

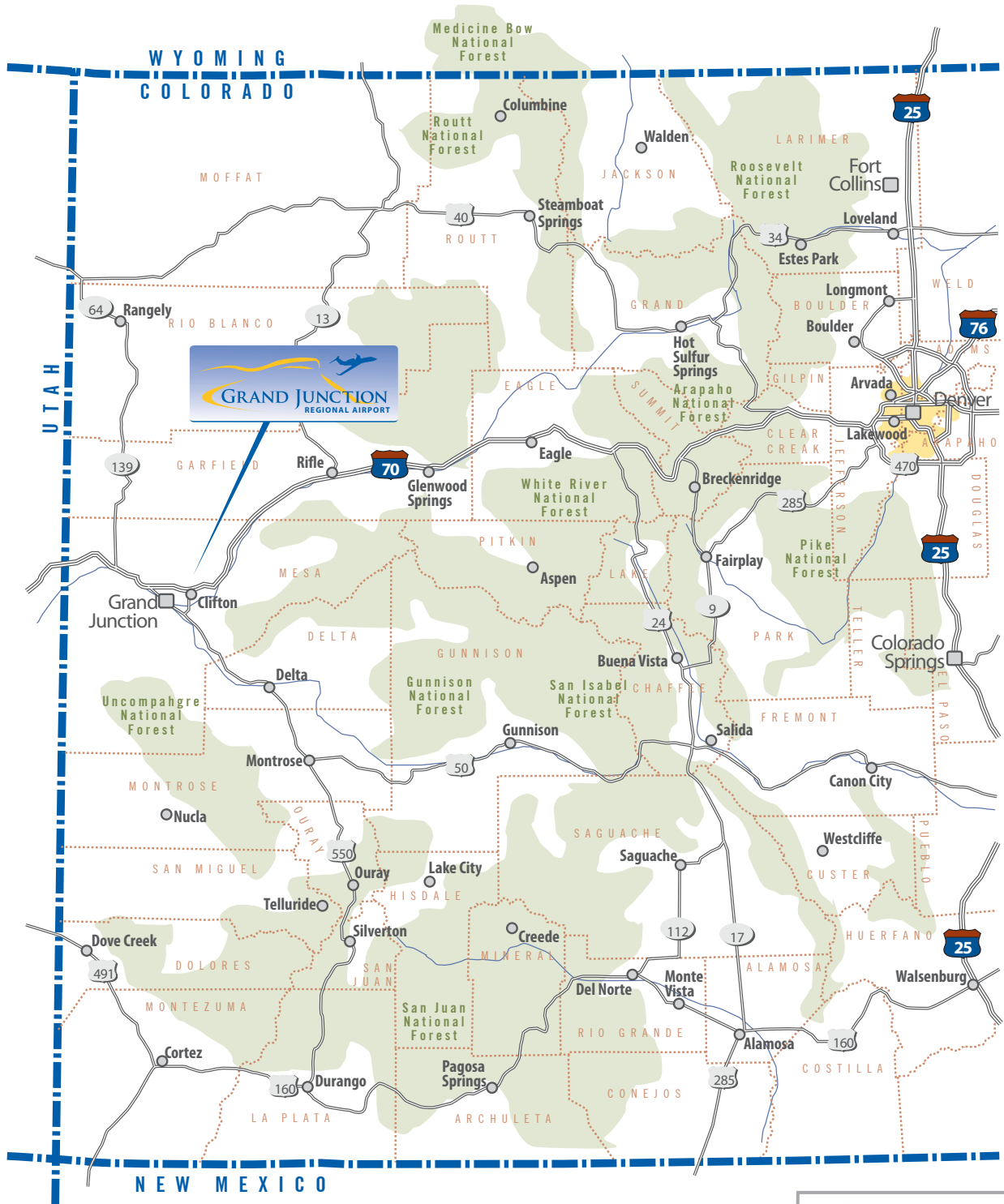
## A. Background Information and Inventories

The City of Grand Junction, with a picturesque backdrop of mountains and monuments in Western Colorado, offers year-round amenities to both visitors and local residents. Grand Junction Regional Airport (GJT or the Airport) is located approximately 3.5 miles northeast of downtown Grand Junction. 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 figures entitled *AIRPORT LOCATION MAP* and *AIRPORT VICINITY 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 industries, promotes tourism, as well as encourages additional business development and expansion throughout Mesa County, the surrounding communities, and adjacent counties. The 2008 Colorado Airports Economic Impact Study quantified the total impact of the Grand Junction Regional Airport at 6,125 jobs with a total payroll of \$189,204,000 and a total economic output of \$623,693,600.**

The last Airport Master Plan for Grand Junction Regional Airport was completed in 2009. However, the 2009 *Airport Master Plan Update* focused primarily on the non-standard conditions associated with the airside areas of the Airport. The focus of this Terminal Area Plan is specifically on the aviation facilities within the boundaries of the Grand Junction Regional Airport terminal area. The “terminal area” for the purposes of this plan is defined as property that surrounds the terminal building including vehicle and aircraft parking areas and the property inside of and adjacent to the terminal loop roadway system.

This initial *Background Information and Inventories* chapter presents the basic elements of the Airport’s terminal area. These elements include the physical layout of buildings, aprons, on-airport roadways, and off-airport roadway connections. Subsequent chapters detail the Airport’s forecasts of aviation activity, the ability of the terminal area facilities to safely and efficiently meet the needs associated with the projected aviation activity, the compatibility of the Airport’s terminal area with surrounding land uses, and recommended future development within the terminal area.



Scale 1" = 40 Miles  
 Source: Microsoft, Streets & Trips, 2006

Figure A1 Location Map

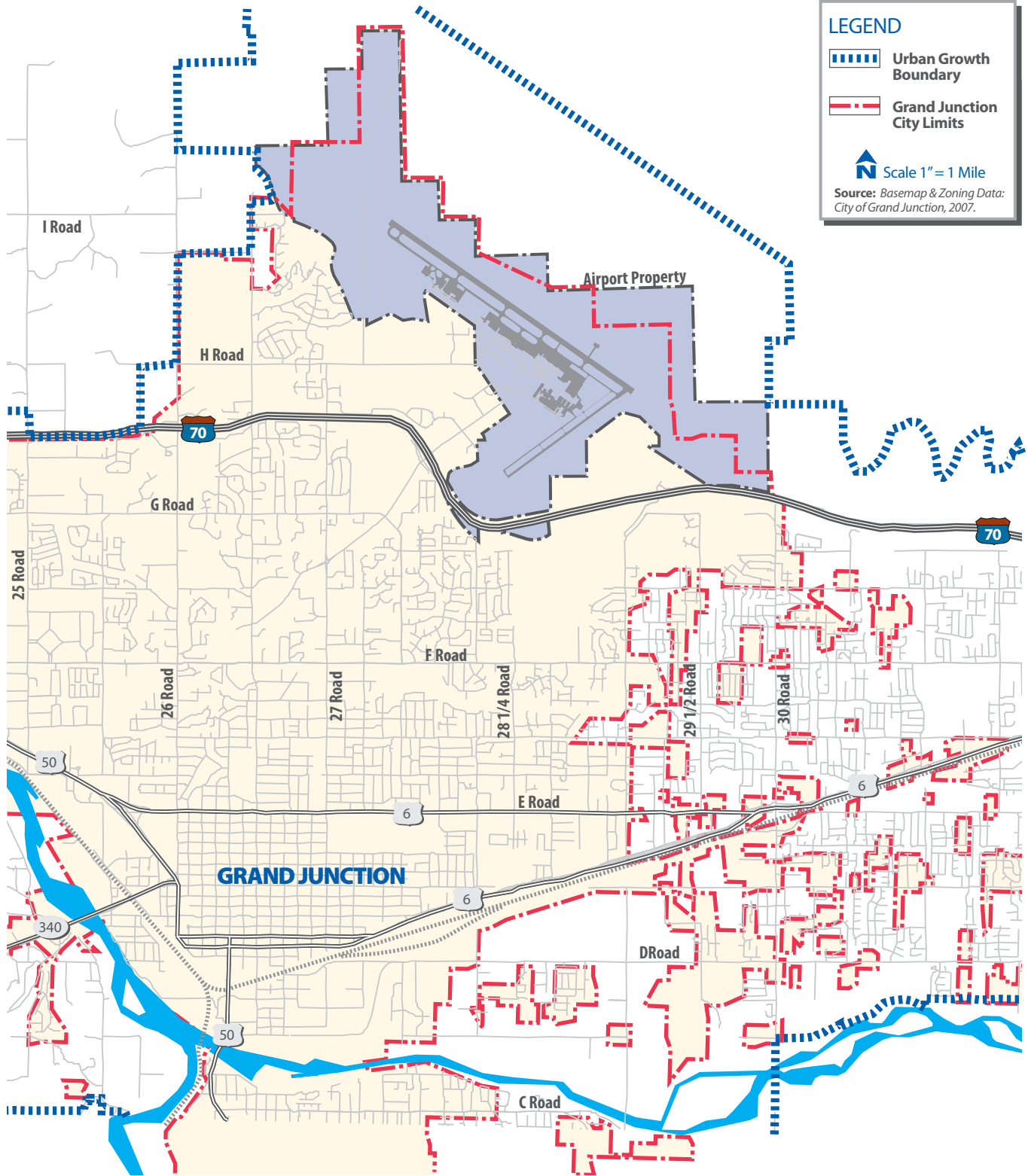


Figure A2 Vicinity Map

## Grand Junction Airport Authority Board

Grand Junction Regional Airport is owned and operated by the Grand Junction Airport Authority Board. The Board is comprised of seven appointed members; three from Mesa County, three from the City of Grand Junction, and one at-large member. The majority of the land owned by the Grand Junction Regional Airport Authority was purchased/deeded from the City of Grand Junction and Mesa County. The Airport Manager is responsible for the day-to-day operation of the Airport and reports to the Board.

