Grand Junction Comprehensive Plan
CIRCULATION PLAN

Vision

The community envisions a safe, balanced and environmentally sensitive multi-modal transportation system that supports greater social interaction, facilitates the movement of people and goods, and encourages active living, mobility independence, and convenient access to goods and services for all users.

A multi-modal transportation system should accommodate pedestrians, bicyclists, motorists, movers of goods, and transit; and should be safe and navigable for all users. It must provide transportation options to all users including those with limited mobility such as children, seniors, and persons with disabilities.

Purpose

The Grand Junction Comprehensive Plan Circulation Plan ("Circulation Plan") is a strategic document adopted by both the City of Grand Junction and Mesa County. This document moves forward the principles identified in the Grand Junction Comprehensive Plan adopted in 2010 related to transportation and those established in the 2010 Circulation Plan, as well as the strategies and vision of the 2001 Urban Trails Plan to create an urban area-wide multi-modal circulation plan.

It supports the efforts of the Mesa County 2040 Regional Transportation Plan’s sound planning principles and best practices including reducing congestion; easing commutes; improving roadway safety; enhancing sidewalks, bike, and multi-use trails; and, maintaining an efficient and effective transportation system. It builds on the transportation goals found in the Grand Junction Comprehensive Plan, including:

- designing streets and walkways as attractive public spaces;
- constructing streets to include enhanced pedestrian amenities; and
- developing a well-balanced transportation system that supports automobile, local transit, pedestrian, bicycle, and freight movement while protecting environmental conditions of air, water and natural resources.

The Circulation Plan will be used by elected officials and staff to guide the assignment of financial resources for infrastructure construction, future development and dedication of other funds for transportation purposes.

Planning Area

This Circulation Plan is applicable to transportation corridors within the Urban Development Boundary as defined by the Grand Junction Comprehensive Plan Future
Land Use Map. Minor exceptions occur where a particular corridor falls both within and outside of the Urban Development Boundary and whereby consistency of standards along the length of the corridor would be beneficial to the traveling public.

Executive Summary

The Circulation Plan establishes a comprehensive approach to transportation planning through the following four sections (Plan Elements). Conceptual and corridor maps have been created to aid decision makers and city and county staff to improve the transportation systems. See Appendix A for full-page maps.

A. Network Map. The Network Map identifies important corridors and linkages connecting centers, neighborhoods and community attractions.

B. Street Functional Classification Map. The Street Functional Classification Map identifies the functional classification of the roadway corridors that connect neighborhoods, employment centers and local attractions and amenities. Many of these corridors are also major truck routes providing heavy truck movement.
and access to the Grand Junction community. There are over fifty proposed changes since the map was last adopted by City Council and Mesa County Board of County Commissioners in 2010. These changes include adding road segments, reclassifying some existing road segments and removing others from the map.

C. Active Transportation Corridor Map. Replacing the Urban Trails Master Plan/Map, the proposed Active Transportation Corridor Map identifies major corridors important for non-motorized travel, providing critical, continuous and convenient connections for bicyclists and pedestrians. The corridors are broadly defined and could accommodate active transportation as part of the road network or as separated paths. This Circulation Plan identifies corridors important for active transportation and does not attempt to identify trails that are predominately recreational in nature. It proposes using canals and drainages for nonmotorized route connections only where there is not another safe or better alternative for non-motorized transportation using the road network.

D. Specific Strategies and Policies
Strategies identified in the Comprehensive Plan and this Circulation Plan will help the community achieve its vision of becoming the most livable City west of the Rockies. A balanced transportation system will be achieved through the following. Each of these strategies and policies are further described and developed in the Plan.

1. Adopt a Complete Street Policy for Grand Junction and develop and adopt a Complete Streets Policy for Mesa County.
2. Develop or revise policies for support of an integrated transportation system.
3. Provide conceptual and corridor maps that will be used by decision makers and planning departments to improve transportation systems.
4. Improve interconnectivity between GVT and centers, neighborhoods and community attractions.
5. Improve Urban Trails System
   a. Provide guidance on incentives for trail construction
   b. Provide guidance on standards for trail construction
   c. Provide guidance on ownership and maintenance of trail system
   d. Maintain or improve multi-purpose trails
   e. Provide wayfinding to attract visitors to the trail system and improve the ability of residents and visitors to find area attractions.
5. Maintain or improve circulation of vehicles on road system.

Background

The 2010 Circulation Plan was adopted as an element of the Grand Junction Comprehensive Plan. It was limited to a brief description of the planning area and the
principle that development should support an integrated transportation system. It also included a functional classification street network map, showing a future network of general vehicular circulation patterns for collector and arterial streets and the interstate highway to accommodate the ultimate buildout of the urban area.

The 2001 Urban Trails Plan was developed as a strategic tool to guide the future course of trail development in the Grand Valley. The Plan identifies the locations for new non-motorized facilities and serves as a guide for the development, protection, management, operations and use of a trail system that meets the demands of the growing community. The plan identifies the opportunity to utilize the natural waterways, drainages and canals to create an interconnected system of safe and efficient means of non-motorized travel.

This Circulation Plan acknowledges the planning that was previously completed and incorporates the findings into a broader framework for transportation to include more than a functional classification of streets. The Plan works to combine urban trails planning with street planning and establish goals and policies that will establish a multi-modal approach to transportation within the Urban Development Boundary established in the Comprehensive Plan. In addition to these two plans, the City and County have previously adopted transportation plans for specific neighborhoods and geographic areas (see below).

The following adopted plans have shaped the transportation planning in the community and have been adopted by one or both, the City of Grand Junction and Mesa County, and can be found at www.mesacounty.us/planning and/or at http://www.gjcity.org. These plans serve as the foundation for the updated Circulation plan.

- **2010 Grand Junction Comprehensive Plan** The Grand Junction Comprehensive Plan was adopted in 2010 by both the City Council of Grand Junction and the Mesa County Planning Commission. The Comprehensive Plan provides the vision and the goal of “Becoming the Most Livable Community West of the Rockies”. Creating a community with an excellent transportation system is essential to achieving this vision. The goals and policies of the Comprehensive Plan are furthered discussed in this Circulation Plan.

