that could introduce non-compatible land uses (Figure 5-6).

FIGURE 5-7 - LAND USE NOISE SENSITIVITY MATRIX

		55-65 DNL	65-75 DNL	75+ DNL
 <b>Residential</b>	1-2 Family			
	Multi-Family			
	Mobile Homes			
	Dorms, etc.			
 <b>Institutional</b>	Churches			
	Schools			
	Hospitals			
	Nursing Homes			
	Libraries			
 <b>Recreational</b>	Sports/Play			
	Arts/Instructional			
	Camping			
<b>Commercial</b>	All Uses			
<b>Industrial</b>	All Uses			
<b>Agricultural</b>	All Uses			

PER FAR PART 150	COMPATIBLE	
	INCOMPATIBLE	

Source: FAA

In 2001 the Gunnison County Commissioners adopted a resolution that imposed a voluntary curfew on takeoffs and landings between 10:30pm and 6am local time “in recognition of adverse noise and light glare effects on residential neighborhoods.” The resolution also noted that no “runway lights, snow plowing, wildlife patrols, runway condition reports, ARFF or other services are available at the Airport during these hours.” The County excluded “emergency situations” from the curfew, such as Life Flight and the military. The FAA’s Airport Facility Directory (A/FD) for GUC states: “Arpt CLOSED 0530Z – 1300Z except for emergencies.”

## 5.5 Existing and Future Noise Contours

In order to determine if there are, and will be, non-compatible land uses in the vicinity of GUC, KB Environmental Sciences, Inc. prepared noise contours using FAA’s Environmental Design tool (AEDT) Version 2b. KB Environmental’s report is attached in Appendix 5-1. As noted by KB Environmental: “The AEDT produces aircraft noise contours that delineate areas of equal day-night average sound level (DNL). The DNL is a 24-hour time-weighted sound level that is expressed in A-weighted decibels and is abbreviated as dB(A) or dB.

The FAA and other federal agencies use DNL as the primary measure of noise impact because: it correlates well with the results of attitudinal surveys regarding noise; it increases with the duration of noise events; and, it accounts for an increased sensitivity to noise at night by increasing each noise event that occurs during nighttime hours (i.e., 10 pm to 7 am) by 10 dB(A).”

KB Environmental Sciences developed noise contours based on aircraft activity levels estimated in 2014, and projected for 2034 (see Chapter 3, Aviation Forecasts). As can be seen in Figure 5-8 and Figure 5-9 below, the threshold noise level (65 DNL contour) does not extend off of airport property.

Based on these noise contours, KB Environmental concluded that: “The DNL 65 dB contours for the Existing Conditions 2014 and Future Conditions 2034 scenarios were within the airport’s property boundary. Therefore, no incompatible land uses (residences, schools, places of worship, etc.) were within the limits of the DNL 65 dB contours.”

