



CITY OF RIFLE BIKE MASTER PLAN

October 2013



The City of Rifle embarked on a process to prepare a citywide Bike Master Plan from April to October 2013, as a recommendation coming out of the Downtown Rifle Transit Oriented Development (TOD) Strategic Plan. The overriding goal was to link all parts of the community into the Downtown through a combination of developing on-street bicycle facilities and connecting Rifle's existing bike trail segments.

DOWNTOWN STRATEGIC PLANNING

The City of Rifle Bike Master Plan was developed as part of Phase II of the Downtown Transit Oriented Development (TOD) Strategic Planning process. This large, two-year interdisciplinary downtown planning effort was funded by a Community Challenge Planning Grant from the U.S. Department of Transportation (DOT) and the U.S. Department of Housing and Urban Development (HUD). The TOD plan was implementation focused, building on past momentum of the Downtown Rifle Master Plan (completed in 2005) and several downtown redevelopment projects that were recently implemented, including Centennial Park, the Brenden Theater, Ute Theater renovation, and the new Rifle Library.

The primary focus of Phase I of the project (completed in 2012) was to identify needs, assess market realities, and provide an implementation strategy for a 15-year planning horizon that includes immediate and short-term actions. Given the downtown's scenic location along the Colorado River, nearby recreational land (including mountain biking opportunities), and small geographical area, a major opportunity identified early in the planning process was Rifle's potential to become a family-oriented bicycling destination along the I-70 corridor. Additionally, the integration of a well-connected pedestrian and bicycle network was identified as a critical component in transforming the downtown into a TOD district.

A core outcome of Phase I was the development of an Action Plan that identified more than 20 individual projects to be implemented over the next 15 years in the downtown. The Action Plan included several infrastructure projects aimed at enhancing bicycling and walking, as listed at right and mapped on the following page.

Through the Downtown planning process it became apparent to the project team and Grant Project Steering Committee that development of a Bike Master Plan for the entire City of Rifle was urgently needed to tie these small downtown bicycle projects into a larger vision for the City. For this reason, preparation of a Bike Master Plan was included as a high priority item in the Action Plan, and was programmed for development as part of Phase II of the TOD project in 2013.

Action Plan Overview

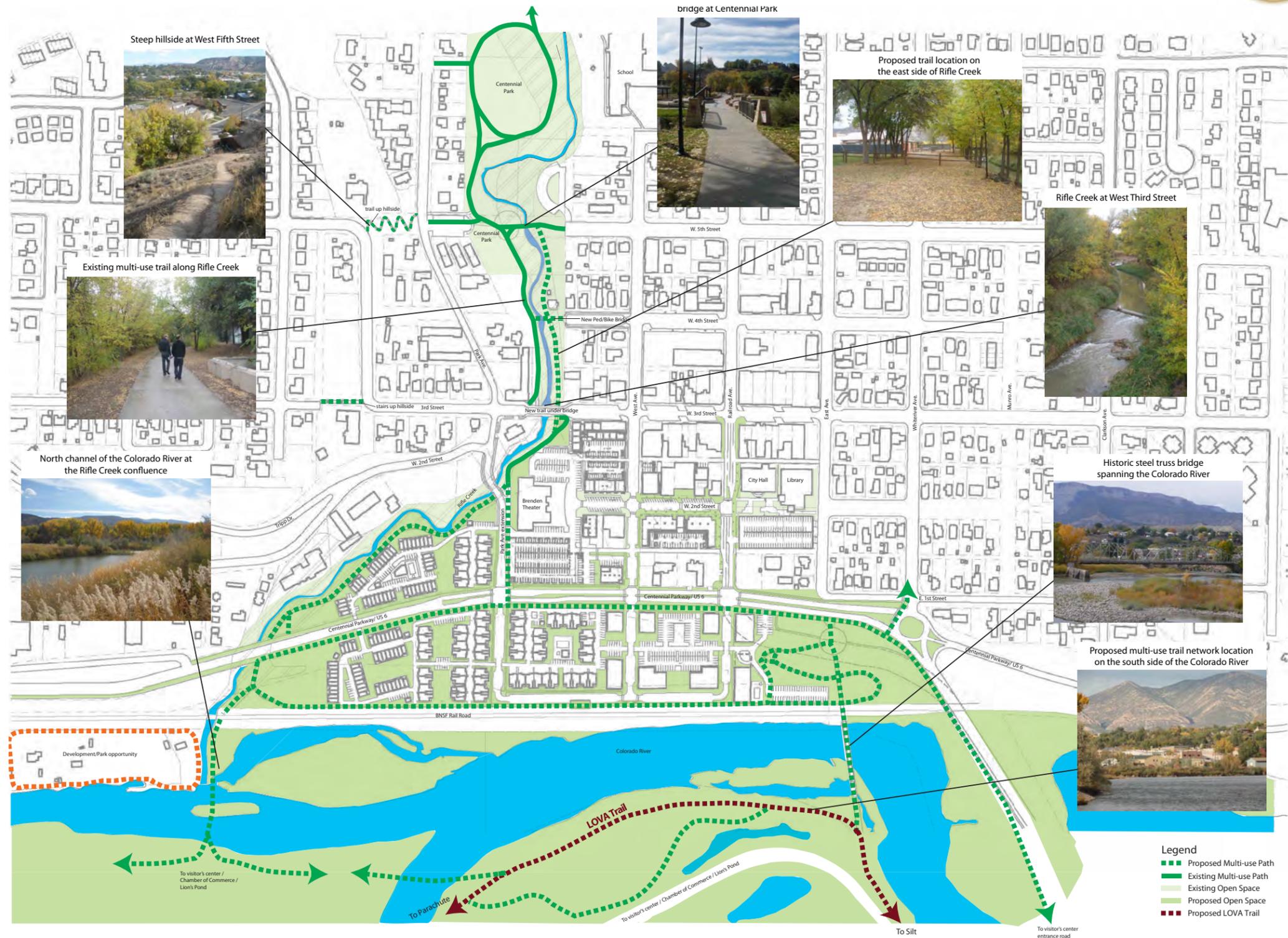
This table provides a brief description of projects in the TOD Action Plan that relate to desired Downtown bicycling enhancements:

Project Name	Brief Description
MULTIMODAL STREET IMPROVEMENT PROJECTS	
Park Ave Extension	Extend Park Ave south from Third Street to Centennial Pkwy
Rifle Gateway	New roundabout, highway realignment, and new recreational park in the Gateway area east of Railroad Ave
Centennial Parkway Street Improvements	Drainage and multimodal street improvements on Centennial Parkway from Railroad Ave to Rifle Creek
MULTIUSE TRAIL AND ACTIVE LIVING PROJECTS	
Fourth Street Bicycle/ Pedestrian Bridge	Bicycle/pedestrian bridge over Rifle Creek at Fourth Street
Rifle Creek Multiuse Trail Missing Link	New multiuse trail on the east side of Rifle Creek between Fifth and Third Street with an underpass at Third Street
Rifle Creek Rehabilitation & Trail Extension	Riparian/channel restoration and multiuse trail extension on the east side of Rifle Creek from Third Street to Centennial Pkwy
Hillside Pedestrian Connections	Staircase or paved trail on the hillside west of downtown at Third Street and Fifth Street
Boardwalk	Two-block raised pedestrian boardwalk adjacent to the railroad tracks in the Gateway overlooking the Colorado River
Colorado River Trail North	Multiuse trail connection between Rifle Creek and the planned Gateway street network
Steel Truss Bridge Bicycle/Pedestrian Access	Feasibility study, plan, design, and implementation of a bicycle/pedestrian connection from downtown to the historic steel truss bridge spanning the Colorado River
Island Trail Connection	Multiuse trail connection to the island in the Colorado River near the Rifle Creek confluence
Colorado River Trail Network	Multiuse trail network on the south shore of the Colorado River connecting to the LOVA and other planned trails
Rifle Bicycle Master Plan	A bicycle network vision for Rifle to guide network development over a 20 year time-frame



DOWNTOWN RIFLE TRAILS AND OPEN SPACE DIAGRAM | DRAFT PLAN

DOWNTOWN RIFLE TOD STRATEGIC PLAN



Goals and Objectives

Per the TOD Plan, Rifle's Bike Master Plan is intended to achieve several important goals for the downtown, the City, and the region:

- Provide both utilitarian and recreational bicycling opportunities in downtown and along the scenic Colorado River and Rifle Creek corridors.
- Establish a vision and implementation strategy for a citywide on-street and off-street bicycle network.
- Establish a vision and implementation strategy to connect the local bike network with planned regional trails and countywide bike routes.
- Ensure that downtown infrastructure plans and investments are aligned with the City's long-term needs for a citywide bicycle network.
- Identify a prioritized list of projects to be implemented over the next 20 years.
- Position the City to qualify for grants and other funding options to build out a trail network.

UNDERSTANDING THE USERS

The City of Rifle desires to expand its past focus on trail planning into a more comprehensive approach to creating a citywide bicycle system.

Key to accomplishing this task is recognition that people use trails and bicycle facilities for different purposes and have varying comfort levels and expectations for their riding experiences. In general, the Rifle Bike Master Plan uses the nationally recognized “design bicyclist” concept in which the planning and design of facilities considers the needs of three distinct classifications of users:

Type A: Advanced Bicyclists

These are experienced riders who can operate under most traffic conditions. They include road cyclists comfortable riding in traffic, who will ride with or without bicycle facilities present, often ride long distances, and prefer direct, safe routes for utilitarian trips and/or long-distance loops for recreational outings. Type A bicyclists comprise the majority of the current users of collector and arterial streets and are best served by the following:

- Direct access to destinations usually via the existing street and highway system.
- The opportunity to operate at maximum speed with minimum delays.
- Sufficient operating space on the roadway or shoulder to reduce the need for either the bicyclist or the motor vehicle operator to change position when passing.



Type B: Basic Bicyclists

These are casual or new adult and teenage riders who are less confident of their ability to operate in traffic without special provisions for bicycles. They are intimidated by motor vehicles, tend to make short trips close to home, and prefer designated bicycle facilities. Some will develop greater skills and progress to the advanced level, but there will always be many millions of basic bicyclists. They prefer:

- Comfortable access to destinations, preferably by a direct route, using either streets with slow speeds and low traffic volumes and/or designated bicycle facilities.
- Well-defined separation from motor vehicles by providing space for bicycle lanes or developing separate bike paths.



Type C: Child Bicyclists

These are pre-teen riders whose roadway use is initially monitored by parents. Eventually they are accorded independent access to the bicycle system and will begin to ride farther from home. They and their parents prefer the following:

- Access to key destinations surrounding residential areas (schools, recreation facilities, shopping, etc.).
- Residential streets with low motor vehicle speed limits and volumes.
- Well-defined separation from motor vehicles on bicycle lanes or paths.

Most bikeway and trail planning initiatives combine Type B/C riders into a single user group that prefers access to off-road paths, a network of lightly traveled neighborhood streets, and bicycle lanes on streets with moderate traffic volumes and speeds.

In contrast, Type A cyclists are generally best served by designing all streets and roadways to accommodate shared use by bicycles and motor vehicles, with select corridors enhanced with wide outside lanes, paved shoulders, striped lanes, and/or multi-use paths designed to bicycle facility standards.