- **Grand Valley 2040 Regional Transportation Plan** (see gv2040rpt.org) - The 2040 Plan was adopted by the Grand Valley Regional Transportation Commission in 2015. To maintain the region’s transportation system, ensure the efficient movement of people and goods, and support future growth and development, transportation services and infrastructure are planned and coordinated through a regional transportation planning process carried out by the Grand Valley Metropolitan Planning Organization (GVMPO). The GVMPO is the federally-designated transportation planning organization for the Grand Junction urbanized area and all of Mesa County. The long-term guidance developed in the regional Long Range Regional Transportation Plan (RTP) informs a short-term capital
improvement plan, or the Transportation Improvement Program (TIP), and prioritize projects to make the best use of limited funding. The regional plan covers all of Mesa County, including incorporated Grand Junction. The Grand Valley 2040 Regional Transportation Plan (RTP) is the most recent update to the region’s overall vision for future transportation infrastructure and investment and identifies the types of investments and strategies needed to address transportation mobility needs in the region. The plan guides future investments in the region’s transportation system to reduce congestion; ease commutes; improve roadway safety; enhance sidewalks, bike, and multi-use trails; and maintain an efficient and effective transportation system that supports the regional economy. It is scheduled to be updated in 2019.

- **2001 Urban Trails Master Plan** - The City of Grand Junction last adopted an Urban Trails Master Plan in 2001 and the Mesa County Board of County Commissioners retired it in April 2014, leaving a plan that is limited, outdated and only implemented within the city limits of Grand Junction. The Urban Trails Master Plan defines the type and locations of non-motorized transportation corridors in the Grand Junction urban area, as well as on-street bicycle and pedestrian facilities. Rather than update the Urban Trails Master Plan, it is being incorporated into this Plan, which will provide more direction, priorities, policies and implementation strategies.

- **2002 Redlands Area Transportation Plan** – Includes a transportation section that was adopted as part of the Circulation Plan in 2002. There were four key elements of the planning effort: 1) State Highway 340 Access Control Plan; 2) capacity improvements on existing routes; 3) new roadways and neighborhood connections; and 4) multi-modal accommodations.

- **2004 Pear Park Neighborhood Plan** – Includes a Transportation and Access Management Plan for the Pear Park neighborhood and was adopted as part of the Circulation Plan in 2004. It remains a part of the Circulation Plan today and its detail at a neighborhood level guides development access and street cross sections for major corridors in Pear Park.

- **2014 Orchard Mesa Neighborhood Plan** – Includes a transportation planning section supporting complete street improvements, multi-modal enhancements for all major corridors on Orchard Mesa including US Highway 50, establishing non-motorized crossings of US Hwy 50 (including the eastbound conversion of the B ½ Road overpass to a pedestrian/bicycle path), and creating safe non-motorized routes to area attractions, schools, the riverfront, and centers.

- **2011 Clifton/Fruitvale Community Plan** - Includes the Clifton Transportation Study and Clifton Pedestrian Circulation Study. Adopted in 2006 and amended in 2011, it specifically looks at pedestrian and bicycle improvements to US Highway 6 that runs through Clifton on the way to Palisade.

- **2007/2011 North Avenue Corridor Plans and Zoning Overlay** - Includes transportation requirements that reinforce a “Complete Street” infrastructure that support this Circulation Plan.

- **24 Road Subarea Plan and Overlay** - Adopted in 2000 and updated in 2017, it includes transportation requirements that reinforce a “Complete Street” infrastructure and support this Circulation Plan.
Access Management Policies can be found in the following documents:

- Mesa County Standard Specifications for Road and Bridge Construction (RB Spec) - www.mesacounty.us/publicworks/roads/specifications.aspx
- Mesa County Road Access Policy - www.mesacounty.us/RoadAccessPolicy.aspx

Plan Elements

SECTION A: MAPS

1. **The Network Map** The Network Map is a conceptual map that views the community from an overall “30,000 foot” vantage point and identifies important corridors and linkages connecting centers, neighborhoods and community attractions. It is used to support more detailed planning, such as the Active Transportation Corridor Map. It is implemented through capital construction of streets, sidewalks and trail infrastructure. A full-page map is included in Appendix A as Figure 1.

2. **The Active Transportation Corridor Map** (Non-motorized Transportation Map) This Circulation Plan establishes the Active Transportation Corridor Map, to create an active transportation network providing critical, continuous, safe, and convenient connections for non-motorized transportation (bicycles and pedestrians). While it may be used for recreation or connect to the Colorado River and other trails, the Active Transportation Corridors are intended to provide a complete alternative network of nonmotorized traffic routes. This includes using existing streets and future trails along drainageways that will connect neighborhood, schools, parks and other open space areas, as well as commercial districts with each other. It further identifies specific corridors that follow and support the Network Map and links important centers identified in the Comprehensive Plan’s Future Land Use Map with neighborhoods and other attractions and local amenities.

Active Transportation Corridors will include some canals and drainageways where they provide the safest and best connections between neighborhoods and area attractions. This focused approach of limiting the use of canals and drainageways establishes and distinguishes between those routes that are more viable and others that are less viable and otherwise only identified because of an existing canal road.
The Active Transportation Corridor Map will be used to support more detailed planning and implementation, including capital construction of sidewalks, bike lanes and trail infrastructure. Active Transportation Corridors can be improved during new development projects or through Capital Improvement Projects and through the development of drainage ways as identified in the Grand Junction Comprehensive Plan.

As property develops there may be situations where trails may be a desired amenity but a route is not shown on the Map. An example of this may be providing a connection from an internal subdivision street to an outside collector or arterial street. Constructing these type of site and development specific improvements will provide connectivity that helps the overall transportation system work. A full-page map is included in Appendix A as Figure 2.

3. The Street Plan Functional Classification Map  The Street Plan identifies major corridors for general circulation of motorized traffic within the Urban Development Boundary. Classifications include roadways labeled as collectors or arterial streets that move more traffic than a local subdivision street. Subdivision streets connect to collector streets that connect to arterial streets. Collector and arterial streets connect community attractions including neighborhood centers, village centers, and downtown together. The map also shows unclassified roads which are important for neighborhood circulation. They establish general locations for these important future local streets in undeveloped areas.

