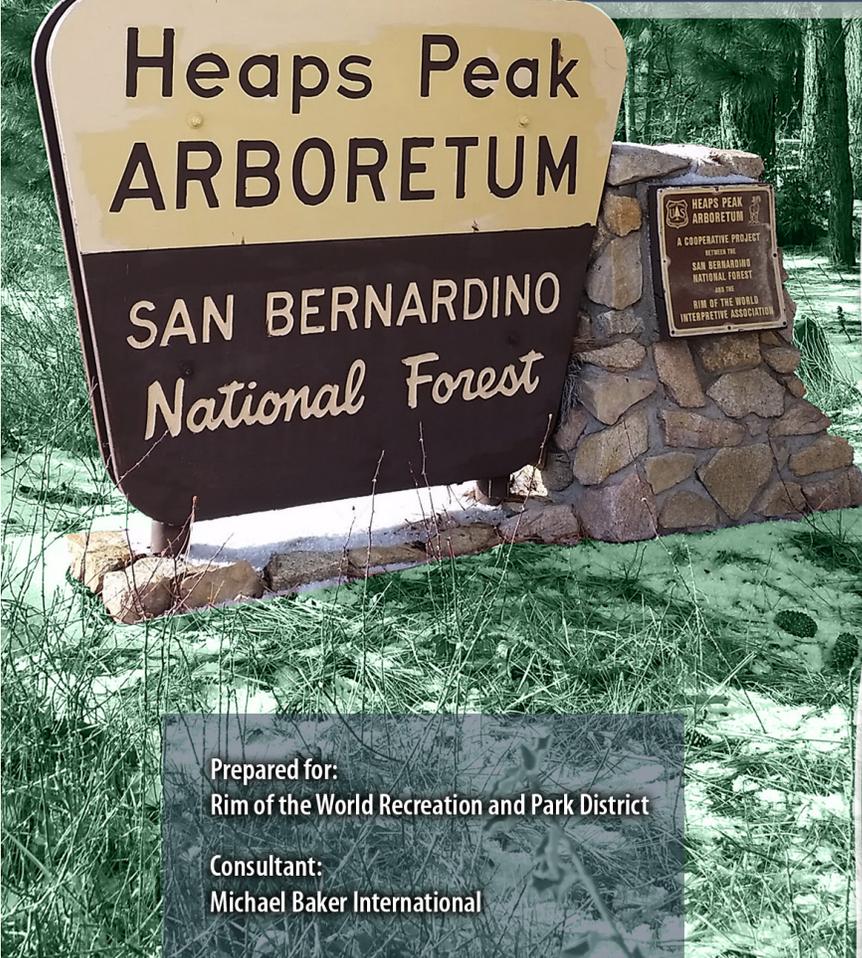




March 13, 2018
FINAL DRAFT



Rim of the World Active Transportation Plan



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Rim of the World Recreation and Park District

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RIM OF THE WORLD

ACTIVE TRANSPORTATION PLAN

Final Draft

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APPENDICES

- **Appendix 1 (Resolution)**



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CHAPTER 1. INTRODUCTION

1.1 A Grassroots Plan for Rim of the World

The Rim of the World Active Transportation Plan (Rim ATP) is the product of a grassroots community-driven effort. Three members of the community, Bruce Daniels, Ken Witte, and Sue Walker, collaborated on an Active Transportation Program planning grant application, which funded production of this plan. Advocates of walking, bicycling, and horseback riding in Rim of the World recognize that these activities are part of active lifestyles and an opportunity for economic development. They also recognize that walking and bicycling are a means of transportation. By developing a system of pedestrian, bicycle, and equestrian facilities, the Rim of the World Recreation and Park District, community stakeholders, and partner organizations will provide residents and visitors with facilities that connect villages, points of recreation, transit hubs, schools, and job centers. Due to the areas covered by the Rim ATP, this plan includes on- and off-street paved facilities, along with unpaved multipurpose trails.

1.2 California's Active Transportation Program

In 2013, California's Active Transportation Program (ATP) was established through Senate Bill (SB) 99 and Assembly Bill (AB) 101. The program consolidated federal and state transportation programs into a single program. The consolidated programs are the Transportation Alternatives Program (TAP), Bicycle Transportation Account (BTA), and Safe Routes to School (SR2S). The intent of the ATP is to encourage people to choose walking and bicycling as modes of transportation by achieving six goals:

- Increase the proportion of trips accomplished by biking and walking.
- Increase safety and mobility for nonmotorized users.
- Advance the active transportation efforts of regional agencies to achieve greenhouse gas (GHG) reduction goals, pursuant to SB 375 (2008) and SB 341 (2009).
- Enhance public health.
- Ensure that disadvantaged communities fully share in the benefits of the program.
- Provide a broad spectrum of projects to benefit many types of active transportation users.

The Rim ATP has been developed consistent with California ATP guidelines to establish eligibility for ATP funding. Consistency is shown in Table 1-1.

1.3 How to Use This Plan

In addition to establishing eligibility for ATP funding, the Rim ATP is designed to serve as a how-to guide



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for Rim of the World Recreation and Park District staff and advocates to collaborate with the County of San Bernardino and other agencies on implementation, including the San Bernardino County Transportation Authority, the City of Big Bear Lake, the San Manuel Band of Mission Indians, independent special districts, the United States Forest Service (San Bernardino National Forest and Angeles National Forest), the San Gabriel Mountains National Monument, the National Park Service, and cities in the valley and desert surrounding the plan area.

Chapter 2: Definitions

The second chapter establishes a common language to be used by those working together to implement the plan.

Chapter 3: Community & Stakeholder Engagement

The third chapter describes community members and stakeholders and how they were involved in the process. Demonstrating meaningful engagement is an important part of grant applications and showing how proposed projects respond to community needs.

Chapter 4: Plan Framework

The Plan Framework communicates the community's vision for active transportation in Rim of the World and the goals and objectives intended to realize that vision. The Plan Framework is an important reference point for partners working together to administer the plan, to ensure that projects implemented incrementally are designed and constructed in a cohesive, consistent manner.

Chapter 5: Planning Background

The Rim ATP is influenced by other planning efforts. Chapter 5 describes the relationship of the Rim ATP with the San Bernardino County General Plan and Community Plans, the San Bernardino County Non-Motorized Transportation Plan, the San Bernardino National Forest Land Management Plan, and bikeway and trail plans of neighboring jurisdictions.

Chapter 6: Existing Conditions

The sixth chapter describes existing conditions, including baseline characteristics required for ATP eligibility. The existing conditions section is intended to be a resource to grant writers as partners work to implement the plan. Many of the descriptions can be included in and the sources used to update data for future grant applications.

Chapter 7: Proposed Improvements

In Chapter 7, proposed facilities, eligible for ATP funding, are described and illustrated in maps.

Chapter 8: Forest Service System Trails

As an agency of the federal government, the United States Forest Service (USFS) has a separate planning process to adopt USFS system trails. Chapter 8 is intended to provide stakeholders with information to proactively engage local representatives of the San Bernardino National Forest. Information includes an overview of the existing system, preliminary description of user demand for trail improvements, a primer about the USFS trail planning and decision-making process, a description of special considerations, proposed projects and programs, and recommendations for future consideration.



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Chapter 9: Trail-Based Economic Development

Chapter 9 communicates the relationship between pedestrian, bicycle, and equestrian facilities and opportunities for economic development and creating a unique sense of place that delights visitors. In addition, Chapter 9 describes flagship projects that offer multiple benefits in support of trail-based economic development strategies.

Chapter 10: Expenditures & Funding

The proposed project list in Chapter 10 includes planning-level cost estimates. In addition, Chapter 10 gives an overview of various funding strategies ranging from grant applications to revenue-generating opportunities.

Chapter 11: Prioritization & Implementation

The last chapter describes preliminary prioritization of projects and includes an implementation strategy with proactive steps for Rim of the World stakeholders to work in partnership with local, regional, state, and federal agencies.

