



GRAND COUNTY GENERAL PLAN 2030

"Adventurous Small Town Spirit"

SECTION EIGHT: TRANSPORTATION

1. OVERVIEW

A transportation system involves means of moving people and products around. This includes road, rail, air, water and active transportation (pedestrian, cycling, etc.). On a local scale, the transportation system should be safe, effective, efficient and equitable for its citizens. A transportation system supports the economy and contributes to quality of life in both the social and environmental aspects.

Equitable transportation supports sustainability and mixed use goals ensuring a resilient economy by making transportation safe, affordable, and attainable for all Grand County residents and employees.

Goal:

Plan for emerging and unforeseen uses and technologies that accommodate new transportation methods while reducing conflicts between modes.

Policies:

- i. Develop preliminary standards for known emerging transportation modes, including e-bikes, segues, electric scooters, and personal electric vehicles;
- ii. Consider emerging technologies when planning travel routes for roads and pathways; and
- iii. Identify within the Transportation Master Plan, opportunities for personalized aircraft.

Goal:

Promote a land use pattern that will enhance the safety, efficiency, effectiveness and equitability of the transportation system through a robust and responsive board. The Board guides the strategic objectives of transportation and other public works projects (See Schedules 16.37, 38 and 39 for Growth Areas, Road Classifications and Pedestrian Facilities).

Policies:

- i. After adoption of the Transportation Master Plan (2022) develop levels of service policies, and road classifications;
- ii. Evaluate the impacts of the Book Cliff's Highway on County infrastructure including habitat, drainage and equity and coordinate with UDOT;
- iii. Develop a strategic decision making path for projects, policies, capital improvements, and operation and maintenance standards through the Board and agencies;
- iv. Coordinate land use and transportation planning and consider the costs of transportation infrastructure in development decisions;
- v. Aim for an appropriate mix of housing, employment and transportation land use that enhances the efficiency, effectiveness and equitability of the transportation system;
- vi. Encourage a compact form to create the critical mass necessary for alternative forms of transportation and to reduce the need for extensions to the transportation system;
- vii. Work with appropriate senior levels of government departments to manage access control along urban connectors to improve safety for both urban traffic and highway bound traffic;



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- viii. Integrate alternative forms of transportation with private vehicle use into new neighborhood designs and site plans;
- ix. Wherever the need for new transportation corridors or river crossings are demonstrated, carefully consider the timing and cost through appropriate studies in coordination with other levels of government; and
- x. Ensure good connections to the regional transportation network to attract industrial and commercial development that would be supportive of the rail system.

2. HIGHWAY AND TRUCK ROUTES

Grand County has a state and interstate highway system with Highway 191 and I-70. The County is known as the "Adventurous Small Town Spirit" because of size and natural lands proximity. Several "urban connectors" connect municipal roads to state highways. These include Spanish Valley Drive, Kane Creek, Mill Creek, and Sand Hills.

Access management control is an important aspect of urban connectors because it helps ensure safety and efficiency. Access management control is the practice of ensuring transportation safety, speed and capacity while allowing access to development. It could involve limiting intersections and driveways or using medians to control turning.

Heavy traffic in residential and institutional areas should be prevented or speed and impact managed. This can be mitigated through the Title 10 of the County Code, and traffic control and calming features like bulb-outs, medians, traffic circles, and raised pedestrian speed tables.

Goal:

Heavy traffic in residential and institutional areas should be mitigated.

Policies:

- i. Ensure heavy traffic in residential and institutional areas is mitigated through municipal codes and design features such as the use of median strips;
- ii. Mitigate impacts of truck traffic parking and operations on residential and pedestrian-heavy areas; and
- iii. Ensure access management control along urban highway connectors to improve safety for both urban traffic and highway bound traffic.