The Airport encompasses 2,357 acres and is 4,858 feet above mean sea level. The Airport's terminal area, as defined for the purposes of this study encompasses approximately 120 acres.

## Air Service

Currently, the Airport is served by five airlines providing 15 to 17 daily scheduled non-stop departures on a yearly basis, which includes: United Express/Skywest with daily service to Denver; Delta Connection/Skywest with daily service to Salt Lake City; US Airways/Mesa Air with daily service to Phoenix; American Airlines/American Eagle with daily service to Dallas/Ft. Worth; and Allegiant Air with weekly service to Las Vegas and Los Angeles. United/Continental Express is expected to begin service from the Airport in 2011.

Air Taxi/charter air service is also available at Grand Junction Regional Airport by Denver Air Connection and Colorado Flight Center. Denver Air Connection provides service out of the main passenger terminal to Centennial Airport or Rocky Mountain Metropolitan Airport, both located in Denver. Colorado Flight Center provides service out of leased hanger space from GJT to Aspen, Telluride, Denver (Centennial and Rocky Mountain Metropolitan Airport), Salt Lake City, Phoenix, Boise, and Las Vegas.

## Terminal Area Facilities Inventory

Facilities information for elements of the terminal area was gathered from the 2009 *Airport Master Plan Update*, as well as on-site observations and surveys. These elements include the physical layout of buildings, runways, taxiways, aprons, and ground access facilities. Later sections of this chapter provide detailed discussions on the functionality of the terminal building and support facilities, and a more detailed inventory of ground access facilities and services.

## Aprons

The commercial service aircraft parking apron at Grand Junction Regional Airport is located adjacent to the passenger terminal building, south of Runway 11/29. The primary general

aviation apron is located east of the commercial service apron adjacent to the various FBO owned facilities. The west half of the general aviation apron is primarily reserved for larger corporate jet and turboprop aircraft parking and rotorcraft parking. The east half of the general aviation apron contain aircraft tie-downs for smaller aircraft. A portion of the commercial service and cargo aprons were recently reconstructed and the commercial service apron was extended to the northeast to improve airline circulation and access to the terminal parking areas and gates.

### Passenger Terminal Building

The passenger terminal building at Grand Junction Regional Airport was opened in 1982 and originally consisted of approximately 70,000 square feet of space. The terminal is located on the south side of Runway 11/29 at approximately the midpoint of the runway. The three-level facility consists of airline ticketing counters, a baggage claim/handling area, passenger-waiting areas, rental car counters, a restaurant, a gift shop, airline and Transportation Security Administration (TSA) administrative offices, and Airport Authority offices. Arriving and departing passengers enter and exit the terminal building on the ground level and airline ticket counters, rental car counters and baggage claim are also located on the ground level. The second level consists of security screening, passenger waiting areas and boarding gates and the restaurant and gift shop. The third level consists primarily of the Airport Authority offices and TSA offices. A detailed evaluation of the passenger terminal building and support facility functionality is discussed later in this chapter.

### Automobile Parking

There is an automobile parking facility located south of the terminal and support equipment parking east of the terminal. Three rental car facilities are located southwest of the terminal building and rental car ready car and return (R/R) lot parking lot is located directly west of the passenger terminal. The automobile parking area was reconstructed and expanded in 2007. The redesigned parking area provides for 552 standard parking spaces, 30 handicap parking spaces, 12 motorcycle parking spaces and 38 recreational vehicle spaces. The parking areas are accessed by a dual entrance road system from the northbound section of Walker Field Drive. The exit from the parking area connects with the Falcon Way.

### Other Buildings

**West Star Aviation Facilities.** West Star Aviation is the fixed base operator (FBO) located on airport property. The FBO facilities consist of several large aircraft storage and maintenance hangars. The FBO also maintains 74 aircraft tie-down spaces on the apron.

**Hangar Facilities.** The general aviation aircraft storage hangar area at the Airport is located south and east of the FBO facilities. There are three privately owned T-hangar facilities located southeast of the FBO facilities containing 38 aircraft parking spaces. In general, the hangar area has good landside access via Aviators Way and Navigators Way which extend east off of Eagle Drive.

**Aircraft Rescue and Fire Fighting (ARFF) Facility.** The recently expanded ARFF facility is located east of the terminal building, directly west of the Airport Traffic Control Tower. Per 14 CFR Part 139, *Certification of Airports*, the Airport currently maintains an Index B ARFF capability, which is required by airports that accommodate five daily departures by commercial-use aircraft less than 126 feet in length (e.g., CRJ-700, B-737-700).

**Airport Traffic Control Tower (ATCT).** The ATCT at the Airport is located immediately east of the ARFF/SRE facility south of Taxiway A between connector taxiways A5 and A6. Access to the ATCT is controlled through a security gate with prior telephone clearance.

**National Weather Service.** A National Weather Service weather station is located south of the ATCT and provides weather information for the area.

**Additional Buildings.** Additional buildings located within the Terminal Area include the privately owned FedEx hangar which is located west of the ARFF building, and the privately owned Sky Adventures Building and Hangar and the privately owned Mesa Airlines maintenance hangar, both located west of the passenger terminal building at the west end of the commercial service aircraft parking apron.

Most of these facilities are shown on the following figure, entitled *EXISTING TERMINAL AREA FACILITIES*.





Figure A3 Existing Terminal Area Facilities

## Evaluation of Existing Terminal Building Conditions – Functional Issues

In November, 2010, the consultant team met with the Airport staff, airlines, rental car companies and the Transportation Security Administration (TSA) to discuss the functioning of the terminal, the utilization of their individual spaces, and what works and does not work in the terminal. Observations were also made of airline check-in processes, and the security screening checkpoint (SSCP). Other members of the consultant team examined the structural and building systems.

The passenger terminal building at the Airport was originally constructed in 1982. The structure is on three levels. The first (ground floor) contains passenger check-in and baggage claim; airline operations and baggage make-up; and rental car counters. Baggage make-up is defined as airline areas for loading checked baggage. The second floor includes non-secure passenger waiting areas, the SSCP; holdrooms for two of the walk-out gates; concessions; and TSA offices. The third floor is used for airport administration and TSA offices.

In 2004 a holdroom expansion was added, which is connected to the second floor of the terminal, but due to the ground elevation change across the terminal site, it is a single level building slightly above apron level. The addition includes two loading bridge equipped gates, holdrooms and restrooms. There are also two other “gates” accessible from the holdroom but are simply exit doors to the apron. With the addition, the gross area of the terminal is approximately 77,500 sf. The following section summarizes the results of these meetings and observations.

### Passenger Wayfinding and Signage

The terminal has a relatively simple, open plan and - in theory - wayfinding should be simple. However, as the airlines and rental car companies noted, there are no signs in the main entrance / check-in lobby to direct people up the stairs/escalator to the second floor and the gates. Although the lobby has a high, open atrium, the SSCP is not visible from the ground floor and signage is necessary. Similarly, although there is a meeter/greeter waiting area at the SSCP exit, there are no signs to direct meeter/greeters to the second floor.

On arrivals there are signs after the SSCP exit toward the escalator to the ground floor for baggage claim and ground transportation. However, it was noted that many passengers are not immediately aware of where baggage claim is when they get to the ground floor, since the claim area is slightly behind them when passengers are facing the exit doors.

Because departing passengers tend to enter the terminal through the vestibules at the end of the



check-in counters, the airline identification signage on the back walls is not readily identifiable. This is not a major wayfinding issue due to the size of the terminal, but should be considered as a possible improvement in the future.

The escalators are old and parts have become difficult to acquire. Although the adjacent stairs are wide and very visible, the floor to floor height of the terminal discourages use by passengers, especially with carry-on bags. The main elevator is small and slow, so is not a viable alternative for most passengers. A second elevator in the northwest corner of the terminal is not visible to passengers and used primarily for deliveries.