In addition, a unique recreational user group is comprised off-road cyclists who seek out soft-surface trails specifically for the sport of mountain biking:



Mountain Bikers

These cyclists are adults and children of varying skill levels who ride off-road on rugged, natural surface trails. To find desirable riding conditions, they often drive to a trailhead and unload specialized, heavy-duty bikes designed for durability and performance in rough terrain. Mountain bikers may ride on country back roads, fire roads, or off-road trails shared with all-terrain vehicles, but most prefer separation from motorized users, equestrians, and pedestrians on systems designated specifically for mountain biking use. These cyclists desire the following:

- Trails that traverse varied terrain, laid out in “stacked loop” systems that offer a variety of interconnected trails of different lengths and abilities originating from a common trailhead.
- Sustainable trails that create good experiences for visitors, minimize user conflict and environmental damage, and hold up over time. Trails need to be able to sustain tread compaction and soil displacement created by trail users, as well as erosion created by natural forces.
- Relatively narrow trails called “single track” that are laid out following the natural contours of the land. Properly designed single track will incorporate gentle undulations, grade reversals, corrals, chokes, and turns to slow mountain bikers to desired speeds and create interesting, challenging rides. Natural objects and technical trail features may additionally be introduced to add technical challenge.



PUBLIC INPUT

Development of The City of Rifle Bike Master Plan involved public outreach to numerous groups within the local and regional community. From April to September 2013, input was sought on current use of existing facilities, safety concerns, connectivity needs, and recreational opportunity. The initial goal of linking all parts of the community into the Downtown was expanded to include areas outside of the City of Rifle based upon input from the following public outreach activities:

Grant Project Steering Committee

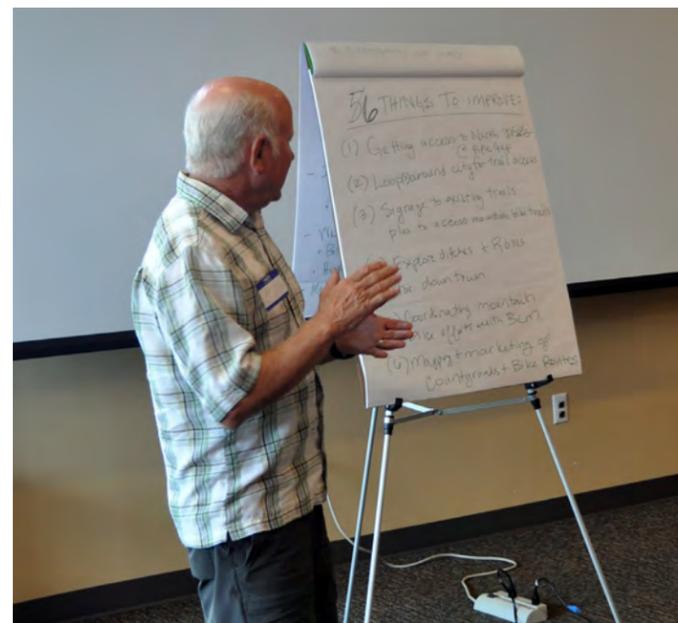
A Grant Project Steering Committee (GPSC) met several times throughout the planning process to guide development of the plan. The GPSC was comprised of the following regional leaders:

- Matt Sturgeon, City of Rifle City Manager
- Nathan Lindquist, City of Rifle Planning Director
- Rich Carter, Rifle City Council
- Keith Lambert, Garfield Clean Energy/Rifle City Council
- Sally Brands, Downtown Development Authority (DDA) President
- Michael Langhorne, Rifle Regional Economic Development Corporation (RREDC) President
- Tamra Allen, Garfield County Long Range Planner
- David Johnson, Roaring Fork Transportation Authority (RFTA) Planning Department
- Jason White, Roaring Fork Transportation Authority (RFTA) Planning Department
- Anne Miller, Colorado Department of Local Affairs (DOLA)
- Joe Carter, Colorado Department of Local Affairs (DOLA)
- Mark Rodgers, Colorado Department of Transportation (CDOT)
- Bill Haas, Federal Highway Administration (FHWA)
- Andy Hill, U.S. Department of Housing and Urban Development (HUD)

Regional Planning Workshop

Community and regional input was solicited into the planning process in May and early June, 2013, culminating in a series of events held on June 7th.

Participants in a regional workshop held at the Rifle Library downtown focused discussions on implementing the Rifle segment of the proposed LOVA trail, improving area streets to better accommodate cyclists, establishing rural loop rides in the county, and identifying potential areas for development of single track trail systems for mountain biking.



Youth Planning Workshop

On June 7th, 2013, a kids' planning workshop was held as a part of the community outreach activities and media events. The youth mapping and walking tour session involved Type B/C teen and preteen riders who provided valuable insights into how Rifle residents get around town without cars.



Bicycle Facilities Tour

Following the workshops, 15 people took a bike ride throughout the community to view current projects and areas of potential connectivity. They navigated missing links in the trail system, experienced difficult roadway intersection crossings, and were rewarded with scenic river views from the site of the future LOVA trail.



First Friday Events

June 7th culminated in evening activities as part of First Friday events throughout the downtown, and included a showing of a short documentary on Rifle and efforts being made as a part of the Downtown TOD Strategic Plan.

On September 6th, the Rifle Bike Master Plan was again showcased at First Friday events, with an opportunity for area residents to view the draft plan displayed in the library and provide feedback to the project consultant.

Media Coverage

Other community outreach included newspaper articles and Channel 5 news coverage, development of a Rifle bicycling video, and periodic updates posted to the Rifle Downtown Transit Oriented Development Strategic Plan website at www.downtownrifle.net.

The Rifle Bike Master Plan assumes that, depending on personal comfort level, area cyclists will ride on all existing streets and roadways, Interstate 70 excepted.

The majority of these “shared roadways” need no special accommodation or signing for bicycle use. This includes rural roadways with good sight distance that carry low volumes of traffic operating at speeds of 55mph or less.

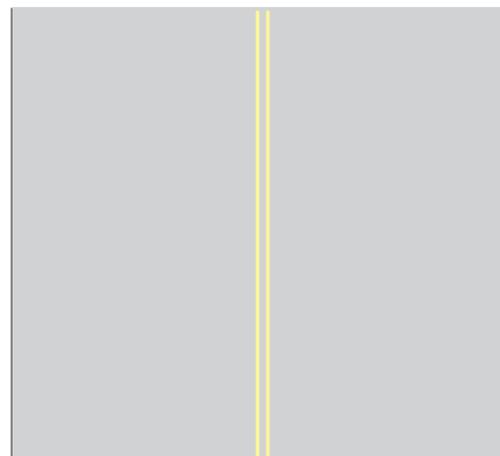
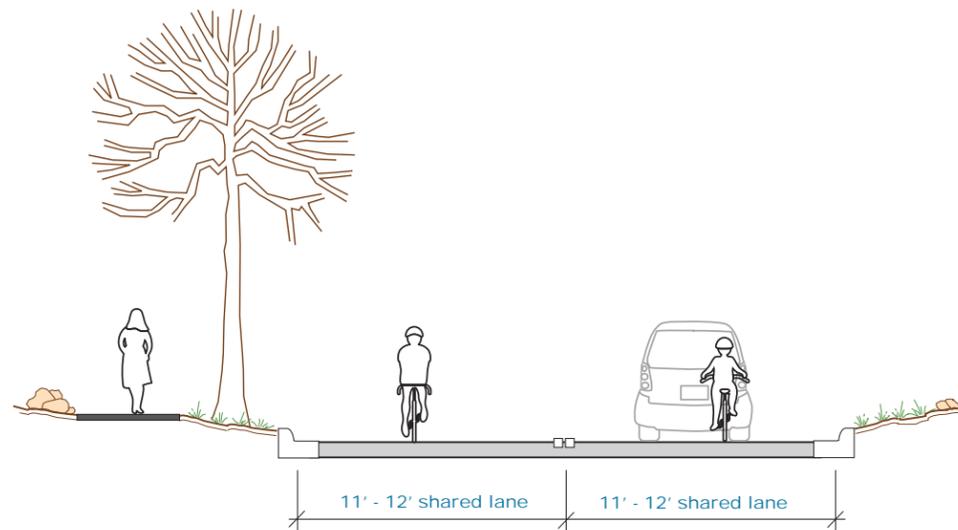
Following guidance of the national *Manual on Uniform Traffic Control Devices (MUTCD)*, shared roadways are usually not signed. Yellow MUTCD “Share the Road” warning signs may be used to alert motorists that bicyclists may be encountered and they should be mindful and respectful of cyclists. This sign is not a substitute for appropriate roadway design geometry to accommodate bicycles, and should not be used to indicate a bike route.

The American Association of State Highway and Transportation Officials (AASHTO) publishes the *Guide for the Development of Bicycle Facilities*, which provides national guidance on providing facilities that are safe, convenient, well-designed, and well-maintained, with low-crash frequencies and severities.

On rural roadways (without curb and gutter) paved shoulders are the recommended AASHTO accommodation. Shoulders provide additional operating space for cyclists, benefit motorists, and extend the service life of the road.

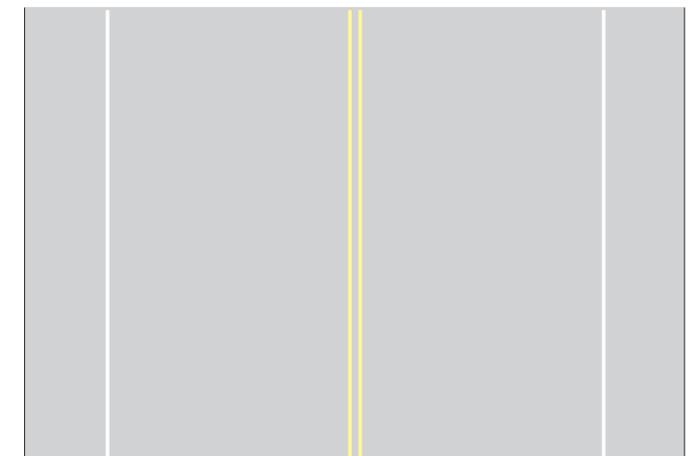
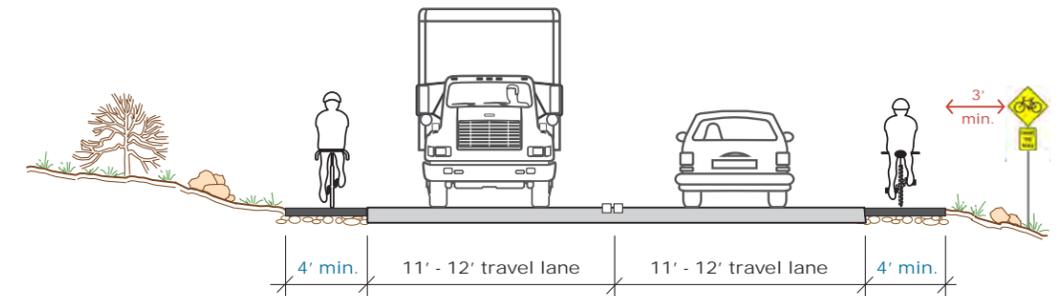
SHARED ROADWAYS

- All streets, roads, and highways, except those where bicyclists are legally prohibited, should be designed and constructed under the assumption that they will be used by bicyclists.
- **Low volume, low speed local streets typically require no special accommodation** for bicyclists and motorists to share travel lanes.



PAVED SHOULDERS

- Appropriate facility treatment for roadway cross-sections without curb and gutter.
- Shoulders should be 4' - 6' paved width, free of loose gravel.
- Use of rumble strips is not recommended, but where used, shoulders must maintain 4' of rideable space and provide periodic gaps for cyclists to move across the rumble strip pattern as needed.
- Shoulder facilities within urban areas may be signed and marked as bicycle lanes, or rural routes may use share-the-road warning signs.
- Bicycle lane pockets may be delineated at intersections to minimize potential conflicts with right turning motor vehicles.



If providing a desired connection between other designated bikeway facilities, shared roadways may be signed as bicycle routes. Green MUTCD "Bike Route" signs are used, which often include directional arrows and supplemental destination identification.