2. ARTERIAL STREET NETWORK

Currently, the County's arterial street network is based on a hierarchy of arterials, collectors and local streets. The objective of the street network is to accommodate all traffic movements within the County and traffic utilizing major access and through routes. The arterial street network was defined in the 2008 Spanish Valley Master Plan. An updated Transportation Master Plan is underway (2022). The network was developed based on a target year population of 9974.

The study also revealed that without transportation network improvements, transport volumes are



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expected to cause unacceptable intersection delays and congestion along key corridors especially Spanish Valley Drive.

Other conclusions follow, and all improvements will be reconsidered in the Transportation Master Plan due June 2022:

Policies:

- i. Geometric intersection improvements and/or signalization at the intersections of Mill Creek Drive/Sand Flats Road and Spanish Valley Drive/Spanish Trail Road;
- ii. Widen Spanish Trail Road to a 4-5 lane section but consider "gateway" into Spanish Valley with a "boulevard" style with landscaped medians and side treatments, bike paths, and meandering sidewalks in conjunction with strict access control and protected turn bays at major intersections;
- iii. Work with UDOT to extend the five-lane section of US-191 south from Spanish Trail Road to the County line, or beyond if development spills over into San Juan County, with additional turning lanes at proposed major intersections;
- iv. Consider a complete streets service road design along US-191;
- v. Improve Spanish Valley Drive to a 3-4 lane cross section from Mill Creek Drive to the County line;
- vi. Existing and proposed future developments in southern Spanish Valley and San Juan County, both the Murphy Lane to Spanish Valley Drive and the Spanish Valley Drive to US-191 at Beeman Road connections should be improved; and
- vii. East-west connections should include new northwest alignments from Spanish Valley Drive to US-191 via Starbuck Lane, and Spanish Valley Drive to US-191 via a western extension of Kerby Lane.

Goal:

Facilitate traffic movements within the County but use major access and through routes within a predictable capital financing plan, and definitive project timetables (reference Updated Master Plan 2022).

Policies:

- i. Continue to develop and update, the hierarchical street network to facilitate orderly and safe movement of traffic through and within the County;
- ii. Work with senior levels of government to align the regional and local transportation network;
- iii. Update the County's Transportation Plan:
 - a. Review arterial/collector system with special attention to reviewing Spanish Valley Drive's role in the system; and
 - b. Develop design standards for all street networks;
- iv. Ensure street layout of future development areas are integrated with existing County street



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networks;

- v. Explore the introduction of the "fused grid" concept during the development of concept plans, while minimizing cul-de-sacs and dead end roads;
- vi. Inventory and update all private road systems including maintenance agreements, condition assessments and long term viability;
- vii. Avoid designating private roads to serve more than one subdivided parcel;
- viii. Update the development standards with specific performance criteria through engineering assessments, and cross section specifications that include multi-modal options and complete streets;
- ix. Continue to forecast growth scenarios and report on short, medium and long term capital investments; and
- x. Ensure ongoing monitoring of traffic volumes and operations to maintain functionality of key roadways.

3. PUBLIC TRANSIT

Public transit can enhance the efficiency of a transportation system reducing reliability on single occupant vehicles. Public transit reduces air emissions contributing to a more sustainable County, and plays an important role in the economy by moving people between home, work and other service needs.

The County should strategically focus on areas where there is potential to attract new ridership to public transit, namely, to, from, and within the Downtown, along major arterials, in and around hub areas, and to and from major areas of employment, education, health care and shopping would be beneficial.

Public transit is important for providing people with transportation choices and fulfills social equity goals by increasing mobility choice especially for disadvantaged people such as the physically challenged, elderly, youth and students and low-income groups.

Goal:

The County, working with regional partners, promotes public transit and shuttle systems as a sustainable form of mobility choice.

Policies:

- i. Explore federal and regional funding for a public transit and shuttle system, and prescribe funding models; and
- ii. Develop integrated transit options through state hot spot funding that capitalizes common transit routes.

4. ACTIVE TRANSPORTATION



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The Grand County Active Transportation Trails Division and the Grand County Trails Mix Advisory Committee - follows the direction of the 2011 Non-Motorized Trails Master Plan for the development and maintenance of trails.