The roadway signage for parking and the terminal curb was recently updated during the Walker Field Drive reconstruction project and is generally effective with the exception of signage for rental cars. The intended route for rental car returns is from Horizon Drive is along H Road to Falcon Way, and then into the ready return lot. On approaching the traffic circle at Horizon and H, there is one small sign indicating that the rental returns should continue around the circle and onto H Road. This is less prominent than other signs and is easily missed according to the rental car operators. If passengers follow the main terminal access signs, there are no other signs for rental car return on the access road system until the customer has driven past the terminal and is at the entrance to the rental car / employee lot turn-off. Again, according to the rental car operators, this is confusing for their customers, especially to the significant number of vehicle returns which were rented at other locations and have no familiarity with the Airport.

### Passenger Check-in

All of the check-in counters (ATO counters) are located in a single row. The passenger circulation and queuing area has been reduced in depth from 38 feet in the original terminal design to 27 feet (as measured from the face of the ATO counter to the escalator). This was done to accommodate placing the checked baggage screening equipment behind the ATO counters. The reduced depth affects half of the ATO counters: Denver Express, US Airways, Delta and United. The passenger queue is approximately 19 feet deep with approximately eight feet for cross-circulation. Although these depths are less than what would be recommended, the passenger volumes for these carriers and the configuration of the passenger queues appears to be workable most of the time. In front of the other ATO counters (Allegiant, American, and the currently vacant ATO area #1) the 27-foot depth can be used for passenger queuing without conflicting with a 20-foot deep circulation and seating area.

The number of self-service check-in units (kiosks) is limited at present. Only Delta (four units) and American (one unit) have kiosks. These are located in the check-in queue adjacent to the

ATO counters from which the power and communications is supplied. The trend in the industry is to have more self-service kiosks, even at smaller airports such as Grand Junction Regional Airport, but the implementation of kiosks at a specific airport by each airline is highly variable, as is the primary customer. At present, Delta directs all passengers, including those with checked bags, to the kiosks, whereas American uses its kiosk primarily for boarding passes. It was the consensus of the airlines that with the high percentage of passengers traveling without checked bags, adding kiosks away from the check-in queues would improve service and reduce congestion near the ATO counters. This would require new power and communications access at non-ATO counter locations in the terminal.

As noted, in order to meet TSA requirements for checked baggage screening, the Airport has moved the ATO counters to allow reconfiguration of the baggage belts and provide space for a CT-80 EDS (explosive detection system) unit for each of the four make-up areas. These are considered to be 'mini-inline' systems because cleared bags go directly to the make-up conveyor. The location of the CT-80s minimizes the disruption to the make-up rooms and removed the units from the passenger queue. However, the related equipment (inspection tables, explosives trace detection units, etc) and the manual movement of bags from each ATO position to the CT-80 feed conveyor can cause congestion behind the ATO counters.

The position of the ATO counters and kiosks relative to the clerestory windows results in glare problems at most of the counter positions at various times of the day, especially in the winter when sun angles are low. The glare problem from the front window wall is most severe at the first ATO counter.

### Baggage Claim

Each of the two baggage claim units has 80 linear feet of claim frontage. This size is adequate for the 50 seat regional jets which are used by the majority of airlines at the Airport. Under most circumstances, these would be too small for 150 seat narrow body equipment such as operated by Allegiant. It was reported, however, that even with Allegiant's high load factors, the claim units are of an acceptable size since the percentage of passengers with checked bags is relatively low. The oversized baggage slide is also of adequate size for skis and other large checked items.

The input side of the claim units, however, does not function well. One of the claim units has limited weather protection (only the actual belt is covered), with poor lighting and ramp apron drainage problems. This leads to icing conditions in winter where the airline personnel unload the bag carts. The second claim unit is under cover from the second floor of the terminal, but also has poor lighting. The addition of wind barriers to both claim units has limited the unload frontage to that of a single bag cart at each. When multiple arrivals occur, only one flight can

unload at each claim and baggage delivery has been delayed. Further, the roll-up door on the oversized baggage slide is manually operated and subject to jams. The locking mechanism is poorly designed.

### Passenger Security Screening

The security screening checkpoint (SSCP) is located on the second floor. One lane is in operation most of the time with the second lane opened during high volume periods. At 28 feet wide, the two-lane SSCP is narrower than a typical configuration for its equipment, and newer (wider) baggage X-ray equipment and an advanced imaging technology (AIT) scanner will likely add to congestion within the SSCP. Expansion of the SSCP footprint is limited by the food/beverage kitchen and the exit corridor from the gates.

### Passenger Gates and Holdrooms

There are two gate areas: the original terminal's gates (now numbered #1 and #6); and the expansion's four gates (#2 - 5). Gates #3 and 4 have loading bridges, each of which has a carry-on bag cart lift so that passengers can drop off and retrieve carryon bags from within the loading bridge. This also avoids the time and labor of manually taking bags to and from the ramp. Both loading bridge gates are common use on a first come-first serve basis. If the gate is occupied, other aircraft will park at walk-out positions. However, from a practical standpoint, Gate #2/3 is used by Allegiant, American and US Airways. Gate #4/5 is used for Delta flights, with United as the secondary user. This is due to the location of each airline's gate equipment in the holdrooms and Ground Service Equipment (GSE) on the ramp. United also uses Gate #6 for walk-out flights. Gate #1 is seldom used for scheduled flights. The airlines and Airport would prefer to have loading bridges for all gates from both level of service and passenger safety perspectives.

The holdrooms for all the gates have large, comfortable seating units and couches, which presents a good image in contrast to typical holdrooms with standard rows of seats. However, the number of usable seats is limited. As a result, the holdroom areas can be crowded when multiple departures are operating even though the total area should be adequate for these aircraft. The triangular configurations of the holdrooms in the original part of the terminal are inefficient and the usable area for seating is significantly less than the total area would imply. Similarly, the relatively shallow depth (less than 20 feet) of the holdrooms in the expansion, limit the flexibility to provide different seating layouts or higher seating densities.

## Concessions

There are three main concession locations in the terminal – a Subway restaurant prior to the passenger screening checkpoint and a news/gift shop and another Subway restaurant after the screening checkpoint. Both Subway restaurants have liquor licenses, but Colorado state law prohibits alcoholic beverages outside the restaurant seating areas. This has led to overcrowding in the Subway restaurant in the secured area.

Concession support space is limited. There is no remote storage for the news/gift shop. The food/beverage support is primarily the adjacent kitchen and prep areas. A small storage room for the food/beverage has been located within the ATO #2 office/operations area.

The terminal has a small loading dock and receiving area which is accessed through the rental car ready/return lot. However, there are no adjacent storage areas for any of the concessions. All concessions supply and waste removal must go through public areas.

## Airline Operations and Baggage Handling

The terminal is configured with four individual operational/baggage make-up modules, each associated with a bank of six ATO counter positions; referred to as ATOs #1 through #4. At the time of the Study's inventory, the usage of the four modules was as follows:

- **ATO #1.** Vacant. The Airport is in the process of renovating this area (formally occupied by US Airways).
- **ATO #2.** American (AA) and Allegiant (G4). AA uses most of the offices and operations spaces. G4 uses one office. The two carriers share the bag make-up area.
- **ATO #3.** Skywest which operates flights for both Delta (DL) and United (UA).
- **ATO #4.** Denver Express (DX), US Airways (US) and Skywest. Skywest leases one office in this area (for their station manager) and two of the ATO counter positions which are currently not in use. It also uses its half of the bag make-up area primarily for ground service equipment maintenance. Due to the unusual operations of DX, they do not use the bag make-up area.

Each of the ATO modules has a single baggage make-up belt which can typically stage two bag carts parallel to the belt. In most cases the configuration of the operations/office spaces allows for a second row of bag carts to be staged if necessary. The baggage make-up areas have dual roll-up doors which allow both rows of carts to be pulled straight out by tugs, but empty carts



typically have to be positioned by hand. Most of the airlines also use the make-up area for GSE storage at night.

