



MULTI MODAL TRANSPORTATION MASTER PLAN



Bike • Ride • Walk • Carpool

**RUSSELL PLANNING & ENGINEERING
MATTHEW J. ZOLL, AICP**

ADOPTED: JULY 17, 2012

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Chapter 1: Durango Multi Modal Transportation Master Plan Vision

The vision of the Durango Multi Modal Transportation Master Plan is to create a fully connected transportation network that provides for an outstanding transit, walking and bicycling community. Transit riders, pedestrians and bicyclists (hereafter “multi modal”) are essential participants in Durango’s Multi Modal transportation system. Many Durango residents desire options that provide the opportunity for automobile-free transportation including public transit, walking and bicycling as safe, enjoyable and convenient modes of travel. Establishing Multi Modal transportation facilities and programs provides a healthier alternative both for individuals and the community by encouraging physical activity and reducing vehicle emissions.

The Durango Multi Modal Transportation Master Plan envisions:

- Development of an accessible, interconnected, attractive and safe system of transit routes, walkways and bikeways throughout the city
- Provision of a transit system that when feasible provides frequently-spaced stops so that able-bodied residents can comfortably walk to a stop within seven minutes on route from any point in the city
- Implementation of pedestrian and bicycle design standards to ensure interconnectivity of transportation facilities
- Continuation of a focus on “projects of opportunity” and other means to expand the transit, pedestrian and bicycle networks, including enhancing transit stops and addressing in-fill sidewalk and bikeway segments in need of improvement
- Establishment of transportation equity by promoting safety and mobility options for persons of all income levels, abilities and ages
- Provision of walkways and bikeways that are integrated with transit and parking access
- Coordination of transit, pedestrian and bicycle facility development throughout the City of Durango comprehensive planning area
- Sustained improvement of the pedestrian and bicycle system to achieve the highest “Walk Friendly Community” and “Bicycle Friendly Community” designations by the Pedestrian and Bicycle Information Center and the League of American Bicyclists
- Promotion of public awareness that multi modal transportation reduces vehicle-miles traveled which in turn reduces road construction and maintenance costs
- Coordination with the adopted Long Range Transportation Plan “TRIP 2030”, City of Durango Comprehensive Plan, 2010 Parks, Open Space, Trails and Recreation Master Plan

A measure of achieving this vision is that a middle-school age child would be able to access transit, walk or bike independently throughout the City of Durango and its environs. The vision of the Multi Modal Transportation Master Plan is to ensure that this is achievable.

It is the intention of the City of Durango wherever it is feasible to build projects to the policies set forth in

this plan. It is the goal of the City to implement as many improvements as financially feasible to increase the safety of all road users. This plan is intended to be used as a guideline for designing and implementing projects whenever feasible. All projects must ultimately be designed to meet standards in the Land Use and Development Code and approved by the City Engineer. This plan also includes examples of street cross sections found in Appendix A. These cross sections should not be used to determine the amount of right-of-way that will need to be dedicated for new construction or the ultimate road configuration of new roads, but can be used as examples for the reconstruction of existing roadways. It is also the intent of the City for this to be a living document once adopted—as new deficiencies are discovered they may be added to this plan at any time, and as this occurs the plan priorities will also be updated. This plan shall be reviewed and updated on an ongoing basis as needed.



The Durango Transit Center makes getting around Durango easier, for people of all ages and abilities.

Chapter 2: Plan Process

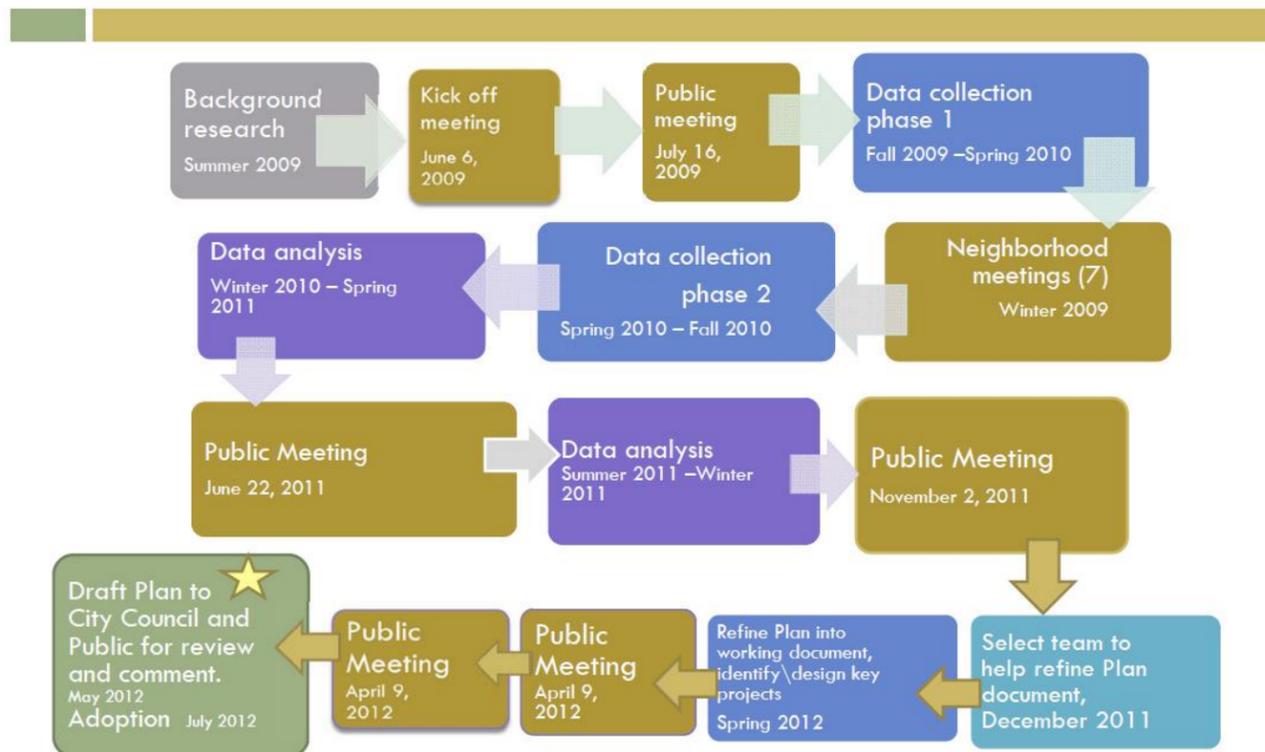
The Multi Modal Transportation Master Plan process has been underway since the summer of 2009. Since that time the City has conducted multiple public meetings and collected information on existing transit, pedestrian and bicycle facility conditions and system deficiencies throughout the City. In late 2011, the City hired a consultant team to assist with plan preparation through a Federal Transit Administration 5304 planning grant. The timeline below summarizes this process.

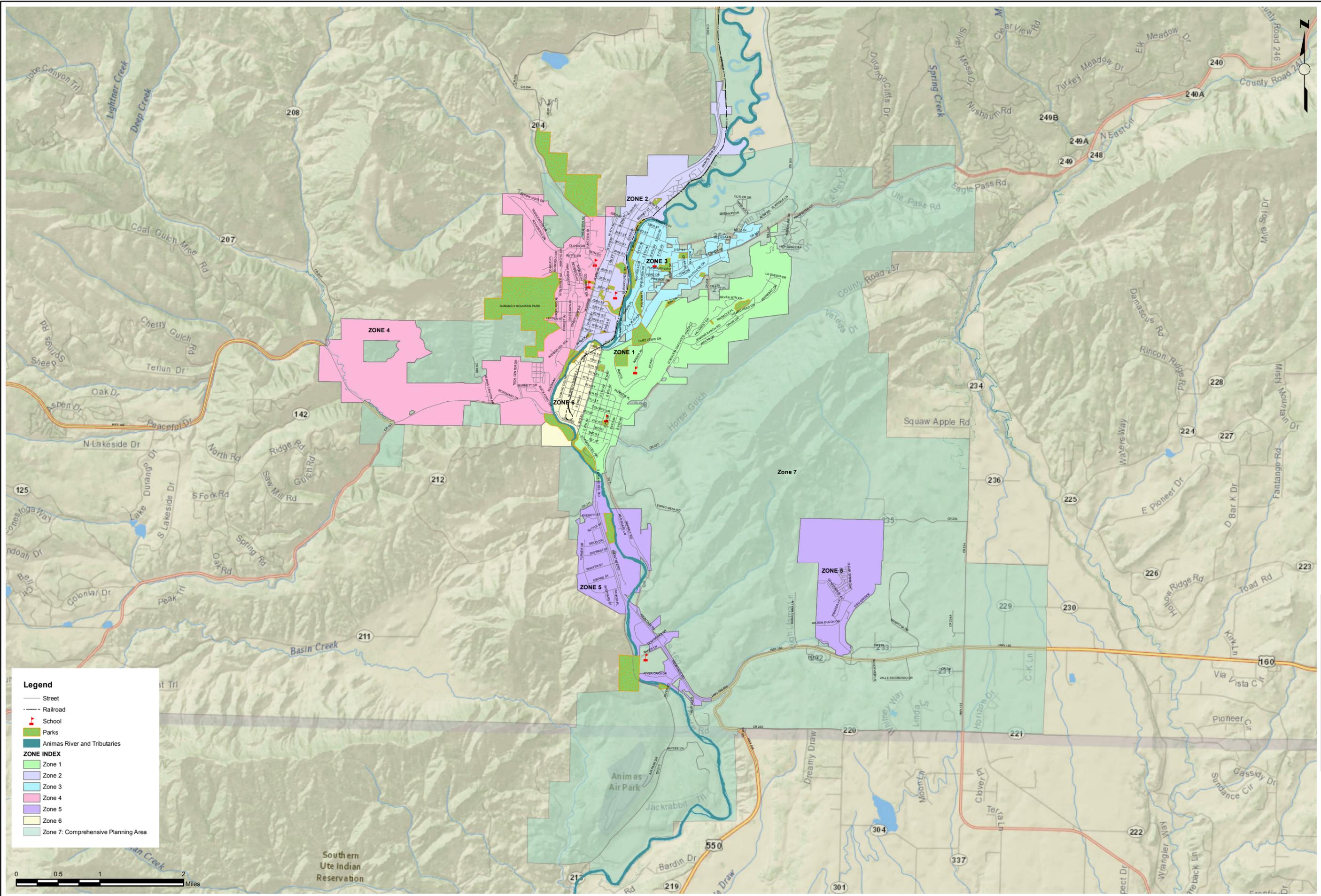
The inventory information and proposed improvements were presented to the City’s Multi Modal Advisory Board for their review and comment. The Multi Modal Advisory Board is an appointed board, consisting of citizens and business owners who assist the City of Durango with enhancing transit, pedestrian and bicycle projects and safety programs. Based on the guidance provided through the public process, plan elements and recommendations were refined in order to help achieve Durango’s vision to continually improve as a first-class transit, pedestrian and bicycle-friendly community.

The project team focused on the six zones within Durango that correspond with the City’s snowplow zones in compiling the inventory information and developing the recommended improvements. The team also evaluated conditions and needs in a seventh zone which encompasses the comprehensive planning area properties outside of current City limits. A table documenting existing conditions, deficiencies and proposed improvements was developed for each zone, and a pedestrian map, transit map and bicycle map were also developed by zone. The seven zones are illustrated in an overview map presented on the following page that shows all the zone boundaries included within the study area.

The Plan process also included creation of the plan vision, review of existing transit, pedestrian and bicycle policies of other jurisdictions, development of proposed policies for Durango, and review of multi modal facility standards including innovative treatments that are proposed for use within Durango. As funding becomes available for implementation, the policies and facility treatments will help Durango be ever improving as an outstanding transit, walking and bicycling community.

Timeline



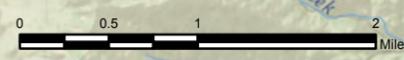


Legend

- Street
- Railroad
- 🏫 School
- 🌳 Parks
- 🌊 Animas River and Tributaries

ZONE INDEX

- Zone 1
- Zone 2
- Zone 3
- Zone 4
- Zone 5
- Zone 6
- Zone 7: Comprehensive Planning Area



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NOTE:
The data shown on these exhibits
are based on City of Durango GIS.
Base Map Source: USGS, ESRI
and National Geographic.

**CITY OF DURANGO
MULTIMODAL TRANSPORTATION PLAN
ZONE EXHIBIT
MASTER INDEX**

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Chapter 3: Multi Modal Transportation Master Plan Policy Statement

It is the goal of the City of Durango to develop infrastructure that integrates the needs of multi modal users into the transportation system including the provision of safe, convenient and routine transit, pedestrian and bicycle accommodations and facilities.

The City acknowledges that promoting multi modal transportation inherently improves the health of the community by reducing vehicle emissions (air pollution and ground water contamination) and by increasing physical activity (reducing obesity). “Accommodation and facilities” for the purposes of this policy are defined as any facility, design feature, operational change, or maintenance activity that enables and improves access to, or travel by, transit, pedestrian or bicycle means. It shall be the policy of the City of Durango to coordinate the connection of all modes of transportation through the Multi Modal Transportation Master Plan so integration opportunities are not missed for each of the modes. This is particularly important as virtually all trips, regardless of purpose, begin and end with pedestrian activity.



The Animas River Trail provides a safe and enjoyable pedestrian experience for families.

The planning area for this plan corresponds with the six snowplow zones and the City of Durango’s comprehensive planning area. The policies laid out in this plan are intended only as recommendations to the surrounding jurisdictions (CDOT and La Plata County) whose multi modal transportation networks merge and/or overlap with those under the jurisdiction of the City of Durango.

For the purpose of simplicity this plan will refer to four districts: Residential, Central Business District, Commercial, and Industrial. Each of these districts has its own unique set of limitations and needs to meet the goals and objectives of this plan. The districts are identified within the following zones:

Residential- Zones 1, 2, 3, 4, 5, 6

Central Business District - Zone 6

Commercial - Zones 1, 2, 3, 5

Industrial – Zones 4, 5

Comprehensive Planning Area outside the City limits – Zone 7

Policy Objective 1 - Connectivity

It is the City of Durango’s desire to create “15-minute neighborhoods” (transportation networks) by providing accessible, efficient and convenient methods for individuals to travel to their destinations. The

City of Durango will expand and improve its multi modal networks so that inner city point-to-point travel should not exceed 15 minutes for any one-way trip. Short travel distances offer the easiest opportunity for active transportation (walking, bicycling) and for mitigating the negative health, environmental and at times economic impacts of personal motor vehicle use. The multi modal network should provide continuous, direct routes and convenient connections between destinations, including homes, schools, parks, employment centers, medical facilities, shopping areas, public services, recreational opportunities, and transit access points.

It is the intention of the City of Durango whenever feasible to:

Policy 1.1: Increase multi modal connectivity between existing residential neighborhoods and nearby parks, employment centers, medical facilities, shopping areas, public services, schools, recreational opportunities, and transit access points.

Policy 1.2: Require multi modal facilities be provided as part of redevelopment and new development within the developed areas and provide connectivity to planned or existing areas.

Policy 1.3: Improve connections to transit for pedestrians and bicyclists and include routine Americans with Disabilities Act (ADA) compliance on the service vehicles and at all transit stops.

Policy 1.4: Build multi modal facilities on new roadways, and where feasible retrofit older roadways to complete the multi modal system, using routes and facility designs identified in this plan.

Policy 1.5: Provide a continuous sidewalk network along all City streets with ADA access at each corner.

Policy 1.6: Incorporate complementary on and off road facilities (both hard and soft surface when feasible) along transportation routes in order to provide choices for differing users; one facility type should not be used in place of another (e.g., a roadway that includes a shared use path needs to also include bike lanes or paved shoulders).

Policy 1.7: Design, construct and operate all new and reconstructed sidewalks, shared use paths, bridges, street crossings (including overpasses and underpasses), pedestrian signals, signs, street furniture, transit stops and facilities, and all connecting pathways and multi-use trails so that pedestrians, including persons with disabilities, can travel safely and independently.

Policy Objective 2 – Infrastructure

It is the City of Durango’s goal to incorporate multi modal traffic on all roadways, thus providing transportation options to all residents and visitors. Examples of such accommodation include, but are not limited to, the provision of transit stops or shelters, sidewalks, bike lanes, shared use paths, signs, lane tapers at intersections to shorten street crossing distance, door buffer space to improve bicyclist safety in parking areas, and bicycle and pedestrian traffic signals.

It is the intention of the City of Durango wherever feasible to:

Policy 2.1: Require all new City roadways to provide ADA access and accommodate multi modal traffic.

Policy 2.2: Require sufficient right-of-way or easements with development, redevelopment, or annexation to allow for future multi modal infrastructure.

Policy 2.3: Design all intersections to provide for ADA access and pedestrian and bicycle traffic so that each mode can make all traffic movements per established standards.

Policy 2.4: Require wayfinding signs be placed so that visitors and locals can easily find points of interest, shopping, schools, government offices, and residential and commercial areas.

Policy 2.5: Require sidewalks to be incorporated along all roadways with planting strips to separate them from the roadways wherever right-of-way exists or where it can be acquired.

Policy 2.6: Designate bikeways on roadways wherever possible. On roadways where insufficient space exists for a designated bike lane, shared lane markings or “sharrows” will be placed as approved by the City Engineer to indicate to motor vehicle drivers that they are to share the lane with bicycles.

Policy Objective 3 – Meeting the Needs

A multi modal transportation system acknowledges that not all persons have the means or ability to operate a private motor vehicle. Therefore, it is the intent of the City of Durango to promote a system that addresses the needs and safety of all multi modal users, including youth, the elderly, people with disabilities, and persons of various incomes. The goal is to have all system programs and facilities include reasonable accommodations to comply with Title VI requirements of the Civil Rights Act. The City recognizes the great diversity in abilities, ages, races, ethnicities, and incomes within the community.

It is the intention of the City of Durango wherever it is feasible to:

Policy 3.1: Incorporate within the design of transit stops and routes, sidewalks, pathways, crossings and bicycle routes so that people, including those with mobility and/or sensory impairments, can easily access and find a direct route to a destination and so that delays are minimized.

Policy 3.2: Incorporate within the design and build transit stops and facilities, sidewalks, pathways, crossings, and bicycle routes to be free of hazards and to minimize conflicts with external factors such as vehicles and buildings and traffic movements.

Policy 3.3: Design and build multi modal facilities which permit the mobility of residents of all ages and abilities. Multi Modal users have a range of skill levels, and facilities should be designed with a goal of providing for the widest range of ages, abilities, and levels of experience.

Policy 3.4: Continually improve multi modal facility safety through design, operations and maintenance.

Policy 3.5: Provide a transportation system that is accessible to people with disabilities, and ensure that an ADA Transition Plan is completed to identify obstacles to access, develop a work plan to remove those obstacles, and identify responsible parties for ADA improvements.

Policy Objective 4 – Mode Shift

Multi Modal options should be appealing modes of transportation, which means that infrastructure must be in place to make these modes convenient and enjoyable.

It is the intention of the City of Durango wherever it is feasible to:

Policy 4.1: Construct high-quality multi modal infrastructure to provide safe, appealing and well-connected facilities.

Policy 4.2: Provide frequently-spaced transit stops so that able bodied residents can comfortably walk to one within seven minutes on route from any point in the City where feasible.

Policy 4.3: Provide marked crosswalks where warranted in accordance with Manual on Uniform Traffic Control Devices (MUTCD) requirements so that pedestrians can cross all Collector and Arterial streets within a minimum of two city blocks. For proposed marked crosswalks on State facilities, consult, coordinate and collaborate with CDOT to determine if these crosswalks are in compliance with warrant requirements and to implement approved crosswalks.

Policy 4.4: Improve the multi modal environment through enhanced traffic operations and maintenance.

Policy 4.5: Require a planting strip between sidewalks and the street as a mechanism to absorb snow so that both the street and sidewalk can be cleared of snow with new construction, wherever right-of-way exists or can be reasonably acquired.

Policy 4.6: Provide community outreach and education regarding the health benefits of multi modal transportation options.

Policy 4.7: Create transportation infrastructure such as sidewalks, bike lanes, bike and vehicle parking with the intent to increase use of transit and active transportation and to mitigate air pollution from motor vehicle use.

Policy Objective 5 – Maintenance

The City of Durango shall incorporate maintenance policies and practices that enhance the safety and comfort of multi modal users. The goal is to pay particular attention to on-road bicycle facilities and pedestrian facilities located within the roadway right-of-way which must be cleared of snow and ice

sufficiently so that pedestrians and bicyclists are not forced to share use of the travel lane where roadways are not designed to accommodate them.

It is the intention of the City of Durango wherever it is feasible to:

Policy 5.1: Routinely clear roadways of debris, including excess “chip seal” and/or aggregate material and sand used for snow traction as quickly as possible. City policy includes sweeping bike lanes and paved shoulders on a twice per month basis in spring through early fall, generally May to October.

Policy 5.2: Provide telephone and website reporting for citizens to call in hazardous debris, trash or other items which might endanger multi modal users, and react to such citizen reports within two business days under normal circumstances; on the occasion of large storms response may take up to a week.

Policy 5.3: City of Durango Engineering and Streets Division workers shall be educated to the special needs of multi modal users, on how they differ from the needs of drivers so that those needs can be met.

Policy 5.4: Maintain all transit stops and facilities for full ADA access in a timely manner.

Policy Objective 6 – Sidewalks

It shall be the Standard Operating Procedure as funded and directed by the City Council for the City of Durango to create and maintain City sidewalks that provide for safe, accessible, affordable and active modes of transportation (i.e., walking, strollers, wheelchairs). Per City Code, residents and businesses continue to be responsible for sidewalks abutting their property.



9th Street sidewalk in need of repair

It is the intention of the City of Durango wherever it is feasible to:

Policy 6.1: Encourage property owners to upgrade sidewalks to the standards established in the Land Use and Development Code as amended.

Policy 6.2: Retrofit sidewalks to the standards established in the Land Use and Development Code as amended, where connections are missing or where it is infeasible to expect the adjacent property owners to make these improvements.

Policy 6.3: Require sidewalks in new construction and redevelopment to accommodate future expected uses and to fully meet the ADA.

Policy Objective 7 – Parking

It will be the policy of the City of Durango to ensure adequate, appropriately priced (where applicable), and convenient parking facilities for all types of vehicles, including but not limited to motor vehicles, bicycles, delivery, commercial, and other vehicles which may reasonably be expected based on the priorities established in this plan. This will ensure that all members of the community and visitors can participate in community activities such as work, shopping, sightseeing, attending schools, and traveling to governmental and medical facilities. It will also be the Standard Operating Procedure of the City of Durango that parking revenues other than in-lieu parking fees as clarified in the Land Use Development Code shall be used to fund multi modal programs, capital needs and services.



Covered bicycle parking outside of the Durango Transit Center.

It is the intention of the City of Durango wherever it is feasible to:

Policy 7.1: Establish parking policies, procedures and appropriate pricing mechanisms to work toward a goal of 85 percent metered parking space occupancy for motor vehicles, to ensure adequate parking availability and appropriate turnover of parking spaces in the Central Business District.

Policy 7.2: Establish adequate bike parking facilities and management practices to ensure that parking is done in a way that does not impede motor vehicle, transit, pedestrian, or bicycle traffic and to limit “clutter” along sidewalks and in other areas from disorganized bicycle parking.

Policy 7.3: Ensure high quality, flexible bicycle parking at all City owned destinations, and ensure that bicycle parking is considered when parks and other public facilities are planned.

Policy 7.4: Require the implementation of appropriate bicycle parking in all new development and redevelopment that occurs within the City, in residential, commercial, industrial and central business districts.

Policy 7.5: Provide bicycle parking facilities near transit stations and bike racks on transit vehicles, and ensure transit stop design and compatibility with surrounding streetscape. Where possible and appropriate some bike parking facilities may be covered.

Policy 7.6: Establish “Park N Ride” facilities where appropriate to improve integration between travel modes.

Policy 7.7: Create and enforce codes that prohibit the blocking of sidewalks by parked or idling vehicles, parked bicycles, waste containers, etc. that may inhibit safe and free access by pedestrians.

Policy 7.8: Conduct outreach and education of existing programs (e.g. bicycle licensing program), and

policies (e.g. abandoned bicycle policy, known as the “green tag” policy) to increase the appropriate use of sanctioned bike parking.

Policy 7.9: Conduct an update to existing parking ordinances including vehicular and bicycle parking requirements, policies and provisions.

Policy Objective 8 – Support Facilities

It will be the policy of the City to provide support facilities such as benches, transit shelters, shower facilities, bike parking, wayfinding signage, etc. to enhance the multi modal network in order to encourage transit use, walking and bicycling. For transit, walking and bicycling to be fully viable forms of transportation in Durango, support facilities are needed to complement an improved network. Such facilities should enhance the convenience of these modes. Partnerships among City departments and with transit agencies, private developers, and companies will be necessary to achieve this objective.