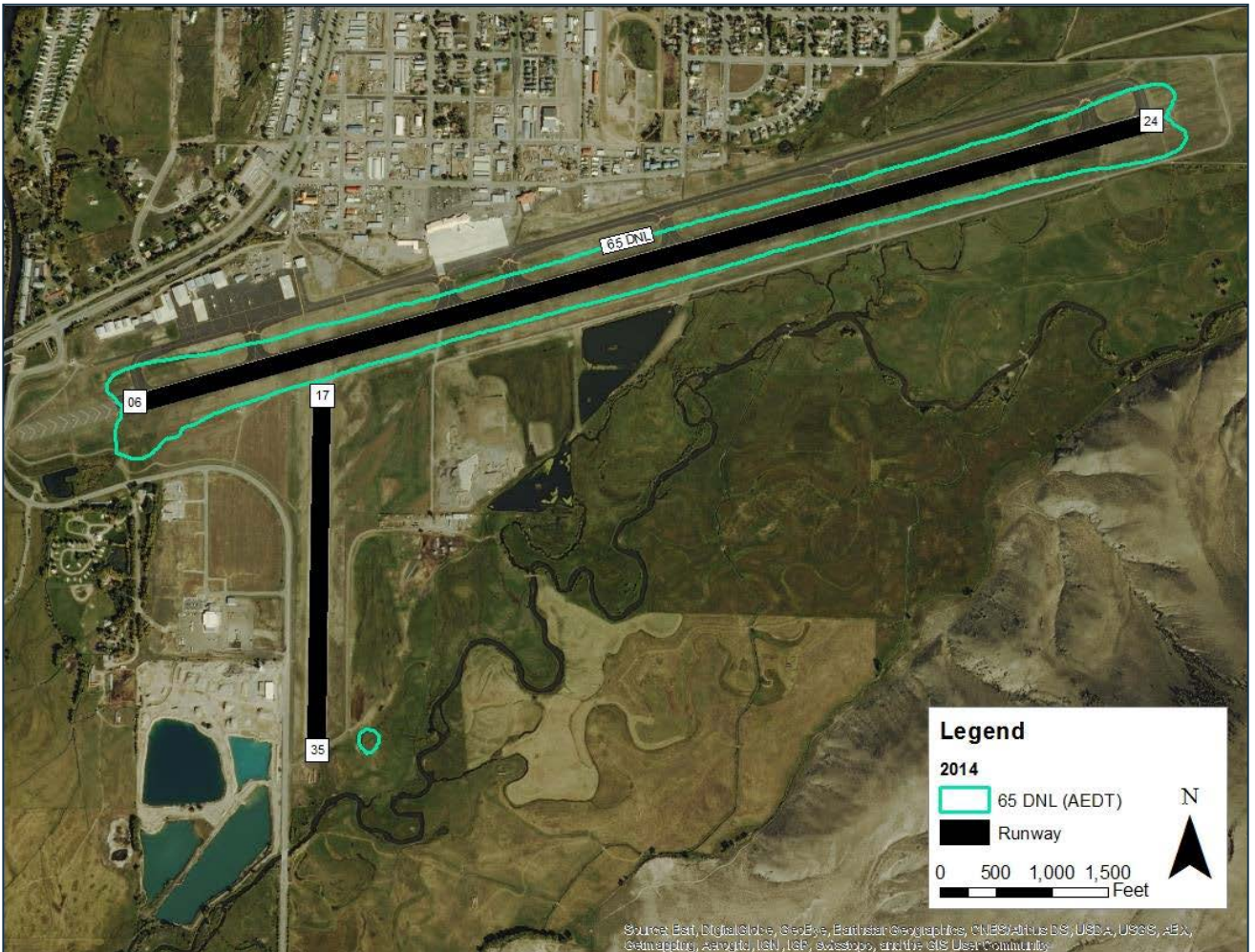
However, it is possible that residents and visitors in the vicinity of the airport will hear airplane noise, which may in some cases create an annoyance. As a result it is recommended that future noise sensitive land uses be directed to areas that are not adjacent to the airport, or directly under the straight-in approach/departure paths of Runway 6 and 24. If noise sensitive land uses are permitted in those areas, then it is recommended that at the very minimum, the property owners and residents be formally notified in writing of the presence of the airport by Gunnison County, including that aircraft operating at the airport create noise.

The size of the existing and future 65 DNL noise contours developed by KB Environmental indicate that there is no need to implement noise mitigation measures such as property acquisition, soundproofing, or zoning ordinances that restrict land use types. The noise contours further indicate that off-airport noise

mitigation measures such as sound proofing or property acquisition, for example, would not be eligible for FAA financial assistance.