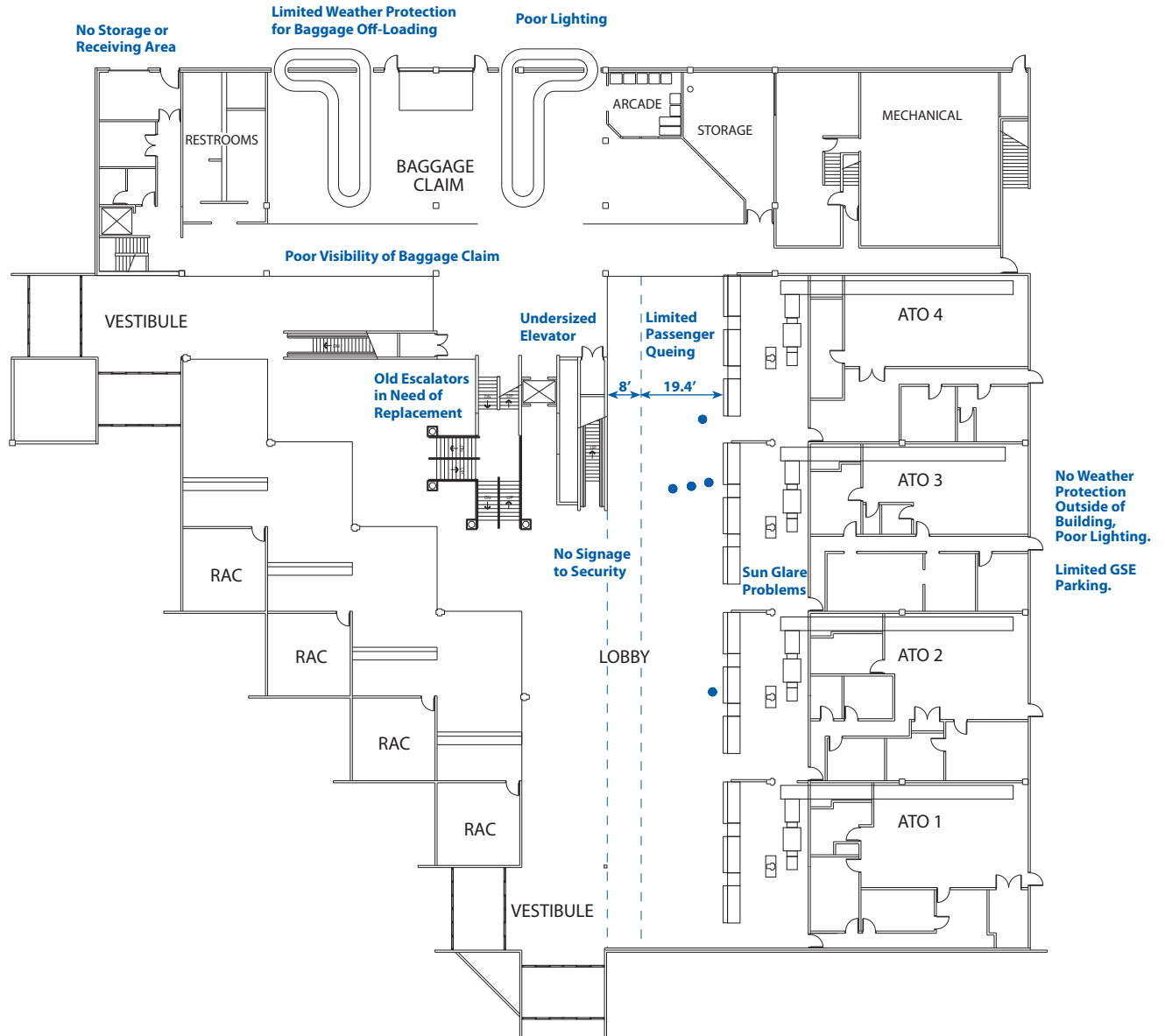
Each of the ATO modules has a different configuration of offices for ATO support, operations and break areas. The presence of personnel lockers and other types of storage in the baggage make-up area indicates that operations areas may be undersized for current airline operations. The area located outside of the ATO modules is used for GSE storage and occasionally overflow baggage make-up. The area is not under cover. Lighting is reported as poor both adjacent to the operations area and in the other GSE parking areas further from the building. There are no electric power outlets for engine block heaters or future electric GSE vehicles. The total amount of GSE parking was considered undersized by most of the airlines.

### Rental Cars

There are six rental car (RAC) brands operating on airport. Enterprise and Hertz have individual counters. Avis/Budget and Alamo/National share counters and offices due to common corporate ownership. The RAC companies report that the counters are adequately sized for their level of activity, but the offices may be oversized. The location of the counters is visible to passengers from the bottom of the escalator and passenger queuing appears to be adequate without interfering with terminal circulation.

The RAC ready car and return (R/R) lot is conveniently located adjacent to the terminal and separate from the public parking area. As noted under wayfinding and signage, roadway signage for RAC returns can be confusing. The exit route from the R/R lot not clear, and exiting signage is poor.

A detailed layout of the terminal building floor plans, with notes related to functionality, are presented in the following illustrations, *TERMINAL LEVEL 1* and *TERMINAL LEVEL 2*.



● - Passenger Check-In Kiosk



Figure A4 Terminal Level 1

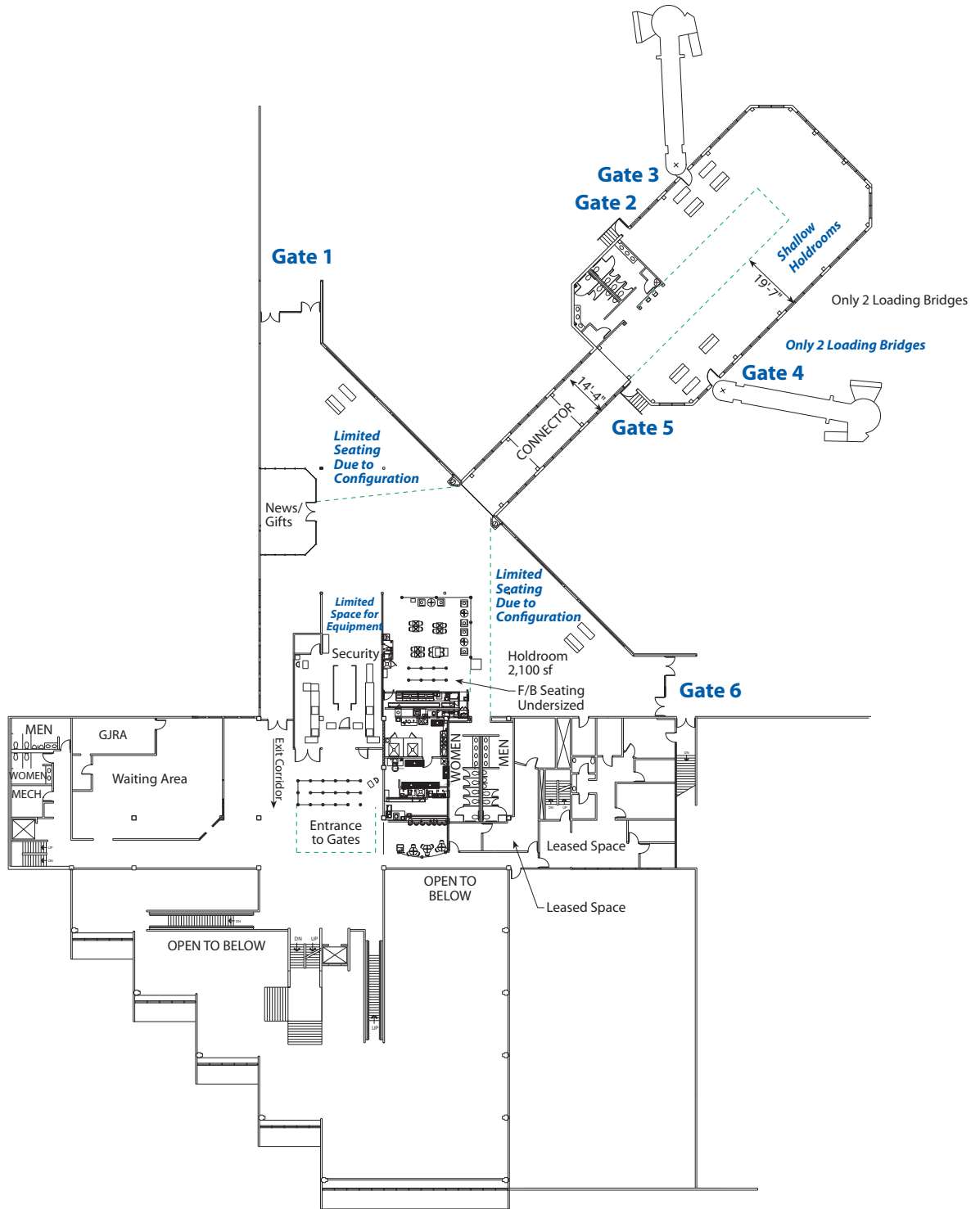


Figure A5 Terminal Level 2

## Inventory of Ground Access Facilities and Services

This section presents an inventory of existing ground access facilities, including roadway access, airport parking facilities, bus services, door-to-door vans, taxi operations, shuttle buses, and pedestrian access.

### Automobile Transportation

As can be seen in the following illustration entitled *INVENTORY OF GROUND ACCESS FACILITIES*, Grand Junction Regional Airport is accessed via Horizon Drive from the south or H Road from the west. Both roads connect to Walker Field Drive, which is a terminal access loop roadway. Horizon Drive becomes Walker Field Drive at the airport boundary and continues in a one-way counterclockwise flow between the terminal and airport parking before continuing south and reconnecting with H Road.

The entrance portion of Walker Field Drive extends north from the large round-a-bout at the airport entrance and is operated as a two lane road, while the portion of Walker Field Drive in front of the terminal building widens to four lanes. The inside lane adjacent to the terminal curb is designated for passenger loading/unloading. There is also a designated shuttle bus parking area off Walker Filed Drive immediately northwest of the terminal building. Walker Field Drive continues past the terminal building where it merges with Falcon Way with a four-way round-a-bout at the intersection of the two roads. Rental car facilities are accessed via Falcon Way with rental car maintenance facilities located northwest of the round-a-bout and rental car pickup and return parking located northeast of the round-a-bout.