It is the intention of the City of Durango wherever it is feasible to:

Policy 8.1: Provide support facilities for City employees who are commuting by multi modal means (such as showers, lockers, private changing areas, and bike parking).

Policy 8.2: Encourage and recommend existing and new developments, businesses and other entities to add multi modal facilities such as transit stops, bicycle parking, and bicycle and pedestrian amenities (such as showers, lockers, and private changing areas).

Policy Objective 9 – Best Practices

It shall be the policy of the City of Durango to develop all transit, pedestrian, bicycle and roadway facilities with a view to planning projects for the long term. Transportation facilities are investments that remain in place for many years, often with little ability or means to change them. The design and construction of new transit, pedestrian, bicycle, and roadway facilities should anticipate future demand for multi modal transportation and not preclude the provision of future improvements.

It is the intention of the City of Durango wherever feasible to:

Policy 9.1: Accommodate future growth in the number of multi modal users and require designed facilities to address that growth.

Policy 9.2: Anticipate adjoining growth and require new development or redevelopment projects to provide facilities and access.

Policy 9.3: Include locations for multi modal facilities and capacity based on anticipated full build-out of new subdivisions and the expected roadways at completion and full occupancy in City long-range plans.

Policy 9.4: Update standards utilizing the highest and best design practices for multi modal facilities

approved by one of the following national standards: American Association of State Highway and Transportation Officials (AASHTO) *Pedestrian Facility Guidelines*, U.S. Access Board *Accessibility Guidelines for Pedestrian Facilities in the Public Right-Of-Way*, AASHTO *Guide for the Development of Bicycle Facilities*, AASHTO *Policy on Geometric Design of Highways and Streets*, the Institute of Transportation Engineers (ITE) *Recommended Practices for Design and Safety of Pedestrian Facilities*, ITE *Walkable Urban Thoroughfares*, the *Manual on Uniform Traffic Control Devices (MUTCD)*, *Relationship of Lane Width to Safety for Urban and Suburban Arterials*, and *Safety Effects of Marked vs. Unmarked Crosswalks at Uncontrolled Locations*. Where desirable, the City of Durango may use design standards which are approved as experimental by these design standards groups and approved by the City Engineer.

Policy Objective 10 – Environmental Impact

The City will promote and facilitate enhancement of the environment and community health by encouraging multi modal transportation. This will be accomplished by providing safe, affordable, accessible options to the single occupant vehicle.



It is the intention of the City of Durango wherever it is feasible to:

Policy 10.1: Actively plan for emerging transportation technology and cultural shifts that change mode utilization.

Policy 10.2: Provide multi modal transportation options and infrastructure that reduce barriers to a healthy lifestyle.

Policy 10.3: Create and enforce pollution-minimizing codes such as, a “no idling” restriction at schools or other locations prone to significant waiting occupied traffic, and that may present risks to more vulnerable populations such as youth or the elderly.

Policy 10.4: Provide public education and awareness of multi modal facilities and options which include the rights, responsibilities and health/environmental benefits of transportation mode choices.

Policy 10.5: Consider health and environmental quality factors in all new development and construction of transportation infrastructure, as well as in retrofit and repair projects.

Policy Objective 11 – Funding Opportunities

It is the intention of the City of Durango wherever it is feasible to:

Policy 11.1: Establish a list of needed multi modal improvements so the City is prepared in the event that funding is made available to make these improvements.

Policy 11.2: Actively seek revenue from vehicle use (parking, licensing, etc.), lodgers’ tax and other sources to support multi modal programs, capital needs, and services.

Policy 11.3: Actively pursue Federal, State and local grant opportunities as well as private funding sources, partnerships and development agreements to implement multi modal facilities and programs.



Safe Routes to School funded improvements to Park Elementary School

Chapter 4: Existing Conditions and System Deficiencies

The project team documented existing transit, pedestrian and bicycle facility conditions and system deficiencies in the City of Durango based on GIS data, field review, public input and requests, documents such as the 2012 La Plata County & Durango Area Bike Map, and information provided by various departments within the City. The data, described in more detail by zone in Chapter 5, include the following:

- Locations and length of existing transit routes, transit stops, sidewalks, and bikeways
- Deficiencies in pedestrian and bicycle accessibility to the transit system

- Missing segments of sidewalk and lack of ADA-compliant transit stops
- Termination of a bike lane or shared use pathway with lack of continuation of suitable facility
- Lack of wayfinding and safety signage for pedestrians and bicyclists
- Intersection crossing difficulties for pedestrians and bicyclists
- Deficiencies in ADA-compliant access
- Striping and pavement marking needs
- Existing maintenance needs of multi modal facilities
- Information, as available, on bicycle and pedestrian crashes, including crash types, causes and locations

It is important to note that when attempting to identify deficiencies within pedestrian facilities and transit stops, the level of effort to determine deficiencies such as existing cross and running slopes, curb ramp transition requirements, detectable warning compliance, and other technical details can be highly time consuming. At this stage in the planning process, existing conditions and deficiencies are primarily documented through visual survey and, where available, more detailed inventory information that was previously secured.

This level of effort can be sufficient for identifying the areas of general need. The measures included within this survey can then serve as a starting point for the development of more detailed analyses, such as an “ADA Transition Plan”, which evaluates ADA needs and establishes funding and implementation strategies to help guide pedestrian facility system upgrades over time.

Similarly, a Level of Service or LOS analysis for pedestrian and bicycle facilities can be helpful for improving access, safety and the quality of the transportation experience for pedestrians and bicyclists. To a limited degree, this Plan considers LOS attributes in the evaluation of existing pedestrian and bicycle conditions and deficiencies. Attributes include but are not limited to:

- Pedestrian and bicycle facility provided
- Sidewalk width and barriers
- Parallel sidewalk or bikeway alternative (within 0.2 miles for pedestrian, 0.5 miles for bicyclist)
- Pedestrian signal wait time/crossing time and clearance
- Turn conflicts and intersection crossing distances
- Width of outside lanes
- Continuity/connectivity of pedestrian and bikeway systems

- Presence of on-street parking
- Traffic speeds and volumes
- Blind exits and intersections

The existing conditions and deficiencies information forms the basis for recommended improvements to more fully develop the multi modal transportation system as described in the following chapters.

It is important to note that the existing conditions within the City of Durango are the result of over 130 years of growth and development, beginning with basic accommodations for pedestrians, horses and horse-drawn vehicles up to our modern times accommodating mechanized private vehicles, transit, pedestrians, and bicyclists. As such, standards were developed gradually and for quite some time transit, pedestrian and bicycle needs were overlooked. It is under these constraints that the City of Durango must attempt to incorporate multi modal facilities and programs, as well as to implement these provisions with greater consideration of environmental and historic resource factors than in the past.



The Animas River Trail (ART) provides easy access to 10 City Parks.

Durango is a community bisected by the Animas River and US 550, which result in significant constraints but also opportunities for multi modal transportation. The river and the highway both serve somewhat as barriers against east-west travel, with few roadway bridges to allow travelers to access each side of the river and a limited number of signalized crossings on 550 to facilitate pedestrian and bicycle cross traffic. Environmental considerations regarding the Animas River are critical, with many pressures on the waterway from adjacent development, contaminated runoff, river users, and other factors.

However, the Animas River also serves as an excellent multi modal conduit with the ongoing development of the Animas River Trail (ART). US 550 can be improved with more bicycle/pedestrian crossings and enhanced bicycle and pedestrian facilities along the corridor.

The ART is a hard surface, shared use path that stretches north-south through Durango’s ribbon of green known as the Animas River Greenway. The ART, running along the banks of the Animas River, links together and provides easy access to 10 City Parks, several open space parcels, the community recreation center, and the new public library. It is the centerpiece of the City’s trail system. It is a recreational trail as

well as an important component of the City’s multi modal transportation network, serving as the spine of the City’s overall network of trails. It is used extensively by area residents and visitors, including pedestrians, cyclists, in-line skaters, joggers, dog walkers, fisherman, and an assortment of other users of all ages and abilities.

Currently approximately seven miles in length, the ART will eventually stretch the entire length of the City (approximately 10 miles). It will do this without ever crossing a single public roadway or intersection at grade. The ART provides convenient connectivity throughout the community including to a variety of soft surface trails in the City’s urban-backcountry interface. The ART provides convenient links to neighborhoods, schools, shopping and other activity centers including regional shopping areas, the Bodo Industrial Park, and the central business district. The ART provides trail users a wide variety of opportunities—from varied-distance recreational treks to assorted routes for destination trips. The City intends to connect the ART to the SMART 160 Trail somewhere near River Rd. This connection will eventually provide access for non-motorized users to safely travel the corridor from Three Springs to the terminus of the ART North of 32nd Street. Current Planning for the SMART 160 Trail and its connection to the ART is funded through a Federal Transit Administration Section 5320 (Alternative Transportation in Parks and Public Lands) grant.

The City of Durango also has an extensive transit system. Within the City limits, there are currently six transit routes which provide public transportation connection between residential areas, commercial shopping centers, business, the public health department, the hospital, and Fort Lewis College. A free trolley provides transportation up and down Main Avenue. All transit buses are equipped to provide ADA access and have bikes racks on the front of the bus. In 2009, a regional Transit Center was constructed at



The Transit Center and Free Trolley

8th Street between Main Avenue and Camino del Rio. This downtown location provides a central connecting point for multiple City bus routes, inter-City transit service such as Road Runner Transit, which provides public transportation to Ignacio, and bus service run by Durango Mountain Resort up to Purgatory ski area. The Transit Center facilities also include permit parking, offices for City employees, bike parking, and public restrooms.

Chapter 5: Proposed Project Categories

Proposed improvements for pedestrian, transit and bicycle facilities cover a wide range of project types. Guidance for these facilities is primarily contained within the American Association of State Highway

and Transportation Officials (AASHTO) *Pedestrian Facilities Guidelines*, *AASHTO Guide for the Planning, Design, and Operation of Bicycle Facilities*, the *MUTCD* and other guidelines and standards.

Various multi modal facilities provide benefits to users as well as to the motoring public. Transit service and provisions help those with low incomes, persons with disabilities, youth and elderly who cannot drive, and other people who would like to either save money or help improve the environment and their community by using the service. As well, transit benefits motorists by reducing demand for roadway space and parking and by improving overall traffic safety. Facilities for transit passengers, pedestrians and bicyclists help improve the overall efficiency of the transportation system and reduce the need for expansion of costly roadway facilities and parking.

Provided below in alphabetical order is a brief description of the proposed improvement categories and some of their benefits and applications. The descriptions are provided primarily from the above documents with additional information on their characteristics from other sources. A complete list of design guides and references is included at the end of this Plan.

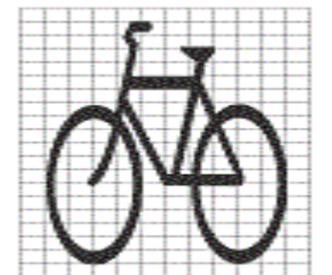
- **AMERICANS WITH DISABILITIES ACT (ADA) PROVISIONS** – The ADA is the most comprehensive civil rights legislation adopted to prohibit discrimination against people with disabilities. Public and private businesses, state and local government agencies, private entities offering public accommodations and services, transportation and utilities are required to comply with the law. The ADA was signed into law by President George Bush on July 26, 1990, extending civil rights protections to individuals with physical or mental disabilities; Title III of the act refers to public accommodations. Public accommodations must not exclude, segregate or treat people with disabilities unequally. This includes compliance with architectural standards providing physical access as well as reasonable modifications to policies, practices and procedures, effective communication with people with disabilities and other access requirements. Courses and examinations related to professional, educational or trade-related applications, licensing, certifications or credentialing must be provided in a place and manner accessible to people with disabilities, or alternative accessible arrangements must be offered.
- **BICYCLE/PEDESTRIAN ACTUATED CROSSING DEVICE** – A special device that is actuated by only pedestrians or bicyclists to cross a higher speed and/or higher volume roadway. In some cases the signal includes physical treatments preventing drivers from crossing at the same location, such as islands or medians. Examples include the “HAWK”, “PELICAN”, “TOUCAN” and “Rapid Rectangular Flashing Beacon” (RRFB) as described below:
 - The **HAWK (High-Intensity Activated crossWalk)** is a traffic signal used to stop traffic and allow pedestrians to cross. It is officially known as a "pedestrian hybrid beacon" and rests on a dark phase until actuated by a pedestrian. A “Bike-HAWK” signal is currently in a testing phase to develop a best practice for both pedestrian and bicycle use with minor modifications to the existing HAWK design.

- The **PELICAN** is a raised pedestrian median refuge which may be signalized and is generally designed so that pedestrians cross a multi-lane roadway in two separate movements. The pedestrian crosses half way into the refuge, then traverses a short distance typically facing traffic within the refuge before making the second half of the crossing. PELICANs may be signalized with a HAWK, RRFB, or more standard signal treatment that stops only one direction of travel at a time until the pedestrian actuates the second part of the crossing.
- The **TOUCAN** name is derived from the fact that the signal is designed so that “two-can” cross, meaning both bicyclists and pedestrians, with the signal designed in some cases using bollards and medians to allow bicyclists and pedestrians to cross a main roadway from a side street while preventing motor vehicles from crossing.
- The “**Rapid Rectangular Flashing Beacon**” or RRFB is a pedestrian-actuated device that includes amber LEDs which supplement warning signs at unsignalized intersections or mid-block crosswalks. The flashers are set in an irregular flash pattern similar to flashers used by emergency vehicles to help catch drivers’ attention as they are approaching the crossing.



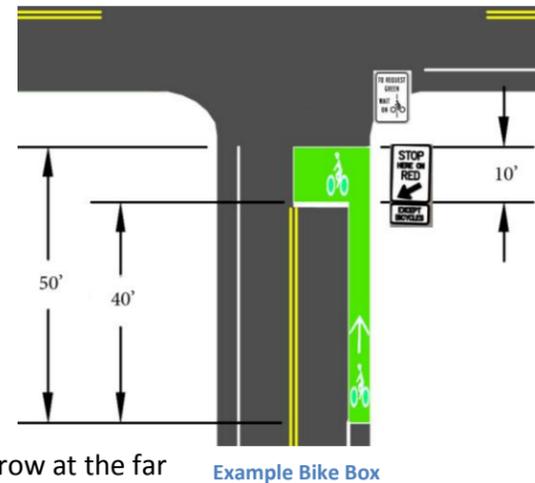
Example of RRFB

- **BICYCLE/PEDESTRIAN INTERSECTION RECONFIGURATION** – Modification of an intersection to include lane tapers that narrow the crossing distance for pedestrians, addition of raised median refuge islands where space permits, reduction in curb radii to slow drivers when turning, and other adjustments. In some cases, raised crosswalks may be permissible on local streets and slow-speed collectors. Raised crosswalks are often associated with schools and effectively serve as speed tables, designed to slow traffic to 20 mph at the crosswalks.
- **BICYCLE/PEDESTRIAN SIGNING AND STRIPING** – Includes addition of “ladder” or high-visibility marked crosswalks, special pedestrian and bicycle crossing signs where shared use paths intersect with a roadway, “No Right on Red” signs where traffic studies indicate this is hazardous for pedestrians or actuated LED “No Right on Red” signs where high visibility is necessary. In addition to hi-visibility marking and signing treatments, the use of HAWK signals or RRFBs should be considered to improve safety and access, especially for multilane arterial and collector crossings. Safety research indicates that the addition of marked crosswalks alone at uncontrolled intersections on multi-lane roadways can actually result in an increase in pedestrian-motor vehicle crashes and that therefore higher safety provisions such as HAWKs and RRFBs should be considered.
- **BIKE BOULEVARD** – Typically low-volume and low-speed streets that have been modified to prioritize bicycle and pedestrian travel and are signed with bike boulevard signs that include information on principal destinations and distances as well as names of intersecting bike routes. Bike boulevards are primarily provided along local streets but segments may be along collectors or arterials that include bicycle lanes, or in some cases the boulevards may have connecting segments



of shared use pathways within the route. Bike boulevards can be implemented at various levels, potentially including only wayfinding signage and then if necessary progressing to pavement marking including sharrows, traffic calming, traffic diverters, and in some cases special bicycle/pedestrian signals to improve crossing opportunities and safety.

- **BIKE BOXES** – A bike box is a colored marking treatment that extends a bicycle lane forward at an intersection and across the travel lane in front of stopped vehicles. The bike box requires drivers to stop further back from the intersection and is combined with a special sign directing drivers to yield to bicyclists. The intent is to place bicyclists at a more visible location to reduce collisions resulting from right-turning movements. The bike boxes are sometimes used at intersections that narrow at the far or departure side of the intersection to allow the cyclists to proceed through the intersection ahead of vehicles and reduce collisions that may occur at the pinch point. Bike Box design details are included in Appendix A.



- **BIKE LANE** – A paved shoulder on curbed or uncurbed roadway which has been primarily or exclusively set aside for bicyclists. Bike lanes are usually provided along collector and arterial roadways and range from 5 to 7 feet wide, and include “bike with arrow” or BIKE LANE pavement markings at frequent intervals and, when used, BIKE LANE signs.
- **BIKE ROUTE**– A roadway or bikeway signed with BIKE ROUTE signs and/or sometimes with special signs which provide information on key destinations and distances. Bicycle routes are often on low-volume local streets or moderate-volume collectors or arterials, and may have minimal improvements other than wayfinding and informational signage. Some collectors and arterials may include SHARE THE ROAD signs.



- **BIKE PARKING** – Bike parking provides designated bicycle parking facilities on or adjacent to sidewalks, at buildings, or in place of parking spaces. By providing designated bike parking facilities it helps keep bicycles from being parked at trees, in the sidewalk pedestrian travel areas, or at parking meters. The City has begun implementation of on-street bicycle parking in the Central Business District in lieu of a metered parking space. Bike parking facilities include bike racks, bike “corrals” (racks located on-street next to the sidewalk), and bike lockers that provide enclosed, long-term bike parking. Design information for on-street bike parking racks is included in Appendix A.
- **BUFFERED BIKE LANE** – A bike lane that includes additional buffer space, usually a 1 to 3-foot



On-Street Bike Parking on Main Avenue

striped space between the bike lane and travel lane, in some cases between the bike lane and on-street parking to help offset bicyclists from the “door zone”. The buffer can also be a colored pavement or colored marking material to help the buffered lane stand out visually.

- **COMPLETE STREET** – Complete Streets defines those streets and roadways that incorporate as many modal elements as possible, including transit routes and shelters, accessible and limited-size intersection crossings, accessible sidewalks, bike lanes, shade landscaping, raised median refuges, on-street parking (in urbanized conditions), intersection and/or pedestrian lighting, and travel lanes. A Complete Street would also have measures to help control vehicular travel speeds, such as narrower lanes and raised median refuges, with a limited number of lanes in order to help control volumes and keep crossing distances reasonable, and would have pedestrian crossing opportunities at frequent intervals. In some cases a Complete Street may not have all the elements, such as on-street parking, especially if the street or roadway is more rural in nature. In this setting the roadway may be considered as a Complete Street if it has paved shoulders or bike lanes, and also if it potentially has a paved pedestrian facility on at least one side of the roadway. Typical cross sections with design information for arterial, collector, and local streets are included in Appendix A.
- **CROSSWALK** – Legal crosswalks in all U.S. states, unless posted to prohibit pedestrian crossings, exist at the prolongation of the curb lines of intersecting public streets, including at T-intersections, and may be marked or unmarked crosswalks. Generally, marked crosswalks are 6 feet minimum in width to 10 feet or more. There are important considerations and studies required in order to mark crosswalks due to the potential for the marked crosswalk to actually result in an increase in motor vehicle-pedestrian crashes. The primary considerations that may result in higher crashes are if the roadway carries a higher number of vehicles, higher speeds, and/or greater number of lanes. Marked crosswalks should be allowed where warranted for higher speed/volume multi-lane roadways, but additional provisions such as bicycle/pedestrian actuated crossing devices should be considered before putting in such a crosswalk. Crosswalk guidance is provided in a table included in Appendix A.
- **CURB RAMP** – Curb ramps are critical to providing access between the sidewalk and the street for people who use wheelchairs. Curb ramps are most commonly found at intersections, but they may also be used at other locations such as on-street parking, loading zones, bus stops, and midblock crossings. The implementing regulations under Title II of the ADA specifically identify curb ramps as requirements for existing facilities, as well as all new construction. Curb ramps for existing facilities must be included in Transition Plans. According to the Title II implementing regulations, priorities for the installation of curb ramps in existing facilities should include access to government facilities, transportation, public accommodations, and for employees to their place of employment (U.S. Department of Justice, 1991a).
- **GRADE SEPARATED CROSSINGS** – Grade separated crossings consist of pedestrian/bicycle overpasses, bridges and underpasses, generally designed to be at least 10 feet wide with greater width desired when feasible. Grade separated crossings are usually provided for shared use pathways or pedestrian facilities over or under main roadways, but also can connect two buildings located across a highway from each other to provide all-weather access as well as to avoid

crossing at street level. Crossings should be designed so that persons can see completely across or through the crossing and should be well-lit when feasible. Crossings also need to be designed carefully to standard in terms of path grades and curvature, and should be ADA-accessible. In some cases crossings could require too much deviation from a direct route or may require too much effort to get up and down, so considerations may be necessary to evaluate a suitable at-grade treatment through a HAWK signal or other such safety device.

- **INFORMATIONAL/WAYFINDING SIGNAGE** – Informational signage would provide longer-distance cyclists with an overview and directions so cyclists can make use of the bike route facilities, the ART, other trails and routes, and streets with lower traffic volumes through town that may be safer and more enjoyable than highway riding.
- **LANE DIET** – In some circumstances it may be desirable to “diet” or narrow the existing travel lane widths in order to fit in desired elements such as bicycle lanes, as well as to help slow traffic speeds through the visual narrowing of the lanes. Safety research indicates that lane widths of 11 feet do not have negative effects on traffic safety on urban and suburban arterials, and in fact can improve safety if bicycle lane accommodations are included along with the narrowing of the travel lanes. On arterial and collector roadways, 10-foot left and right turn lanes can be acceptable. On roadways with speed limits of 40 mph and below, 10-foot travel lanes have also been found to be feasible with no negative effects on traffic safety.
- **MULTI MODAL FACILITY** – Any transportation-related facility that accommodates, improves, or provides access and/or connectivity for transit, pedestrians, bicycles, or motor vehicles. Facilities include but are not limited to: transit stops, bus storage, bus maintenance facilities, bicycle, and vehicle parking, wayfinding and informational signage, sidewalks, multi-use trails, hard and natural surface trails, surface treatments to improve safety or accessibility, curb ramps, signal timing, traffic signals such as HAWKs or RRFBs, and bike boxes.
- **NEIGHBORHOOD TRAFFIC CIRCLE** – This traffic calming device, also known as a mini-circle or mini-roundabout, is usually installed in neighborhoods on local streets at existing 4-way or T-intersections that may currently be signed with stop signs. The circle can be posted with yield signs or even no signs at all, and have been found to reduce crashes by over 94 percent in comparison to local street intersections signed with stop signs. The circles can be designed to accommodate fire trucks and larger vehicles, including sufficient offset distance around the circles and/or mountable aprons. A major advantage of the circles is that they are “self-enforcing” through the elimination of stop signs while facilitating safer and more efficient travel, especially for bicyclists.
- **PAVED SHOULDER** – Similar to a bike lane, this facility provides additional paved width for a bicyclist to utilize while motor vehicle traffic is usually able to pass without encroaching into an opposing traffic lane. Paved shoulders should be at least five feet in width and preferably six feet, especially as typical motor vehicle speeds exceed 30 mph. In limited cases due to topographic or right-of-way constraints, paved shoulders may be four feet in width.

- **RAISED MEDIAN REFUGE (LOW PROFILE BARRIER)**– Typically constructed of concrete and designed at varying lengths, a median refuge should be a minimum of eight feet wide if designed for pedestrian use and a minimum of 10 feet wide if designed for bicyclists (with 12 to 14 feet preferred where space is available). The raised refuge may also be combined with a HAWK or similar signal to improve pedestrian and bicycle crossing safety. Medians may or may not include marked crosswalks and can be designed in a “Pelican” arrangement that results in an off-set two-stage crossing. This treatment guides the pedestrian to cross to the median and then walk a short distance within it to the second half of the crossing. The median can also be designed with a Low-Profile Barrier, which can improve vehicular and pedestrian safety.