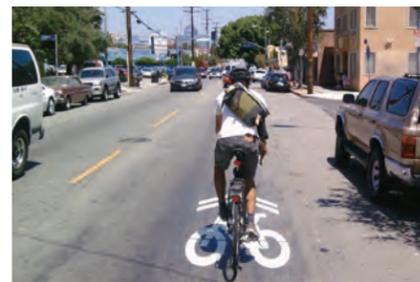
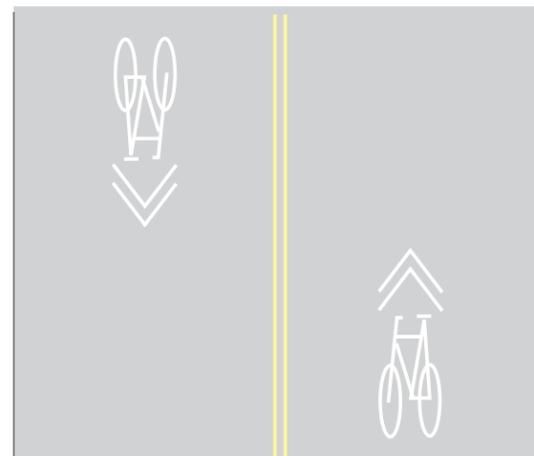
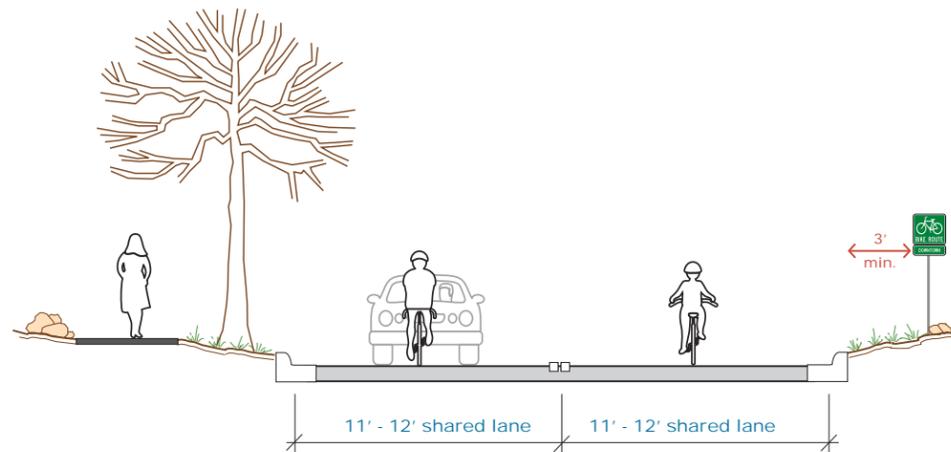
In situations where it is desirable to provide a higher level of guidance to bicyclists and motorists, shared lanes may be marked with a pavement marking symbol called a "sharrow." This treatment is appropriate on skinny streets with speed limits less than 35mph.

However, signing and marking shared roadways as bicycle routes does not create designated space for bicyclist use. Thus wherever possible, on-street bicycle lanes are the preferred treatment to create major cross-town bicycling corridors that will benefit both both Type A and Type B/C riders.

Bicycle lanes should be located on collector and arterial streets, which provide convenient and direct routes of travel, and where additional bicycle operating space is most needed to enhance cyclist safety and comfort levels. Special attention to bike lane positioning at intersections is required to minimize potential conflicts with turning vehicular movements. Design guidance for bike lane placement within a variety of intersection configurations is provided in the AASHTO and MUTCD guides.

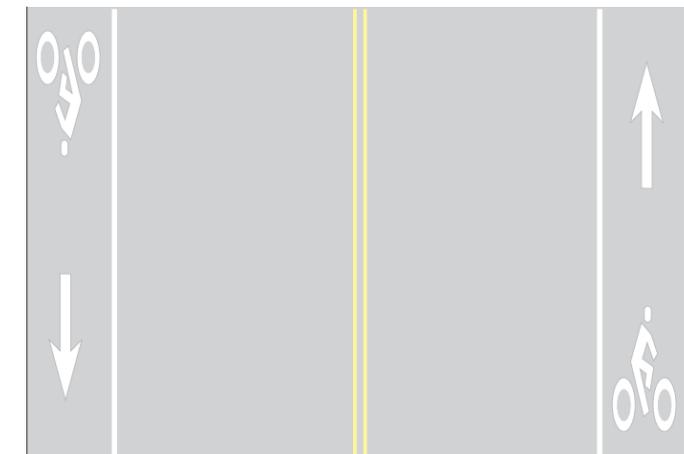
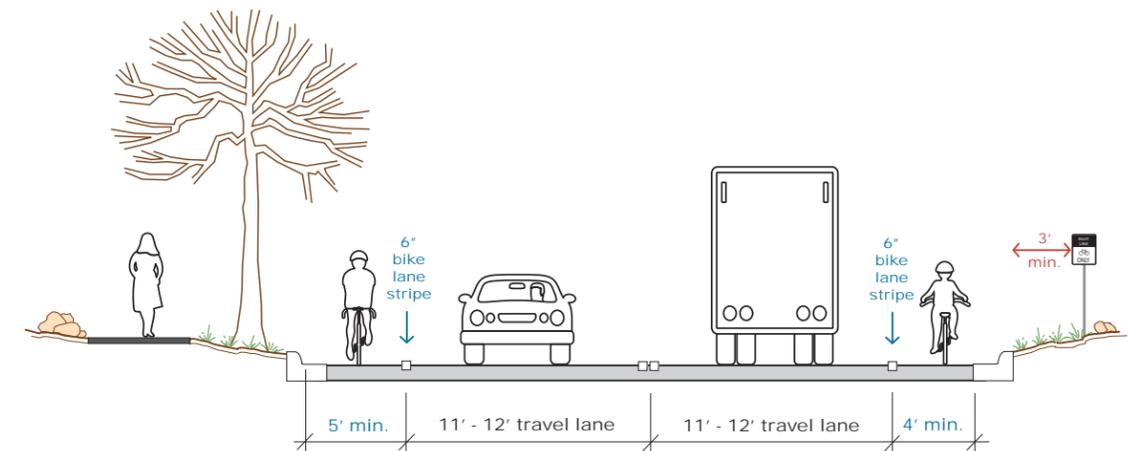
DESIGNATED BIKE ROUTES

- Select shared use roadways may be designated as bicycle routes to identify key connections within a community's overall bicycle system.
- Appropriate for use on skinny streets with low traffic volumes and speeds.
- Designation uses bike route signing with supplemental directional arrows, and shared use pavement markings or "sharrows."
- Sharrows shall be placed on the pavement to indicate correct bicyclist roadway positioning. Preferred location is in the center of the shared travel lane, but markings shall be located no closer than 4' min. from curb face, or 11' min. if on-street parking is present.



BICYCLE LANES

- Used to delineate available roadway space for preferential use by bicyclists, place cyclists in motorist's field of vision, and discourage wrong-way riding.
- Appropriate for use on streets with moderate to high levels of vehicular traffic where designated lanes are desired to provide separation from motor vehicles.
- Bike lanes may be 4' - 6' wide. Where on-street parking is present, width is 5' min.
- When bicycle lanes approach intersections, care should be taken to minimize conflicts with turning vehicles. The bike lane should always be located to the left of any right-turn lanes, with dashed lane striping provided through vehicular merge areas.



New collector streets in Rifle are proposed to be constructed to a wider standard that includes on-street bicycle lanes, and several streets are recommended to be retrofitted to add bicycle lanes. However, not all existing streets are wide enough to accommodate bike lane restriping.

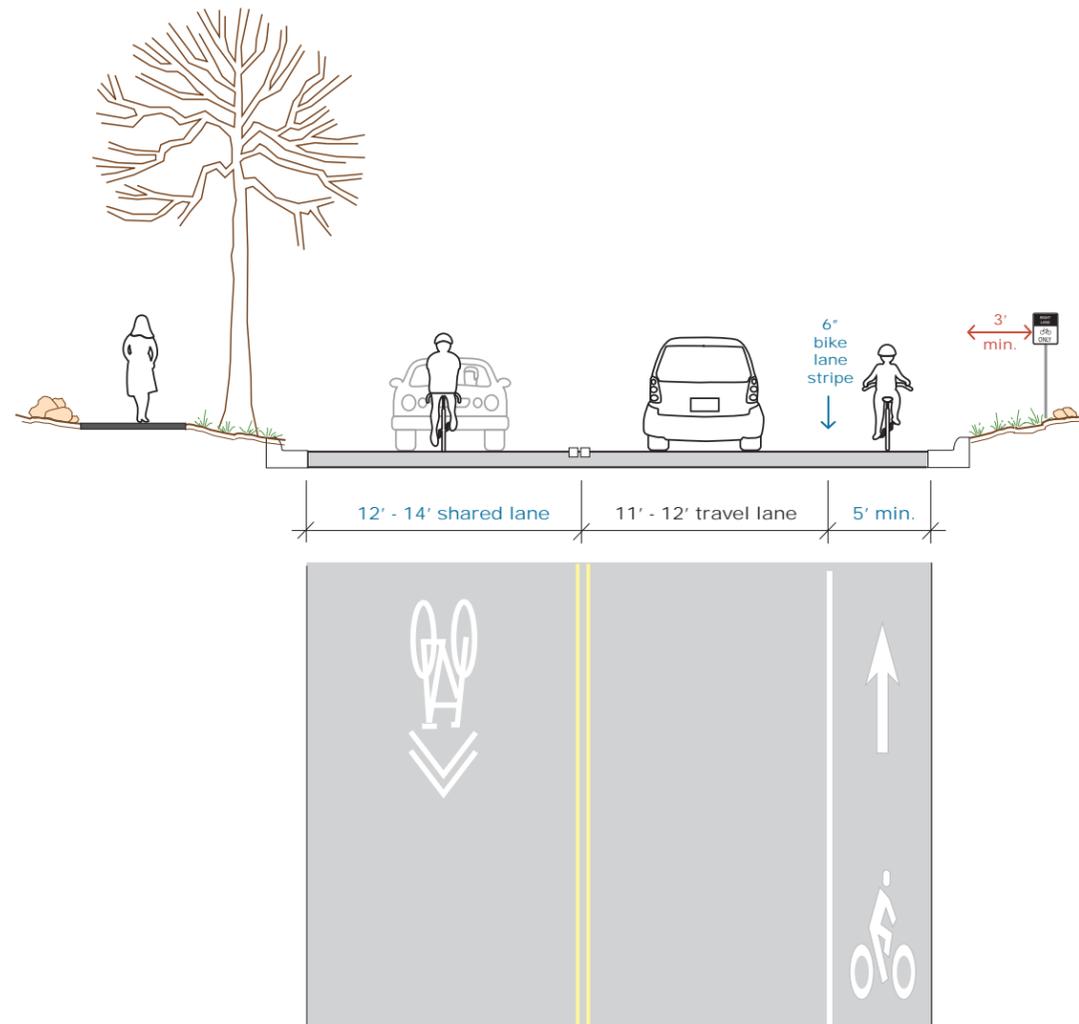
Two special design situations should thus be implemented to address retrofit on steep slopes and in corridors with on-street parking.

In most cases, bicycle lanes should be provided on both sides of two-way streets. However, on streets with appreciable grade, the preferred AASHTO design treatment is a designated up-hill bicycle lane for slower climbers, and a shared lane for down-hill cyclists traveling at faster speeds. This treatment may be implemented on hills with or without on-street parking, but sharrow markings need to be placed away from the curb and/or the door zone of parked cars.

On streets with moderate to few parked vehicles, on-street parking may be limited to one side of the street to create space for striping bicycle lanes. Working with adjacent property owners to assess parking demand will be necessary for successful roadway reconfiguration.

