



EXECUTIVE SUMMARY

Inventory

- ➔ The previous airport master plan for Gunnison-Crested Butte Regional Airport was prepared in 2006 by Barnard Dunkelberg and Company. That master plan projected growth in aircraft operations, passenger enplanements, and based aircraft throughout the 20-year planning period. The primary recommendation was to construct a new terminal building to accommodate growing air service demand.
- ➔ Gunnison-Crested Butte Regional Airport (GUC), situated at 7,679' above sea level. It is owned and operated by Gunnison County and is situated within the limits of the City of Gunnison. The airport encompasses 1,600 acres, and has two runways. The main runway, 6-24, is paved 9,400' by 150' with high intensity runway lights. The second runway, 17-35, is turf and gravel surface 2,981' by 150'. It is unlit, and is closed December 1-May 1.
- ➔ GUC is classified as a commercial service, primary airport by the FAA, and a major commercial service airport by Colorado DOT. FAA has issued GUC an operating certificate under 14 CFR Part 139 (Class I, ARFF Index B).
- ➔ There are five published instrument approaches to GUC, including a precision instrument landing system (ILS) approach to Runway 6, and Required Navigation Performance (RNP) approaches to Runway 6 and 24. The lowest instrument approach minimums are on the RNP 24 at 309' and 1 mile visibility.
- ➔ There is no control tower at GUC. The airport lies within FAA Class E airspace. The FAA and Colorado DOT recently installed the wide area multilateration (WAM) system to supplement air traffic radar coverage in the Western Slope Region. With WAM, Denver Center has radar coverage to ground level at GUC, which enhances airspace capacity in the vicinity of GUC.
- ➔ GUC airport reference code (ARC) is C-IV, and the critical design aircraft is the Boeing B-757-200.
- ➔ In addition to air carrier and general aviation aircraft, there are also a number of transient military training operations at GUC conducted by USAF C-17 (ARC D-IV) and C-130 aircraft (ARC C-IV). Additionally, a variety of civilian and military aircraft stage at GUC to conduct high altitude tests. However, they do not meet FAA's definition of 'substantial use' and are therefore not designated as critical design aircraft.
- ➔ Three airlines serve GUC; American, United, and Alaska. Regional partners for American and United (Trans Sates, Skywest, ExpressJet) also serve GUC. The majority of operations by the airlines are conducted using regional jets such as the ERJ-145 and CRJ-700, as well as the Airbus A319.

- ➔ December – March is the peak season for airline service at GUC, generated primarily by the ski market. Non-stop destinations from GUC include Denver (DEN), Houston (IAH), Dallas Fort Worth (DFW), and Chicago O’Hare (ORD). In the winter of 2015/2016, Alaskan Airlines started scheduled service between LAX-GUC using DHC-8-402 Q400 turboprop aircraft.
- ➔ In CY 2013 there were 30,780 scheduled airline passenger enplanements at GUC. Both passenger enplanements and available seats at GUC have declined by 44 % between 2000 and 2013. 81% of all passengers are in-bound visitors (primarily skiers) vs. local residents (19%). According to Mead & Hunt, the majority of local residents use airports other than GUC because they have higher frequency of service and/or lower fares.
- ➔ The analysis prepared by Mead & Hunt estimated there were approximately 7,627 aircraft operations in CY 2014, and 25 based aircraft.
- ➔ Runway 6-24 pavement is in need of rehabilitation due to the type of material (Trinidad Lake Asphalt) used in the prior runway reconstruction project. Moisture leakage causes pavement cracking and deterioration, which requires continual maintenance. The runway is programmed to be rehabilitated in 2017-2018.
- ➔ The National Weather Service (NWS) does not prepare Terminal Aerodrome Weather Forecasts (TAF) for GUC. The lack of terminal weather forecast for GUC impacts service by 14 CFR Part 121, 125, and 135 operators, which have very specific weather requirements for arrivals and departures. The reason that weather forecasts are not issued for GUC is the lack of adequate radar coverage and also limitations of the AWOS-3 sensor situated on GUC. The FAA has stated they will replace the AWOS-3 in September 2016, and then begin issuing terminal weather forecasts for GUC.
- ➔ The terminal building is approximately 38,400’ in size. Improvements were recently made to bring it into compliance with building and fire codes. However there are numerous deficiencies including the internal layout of the building, which is very inefficient in terms of passenger and baggage handling and traffic flows, and the building’s utilities are in need of replacement. The building is not fully compliant with the Americans with Disabilities Act (ADA). In addition, improvements are needed to the vehicle parking area as well as designating a primary airport access road and improving signage and landscaping to the airport.
- ➔ There are wetlands and floodplains on and in the vicinity of the airport. Both Gunnison River and Tomichi Creek cross airport property. Two bridges on U.S. 50 just south of GUC Airport are on the National Register of Historic Places. The Gunnison sage grouse is a state and federally protected species with habitat throughout Gunnison County.