Table 1-1. Consistency with Active Transportation Program Guidelines

Active Transportation Program Guideline	Location in Rim ATP
<p>Bicycle & Pedestrian Trips The estimated number of existing bicycle trips and pedestrian trips in the plan area, both in absolute numbers and as a percentage of all trips, and the estimated increase in the number of bicycle trips and pedestrian trips resulting from implementation of the plan.</p>	Chapter 6 Existing Conditions
<p>Collisions The number and location of collisions, serious injuries, and fatalities suffered by bicyclists and pedestrians in the plan area, both in absolute numbers and as a percentage of all collisions and injuries, and a goal for collision, serious injury, and fatality reduction after implementation of the plan.</p>	Chapter 6 Existing Conditions
<p>Land Use A map and description of existing and proposed land use and settlement patterns which must include, but not be limited to, locations of residential neighborhoods, schools, shopping centers, public buildings, major employment centers, and other destinations.</p>	Chapter 6 Existing Conditions
<p>Existing & Proposed Bicycle Facilities A map and description of existing and proposed bicycle transportation facilities, including a description of bicycle facilities that serve public and private schools and, if appropriate, a description of how the five Es (Education, Encouragement, Enforcement, Engineering, and Evaluation) will be used to increase rates of bicycling to school.</p>	Chapter 6 Existing Conditions Chapter 7 Proposed Improvements
<p>Bicycle Parking A map and description of existing and proposed end-of-trip bicycle parking facilities.</p>	Chapter 6 Existing Conditions Chapter 7 Proposed Improvements
<p>Bicycle Parking Policies</p>	Chapter 4 Plan Framework Chapter 5 Planning Background



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Active Transportation Program Guideline	Location in Rim ATP
<p>A description of existing and proposed policies related to bicycle parking in public locations, private parking garages and parking lots and in new commercial and residential developments.</p>	
<p>Bicycles and Multimodal Connection A map and description of existing and proposed bicycle transport and parking facilities for connections with and use of other transportation modes. These must include, but not be limited to, bicycle parking facilities at transit stops, rail and transit terminals, ferry docks and landings, park and ride lots, and provisions for transporting bicyclists and bicycles on transit or rail vehicles or ferry vessels.</p>	<p>Chapter 6 Existing Conditions Chapter 7 Proposed Improvements</p>
<p>Existing & Proposed Pedestrian Facilities A map and description of existing and proposed pedestrian facilities, including those at major transit hubs and those that serve public and private schools and, if appropriate, a description of how the five Es (Education, Encouragement, Enforcement, Engineering, and Evaluation) will be used to increase rates of walking to school. Major transit hubs must include, but are not limited to, rail and transit terminals, and ferry docks and landings.</p>	<p>Chapter 6 Existing Conditions Chapter 7 Proposed Improvements</p>
<p>Wayfinding Signage A description of proposed signage providing wayfinding along bicycle and pedestrian networks to designated destinations.</p>	<p>Chapter 7 Proposed Improvements</p>
<p>Safety Education & Encouragement A description of bicycle and pedestrian safety, education, and encouragement programs conducted in the area included within the plan, efforts by the law enforcement agency having primary traffic law enforcement responsibility in the area to enforce provisions of the law impacting bicycle and pedestrian safety, and the resulting effect on collisions involving bicyclists and pedestrians.</p>	<p>Chapter 6 Existing Conditions</p>
<p>Community Involvement A description of the extent of community involvement in development of the plan, including disadvantaged and underserved communities.</p>	<p>Chapter 3 Community & Stakeholder Engagement</p>
<p>Coordination with Neighboring Jurisdictions A description of how the active transportation plan has been coordinated with neighboring jurisdictions, including school districts within the plan area, and is consistent with other local or regional transportation, air quality, or energy conservation plans, including, but not limited to, general plans and a Sustainable Community Strategy in a Regional Transportation Plan.</p>	<p>Chapter 3 Community & Stakeholder Engagement Chapter 5 Planning Background</p>
<p>Project Description & Prioritization A description of the projects and programs proposed in the plan and a listing of their priorities for implementation, including the methodology for project prioritization and a proposed timeline for implementation.</p>	<p>Chapter 7 Proposed Improvements Chapter 11 Prioritization & Implementation</p>
<p>Financial Expenditures & Needs A description of past expenditures for bicycle and pedestrian facilities and programs, and future financial needs for projects and programs that improve safety and convenience for bicyclists and pedestrians in the plan</p>	<p>Chapter 10 Expenditures & Funding</p>



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Active Transportation Program Guideline	Location in Rim ATP
area. Include anticipated revenue sources and potential grant funding for bicycle and pedestrian uses.	
Implementation A description of steps necessary to implement the plan and the reporting process that will be used to keep the adopting agency and community informed of the progress being made in implementing the plan.	Chapter 11 Prioritization & Implementation
Resolution A resolution showing adoption of the plan by the city, county or district.	Appendix 1



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CHAPTER 2. DEFINITIONS

2.1 Definitions

Activity Center: A place that draws many people due to the presence of commercial businesses, employment, recreational amenities, or other uses in demand and that should offer multiple transportation options, information to guide decision-making, and be connected to other activity centers by an intermountain trail system (see **Intermountain Trail System**).

Bikeway: Paved facilities are referred to as “bikeways.” The California Streets and Highways Code Section 890.4 defines a "bikeway" as a facility that is provided primarily for bicycle travel. The California Department of Transportation (Caltrans) Highway Design Manual, Chapter 1000, “Bicycle Transportation Design,” further defines the bikeways as Class I, Class II, or Class III Bikeways.

Class I Bikeway (Bike Path) - Provides for bicycle travel on a paved right-of-way completely separated from a street or highway and with crossflow by vehicles minimized. Bicycle paths are often planned along uninterrupted linear rights-of-way, such as rivers and rail rights-of-way.

Class II Bikeway (Bike Lane) - Provides a striped lane for one-way bike travel on a street or highway. A buffer can be provided to enhance separation between vehicular traffic and cyclists.

Class III Bikeway (Bike Route) - A preferred travel route for bicyclists on a roadway shared by bicyclists and cars where a separate lane or path is either not feasible or not desirable. The lane is marked with signs and can also be marked with sharrows. Bike routes are more useful when coupled with techniques such as the following:

- Route, directional, and distance signage
- Wide curb lanes
- Sharrow stencils painted in the traffic lane along the appropriate path of where a bicyclist would ride in the lane
- Accelerated pavement maintenance schedules
- Traffic signals timed and coordinated for cyclists (where appropriate)
- Traffic-calming measures

Buffered Bike Lane: Bike lane with a painted buffer area usually outside the bike lane that provides some space between bicycles and motor vehicles. The buffer may also go between parked cars and the bike lane.



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End-of-Trip Facilities: Amenities such as bicycle racks, bicycle or personal lockers, showers, or any other facility or amenity that fulfills commuters' needs for secure storage and personal hygiene. End-of-trip facilities are especially important to bicycle commuters and are usually provided by employers.

Intermountain Trail System: A system of multipurpose trails, primarily in the San Bernardino National Forest, intended to provide recreational and transportation benefits by connecting residential areas and activity centers in Rim of the World and connecting Rim of the World communities to other areas such as Lake Silverwood and Big Bear Valley.

Multipurpose Trail: An off-street path for the use of nonmotorized modes of transportation (pedestrians, equestrians, bicyclists) and recreation, which may or may not be paved. Multipurpose trails are not designed for the primary use of bicyclists and do not meet Caltrans Design Standards. In the National Forest, multipurpose trails are typically unpaved single-track pathways designed to meet the needs of pedestrians, equestrians, and people on mountain bicycles.

Project or Infrastructure Project: A physical improvement identified in this plan and intended to improve conditions for walking, bicycling, horseback riding, and other nonmotorized trail-based activities. Examples include curbs, gutters, sidewalks, crosswalks, bicycle lanes, bicycle storage, and bus stops. These may be combined with other improvements such as parking, parks, lighting, drainage/flood control, community centers, police and fire stations, schools, and transit centers to achieve multiple benefits.

Sharrow: Standardized as a traffic control device, a sharrow, or shared lane marking, is used to indicate a shared lane environment for bicycles and automobiles. The painted sharrow marking shows the recommended proper bicycle positioning within the travel way, and discourages dangerous wrong-way riding by cyclists. Sharrows are recommended for streets with speeds of 35 miles per hour or less, and streets with insufficient width to allow for bicycle lanes.

Trail: A paved or unpaved pathway intended for nonmotorized use (as defined for the purposes of the Rim ATP), which may also include defined routes on waterways.

Trailhead: A node where pedestrians, bicyclists, and equestrians may access the National Forest.

Trailhead, Intermountain: A node where people may access the National Forest and which is improved with amenities such as designated areas for parking, including one or more spaces for horse trailers and other large vehicles (e.g. buses, and recreational vehicles), drinking fountains, trash/recycling receptacles, and signage to inform users about how to navigate the Intermountain Trail System (see **Intermountain Trail System**). Where feasible, Intermountain Trailheads should also include restrooms and be located in activity centers (see **Activity Center**) or be accessible from activity centers.