Example Low Profile Barrier

- **ROAD DIET** – A roadway that usually is converted from a 4-lane roadway that has two travel lanes in each direction to a 3-lane roadway with center turn lane, one travel lane in each direction, and bike lanes or parking (sometimes both if sufficient width exists). A road diet is often achieved through low-cost striping modifications, and usually on roadways with volumes of 26,000 motor vehicles per day or less.
- **SAFE ROUTES TO SCHOOL(SRTS)** – This term describes efforts to develop safer pedestrian and bicycle routes for children and their families to be able to travel to elementary and middle schools. Routes would include paved pedestrian facilities, shared use paths, bicycle lanes, actuated bicycle/pedestrian crossings, and in some cases traffic calming to reduce speeds in the vicinities of schools. It is important to note that there is no true way to develop an absolutely “safe” route for children to get to and from school, and so that’s why communities often develop support programs such as “walking school buses” or “bicycle trains” whereby responsible adults or older youth assist younger children in getting to and from school and in learning about traffic safety and security. Some communities also provide specific bicycle and pedestrian training for children through nonprofits, fire or police departments, or transportation departments.
- **SHARED LANE** – A lane that is used by vehicles and bicycles and may be designated with signing for bicycle use. Shared lanes can range from local streets where drivers must wait behind bicyclists or pass as traffic conditions permit, to “wide curb lanes” usually 15 to 16 feet in width that allow drivers to pass bicyclists with relative safety while still staying within the travel lane.



- **SHARED LANE MARKING** – A pavement marking that includes a bicycle symbol with two “chevron” arrows to guide bicyclists on the best location to ride within a shared lane. Also known as “sharrows”, this marking indicates to drivers to expect bicyclists on the roadway and that the bicyclists will be using the shared travel area.



Example of a “Sharrow”

- **SHARED USE PATH (MULTI-USE PATH)** - A paved pedestrian and bicycle facility located along rivers or independent rights-of-way or sometimes alongside roadways separated by sufficient space or by a barrier. Shared use paths, typically 10 to 12 feet in width, are often used by pedestrians, bicyclists, roller bladers, wheelchair users, joggers and other users. Where feasible, shared use paths have grade-separated crossings of roadways, either underpasses or bridges, or have special bike-pedestrian traffic signal crossings. Shared Use Paths are maintained by the City of Durango, as opposed to sidewalks, which are typically maintained by the adjacent property owner.
- **SIDEWALK** – A facility usually located within a street or highway right-of-way that’s typically 5 to 10 feet wide and used by pedestrians and, when permitted, by bicyclists. Where possible, addition of a buffer such as a landscaped separation from the roadway, presence of a bike lane or on-street parking improves the pedestrian’s walking experience and safety. Sidewalks may also be located in easements between houses or businesses and serve as key connecting facilities, including to provide “Safe Routes to School” where direct pedestrian connectivity from a neighborhood to adjacent school may not otherwise be available.
- **TRANSFER POINT** – A fixed location where passengers transfer from one route to another.
- **TRANSIT SHELTER/STOP** – Locations on transit route, stop amenities may include but are not limited to: signage, platform, shelter, benches, bike racks, lighting, trash receptacle, and smoker’s urn. Design details for transit stops are included in Appendix A.

These proposed improvement types are applied in the following chapter on recommended improvements by zone to provide for better transit, pedestrian and bicycle facilities and conditions.

Additional Considerations:

There are various approaches to improve multi modal transportation through measures other than physical facility changes, such as education, enforcement and encouragement activities. One measure that has been recommended for consideration—although not endorsed at present within this plan—is the “Idaho Stop Law.” The law, so named because it was enacted by the State of Idaho in the 1980s, allows bicyclists to slowly roll through a stop sign if it is safe to do so and if they have the right of way. It also allows bicyclists to proceed through a red light with certain restrictions. If a cyclist is making a right turn at a red light they must slow, yield according to standard right-of-way laws, and roll through. If the cyclist is

proceeding straight or making a left turn they may proceed after stopping through a red light if it is safe to do so while yielding the right-of-way. The law does not allow a bicyclist to take the right-of-way from vehicles or pedestrians and actually increases the fines for cyclists who disregard the proper right-of-way. The Idaho Stop Law was originally drafted in 1982 by the Administrative Director of the Courts in Idaho as part of a revision of the Idaho traffic code. The provision that allows cyclists to treat a stop sign as a yield sign was included to bring the law closer to what was considered functional and common cycling behavior. In 2005 the law was modified to include the provisions that allow bicyclists to proceed through a red light when going straight or left.

There are numerous arguments both for and against implementing the Idaho Stop Law. The arguments for the law generally center on the promotion and facilitation of cycling as a form of transportation. The arguments against the law center on safety, particularly for less-capable users such as youth, and equality of responsibility.

Connectivity and Prioritization:

As discussed in the initial chapters of this document, the goal of this plan and the proposed multi modal transportation projects is to provide safer and more convenient automobile-free transportation options. These transportation modes include bus riding, walking, and bike riding. In order for these modes to be convenient, connection between facilities is important. The points of connection include residential, commercial, institutional, and recreational areas.

For example, the ART provides connection to 10 City parks, a variety of neighborhoods, schools, shopping centers, the Bodo Industrial Park, and the central business district. The ART also connects or will connect with several planned and existing hard-surface trails including the College Mesa Connector, the Highway 160/Lightner Creek Greenway Trail and the SMART 160 Trail to the Grandview/Three Springs area. Soft surface and backcountry trails are also conveniently linked to the ART, directly and indirectly.

With the City of Durango generally surrounded on three sides by public lands (Bureau of Land Management (BLM), Department of Wildlife (DOW), United States Forest Service (USFS), Bureau of Reclamation (BOR)), the City’s integrated trail system provides regional connectivity as well. Future extensions of the ART will include the SMART 160 Trail past Three Springs and eventually to Bayfield, and an extension north of the city to Hermosa. These extensions will help connect additional neighborhoods and business areas, allowing more users to connect to other multi modal facilities such as the City’s transit system or inter-city facilities such as Road Runner Transit.

Connectivity of transit stops to sidewalks, bike lanes, and trails helps provide ease of access to riders and also provides safer methods of transportation for the user. Implementation of multi modal facilities throughout the City and beyond the City limits helps allow the user to travel with minimal road crossings and provides the necessary facilities at road crossings to allow the pedestrian or cyclist to cross the road in a safer fashion.

In the next chapter, the existing and proposed multi modal transportation facilities are analyzed in greater detail. Maps and matrices help outline the existing deficiencies and proposed projects. In the matrices, the projects are prioritized based on four concepts. The four concept rankings are then added together to provide the prioritization sum. A high sum gives the project high priority and thus it becomes a Tier 1 project. A low sum gives the project a lower priority, such as Tier 2 and Tier 3 projects. The ranking system is based on the following four concepts:

- 1) **Existing or Potential Level of Use.** Projects that are readily used or that would be used heavily upon construction are given more importance.
 - a. Highly-used or high potential use areas are given a high ranking.
 - b. Low levels of use receive a low ranking.
- 2) **Ease of Completing a Project or Proposed Improvement.** This might include constraints such as property ownership, environmental constraints, or funding limitations.
 - a. Improvements that do not require right-of-way acquisition and are relatively less expensive to implement are given a high ranking.
 - b. Projects that have additional constraints or will require substantial financial support are given a lower ranking.
- 3) **Connectivity to Existing Facilities.** Connectivity is important for ease of access and improved travel safety for all multi modal transportation users.
 - a. Projects that connect highly-used areas are given the highest ranking.
 - b. Projects that do not provide a connection to existing facilities are given the lowest ranking.
- 4) **Safety Benefit.** Pedestrian and bicycle safety is extremely important for users of all ages and abilities.
 - a. Projects that provide major safety improvements are given the highest ranking.
 - b. Projects that do not affect travel or road crossing safety are given the lowest ranking.

While the proposed projects are prioritized based on the ranking system explained above, Tier 1 projects may not necessarily be constructed before Tier 2 or Tier 3 projects. Focus will be given to Tier 1 projects, but any project may be constructed as the opportunity arises. These opportunities may include collaborative efforts with other agencies or departments, “projects of opportunity” tied in with construction of projects such as roadway construction or reconstruction, development of adjacent properties, and available funding such as grants.

Project Funding, Partnering Opportunities and Fiscal Impacts

There are various funding sources and partnering opportunities that are available to the City to implement these identified project categories and safety programs. Federal sources include-,but are not limited to, Federal Transit Administration grants, Federal Highway Administration Transportation Enhancements (TE) Funds and Federal Safe Routes to School grants. State gas tax and vehicle license fees (FASTER funds) may be eligible for transit, pedestrian and bicycle projects located within roadway rights-of-way. Local sources such as parking fees, lodgers’ tax and other sources can be used to support multi modal programs, capital needs and services.

“Piggybacking” of pedestrian and bicycle projects with roadway improvements, or projects of opportunity, are often a good way to address multi modal needs in a cost-effective manner due to sharing of costs. Partnering with nonprofits and police and fire departments to implement pedestrian and bicycle safety training and Safe Routes to School programs can be successful.

Development agreements to provide transit, pedestrian and bicycle facilities as part of new development or redevelopment is an important method to address needs as the community grows. A bicycle parking ordinance which requires new or expanded businesses, multi-family housing, public buildings and other facilities to install bike parking can be as important as existing regulations that require those entities to provide vehicular parking.

The fiscal impact of projects will vary improvement-by-improvement in conjunction with the City of Durango’s 5-Year Street Improvement Plan. Standalone projects outside of the 5-Year Street Improvement Plan may grant funding with the appropriate local match.

Chapter 6: Existing Conditions, System Deficiencies and Proposed Improvements by Zone

City staff, the Multi Modal Advisory Board and the project team inventoried and evaluated existing transit, walking and bicycling conditions and system deficiencies, resulting in recommendations for proposed improvements to ensure safety and access for transit, pedestrians and bicyclists. The data includes locations of transit stops, pedestrian amenities, deficiencies in pedestrian and bicycle accessibility to the transit system, missing segments of sidewalk, lack of wayfinding and safety signage, striping needs and deficiencies in ADA-compliant access. Limited data were available on bicycle and pedestrian crashes, including crash types, causes and location.

The existing conditions and deficiencies information forms the basis for recommended improvements to more fully develop the multi modal transportation system. Also as part of this task the project team has compiled:

- Proposed transit improvements including upgrading or adding stop amenities,
- Project descriptions including details on proposed sidewalk and ramp improvements,
- Identified locations for striping of the existing and proposed bicycle network, and
- The location of safety and wayfinding signs associated with the transit, pedestrian and bicycle networks.

The team documented and reviewed the existing conditions and deficiencies for the six zones within the City of Durango that correspond with the snow plow zones and the seventh zone which includes the comprehensive planning area. Following is a narrative of key observations within each of the zones, with more comprehensive documentation of the conditions, deficiencies and proposed improvements presented in the maps and summary tables at the end of each zone section.

It is important to note that some roadways throughout each zone lack sidewalks because of right-of-way issues, steep topography, coordination with adjacent property owners, and other constraints. Construction of sidewalk along these roadways may not be feasible; therefore, alternative routes may instead be improved and signed for pedestrian access.

Many locations identify streets for proposed bike lanes, bike routes or sharrows. Typically, bike lanes were identified in locations where the existing street width is sufficient enough to stripe them in place. While lane diets along these roads are not indicated specifically on the maps, implementation of new bike lanes on existing streets may require lane diets with re-striping of the existing street to narrow the travel lanes, thus providing additional room to stripe a bike lane. Bike routes and sharrows are typically identified where the existing street width is not wide enough to allow for striping of a separated bike lane.

Zone 1 –College Mesa

Existing Conditions and Deficiencies

Encompassing residential and commercial areas from 3rd Avenue eastward, as well as Ft. Lewis College and residential areas northeast to Ball Lane and CR 240, Zone 1 has a mix of older, grid-tied City streets in contrast with a more suburban development pattern on the mesa. Transit accessibility is limited to one route in the southern section of the zone and two routes in the central to northern sections, with no transit access in the northeast. Pedestrian accessibility to transit is generally good in the older sections of the city, which overall has ADA-compliant sidewalks. Transit patrons must walk over six blocks in some areas to access the transit routes. Although the northeast residences lack transit service, there are ADA-compliant pedestrian facilities on most of the streets serving that area of the community.

As documented in the *2012 La Plata County & Durango Area Bike Map*, Zone 1 has a mix of bicycle routes that provide reasonable coverage for the area, but with limitations. Some of the routes such as in the older sections of the city are attractive for less-experienced cyclists to use due to lower speeds and more accessible grades. Other routes such as Rim Drive and Highway 3 are more intimidating to the beginning or casual cyclist due to lack of bike facilities, steeper grades in some areas, and/or higher traffic speeds and volumes.

Some issues identified in the analysis include the intersections of 4th Avenue/College Drive and 5th Avenue/College Drive that are problematic for pedestrians and bicyclists to cross. Also Santa Rita Drive, a key connector for City residents to the ART, lacks sidewalk or a paved shared use path that would provide connectivity. Way finding signage at trailhead sites is not in place. As discussed above, some bicycle routes are mainly accessible to more experienced cyclists but are intimidating to a large segment of the population due to the nonexistence of bike facilities. Some bike lanes end without continuation of a suitable facility and bike signing and striping is lacking in some locations.

Proposed Improvements

Drawing from the above data collection and review, various project needs exist such as repair of segments of sidewalk and installation of shared use paths, signing to improve safety and wayfinding, reallocation of roadway space to reduce crossing distances for pedestrians and to provide additional roadway space for bicyclists, minor intersection improvements for pedestrians and bicyclists, installation of sharrows, striping adjustments and other miscellaneous improvements.

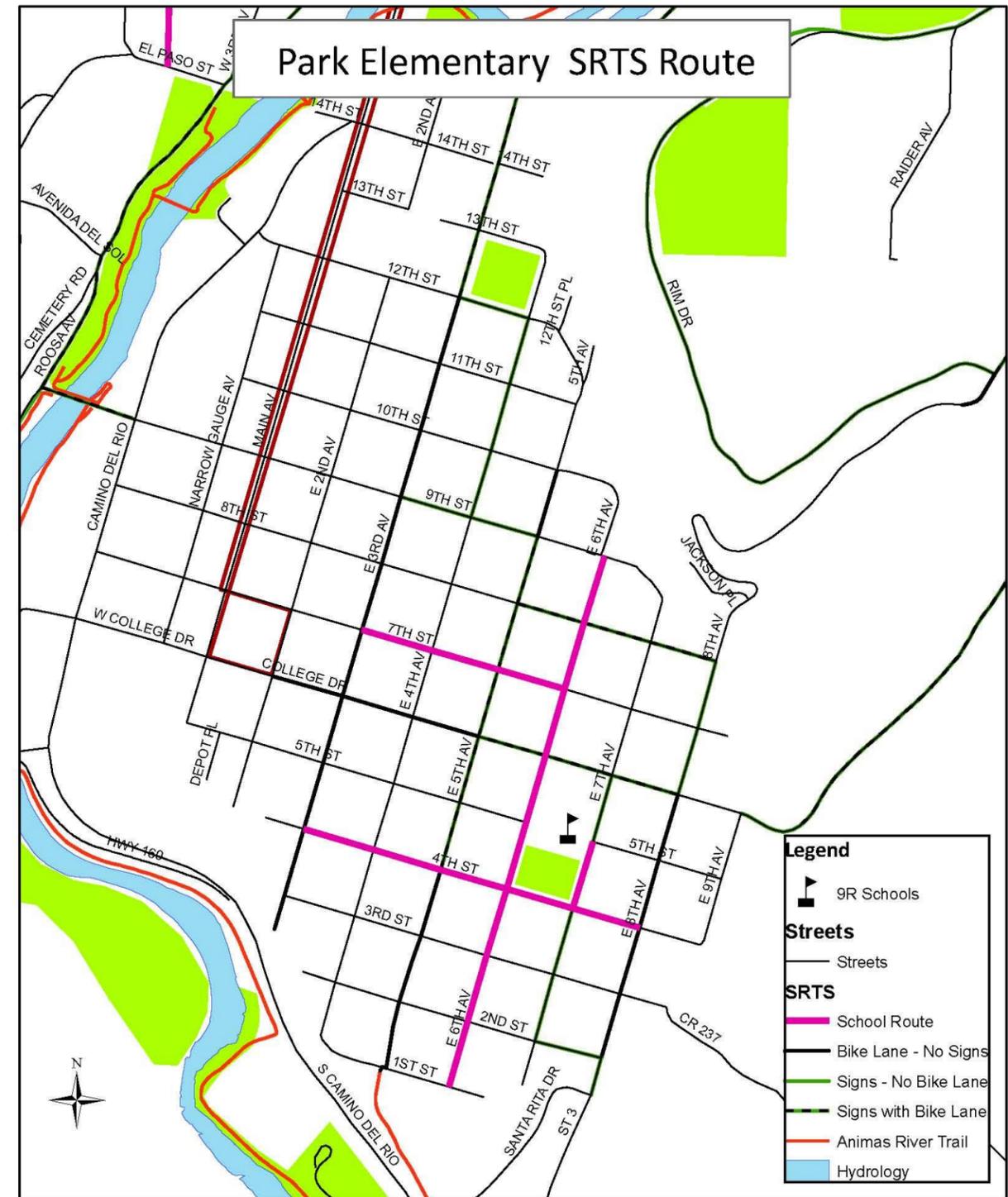
Key projects identified include potential road diets, improved signage, intersection improvements, and possibly the addition of bike boulevards. Various intersections throughout the zone need additional signage and striping or reconfiguration to improve safety. Additionally, these intersection improvements should include installation of ADA-compliant sidewalk ramps to improve access to persons with disabilities, to improve connectivity to other existing pedestrian and transit facilities and to improve user

safety. Wayfinding signage throughout the south and west sides of the zone would be helpful for pedestrians and bicyclists—including locals, tourists and newcomers—to find the best access to the ART, downtown, and Fort Lewis College. Signing of new bike routes and installation of sharrows can improve bicycle access and safety along roadways such as the Rim Drive. Zone 1 includes Fort Lewis College and a residential area where many college students live. Wayfinding signage in this area can be especially beneficial to this highly transient population and college-related visitors, such as prospective students and parents.

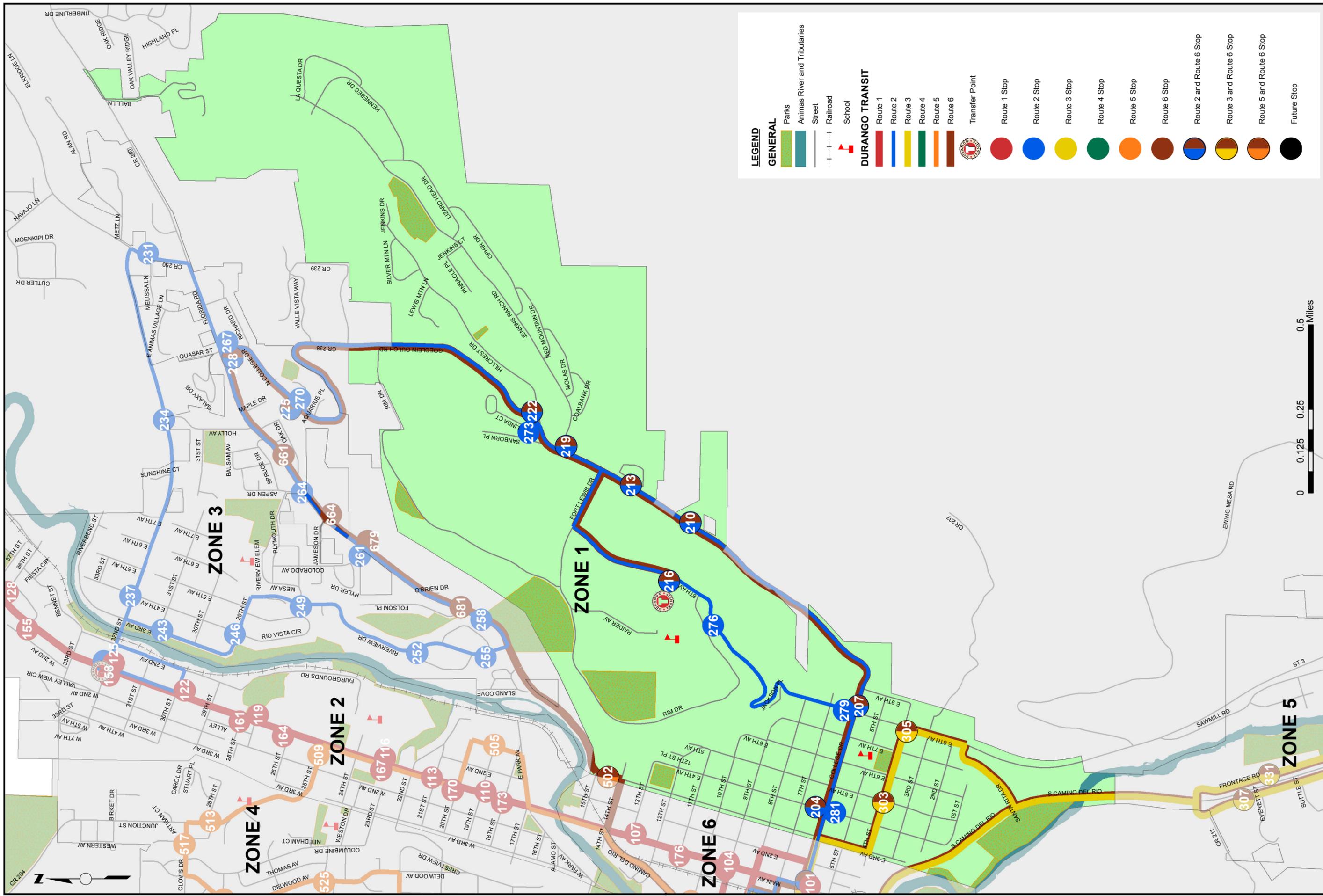
A proposed road diet on College Drive from E. 3rd Avenue to E. 8th Avenue would reduce the number of lanes while adding bicycle lanes and providing greater buffer space between motor vehicles and pedestrians. This route is used by through-traffic as a connection between Highway 3, Main Avenue, and Camino del Rio, and is also used as one of the primary access roads up to Fort Lewis College. Currently this section of road has some signalized intersections and some unsignalized intersections. Transit routes also exist along this stretch. By implementing a road diet and adding bike lanes, connectivity and safety can be improved for all multi modal users. Colored “Bike Boxes” are proposed at three locations along College Drive—at E. 3rd Avenue, E. 6th Avenue and E. 8th Avenue and intersection safety improvements are proposed at the unsignalized intersections potentially including neighborhood traffic circles.

Bike boulevards are possible improvements along E. 4th Avenue, E. 5th Avenue, 7th Street, and 3rd Street. These local roads are connectors that are not typically used by through traffic. The addition of bike boulevards along these streets can allow for safer bike travel, where signing and potentially traffic calming and motor vehicle traffic diverters can prioritize bicycle and pedestrian travel over motor vehicles. Since these roads are not typically used for through travel, bike boulevards could be implemented along these streets with limited negative impacts on traffic flow.

Repair of existing sidewalk along 12th Street from 4th Avenue to 5th Avenue will improve overall pedestrian access. Installation of a new concrete shared use pathway parallel to Santa Rita Drive is recommended to provide access for residents to the ART. The new pathway would need to avoid the wetland mitigation site. Reduction of roadway width through curb line tapers at College and 4th Avenue and at 5th Avenue would help improve pedestrian access and safety, especially for families traveling to and from Park Elementary School. Special Safe Routes to School (SRTS) signage is proposed along 4th Street, E. 6th Avenue, and 7th Street for children and their families to access Park Elementary. A SRTS Exhibit for Park Elementary is included at the end of this zone discussion.



Map by Amber Blake
 City of Durango 2009
 NAD 1983 HARN State Plane
 Lambert Conformal Conic



LEGEND

GENERAL

- Parks
- Animas River and Tributaries
- Street
- Railroad
- School

DURANGO TRANSIT

- Route 1
- Route 2
- Route 3
- Route 4
- Route 5
- Route 6
- Transfer Point
- Route 1 Stop
- Route 2 Stop
- Route 3 Stop
- Route 4 Stop
- Route 5 Stop
- Route 6 Stop
- Route 2 and Route 6 Stop
- Route 3 and Route 6 Stop
- Route 5 and Route 6 Stop
- Future Stop



NOTE:
The data shown on these exhibits are based on City of Durango GIS.