→ The FAA required the preparation of Airports Geographic Information System (AGIS) mapping to standards specified in three advisory circulars. Woolpert, Inc., prepared the AGIS mapping in the fall of 2014, and uploaded the mapping on FAA's web site. The AGIS mapping was accepted by FAA and the National Geodetic Survey (NGS). Woolpert also provided mapping for the Airport Layout Plan (ALP) drawing set, including the airspace drawings that analyze 14 CFR Part 77 imaginary surfaces.

Forecasts of Aviation Activity and Air Service Analysis

→ The forecasts of aviation demand and the air service analysis were prepared by Mead & Hunt. The air service analysis concluded that although overall passenger enplanements had declined, the demand for air service, particularly in the winter months would stabilize, and grow slightly through 2035. The analysis projected that air service would continue to be provided by United and American and their regional partners, in part because they generate very strong yields on their Gunnison routes. The study also concluded that new service could be initiated by Alaska Airlines to LAX, which started in December 2015. The air service analysis did not anticipate new service at GUC by low fare airlines (e.g. Spirit, Allegiant, or Frontier), nor by Southwest. The air service analysis also concluded that there was insufficient demand for increased scheduled service in the shoulder seasons.

→ GUC's seasonal (winter) service is provided primarily by 50- and 69-seat regional jets (such as the ERJ-145, DH-8-Q400, etc.), and narrow body aircraft such as the Airbus A319 with 128 seats. Summer service by United is operated entirely with regional jet aircraft. It is anticipated that larger regional jets will be utilized in the future as airlines continue to move away from 50-seat regional jet aircraft (i.e., the ERJ145) and toward larger capacity regional jet aircraft (i.e., the CRJ7 and CRJ9). Operations by narrow body aircraft like the A319 (or equivalent seating capacity aircraft) are anticipated to remain relatively constant throughout the forecast period.

→ The activity forecasts projected that:

- Scheduled passenger enplanements would increase from 30,831 in 2014 to 43,430 by 2034, an increase of 40.8%.
- Aircraft operations would increase from 7,627 in 2014 to 10,052 by 2034, an increase of 32%.
- Based aircraft will increase from 25 in 2014 to 35 by 2034, an increase of 40%.

→ The forecasts of demand were approved by the FAA.

→ While the total number of Airplane Design Group IV operations do not currently meet the FAA's substantial use threshold of 500 itinerant operations per year, C-IV-5000 is still considered the appropriate airport reference code (ARC) because the Airport already meets most design standards for this ARC and maintaining the Airport to these standards will provide the airlines maximum flexibility in choosing the type of aircraft they use to serve the Gunnison market in the future. Runway 6-24 will continue to meet RDC C-IV-5000.

Facility Requirements

→ Terminal Area – the terminal building is approximately the right size (39,000 s.f.) for the existing and projected level of passenger traffic. However as noted above, it is extremely inefficient in terms of its internal layout, and the building’s utilities need replacing. There is also a need for additional vehicle parking, including buses and other commercial vehicles, improved traffic circulation in the vicinity of the terminal building, and designation of a primary access road to the airport, with improved signage and landscaping. The aircraft parking apron is recommended to remain at its current location and size. The terminal area facilities are discussed further in the alternatives section below.

→ General Aviation Facilities – there is a need for additional paved apron for transient aircraft parking during peak periods, particularly the July 4th weekend and throughout the winter months. There is a need for additional T-hangars and potential demand for more corporate hangars. It is recommended that the existing T-hangars be moved to an area south of Runway 6-24, adjacent to Runway 17-35. Additional T-hangars should also be constructed in that area as demand warrants.

→ Runways – the existing runway/taxiway system provides more than adequate operational capacity to accommodate existing and projected demand without delays. Runway 6-24 can accommodate the existing and future critical design aircraft (B-757-200). Both Runway 6-24 and 17-35 are recommended to remain in operations throughout the forecast period. Runway 6-24 will be rehabilitated in the 2017-2018 period to address existing pavement deterioration. A clearway can be designated at the end of Runway 24 for departures on Runway 6, which may allow some operators of turbine aircraft to increase their takeoff weight. Runway 6-24 is recommended to remain at its current size (9,400’ x 150’). No new instrument approaches are proposed for either runway end. Runway 17-35 is recommended to remain open on a seasonal basis, and also remain as a turf/gravel, unlighted, visual runway.