There are over fifty proposed changes since the map was last adopted by City Council and Mesa County in 2010. These revisions are the result of new development or improved traffic data and are incorporated into the map. A full-page map is included in Appendix A as Figure 3.
SECTION B: STRATEGIES/POLICIES

1. Complete Streets Policies
   a. Grand Junction Complete Streets Policy – The Complete Streets Policy will support the City of Grand Junction Comprehensive Plan goal to “develop a well-balanced transportation system that supports automobile, local transit, pedestrian, bicycle, air, and freight movement while protecting air, water and natural resources.” A Complete Streets approach integrates the needs of people and places in the planning, design, construction, operation and maintenance of transportation networks, making streets safer for people of all ages and abilities and thereby supporting overall public and economic health. At the heart of a complete streets policy is the intent for communities to build streets that safely accommodate all modes of transportation.

   While the City has historically incorporated Complete Streets concepts in the design of transportation corridors, this policy memorializes that commitment for all transportation related projects. The Grand Junction Complete Streets Policy recognizes the importance of all modes of transportation and is established for the areas under the jurisdiction of the City of Grand Junction.

   The City established the Urban Trails Committee to advise City Council on matters pertaining to the safe, convenient and efficient movement of pedestrians and bicyclists of all ages and abilities. It has been a long-standing goal of the Urban Trails Committee and desire to develop and adopt a complete streets policy. That goal is now incorporated into the 2017 City Council Strategic Plan as a Key Initiative.

   b. Mesa County - Develop and adopt a “Complete Streets” Policy – For Mesa County, a Complete Streets Policy will be developed that is appropriate to their jurisdiction and supports the Grand Junction Comprehensive Plan by fostering community values of transportation connections, attractive corridors and safe routes for all modes of travel. This policy will be separate from the Complete Streets Policy adopted by the City of Grand Junction and will be part of the Mesa County Road & Bridge Standards.

2. Integrated Transportation System (Strategy)
   An integrated transportation system is defined as a system that provides transportation options and needs for all mobility types. New development shall be designed to continue or create an integrated system of streets and trails that provides for efficient movement of pedestrians, bicycles, and automobiles to and from adjacent development, while also encouraging the use of transit. Design shall allow for through movement of general traffic, thus avoiding isolation of residential areas and over-reliance on arterial streets.
Implementation Actions:

A. Established Development Codes should identify requirements for building street networks and construction/reconstruction responsibility.
B. Establish construction responsibility, design guidelines, and ownership guidance for bicycle and pedestrian facilities.
C. Develop methods to incentivize construction of bicycle and pedestrian facilities.
D. Revise the City of Grand Junction Transportation Engineering and Development Standards (TEDS) manual, specifically relating to street and trail design guidelines and cross sections, to support the concepts presented in this plan.
E. Revise the City’s Zoning and Development Code to create best practices for street and intersection design alternatives based on anticipated travel patterns and multi-modal demand.
F. Update the Mesa County Road and Bridge Standards to include additional options for implementation of the strategies/policies presented in this plan.
G. Revise the Mesa County Development Standards to provide the necessary criteria to promote an integrated transportation system.

3. Create Sub Area Maps (Strategy)

Various plans have been developed for some areas within the Urban Development Boundary while many other areas still need specific plans. The following list recognizes planning efforts to date that are incorporated into this Circulation Plan. Each of these need to be revisited regularly and updated when needed. This list will expand as other sub areas are planned and mapped.

A. Safe Routes to Schools – Studies to improve safety for children between existing neighborhoods and schools continue with projects planned, funded and constructed for Nisley Elementary, Clifton Elementary and West Middle School. Other planning has occurred and will continue to occur for all schools in School District 51.
B. Clifton Pedestrian Plan – Refer to Clifton Community Plan
C. Orchard Mesa Pedestrian Plan at the Fairgrounds/Meridian Park Neighborhood Center – Refer to Orchard Mesa Neighborhood Plan
D. For Redlands area refer to the Redlands Area Plan
E. For Pear Park refer to the Pear Park Neighborhood Plan
F. Horizon Business District – Refer to (future) Horizon Business District Overlay
G. Mesa Mall Environments – (future)
H. Safe Routes to Parks & Open Space (future)
4. **Improve Interconnectivity Between Grand Valley Transit (GVT) and Community-wide Destinations (Strategy)** - The vision for GVT is to provide a viable transportation choice for all populations that connects communities, neighborhoods, and destinations while improving quality of life and supporting economic vitality in the region. GVT strives to provide an affordable, connected, efficient, and easy to use transit system that attracts all rider types, integrates all modes of transportation and that provides a transportation system that supports jobs, recreation and overall community well-being. Additional statistical information for GVT can be found in Appendix B.

To achieve GVT’s vision, the transit system must provide improved interconnectivity and accessibility of their system. Many of the improvements will rely on coordination with both Mesa County and City of Grand Junction for implementation.

*Implementation Actions:*

A. Access - In coordination with its partners, GVT will improve sidewalks, curb ramps, and bike lanes and provide bike racks at bus stops in an ongoing effort to improve access for riders.

B. Collaboration – GVT will collaborate and be a strong community partner that works with public, private, and non-governmental organizations to provide transit service options within the transportation system and look to emerging trends and technologies to bring this to fruition.

5. **Improve Urban Trails System (Policy)**

Creating neighborhood and community connections that are safe, convenient and efficient are very important to providing transportation options. These can include routes to parks, schools, commercial and employment areas that are off the major, highly traveled ways. Efforts should look at planning at a ¼ mile radius from a proposed development as well as the entire transportation corridor between major attractions.

Access between neighborhoods and subdivisions and connecting them to the Active Transportation Corridors can be accomplished in a variety of ways. See the three example below. Using drainage ways and open space areas is deemed the highest priority to make these connections work.

The City has a history of working with development to create safe and convenient connectors between residential neighborhoods as well as other land uses and connecting nonresidential land uses together. The following are two examples of building community infrastructure with commercial and residential development such as the Leach Creek trail along Leach Creek drainage and O’Reilly’s Auto Parts on Patterson Road.
Example 1: Leach Creek Trail - The Estates residential subdivision and development of Leach Creek bike/pedestrian concrete trail.