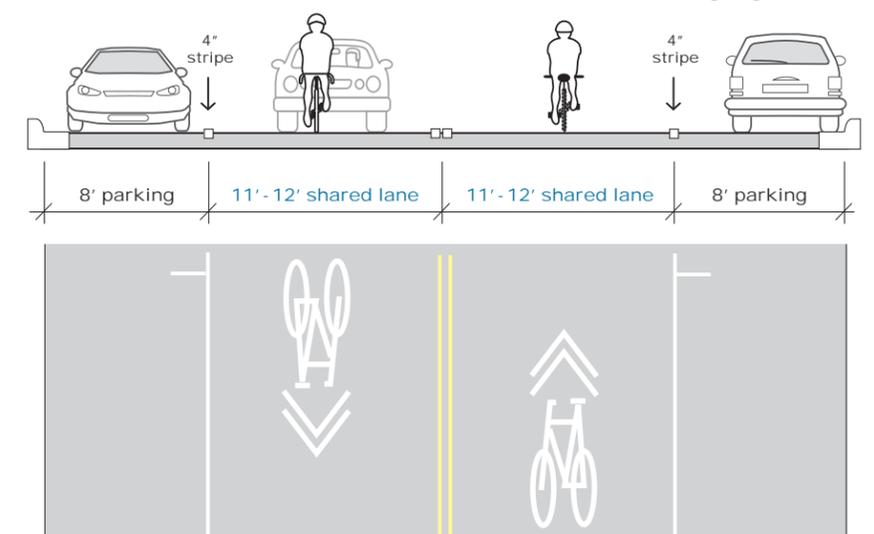
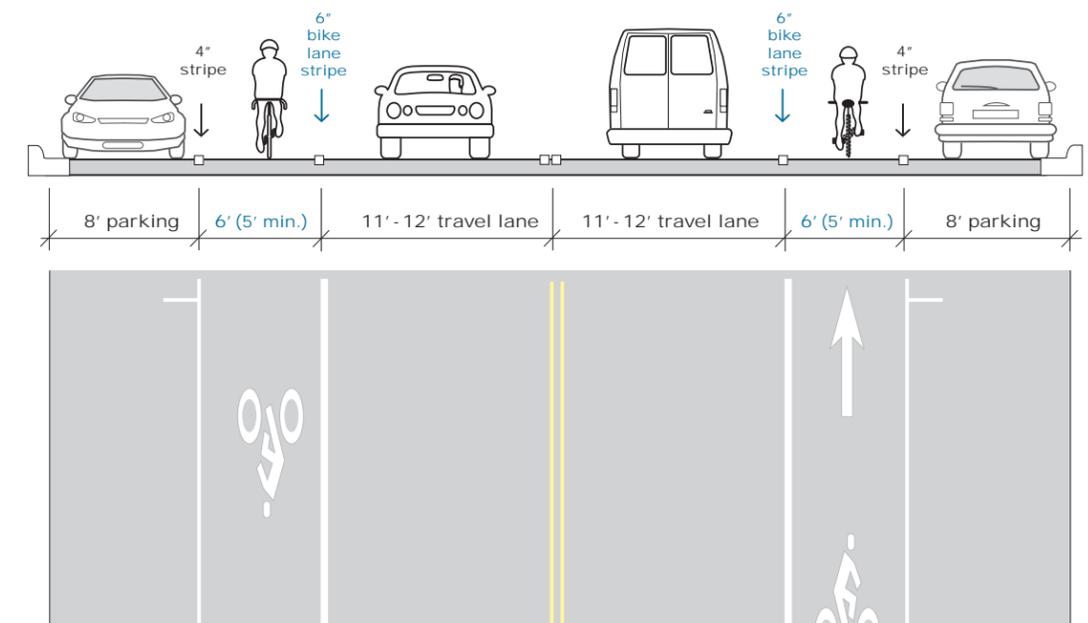
CLIMBING LANES

- For use on steep grades where space is too constrained to provide a pair of bike lanes, and/or where downhill bicyclists desire additional separation from parked cars.
- Provide a designated bike lane in the uphill direction for slower moving cyclists.
- Provide shared lane markings in the downhill direction where cyclists are traveling at vehicular speeds and can easily share the lane. Place sharrow markings in the center of the shared travel lane.



ON-STREET PARKING

- Both bicycle lanes and sharrow bike route treatments may be implemented in corridors with on-street parking present on one or both sides of a street.
- Bicycle lanes must always be striped between the parking and travel lanes. 6' wide bike lanes are preferred adjacent to parked cars, with 13' min. preferred for the combined bike/parking lane.
- Parking stripes or markings should be used between bike lane and parking lane to discourage encroachment of parked cars into the bicycle travelway.
- When bicycle lanes approach intersections, the bike lane should continue to the left of any right-turn lanes, with dashed striping provided through merge areas.
- On streets where sharrow markings are used, preferred placement is in the center of the shared lane to avoid the "door zone" adjacent to parked cars. At minimum, the center of the sharrow shall be placed at least 11' from the curb face.



Off-road trails are desired by Type B/C bicyclists to offer alternative routes removed from traffic. In many parts of Rifle, trail segments are also needed to make connections where the street system does not go through due to challenging terrain. Expansion of Rifle's trail system is thus desired to serve both utilitarian and recreational bicycling needs.

Multi-use paths may be paved or soft-surface, but should be developed to widths that will allow bicyclists to meet and pass other cyclists and pedestrians that are on the trails. Appropriate curb cuts, crosswalks, and signage shall be provided to ensure seamless transitions between interconnecting on-street and off-road bicycle facilities.

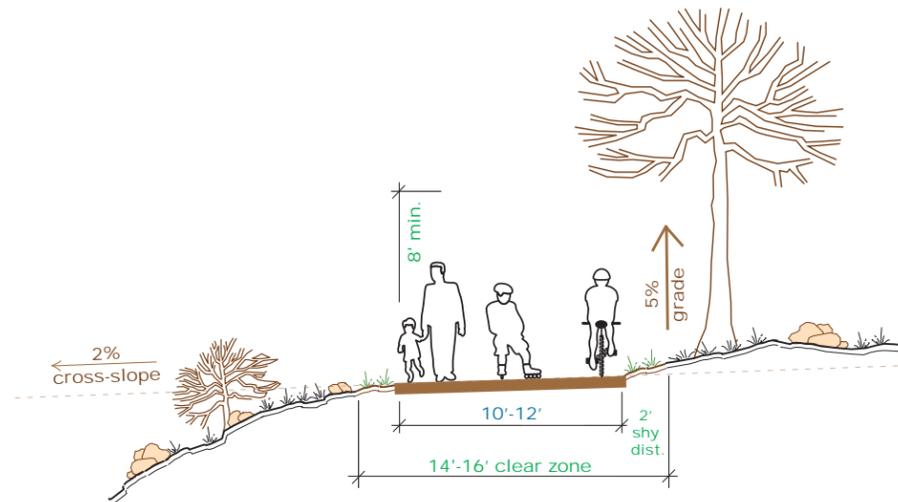
In contrast, single track should be designed to discourage use by motorized ATV users and not be developed to wide standards. Narrow trails laid out following the natural contours of the land are desired to wind through areas designated specifically for mountain biking.

The AASHTO Bike Guide should be followed for designing multi-use paths. A publication by the International Mountain Biking Association (IMBA) is recommended for constructing single track.

Trail Solutions: IMBA's Guide to Designing Sweet Singletrack is the premier trailbuilding resource on how to develop sustainable trails and successfully introduce natural objects (rocks, roots, logs, etc.) and man-made features (elevated bridges, teeter-totters, jumps, etc.) to add technical challenge to mountain biking experiences.

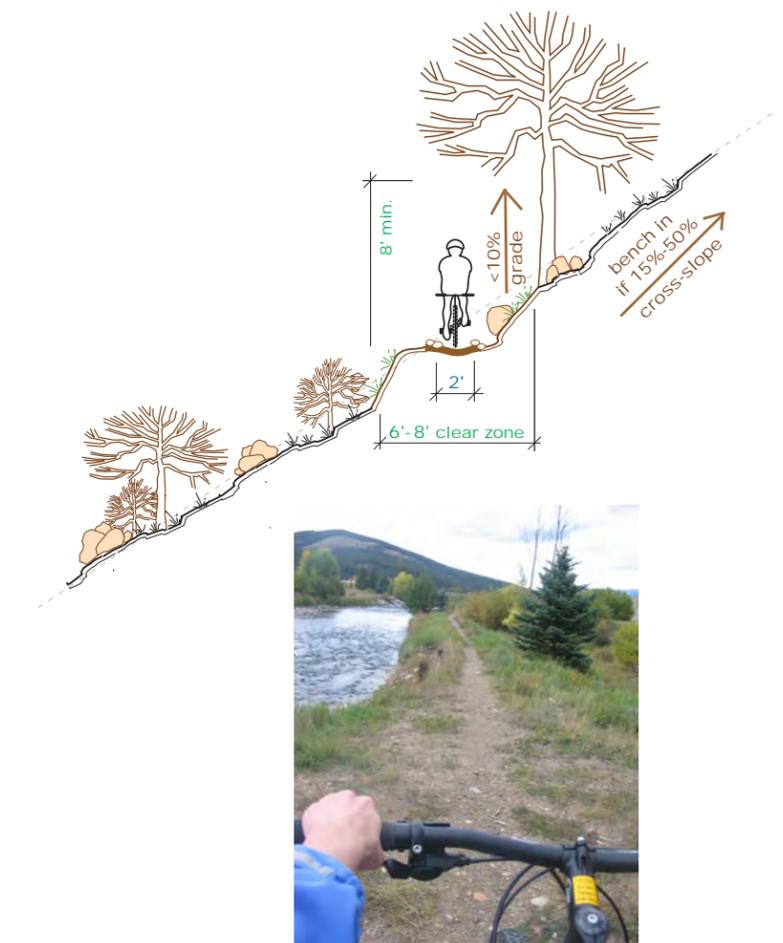
MULTI-USE TRAILS

- Intended for use by a variety of non-motorized user groups including pedestrians, bicyclists, in-line skaters, and joggers.
- Appropriate to be developed in linear open spaces, or parallel to higher volume roadways when adequate separation can be provided between trail and road.
- The trail tread may be soft surface (crusher fines) or paved (asphalt or concrete). Trail width is 10' min. with a 5% grade to accommodate multiple users.
- Standard MUTCD signage and pavement markings, including ladder-style crosswalks, shall be installed at all street crossings.



SINGLE-TRACK

- These rugged, natural surface trails are called single-track when used by mountain bikers, or hiking trails when used by pedestrians.
- Appropriate to be developed in open space areas as a series of stacked loop trails of varying lengths.
- The trail tread is compacted soil typically 2' wide and defined by using vegetation, boulders, and other natural features to create chokes and corrals that create an interesting, meandering ride.
- All single-track should be designed as rolling contour trails - characterized by gentle grades, rolling undulations called grade reversals, and an outsloped trail tread that allows water to drain off the surface without causing erosion.





THE VISION

The 2013 Rifle Bike Master Plan is intended to establish a vision and implementation strategy for positioning the City of Rifle as a family-oriented bicycling destination along the I-70 corridor. Goals include developing a citywide bicycle system that will allow residents to travel around town without use of an automobile, offer enhanced recreational opportunities, provide safe routes to schools, and promote active and healthy lifestyles.

In addition, completion of the local bicycle system will create an activity hub that connects to regional visitor attractions such as Rifle Gap State Park, Rifle Falls State Park, and the proposed 50-mile regional trail along the Colorado River. Creating a community that supports and embraces bicycling is viewed as a key strategy to attract on-going investment in Downtown Rifle and expand the social and economic networks that are critical to creating and maintaining a vibrant community.

A NETWORK APPROACH

Segments of bikeway facilities exist in Rifle and are used by cyclists of all ages. Most notably, the Rifle Creek Trail is an exemplary community asset that explores the history of Rifle through public art installations along the route. However, Rifle's existing facilities are disconnected and arriving to these amenities on bike is difficult from many parts of the community.