CITY OF DURANGO
MULTIMODAL TRANSPORTATION PLAN
TRANSIT SYSTEM EXHIBIT
ZONE 1

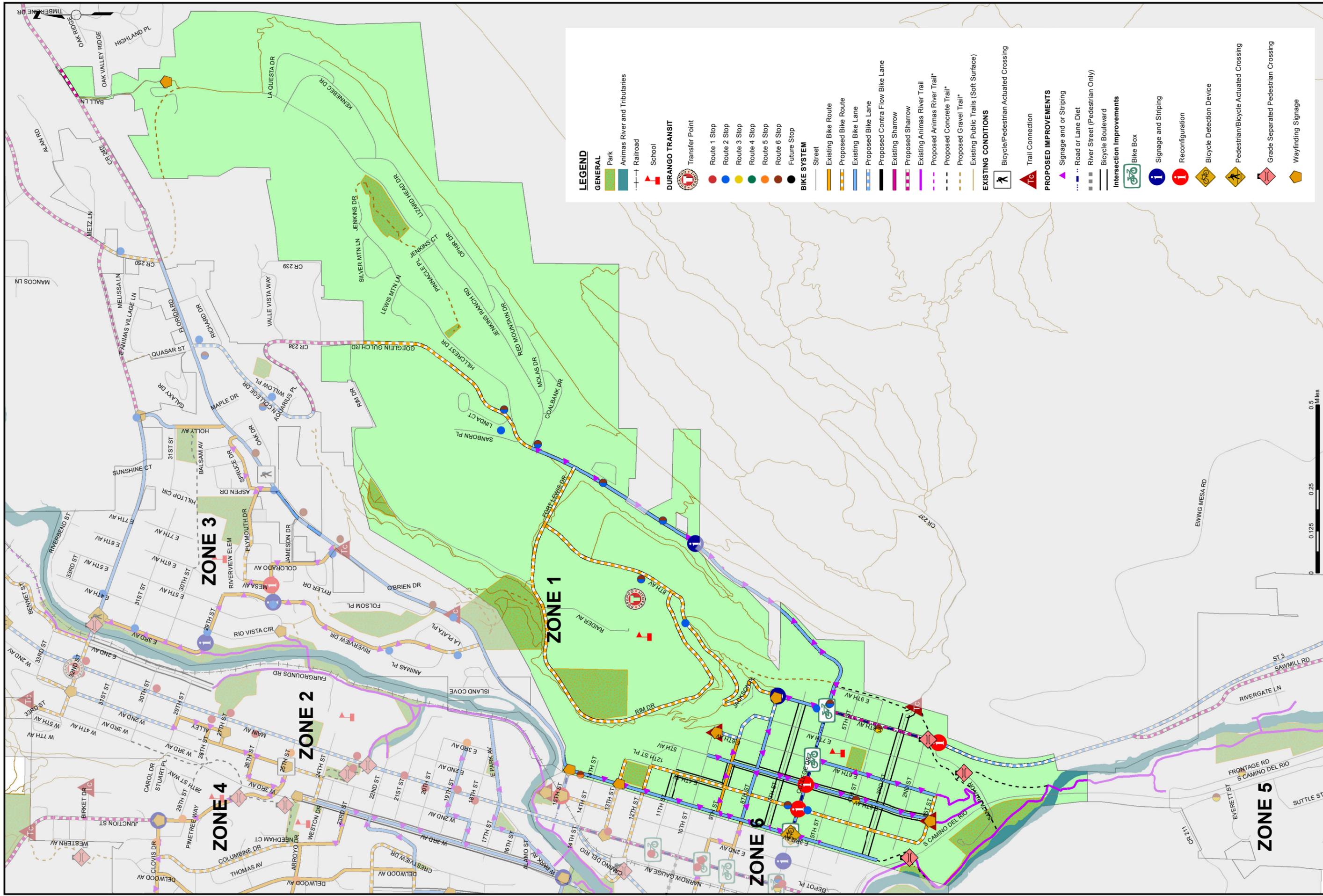
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LEGEND

GENERAL

- Park
- Animas River and Tributaries
- Railroad
- School

DURANGO TRANSIT

- Transfer Point
- Route 1 Stop
- Route 2 Stop
- Route 3 Stop
- Route 4 Stop
- Route 5 Stop
- Route 6 Stop
- Future Stop

BIKE SYSTEM

- Street
- Existing Bike Route
- Proposed Bike Route
- Existing Bike Lane
- Proposed Bike Lane
- Proposed Contra Flow Bike Lane
- Existing Sharrow
- Proposed Sharrow
- Existing Animas River Trail
- Proposed Animas River Trail*
- Proposed Concrete Trail*
- Proposed Gravel Trail*
- Existing Public Trails (Soft Surface)

EXISTING CONDITIONS

- Bicycle/Pedestrian Actuated Crossing
- Trail Connection

PROPOSED IMPROVEMENTS

- Signage and or Striping
- Road or Lane Diet
- River Street (Pedestrian Only)
- Bicycle Boulevard

Intersection Improvements

- Bike Box
- Signage and Striping
- Reconfiguration
- Bicycle Detection Device
- Pedestrian/Bicycle Actuated Crossing
- Grade Separated Pedestrian Crossing
- Wayfinding Signage

0 0.125 0.25 0.5 Miles

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Gravel trail may be either a natural
surface trail or an aggregate trail.

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MULTIMODAL TRANSPORTATION PLAN
BIKE SYSTEM EXHIBIT
ZONE 1

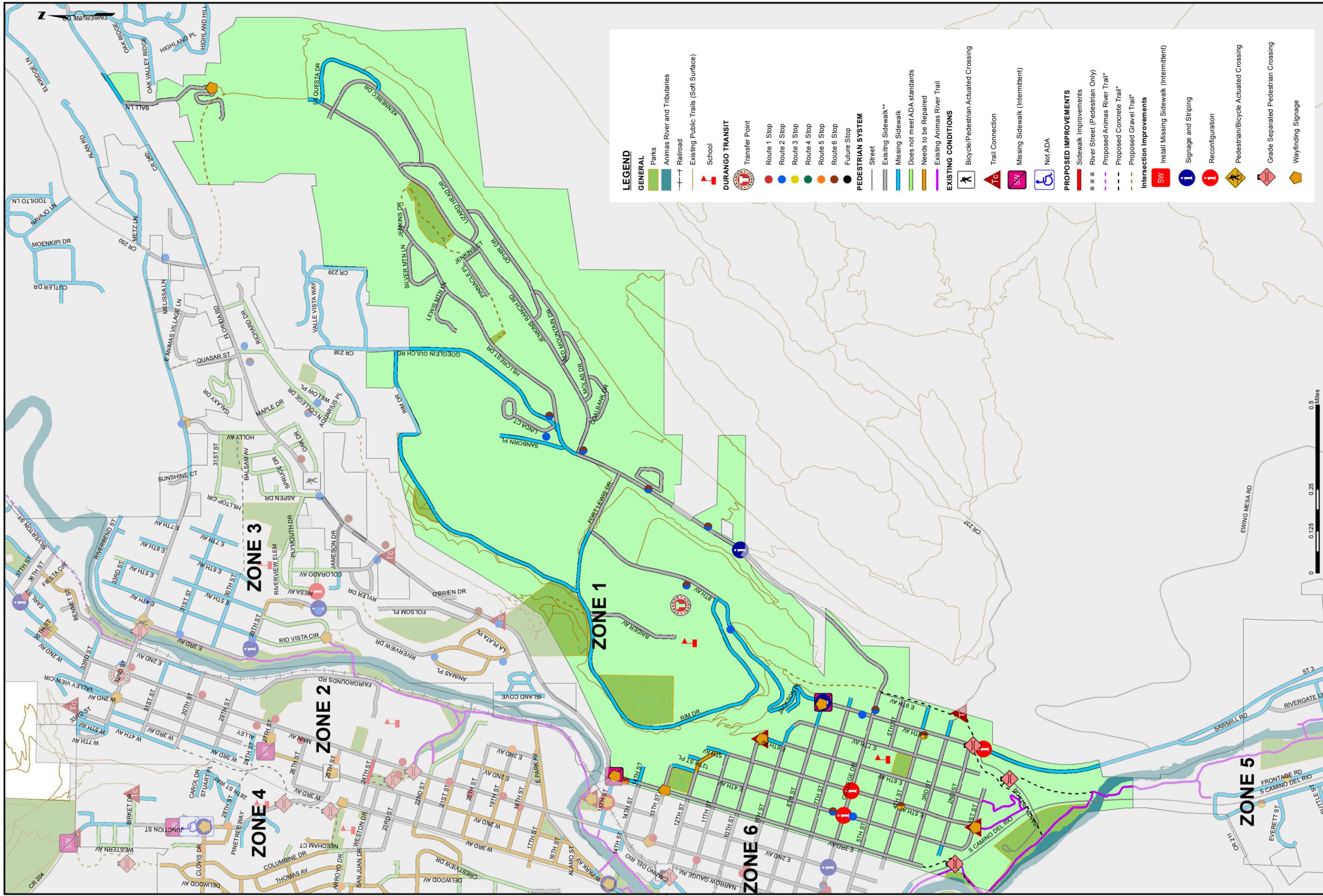
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LEGEND

GENERAL

- Parks
- Animas River and Tributaries
- Railroad
- Existing Public Trails (Soft Surface)
- School

DURANGO TRANSIT

- Transfer Point
- Route 1 Stop
- Route 2 Stop
- Route 3 Stop
- Route 4 Stop
- Route 5 Stop
- Route 6 Stop
- Future Stop

PEDESTRIAN SYSTEM

- Street
- Existing Sidewalk**
- Missing Sidewalk
- Does not meet ADA standards
- Needs to be Repaired
- Existing Animas River Trail

EXISTING CONDITIONS

- Bicycle/Pedestrian Actuated Crossing
- Trail Connection
- Missing Sidewalk (Intermittent)
- Not ADA

PROPOSED IMPROVEMENTS

- Sidewalk Improvements
- River Street (Pedestrian Only)
- Proposed Animas River Trail*
- Proposed Concrete Trail*
- Proposed Gravel Trail*

Intersection Improvements

- Install Missing Sidewalk (Intermittent)
- Signage and Striping
- Reconfiguration
- Pedestrian/Bicycle Actuated Crossing
- Grade Separated Pedestrian Crossing
- Wayfinding Signage



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Zone 2 – Camino del Rio - North Main Avenue Corridor

Existing Conditions and Deficiencies

Centered along Main Avenue from El Paso Street at the south to 37th Street at the north, Zone 2 is largely a commercial corridor along its spine with residential on the edges and the ART as a pedestrian and bicycle showpiece traversing or immediately adjacent to the corridor. As a fairly narrow and linear corridor, Zone 2 is served well by transit service along Main Avenue with limited walking distances of 1/4-mile to 1/3-mile to access transit stops from either side of Main. Pedestrian facilities within Zone 2 generally provide good system coverage with most sections of sidewalk ADA-compliant. However, approximately a third of the existing sidewalk segments are in need of repair and there are sections of missing sidewalk through mainly the northern half of the zone. Sidewalks in the vicinity of the railroad tracks along 32nd Street are discontinuous and in need of repair. The sidewalk along 24th Street is discontinuous, non-ADA compliant at some intersections and driveway crossings, and there is a gap in the sidewalk in particular at the bridge crossing located between Main Avenue and W. 2nd Avenue, forcing pedestrians to walk out into the roadway when crossing the bridge.

In the northern part of the zone the intersections of 32nd Street/E. 2nd Avenue and 32nd Street/E. 3rd Avenue are difficult for some pedestrians and bicyclists to cross. 32nd Street from 3rd Avenue to Main Avenue, although a desirable and used route by bicyclists, does not have bicycle facilities. This is the only roadway bridge crossing of the Animas for nearly 2 miles north of the Main Avenue bridge, which also does not have designated bicycle facilities. North-south bicycle access is provided primarily by the ART which also provides a crossing of the Animas just north of Durango High School, while designated east-west bicycle routes across the zone are limited. W. 2nd Avenue and W. 3rd Avenue are bikeable local streets providing a north-south route west of Main, but are not signed routes. No specific bicycle access is designated along Main Avenue, the principal continuous arterial that would serve many commuter and visiting bicyclists. Signage is lacking along some of the existing bikeways.

Proposed Improvements

Projects intended to promote pedestrian, transit and bicycle access within Zone 2 include signage, marking improvements, intersection upgrades, and new pedestrian and bicycle facilities. At the northern end of the zone, installation of a HAWK or other suitable bicycle-pedestrian crossing device at North Main Avenue and 35th Street/Earl Street will be beneficial to both pedestrians and bicyclists not only to cross Main to reach transit stops, but also to allow access onto North Main for bicyclists who need to travel the corridor. The North Main Avenue crossing will ideally be located behind an adjacent bus stop, increasing safety for pedestrians by allowing them to cross behind the bus. This crossing may possibly be a HAWK, if warranted to meet MUTCD requirements.

Currently sidewalk is missing between 35th Street to 36th Street along Main Avenue, but installation of sidewalk along this stretch is complicated by an adjacent steep, rocky slope. A sidewalk connection from 35th Street at Main and connecting up to 36th Street along Earl Street may be a feasible alternative in order

to provide sidewalk connectivity and improve conditions for persons with disabilities, and to provide improved access to the transit routes.

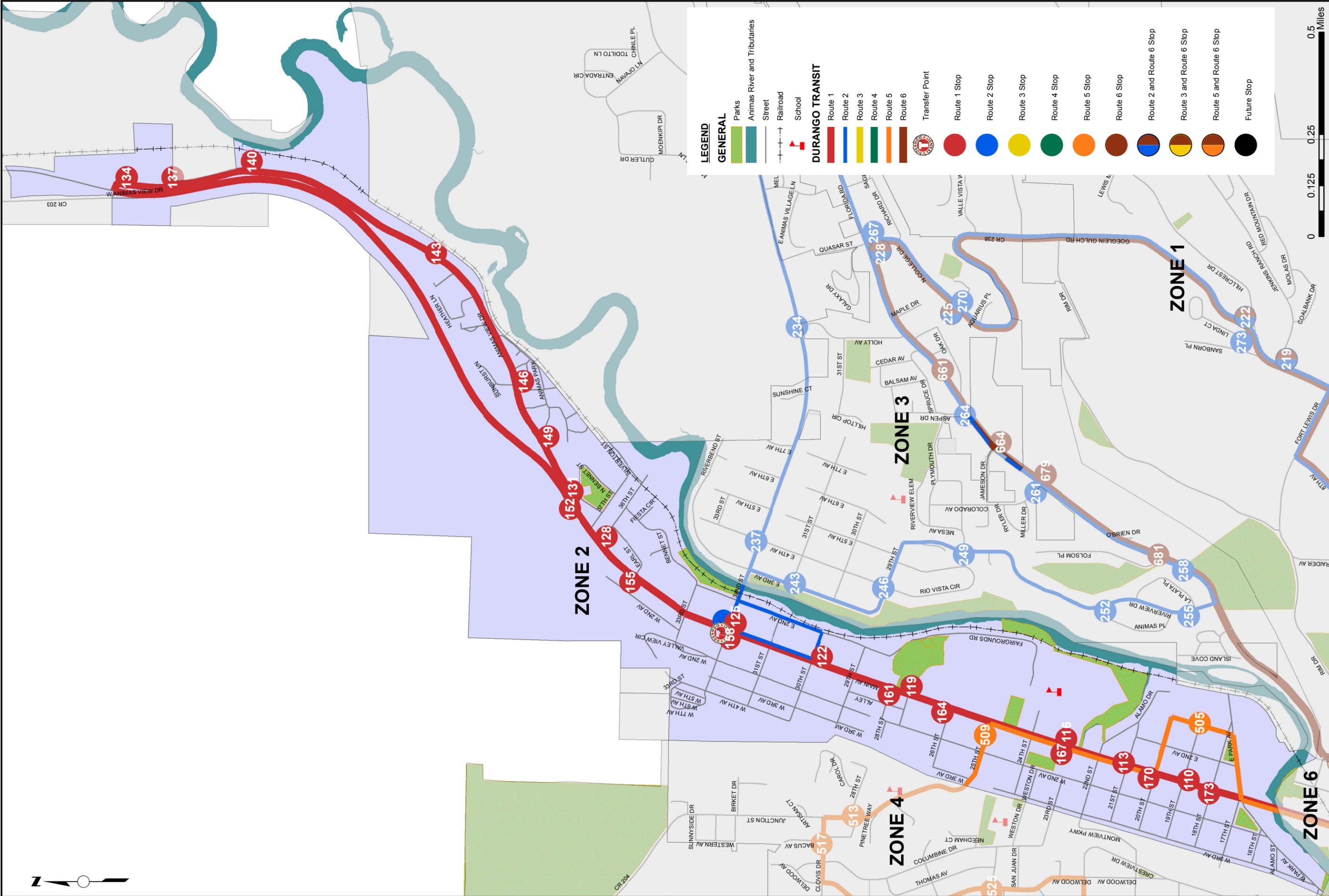
A proposed project is under consideration to develop a sidewalk connection on the north side of 24th Street at the bridge located just west of Main Avenue. Sidewalk would also be upgraded along the route at intersections and driveway crossings to meet ADA standards. Also proposed is a raised midblock crossing of 24th Street between the bridge and Main Avenue so that pedestrians may cross to the south and access a proposed concrete trail through Brookside Park to the Brookside transit stop on Main Avenue. The raised crossing would essentially serve as a speed table as well to slow traffic and would provide better visibility of pedestrians.

Restriping of North Main within engineering standards is proposed for the length of Zone 2 to provide bicycle lanes on each side of the roadway, which will also result in extra buffer space between motor vehicles and pedestrians. This may include the use of 11-foot travel lanes and possibly narrowing the center turn lane to accommodate bike lanes (i.e., a lane diet).

Raised medians along North Main would improve safety, but may be difficult due to the high traffic volume and frequency of businesses with access directly off North Main. The raised medians may also result in insufficient space to also provide bicycle lanes through restriping. An Access Control Plan and study of this concept is recommended. Medians along Camino del Rio in the downtown district south of 14th Street may provide an excellent study location and are discussed in Zone 6. At the north end of Main the bicycle lanes are recommended to transition to Animas View Drive, which would be modified with shared lane markings and bicycle route signage.

Wayfinding signage along various routes is also proposed to help pedestrians and bicyclists reach the ART, Fort Lewis College, the Durango Community Recreation Center, Mountain Park Trailheads (Overend and Dalla), and Downtown. New bike routes primarily along local streets are recommended to make key connections to some existing bike routes and bike lanes. Addition of concrete trails can enhance connectivity in the central part of the zone. Extension of the ART north along the Silverton Street alignment is a major goal, with an improved crossing of 32nd Street and the Animas River recommended as an important link.

Various local streets and pathways have been identified as Safe Routes to School routes for Needham Elementary School and Miller Middle School. The routes overlap between Zones 2 and 4, and serve as key central connecting routes that other local streets feed into. A SRTS Exhibit for Needham and Miller are included at the end of the zone 4 discussion. The routes include W. 3rd Avenue, W. 2nd Avenue, and Weston Drive. Connecting routes from the east side of Main Avenue include the ART and E. 2nd Avenue. The bike/ped bridge connecting over the Animas River behind the high school also provides access for residents and youth living east of the Animas River. The routes could be identified through special SRTS



LEGEND

GENERAL

- Parks
- Animas River and Tributaries
- Street
- Railroad
- School

DURANGO TRANSIT

- Route 1
- Route 2
- Route 3
- Route 4
- Route 5
- Route 6
- Transfer Point
- Route 1 Stop
- Route 2 Stop
- Route 3 Stop
- Route 4 Stop
- Route 5 Stop
- Route 6 Stop
- Route 2 and Route 6 Stop
- Route 3 and Route 6 Stop
- Route 5 and Route 6 Stop
- Future Stop



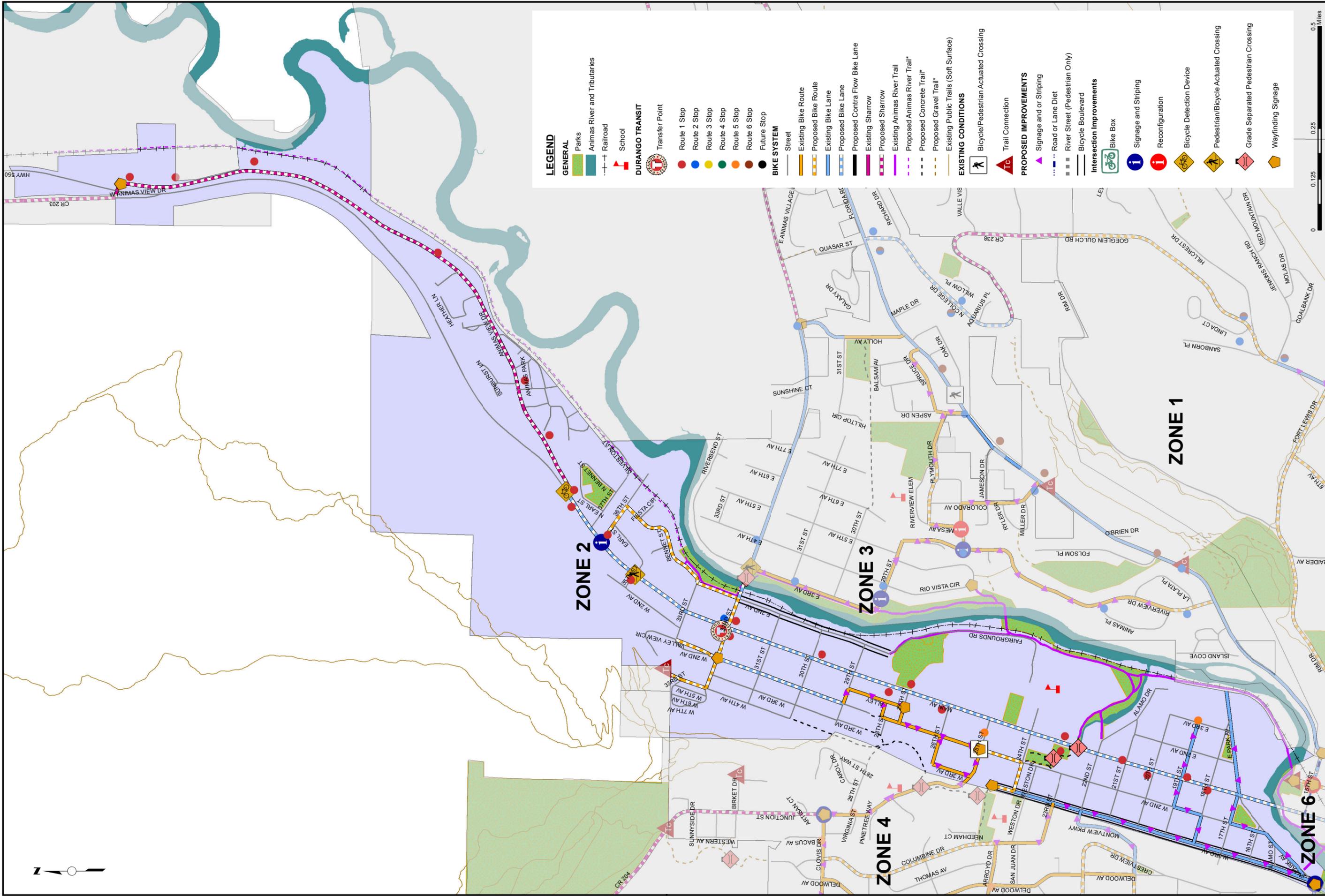
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LEGEND

GENERAL

- Parks
- Animas River and Tributaries
- Railroad
- School

DURANGO TRANSIT

- Transfer Point
- Route 1 Stop
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- Route 3 Stop
- Route 4 Stop
- Route 5 Stop
- Route 6 Stop
- Future Stop

BIKE SYSTEM

- Street
- Existing Bike Route
- Proposed Bike Route
- Existing Bike Lane
- Proposed Bike Lane
- Proposed Contra Flow Bike Lane
- Existing Sharrow
- Proposed Sharrow
- Existing Animas River Trail
- Proposed Animas River Trail*
- Proposed Concrete Trail*
- Proposed Gravel Trail*
- Existing Public Trails (Soft Surface)

EXISTING CONDITIONS

- Bicycle/Pedestrian Actuated Crossing
- Trail Connection

PROPOSED IMPROVEMENTS

- Signage and or Striping
- Road or Lane Diet
- River Street (Pedestrian Only)
- Bicycle Boulevard

Intersection Improvements

- Bike Box
- Signage and Striping
- Reconfiguration
- Bicycle Detection Device
- Pedestrian/Bicycle Actuated Crossing
- Grade Separated Pedestrian Crossing
- Wayfinding Signage



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BIKE SYSTEM EXHIBIT
ZONE 2**

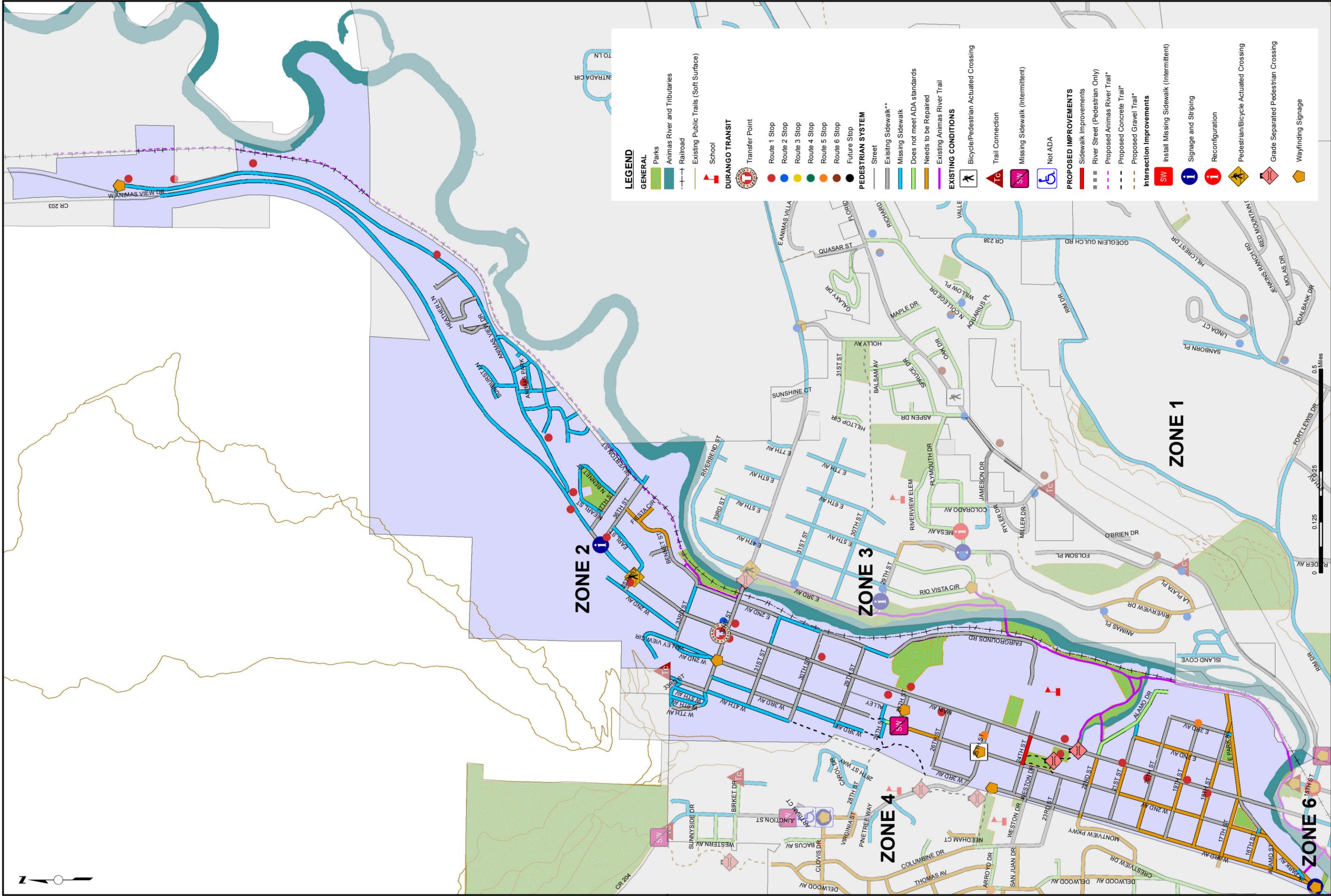
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PE-2

wayfinding signage and in some cases traffic calming on roadways that have higher traffic speeds and volumes could be considered.