Leach Creek Drainage Trail – Connecting G Road and G ½ Rd

Example 2: GVT Transfer Station Connection with Patterson Road – through O’Reilly Auto Parts store at 2442 Patterson Road.

Example 3: Connecting two Active Transportation Corridors through a neighborhood providing access to the neighborhood.

Graphic and additional information needed

a. Incentives for trail construction - Trails should be considered part of the transportation network just like public streets, as they have an important role in providing transportation corridors for commuting purposes. They also serve as an amenity to new developments, the neighborhood, and the populace in general and have been shown to improve health and strengthen communities as well as lead to increased property values (CMU Study: “The Impact of Natural Amenities on home values in the Greater Grand Junction area” need to footnote this).

Implementation Actions:

A. The City or County will seek funding for off-site trail construction to connect development-required trail(s) to the existing trail network.
B. Revise the City’s Zoning and Development Code (Z&D) and County’s Land Development Code (LDC) to reflect the intent of the following:

1. Establish responsibility of new development for constructing trails shown on the Active Transportation Corridor Map and associated connections within their project limits.
2. For projects in the City of Grand Junction limits, developers may request an offset for the cost of trail(s) construction against the project’s open space fee for trail(s) constructed in addition to that required on the Active Transportation Corridor Map or required sidewalks. These trail(s) are recreational and the offset amount may not exceed the total open space fee. Refer to (Grand Junction Municipal Code, Section 21.06.020(c) Trails).
3. For projects in unincorporated Mesa County, trails are part of the common open space (not including perimeter sidewalks) and are given credit in the Flexible Landscape Point System and toward the Open Space Requirement. At least fifty percent (50%) of the common open space shall be suitable for active recreational use which includes pedestrian pathways and jogging trails (but not required sidewalks) (LDC 7.5.2).

b. Standards for trail construction - All trails should be hard surface, preferably concrete and constructed to meet the American with Disabilities Act (ADA) requirements, follow specific regulations found in the Grand Junction Development Code, and be designed according to the latest industry standard.

Implementation Actions:

A. Revise the Zoning Code to reflect the intent of the following:

1. Off-street trails shown on the Active Transportation Corridor Map shall be 10’ wide, designed and constructed per City’s Transportation Engineering Design Standards (TEDS).
2. Minimum standards for on-street trails shown on the Active Transportation Corridor Map shall consist of on-street bike lanes in accordance with standard street cross sections and a detached sidewalk.
3. In some cases, because of topography or other concerns, it may be impossible to meet ADA requirements. Soft trails may be acceptable in those instances.
4. Per the Stormwater Management Manual (SWMM), most drainage channels require at least one 12’ wide service road. All drainage channel service roads shall also be designed to function as soft trails. If a trail is shown on the Active Transportation Corridor Map
along a drainage channel, the service road must be constructed of a hard surface. To achieve the required 12’ service road width, it can be 10’ of concrete with compacted road base shoulders.

c. Ownership and Maintenance of the trail system - This policy is as follows and is different within the jurisdiction of Grand Junction than it is in the unincorporated areas of Mesa County.

City of Grand Junction Implementation Actions:

A. Revise the Zoning Code to reflect the intent of the following:
   1. If the trail is shown on the Active Transportation Corridor Map it must be in a tract or easement dedicated to the City of Grand Junction. If the trail is not shown on the Active Transportation Corridor Map the developer shall dedicate an appropriately sized tract or easement to accommodate the trail to the appropriate entity in the following order of descending priority: the City of Grand Junction, the Canal Company/Drainage District, or the Homeowners Association (HOA) per the following:
      a) When the trail is located adjacent to a drainage channel if maintained by the City of Grand Junction, it shall be dedicated to the City. If the Grand Valley Drainage District (GVDD) maintains the channel, dedication shall be to the City and/or the GVDD.
      b) If the trail is located adjacent to a canal, dedication shall be to the City and/or the canal company.
      c) Trails connecting internal subdivision streets or trails to external streets or trails shall be to the City or the HOA.
      d) Trail connections between neighborhoods shall be to the City or the HOA.

Unincorporated Areas of Mesa County Implementation Actions:

A. Establish the following language in the Mesa County Land Development Code and/or Transportation and Engineering Design Standards (TEDS) for developing property:
   1. Trails connecting internal subdivision streets or trails to external streets or trails shall be dedicated to the HOA, but available for public use with appropriate easements.
   2. Trail connections between neighborhoods shall be dedicated to the HOA of which they are a part, but available for public use with appropriate easements.
3. Sidewalks along streets shall be in the Mesa County right-of-way.

d. Maintain or improve the trail system - The Colorado River Regional Trail envisioned by Grand Junction, Mesa County and many other partners establishes a regional trail running the length of the Colorado River from the Town of Palisade to the City of Fruita and beyond. Today parts of this trail are already built and more segments will be constructed through the combined efforts of Colorado State Parks, the Colorado Riverfront Commission, and the Urban Trails Committee.

Trails along Drainage Ways - North of the Colorado River, drainageways generally orient in a northeast/southwest direction as they drain toward the river. These drainageways create a grid system separate from the grid of the street system and can provide necessary connections for a trail network from many existing and future residential neighborhoods and the Colorado River. In the Redlands, drainageways generally orient from SE to NW. Trails can be located within some of the broader drainageways, but may have to be aligned along the edge of narrower drainage corridors.

Canal Trails - Canals are part of the secondary water system of the valley and generally run along contour lines in a northwest/southeast alignment, following the terrain of the valley. These canals are owned by the U.S. Bureau of Reclamation and private irrigation companies, and are located in rights-of-way or easements across private land. The combination of drainage way trails (discussed above) that run in a northeast to southwest direction, and canal trails that run somewhat perpendicular in a northwest to southeast direction a transportation grid system can be developed.

The concept for accessing the Colorado River Trail system through these major trail corridors takes advantage of existing transportation corridors, greenways, drainages, and a few canal segments as identified on the Active Transportation Corridor Map and will tie most of Grand Junction to the Colorado River Regional Trail.