Additional commercial and general aviation facilities located northwest of the Terminal Area are accessed either via Falcon Way or Landing View Lane, which extends west from Falcon Way. The majority of general aviation and air cargo facilities is located southeast of the Terminal Area and is accessed via Eagle Drive, which extends east from the round-a-bout at the intersection of Horizon Drive, Walker Field Drive, and H Road. Additional access roads in the general aviation and air cargo areas include Blue Angel Lane, Aviators Way, Heritage Way, and Navigators Way. The entire airport access road and vehicle parking system was reconstructed in 2007 and 2008 with road realignments to improve access and traffic flow. Roads that were realigned or reconstructed include Walker Field Drive, Falcon Way, Eagle Drive, and Aviators Way. The existing automobile access to the Airport is considered adequate.



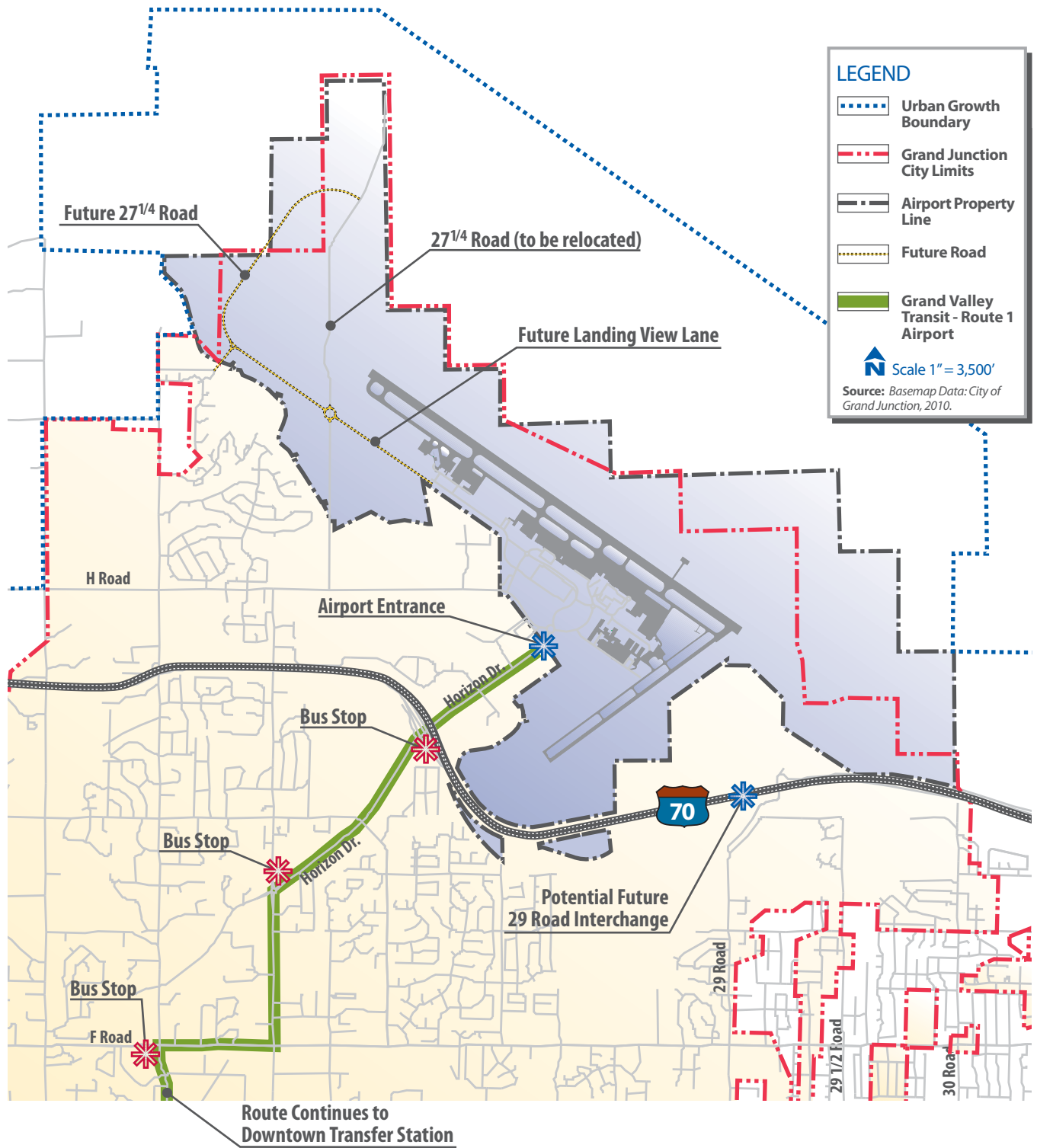


Figure A6 Inventory of Ground Access Facilities and Services

## Public and Private Bus/Shuttle/Van Transportation

Public bus service provides an alternative to private automobile travel to the Airport. Grand Valley Transit currently serves the Airport via Route 1, Airport, with hourly service originating Downtown from 5:15 a.m. to 6:15 p.m. The route connects the Airport and the Downtown Transfer Station with stops along 12<sup>th</sup> Street and Horizon Drive servicing St. Mary's Hospital, and other local amenities. Patrons can transfer to other transit routes at the Downtown Transfer Station. Hotel shuttles, taxi service, and neighboring communities provide transportation to and from the airport. Eight hotels in the immediate proximity to the Airport and one in the downtown provide complimentary shuttle service upon request. There are nine taxi services, of which four serve the Grand Valley. The other five serve the region ranging from Aspen to Telluride. The Airport bus stop is conveniently located directly northwest of the passenger terminal. This is the only bus stop on Walker Field Drive. It is well equipped with lighting, a wide sidewalk for gathering, outdoor seating on curbside benches, and a shelter to provide shade and protection during inclement weather. Directional traffic flow past the terminal also allows patrons to wait inside the terminal building, observe the bus approaching, and time their exit to meet the bus at the stop. It would be beneficial to post current bus schedules inside the terminal building as well as at the stop.

## Pedestrian Circulation and Sidewalk/Trail Connections

The Airport has an efficient, convenient, pleasant, safe, well constructed, and well maintained pedestrian circulation system serving both patrons and employees. Well defined sidewalks and crosswalks connect the passenger terminal with curbside loading/unloading, parking, rental car lots, the bus stop, plazas and gathering spaces, and other airport facilities. Walking distance between the terminal and public parking varies from 100 feet to 800 feet (1 to 4.5 minutes based on 2 mph). Walking distance between the terminal and rental car parking varies from 125 feet to 450 feet (1 to 2.5 minutes). Tree lined sidewalks bordering Walker Field Drive and Horizon Drive connect the airport campus to local businesses, public/private amenities, and the Urban Trails Network. Some of the routes included in the Urban Trails Network are illustrated in the following figure entitled *URBAN TRAILS*. The City of Grand Junction's Comprehensive Plan further identifies new components of the trail system, including a regional trail, canal trails, and trails along drainageways. These concepts were established to take advantage of existing drainages, greenways, and a few potential canal segments to link Grand Junction to the Colorado River regional trail system. Two general trail corridors identified in the Comprehensive Plan begin south of the Airport at H Road and Horizon Drive. With the exception of the bike route, the trails crossing airport property are not accessible to the public due to airport perimeter fencing.