Intersection improvements are suggested to improve access and safety at the intersection of Roosa Avenue, El Paso Street, W. Park Avenue, and E. 3rd Avenue. This is an unusual intersection configuration. Vehicles traveling downhill on El Paso Street have the right-of-way and traffic on the through street, Roosa Avenue, yields to these cars. The southwest corner of the El Paso Street/Roosa Avenue intersection is very wide and a tighter radius should be installed to slow traffic and allow for sidewalk installation at the intersection. Sidewalk should be installed along the south side of El Paso and the west side of Roosa Avenue along with marked crosswalks in all directions, if warranted per the MUTCD. Along W. Park Avenue the sidewalk should be continued on the north side to the intersection of E. 3rd Avenue with installation of a marked crosswalk at the intersection, as warranted.

Overlapping with Zone 3, the segment of 32nd Street from Main Avenue to E. 3rd Avenue is a particularly busy roadway, with turning movements into and out of City Market as well as at 32nd/E. 3rd Avenue and 32nd/E. 2nd Avenue. The section from E. 2nd Avenue to E. 3rd Avenue, including the bridge and railroad tracks, is currently under preliminary design to evaluate pedestrian, bicycle and traffic needs and develop proposed improvements. Long-term improvements in this area include construction of the ART on both sides of the Animas River, an additional pedestrian bridge over the river near 31st Street, and a grade-separated trail crossing (pedestrian overpass) of 32nd Street and E. 2nd Avenue.



32nd St approaching East 2nd Ave and Main Ave

Due to traffic considerations and constraints within the right-of-way, for the near term only sharrows are proposed on the segment from E. 2nd Avenue to Main Avenue to help facilitate bicycle access and safety through this area. Because of the importance for transit, pedestrian, bicycle, and vehicle access in this area, this section is recommended for further evaluation to improve safety for all users traveling this route. Refer to Appendix B for the recommended short-term improvements on 32nd Street between E. 2nd Avenue to Main Avenue.

Zone 3 – Animas City and Florida Road Area

Existing Conditions and Deficiencies

Zone 3 is delineated by Florida Road/ CR 240 to the southeast, 32nd street to the north and the Animas River to the west. The area is predominately residential with some commercial districts along Florida Rd. and CR 250. Pedestrian facilities within Zone 3 exist on approximately half of the roadways, with existing sidewalk segments generally ADA-compliant. Florida Road includes new bike lanes and for nearly all of the length of Zone 3 has a 10-foot shared use path on the western side of the roadway, built as part of the recent reconstruction of the road. A limited number of sidewalks need some repair work and sidewalks are discontinuous on some roadways. Transit coverage for the zone is good, with patrons generally walking no more than a third of a mile at any point to access a line off of Florida Road, Riverview Drive or 32nd Street.

The bicycle system is centered primarily along the key routes of the new Florida Road section and along Riverview and 32nd Street. However, 32nd Street becomes CR 251 from Holly Avenue to CR 250 and is a fairly busy road which does not include bicycle facilities. CR 251 is a desirable route to CR 250, a highly popular roadway for bicyclists who travel up the Animas Valley. Also Florida Road from CR 250 to the northeast is another popular roadway for bicycling, with existing paved shoulders that in areas outside of the city narrow considerably. A key connecting road between Zone 3 and Zone 1 is North College Drive, which also does not have designated facilities but does have some traffic calming in the lower section closer to Florida Road. An important centerpiece and focal area of the zone, Riverview Elementary School, has access via limited pedestrian pathways and bicycle routes but they are not signed routes.

Proposed Improvements

A major emphasis in Zone 3 is to improve pedestrian access and ADA-compliance within the zone, especially around the elementary school. Numerous existing sidewalks are recommended for ADA upgrades. However, as discussed above, these neighborhoods are already developed and the timing of upgrades will depend on various factors. A concrete trail connector can provide access across the central part of the zone between 30th Street and Holly Avenue, an area underserved by pedestrian or bicycle facilities. Intersection reconfiguration and signing/striping adjustments at three locations is recommended within the walking coverage area of the school.

Sharrows are proposed on CR 240, CR 250 and CR 251 to improve driver awareness and to increase passing clearance to cyclists. Bicycle lanes are recommended as longer-term improvements for CR 240, CR 250 (between CR 240 and CR 251), and on CR 251. Design of Multi Modal improvements on CR 251 from Holly Avenue to CR 250, and on CR250 from CR 251 to CR 240, are scheduled to begin in the summer of 2012. The improvements are proposed to include bicycle lanes and a shared use path on the north side of CR 251, and bicycle lanes and sidewalks on CR250 for the short section connecting to CR 240. Refer to Appendix B for the recommended improvements on these sections



of CR 250 and CR 251.

Signing for bicycle routes can help with connectivity along Riverview Drive from Florida Road to E. 3rd Avenue, along Ford Drive, Colorado Avenue, Mesa Avenue, Spruce Drive, and College Drive. The existing routes are popular connectors to Florida Road or the ART at 29th, but require additional bike route and wayfinding signage.

At the intersection of Mesa Avenue and Ford Drive, reconfiguration is recommended to improve safety. This may include narrowing the intersection by reducing the curb radii or using curb tapers.



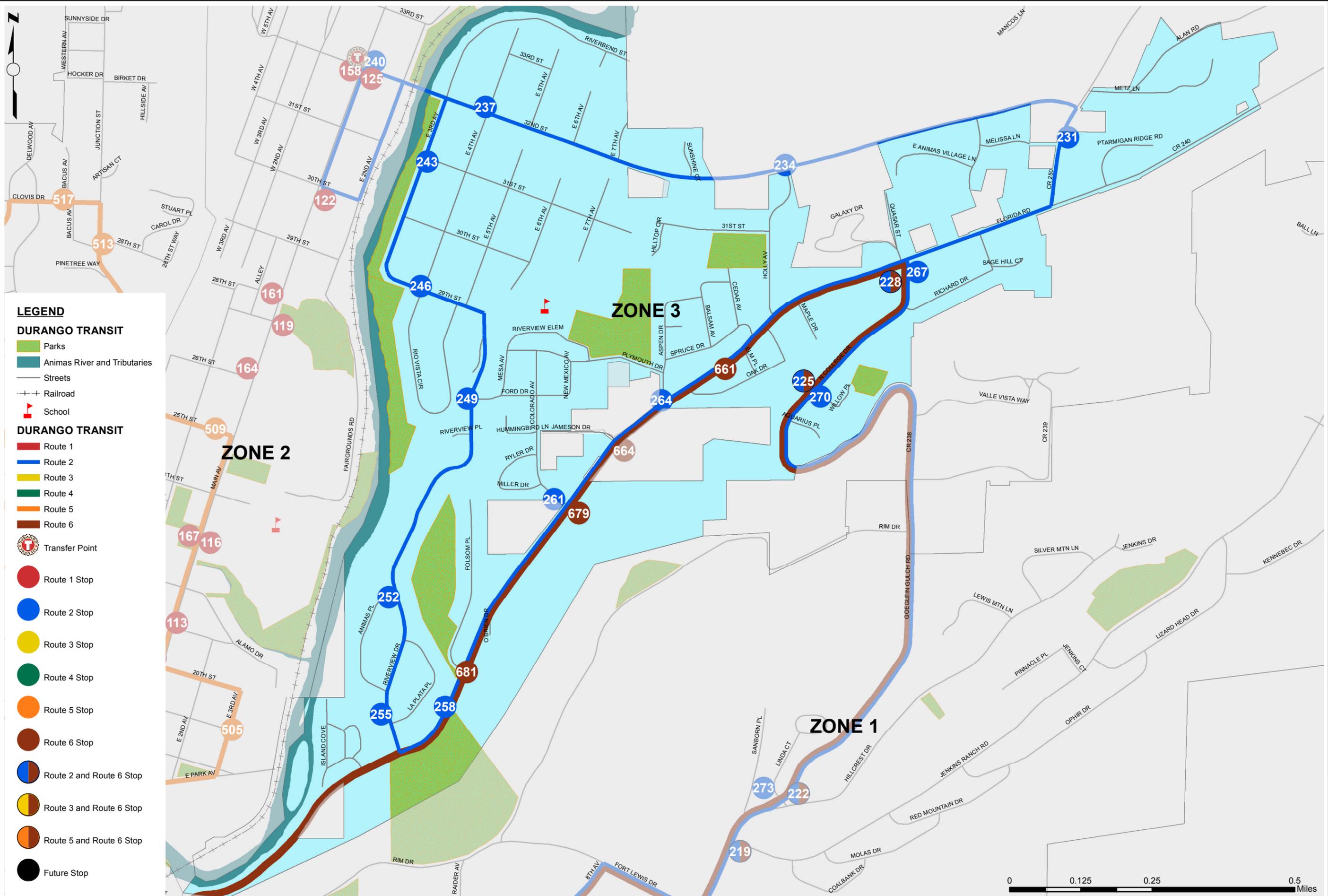
CR 251 is used as a connector to popular road bike rides

In Zone 3, transit stops exist along Riverview Drive, Florida Road, and CR 251/32nd Street. Improvements to bicycle routes, intersection safety, connection to the ART, and implementation of Safe Routes to Schools projects can help provide connectivity to the transit system and improve safety conditions for all multi modal users. Local streets including E. 3rd Avenue, 29th Street, Riverview Drive, and Plymouth/Spruce Drives provide connectivity to Riverview Elementary. The routes could be identified and improved through special SRTS wayfinding signage and in some locations could be improved through traffic calming. A SRTS Exhibit for Riverview Elementary is included at the end of this zone discussion.

At the intersection of 3rd Avenue and 32nd Street a pedestrian crossing treatment is necessary to improve access to the ART across the river. This intersection including the segment across the Animas bridge to 2nd Avenue (overlapping into Zone 2) is currently under preliminary design to evaluate pedestrian, bicycle and traffic needs and develop proposed improvements.



Map by Amber Blake
 City of Durango 2009
 NAD 1983 HARN State Plane
 Lambert Conformal Conic



LEGEND

DURANGO TRANSIT

- Parks
- Animas River and Tributaries
- Streets
- Railroad
- School

DURANGO TRANSIT

- Route 1
- Route 2
- Route 3
- Route 4
- Route 5
- Route 6

- Transfer Point
- Route 1 Stop
- Route 2 Stop
- Route 3 Stop
- Route 4 Stop
- Route 5 Stop
- Route 6 Stop
- Route 2 and Route 6 Stop
- Route 3 and Route 6 Stop
- Route 5 and Route 6 Stop
- Future Stop

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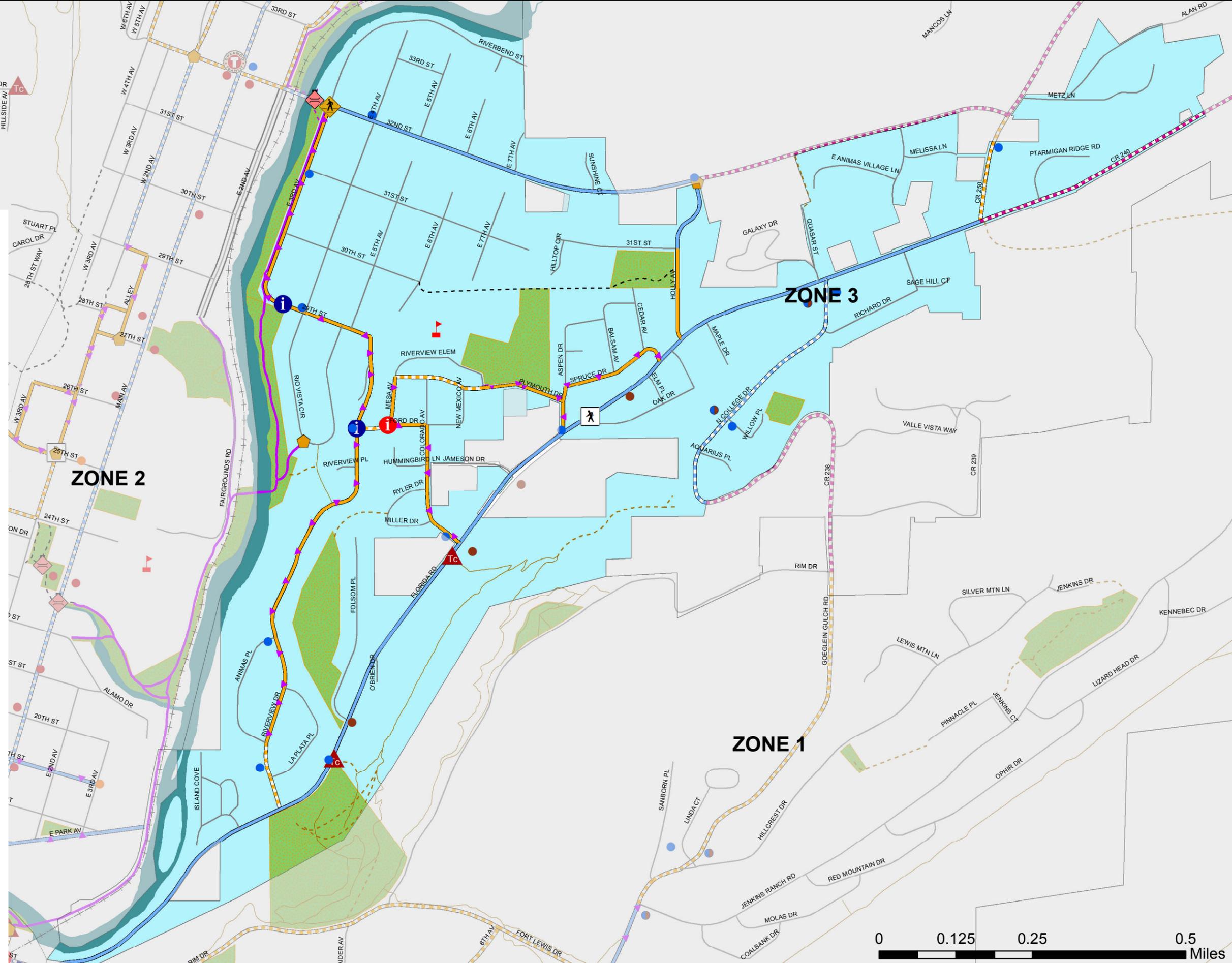
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TE-3





- LEGEND**
- GENERAL**
- Parks
 - Animas River and Tributaries
 - Railroad
 - School
- DURANGO TRANSIT**
- Transfer Point
 - Route 1 Stop
 - Route 2 Stop
 - Route 3 Stop
 - Route 4 Stop
 - Route 5 Stop
 - Route 6 Stop
 - Future Stop
- BIKE SYSTEM**
- Street
 - Existing Bike Route
 - Proposed Bike Route
 - Existing Bike Lane
 - Proposed Bike Lane
 - Proposed Contra Flow Bike Lane
 - Existing Sharrow
 - Proposed Sharrow
 - Existing Animas River Trail
 - Proposed Animas River Trail*
 - Proposed Concrete Trail*
 - Proposed Gravel Trail*
 - Existing Public Trails (Soft Surface)
- EXISTING CONDITIONS**
- Bicycle/Pedestrian Actuated Crossing
 - Trail Connection
- PROPOSED IMPROVEMENTS**
- Signage and or Striping
 - Road or Lane Diet
 - River Street (Pedestrian Only)
 - Bicycle Boulevard
- Intersection Improvements**
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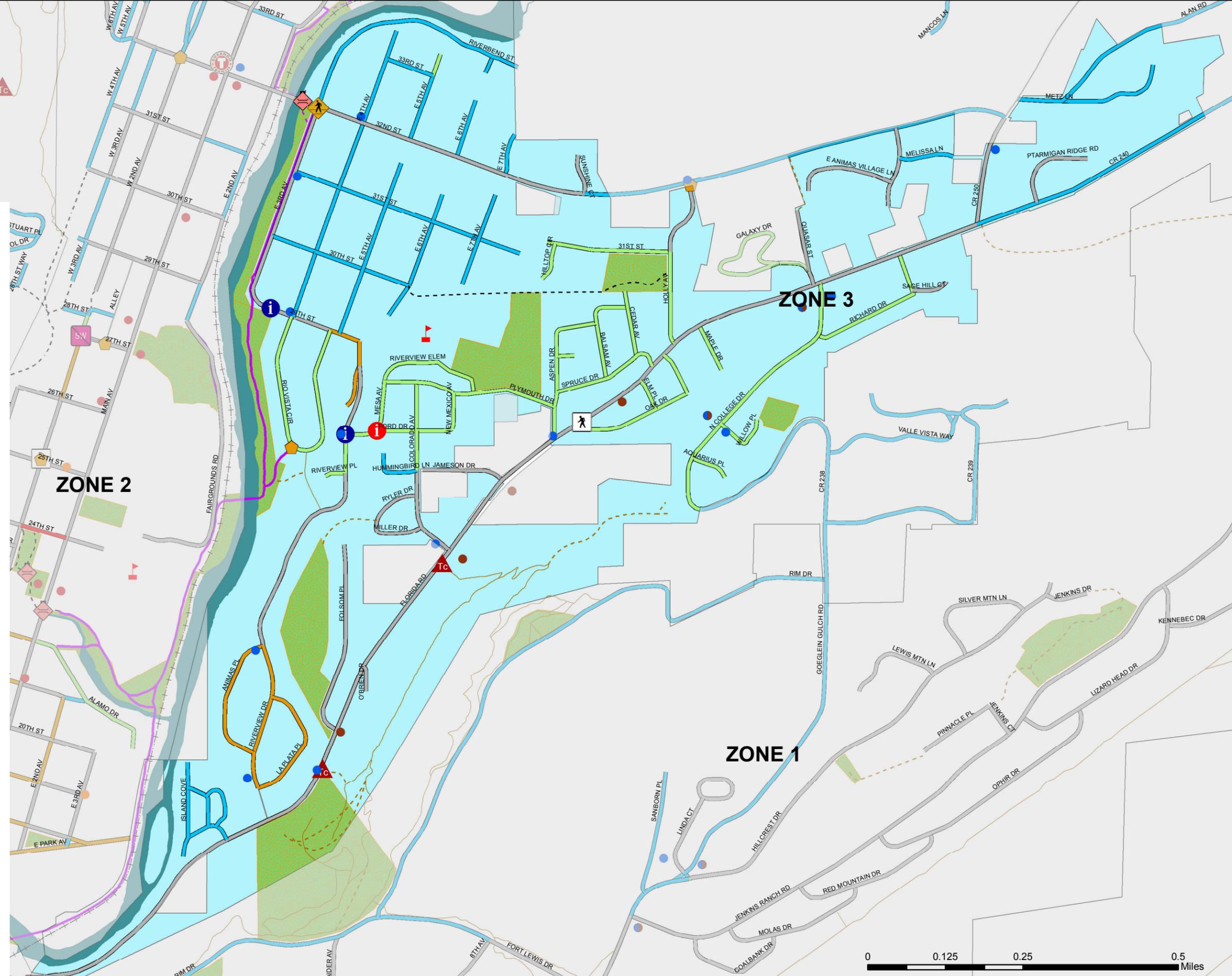
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- LEGEND**
- GENERAL**
- Parks
 - Animas River and Tributaries
 - Railroad
 - Existing Public Trails (Soft Surface)
 - School
- DURANGO TRANSIT**
- Transfer Point
 - Route 1 Stop
 - Route 2 Stop
 - Route 3 Stop
 - Route 4 Stop
 - Route 5 Stop
 - Route 6 Stop
 - Future Stop
- PEDESTRIAN SYSTEM**
- Street
 - Existing Sidewalk**
 - Missing Sidewalk
 - Does not meet ADA standards
 - Needs to be Repaired
 - Existing Animas River Trail
- EXISTING CONDITIONS**
- Bicycle/Pedestrian Actuated Crossing
 - Trail Connection
 - Missing Sidewalk (Intermittent)
 - Not ADA
- PROPOSED IMPROVEMENTS**
- Sidewalk Improvements
 - River Street (Pedestrian Only)
 - Proposed Animas River Trail*
 - Proposed Concrete Trail*
 - Proposed Gravel Trail*
- Intersection Improvements**
- Install Missing Sidewalk (Intermittent)
 - Signage and Striping
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 - Pedestrian/Bicycle Actuated Crossing
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Zone 4 – US 160 West Corridor, Tech Center, and Residential Areas west of West 3rd Avenue

Existing Conditions and Deficiencies

Approximately 20 percent to 30 percent of the street centerline miles in Zone 4 include ADA-compliant sidewalks, with another 20 percent including existing sidewalks that are in need of repair and/or in need of ADA upgrades. Transit service is provided principally along Highway 160 to the west end of the zone and along central streets including Forest Avenue and Delwood Avenue to the north end of the zone. Numerous trail connections exist in this area along the Overend Mountain Park eastern boundary.

Existing bicycle conditions include the only section in the city that currently has shared lane markings, which are located along Roosa Avenue north of Highway 160 to 9th Street. Further north on Roosa Avenue and West 3rd Avenue, good bicycle connectivity is provided through the majority of the corridor by bicycle lanes and then along existing relatively low-traffic residential streets to the north end of the zone. Junction Street to CR 204, a popular route northward to Dalla Mountain Park and to the Colorado Trail, do not have bicycling facilities but are fairly bikeable for more experienced cyclists.

Proposed Improvements

Transit and pedestrian improvements in Zone 4 include proposed construction of a transit pad with shelter and additional sidewalk at the intersection of Avenida del Sol and Roosa Avenue to provide more protection from the elements for transit patrons and improved ADA access. The intersections of Roosa Avenue and 9th Street and Roosa Avenue and West Park are identified for crosswalk marking and signing upgrades.

A principle consideration in Zone 4 includes the addition of a concrete shared use path along Highway 160 from the ART beyond the west end of the zone, with future crossings of Highway 160 located in various locations corresponding to existing US 160 cross culvert locations.