City of Grand Junction Implementation Actions:

A. Revise the Zoning Code to reflect the intent of the following:

1. Trails along canals and drainages are shown on the Active Transportation Corridor map for certain segments needed to make essential trail system connections. Utilizing these segments for trail connections will require:
a) Cooperation and allowance of public access from the irrigation companies to ensure public safety along the canal.
b) Providing canal companies’, the ability to maintain the canals.
c) Permission from the underlying landowners and provisions to minimize public impacts on their land (such as fencing).
d) Establish Memorandums of Understanding (MOU’s) to address liability.

**Unincorporated Areas of Mesa County Implementation Actions:**

It is Mesa County’s policy to not require trails along drainageways or canals except in the Urban Residential Reserve (URR) zoning where right of way is required to be dedicated per adopted trail plans.

e. Develop wayfinding and marketing for trails system

Wayfinding and Marketing of Trail System - A wayfinding system for bicyclists and pedestrians consists of comprehensive signing and/or pavement markings to guide bicyclists and pedestrians to their destinations along preferred routes. Signs are typically placed at decision points along routes – typically at the intersection of two or more routes, trails, or bikeways, and at other key locations leading to and along bike and pedestrian routes. (Adopted from *Urban Bikeway Design Guide*, Second Edition, National Association of City Transportation Officials, March 2014. Need to footnote)

**Implementation Actions for all transportation providers/partners:**

A. Make trail maps available on key websites including at a minimum: Mesa County, City of Grand Junction, GJEP, Chamber of Commerce, CMU, and Visit Grand Junction
B. Distribute hard copy maps/brochures at visitors’ centers/ mobile visitor center/ hotels/ library/ schools and other locations that serve as visitor and user destinations.
C. Distribute and/or post full-sized maps showing the circulation with GVT, trails, roads posted downtown, at CMU campus, at GVT transit centers and at important transit stops.
D. Develop a phone app showing different forms of circulation using different modes including photos. A mobile app could also be used to show history or points of interest as well as retain the ability to report problems.

6. **Maintain or Improve Vehicular Circulation (Strategy)**

In less developed sections of the urban area there is a need for local (subdivision) streets to be constructed in specific locations for better connectivity and access to the collector and arterial street network. These streets have been identified as
“Unclassified” on the Street Functional Classification Map and may be reclassified in the future when actual traffic demand is determined with development proposals.

Stub Streets - Local circulation systems and land development patterns must not detract from the efficiency of adjacent higher order streets nor limit access to undeveloped property within a neighborhood. Requiring stub streets is necessary to provide access and connectivity within a neighborhood. Management of access to higher volume streets, including public and private streets and driveways, is necessary to ensure that efficiency and safety are not unduly compromised.

**Implementation Actions:**

A. Unclassified “Future” Streets are required to be built during development. However, the classification will be determined via a Traffic Impact Analysis that demonstrates vehicle traffic demand within the area of interest (not limited to the development under consideration).

B. Developments are required to stub streets to adjacent properties in logical locations, based on the Circulation Plan and each jurisdiction’s Access Management Policies. This will allow for an interconnected local street system while minimizing the number of points required for access to the general street system. Stub streets may be required for any functional classification street including local streets.
Jamison Avenue is stubbed on both the east and west sides of this undeveloped area in Frutivale
Appendix A - Maps

Figure 1 - Network Map

Figure 2 - Active Transportation Corridor Master Plan Map

Figure 3 - Street Plan - Functional Classification Map
Figure 1
### Proposed Revisions - Road Classifications – Street Plan