Terminal Building Alternatives

- Three alternatives were identified and analyzed to address the most effective method to upgrade the terminal area to meet existing and projected demand, as well as FAA design standards, and building, fire, and access codes.
- Status Quo – this option would involve bringing the building up to current codes, and upgrading some of the buildings utilities. It would not involve major reconfiguration of the interior space or resolve the inefficiencies of the interior layout. The estimated cost for this option ranges between \$2 million - \$3.5 million.
 - Renovation of the Existing Terminal Area – this option would result in a complete renovation of the existing terminal building. It would keep the existing building shell and completely redesign the interior space, replace the utilities, and meet all current building, fire, and handicap accessible codes. It would also involve reconfiguring the vehicle parking area, the on-airport circulation system, and designate a primary airport access road (Rio Grande Boulevard), with additional signage and landscaping. It would also include the city’s non-motorized trail system in the vicinity

of the airport. The trail system would need to meet all pertinent FAA and airport requirements and be approved by the FAA and FAA. The existing aircraft parking apron would remain in place. The cost estimate for this option ranges between \$8 million - \$13 million.

- Construct New Terminal Area - this option examined constructing a new terminal building approximately 40,000 s.f. in size, a new aircraft parking apron, new vehicle parking lot, and access road. This option would involve acquiring additional property, and is the most expensive of the three alternatives. The cost estimate for this option ranges between \$22 million - \$28 million.

→ Based on a comprehensive analysis of a large variety of factors, Option2 – Renovate the Existing Building, was selected as the preferred alternative. That recommendation was accepted by the Gunnison Board of County Commissioners, the FAA, and the Planning Advisory Committee (PAC).

→ A Terminal Concept Study was recommended to be prepared before the initiation of the design of the terminal area. The terminal concept study will provide a detailed analysis of the future interior layout of the building, the vehicle parking area and on-airport circulation, as well as upgrades to the designated primary airport access road (Rio Grande Boulevard). The study would recommend the preferred interior configuration, present detailed cost estimates, and an implementation plan and program schedule. It would also identify funding sources.

Environmental Issues

→ The FAA issued Order 1050.1, *Environmental Impacts: Policies and Procedures*, to ensure compliance with the National Environmental Protection Act. Airport improvements at GUC that are funded by the FAA fall within FAA Order 1050.1F. Based on current information, it is anticipated that the terminal development program as described in Option 2 – Renovate Existing Terminal Area, will fall within FAA's definition of Categorical Exclusion (CATEX). The recommended Terminal Concept Study will address whether the preferred configuration of the terminal area meets FAA's requirements for a CATEX.

→ Aircraft noise and land use are typically issues of concern at airports. KB Environmental Sciences, Inc. prepared noise contours using FAA's Environmental Design tool (AEDT) Version 2b. The resulting 65 Ldn noise contour for both existing and future conditions did not extend off of the runway. There are residential areas adjacent to the airport, as well as proposed residential development to the northeast, around Route 50, Tomichi Avenue. While the noise contours do not indicate that the residential land use is incompatible with aircraft operations, a number of recommendations were presented with the goal of preventing noise complaints, controlling the extent of future noise sensitive development near the airport, and also formally notifying property owners of the airport and existing flight tracks.

→ There are floodplains and wetlands in the vicinity of GUC. The proposed development does not impact those areas.

→ In November, 2014, the U.S. Fish and Wildlife Service (USFWS) determined that the Gunnison sage-grouse, a ground-dwelling bird found only in southwestern Colorado and southeastern Utah, requires the protection of the Endangered Species Act (ESA) as a threatened species. The USFWS also designated

critical habitat. Gunnison County has an active and comprehensive program to protect the Gunnison sage-grouse. The USFWS had adopted a preliminary draft rule to protect the species.

→ The FAA requires the preparation of a reuse, recycle, and waste management plan for GUC. The existing reuse, recycle, and waste management program in place at GUC was documented, and a series of recommendations were presented based on best practices adopted by the airport industry.

Financial Plan

→ Cost estimates were developed for the proposed improvement projects at GUC. The cost estimates for the terminal program and GA facilities are preliminary, and were not based on site-specific data or engineering design. As the County decides to implement various projects, the cost estimates should be updated based on site-specific data such as soils, survey, drainage, etc., as well as the cost of materials, mobilization, and contractor labor, at that time.

→ GUC has two large projects in Phase I of its capital improvement plan (CIP) between 2016 and 2021: the rehabilitation of Runway 6-24 (and associated improvements), and the Terminal Improvement Program. Together these two projects are estimated to cost \$22.17 million over a five-year period. Of that amount, it is estimated that the Airport and Gunnison County will be responsible for approximately \$6 million (27%). It is estimated that Gunnison County may need to cover approximately \$5.5 million through various financial instruments to pay for a portion of the Terminal Improvement Program.