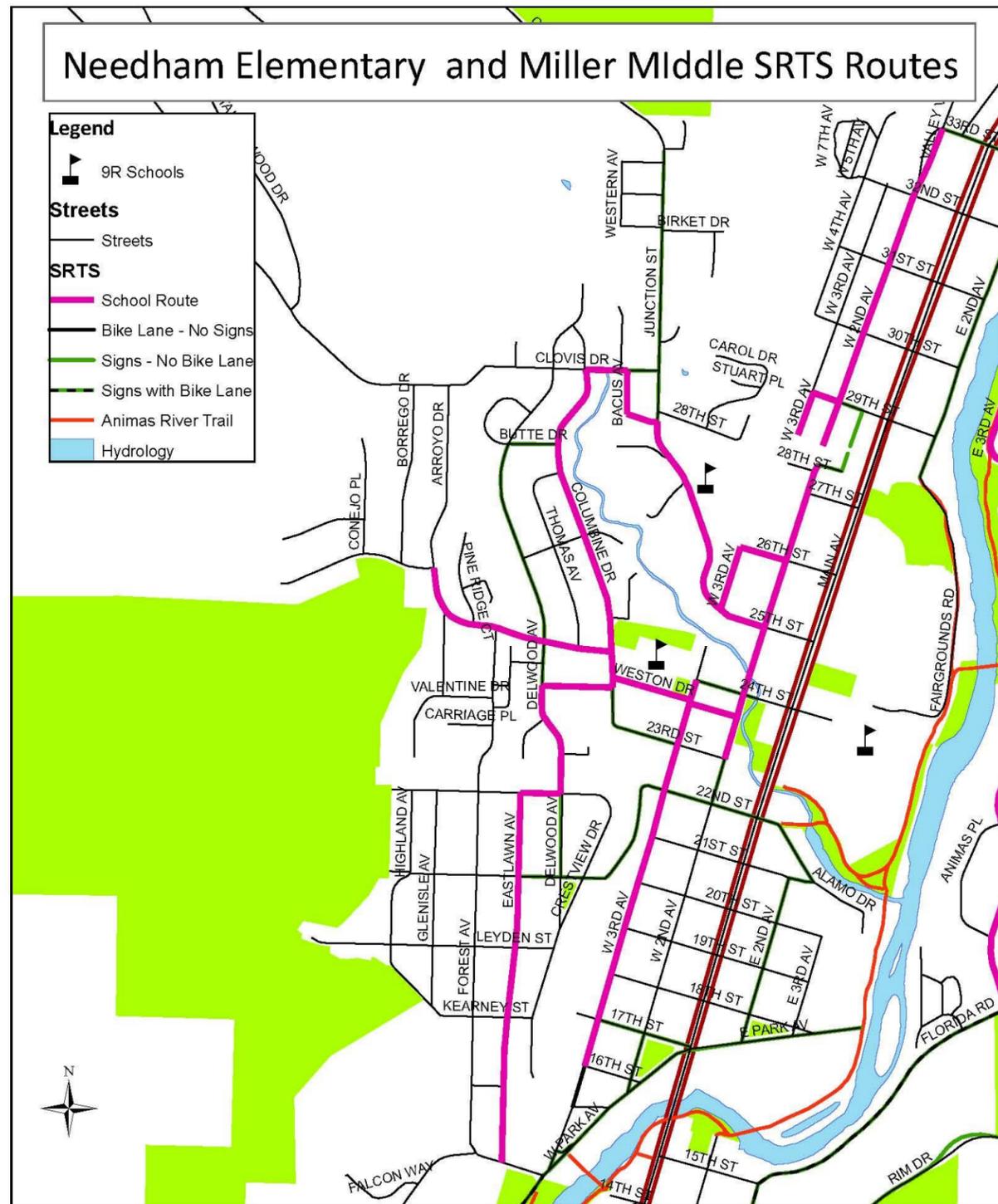
The goal of the path is to parallel the highway and Lightner Creek providing a connection from the western city limits (Twin Buttes) to downtown and the ART. The current alignment is conceptual level design. At the east end, the alignment is defined through the dog park and in front of the new Holiday Inn Express Hotel where the City has a pathway easement. At the west end, the alignment is defined through Twin Buttes and currently exists as a natural surface trail. Between the east end and west end, the alignment is very conceptual and more detailed analysis is planned during 2012. The final path alignment will depend on coordination with CDOT and property owners and will also be influenced by possible Highway 160 crossing locations, functionality, environmental concerns along Lightner Creek, sun exposure/snow control.

Ideally the Lightner Creek Trail crossings of Highway 160 will be grade separated crossings at culvert locations. Environmental considerations will need to be addressed for proposed grade separated crossings at the culvert locations. For near-term, at-grade crossings of Highway 160W for the path are proposed, as traffic signals are warranted providing safe at-grade crossings until culvert crossings can be implemented.

Future signal locations along Highway 160W will potentially be located at the Giant Gas Station on US 160, Lightner Creek Village, and Tech Center Drive. Transit stops currently exist at the proposed signalized intersection locations, therefore installation of these signals will also help provide safe and easy access to the transit stops. Further west, at the new edge of the city limits, additional transit stops will be installed with construction of the Twin Buttes project.

Sharrows and bicycle route signage are also proposed along Highway 160, used by road cyclists and mountain bikers alike. To improve safety, possible improvements may include 11-foot travel lanes and center turn lane width reduction in the 35 mph zone allowing for bike shoulders (i.e., lane diet). Throughout the zone several local streets are proposed to be signed as bike routes, especially those connecting to the Overend Mountain Park trailheads. Wayfinding signage is also recommended to improve access to the ART, Overend Mountain Park, Hill Top House, Downtown, Durango West, and Ft. Lewis College. Junction Street and CR 204 are recommended to receive sharrows.

Also identified under Zone 2, various local streets and pathways have been identified as Safe Routes to School facilities for Needham Elementary School and Miller Middle School. Columbine Drive, Arroyo Drive, Eastlawn Avenue, and Weston Drive are key connecting routes. SRTS wayfinding signage is recommended and traffic calming can be considered along those routes, as necessary. A SRTS Exhibit for Needham and Miller is included at the end of this zone discussion.

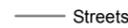
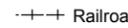


Map by Amber Blake
City of Durango 2009
NAD 1983 HARN State Plane
Lambert Conformal Conic



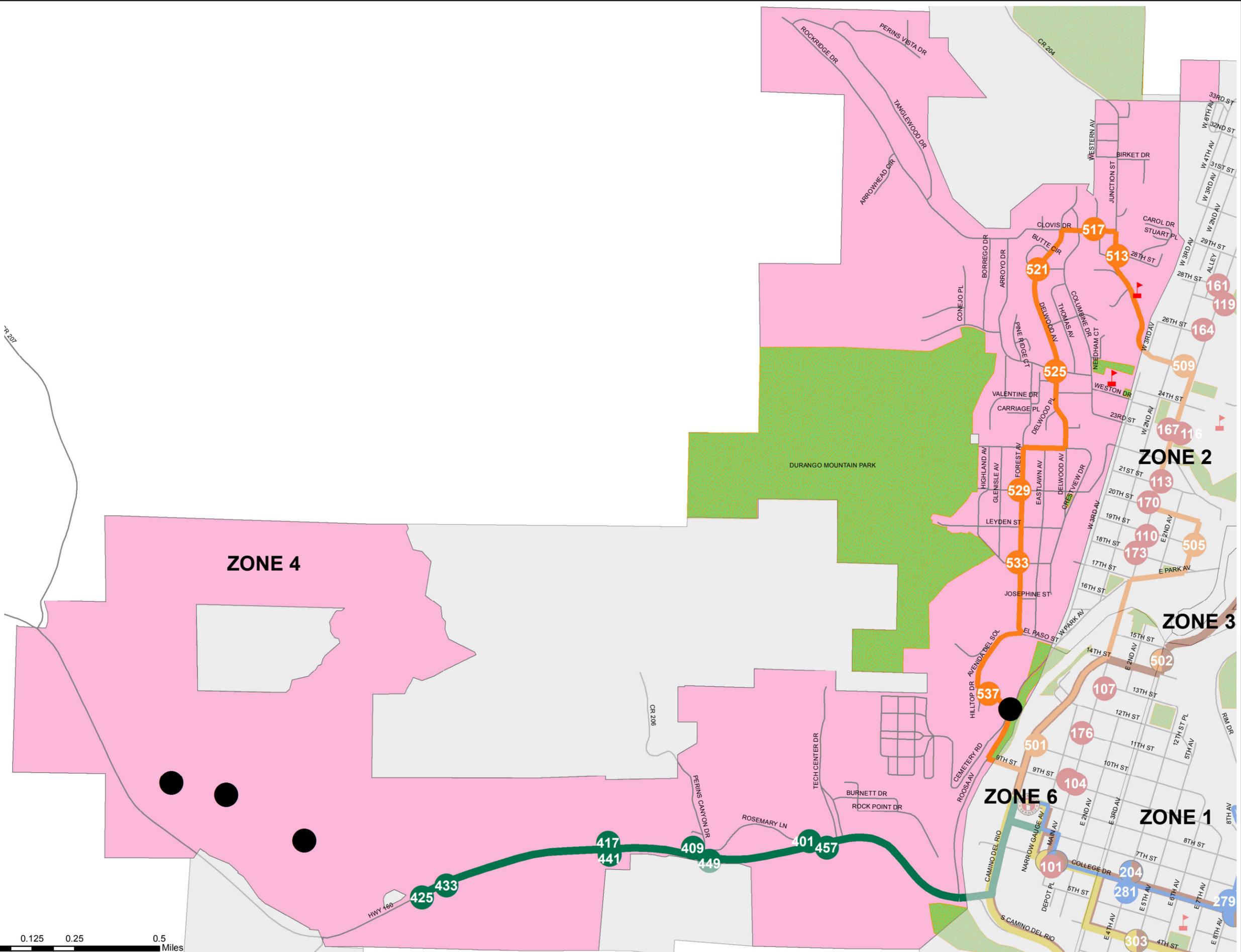
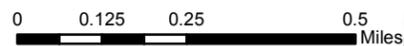
LEGEND

GENERAL

-  Parks
-  Animas River and Tributaries
-  Streets
-  Railroad
-  School

DURANGO TRANSIT

-  Route 1
-  Route 2
-  Route 3
-  Route 4
-  Route 5
-  Route 6
-  Transfer Point
-  Route 1 Stop
-  Route 2 Stop
-  Route 3 Stop
-  Route 4 Stop
-  Route 5 Stop
-  Route 6 Stop
-  Route 2 and Route 6 Stop
-  Route 3 and Route 6 Stop
-  Route 5 and Route 6 Stop
-  Future Stop



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ZONE 4

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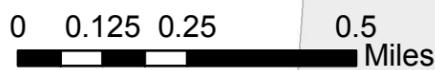
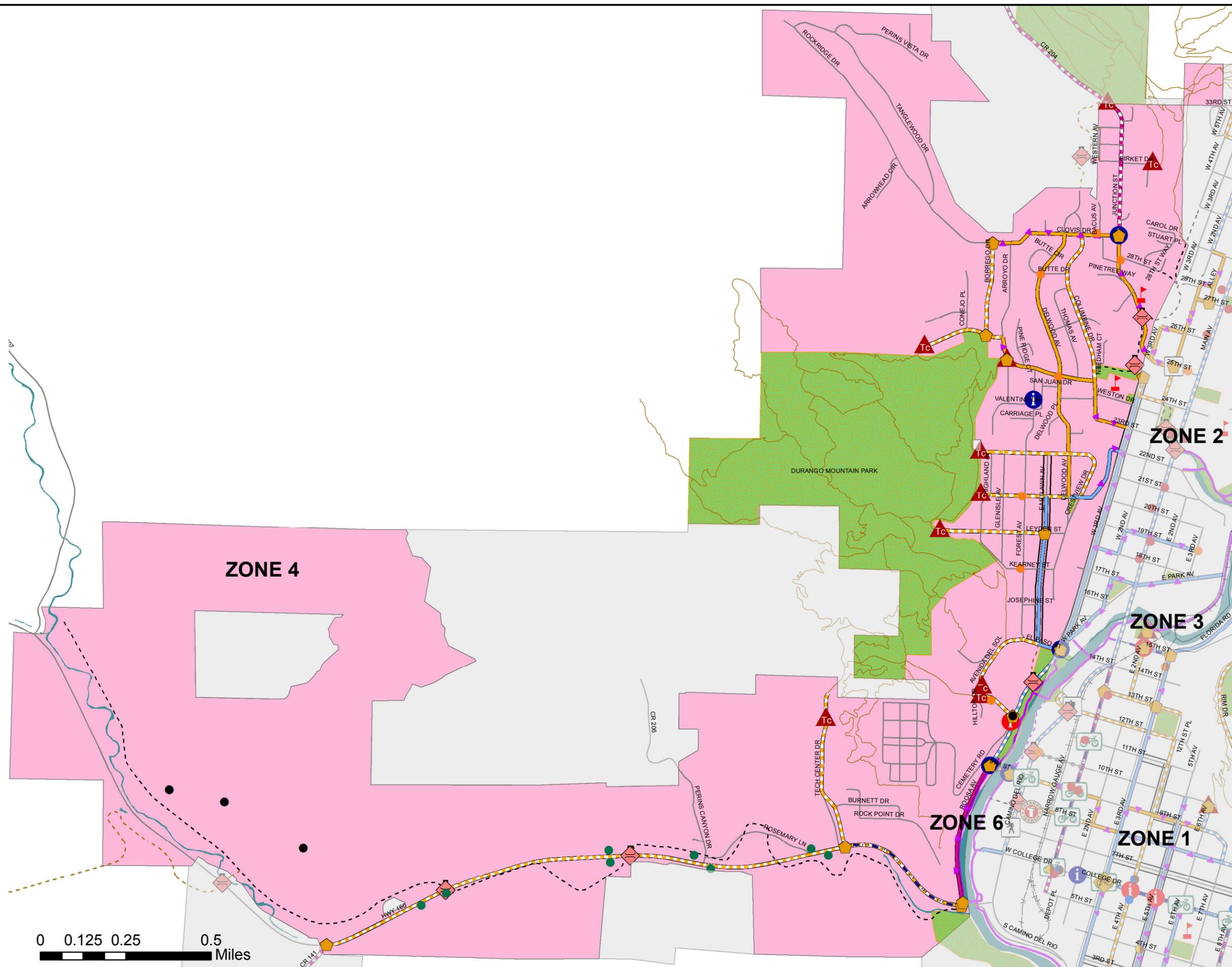
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4 OF 6

TE-4



- LEGEND**
- GENERAL**
- Parks
 - Animas River and Tributaries
 - Railroad
 - School
- DURANGO TRANSIT**
- Transfer Point
 - Route 1 Stop
 - Route 2 Stop
 - Route 3 Stop
 - Route 4 Stop
 - Route 5 Stop
 - Route 6 Stop
 - Future Stop
- BIKE SYSTEM**
- Street
 - Existing Bike Route
 - Proposed Bike Route
 - Existing Bike Lane
 - Proposed Bike Lane
 - Proposed Contra Flow Bike Lane
 - Existing Sharrow
 - Proposed Sharrow
 - Existing Animas River Trail
 - Proposed Animas River Trail*
 - Proposed Concrete Trail*
 - Proposed Gravel Trail*
 - Existing Public Trails (Soft Surface)
- EXISTING CONDITIONS**
- Bicycle/Pedestrian Actuated Crossing
 - Trail Connection
- PROPOSED IMPROVEMENTS**
- Signage and or Striping
 - Road or Lane Diet
 - River Street (Pedestrian Only)
 - Bicycle Boulevard
- Intersection Improvements**
- Bike Box
 - Signage and Striping
 - Reconfiguration
 - Bicycle Detection Device
 - Pedestrian/Bicycle Actuated Crossing
 - Grade Separated Pedestrian Crossing
 - Wayfinding Signage



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Gravel trail may be either a natural surface trail or an aggregate trail.

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BE-4



LEGEND

GENERAL

- Parks
- Animas River and Tributaries
- Railroad
- Existing Public Trails (Soft Surface)
- School

DURANGO TRANSIT

- Transfer Point
- Route 1 Stop
- Route 2 Stop
- Route 3 Stop
- Route 4 Stop
- Route 5 Stop
- Route 6 Stop
- Future Stop

PEDESTRIAN SYSTEM

- Street
- Existing Sidewalk**
- Missing Sidewalk
- Does not meet ADA standards
- Needs to be Repaired
- Existing Animas River Trail

EXISTING CONDITIONS

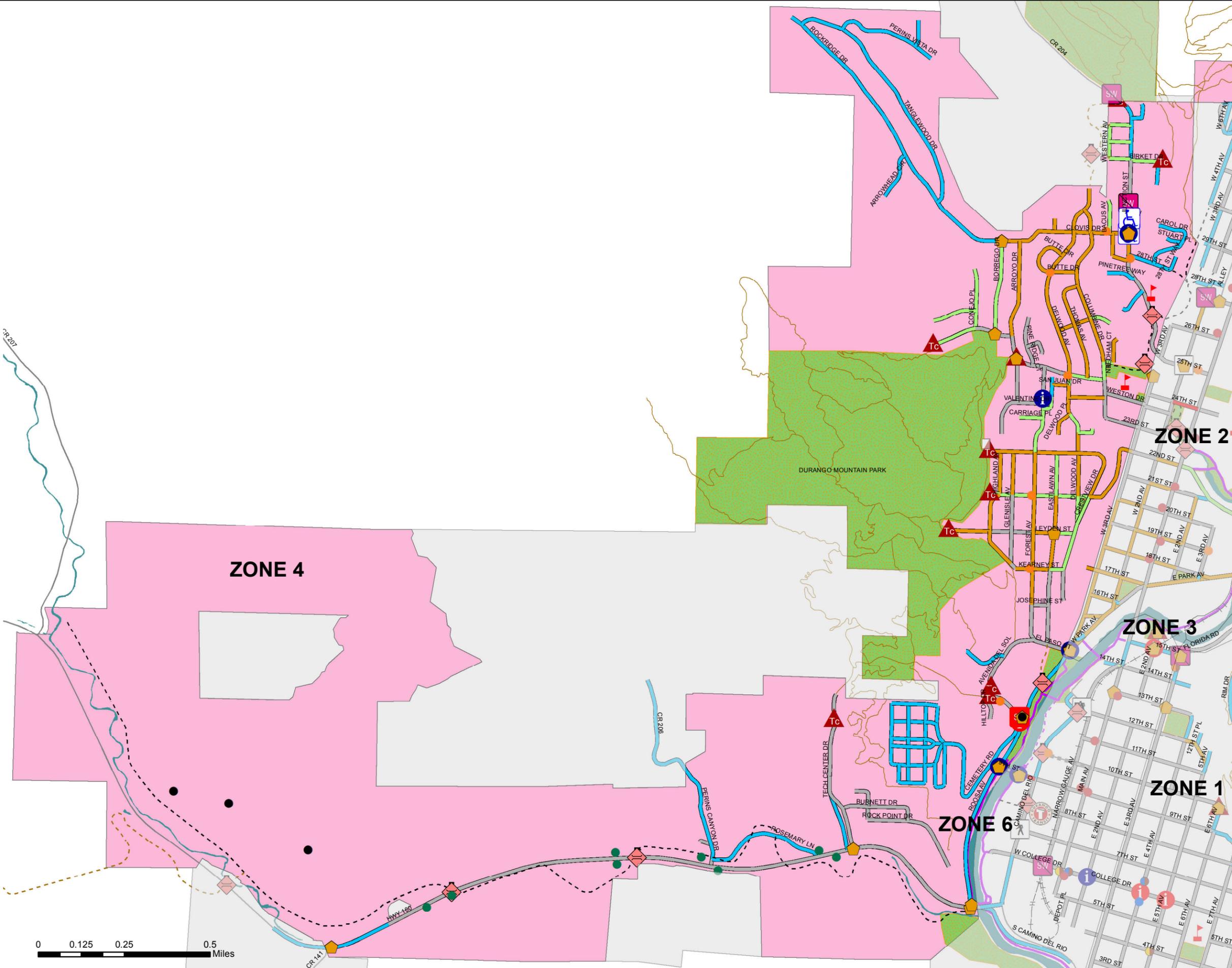
- Bicycle/Pedestrian Actuated Crossing
- Trail Connection
- Missing Sidewalk (Intermittent)
- Not ADA

PROPOSED IMPROVEMENTS

- Sidewalk Improvements
- River Street (Pedestrian Only)
- Proposed Animas River Trail*
- Proposed Concrete Trail*
- Proposed Gravel Trail*

Intersection Improvements

- Install Missing Sidewalk (Intermittent)
- Signage and Striping
- Reconfiguration
- Pedestrian/Bicycle Actuated Crossing
- Grade Separated Pedestrian Crossing
- Wayfinding Signage



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PEDESTRIAN SYSTEM EXHIBIT
ZONE 4**

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PE-4

Zone 5 – US 160/550 Corridor and Three Springs

Existing Conditions and Deficiencies

Zone 5, which is a split zone that includes the Bodo Industrial Park and Three Springs, has very limited sidewalk coverage within the zone. Pedestrian and bicycle travel is primarily accommodated along the ART from the older part of the City south to the Rivera Bridge on River Road. Transit service is provided by two routes along Highway 160 to and including Three Springs, with offshoots within part of Bodo and out near Escalante Middle School.

Bicycle network coverage in the zone is also very limited. The ART however does provide access to Escalante School for middle school students who may travel from central Durango. The local streets within the zone that serve area businesses and residences are fairly rideable for most bicyclists. Three existing trailheads provide access to the Horse Gulch bike trails northeast of Highway 160 and are accessible by mountain bicyclists who travel the ART and then ride to the trailheads using local street connectors and the frontage road.

Proposed Improvements

Long-range goals for improvements in Zone 5 include installation of sidewalk along Highway 3, South Camino del Rio, the frontage roads along South Camino del Rio in the Bodo Corridor, and along the streets within Bodo. Installation of sidewalk is proposed along the outside of frontage roads only. Sidewalk is also recommended for roadways within Bodo where transit service is currently provided. In addition, it would be desirable to connect the existing hotels with sidewalk to the Bodo Drive area, where hotel patrons could walk along frontage sidewalks to Office Depot and cross Camino del Rio at the signal to access the ART. This would be a relatively short walk for patrons to access the trail for healthful activity, versus driving the short distance from their hotel in order to park near the trail.

As discussed previously, Bodo is close to full buildout and the timing of upgrades will be dependent on various factors and will likely occur during redevelopment. However, plans are underway for extending the ART from the existing terminus at River Road to connect to the SMART 160 Trail to Three Springs. Completion of the ART behind the Mall in 2012 provides a greatly improved Safe Routes to School trail corridor for Escalante Middle School, allowing youth to cycle from central Durango to and from school. Completion of the SMART 160 trail from River Road to Three Springs will provide that same access to Escalante Middle School from the East, this will be a tremendous opportunity to develop middle school bicycle clubs and “bike trains” that enable youth and their families to safely and securely travel by bicycle to school within a reasonable 3 to 4-mile radius. A SRTS Exhibit for Escalante Middle School is included at the end of this zone section.

On the frontage road from Highway 3 for a short distance to the southeast, a “contra flow” bike lane is proposed to make connectivity at that location. The contra flow lane would allow bicyclists to travel the

opposite direction of the one-way traffic flow, while being signed and marked to ensure that drivers understand the use of the lane. The remainder of the frontage road to Dominquez Drive is proposed for signing as a bike route. Installation of new bike lanes is also recommended on Highway 3 from South Camino del Rio to College Drive. Coordination with CDOT is necessary for the contra flow bike lane on Highway 3, for the Bodo Corridor sidewalk improvements, and the pathway improvements along 550/160.

The ART, which currently terminates at River Road, is proposed to be connected north along the east side of River Road with an at-grade crossing of Highway 160 using the existing traffic signal. This connection will require improvements on the east side of Highway 550/160 to provide good pedestrian/bicycle access to the Sale Barn Trailhead. Coordination with CDOT would be required for this connection, with potential signage upgrades at the signal to indicate that it’s a trail crossing as well as to “advertise” the trail to drivers who may become interested in utilizing the trail as pedestrians or bicyclists.

Continuation of the ART and SMART 160 toward Three Springs is in the conceptual stages of design. Funding is available for design and identification of right-of-way in 2013. The current concept includes continuing the ART southbound, hugging the ridge, coming up behind the CDOT buildings, continuing along Trestle Lane, and connecting over the highway with a grade separated crossing to the northeast side of the highway and the current SMART 160 alignment.

Currently many highway improvements are underway west of Three Springs, including new bridges and access points. The City is currently working towards extension of Wilson Gulch Road from Three Springs Boulevard west towards the improvements connecting Highway 160 and Highway 550 (Farmington Hill reconstruction). The development of Wilson Gulch Road may lead to additional commercial developments in this area along with future transit stops and connections along Wilson Gulch Road.