This plan therefore takes a systems-level approach that focuses on targeting specific corridors that will link together to create a complete travel network. Implementing bicycle facilities where most feasible is balanced with making infrastructure investments designed to eliminate gaps in the system. The goal is to have on-road and off-road facilities seamlessly combine to offer routes of travel that overcome barriers such as steep topography, rivers, busy roadways, and railroads.

USER GROUPS

As previously discussed, the Rifle Bike Master Plan seeks to meet the needs of all bicycle users. The public process for developing this plan provided direction from each of the various user groups, as summarized following:

TYPE A – ADVANCED CYCLISTS

Local experienced cyclists like to ride outside of the City of Rifle on a variety of rural roadways. In general, they desire mapping to help in planning rides of varying lengths, and placement of signage along routes to encourage a greater share-the-road etiquette between cyclists and motor vehicle drivers. This user group would also like to see local education programs targeted at both motorists and bicyclists, and provisions for additional bicycle parking, especially indoor bike parking at employment sites.

TYPE B – BASIC CYCLISTS

Riders less confident in sharing the road with vehicles stated preference for development of additional miles of off-road multi-use paths. They also desire widening of select roadway segments to provide bicycle lanes and/or shoulder bikeway facilities.

TYPE C – CHILD CYCLISTS

Youth participating in the kids' planning workshop would like to see a complete network of in-town trails and bike lanes developed that will allow them to access to all parts of the city by bicycle. Currently, making trips on foot or bike between the Palomino Park neighborhood and Downtown is especially challenging for Rifle youth.

MOUNTAIN BIKERS

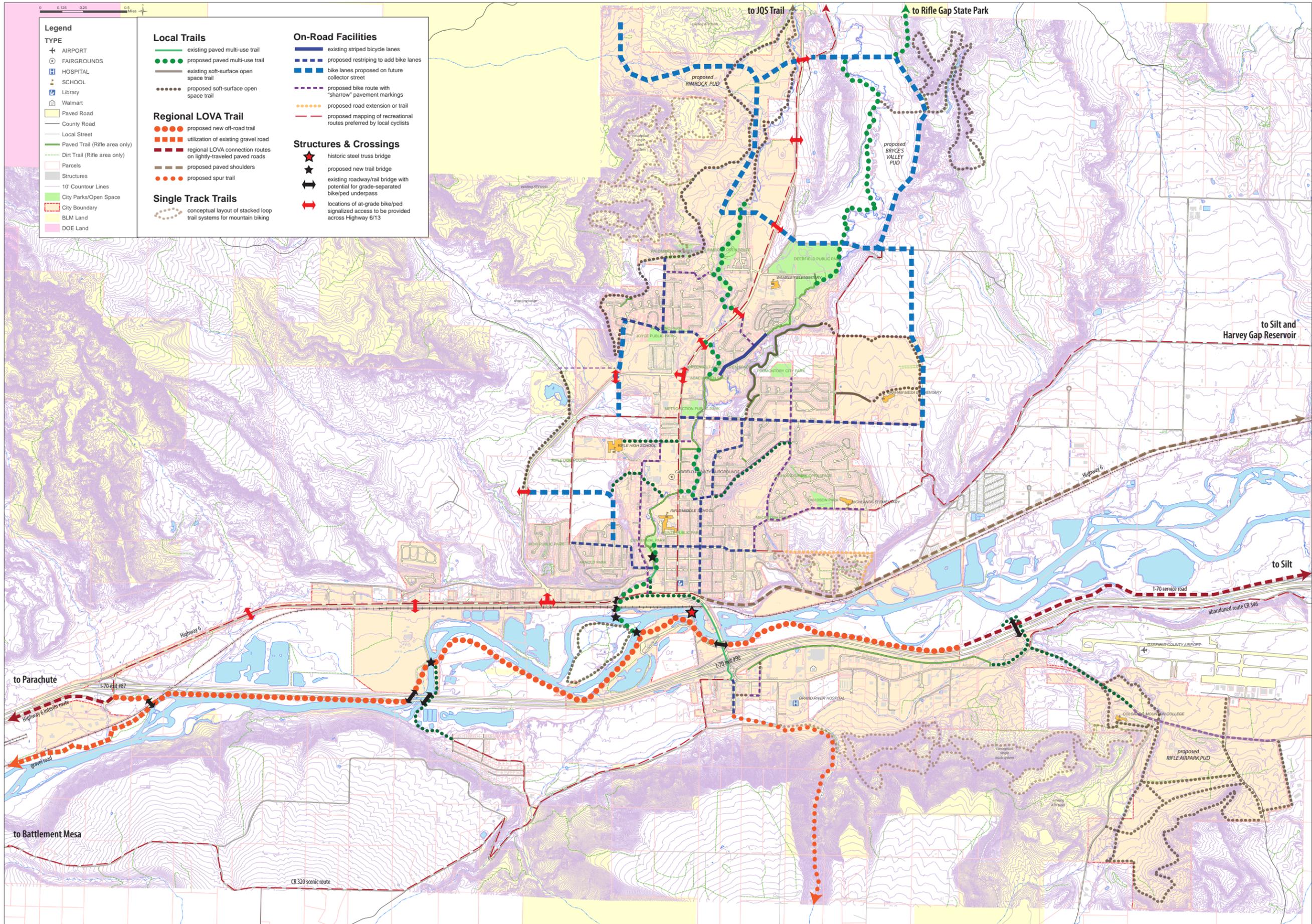
Teen and adult cyclists alike would like to see single track developed specifically for mountain biking, similar to trail systems found in the communities of Durango and Fruita. National Forest and Bureau of Land Management (BLM) properties around Rifle allow mountain biking on select trails and roads. However, these often traverse open space lands used for hunting, are shared with a variety of motorized users, and are located beyond cycling distance from Rifle residences and lodging.

Development of designated single track systems at the urban fringes, within easy bicycling distance from Downtown Rifle, is desired to expand local recreational opportunities. Location of single track systems within biking distance of hotels and restaurants will further encourage economic development potential to have the Rifle area become a day-trip destination for mountain biking, consistent with the vision of Rifle's Strategic Downtown Plan.

PLAN OVERVIEW

The 2013 Bike Plan map on the following page depicts the long-range vision for the City of Rifle and illustrates how various bikeway facility types will combine to create an integrated bicycling network. Dotted lines depict conceptual routes for new off-road, multi-use trails. Dashed lines represent near-term street restriping projects to cost effectively add designated bicycle lanes, and/or proposed new collector streets that should include bicycle lanes to provide connectivity into and through parts of the community targeted for future growth and development.

Four enlarged maps, focusing on the northern, central, and southern parts of the city, plus a regional context map follow. Each is keyed to a list of specific implementation details recommended to accommodate bicycle travel within the identified corridors.



Legend	
TYPE	
	AIRPORT
	FAIRGROUNDS
	HOSPITAL
	SCHOOL
	Library
	Walmart
	Paved Road
	County Road
	Local Street
	Paved Trail (Rifle area only)
	Dirt Trail (Rifle area only)
	Parcels
	Structures
	10' Contour Lines
	City Parks/Open Space
	City Boundary
	BLM Land
	DOE Land

Local Trails	
	existing paved multi-use trail
	proposed paved multi-use trail
	existing soft-surface open space trail
	proposed soft-surface open space trail

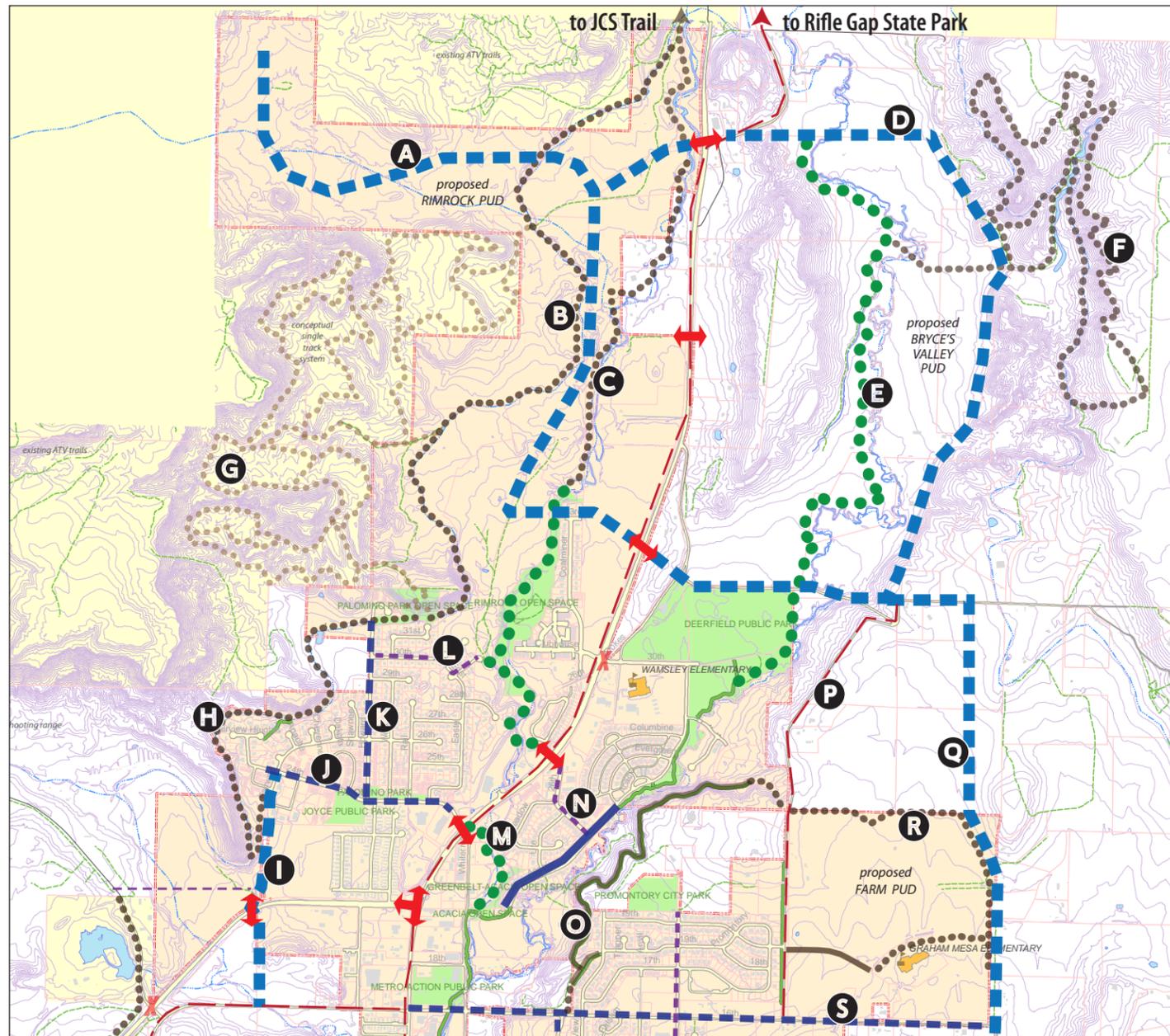
Regional LOVA Trail	
	proposed new off-road trail
	utilization of existing gravel road
	regional LOVA connection routes on lightly-traveled paved roads
	proposed paved shoulders
	proposed spur trail

Single Track Trails	
	conceptual layout of stacked loop trail systems for mountain biking

On-Road Facilities	
	existing striped bicycle lanes
	proposed restriping to add bike lanes
	bike lanes proposed on future collector street
	proposed bike route with "sharrow" pavement markings
	proposed road extension or trail
	proposed mapping of recreational routes preferred by local cyclists