Type B Sharrow: Bold sharrows, such as a 6-foot-wide green swath painted under sharrows or large sharrows placed close together. Type B sharrows are not yet standardized in the state of California, but currently can be utilized through a Federal Highway Administration pilot project.

User-Created Trails: Also known as "social trails," user-created trails are the product of regular traffic or construction by trail enthusiasts. They are not part of a formally adopted system and, as a result, may be slashed and closed without notice.



CHAPTER 3. COMMUNITY & STAKEHOLDER ENGAGEMENT

3.1 Community Composition

Population Characteristics¹

Approximately 29,240 people live in Rim of the World based on the 2014 American Community Survey 5-Year Estimates (US Census Bureau 2014). About 10,900 people live in the Crest Forest communities; about 12,579 people live in the Lake Arrowhead communities; and about 5,761 people live in the Hilltop communities. All three communities are growing, but at a slower pace than the County of San Bernardino. By 2020, Rim of the World is forecast to have a population of 29,813, an increase of nearly 2 percent.

The median household income among the Rim of the World communities is higher than the rest of San Bernardino County. Likewise, the median age across these three communities is higher than in San Bernardino County. The Crest Forest communities have a median income of \$54,815. The Lake Arrowhead communities have a slightly lower median income of \$54,539. The median household income in the Hilltop communities is \$49,027.

While poverty data is not available for all communities, more than 1,600 people, at least 5 percent of the population, live below poverty. About 940 live in the Crest Forest communities and about 660 live in the Lake Arrowhead communities. Data was not available for the Hilltop communities. Additional detailed information about the three Community Plan areas may be found in the Community Plans component of the web-based San Bernardino Countywide Plan, which was in draft form at the time this plan was adopted.² Another source of useful information is made available by the State of California Office of Environmental Health Hazard Assessment. The web-



¹ Source: 2014 American Community Survey 5-Year Estimates

² <http://countywideplan.com>



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based data and mapping tool called CalEnviroScreen helps identify communities that are disproportionately burdened by pollution and population characteristics that make them more sensitive to pollution. This data may be useful when applying for ATP and other grant funding.

Schools

Six public schools serve the Rim of the World communities. These schools are Charles Hoffman Elementary School, Lake Arrowhead Elementary School, Valley of Enchantment Elementary School, Mary Putnam Henck Intermediate School, Rim of the World High School, and Mountain High School. They are part of the Rim of the World Unified School District, which is facing challenges that accompany the ongoing trend of decreasing numbers of students. According to the Local Control and Accountability Plan for 2017-18 (Rim of the World Unified School District, 2015) the district serves approximately 3,400 students and 53 percent are classified as low income. Table 3-1 provides a broader view of the student population based on data collected in 2015-16.



Source: Rim of the World Unified School District

Table 3-1. 2015-16 Student Population

School	Total Enrollment	Number Economically Disadvantaged ³	Percent Economically Disadvantaged	Healthy Fitness Zone ⁴
Rim of the World High School <i>Lake Arrowhead</i>	1,151	474	41%	52.90%
Mary P. Henck Intermediate School <i>Lake Arrowhead</i>	804	466	58%	48.40%
Valley of Enchantment Elementary <i>Crestline</i>	594	423	71%	35.50%
Lake Arrowhead Elementary	425	223	52%	44.80%

³ According to the California State Board of Education (2017) economically disadvantaged students includes students whose parents did not receive a high school diploma, who are eligible for the free or reduced-price lunch program, or both.

⁴ Students who are in the healthy fitness zone meet or exceed physical fitness standards in six major areas.



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Charles Hoffman Elementary <i>Running Springs</i>	295	169	57%	26.20%
Mountain High School <i>Lake Arrowhead</i>	30	20	67%	<i>Not available</i>

When schools close, they may become community centers, as is the case with Lake Gregory Elementary School. Grandview Elementary School has also closed and is situated in a prime location to function as a trailhead.

Stakeholder Analysis

As a grassroots plan, stakeholders are the foundation of the Rim ATP. Stakeholders fall into eight categories as shown in Table 3-2. The organizations listed in the table either participated or were recommended as stakeholders through the planning process. The list is not comprehensive and other stakeholders should be added as they are identified over time.

Table 3-2. Rim of the World Active Transportation Plan Stakeholders

Users and User Groups	Community and Service Organizations
<ul style="list-style-type: none"> • Individual hikers, mountain bikers, road cyclists, and equestrians • Mountain Communities Hiking Adventures • Rim High Mountain Biking Team • Boy Scouts of America 	<ul style="list-style-type: none"> • Crestline Connect • Crestline Municipal Advisory Council • Crestline Yacht Club • Crest Forest Senior Citizens Club, Inc. • Golden Oaks Senior Citizens • Hearts & Lives • Lake Arrowhead Municipal Advisory Council • Mountain Communities Senior Citizens • Rim Communities Resource Network • Rim of the World Interpretive Association • Soroptimists International
Nongovernmental Organizations	Local Agencies
<ul style="list-style-type: none"> • Save Our Forest Association • San Bernardino Mountains Land Trust • Sierra Club • Southern California Mountains Foundation 	<ul style="list-style-type: none"> • Crestline Village Water District • Rim of the World Recreation and Park District • Rim of the World Unified School District • Mountain Area Regional Transit Authority • ESA 18 Cedar Pines Park • Green Valley Lake Water District • Running Springs Water District



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Regional Agencies	State and Federal Agencies
<ul style="list-style-type: none"> • County of San Bernardino <ul style="list-style-type: none"> ○ Special Districts ○ County Service Area Dam Commission • San Bernardino County Transportation Authority 	<ul style="list-style-type: none"> • California State Parks (Lake Gregory) • USFS San Bernardino National Forest
Recreational Businesses	Other Businesses/Business Organizations
<ul style="list-style-type: none"> • Rim Nordic Ski Area, Inc. • SkyPark at Santa’s Village • Snow Valley Mountain Resort • Wake and Wheel 	<ul style="list-style-type: none"> • Crestline Chamber • First Mountain Bank • Lake Arrowhead Communities Chamber of Commerce • Running Springs Area Chamber of Commerce

Users, user groups, and community, service, and nongovernmental organizations are the most important stakeholders. They are the people who will use, advocate for, and support implementation of the pedestrian, bicycle, and equestrian trails network.

Government agencies are responsible for adopting policies that coordinate infrastructure, establish eligibility for grant funding, and enable dedication of right-of-way as projects develop. In addition, they fund, construct, and maintain infrastructure, which may include facilities for pedestrians and bicyclists.



Recreational and other businesses in Rim of the World, including concessionaires to the USFS San Bernardino National Forest, make up the local tourist economy. Recreational businesses offer trail facilities, connect to recreational trail networks, or offer goods and services that enable or enhance tourist experience.

3.2 Public Engagement

Because the RIM ATP is a grassroots project, public stakeholders influenced the project focus and informed the vision, goals, and objectives in Chapter 4. Although the Rim of the World Recreation and Park District Trail Committee was not active at the time of project kickoff, former members gathered with the project team to provide input about the outreach methods best suited for the Rim ATP project. The opportunities for public engagement offered during the planning process are shown in Table 3-3.



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Table 3-3. Community & Stakeholder Engagement Opportunities

Engagement Activity	Total Participants	Key Outcomes/Inputs
<p>Pop-Up Workshops (at community events/festivals)</p> <p>Running Springs <i>June 25, 2016</i></p> <p>Crestline <i>July 2, 2016</i></p> <p>Lake Arrowhead <i>July 8, 2016</i></p>	<p>160+</p>	<p>Community Values</p> <ul style="list-style-type: none"> • Open space, quiet, solitude • Recreation and exercise on trails such as walking, running, biking, and horseback riding <p>Opportunities for Enhancement</p> <ul style="list-style-type: none"> • Signage, maps, and other guides • Safety and maintenance • New trails and related recreational infrastructure like rock climbing areas and skate/bike parks
<p>Web-Based Survey <i>June 24, 2016, through October 31, 2016</i></p>	<p>199</p>	<p>Infrastructure Priorities (ranked)</p> <ol style="list-style-type: none"> 1. Hiking and trail running 2. Safe Routes to School 3. Pedestrian improvements in village 4. Access to transit 5. Road cycling 6. Mountain biking 7. Horseback riding <p>Map Markers Identifying Potential Locations for Infrastructure Improvements (most frequently used markers)</p> <ul style="list-style-type: none"> • Add or improve a bicycle path • Improve pedestrian safety • Support connections with park/green/open space destinations • Add or improve a pedestrian pathway • Build a new trail <p>Funding Considerations Grants, volunteer labor, and nonprofit fundraising before property and sales tax</p>
<p>Equestrian Focus Group and Tour <i>October 18, 2016</i></p>	<p>5</p>	<p>Mapping and Field Visit</p> <ul style="list-style-type: none"> • Reviewed existing equestrian networks on public and private lands • Discussed opportunities to improve trails and trailhead • Visited sites in the field