ZONE 1

ZONE 5

ZONE 5

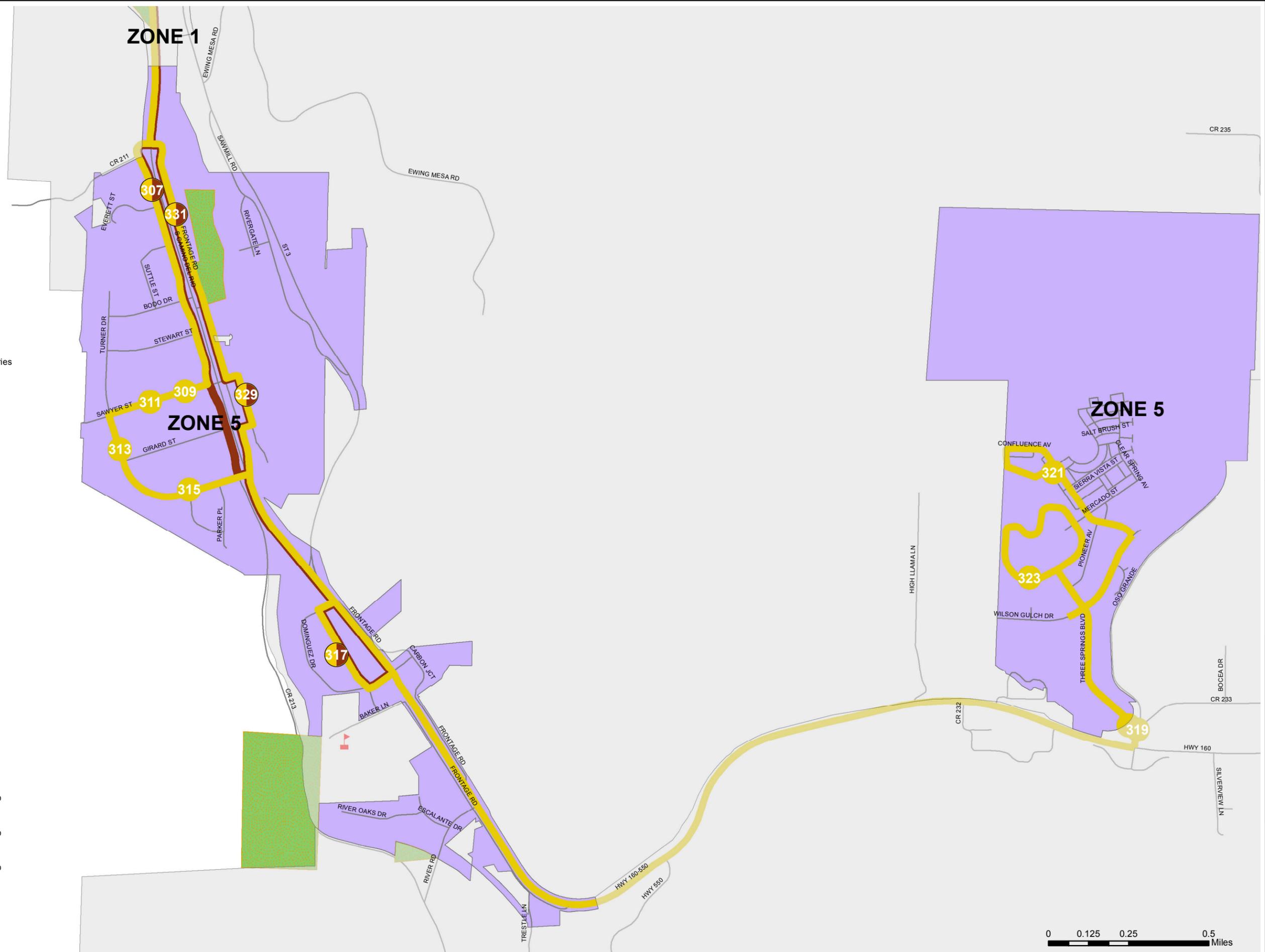
LEGEND

GENERAL

- Parks
- Animas River and Tributaries
- Streets
- Railroad
- School

DURANGO TRANSIT

- Route 1
- Route 2
- Route 3
- Route 4
- Route 5
- Route 6
- Transfer Point
- Route 1 Stop
- Route 2 Stop
- Route 3 Stop
- Route 4 Stop
- Route 5 Stop
- Route 6 Stop
- Route 2 and Route 6 Stop
- Route 3 and Route 6 Stop
- Route 5 and Route 6 Stop
- Future Stop



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ZONE 1

ZONE 5

ZONE 5

LEGEND

GENERAL

- Parks
- Animas River and Tributaries
- Railroad
- School

DURANGO TRANSIT

- Transfer Point
- Route 1 Stop
- Route 2 Stop
- Route 3 Stop
- Route 4 Stop
- Route 5 Stop
- Route 6 Stop
- Future Stop

BIKE SYSTEM

- Street
- Existing Bike Route
- Proposed Bike Route
- Existing Bike Lane
- Proposed Bike Lane
- Proposed Contra Flow Bike Lane
- Existing Sharrow
- Proposed Sharrow
- Existing Animas River Trail
- Proposed Animas River Trail*
- Proposed Concrete Trail*
- Proposed Gravel Trail*
- Existing Public Trails (Soft Surface)

EXISTING CONDITIONS

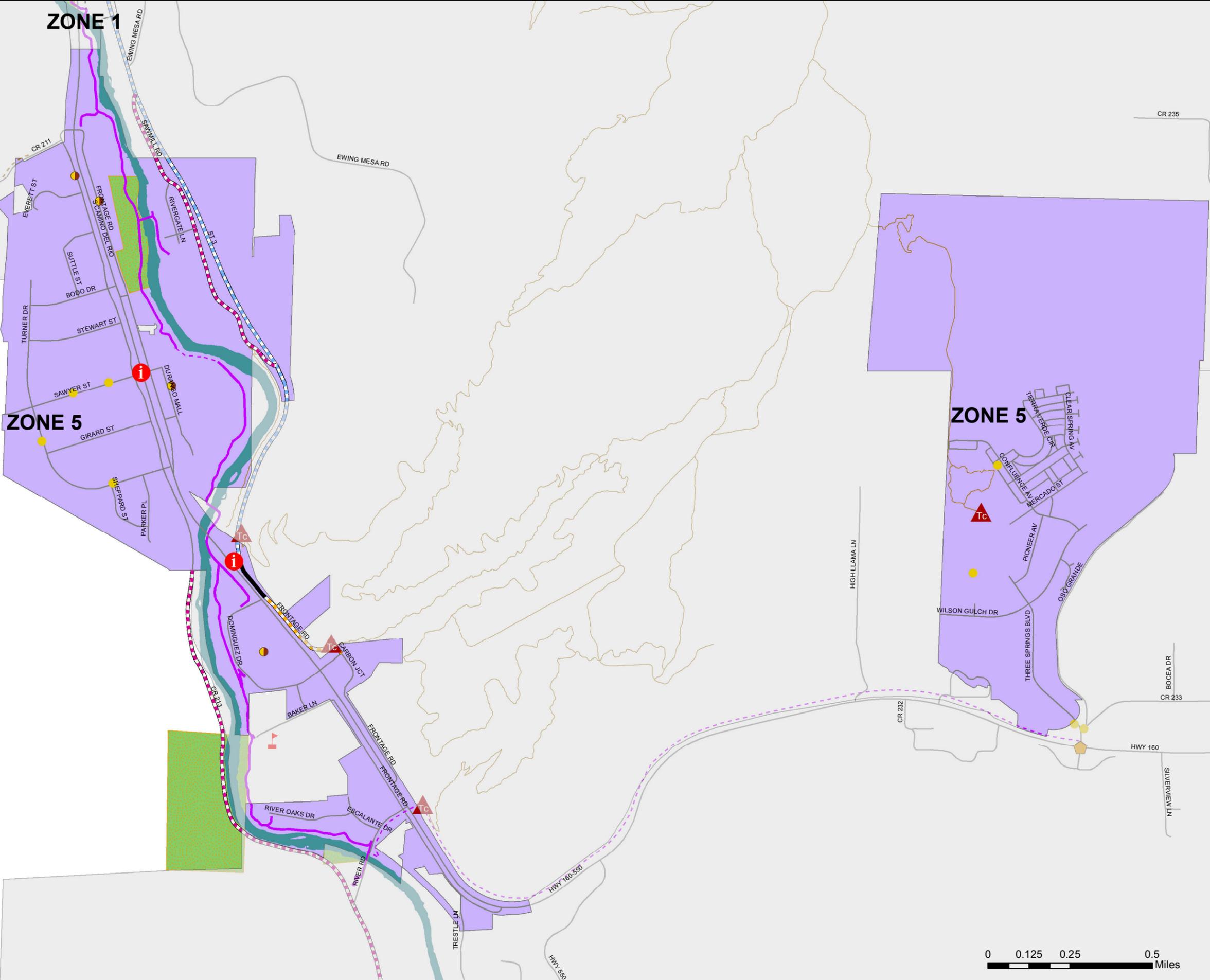
- Bicycle/Pedestrian Actuated Crossing
- Trail Connection

PROPOSED IMPROVEMENTS

- Signage and or Striping
- Road or Lane Diet
- River Street (Pedestrian Only)
- Bicycle Boulevard

Intersection Improvements

- Bike Box
- Signage and Striping
- Reconfiguration
- Bicycle Detection Device
- Pedestrian/Bicycle Actuated Crossing
- Grade Separated Pedestrian Crossing
- Wayfinding Signage



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BE-5





ZONE 1

ZONE 5

ZONE 5

LEGEND

GENERAL

- Parks
- Animas River and Tributaries
- Railroad
- Existing Public Trails (Soft Surface)
- School

DURANGO TRANSIT

- Transfer Point
- Route 1 Stop
- Route 2 Stop
- Route 3 Stop
- Route 4 Stop
- Route 5 Stop
- Route 6 Stop
- Future Stop

PEDESTRIAN SYSTEM

- Street
- Existing Sidewalk**
- Missing Sidewalk
- Does not meet ADA standards
- Needs to be Repaired
- Existing Animas River Trail

EXISTING CONDITIONS

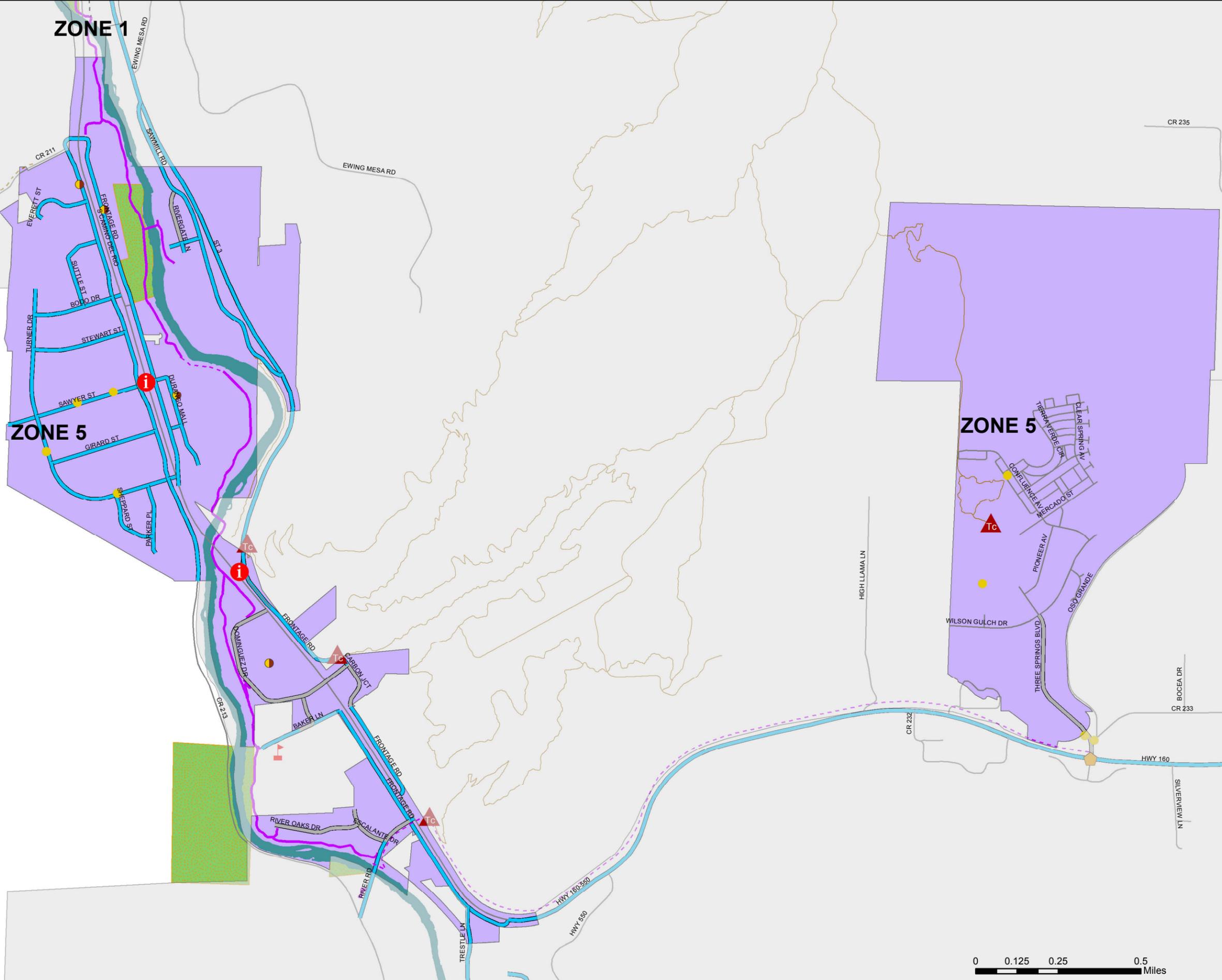
- Bicycle/Pedestrian Actuated Crossing
- Trail Connection
- Missing Sidewalk (Intermittent)
- Not ADA

PROPOSED IMPROVEMENTS

- Sidewalk Improvements
- River Street (Pedestrian Only)
- Proposed Animas River Trail*
- Proposed Concrete Trail*
- Proposed Gravel Trail*

Intersection Improvements

- Install Missing Sidewalk (Intermittent)
- Signage and Striping
- Reconfiguration
- Pedestrian/Bicycle Actuated Crossing
- Grade Separated Pedestrian Crossing
- Wayfinding Signage



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Zone 6 – Historic Downtown (and/or Business District) and South Camino del Rio Corridor

Existing Conditions and Deficiencies

As the heart of Durango, Zone 6 has a comprehensive sidewalk network that is largely ADA-compliant, with the exception that there is the need for construction of some ramps and reconstruction of driveway crossings, plus most existing ramps still need truncated domes in order to be fully compliant. Sidewalk is not present on some streets in the north part of the zone and along parts of Camino del Rio. The ART traverses the western edge of the zone and provides ADA access, but some connections to and from the trail are missing or are non ADA-compliant.

As a whole, this is perhaps the most walkable area within the City of Durango due to its development during an era when walking was a primary mode of transport, and even today walking and bicycling are favored modes for short to medium-length trips. The Historic Downtown street network is as near to having Complete Streets as exists in any community. Most streets have sidewalks, shade landscaping, relatively short crossings, tight curb radii, interesting and multiple destinations, mixed land use, a tight and “fine-grain” street grid, and other features that serve to slow traffic and contribute to better transit, walking and bicycling conditions.



Intersection of 11th Street and Main Avenue

Transit coverage in the zone is excellent, with six bus routes providing service. Walking distance to transit stops is generally no more than a quarter-mile. Local streets within the zone are rideable by most bicyclists without designated facilities, with bike lanes provided on E. 3rd Avenue and on College Drive and a short bike lane segment provided on 9th Street connecting across the Animas River to Roosa Avenue. However, a bike lane is nonexistent on 9th from the bridge eastward and sidewalk is missing on the south side of the street from the bridge and ART east to Camino del Rio. Some streets such as Camino del Rio and Main Avenue, are challenging for less experienced and less confident bicyclists to use comfortably due to lack of bike lanes and high traffic volumes.

Proposed Improvements

Proposals to further complete the streets in and near the Downtown include addition of sidewalks on several roadways such as 9th Street from the ART to Camino del Rio, with construction of ADA-compliant ramps on all corners of the intersection. Sidewalk can be located within City right-of-way on the south side of the roadway, necessitating trimming of the hedge and relocation of two



The 9th Street Bridge is a popular connection location between the Animas River Trail and Historic Downtown Durango

small trees and other minor landscaping. Alternatively, the sidewalk could be located to the back (southern) side of the hedge, providing more direct access to the hotel visitors and staff while also allowing public access.

The intersection was also recently reconfigured with the restriping of east and westbound lanes with right, left and through lanes designated in the westbound direction and left and through-right lanes designated in the eastbound direction. As a popular bike route into and out of Downtown, additional improvements such as modified bike boxes should be considered to facilitate movements across the intersection. Because the eastbound direction has such a high right-turning volume, a green bike box to the east edge of the right-through lane is recommended, with additional green color-backed sharrows provided across the intersection as both through-bicyclists and drivers would need to share the space.



9th Street as approaching Main Avenue and looking East. Sidewalk is proposed on the southside (right side of photo) along with striping of Sharrows and Bike Boxes.

Sharrows are recommended to be placed west of the intersection in both eastbound and westbound directions. A modified bike box has also recently been marked on the westbound approach to help guide bicyclists out of the conflict area with right-turning vehicles. Because the bicycle symbol marking is very small and difficult to see, this may need additional enhancement such as approach guidance signs as well as green marking material and a larger bicycle symbol. Refer to Appendix B for the recommended improvements on 9th Street from the ART to Main Avenue.

Also in the vicinity of 9th Street and Camino del Rio, the future expansion of the Transit Center with construction of intermodal facilities is proposed to include a grade separated pedestrian crossing of Camino del Rio located one block south at 8th Street. The project would include a proposed pedestrian bridge as part of Project LIVE, connecting the proposed City intermodal facility at the existing Transit Center to a future private intermodal facility at the “Commons Building.” A new sidewalk is also proposed for construction from the west side of the Commons Building connecting to the ART. Refer to Appendix B for the recommended Project LIVE improvements.

A grade separated crossing of Camino del Rio is also proposed a few blocks north of the Project LIVE project. A feasibility study was performed to determine possible locations for a



Should Project LIVE be implemented the Existing Transit Center will be connected Intermodal Facility. A Pedestrian Overpass is proposed to connect the East and West sides of Camino del Rio.

pedestrian underpass of Camino del Rio between 10th Street and 14th Street. The study, the *Camino del Rio–SH 550 Bike Pedestrian Underpass Feasibility Study*, was performed by SHE, Inc. for the City of Durango in 2009. The analysis found the most feasible location for a Camino del Rio underpass to be at Veteran’s Way. While this study was completed, it was shelved, with a determination that the cost, engineering constraints, and lack of support by neighboring business owners made the proposal largely infeasible. In 2011, the City developed the at-grade improvements at the River City Hall intersection. If it is decided that an underpass is someday warranted, an entirely new study will likely need to be undertaken that may result in a different location being identified.

Additional beneficial improvements in Zone 6 include installation of sidewalk along portions of E. 2nd Avenue, 15th Street, and Camino del Rio. These improvements will likely occur during redevelopment. A more progressive and long-term project in Zone 6 is the “River Street” project. This includes conversion of 10th Street from Narrow Gauge Avenue to Camino del Rio to a “pedestrian street” and renamed to River Street, including a pedestrian underpass at Camino del Rio. River Street, which is envisioned as part of the future Town Plaza redevelopment, would prohibit motor vehicle use except for deliveries, utility access and other limited activities.

Possible modifications to Main Avenue were discussed at length in 2007 and 2008 during the *Main Avenue Sidewalk Project*. This project was part of the City’s implementation of the *2006 Downtown Durango Vision and Strategic Plan*. Phase I of the project included data collection, alternatives analysis, public meetings, and the finalization of the preferred concept plan. Various concepts were discussed including a pedestrian-only street; a 3-lane section with wider sidewalks, on-street parking, two travel lanes, and a center left turn lane; lane tapers at intersections; patterned concrete crossings at major intersections; and repair of existing sidewalks. As a result of the public process, the decision was made to repair the existing sidewalks with their current configuration. One exception was the intersection of College Drive and Main Avenue. A patterned concrete crossing and “Barnes Dance” pedestrian crossing were installed at this location.



Intersection of Main Avenue and College Drive

A road diet should receive additional evaluation both on Main Avenue from 14th Street to College Drive and also on 15th Street from Main Avenue to E 3rd Ave. Road diets, where existing 4-lane roadways are converted to 3-lane facilities, have been done on other roadways across the U.S. that carry nearly twice the traffic volumes as Main Avenue. These have been found to be more successful than the previously existing conditions in terms of improving business visibility and access, improving left-turn capabilities, maintaining and in some cases improving traffic flow, reducing rear-end and sideswipe crashes, and

improving bicycling conditions and safety, among other benefits (*Road Diet Handbook 2007*).

Until such time that a road diet on the Main Avenue corridor can garner adequate business owner and public support, sharrows are proposed on Main throughout the Downtown with a speed limit of 20 mph. A speed limit as low as 15 mph could be considered; however, in an urban corridor with a great deal of “roadside furniture” such as trees, street lights and poles, other signs, and on-street parking, it is not likely that 15 mph signs would be seen or adhered to. More important to control speeds are the number and width of lanes, presence of other road users such as transit, bicyclists and pedestrians, traffic signal timing, on-street parking, roadside trees, and other factors.

Colored bike boxes are also proposed along Main Avenue at several intersections to assist with bicycle safety and access at those locations. Bike lanes are recommended to be striped on Camino del Rio from West College Drive north through restriping and narrowing travel lanes while still meeting engineering standards. A lane diet could include 11-foot travel lanes with narrowing of the two-way center turn lane. The most difficult section of US 550/Camino/North Main Avenue will be the 14th Street section and immediate vicinity due to narrower widths, the existing roadway curvature, and truck traffic.

Raised medians have been evaluated and proposed by several previous studies, including the *2002 Durango US 550 Concept Plans* (i.e., “Carter Burgess” study), the *2006 Downtown Durango Vision and Strategic Plan*, and the *2009 US 550-Camino Access Control Plan*. However, the addition of raised medians may preclude restriping the roadway to include bicycle lanes, unless the raised medians are no greater than 10 feet in width and are discontinued at locations where left turns are required. Due to the presence of signals with countdown timers that are set to allow pedestrian crossings of the full width of Camino del Rio on the cross-traffic green signal phase, raised medians are not absolutely required to help improve pedestrian crossing access and safety. Raised medians may also reduce the ability for drivers and cyclists to make left turns at certain locations, which may or may not be desired, and reduce the ability for users to make left turns onto Camino del Rio from adjacent locations. In sum, tradeoffs with raised medians as identified in the studies, including potential negative impacts on multi modal users, need to be carefully evaluated and mitigated if the decision is made to proceed with them.

In addition, a much-needed HAWK crossing was recently installed at the intersection of 12th Street and Camino del Rio. This signalized crossing of Camino del Rio provides an additional connection between Downtown and the ART for pedestrians and bicyclists alike. Also, bike routes are proposed to be signed on 8th Street, 12th Street, and 13th Street from Camino

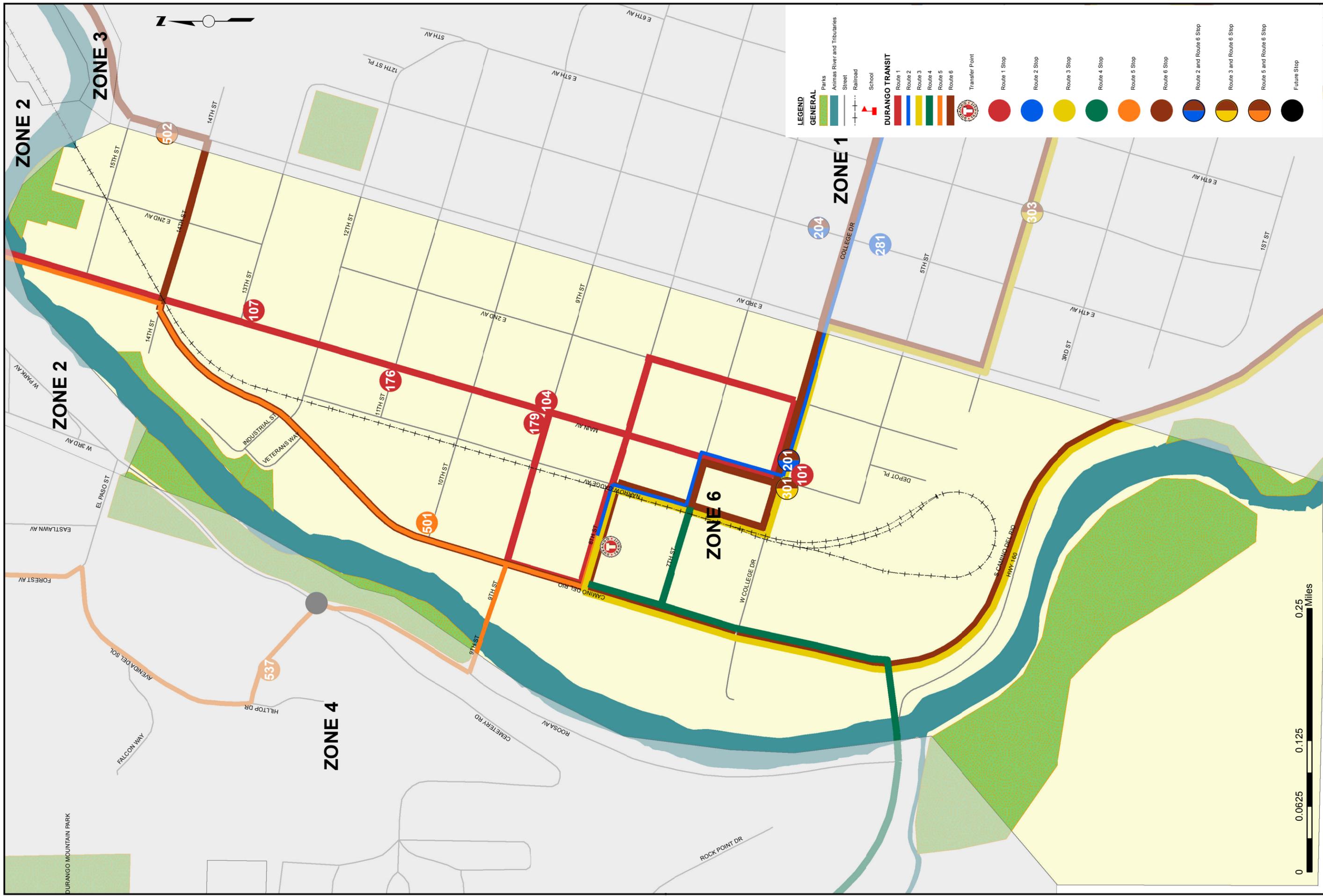


15th Street at E. 2nd Avenue is a popular access to the Animas River Trail.

del Rio to the east into Zone 1.