The mission of Trails Mix is to preserve and develop the individual trails into a non-motorized, integrated trail network that provides convenient, enjoyable recreation and transportation experiences for all trail users throughout Grand County.

Trail Mix serves as a blueprint for strategic integrated trail systems, current maintenance and future development and follows a number of guiding principles (See Schedules 16.10-19 and the 2022 Transportation Master Plan and to Schedule 16.39):

- 1: Trails are important to the economy and play an important role in the responsible use of natural resources;
- 2: Trails are important to livable neighborhoods and a vibrant business community;
- 3: Trails are viewed as part of a total, integrated transportation system;
- 4: Trails are properly designed to achieve a successful trail system;
- 5: The entire trail system must be properly maintained to keep it viable.

Active transportation is any form of human powered transportation, including walking, cycling, and inline skating, or skateboarding. Several important values in active transportation include:

- Health and safety;
- Environmental impacts; and
- Neighborhood's quality of life.

With between 15 and 20% of Utah adults and over 15% country wide (Center for Disease Control January 2020) physically inactive, sedentary living is a significant issue today. Transportation options have a dramatic impact on the environment. The County has made steps towards achieving a healthier lifestyle with the development back and front country trail networks.

Air quality degradation increases lung inflammation, especially particulate matter less than 2.5 microns. Transportation is the source of 10% of PM 2.5 (Environmental Protection – EPA - <https://gispub.epa.gov/neireport/2014/>). The County can improve air quality through managed:

- Automobile use;
- Pattern and intensity of land use;
- Access to transit; and
- Improving the pedestrian/cycling environment.

The County can try to reduce greenhouse gasses by facilitating mobility choice and using land wisely. Active transportation, embedded within development decisions integrates climate resiliency and broadens adaptation choices; improves air quality and physical health in the County, neighborhood and individuals.

Goal:

Ensure trail network design and maintenance achieves connected and integrated active transportation choice for both recreational and mobility uses.



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Policies:

- i. Develop staffing resource plans for long-range project planning and management;
- ii. Incorporate work plans that identify operation and maintenance projects including private and public partners;
- iii. Monitor and report on air quality and noise impacts on a quarterly basis;
- iv. Ensure street layouts combine the benefits of the grid and curvilinear system to create a pedestrian friendly environment in new and existing neighborhoods;
- v. Support and employ traffic calming principles such as crosswalks in the design of neighborhood streets to ensure that interior street systems are designed to slow traffic down, reduce the risk of traffic accidents and promote pedestrian safety;
- vi. Support integrated and connected pedestrian street layouts by:
 - a. Incorporating "healthy" neighborhood designs that include walking, biking, and rollerblading that improve health and sociability while reducing negative impacts on the natural environment;
 - b. Discouraging the use of multiple lanes in new neighborhoods except where they are designed according to CPTED (Crime Prevention Through Environmental Design) principles and are cost effective to maintain; and
 - c. Providing sidewalks, dark skies compliant lighting, noise mitigation, safety measures and street maintenance in existing communities where pedestrian activity and demand for public transit is highest.
- vii. Encourage walking by including the pedestrian environment as a design element in all land uses and plans;
- viii. Provide complete street design and construction strategies as outlined in Appendix 17.8 and 7 and reference <https://www.transportation.gov/mission/health/complete-streets-policies> and consider reporting relevant indicators – see <https://www.transportation.gov/mission/health/indicator-profiles>;
- ix. Ensure active transportation modes are implemented into future development and design through the construction of green space, pathways, sidewalks and barrier-free walkways;
- x. Develop a policy to maintain non-designated historic use trails, particularly non-motorized trails, and access through private parcels during the master planning process for subdivision and redevelopment process; and
- xi. Encourage neighborhood designs that support a range of transportation choices (i.e. appropriate densities, mixed land uses that encourage alternative transportation modes).