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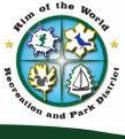
Engagement Activity	Total Participants	Key Outcomes/Inputs
Off-Road Focus Group and Tour <i>December 16, 2016</i>	8	Mapping and Field Visit <ul style="list-style-type: none"> • Reviewed existing multiuser trail networks through National Forest, including system trails and user-created trails • Discussed opportunities to improve connectivity, fill in gaps in the network, and conserve resources • Visited sites in the field
Community Workshop #1 <i>September 19, 2016</i>	34	National Forest <ul style="list-style-type: none"> • Look for opportunities for new trails • Use trailheads, signage, guides, and maps to guide and educate users • Mitigate human impact through resource conservation and maintenance Safe Routes to School <ul style="list-style-type: none"> • Look for opportunities at bus stops and crossings • Use trails to connect youth to after-school activities Villages, Transit, and Economic Development <ul style="list-style-type: none"> • Focus on villages as hubs of activity • Consider transit services and related facilities • Look for opportunities to make villages more walkable • Provide information and services to locals and tourists Road Cycling <ul style="list-style-type: none"> • Look for opportunities for: <ul style="list-style-type: none"> ○ Directional signage ○ Share the road signs (Class III) ○ Bicycle lanes (Class II) ○ Separated bicycle paths (Class I)
Community Workshop #2 <i>February 16, 2017</i>	20	Input from Small Group Discussion Input focused on what participants liked and disliked, and what was missing in the conceptual improvements. Questionnaire (Key Insights) <ul style="list-style-type: none"> • Crestline, Lake Arrowhead, Running Springs, SkyPark, Snow Valley, and Heaps Peak Arboretum best suited for locals and tourists • Desired activity center improvements include parking, ecotourism, information kiosks, wayfinding and



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Engagement Activity	Total Participants	Key Outcomes/Inputs
		<p>signage, bike lockers, sidewalks, trash cans, restrooms, connector trails</p> <ul style="list-style-type: none"> Hiking and camping offer the most growth potential for outdoor recreation economy
Stakeholder Meeting <i>April 26, 2017</i>	19	In response to calls for wider engagement, the project team hosted a stakeholder meeting that included representatives from various organizations that had not been present at prior meetings.
Off-Road Focus Group Meeting <i>August 29, 2017</i>	19	<p>Relationship Building</p> <ul style="list-style-type: none"> Learned about Big Bear Valley Trails Foundation History and current partnership with United States National Forest and the Southern California Mountains Foundation <p>Discussed challenges of implementation for Rim of the World with an emphasis on lead organizations and representation of all communities.</p>
Community Workshop #3 <i>November 15, 2017</i>	17	Input on draft proposed improvements, goals, objectives, and implementation strategies.
Individual Interviews <i>January 5, 2018</i>	15	Gathered missing information and discussed challenges and opportunities for implementation.
Regional Agency Consultation <i>January 16, 2018</i>	10	Discussed project feasibility and implementation activities with San Bernardino County Land Use Services and Public Works.
Local Organizational Consultation <i>January 22, 2018</i>	12	The group included representatives from local agencies such as Mountain Transit, the San Bernardino County Sheriff, San Bernardino County Fire, Lake Arrowhead Municipal Advisory Council, California Highway Patrol, Mountains Group Sierra Club, the Lake Arrowhead and Running Springs Chambers of Commerce, Boy Scouts (regional), and local real estate agents. The group discussed constituents/members of their respective groups, the benefits offered by improvements to nonmotorized infrastructure, including trails, and ways that organizations may be interested in being involved with implementation of the Rim ATP.



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CHAPTER 4. PLAN FRAMEWORK

4.1 Vision

Once implemented, Rim ATP stakeholders envision that the Rim ATP will result in:

- A system of sustainable trails connecting villages and activity centers and offering recreational experiences for a diverse set of people including locals of all ages as well as visitors seeking a “world class” experience.¹ The future trail system connects Silverwood Lake State Recreation Area, Crestline, Lake Arrowhead, Heaps Peak Arboretum, SkyPark at Santa’s Village, Pali Mountain, Running Springs, Green Valley Lake, the Children’s Forest, Snow Valley, Rim Nordic, the Pacific Crest Trail, Big Bear Valley, Highland, San Bernardino, and various places in between.
- Transit and school bus stops accessible by way of safe pathways and crosswalks. Future bus stops are improved with shelters, benches, garbage cans, and, in some cases, additional amenities such as lighting.
- Villages, activity centers, and trailheads with vehicle and bicycle parking, trash and recycling bins, restrooms, drinking fountains, and information kiosks.
- An integrated wayfinding information system including a digital trail guide, signage, maps at kiosks, and trail markers.
- A population that benefits from trail-based wellness programs as well as tax revenues from and employment opportunities in a range of cottage and larger, more formalized industries developed around outdoor and trail-based recreation.



¹ “World class” is a subjective term and the meaning of the term may change over time for Rim ATP stakeholders. A discussion of the term and several attributes that influence the quality of recreation destinations is included in Chapter 9 Trail-Based Economic Development.



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- Equitable distribution of bicycle, pedestrian, and equestrian trails that provide recreation and transportation options to disadvantaged communities as locally defined based on socioeconomic status, age, ethnicity, and ability.
- A sustainable density of trails that meet user demands while protecting open space resources from human impacts. Trail features include interpretive signs and accompanying digital applications that inform people about the environment and promote stewardship.

4.2 Goals and Objectives

Three overarching goals and accompanying objectives are included in the Rim ATP to make advances toward realizing the vision.

ATP Goal 1. Establish a district-wide trail system for pedestrians, bicycles, and equestrians that is designed and constructed to minimize impact of trails and trail use on open space resources

Objectives

- 1.1 Work with the National Forest, private property owners, and others to enable construction, maintenance, and operation of a system that connects communities and outdoor recreation destinations
- 1.2 Construct Safe Routes to School infrastructure projects beginning with projects that reflect student travel demand such as bus stop enhancements and improved pedestrian access to bus stops
- 1.3 Construct new multiuser trails in the National Forest
- 1.4 Sign Class III bicycle routes
- 1.5 Construct new sidewalks and crosswalks with signage and traffic signals where warranted
- 1.6 Paint or construct new Class II bicycle
- 1.7 Balance density of trails across the National Forest to minimize impact of recreation on including water quality, native habitats, and plants and animals

ATP Goal 2. Increase rates of bicycling, walking, and transit ridership throughout the Rim of the World communities

Objectives

- 2.1 Improve access to transit by constructing sidewalks, crosswalks, bus stop enhancements, signage, signals, or other improvements as appropriate
- 2.2 Construct amenities in villages, at trailheads, and at outdoor recreation destinations including





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information kiosks, automobile parking, bicycle parking, trash and recycling bins, water fountains, and/or restrooms

- 2.3 Provide information and guidance by adopting and implementing a signage and wayfinding program
- 2.4 Form parent, student, and teacher groups to develop Safe Routes to School programs and advocate for Safe Routes to School infrastructure
- 2.5 Educate students and parents about safety and rules of the road
- 2.6 Educate drivers about rules of the road emphasizing awareness about laws intended to enhance safety for those who ride bicycles and walk along public streets
- 2.7 Prioritize infrastructure projects that decrease levels of stress and increase health and safety
- 2.8 Collaborate with employers to offer programs that incentivize walking, bicycling, riding the bus, or other alternatives to driving alone to work

ATP Goal 3. Leverage walking, bicycling, and equestrian trail system to achieve multiple and equitable public benefits

Objectives

- 3.1 Develop a program to encourage regular exercise and outdoor experiences that enhance physical, mental, and emotional well-being
- 3.2 Strive for equitable distribution of long-term trail system benefits, including benefits for disadvantaged communities

Recommended Implementation Action

3.2.a. Seek input from all communities during plan implementation

- 3.3 Adopt a local, context-sensitive definition for “disadvantaged communities” that considers socioeconomic characteristics such as income, and and education, age, ethnicity, and ability
- 3.4 Bolster tourist economy by leveraging outdoor recreation and enhanced village experiences

Recommended Implementation Actions

3.4.a. Develop an ecotourism program that fosters stewardship and promotes sustainable recreation

3.4.b. Form a new or expand upon an existing tourism business association to generate locally controlled funding to be used for construction, maintenance, operation, and marketing of a “worldclass” trail system (see Chapter 9 for more information)

3.4.c. Deploy a targeted campaign for trail-based recreation

3.4.d. Promote new business development to enhance visitor experience

3.4.e. Establish a network of lodging, such as huts, yurts, or cabins, that enables hikers, bikers, and equestrians to enjoy multi-day adventures



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CHAPTER 5. PLANNING BACKGROUND

The Rim ATP is situated in a broader planning context including federal, state, regional, and local planning and policy documents that guide and influence land use, transportation, and recreation across Rim of the World. These documents include the San Bernardino County General Plan, the San Bernardino County Non-Motorized Transportation Plan, the San Bernardino National Forest Land Management Plan, and the Big Bear Valley Pedestrian, Bicycle, and Equestrian Master Plan.