A modified road diet is proposed on 15th Street from the Florida Road/E. 3rd Avenue intersection to Main Avenue. The roadway would be striped with one westbound lane for the full distance and one eastbound lane from Main Avenue to E. 2nd Avenue where a second eastbound lane would pick up and become a drop/right turn only lane onto E. 2nd Avenue. Included with the road diet would be bicycle lanes and enhanced pedestrian facilities, including lane tapers on E. 2nd Avenue to shorten the pedestrian crossing distance.

The railroad track base is recommended to be reconstructed to provide a more flush crossing with the roadway at this location where the tracks cross at a skew with the street. Raised median refuges should be considered on 15th Street at E. 2nd Avenue to facilitate pedestrian and bicycle crossings to access the ART. However, the median refuges may limit left turns off of 15th Street at this location, plus may be difficult for snow removal including of the pedestrian cut-throughs in the medians. Improvements along E. 2nd Avenue near 15th Street are also proposed. This includes installation of sharrows along E. 2nd Avenue from the ART connection at Rotary Park south to 13th Street. Sidewalk and crosswalk improvements are also warranted at the intersection of 15th and E. 2nd Avenue to improve connectivity of the ART to other multi modal facilities and to improve intersection safety. Refer to Appendix B for the recommended improvements on 15th Street and E. 2nd Avenue.



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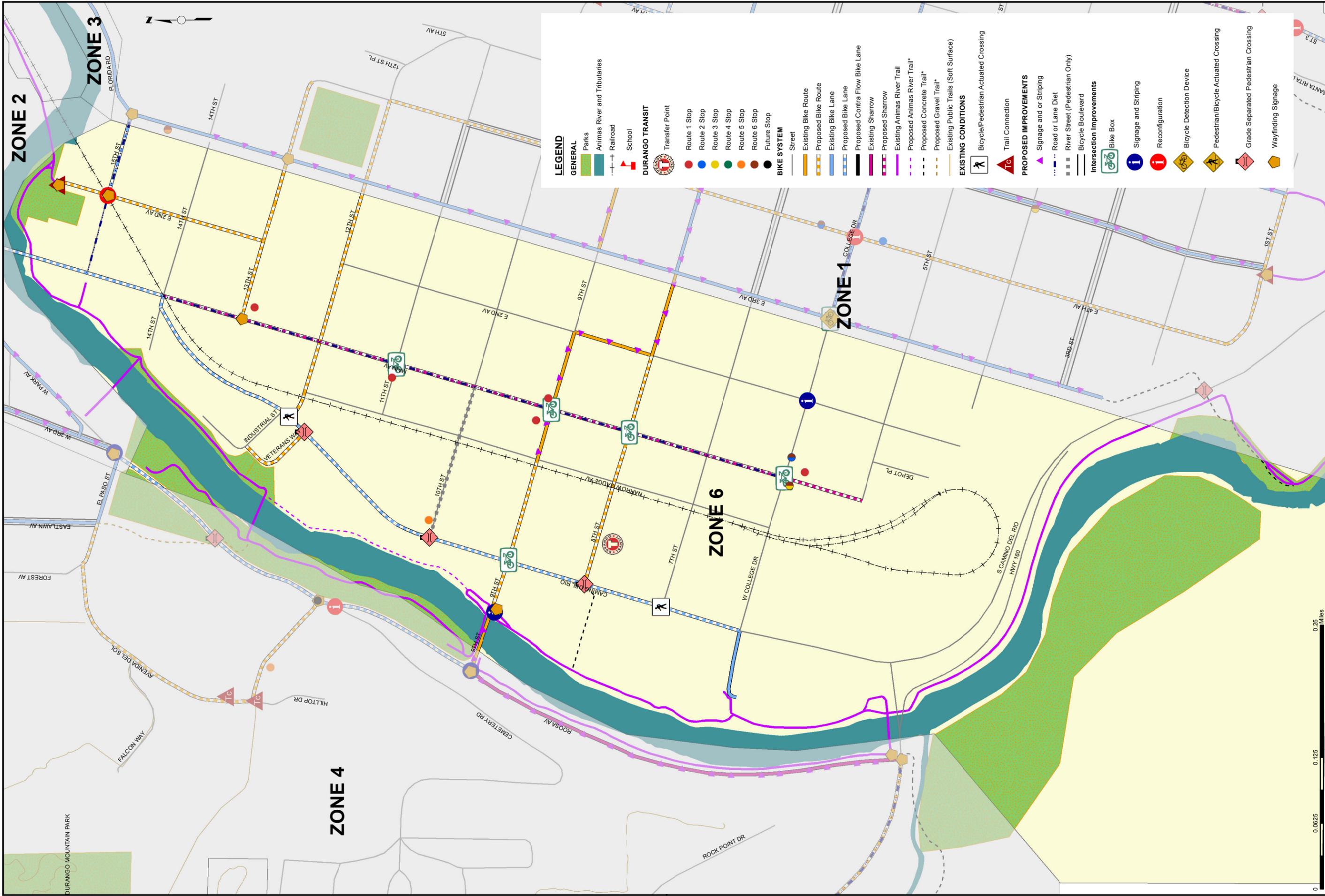
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LEGEND

GENERAL

- Parks
- Animas River and Tributaries
- Railroad
- School

DURANGO TRANSIT

- Transfer Point
- Route 1 Stop
- Route 2 Stop
- Route 3 Stop
- Route 4 Stop
- Route 5 Stop
- Route 6 Stop
- Future Stop

BIKE SYSTEM

- Street
- Existing Bike Route
- Proposed Bike Route
- Existing Bike Lane
- Proposed Bike Lane
- Proposed Contra Flow Bike Lane
- Existing Sharrow
- Proposed Sharrow
- Existing Animas River Trail
- Proposed Animas River Trail*
- Proposed Concrete Trail*
- Proposed Gravel Trail*
- Existing Public Trails (Soft Surface)

EXISTING CONDITIONS

- Bicycle/Pedestrian Actuated Crossing
- Trail Connection

PROPOSED IMPROVEMENTS

- Signage and/or Striping
- Road or Lane Diet
- River Street (Pedestrian Only)
- Bicycle Boulevard

Intersection Improvements

- Bike Box
- Signage and Striping
- Reconfiguration
- Bicycle Detection Device
- Pedestrian/Bicycle Actuated Crossing
- Grade Separated Pedestrian Crossing
- Wayfinding Signage



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NOTES:
The data shown on these exhibits are based on City of Durango GIS. *Alignments are conceptual only. Gravel trail may be either a natural surface trail or an aggregate trail.

**CITY OF DURANGO
MULTIMODAL TRANSPORTATION PLAN
BIKE SYSTEM EXHIBIT
ZONE 6**

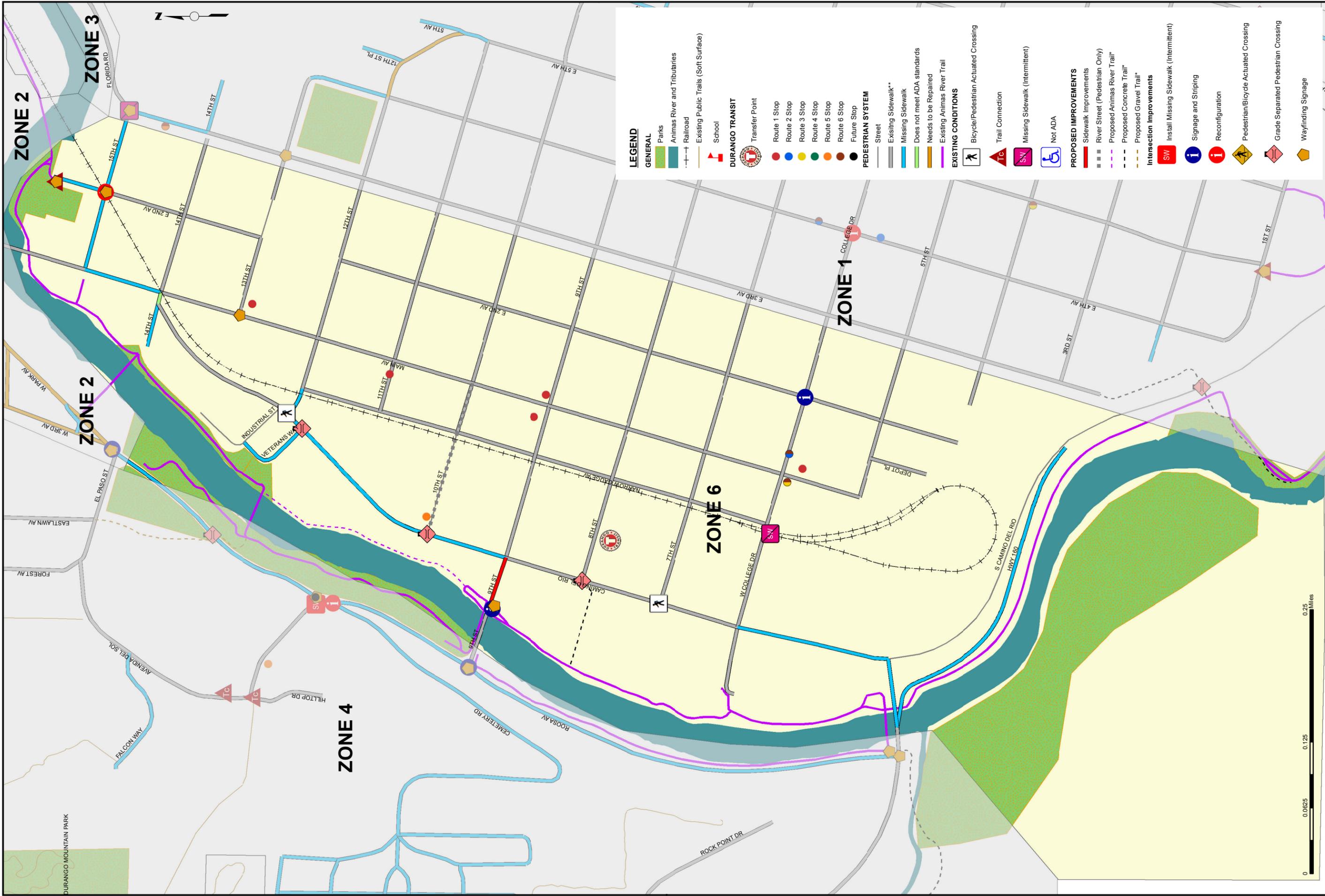
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BE-6



LEGEND

GENERAL

- Parks
- Animas River and Tributaries
- Railroad
- Existing Public Trails (Soft Surface)
- School

DURANGO TRANSIT

- Transfer Point
- Route 1 Stop
- Route 2 Stop
- Route 3 Stop
- Route 4 Stop
- Route 5 Stop
- Route 6 Stop
- Future Stop

PEDESTRIAN SYSTEM

- Street
- Existing Sidewalk**
- Missing Sidewalk
- Does not meet ADA standards
- Needs to be Repaired
- Existing Animas River Trail

EXISTING CONDITIONS

- Bicycle/Pedestrian Actuated Crossing
- Trail Connection
- Missing Sidewalk (Intermittent)
- Not ADA

PROPOSED IMPROVEMENTS

- Sidewalk Improvements
- River Street (Pedestrian Only)
- Proposed Animas River Trail*
- Proposed Concrete Trail*
- Proposed Gravel Trail*

Intersection Improvements

- Install Missing Sidewalk (Intermittent)
- Signage and Striping
- Reconfiguration
- Pedestrian/Bicycle Actuated Crossing
- Grade Separated Pedestrian Crossing
- Wayfinding Signage

NOTES:

The data shown on these exhibits are based on City of Durango GIS.

*Alignments are conceptual only.

**Sidewalk exists at least on one side of the street.

CITY OF DURANGO
MULTIMODAL TRANSPORTATION PLAN
PEDESTRIAN SYSTEM EXHIBIT
ZONE 6

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Zone 7 – Unincorporated La Plata County in Durango Comprehensive Planning Area

Existing Conditions and Deficiencies

Zone 7, the Comprehensive Planning Area, is property that is outside of the jurisdiction of the City of Durango in unincorporated La Plata County. Because the area has been identified as having potential for annexation to the City and includes many important opportunities for connections to multi modal transportation facilities, it is included in this study. It should be noted that Zone 7 has received the least amount of study through this process since it is not technically within the City. It has been included here to highlight obvious opportunities and should be considered for additional study.

Proposed Improvements

Zone 7 is for the most part entirely lacking in transit, pedestrian and bicycle improvements with the exception of some existing trailheads for soft surface trails and some existing County paved shoulders. The La Plata County Regional Transit and Future Land Use Plan (Landsman) identified potential sites for Park and Ride lots which are included here on the Zone 7 map. Several other improvements were identified through this process including the need for expanded shoulders and bike lane markings and marking of sharrows on popular bike routes including Junction Creek Road, Florida Road, CR 250, La Posta Road and CR 234. The deficiencies identified for this zone are not comprehensive and should receive further study and consideration.

The Intergovernmental Agreement on Land Use (IGA) between the City and La Plata County covers the comprehensive planning area (Zone 7) and is an opportunity for the City to communicate its multi modal goals to the County and developers and to obtain improvements as annexation and development occurs. In addition, the annexation process is an opportunity for the City to communicate its commitment and desire for all new development to consider multi modal transportation options and obtain improvements that will benefit both the new development and the entire multi modal transportation system. Examples of this opportunity are the recent annexation agreements for Twin Buttes and Three Springs which both include transit stops, trail connections (both hard and soft surface), new trailheads and significant pedestrian-oriented designs. In addition, the Twin Buttes development agreed to help fund necessary expansion and capital improvements for the transit system. These annexations could be considered as models for future development annexations. Example of a Transit Impact fee can be found at the end of this section.

Beyond Zone 7

Although this is a City of Durango planning document, transportation needs and systems are seamless and generally do not respect municipal boundaries. The process identified several areas where expanded transit service was desired by City of Durango residents and tourists beyond the City and comprehensive planning area. This includes expanded service north to Hermosa, Trimble Lane and Durango Mountain Resort, west to Hesperus and east to Forest Lakes and the Durango-La Plata Airport. These stops are outside the city limits and cannot be serviced by City transit, but may be coordinated with Durango

Transit’s system and serviced by other agencies such as Road Runner Transit or future inter-city bus services.

Non-Zone Specific Comments/Ideas/Deficiencies

The planning process generated many ideas that were more general in nature and not specific to projects or zones. Some of the more frequent public comments received included the need for expansion of the existing trolley system, additional/improved maintenance of bicycle and pedestrian facilities, additional soft surface trails, and revisions to existing laws and policies such as implementing an “Idaho Stop Law” for bicyclists wherein bicyclists are permitted to treat stop signs and stop lights as yields.

The following information is what was approved in the Twin Buttes Development Agreement in regards to transit.

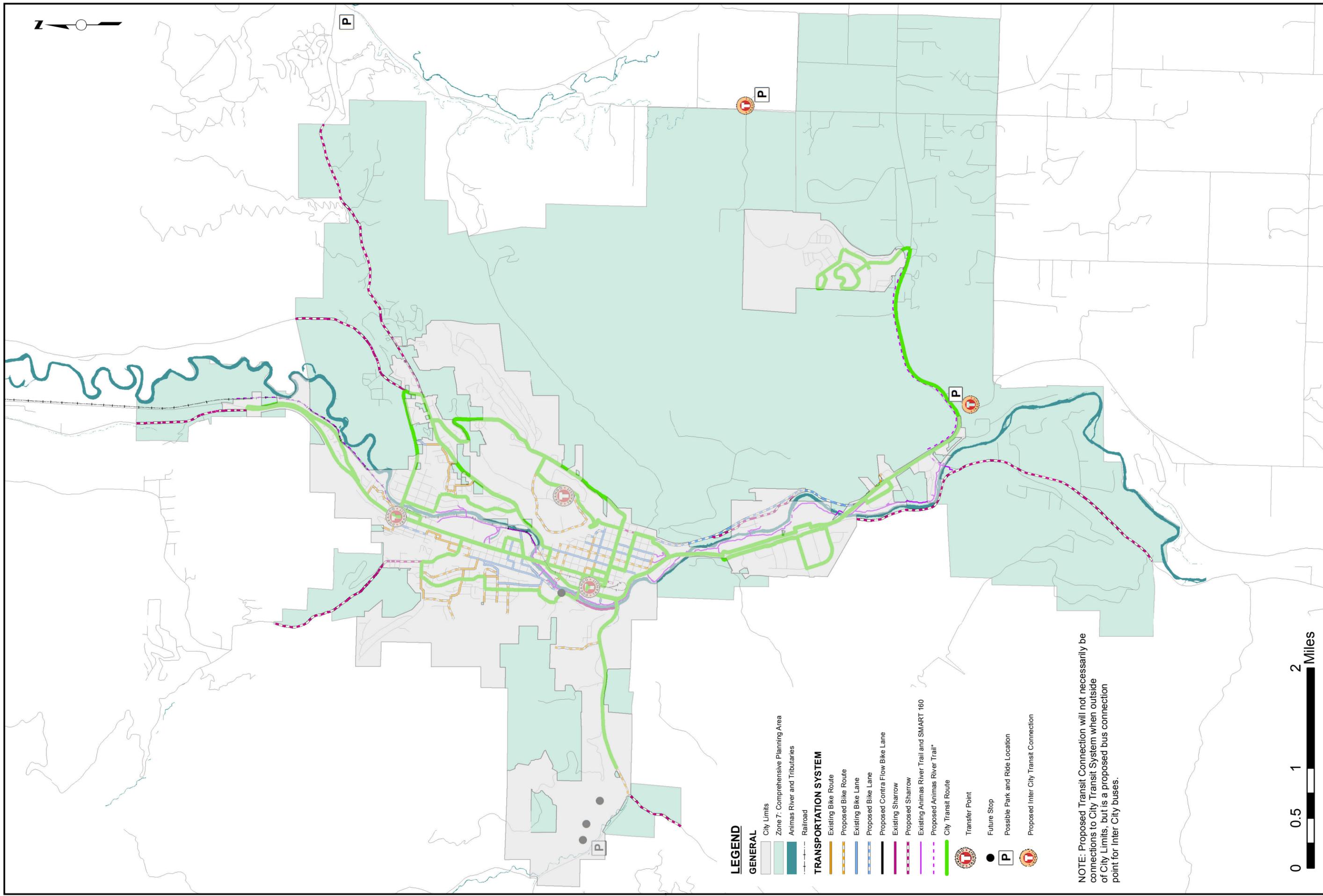
1. Twin Buttes agreed to provide 2 (potentially 3) transit shelters within the development. Each transit stop will provide: sheltered/covered seating, bike parking (preferred covered), a trash can and ADA access.
2. In order to provide a satisfactory level of service Durango Transit requested operating expenses on an increasing scale for 7 years, dependent on development build out and desired level of service. The scale will commence with \$13,000 the first year and will increase to no more than \$30,000. Currently is the cost of a route bus is approximately \$25.00 per hour (\$20.00 for operator and \$5.00 for maintenance and replacement per hour). Operating 12 hours per day 5 days per week, equates to \$78,000 annually. By 2013 Durango Transit plans to be running service 12 hours a day 7 days a week. This will increase the operating cost to \$109,000 a year (not including inflation or increased gas prices).

Year	Capital	Operating
1	17,000	13,000
2		30,000
3		30,000
4		30,000
5		30,000
6		30,000
7		30,000
Total Cost to Twin Buttes	17,000	193,000

- a. Twin Buttes agreed pay the local match (\$17,000) for the capital purchase of a Durango Transit Bus the first year of operations. The start date for operations will be based on number of potential riders. This was calculated using 2.5 persons per household. In order to justify service Durango Transit has determined, based on current ridership rates, that 150 households will produce 38 riders per day. (150HH x 2.5p = 375 x 10% ridership = 37.5

riders). The service will run every 30 minutes up the western access road to the transit shelter on the Spine Road.

- b. The operating assistance costs the first year of service will be pro-rated to \$13,000.
 - c. The operating assistance costs in years 2 -7 will be \$30,000. This is based on the fact that a new route will be needed to run 30 minute service into the development. This new route will cost \$109,000 a year to run, in addition to the cost of the new route, new maps and schedules will need to be printed (this costs Durango T \$10,000 each reprint). After the year seven the City of Durango and Durango Transit may be responsible for operating and capital costs associated with the Twin Buttes Route, based on ridership.
3. Durango Transit will only be able to provide service within the City limits.



LEGEND

- GENERAL**
- City Limits
 - Zone 7: Comprehensive Planning Area
 - Animas River and Tributaries
 - Railroad

TRANSPORTATION SYSTEM

- Existing Bike Route
- Proposed Bike Route
- Existing Bike Lane
- Proposed Bike Lane
- Proposed Contra Flow Bike Lane
- Existing Sharrow
- Proposed Sharrow
- Existing Animas River Trail and SMART 160
- Proposed Animas River Trail*
- City Transit Route

- Transfer Point
- Future Stop
- Possible Park and Ride Location
- Proposed Inter City Transit Connection

NOTE: Proposed Transit Connection will not necessarily be connections to City Transit System when outside of City Limits, but is a proposed bus connection point for Inter City buses.



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CITY OF DURANGO
MULTIMODAL TRANSPORTATION PLAN
TRANSPORTATION SYSTEM EXHIBIT
ZONE 7

NOTES:
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 *Alignments are conceptual only.

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Design Guidelines and Reference Documents

Bicycle Facility Guidelines

AASHTO, Guide for the Planning, Design, and Operation of Bicycle Facilities, 2010 Draft:

http://safety.nmsu.edu/faq/2010/2010_0201ASSHTO-BikeGuideDRAFT.pdf

City of Davis, CA design guidance, 2009: <http://cityofdavis.org/bicycles/pdfs/Bike-Plan-2009.pdf>

See pp. 65 to 74 in the appendix

City of Eugene OR Pedestrian and Bicycle Master Plan Design Toolkit, 2011:

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MUTCD (Manual on Uniform Traffic Control Devices), Part 9 Traffic Control for Bicycle Facilities, 2009:

<http://mutcd.fhwa.dot.gov/pdfs/2009/part9.pdf>

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LA County, Model for Living Streets Design Manual, 2011:

http://modelstreetdesignmanual.com/model_street_design_manual.pdf

MRSC, Designing Transportation Facilities for Bicycles and Pedestrians, 2011 - Complete Streets

<http://www.mrsc.org/subjects/planning/planpedbike.aspx>

NCSC, Complete Streets Design Guidance, 2011:

<http://www.completestreets.org/complete-streets-fundamentals/resources/>

Transportation Authority of Marin, *Pedestrian and Transit-Oriented Design Toolkit*, 2007:

<http://www.tam.ca.gov/Modules/ShowDocument.aspx?documentid=2118>

Bicycle Parking Guidelines

Association of Pedestrian and Bicycle Professionals Bicycle Parking Guidelines, 2nd Edition 2010:

http://www.apbp.org/resource/resmgr/webinars/bpg_exec_summary_4-21-10.pdf, 1st Edition, 2002:

http://www.apbp.org/resource/resmgr/publications/bicycle_parking_guidelines.pdf

Pedestrian and Bicycle Information Center, Survey of Bicycle Parking Ordinances and Design Guidelines,

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