Structures & Crossings	
	historic steel truss bridge
	proposed new trail bridge
	existing roadway/rail bridge with potential for grade-separated bike/ped underpass
	locations of at-grade bike/ped signalized access to be provided across Highway 6/13





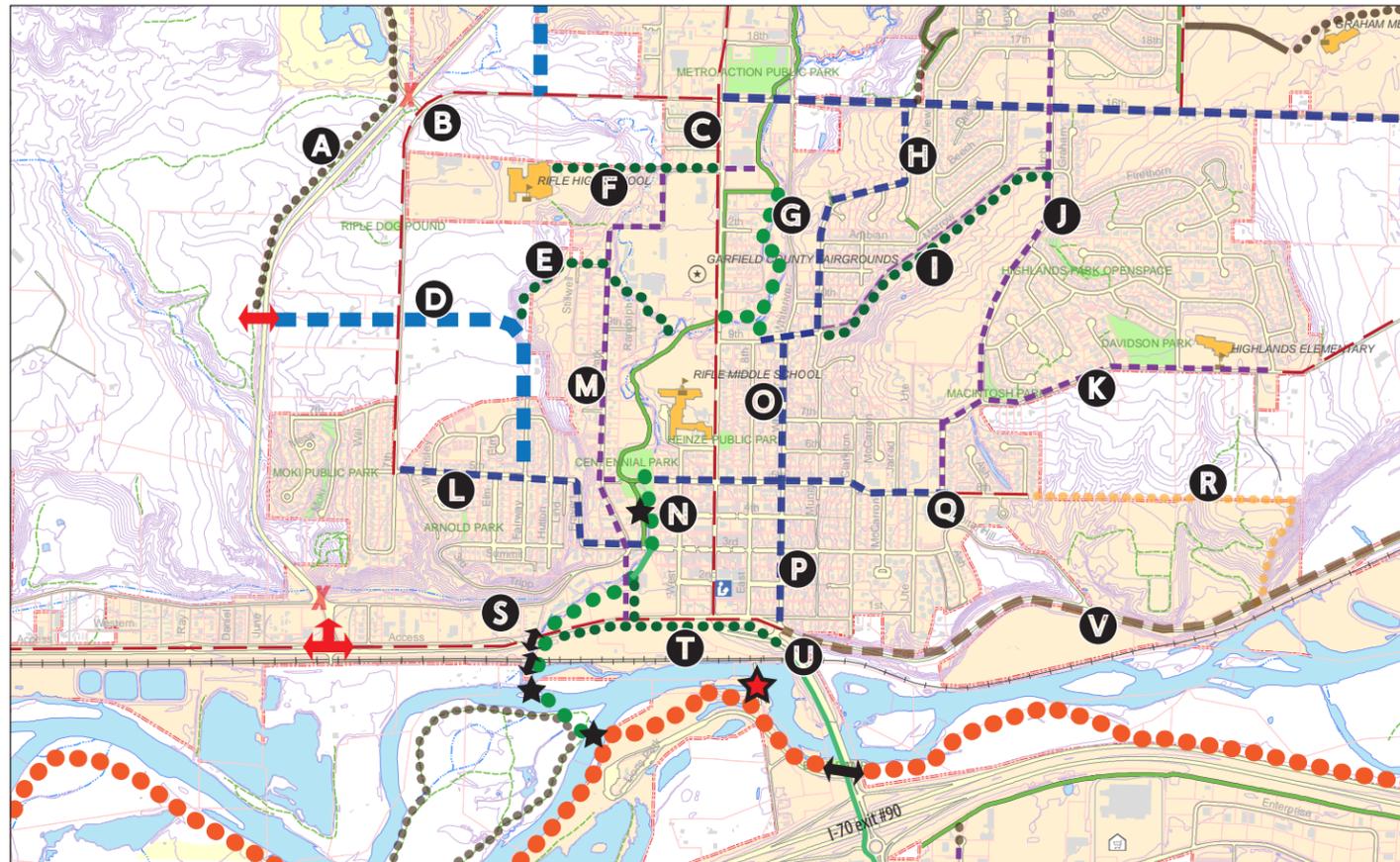
The long-range vision for bicycle accommodation in the northern part of the city will largely be dependent on future land development. The Rifle Bike Master Plan incorporates proposed new trails and streets per Planned Unit Development (PUD) projects, and identifies a system of recommended routes that will provide connectivity across the Rifle Bypass/Highway 13 at intersections planned to have signalized bicycle and pedestrian crossings.

Near-term, providing access between Palomino Park and Downtown Rifle is a high priority, to be accomplished by

restriping W. 24th Street to add on-street bicycle lanes, constructing a trail segment to connect the Rifle Creek Trail with the 24th Street/Railroad Avenue intersection, and adjusting signal timing for safer bike/ped crossings.

Other ideas for northern Rifle include exploring the feasibility of developing trails along ditch corridors and creating a system of designated mountain bike trails on the eastern edge of the Bureau of Land Management Hubbard Mesa Open Space. Details of specific corridor recommendations follow:

- A. **FUTURE RIMROCK COLLECTOR STREETS** – The main collector boulevard proposed in the RimRock PUD should be developed with on-street bike lanes. Likewise, bicycle accommodation should be included on the town entry drive and an extension of 33rd Street, both of which will provide signalized access across Highway 13 and link into the proposed street system of Bryce's Valley PUD.
- B. **RIMROCK TRAIL SYSTEM** – The RimRock PUD proposes possible pedestrian, bike and equestrian trails paralleling drainageways traversing the development.
- C. **GOVERNMENT CREEK TRAIL EXTENSION** – Continue trail development north to provide access to Highway 325 and the JQS Trail.
- D. **FUTURE VALLEY FLOOR CONNECTOR** – The valley floor connector street proposed in the Bryce's Valley PUD should be developed with on-street bike lanes, linking with designated bike/ped signalized crossings of Highway 13, per the Highway 6L & 13A Access Study.
- E. **RIFLE CREEK TRAIL EXTENSION** – Continue development of this regional trail through the Bryce's Valley Planned Unit Development.
- F. **RIFLE CREEK CANYON DITCH** – To make a future trail connection north to Rifle Gap State Park, a trail link will be needed from Rifle Creek to and along the Rifle Canyon Ditch.
- G. **BRYCE'S VALLEY OPEN SPACE TRAILS** – In addition to the regional trail north/south trail, the Bryce's Valley PUD proposes a system of open space trails. Based on the site topography, this system would be good to develop as single track to accommodate mountain bikes.
- H. **HUBBARD MESA** – Similarly, the terrain at the urban fringe where the City of Rifle abuts BLM lands is well suited for mountain biking. Multi-jurisdictional coordination should be explored for development of a system of single track on the far eastern edge of the Hubbard Mesa Open Area, where there is no conflict with shooting range, hunting, or ATV trail uses.
- I. **GRAND TUNNEL DITCH CANAL** – Pursue soft-surface trail development along drainage ditch. Connect to Fairway Avenue as southern terminus to avoid routing near shooting range.
- J. **FUTURE COLLECTOR STREET** – Access to the Highway 13 Bypass is proposed to be relocated with an extension of Fairway Avenue, including on-street bicycle lanes to 16th Street. In addition, the existing access road into Hubbard Mesa will need to be realigned to provide shared auto and bike access to the northwest from the new intersection.
- K. **W. 24th STREET** – Restripe with on-street bike lanes and parking provided on one side of street from Fairway Avenue to the Railroad/Whitewater intersection.
- L. **HOWARD AVENUE** – If neighborhood speeding is a problem, stripe bicycle lanes and provide parking on one side of street. If parking supply is an issue, designate as a bike route with sharrow and allow parking on both sides.
- M. **W. 30th STREET** – Once the Government Creek Trail is built from Hwy 13 to W. 30th Street, add bike route directional signs and sharrow pavement markings on 30th to identify the connection to Howard Avenue.
- N. **TRAIL EXTENSION TO PALOMINO PARK** – Construct a short segment of multiuse path along Government Creek from the Rifle Creek fork to the signalized intersection of Railroad Ave/Whitewater Ave/W. 24th. Adjust signal timing to provide additional crossing time for people on foot or bike.
- O. **E. 26th STREET** – Designate as a shared roadway link from Acacia Avenue to the Highway 13 signal and future Government Creek Trail.
- P. **RAYNARD GULCH TRAIL** – Extend existing trail to connect with streets on either end.
- Q. **SILT MESA ROAD** – This is part of a route that is used to access rural rides in the County and desired to be mapped as part of a recreational loop ride around Rifle. Future roadway improvements may include bike lanes or use of sharrow.
- R. **FUTURE EASTSIDE ROAD** – Build proposed Eastside North/South Road to include bicycle lanes.
- S. **THE FARM TRAIL SYSTEM** – Complete trail system as proposed in The Farm PUD.
- T. **E. 16th STREET** – Cross-town bike route through combination of bike lanes and sharrow treatments.



The central planning area extends from 16th Street south to Centennial Parkway/Highway 6. Overcoming grade challenges to provide system connectivity is a major need for bicycle accommodation in this area of the city. Existing streets are proposed to be designated with either bicycle lanes, or shared route pavement markings (sharrows) to designate desired routes. New segments of off-road trail are also proposed to be built to provide needed connectivity in areas where the street system does not go through.

- A. **BYPASS TRAIL** - Explore opportunity for bicycle use of an existing trail along the western edge of the Bypass right-of-way as an option to provide future access to Hubbard Mesa from the south once the existing Highway 13 roadway intersection is closed and relocated.
- B. **PREFONTAINE AVENUE/W. 16th STREET** - May be mapped as part of a loop ride around town. Due to narrow width, rural feel, and potential for higher vehicular speeds, are not recommended to be designated as bike routes. Share-the-Road signing

may be posted to alert motorists to potential bicycle use. Cyclists may opt to use the sidewalk along the east side of Prefontaine, but it is too narrow to be designated as a bike path.

- C. **RAILROAD AVENUE** - This major corridor is used by experienced cyclists for access out of town, but Railroad Avenue is not recommended for designation as a part of the bicycle system.
- D. **FUTURE COLLECTOR STREET** - Transportation plans for Rifle include a new west-side collector, which should include on-street bicycle lanes.
- E. **FAIRGROUNDS/W. 11th TRAIL** - To provide additional east/west connectivity, develop a trail extension along the southwest edge of the fairgrounds to Park Avenue. Long-term, this trail will continue along W. 11th, then gradually climb up grade to connect with the planned new west-side collector street. Alignment with W. 8th may also be option to navigate steep grades.