5.1 San Bernardino County General Plan

The San Bernardino County General Plan establishes the vision, framework for decision-making, and goals, policies, and implementation measures for San Bernardino County and for unincorporated communities throughout the county. Four of the eight elements in the General Plan relate to planning for pedestrians, bicycles, equestrians, and access to transit in Rim of the World: the Circulation and Infrastructure (CI) Element, the Open Space (OS) Element, the Land Use (LU) Element, and the Economic Development (ED) Element. Relevant goals, policies, and programs from the CI, OS, and LUS elements follow. Relevant goals, policies, and programs from the ED Element appear in Chapter 9.

Circulation and Infrastructure Element

The CI Element guides coordinated development of multimodal countywide transportation and infrastructure systems to meet the needs of people and businesses in the county. Goals CI 3 and CI 6 seek to reduce dependence on automobiles and promote increased use of nonmotorized modes of transportation.

Goal CI 3. The County will have a balance between different types of transportation modes, reducing dependency on the automobile and promoting public transit and alternate modes of transportation, in order to minimize the adverse impacts of automobile use on the environment.

Policy CI 3.1 Encourage the reduction of automobile usage through various incentive programs.

Programs

1. Provide a pattern of land use designations, along with appropriate development standards that facilitates development of local retail uses near residential uses,



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consistent with Smart Growth and New Urbanism Concepts in new development to reduce the number of automobile trips by providing neighborhood shopping facilities and connectivity through pedestrian and bicycle paths.

2. Promote and encourage the design and implementation of land uses, development standards, and capital improvement programs that maximize the use of public transit facilities and programs, and the availability of local retail uses accessible to local residents by walking or biking to reduce dependence on the automobile.

Goal CI 6. The County will encourage and promote greater use of non-motorized means of personal transportation. The County will maintain and expand a system of trails for bicycles, pedestrians, and equestrians that will preserve and enhance the quality of life for residents and visitors.

Policy CI 6.1 Require safe and efficient pedestrian and bicycle facilities in residential, commercial, industrial and institutional developments to facilitate access to public and private facilities and to reduce vehicular trips. Install bicycle lanes and sidewalks on existing and future roadways, where appropriate and as funding is available (see Figure 2-11A through Figure 2-11C of the Circulation and Infrastructure Background Report).

Policy CI 6.2 Utilize right-of-way and easement dedication and acquisition as tools to implement a County trail system.

Policy CI 6.3 Retain residual road dedication that may result whenever a road is changed to a lower highway designation, thus reducing the required right-of-way, until it is determined that such dedication will not be needed for bicycle, pedestrian or equestrian trail purposes.

Open Space Element

The intent of the Open Space Element is to guide protection and preservation of open space, recreation, and scenic areas. Trails are an integral component of outdoor recreation. They also make open space accessible for education, enjoyment, and conservation activities. Goal OS 2 focuses on the expansion of trail systems for pedestrians, equestrians, and bicyclists. Goal M/OS 2 focuses on open space in the mountain areas.

Goal OS 2. The County will expand its trail systems for pedestrians, equestrians, and bicyclists to connect with the local, state, and federal trail systems.

Policy OS 2.1 Provide a regional trail system, plus rest areas, to furnish continuous interconnecting trails that serve major populated areas of the County and existing and proposed recreation facilities through the regional trail system. The purpose of the County regional trails system will be to provide major backbone linkages to which community trails might connect. The provision and management of community and local trails will not be the responsibility of the regional trail system.

Programs

1. Provide equestrian, bicycling, and pedestrian staging areas consistent with the



CHAPTER 6. EXISTING CONDITIONS

6.1 Overall Built Environment

The Rim ATP plan area is predominantly made up of protected lands interspersed by rural towns. These place types are described in the Smart Mobility Framework published by Caltrans.¹ In the rural towns that make up the Rim ATP plan area, a Smart Mobility approach should focus on centrally located community-serving uses in walkable activity centers and applying a flexible approach to the design and operations of state highways, which function as Main Streets. In protected lands, a Smart Mobility approach includes recreational facilities to promote environmental stewardship, health and safety, and interregional connectivity and a robust economy. The existing built environment includes sixteen primary activity centers as illustrated in Figure 6-1.



¹ Smart Mobility Framework.

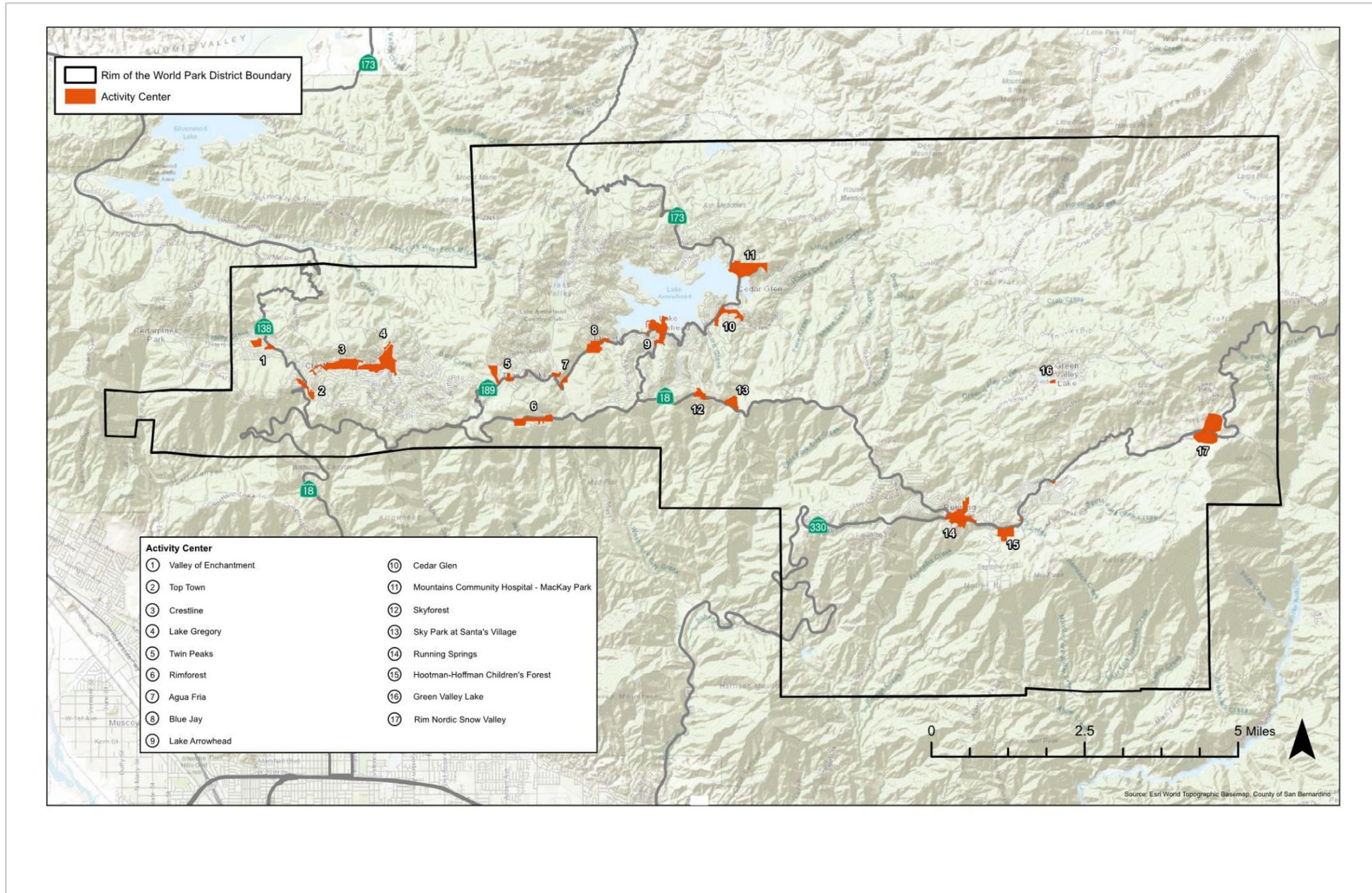
http://www.dot.ca.gov/hq/tpp/offices/ocp/documents/smf_files/SMF_handbook_062210.pdf



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Figure 6-1. Rim of the World Activity Centers





6.2 Existing Facilities

Roadway types and conditions

The Rim of the World Recreation and Park District is in unincorporated San Bernardino County. Local roadway widths are designated according to the County of San Bernardino Circulation Element. Several state highways are also located in the plan area. Both local and state highways are classified based on the Federal Highway Administration functional classification system. California state highways are owned and operated by Caltrans, whereas other roadways are owned and operated by the County of San Bernardino Public Works or Special Districts, or are roads open to the public but not owned or operated by any government agency.