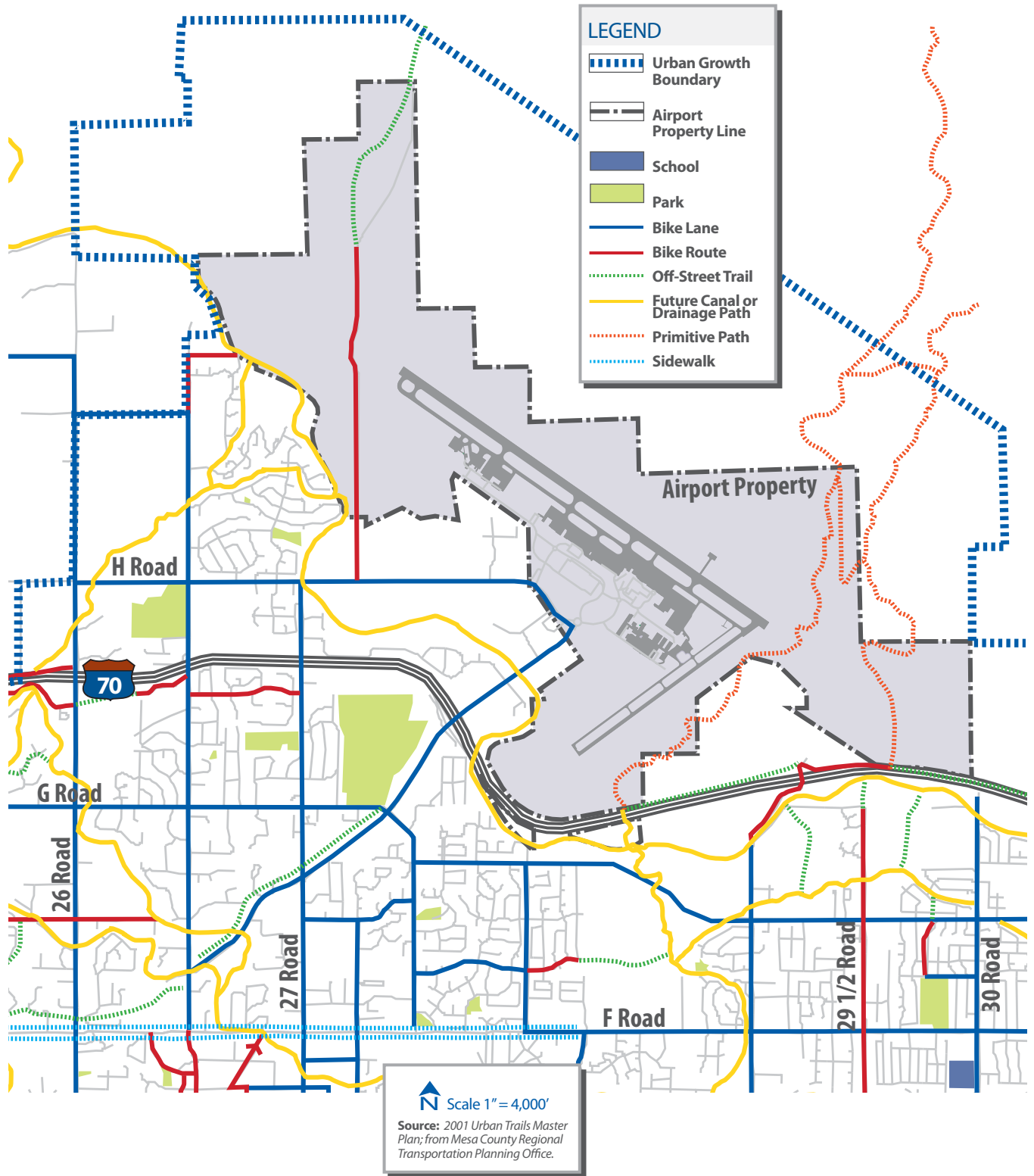


Figure A7 Urban Trails

Future campus development should strive to maintain and improve this system. However, it is important that future trails do not cross aeronautical use areas of airport property. Elements to include/consider in future development are; safety, lighting, direct connections, appropriate construction materials and methods, maintenance, resting areas/points of interest, and landscape enhancements. Bicycle facilities serving employees, visitors and the community could be considered in future development including bike racks, multi-use paths, designated bike lanes, or shared roadway shoulders.

### Grand Valley Circulation Plan

As part of the Comprehensive Plan, the City of Grand Junction adopted the Grand Valley Circulation Plan, which identifies the functional classifications of the transportation system within the Grand Junction/Mesa County Urban Area. As shown in the following figure entitled *GRAND VALLEY CIRCULATION PLAN*, within the airport terminal area, Horizon Drive is classified as a minor arterial, H Road is classified as a principal arterial, and 12<sup>th</sup> Street/27 Road southwest of the Airport is classified as a major collector. The Grand Valley Circulation Plan also identifies potential future roads of various types and functional classifications. Potential future roads in the vicinity of the Airport include a new interchange with Interstate 70 at 29 Road, a proposed Principal Arterial connecting the Clifton Interchange with the 29 Road Interchange and a proposed Principal Arterial connection between the 29 Road Interchange and H Road running across airport property and under Runway 4/22.



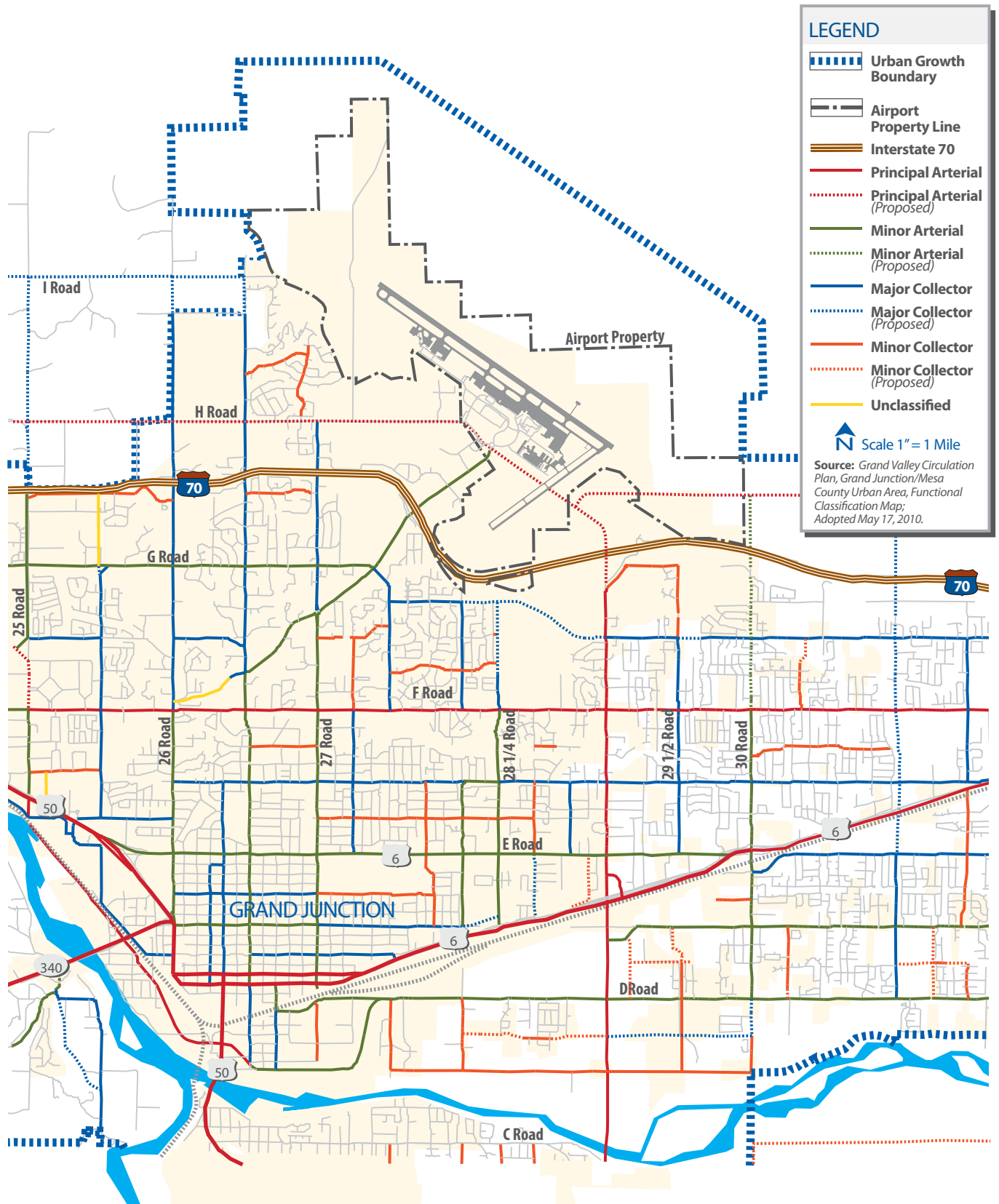


Figure A8 Grand Valley Circulation Plan

## Airport Environs

An inventory of the land uses, zoning patterns, and the various land use planning and control documents used to guide development of property surrounding the Airport is an important element in the terminal area planning process. Furthermore, some of the zoning codes and land use plans in the vicinity of the Airport have been updated since the *2009 Airport Master Plan Update* was completed making it important to complete a full inventory of this information.

The City and County land use and development codes define specific standards and criteria for evaluating land use compatibility when new development occurs either at the airport or in the surrounding area. Developing a successful plan for the terminal area that meets these standards and is acceptable to the community will require a thorough understanding of the setting within which the airport is located and the local regulations that govern development.

Grand Junction Regional Airport is located four miles northeast of downtown Grand Junction. The following paragraphs and the associated maps provide a generalized description of the existing zoning and future land use patterns for the areas surrounding the Airport.

### Existing Zoning

The City of Grand Junction and Mesa County both have zoning and development codes that help guide development. The City's Zoning and Development Code (Title 21 of the *Grand Junction Municipal Code*), adopted in April 2010, pertains to the area within its corporate limits. The GJMC is intended to enable the City to uniformly and consistently evaluate, improve and approve, as appropriate, development, changes to existing uses, future uses and activities and to promote the health, safety and general welfare of the citizens and residents of the City. The County's *Land Development Code* pertains to the unincorporated area surrounding the Airport and is intended to preserve and improve the public health, safety and general welfare of the citizens and businesses of Mesa County.