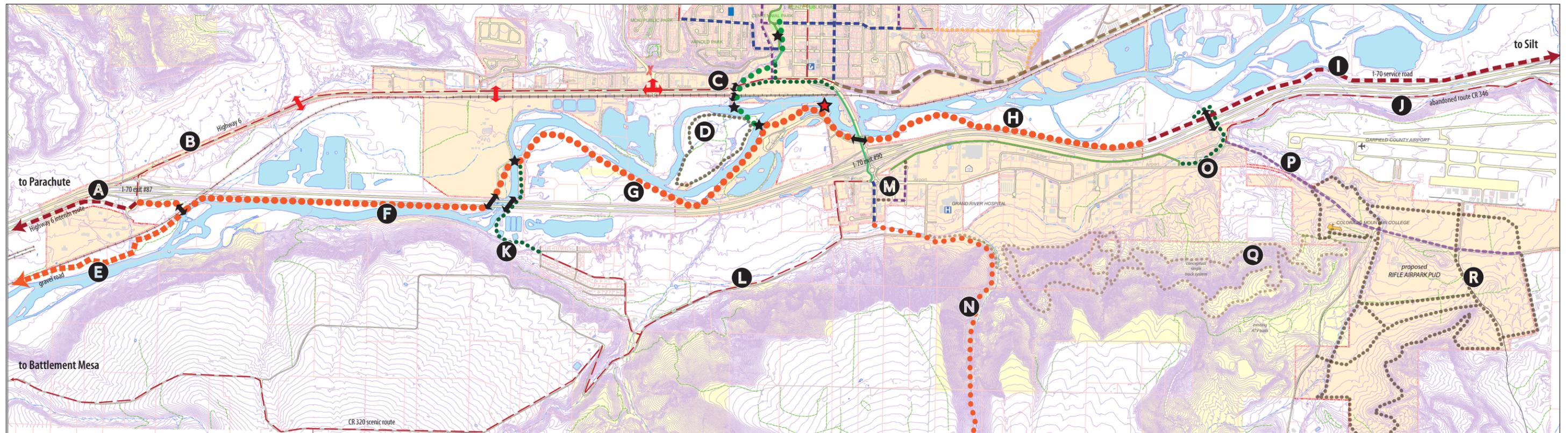
- F. **HIGH SCHOOL CONNECTOR TRAIL** - Develop a multi-use path for use by cyclists and pedestrians along the northern edge of Rifle High School, continuing along the north side of 14th Street.
- G. **MISSING GAP in RIFLE CREEK TRAIL** - Complete the missing trail link routing along the creek from the Railroad Avenue underpass up to City Market.
- H. **MUNRO AVENUE** - Stripe bicycle lanes on Munro with parking provided on one side. Continue bike lane striping or use sharrow markings on Rifle Heights Drive to identify the connection to 16th Street.
- I. **E. 9th/MORROW DRIVE** - Morrow is preferred to access the east side of Rifle due to its mild grade. However, it should not be designated as a bike route due to narrow pavement width and limited sight distances. Improvement options include exploring the feasibility of adding paved roadway shoulders; developing a multi-use path on the south side of the drainageway; or closing the existing road to vehicular use and making it a bike/ped path.

Additionally, E. 9th will be striped with bike lanes for two blocks to make connections for both north/south and east/west travel.

- J. **BIRCH AVENUE** - Restripe Birch with a combination of sharrow markings, climbing lanes and/or striped bicycle lanes as space permits along various segments.
- K. **E. 7th STREET** - Transition from bicycle lanes to sharrow treatments to Share-the-Road signing as 7th Street traverses urban to rural environments.
- L. **W. 5th/FRAVERT HILL** - Stripe bicycle lanes on W. 5th Street, stripe a climbing lane on the Fravert hill, and provide sharrows or bike lanes and enhanced crosswalks on W. 3rd Street to link to the Rifle Creek Trail.
- M. **PARK AVENUE** - Designate Park as a north/south route by providing directional signage and sharrow pavement markings. Park Avenue is proposed to be extended across Rifle Creek to connect with Centennial Parkway as its southern terminus.
- N. **DOWNTOWN TRAIL IMPROVEMENTS** - Complete bike/ped enhancements proposed in the TOD Strategic Plan including a new bridge at 4th, continuation of the Rifle Creek Trail on the east side of the creek between

5th and 3rd, a multi-use path paralleling Park Avenue, pedestrian access up the hillside between Fravert and Lind, and between Park and W. 5th.

- O. **WHITERIVER AVENUE** - Stripe bicycle lanes with parking on one side of street. This treatment is recommended to create a clearly defined north/south bicycling corridor that connects with the proposed gateway round-about at Highway 13, bicycle lanes on 9th Street, and facilities to the north. (East Avenue may be considered as an alternate route, if stop signs are reoriented and a connection can be made south across Centennial Parkway. Otherwise cyclists will benefit more with bicycle lanes provided on Whiteriver.)
- P. **E. 5th/ASPEN AVENUE** - Stripe bicycle lanes on 5th Street, restripe the 5th Street hill to provide a climbing lane for cyclists, and designate Aspen Avenue as the preferred connection to E. 7th Street.
- Q. **E. 5th EXTENSION** - Long term, 5th Street is also desired to be continued to the east, connecting with Highway 6, as either a street extension or bike trail link.
- R. **5th STREET BIKE PARK** - Explore development of a mountain biking terrain park that includes dirt jumps, pump tracks, and other technical skill training areas.
- S. **CREEKSIDE SOUTH TRAIL EXTENSION** - Extend the Rifle Creek Greenway through the proposed Creekside South development, including retrofit of the area beneath the Centennial Avenue bridge to create a bicycle/pedestrian underpass.
- T. **CENTENNIAL PARKWAY** - This roadway is planned to be transferred and redesigned from State highway to City street, with a parallel multi-use path proposed within the right-of-way on the south side of the parkway. The path will connect from the Creekside South trail extension under Centennial Parkway, to the existing bike/ped accommodation on the highway bridge over the Colorado River. Location is planned to minimize conflicts with the proposed Gateway round-about to be installed at Whiteriver and Highway 13.
- U. **HIGHWAY 6** - Due to truck traffic on this route, it is not desired to be designated for bicycle use. If used as interim LOVA routing, Share-the-Road warning signs should be posted. The long-term vision is to add paved shoulders for cyclist use.



A major focus of bicycle system development south of the Colorado River is completion of the Rifle portion of the regional Lower Valley (LOVA) Trail, which is a proposed 50-mile trail running along the Colorado River, from the Mesa County Line southwest of Parachute to Glenwood Springs. Initial development of a river edge trail at the Rifle visitors' center will link together lightly traveled rural roadways recommended in the LOVA system, and enhance bicycle network connectivity within the City of Rifle.

Other south-side projects include safer access to Colorado Mountain College, a LOVA trail extension up Ramsey Gulch, and a potential system of mountain biking trails along the front edge of the Grass Mesa.

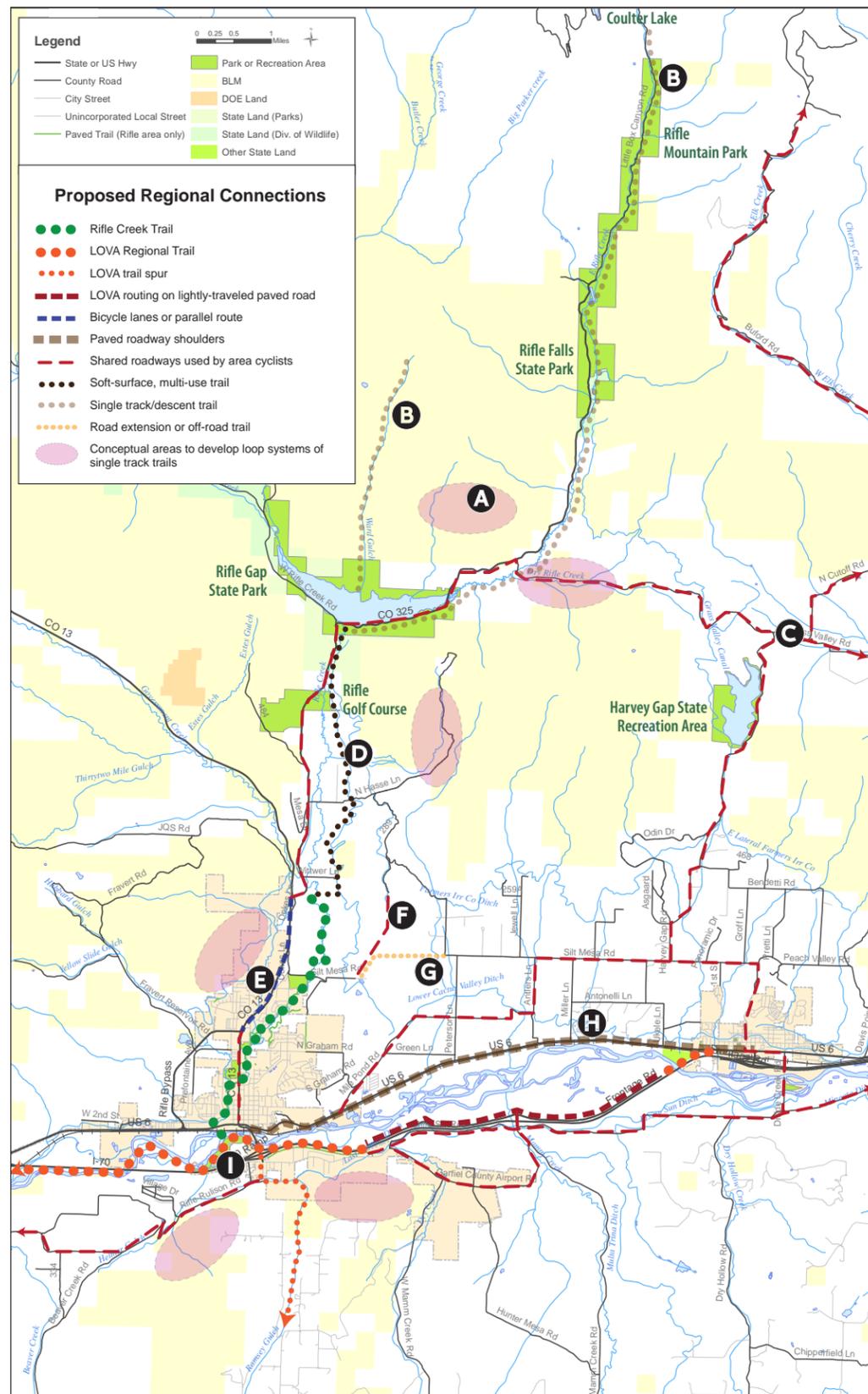
- A. **HIGHWAY 6** - LOVA Plan interim on-road route to Parachute, with a river trailhead access point located south of I-70 exit #87.
- B. **CENTENNIAL PARKWAY** - Highway 13 is being re-routed from exit #90 to #87 to connect with the Rifle Bypass to carry truck traffic to the north. No bicycle designation is recommended on this section of highway, although experienced cyclists may opt to use the route.

- C. **DOWNTOWN / ISLAND CONNECTOR TRAIL** - Construct a trail underpass beneath the railroad and two bridges over the Colorado River to link Downtown Rifle with the LOVA trail at the Visitor's Center.
- D. **ISLAND LOOP** - Explore potential to develop a loop trail around the river island.
- E. **LOVA TRAIL TO PARACHUTE** - West of exit #87, utilize existing gravel road between I-70 and the river.
- F. **LOVA TRAIL: WEST RIFLE** - Construct new trail east of exit #87 between I-70 and the river for approximately 2 miles. Trail is proposed to go under the existing I-70 bridges and then cross the river on a new bike/ped bridge.
- G. **LOVA TRAIL: CENTRAL RIFLE** - 1st Phase: Construct new trail west of exit #90 along the south bank of the Colorado River for approximately 2 miles.
- H. **LOVA TRAIL: EAST RIFLE** - Continue trail to the east, under Highway 13 and along CDOT property for 0.6 mile. Then proposed LOVA routing is currently a private quarry access road. A trail segment through

this area would need to route along the edge of the I-70 right-of-way for approximately 1 mile to make the missing connection.

- I. **LOVA TRAIL TO SILT** - On-road route following the lightly traveled I-70 service road.
- J. **CR 346** - Alternative on-road option to Silt per the LOVA Master Plan.
- K. **SOUTHWEST CONNECTOR TRAIL** - Proposed new trail spur to link LOVA central Rifle section to Village Drive.
- L. **CR 320** - Scenic on-road LOVA Plan alternative to Battlement Mesa.
- M. **I-70 FRONTAGE TRAIL ACCESS** - Explore an alternative to riding on the narrow, attached sidewalk along Airport Road to gain access from the roundabout to the I-70 Frontage Trail. Bike lanes on Taughenbaugh Blvd and a trail link along drainage to Wapiti Avenue could allow cyclists a more simplified crossing of Airport Road at Wapiti.