Goal:

Increase the proportion of people using alternative transportation modes.

Policies:

- i. Ensure the provision of a safe, direct, continuous and barrier-free pedestrian environment for all existing, expanded and new developments regardless of the type of land use or intensity



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of development;

- ii. Facilitate access to active transportation for seniors and the mobility impaired using measures including curb cuts, audible traffic signals, and truncated domes.; and
- iii. Provide safe convenient pedestrian routes to shuttles and public transit.

5. WALKWAYS

Goal:

Ensure safe walkways and pathways are well integrated and linked within the street network to accommodate and promote non-vehicular modes of transportation to community amenities within the neighborhood through the use of walkway linkages. Safe walkways provide alternative transportation modes such as biking, walking and rollerblading.

Policies:

- i. Employ CPTED in the design of new walkways, and where applicable, incorporate into existing walkways to minimize blind spots, provide clear sightlines, sufficient lighting and promote natural surveillance;
- ii. Collaborate with Trail Mix to improve walkways safety using CPTED principles; and
- iii. Promote urban and rural design principles that encourage walkability between adjacent neighborhoods and the existing trail systems.

Goal:

Encourage and support the establishment of a safe, convenient and pleasant system of paths and routes to accommodate active transportation and referencing the Non-motorized Trails Plan – see Schedules 16.10 - 19.

Policies:

- i. Ensure the use of traffic calming safety measures such as crosswalks implemented throughout the County particularly in areas of high traffic volume;
- ii. Work with partners that include public lands, users, and other jurisdictions, to develop design and implementation strategies that are integrated with all land use actions;
- iii. Integrate major trail systems within communities for cyclists, rollerblading and walking and support the development and use of multipurpose trails;
- iv. Collaborate with other levels of government and community organizations, which are working toward promoting alternative transportation modes;
- v. Seek and utilize funding sources such as sustainable communities grants to implement initiatives and projects;
- vi. Develop sound and sustainable maintenance programs for all trail systems;
- vii. Provide heritage and historical features at key trail points;



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- viii. Designate trail standards for singletrack, equestrian, multi-use and trailheads;
- ix. Support the trail designations and hierarchy;
- x. Encourage and support safe and convenient bicycling path and routes to accommodate those for whom cycling is a necessary mode of transport to school, and/or work and to accommodate recreational cyclists by:
 - a. Identifying transportation nodes and focal points for mobility transfer;
 - b. Designating bicycle routes along streets that bear low volumes of vehicular traffic;
 - c. Providing lanes for bicycle traffic on existing and new bridges;
 - d. Providing separate bicycle paths in park areas and along the boulevards of arterial and collector streets where feasible, economical and safe;
 - e. Wherever possible provide trails dedicated to non-motorized use when existing alternatives are impacted by excessive non-automobile vehicular use such as ATVs and dirt bikes; and
 - f. Designating sidewalks on one side of a street for bicycle traffic in cases where there is no inconvenience to pedestrians. Technical matters such as route selection, signing, surfacing, regulation, lighting and other matters will be addressed in the Parks and Recreation Master Plan.

6. PARKING

Goal:

Ensure that adequate parking facilities are provided throughout the County, including the appropriate location and design of parking facilities as part of an efficient and functional transportation system.

Policies:

- i. Developments should provide adequate off-street parking. The Land Use Code should contain appropriate parking standards for:
 - 1. All forms of development including suitable bonusing and transportation demand management alternatives; and
 - 2. addressing the design of parking areas; and
- ii. Required parking spaces should be placed near the development site.

7. RAILWAY

Because of the costs and the number of agencies involved, it is anticipated that rail designation and land use planning will be challenging. Consultation needs to take place with the interested stakeholders.

A policy could explore a multi-modal transportation facility in the event of increased rail passenger service, along with integrated transportation facilities close to the Airport and City of Moab.