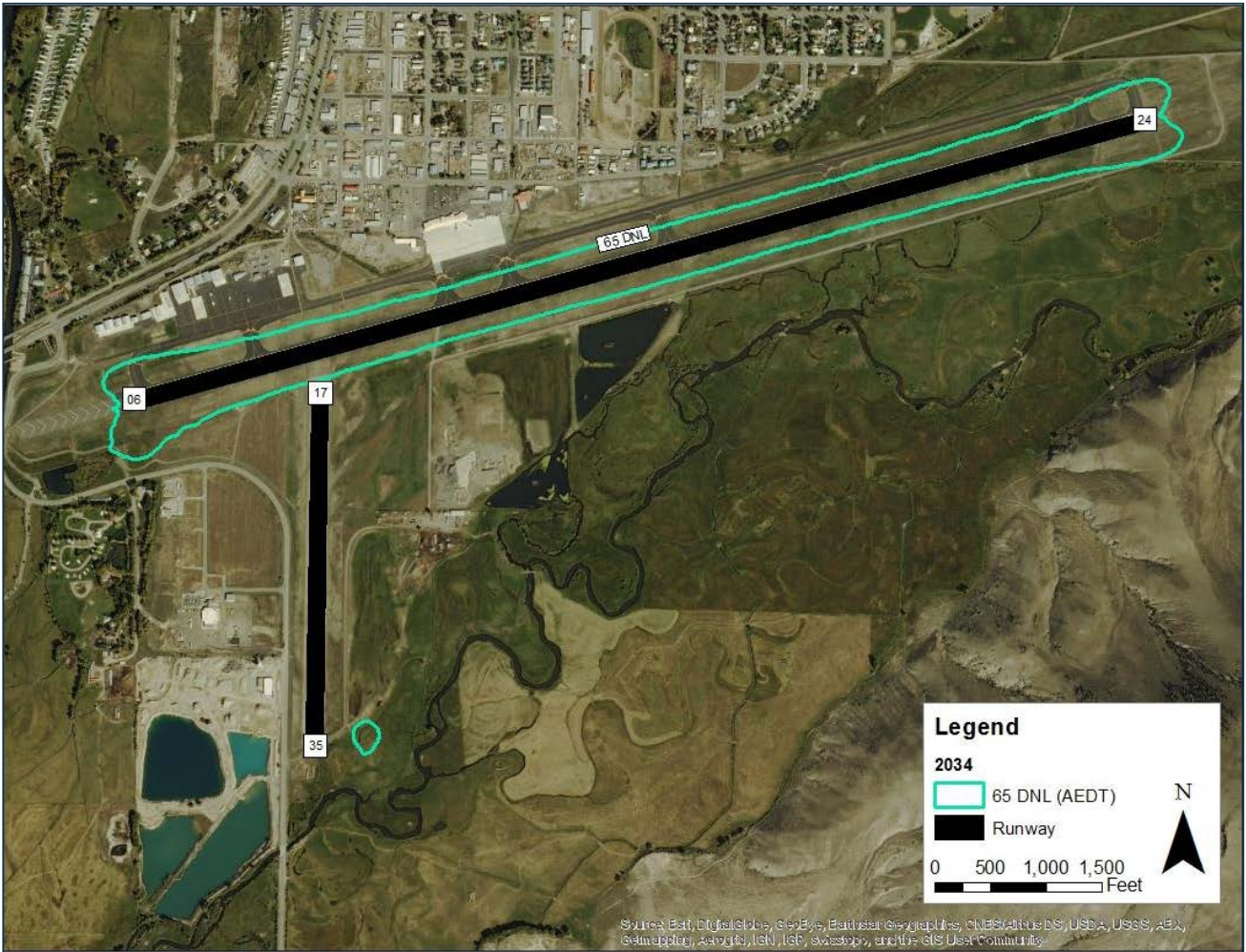
GUC has noise abatement procedures in place by closing the airport at night except for emergency access, which helps to mitigate noise impacts. Because the procedures have been in place for a number of years it is not recommended to be changed unless the FAA were to determine that it is contrary to the Sponsor Grant Assurances.

FIGURE 5-8 - 2014 DNL NOISE CONTOUR



Source: KB Environmental Sciences, November 2015

FIGURE 5-9 - 2034 DNL NOISE CONTOUR



Source: KB Environmental Sciences, November 2015