<table>
<thead>
<tr>
<th>Revision</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Add: 22 Rd Crossing of RR connecting with Hwy 6 &amp; 50 and River Road</td>
</tr>
<tr>
<td>2</td>
<td>Change: River Rd from 25 Rd Ramp to 22 Rd from a Major Collector to a Minor Arterial</td>
</tr>
<tr>
<td>3</td>
<td>Add: Bond Street from 21 1/2 Rd connecting to H 1/2 Rd as Unclassified</td>
</tr>
<tr>
<td>4</td>
<td>Change H 1/2 Rd from 21 Rd to 23 1/2 Rd from Proposed Major Collector to Unclassified</td>
</tr>
<tr>
<td>5</td>
<td>Add: Mease lane from H Rd to H 3/4 Rd as Unclassified</td>
</tr>
<tr>
<td>6</td>
<td>Remove: H 1/2 Rd from 23 1/2 Rd to 24 Rd</td>
</tr>
<tr>
<td>7</td>
<td>Add: G 3/4 Rd from 23 Rd to 24 1/2 Rd as a Major Collector</td>
</tr>
<tr>
<td>8</td>
<td>Remove: I-70 double diamond interchange between 23 1/2 Rd and 24 Rd</td>
</tr>
<tr>
<td>9</td>
<td>Remove: Previous alignment of Logos Dr</td>
</tr>
<tr>
<td>10</td>
<td>Change: Proposed Major Collector alignment of Logos Dr between 23 1/2 and 24 Rd to a better alignment with G 1/4 Rd at 24 Rd intersection</td>
</tr>
<tr>
<td>11</td>
<td>Add: Market St north of F 3/4 Rd as Unclassified</td>
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<tr>
<td>12</td>
<td>Add: F 7/8 Rd between 23 3/4 Rd and 24 Rd as Unclassified</td>
</tr>
<tr>
<td>13</td>
<td>Change: F 3/8 Rd from 24 1/2 Rd to F 1/2 Rd from Local to Unclassified</td>
</tr>
<tr>
<td>14</td>
<td>Remove: Unclassified 24 3/8 Rd South of F 1/2 Rd</td>
</tr>
<tr>
<td>15</td>
<td>Remove: Tammera Ln South of F 1/2 Rd - was Unclassified</td>
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<tr>
<td>16</td>
<td>Add: 24 3/4 Rd from F 1/4 Rd to F 1/2 Rd as Minor Collector</td>
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<td>17</td>
<td>Change: F 1/4 Rd between 24 1/2 Rd and 25 Rd from a Minor Collector to a Major Collector</td>
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<td>18</td>
<td>Change: Flat Top Ln between 24 1/2 Rd and Devils Thumb Dr from a Minor Collector to Unclassified</td>
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<td>19</td>
<td>Remove: 25 1/2 Rd between G 3/8 Rd and G 1/2 Rd was Unclassified</td>
</tr>
<tr>
<td>20</td>
<td>Change: 25 1/2 Rd between G Rd and G 3/8 Rd from Unclassified to a Major Collector</td>
</tr>
<tr>
<td>21</td>
<td>Add: 25 3/4 Rd from Patterson Rd to West Orchard Ave (follow drainage ditch) as Unclassified</td>
</tr>
<tr>
<td>22</td>
<td>Remove: 26 1/2 Rd and I Rd Major Collectors</td>
</tr>
<tr>
<td>23</td>
<td>Add: H 3/4 Rd between 26 Rd and 26 1/2 Rd as a Major Collector</td>
</tr>
<tr>
<td>24</td>
<td>Add: Unclassified stub street over Ranchmans ditch</td>
</tr>
<tr>
<td>25</td>
<td>Remove: H Rd to 29 Rd (Tunnel Under Runway) Principal Arterial</td>
</tr>
<tr>
<td>26</td>
<td>Add: Airport Frontage Rd Between H Rd and 29 Rd as a Major Collector</td>
</tr>
<tr>
<td>27</td>
<td>Change: Roads going through Matchett Park to match current Master Plan</td>
</tr>
<tr>
<td>28</td>
<td>Change: G Rd from a Minor Collector to a Major Collector from 29 Rd to 29 1/2 Rd connecting with future I-70 interchange</td>
</tr>
<tr>
<td>29</td>
<td>Change: G Rd between 29 1/2 Rd &amp; 30 Rd from Unclassified to a Major Collector that extends to 29</td>
</tr>
<tr>
<td>30</td>
<td>Change: 29 1/2 Rd from a Minor Collector to a Major Collector</td>
</tr>
<tr>
<td>31</td>
<td>Add: 29 1/4 Rd between F 1/2 Rd and G Rd as Unclassified</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>32</td>
<td>Add: Extend Broddick as Unclassified between 29 Rd and 29 ½ Rd</td>
</tr>
<tr>
<td>33</td>
<td>Add: 28 1/2 Rd as Minor Collector connecting to Presley Ave from Grand Falls Dr</td>
</tr>
<tr>
<td>34</td>
<td>Add: Grand Falls Dr as Minor Collector connecting to 28 1/2 Rd from 28 1/4 Rd</td>
</tr>
<tr>
<td>35</td>
<td>Change: Presley Avenue from Unclassified to Minor Collector between 28 3/4 Rd and 29 Rd</td>
</tr>
<tr>
<td>36</td>
<td>Add: Elm Avenue between 29 Rd and 29 1/4 Rd as Unclassified</td>
</tr>
<tr>
<td>37</td>
<td>Change: 28 Rd between Orchard Ave and Grand Ave from a Minor Arterial to a Major Collector</td>
</tr>
<tr>
<td>38</td>
<td>Add: 28 Rd between Grand Ave and I-70B as a Major Collector (Unsignalized and Likely Movement Restricted)</td>
</tr>
<tr>
<td>39</td>
<td>Change: Riverside Pkwy from 7th St to 29 Rd from a Minor Arterial to a Principle Arterial</td>
</tr>
<tr>
<td>40</td>
<td>Change: 27 1/2 Rd between Riverside Pkwy and C ½ Rd from Minor Collector to Major Collector</td>
</tr>
<tr>
<td>41</td>
<td>Add: C ¾ Rd between Indian Rd and 28 Rd as a Minor Collector</td>
</tr>
<tr>
<td>42</td>
<td>Change: 28 Rd between Riverside Pkwy and C ½ Rd from Minor Collector to Major Collector</td>
</tr>
<tr>
<td>43</td>
<td>Add: 29 ¾ Rd between C ½ Rd and D Rd as Unclassified</td>
</tr>
<tr>
<td>44</td>
<td>Add: D ¼ Rd between 29 ½ Rd and 29 ¾ Rd as a Minor Collector</td>
</tr>
<tr>
<td>45</td>
<td>Add: Unclassified connection from 30 Rd to I-70 Frontage Rd with a connection to Market Way</td>
</tr>
<tr>
<td>46</td>
<td>Change: 30 Rd heading south from US Hwy 50 from a Major Collector to Unclassified</td>
</tr>
<tr>
<td>47</td>
<td>Add: F 1/2 Rd between 32 Rd and 33 Rd as a Minor Collector</td>
</tr>
<tr>
<td>48</td>
<td>Add: F 3/4 Rd between 33 Rd and F 1/2 Rd as a Minor Collector</td>
</tr>
<tr>
<td>49</td>
<td>See: Whitewater Functional Classification Proposed Revisions Map</td>
</tr>
<tr>
<td>50</td>
<td>Add: Proposed Major Collector on segment between Highway 6 &amp; 50 and River Rd at truck stop</td>
</tr>
<tr>
<td>51</td>
<td>Change: Principal Arterial to Major Collector on H Rd between 21 Rd and 22 Rd</td>
</tr>
<tr>
<td>52</td>
<td>Change: Principal Arterial to Minor Arterial on 22 Rd north of H Rd</td>
</tr>
<tr>
<td>53</td>
<td>Change: Principal Arterial to Minor Arterial on 24 Rd north of H Rd</td>
</tr>
<tr>
<td>54</td>
<td>Change: I Rd and jog to the north parallel to Persigo Wash between 22 1/2 Rd and 23 Rd</td>
</tr>
<tr>
<td>55</td>
<td>Delete: F ¾ Road from 24 ¾ Road to 25 Road</td>
</tr>
<tr>
<td>56</td>
<td>Add: F ¾ Road to Copper Canyon Drive as Unclassified</td>
</tr>
</tbody>
</table>
Appendix B - GVT Transit

GVT Transit Summary, Service Areas and Major Corridors
Based on onboard passenger surveys conducted between 2008 to 2016, the two major destinations for Grand Valley Transit (GVT) passengers while riding the bus are home followed by work. Therefore, GVT focuses the system around densities of residential development and centers of employment. Determining factors for route alignments and stop placement focus on transit-dependent populations that include older adult, persons with ambulatory disabilities, low-income, and zero-vehicle populations. Much of this information comes from Census tract data, while the Grand Junction Housing Coalition is another resource.