Roadways in the plan area are predominantly two lanes. Major highways feature a striped median. In contrast, local roads that provide access to residential and recreational areas are unstriped. Roadway shoulders, where present, are generally narrow with no curbs; however, many roadways do not have shoulders due to topographic constraints. Due to the mountainous terrain, many roads have been constructed either by cutting into or by filling land onto the outside of existing slopes. Roadways constructed in this manner tend to be challenging to widen or otherwise modify.

In residential areas where automobiles travel slowly, pedestrians and cyclists generally experience lower levels of stress. However, such roadways are disjointed and typically only viable for recreational purposes and not for connecting to activity centers. On roadways that connect residential areas to activity centers and activity centers to one another, people drive automobiles at higher speeds, which tends to increase levels of stress and discourage people from walking or riding bicycles for trips to work, school, or commercial areas for errands and entertainment.

Existing Pedestrian Facilities

Examination of dedicated pedestrian facilities focused on villages and other activity centers. Among the activity centers in the district, only four have existing pedestrian facilities in public areas. In three of the villages, sidewalk areas are short, disconnected segments, less than a mile in length. Although Lake Arrowhead doesn't have any sidewalks, Lake Arrowhead Village is a car-free area with shops, restaurants, and amenities located in a pedestrian-friendly environment. Table 6-1 summarizes these facilities.



Table 6-1. Existing Pedestrian Facilities



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Village Area	Street/Segment	Total Length
Crestline	Lake Drive	0.66 miles
Blue Jay	SR-189	0.09 miles
Running Springs	Hilltop	0.04 miles
Lake Arrowhead	Car-free shopping and recreation areas	

Existing Bicycle Facilities

The Rim ATP planning area has no paved bicycle routes (Class I, Class II, Class III) and no dedicated bicycle parking in the public right-of-way.

USFS Unpaved Trails and Roadways

Existing recreational facilities in the National Forest include the Pacific Crest National Scenic Trail, Camp Creek National Recreation Trail, North Shore National Recreation Trail, as well as other local trails. In addition to nonmotorized trails, the National Forest includes an extensive network of existing and decommissioned roads. Existing roads may be enjoyed by both motorized and nonmotorized recreational users. Decommissioned roads have the potential to be rehabilitated as nonmotorized trails. Lastly, users have constructed single-track trails throughout the National Forest. While user-created trails reflect demand for trails, they are not part of the system network until being adopted by the National Forest and, therefore, could be removed without notice.

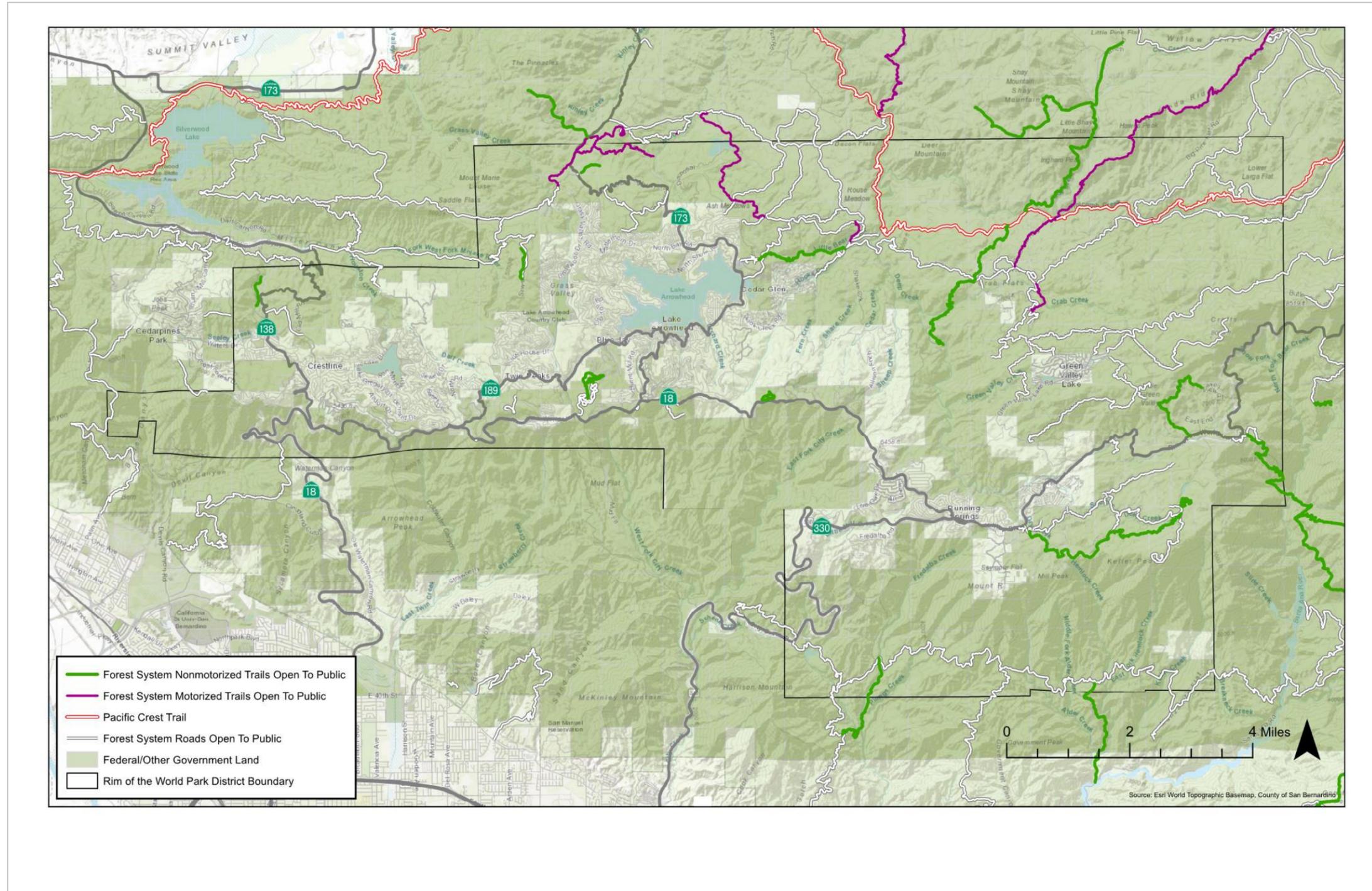




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Figure 6-2. USFS System Roads and Trails





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Existing Transit Routes and Facilities

Mountain Area Regional Transit Authority provides Mountain Transit services to the planning area. Mountain Transit buses are equipped with racks capable of transporting two bicycles.

Mountain Transit offers the following four fixed-route bus services, listed below and illustrated in Figure 6-3.

RIM Route 2: Nine eastbound and eight westbound trips between Lake Arrowhead and Cedarpines Park. Service hours are Monday to Friday, 6:15 a.m. to 7:05 p.m.

RIM Route 4: Nine eastbound and eight westbound trips between Lake Arrowhead and Running Springs. Service hours are Monday to Friday, 6:50 a.m. to 6:35 p.m.

RIM Off the Mountain: Long-distance service to San Bernardino from Lake Arrowhead, Twin Peaks, and Crestline. Operates four round trips per weekday and two round trips on Saturday.