Goal:



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In conjunction with the railway and operators, the County should endeavor to ensure that railway lands are utilized in a manner that is consistent with the intent of this Plan. The County should attempt to reach a consensus respecting the abandonment of redundant or mutually undesirable rail lines and conversion to a mixed use corridor. Land released through such a consensus should be subjected to the provisions of this Plan.

Policy:

- i. Work with partners to develop a rail use strategy and policy.

8. CANYONLANDS REGIONAL AIRPORT

The Federal Aviation Administration (FAA) assists with airside improvements through entitlement and discretionary grant funds. Airside projects include anything inside the fence which mainly consists of runway, taxiway, and apron surfaces but also includes safety and security.

Airport revenue is reporting growth due to increased business and operations. Revenue is generated through user fees such as ground and space leases, fuel taxes, landing fees, concession sales, and public parking. Airport staff evaluate the budget each year to adjust reasonable rates and charges to support increasing operational costs.

Canyonlands Regional Airport provides commercial, private, and recreational flights. Services include a full service fixed based operator, scenic and charter tours, emergency medical transportation, skydiving, private hangars, and ground transportation.

Current enplanements are 20,000 people annually. Projected growth demands updates to the 2015 Airport Master Plan. Terminal expansion in 2018 allowed more commercial flights with two direct flight options out of Moab, flying to Salt Lake City, Utah and Denver, Colorado.

The Sheriff's Department is not located on Airport property, but provides one deputy to be on site during commercial air service operations. The Transportation Security Authority (TSA) provides baggage and passenger screening for all scheduled air carrier flights operating at Canyonlands Regional Airport.

Airport landside includes the access road, vehicle parking, a need for car rental wash bays and further expansion requires significant funding of which is not federally eligible for grants. These improvements will need to be funded through airport revenues, local budgets or state grants.

The Federal Aviation Administration (FAA) assists with airside improvements through annual grant funding including runway construction, lighting, and taxiways. The airport operates as an Essential Air Service market which allows for a federal subsidy toward an airline provider to small markets. The average aircraft load factor is approximately 50%-60% but reporting signs of increased passenger demand post COVID.

The financial health of the airport has been historically reliant on the Grand County general fund. However, with the increase in business activity and adjustments to airport rates and charges there is an anticipated increase to airport revenues and less on the general fund.



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Daily overnight and long-term parking is available to travelers at a low cost. To gain revenue, airport staff have proposed an increase in prices to stay aligned with demand. Gates have been suggested to be constructed at entrances and exits to enforce parking fees and security.

Acceleration and de-acceleration lanes on Highway 191 need increases to stacking lengths. More signage must be implemented to make traveling to and from the airport safer. Future transportation considerations should include a public shuttle system service to increase accessibility from the north end of Grand County to the urban area.

Goal:

Update the 2015 Airport Master Plan to include new data, land use strategies within the airport vicinity, transportation options, optimal passenger capacity limits, security, terminal size and expansion, and service levels. Reference Schedule 16.24.

Policies:

- i. Continue to coordinate with the Sheriff's Office for future security staffing during commercial flights;
- ii. Ensure the flight paths, airport vicinity area and land uses are compatible with airport operations and strategic plans;
- iii. Promote development and space to increase operations for improved financial returns;
- iv. Gauge and prepare for public and private demand for increased storage and capacity;
- v. Conduct a security review manage current and future usage, including Sheriff on-site location options;
- vi. Develop usage options for Unmanned Aerial Vehicles (UAVs) and Aircars;
- vii. Prepare an airport vicinity land use plan that identifies a range of opportunities including industrial and industrial uses;
- viii. Work with public partners like SITLA and BLM to improve the airport vicinity protection area overlay identifying short and long term encroachments such as Blue Hills road;
- ix. Increase passenger capacity limits to improve financial returns;
- x. Implement revenue streams that may include impact fees, for the landside of operations to initiate capital improvements;
- xi. Explore solar field installation opportunities; and
- xii. Improve access to and from the airport from Hwy 191 both through the Transportation Master Plan and improved public, rail and shuttle transit.