GVT focuses on specific corridors - Since the inception of fixed routes in 2000, GVT has focused on particular corridors including the following within the City of Grand Junction: North Avenue, Patterson Road, Orchard Avenue, Horizon Drive, Unaweep Avenue, D ½ Road, D Road, 4th & 5th Street couplets, 7th Street, 12th Street, 29 Road, and 32 Road.

GVT daily boarding’s and alightings –

The busiest stops in 2016 for passenger boardings include the following (in order):
- Downtown Transfer Facility
- Clifton Transfer Facility
- West Transfer Facility
- North Ave & East of 28 ¾ Rd - Walmart
- 1st St & North of Rood Ave – City Market
- North Ave & West of 28 ¾ Rd – Texas Road House - North Ave & East of 28 ½ Rd – Homeward Bound

The busiest stops in 2016 for passengers’ alightings include the following:
- Downtown Transfer Facility
- Clifton Transfer Facility
- West Transfer Facility
- North Ave & Orchard Ave - West of 29 ¼ Rd
- North Ave & East of 28 ½ Rd – Homeward Bound
- North Ave & West of 29 ½ Rd – Career Center
- East of 28 ¾ Rd - Walmart

GVT seeks Economic and Community Vitality – Provide a transit system that supports jobs, recreation, and overall community well-being.

GVT seeks System Preservation – Maintain a financially sustainable transit system operating in a state of good repair.
GVT seeks Education and Outreach – Strive to inform and educate the public about transit services and the mobility options they provide for all trip types and populations. Municipalities and educational institutions can partner with GVT to leverage grant funding for capital improvements. Examples of recent successes include:

- Pedestrian and bicycle facilities (crossing beacons, sidewalks, ADA ramps, etc.)
- Buildings (County Fleet addition in Whitewater, park-and-ride facilities)
- Compressed Natural Gas (CNG) fueling facilities
- Litter vacuum for Mesa County Facilities Department
- CMU coach bus & GVT bus pullout on 7th & Elm at new engineering building
- A conceptual plan for connecting the GVT West Transfer Station on 24 ½ Road, to Patterson Road was prepared jointly by the City and GVT, and a trail built by O'Reilly Auto Parts provides pedestrian access from 24 ½ Road to Patterson Road.
City of Grand Junction Complete Streets Policy

Vision:

The Comprehensive Plan established specific strategies to implement its vision, guiding principles, goals and policies. In Chapter 5, Balanced Transportation, there are strategies to provide alternatives to getting around the community, increasing connectivity between neighborhoods, schools, parks, shopping and employment areas. It is through the buildout of neighborhood and village centers, along with strategies identified in the Comprehensive Plan and this Circulation Plan that will help the community achieve its vision of becoming the most livable City west of the Rockies.

Grand Junction streets will be designed and maintained to be safe, attractive, accessible, convenient and comfortable for users of all ages and abilities and transportation modes. Complete Streets will make the City of Grand Junction more walkable and bikeable, support transit, foster community engagement, and support the local economy and property values. Complete Streets will strengthen quality of life by improving public health and safety, advancing mobility, enhancing livability and long-term sustainability to achieve the vision “to become the most livable community west of the Rockies.”

Purpose:

The City of Grand Junction commits to improvements that are planned, designed, constructed, operated, and maintained to support safe, efficient and convenient mobility for all roadway users—pedestrians, bicyclists, people who use mobility devices, transit riders, freight traffic, emergency response vehicles, and motorists—regardless of age or ability. Complete streets are necessary to expand everyone’s mobility choices for safe and convenient travel by different modes between destinations throughout Grand Junction and are designed, appropriate to the context, to balance safety and convenience for everyone using the road.

Safety, including a reduction in hazards for pedestrians and bicyclists on Grand Junction roadways, is a fundamental consideration of this Complete Streets Policy. Complete Streets also encourage people to more easily make active transportation choices (walking and bicycling), which are associated with improved health outcomes at all stages of life and provide the added benefit of improved air quality.

The City of Grand Junction recognizes that the planning and design of streets and regional roadways should include the entire right-of-way and public realm. A Complete Streets approach provides a unique opportunity to thoughtfully integrate and advance multiple objectives for the community, now and into the future, while delivering maximum benefits from both public and private investments. A Complete Street
includes an array of integral facilities, including, but not limited to street and sidewalk lighting, pedestrian and bicycle safety improvements, access improvements, compliance with the Americans with Disabilities Act, public transit facilities and access there-to, landscaping, drainage, and street amenities such as street furniture and shade.

Complete Street Principles/Context Sensitive Design Standards

1. **Complete Streets serve all users and modes.** The City of Grand Junction commits to design, operate and maintain the communities’ streets and right-of-way so as to promote safe, comfortable and convenient access and travel for people of all ages and abilities. All streets and roadways within the City shall provide basic safe access and crossings for all allowed categories of users, including pedestrians, bicyclists, transit riders and motorists, as well as accommodate emergency responders and freight transport in a manner consistent with this policy. The City recognizes that children, seniors, and persons with disabilities may require special accommodations.

2. **Complete Streets require connected travel networks.** The City of Grand Junction shall prioritize opportunities to create a complete transportation network that provides connected facilities to serve all people and modes of travel, now and into the future. Streets shall be connected to create complete networks that provide travelers with multiple choices of travel routes and that help to reduce congestion on major roadways. The network shall include off-street hard-surface trails for biking and walking where necessary to improve safety and convenience. All roadways and routes need not be optimized for all modes; however, the network shall provide safe, efficient and convenient travel routes for each mode throughout the City, connecting services, schools, parks, civic uses, major centers of activity and attractions.

3. **Complete Streets are attractive, interesting and comfortable places for people.** Grand Junction’s streets shall be designed as public amenities and include aesthetic elements such as street trees, landscaping, pedestrian lighting, street furniture, and wayfinding signage wherever possible.

4. **Complete Streets require context-sensitive approaches.** The City will align land use and transportation goals, policies and code provisions to create Complete Streets solutions that are flexible and appropriate to the unique circumstances of the surrounding neighborhood, land use patterns and street classification to maximize travel.