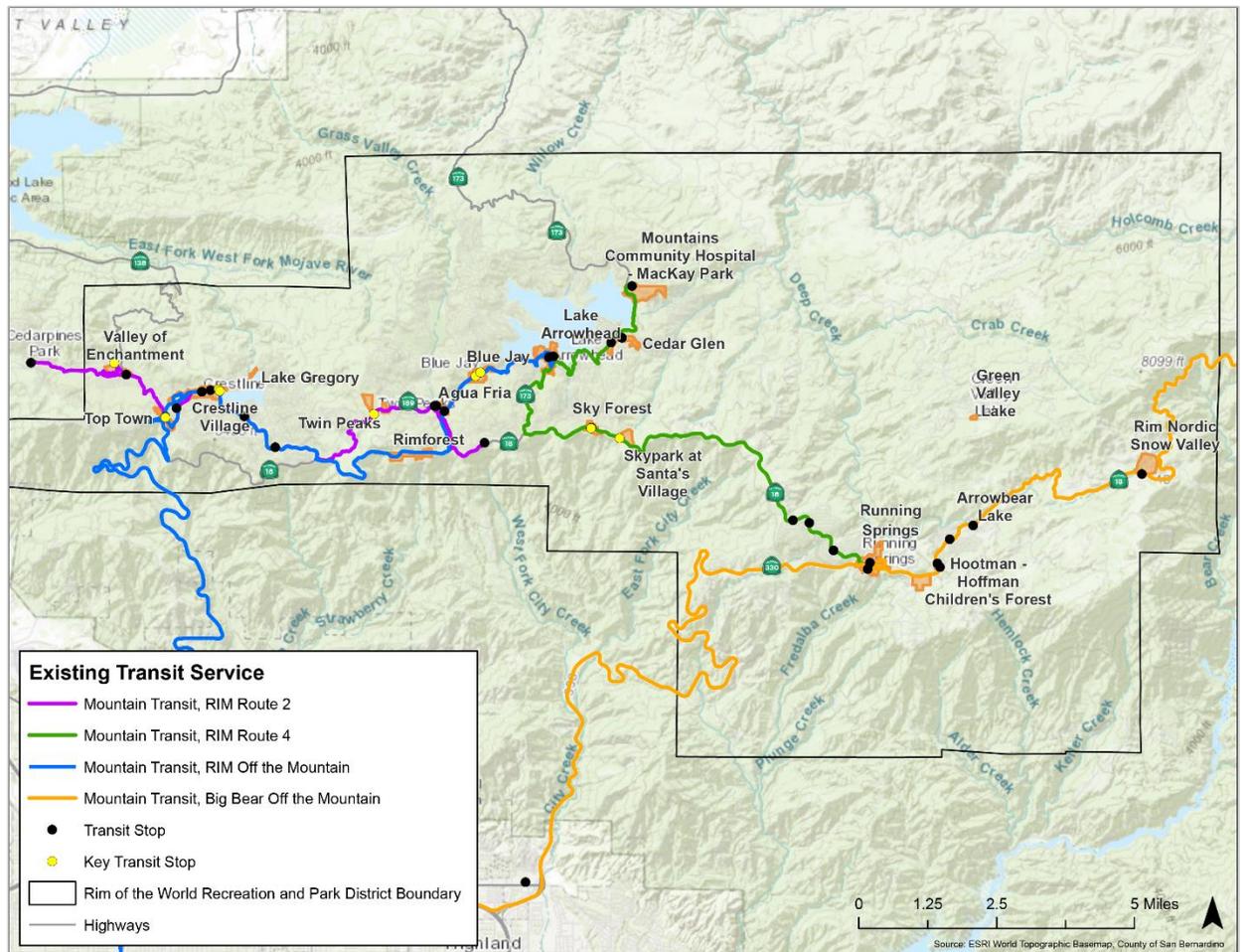
Big Bear Off the Mountain: Long-distance service to Highland and San Bernardino from Big Bear Valley and Running Springs. Operates three round trips per weekday, and two round trips each on Saturday and Sunday.



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Figure 6-3. Existing Transit Routes and Stops



In addition to the bus routes listed above, Mountain Transit offers the RIM Weekend Trolley and Dial-a-Ride. On weekends and holidays, the trolley connects villages across the mountaintop from Lake Gregory to Lake Arrowhead and gives residents and tourists a unique experience. Dial-a-Ride extends the reach of Mountain Transit’s fixed-route services. Seniors (60 years and older), persons with disabilities, and people who live more than three-quarters of a mile beyond existing fixed routes may schedule a trip with Dial-a-Ride.

6.3 Walking, Bicycling, and Transit Trips

Existing Pedestrian and Bicycle Trips

One of the primary goals of California’s ATP is to increase the number of trips people take by walking or biking to travel to work, schools, and for other reasons. To establish a baseline and evaluate future performance, ATPs estimate the number of existing pedestrian and bicycle trips.



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In the Rim of the World plan area, approximately 970 walking trips are taken each day to work, school, or to do errands. In contrast, approximately 310 people bike to work, school, or to do errands each day.² The number of walking and biking trips varies by community, day of the week, and season. While implementation of this plan cannot change temperature, moisture, fog, and other weather patterns, the Rim ATP is focused on improving the physical environment in a manner amenable to people who would otherwise walk and bicycle.

Existing Transit and School Bus Ridership

Mountain Transit served 42,060 riders in fiscal year (FY) 2014-2015, a 5.5 percent increase from FY 2013-2014. Table 6-2 shows ridership by service type.

Table 6-2. Mountain Transit FY 2014-2015 Ridership³

Fixed Route	Dial-a-Ride	Off the Mountain	Total
23,340	7,992	10,728	42,060

Existing Recreational Activity

Recreational activity is made up of a combination of residents and visitors who hike, mountain bike, horseback ride, snowshoe, cross-country ski, and more. The total number of people who participate in these activities is unknown. On a district-wide scale, collection of such data is a significant undertaking and beyond the scope of this plan. Nevertheless, anecdotal evidence indicates that a sizable portion of residents, second home owners, and visitors enjoy hiking, mountain biking, and horseback riding regularly. Moreover, with new business at SkyPark at Santa’s Village, the area is seeing a significant increase in mountain biking and is expected to see more with plans for summertime recreation at Snow Valley.

Education and Encouragement Programs

In the Rim of the World communities, no ongoing safety, education, or encouragement programs exist. However, in 2016 and 2017, the San Bernardino County Sheriff’s Department collaborated with the California Highway Patrol and others to host bike rodeos. The events included helmet distribution to those without. In addition, organizers gave away 25 bicycles in 2016 and 30 bicycles in 2017. Organizers distributed printed materials explaining such points as rules of the road and proper use of safety gear.

The first bike rodeo took place in Lake Gregory at the San Moritz lodge and attracted about 225 youth accompanied by family members or other caregivers. The second rodeo took place at

² Estimated trips by mode includes an estimate for daily commute as well as non-commuting trips. It is based on “journey to work” information collected by the US Census as part of the American Community Survey. The team adjusted industry standards to account for unique characteristics of the plan area, such as topography, weather, and development patterns, and were then applied them to “journey to work” to estimate the number of non-commuting trip types.

³ Mountain Transit Short Range Transit Plan 2016-2021 (October 2016).



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SkyPark at Santa's Village and attracted about 120 youth. The lower rate of participation was attributed to other community events scheduled on the same date and time. The organizers intend to continue the program in the future.

While individuals and organizations encourage community members to get outdoors to enjoy recreational activities, there are no formal programs that encourage walking, bicycling, and other modes of self-propelled transportation for commuting, trips to school, or other types of trips. Despite the lack of such programs, community residents are known to walk and bicycle for transportation purposes.