→ The FAA has very specific requirements in terms of what is eligible for funding in terminal programs. In general FAA grants cannot be used to construct privately leased or exclusive use space, or space that is being paid for by other grants. Funding sources for the non-eligible areas of the terminal include Airport generated revenue, the County, private investment (e.g. terminal tenants), the City of Gunnison (e.g. road improvements), as well as non-aviation state and federal grants (e.g. economic development grants, etc.) As noted previously, the Terminal Concept Study will develop detailed cost estimates of the preferred terminal renovation, as well as the share of funding to be provided by FAA, CDOT, the County, the Airport, and private sources (such as the terminal tenants – airlines, rental car companies, concessions, etc.)

→ GUC has been examining its current schedule of rates and charges, and has identified potential increases in revenue from landing and parking fees, particularly for GA aircraft. Based on the current revenue guarantee program in place, as well as other cost factors, it is not anticipated that rates and charges on the airlines serving GUC can be increased sufficiently to cover the cost of the terminal improvement program, in concert with FAA and CDOT grants. As a result, it is anticipated that Gunnison County will provide some of the funding for the terminal program, based on various sources that will be considered by the County.

→ The financial plan anticipates that a large share of funding for future GA facilities will be provided by private sources, such as aircraft owners, etc. Many of the GA facilities will be constructed when demand warrants.

→ The financial plan notes that a number of assumptions were used in developing the pro forma spreadsheets. The assumptions underlying the financial plan need to be re-examined and updated on a regular basis based on more detailed cost estimates, and any potential changes in funding availability from the FAA, CDOT, the County, the airport, or private sources. For example, the FAA's funding program for airports, the Airport Improvement Program (AIP), expired on September 30, 2015. FAA is currently operating under Continuing Resolutions (CR) passed by Congress. Once a new AIP program is adopted, the funding levels and eligibility requirements need to be analyzed in relation to Gunnison's terminal improvement program.

Public Outreach Program

The public outreach program was multi-faceted and ran throughout the duration of the Master Plan. Its primary goal was to ensure as broad a participation in the Airport Master Plan as possible.

→ Planning Advisory Committee (PAC) – the PAC membership was comprised of local community business leaders, airport users, local government agencies, airport tenants, and the Federal Aviation Administration. Four meetings were held with the PAC. The consultant team made presentations at each meeting, and input was solicited from each of the members. The meetings were posted and advertised, and the meeting minutes were recorded and are included in the master plan report appendices. The PAC reviewed all of the draft reports, provided comments and input throughout the course of the study.

→ Public Information Meeting – two public workshops were held in July, 2015. Both workshops were heavily advertised in the press, and meeting flyers were distributed throughout the County. One public meeting was held in the Gunnison Airport terminal building, and one public meeting in the Town of Crested Butte. The public was presented with a comprehensive summary of the inventory, forecasts of demand, facility requirements, and alternatives analysis. They were provided comment cards and asked to provide input on the study, and in particular the recommended terminal improvement option, renovate the existing building. The general consensus from those who attended the public meeting was that the recommended terminal option was the preferred alternative. Members of the public were given a behind the scenes tour of the airport.

→ Gunnison Board of County Commissioners (BOCC) – the master plan consultant team made four presentations to the BOCC throughout the course of the plan to keep the Commissioners apprised of the study, and solicit their input. The BOCC approved the forecasts of aviation demand, and also concurred with the recommended terminal renovation option.

→ Airport video – a video was produced for the airport master plan about Gunnison Airport; why the master plan was being prepared; the issues being addressed in the study; and also included interviews and comments from community leaders and businesses about the value of the airport to the County. The video is available to download on the airport master plan web site (click on banner) - <http://sites.jviation.com/guc/>.

- ➔ Airport Master Plan web site – a web site was developed specifically for the airport master plan (<http://sites.jviation.com/guc/>). All of the draft documents were posted on the web site, as well as all relevant information about the master plan.
- ➔ Two separate focus group meetings were held; one with airport terminal tenants, including representatives from the airlines, rental car and bus companies, and the Transportation Security Administration (TSA). The meeting discussed in detail the pros and cons of the terminal building, and potential improvements that would address the concerns and issues raised. A focus group meeting was also held with the general aviation pilots, FBO, and airport users, to solicit their input in the master plan, particularly about future GA facilities and their use of Runway 17-35.
- ➔ Project related meetings – throughout the master plan, meetings were held with agencies and entities to discuss specific issues. Meetings were held with the FAA, the City of Gunnison, the Gunnison Valley RTA, the Crested Butte Mountain Resort (CBMR) to solicit input and information on specific airport-related issues.
- ➔ Press and media – the Gunnison County Times and Crested Butte News published articles about the airport master plan, which are included in the appendices.