- N. **RAMSEY GULCH** - Proposed LOVA Master Plan spur trail to the south up Ramsey Gulch. Explore following Last Chance Drive to gain access and develop as soft-surface single track that links to a proposed mountain biking system along the front of Grass Mesa.
- O. **SOUTHEAST CONNECTOR TRAIL** - Proposed new trail spur to link the current terminus of the I-70 Frontage Trail under the existing I-70 and I-70 service road bridges. Would connect directly with the on-road LOVA route to Silt, providing an interim route until the East Rifle LOVA trail segment may be built.
- P. **AIRPORT ROAD** - Add paved shoulders or construct a parallel multiuse path for bicyclist access to Colorado Mountain College.
- Q. **GRASS MESA** - Explore feasibility of developing a system of single track trails where the City of Rifle abuts the northernmost Grass Mesa BLM lands.
- R. **RIFLE AIRPARK TRAIL SYSTEM** - The Rifle Airpark PUD pedestrian and trails plan includes hillside and open space trails, as well as central core trails paralleling arterial and collector streets.



Public input into the planning process for developing the 2013 Rifle Bike Master Plan indicated a strong desire to include areas outside of the Rifle city limits. Coordination with Garfield County, the Bureau of Land Management, Colorado Parks and Wildlife, and the Colorado Department of Transportation will be required to further explore implementation of the following desired bicycling routes and destinations:

A. AREAS WITH POTENTIAL FOR SINGLE TRACK DEVELOPMENT - Several areas were conceptually identified with terrain desirable for exploring development of future stacked loop mountain biking trail systems. Most are located on BLM lands and will require revisiting travel management policies to create new single track trails specifically for mountain biking use that are separate from hunting activities and jeep/OHV trail use.

It is recommended that the City and County coordinate and utilize volunteer trail building resources to help construct mountain biking and soft-surface trails using community groups like the Roaring Fork Outdoor Volunteers, or the Garfield County Youth Corps, who are currently building trails on Forest Service land.

B. AREAS WITH POTENTIAL FOR DEVELOPING DESCENT TRAILS - As a different type of destination ride, area cyclists also expressed a desire for one-way, longer-distance mountain biking descent trails, similar to the Whole Enchilada Trail in Moab. Bikers would arrange a shuttle ride to the start of the trail and ride downhill into town or a terminus at Rifle Gap State Park.

Ward Gulch and the Coulter Lake area are two options identified with suitable terrain.

C. COUNTY-WIDE BICYCLE SYSTEM - Area cyclists would like to see a county-wide bike plan developed that includes identification and mapping of a series of recreational loop rides on rural roadways, with mileage information provided. Selected routes may

be marked with MUTCD Share-the-Road warning signs to alert motorists to the potential presence of cyclists.

As part of this planning effort, workshop participants identified several rural routes around Rifle that are preferred by area bicyclists. The Visitor's Center and the Garfield County Fairgrounds were identified as good meeting/starting points for rides that originate in Rifle.

D. RIFLE CANYON DITCH - Continuing north of city limits, it is desired to explore the feasibility of creating a trail along the Rifle Canyon Ditch right-of-way as an alternative to riding on Highway 325. This proposed rural multi-use trail would allow continuous off-road travel from the city's Rifle Creek Trail north to Rifle Golf Course and the Rifle State Park and Reservoir.

E. HIGHWAY 13 - Area cyclists desire safer and more comfortable biking access to Rifle Gap State Park. Options include adding bicycle lanes on the segment of Highway 13 between the Railroad Ave/24th Street intersection north to Highway 325, or development of an alternate route off of the highway.

F. SILT MESA ROAD - Determine if this road is public right-of-way and can be used by cyclists.

G. STEVEN'S HILL AREA - A future road extension or trail connection is desired to Highway 233 from Steven's Hill.

H. HIGHWAY 6 - Long-term plans should include adding paved roadway shoulders to the section of Highway 6 between Rifle and Silt.

I. LOVA TRAIL - Garfield County and the City of Rifle should partner together to complete a pilot project segment of the proposed regional LOVA trail within Rifle along the Colorado River. (See LOVA corridor details as outlined on the enlarged map for Southern Rifle.)

Public workshop participants and members of the Grant Project Steering Committee identified the community's highest priority projects, which are highlighted in yellow on the map below. Some are big-ticket items that will require pursuit of state and federal grant funding to build; many may be accomplished immediately by simply installing signing and pavement markings; others will depend upon

forging multi-jurisdictional partnerships with volunteer support from the general public. Priorities include:

1 Complete Missing Gap in Rifle Creek Trail – Complete missing trail segment that will route along Rifle Creek from the Railroad Avenue underpass up to City Market/14th Street.

2 Link Palomino Park to Downtown – Construct a short segment of trail along the Government Creek floodplain between Rifle Creek and Railroad Ave; adjust signal timing at the 24th Street/Railroad Avenue intersection; and stripe bicycle lanes on W. 24th Street.

3 Construct a Multi-Use Trail to Rifle High School – Develop a multi-use path along the north side of 14th Street, crossing the creek, and continuing up the gentle grade along the northern edge of the school property.

4 Begin Developing the Rifle Section of the LOVA Trail – To date, implementation of the regional LOVA trail has focused on the Glenwood Springs end of the corridor. A second area of synergy is desired to be created in the central portion of Garfield County, beginning at the Rifle Visitor's Center. Initial projects for the Rifle area include constructing the central 2-mile trail section of the LOVA Trail from I-70 exit #90 to the proposed trail bridge across the Colorado River; and developing spur trails under existing I-70 bridges to connect together existing street routes and trail segments.

5 Construct Fairgrounds Trail – Extend the Rifle Creek Trail along the southwest edge of the Garfield County Fairgrounds to link to Park Street.

6 Complete a Trail Extension to Colorado Mountain College – Construct a trail west along Airport Road to provide a commuting connection to Colorado Mountain College.

7 Add Bike Lanes and Sharrows at Appropriate Locations throughout Town – A major goal of the Rifle Strategic Plan is to enhance access for bicyclists and pedestrians to and through the downtown from all parts of the city. In many areas, this may be cost effectively accomplished by striping streets with bicycle lanes to create designated travel corridors; using sharrow pavement stencils on select streets to identify connecting routes; signing connections to off-road trails; and providing highly visible ladder-style crosswalks at all at-grade trail crossings.

8 Study Morrow Drive Options – Morrow Drive has mild grade, but very narrow pavement width and limited sight distances. Improvement options include

exploring the feasibility of adding paved roadway shoulders; developing a multi-use path on the south side of the drainageway; or closing the existing street to vehicles and allowing pedestrian and bike use only.

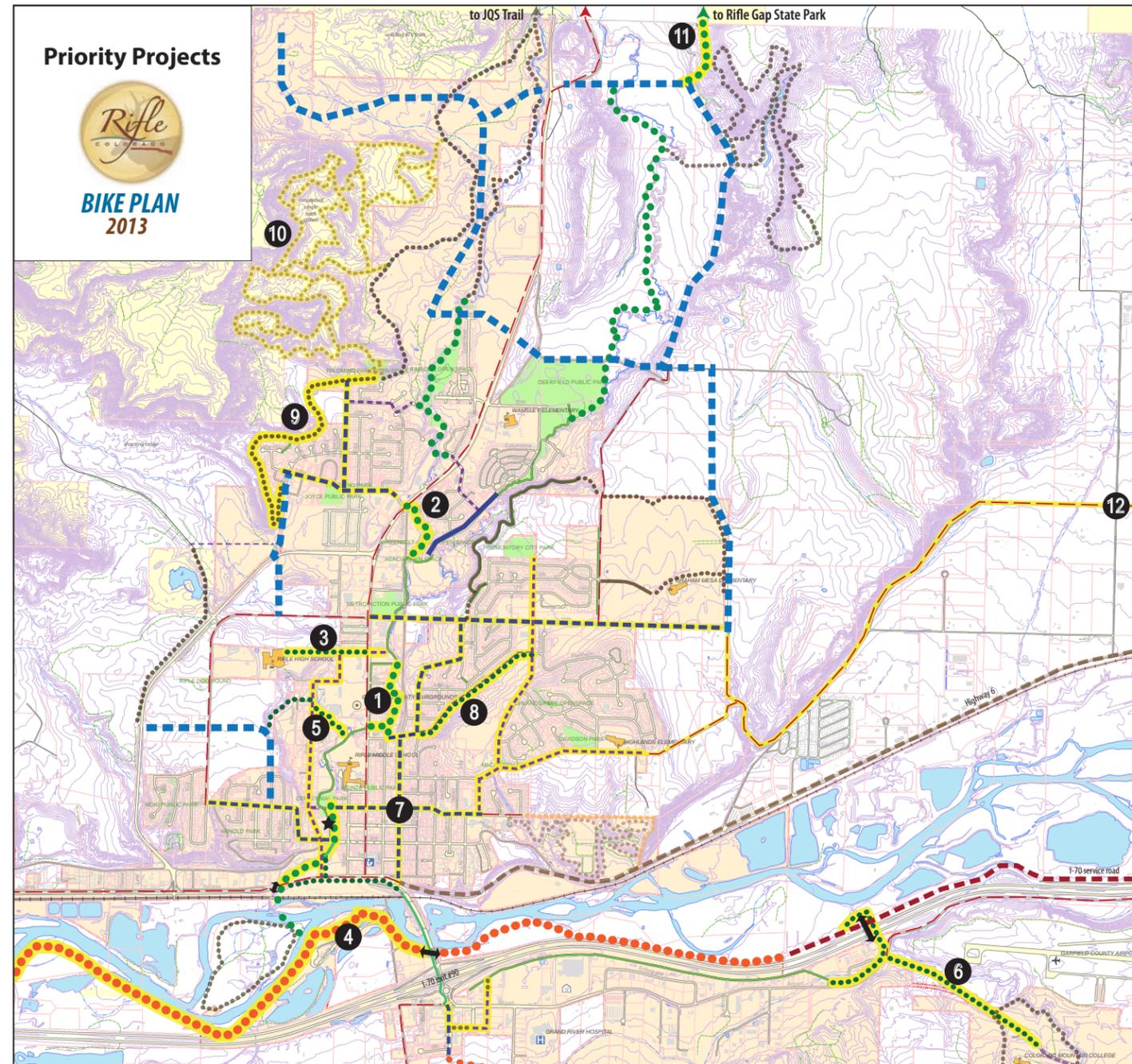
9 Pursue New Trails along Ditch Right-of-Ways – Explore partnering with ditch companies to use their right-of-ways for trail development. Develop trail facilities to jointly provide vehicular maintenance access and allow public trail use.

Three additional priority initiatives for bicycling fall outside of Rifle city limits and will require additional planning in conjunction with CDOT, BLM, Garfield County, and private landowners:

10 Pursue Mountain Biking Trails on BLM Lands – Explore partnering with the Bureau of Land Management to develop designated trails for mountain biking. Coordinate resources and utilize community groups like the Roaring Fork Outdoor Volunteers and County Youth Corps to build trails. Two areas ideal for door-to-trail biking experiences would be the far eastern edge of BLM Hubbard Mesa lands, located next to the proposed RimRock PUD, and along the edge of the Grass Mesa located south of Airport Road. Both areas abut the city limits and are removed from conflicts with shooting range, hunting, and jeep/OHV trail uses.

11 Enhance Access to Rifle Gap State Park – Rifle Gap State Park and reservoir are major destinations for locals and visitors. Located 7 miles from Downtown Rifle and 4 miles from the northern city limits, the park is within easy bicycling distance of town, but riding on Highways 13 and 325 can be challenging. Paving roadway shoulders or developing an alternative route along the Rifle Canyon ditch is thus desired.

12 Map and Market Rural Routes – Work with Garfield County and surrounding jurisdictions to map and market a series of recommended recreational rides of differing lengths throughout the county, including a perimeter loop around the City of Rifle. The countywide plan should also identify difficult segments of rural roadways to be targeted for future bicycling improvements.





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