The Airport includes property within the jurisdiction of both the City of Grand Junction and Mesa County. Airport property in the City's jurisdiction is zoned Public Airport District (PAD) which is a nonresidential zoning district. The allowed uses and dimensional requirements for lands located within the PAD zone district are defined in Ordinance No. 3679, which was approved by the Grand Junction City Council in October of 2004. Areas to the south and west of the Airport consist of various zoning districts including both residential and nonresidential zoning districts. Some of these districts include Residential Single-Family for low density uses

(R-1), Residential Single-Family for medium-low density uses (R-2<sup>1</sup> and R-4<sup>2</sup>), Residential Multifamily (R-5), Light Commercial (C-1), Industrial/Office Park (I-O), and Planned Development (PD).

Chapter 7 of the Zoning and Development Code includes a special regulation entitled Airport Environs Overlay Zoning District (AE) intended to protect public health, safety and welfare by regulating development and land use within noise sensitive areas and airport hazard areas. The AE district is also intended to ensure compatibility between the Airport and surrounding land uses and protect the Airport from incompatible encroachment. The AE district includes four subdistricts, which are Subdistrict A (Airport Area of Influence), Subdistrict B (Airport Noise Zone), Subdistrict C (Airport Critical Zone), and Subdistrict D (Airport Clear Zone). The AE district also includes an airport environs land use compatibility matrix, aviation easement requirement, recorded notice of critical and noise zone subdistricts, and height limitations based on 14 CFR Part 77, *Objects Affecting Navigable Airspace*.

Areas to the north and east of the Airport are outside of the existing corporate city limit boundary and are subject to the provisions of the *2000 Mesa County Land Development Code*. Based on the *Consolidated Zoning District Map of Mesa County, Colorado*, the majority of the land north and east of the Airport is owned by the BLM and is zoned by Mesa County as Agricultural, Forestry, Transitional District (AFT), which is a Rural Zoning District. The AFT district is primarily intended to accommodate agricultural operations and very low-density single-family residential development. The County's *Land Development Code* also includes an Airport Environs Overlay District (AE) with the identical purpose and subdistrict zones as the City's AE. Existing zoning is depicted in the following figure entitled *GENERALIZED EXISTING ZONING*.

### Existing Land Use

Typically, existing land use patterns follow relatively closely to what is portrayed on the local zoning map, with the exception of those areas that are currently vacant and for which future development is contemplated under the existing zoning. When viewing the aerial photograph for Grand Junction Regional Airport, land use patterns do indeed resemble what is illustrated in the existing zoning map for the City of Grand Junction. One area of note is a collection of large vacant parcels located immediately southeast of the general aviation runway, which has been approved as a Planned Development.

<sup>1</sup> Where adequate public services and facilities exist.

<sup>2</sup> Where adequate public services and facilities are available.

## Future Land Use

In February 2010, the City of Grand Junction adopted a major update of the *Grand Junction Comprehensive Plan*. This document establishes the community's vision for the future and defines a strategy to achieve that vision. The Plan was designed, through an intergovernmental agreement, to be applied to both the City of Grand Junction and a portion of Mesa County surrounding the City.

The Comprehensive Plan includes a Future Land Use Map showing recommended land uses surrounding the Airport. Recommended land uses south and west of the Airport include Commercial, Commercial Industrial, Residential (mostly medium and medium low densities, with some low density residential), Rural/Agricultural, Parks and Community Facilities. Recommended land uses north and east of the Airport include Commercial, Commercial Industrial, Rural/Agriculture, and Future Industrial Reserve. The future land use pattern defined in the Comprehensive Plan is particularly important where future Planned Development zoning might be contemplated since the City's Zoning and Development Code specifies that only uses consistent with the Comprehensive Plan will be allowed in the PD zone.

Major changes from the previous Land Use Map included in the 1996 Growth Plan for the city include the addition of the Future Industrial Reserve adjacent to airport property to the north and east and the change in the land use designation southeast of the Airport along Interstate 70. Much of this land was designated for community facilities and is now designated as either Commercial or Commercial/Industrial.

The Future Land Use Plan reflects the potential acquisition of BLM land by the Airport to the north and west as identified in the *2009 Airport Master Plan Update*. Further, the *2009 Airport Master Plan Update* was used in the Comprehensive Plan as a cooperative planning agreement. The future Land Use Plan is shown in the following figure entitled *GENERALIZED FUTURE LAND USE*.

## Airport Environs Overlay Zoning District

As stated previously, the City of Grand Junction has established an Airport Environs Overlay Zoning District (AE Overlay) which includes Subdistrict A Airport Area of Influence, Subdistrict B Noise Zone, Subdistrict C Critical Zone and Subdistrict D Clear Zone. The AE Overlay establishes standards and requirements for properties over and above those set by the underlying zone districts. New development within the AE Overlay zone is also required to convey an aviation easement to the Airport Authority, the terms and conditions of which must be approved by the Airport Authority and the City's Planning Director. The Area of Influence is described as an area surrounding the Airport impacted or influenced by proximity of the Airport



either by aircraft overflight, noise and/or vibrations. The Noise Zone includes the area within the 65 Ldn to 70 Ldn noise-exposure areas as shown in the Grand Junction Regional Airport Master Plan (the noise zone is currently shown on the Mesa County and City of Grand Junction zoning maps). The Critical Zone is a rectangular-shaped zone located directly off the end of each runway's primary surface (or 200 feet from the end of pavement) which is critical to aircraft operations (i.e. more apt to have accidents within it because of the takeoff and landing mode in that particular area). The Clear Zone is a trapezoidal-shaped zone also beginning 200 feet from the end of the pavement, which is to remain clear of all above-ground obstructions or construction. The Clear Zone dimensions match the dimension of the Runway Protection Zone (RPZ) as shown on the Airport Layout Plan (ALP). The boundaries of the Airport Environs Overlay Zoning District and its subdistricts shall be reviewed whenever the Grand Junction Regional Airport Authority updates and/or amends the noise contour maps and/or Master Plan. The Grand Junction Regional Airport Authority shall notify the City of any such update and/or amendment and provide a copy of it to the City. These zones are shown on the following figure entitled *AIRPORT ENVIRONS OVERLAY ZONING DISTRICT*.