5. **Complete Streets include all roadways and all projects and phases.** The City shall apply this policy, to the greatest extent practicable given budget constraints, to all street projects, including new construction, reconstruction, resurfacing, and maintenance.
Exceptions

Any exception to this Policy, including for eligible private projects, must be reviewed and approved by the Transportation Engineering Design Standards (TEDS) Exception Committee, comprised of the Public Works Director, Transportation Engineer, Community Development Director, and the Fire Marshal.

The following will be considered by the Committee for exceptions to the Policy:

a. An accommodation is not necessary on the corridors where specific user groups are prohibited;
b. Costs of accommodation are excessively disproportionate to the need or probable use, when factoring in both current economic conditions and economic benefits of initial capital cost;
c. A clear, documented absence of current and future need exists;
d. Transit accommodations that that may be excluded where there is no existing or planned transit service;
e. Routine maintenance of the transportation network that does not change the roadway geometry or operations, such as mowing, sweeping, spot repair, pothole filling or when interim measures are implemented on temporary detour or haul routes;
f. A reasonable and equivalent project existing along the same corridor that is already programmed to provide facilities exempted from the project at hand; or
g. The cost of providing accommodations is excessive compared to reasonable access to alternative facilities existing within one quarter mile of the surrounding network of complete streets to the site.

Applicability:

The policy is applicable to all development and redevelopment in the public realm within the City of Grand Junction. It applies to the work of all City Departments and other entities working within the public right-of-way. In addition, it is intended to guide all private development that affects streets, the transportation system, and the public realm.

Where new streets and subdivisions are subject to the City of Grand Junction Zoning and Development Code and/or Transportation Engineering Design Standards, the City shall fully and consistently refer to this policy for guidance.

In the existing developed areas of the City, roadway improvements that implement this policy shall be achieved as individual projects advance, as sites and corridors are developed and improved, and as needs and travel-mode balance evolve over time.
**Performance Measures**

Complete Streets require appropriate performance measures. The City will track and report performance measures for the transportation system that measure how well the City is conforming to this policy. Indicators shall reflect safe and efficient mobility for all users—pedestrians, bicyclists, transit riders, motorists and freight. The City shall measure the success of this policy using, but not being limited to, the following performance measures:

<table>
<thead>
<tr>
<th>Performance Measure</th>
<th>Unit/Quantity</th>
<th>Goal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crashes for all modes</td>
<td>Number</td>
<td>Decrease</td>
</tr>
<tr>
<td>Injuries and fatalities for all modes*</td>
<td>Number</td>
<td>Decrease towards zero</td>
</tr>
<tr>
<td>1. Number of Fatalities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Rate of Fatalities per 100 million VMT</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Number of Serious Injuries</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Rate of Serious Injuries per 100 million VMT</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Number of Non-motorized Fatalities and Non-motorized Serious Injuries.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ADA compliant curb ramps</td>
<td>Number</td>
<td>Increase</td>
</tr>
<tr>
<td>Countdown Signals</td>
<td>Number</td>
<td>Increase</td>
</tr>
<tr>
<td>ADA compliant accessible routes</td>
<td>Miles</td>
<td>Increase</td>
</tr>
<tr>
<td>On-street bike lanes</td>
<td>Miles</td>
<td>Increase</td>
</tr>
<tr>
<td>Audible traffic signals</td>
<td>Number</td>
<td>Increase</td>
</tr>
<tr>
<td>Signal approaches with bike friendly detection</td>
<td>Number</td>
<td>Increase</td>
</tr>
<tr>
<td>Students who walk or bike to school</td>
<td>%</td>
<td>Increase</td>
</tr>
<tr>
<td>Mode share: walk, bike and transit</td>
<td>%</td>
<td>Increase</td>
</tr>
<tr>
<td>On-time arrivals for GVT</td>
<td>%</td>
<td>Increase</td>
</tr>
<tr>
<td>Bus stops that provide weather protection</td>
<td>%</td>
<td>Increase</td>
</tr>
<tr>
<td>Vehicle miles traveled (VMT) per capita</td>
<td>Number</td>
<td>Decrease</td>
</tr>
</tbody>
</table>

Notes:
(1) *The US Department of Transportation (USDOT) Safety Performance Management Final Rule establishes five performance measures as the five-year rolling averages. The GVCP goal or target for 1-5 above will be to Decrease towards zero.

(2) As the Safety Performance Rule and other transportation system performance management rules required by the USDOT are implemented, these Complete Streets Performance Measures will be updated as applicable.

**Implementation Strategies:**

1. Implementation of the Complete Streets Policy will be carried out cooperatively among all departments in the City of Grand Junction, outside agencies, and, to the greatest extent possible, private developers.
2. The Department of Public Works as well as the Community Development Department will serve as the technical review agencies for all Complete Streets projects. Community Development will forward the project documentation and plans to all applicable City departments for comment during the review process. Ultimately, the project will require a vote by the appropriate governing body.

3. The City shall make the Complete Streets practices a routine part of everyday operations, approach every transportation project and program as an opportunity to improve streets and the transportation network for all users, and work in coordination with other departments, agencies and jurisdictions.

4. The City will review and revise, as needed, all plans, guidelines, regulations, procedures, and programs to integrate the Complete Streets principles in all street projects, as feasible.

5. The City will maintain a comprehensive priority list of transportation improvement projects, including problem intersections and roadways.

6. The City will maintain a comprehensive inventory of pedestrian and bicycle infrastructure and will prioritize projects to eliminate gaps in the sidewalk and bikeway network. The City will coordinate with Colorado Department of Transportation to confirm the accuracy of a baseline pedestrian and bicycle accommodations inventory in order to prioritize projects.

7. The City will re-evaluate Capital Improvement Projects prioritization to encourage implementation of Complete Streets principles.

8. The City will incorporate Complete Streets principles into the City of Grand Junction’s Comprehensive Plan as well as other plans.

9. The City will train pertinent staff on the content of Complete Streets principles and best practices for implementing this policy.

10. The City will utilize inter-department coordination to promote the most responsible and efficient use of resources for activities within the public way.

11. The City will seek out appropriate sources of funding and grants for implementation of Complete Streets policies.

12. The City will produce an annual report detailing progress made on the performance measures and implementation of the Complete Streets Policy.