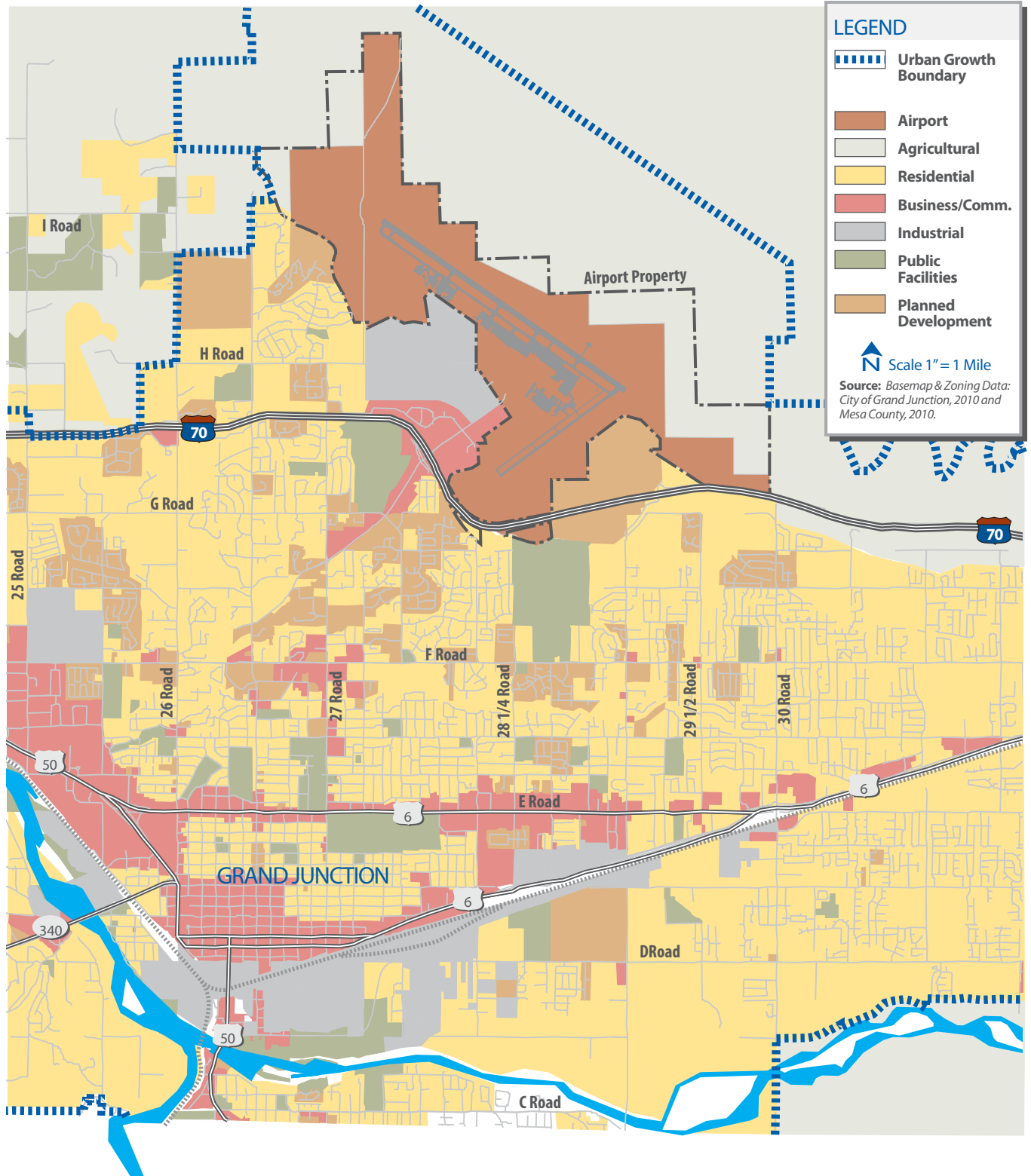


Figure A9 Generalized Existing Zoning

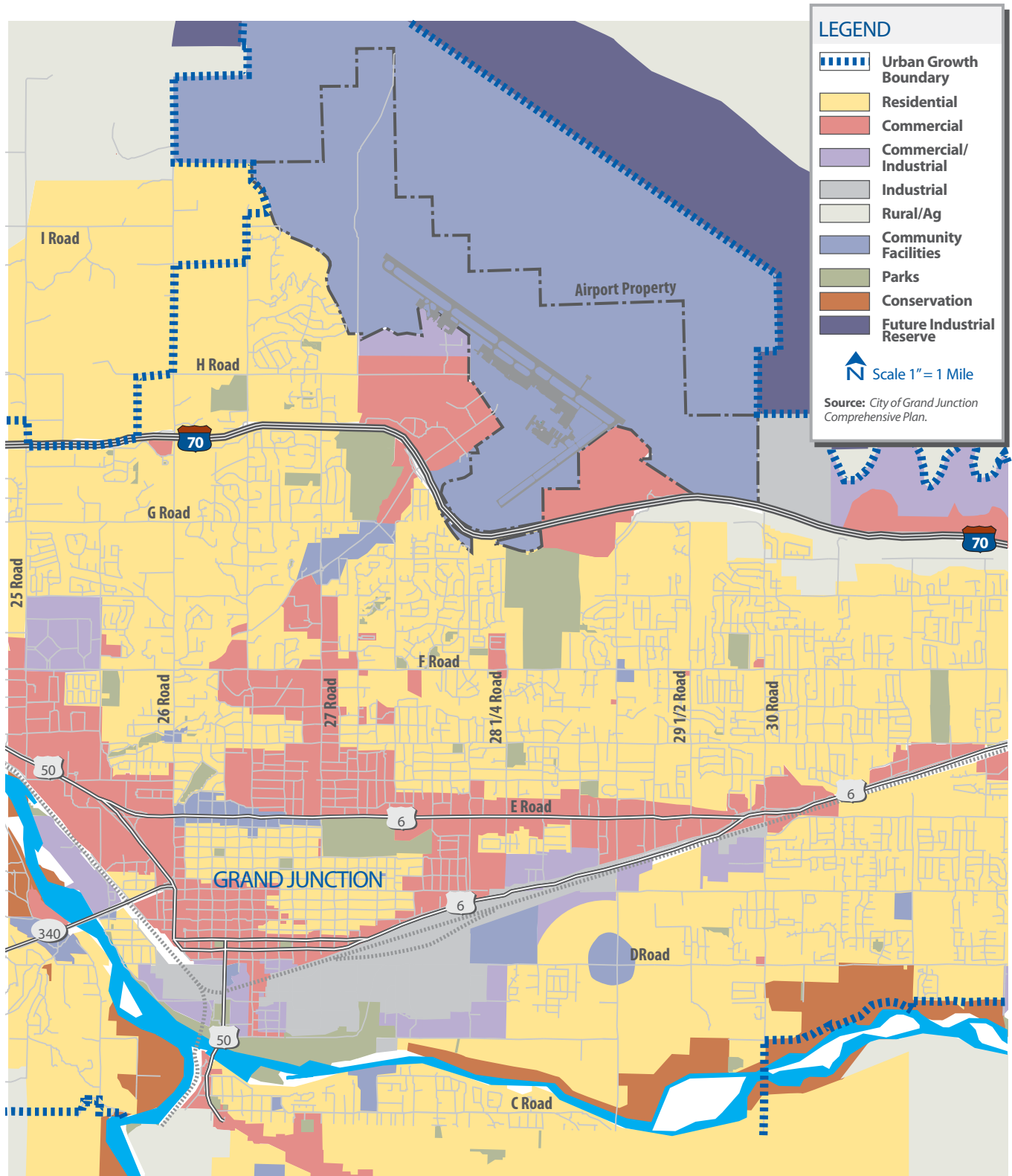


Figure A10 Generalized Future Land Use

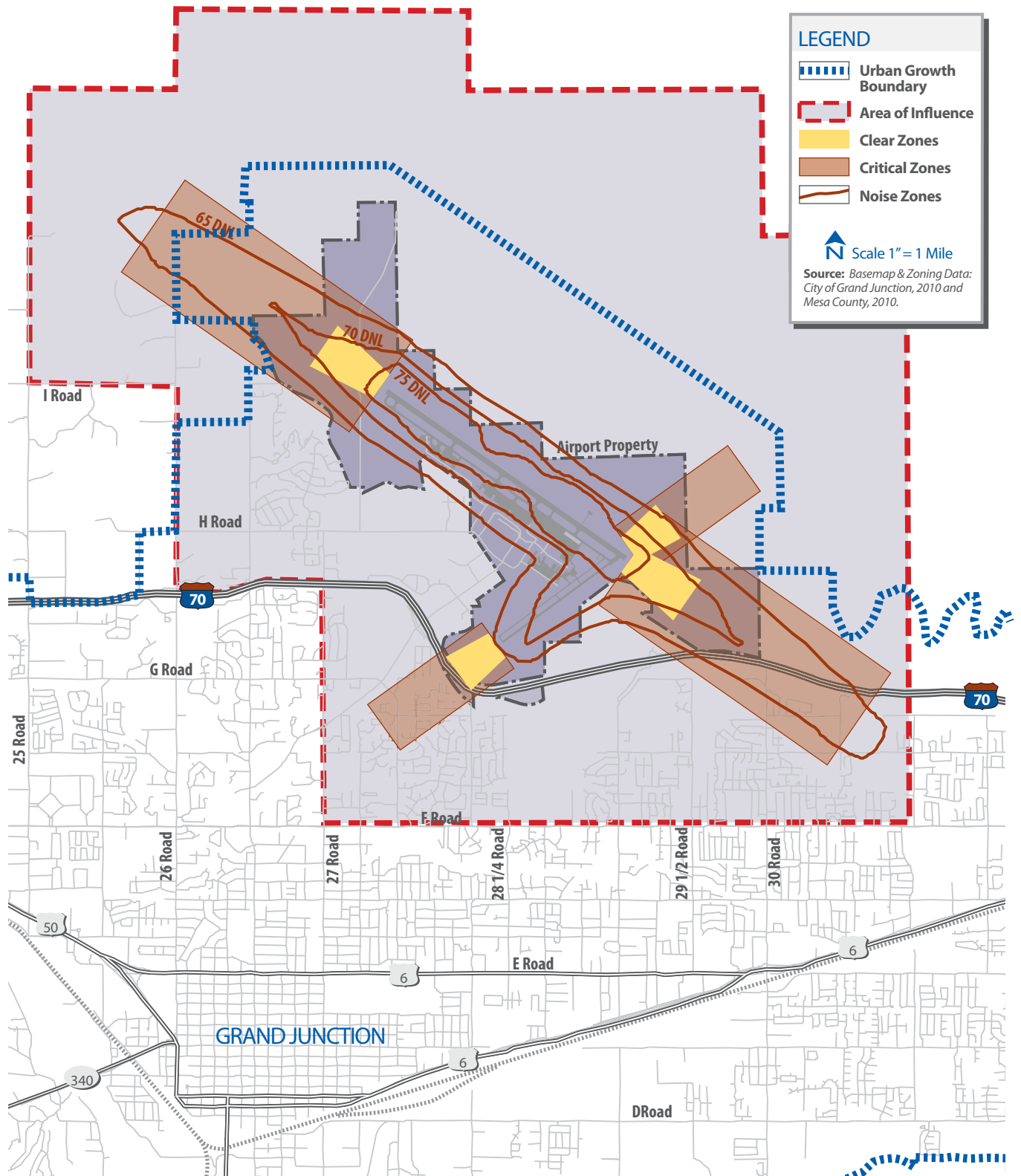


Figure A11 Airport Environs Overlay Zoning District