6.4 Collisions

Between 2006 and 2016, 106 pedestrian and bicycle-involved collisions occurred in the plan area. Of these collisions, 68 percent (72) involved pedestrians and 32 percent (34) involved bicyclists. In the past 10 years, collisions have been decreasing, from a high of 17 in 2008 to zero in 2016.⁴

Pedestrian-Involved Collisions

Of the 72 pedestrian-involved collisions from 2006 to 2016, the data show that 13 (or 18 percent) resulted in serious injuries and 2 (or 3 percent) involved fatalities. The highest concentrations of pedestrian-involved collisions occurred in five areas illustrated in Figure 6-4 and listed below:

- The vicinity of SR-138 in Valley of Enchantment
- Along SR-138 in Crestline
- Along Lake Drive between Alder Road and Lake Gregory Drive in Crestline
- Along SR-189 in Blue Jay
- Along SR-18 in Running Springs

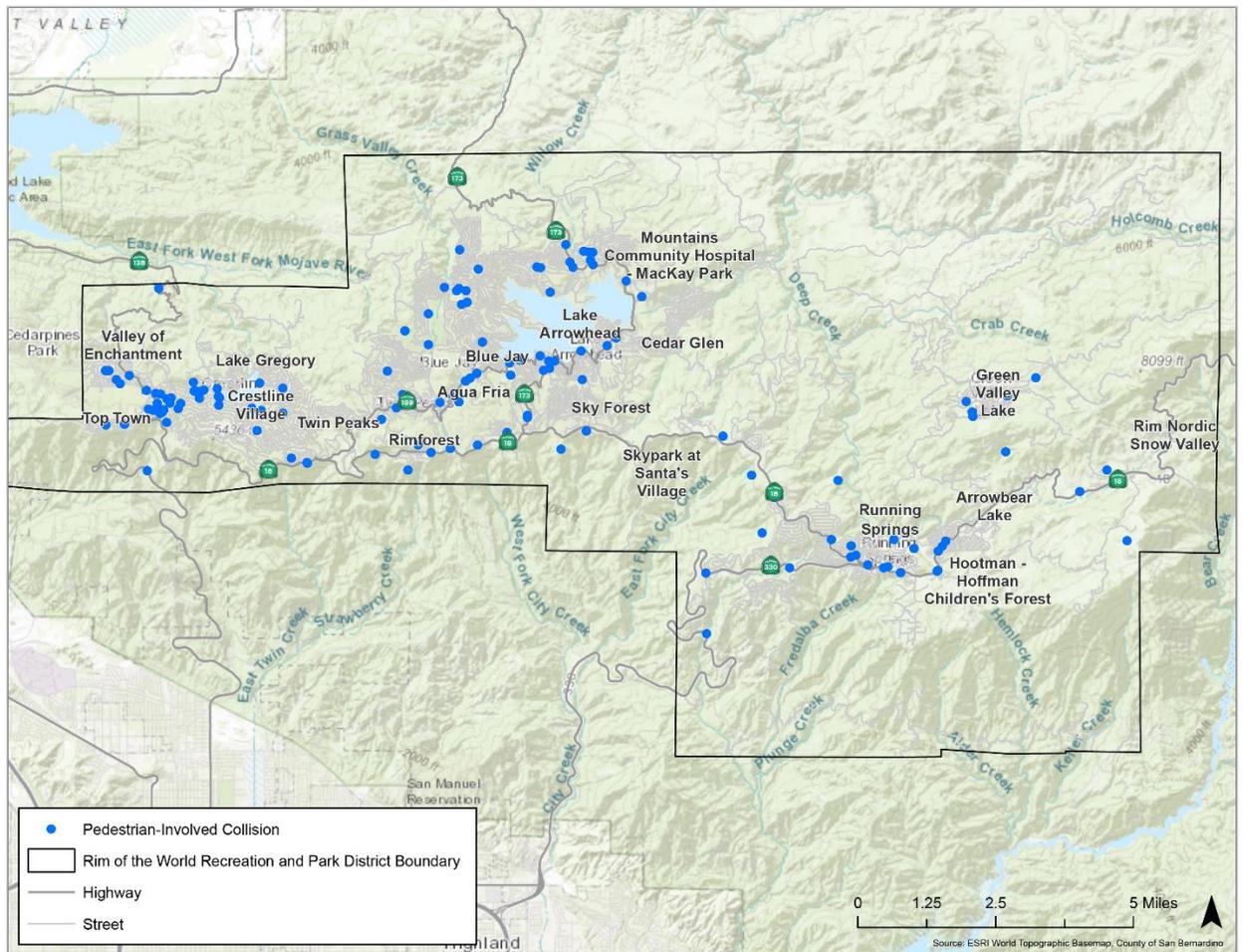
⁴ Data are from the California Highway Patrol's Statewide Integrated Traffic Records System (SWITRS). The system notes that its 2014–2016 data is new and may be revised.



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Figure 6-4. Pedestrian-Involved Collisions (2006-2016)



Bicycle-Involved Collisions

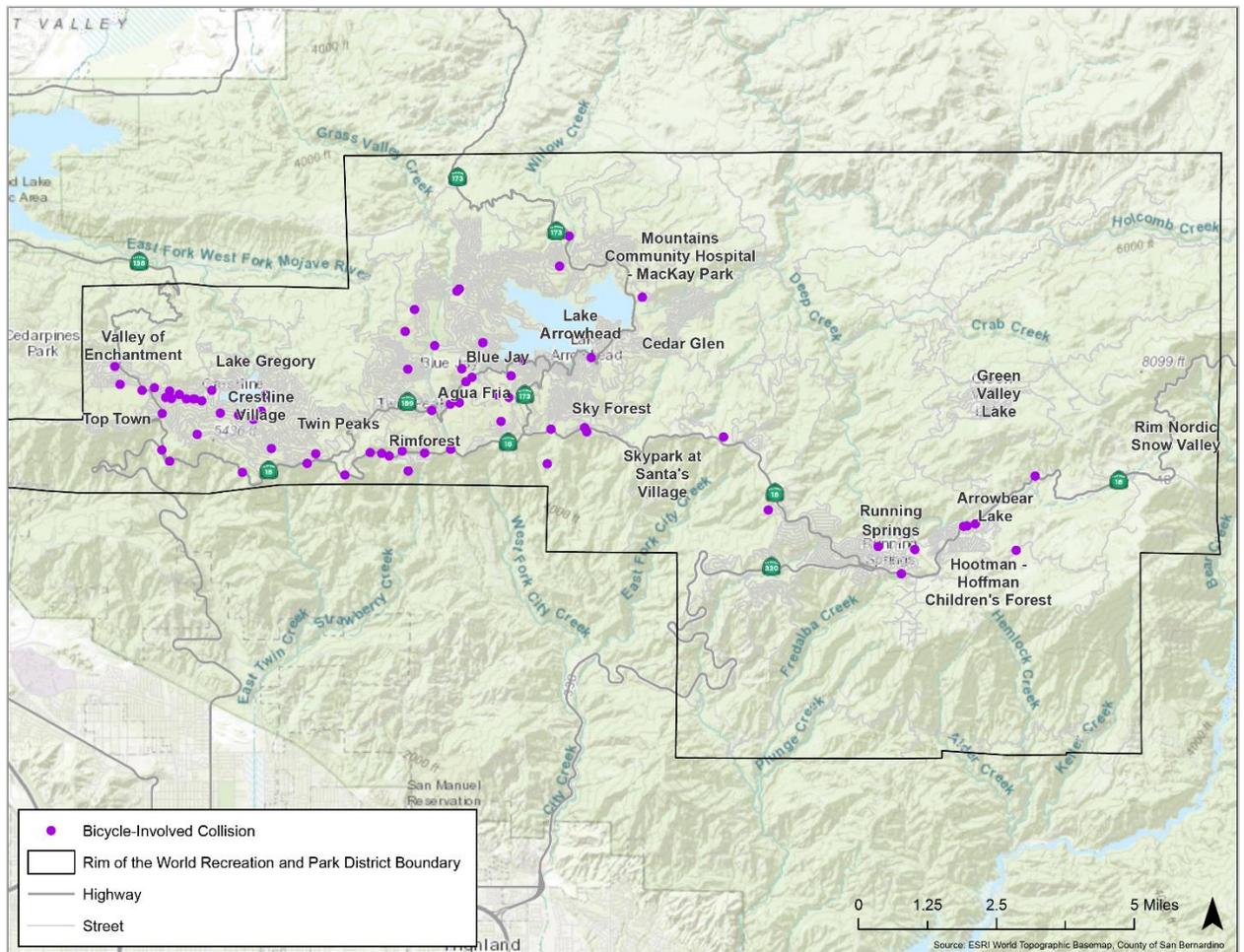
Of the 34 bicycle-involved collisions from 2006 to 2016, 7 (or 21 percent) resulted in serious injuries. No fatalities were reported. The highest concentrations of bicycle-involved collisions are in the Crestline area, primarily along residential streets. Many other bicycle-involved collisions occurred along major roads and highways throughout the area as shown in Figure 6-5.



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Figure 6-5. Bicycle-Involved Collisions (2006-2016)



Community Concerns

In 2016, the project team conducted a survey to identify perceived safety concerns in the plan area. The survey revealed higher levels of concern in the following locations:

- **SR-18 in Rimforest:** Although community members express concern, this is not one of the highest concentrations of collisions.
- **SR-18 in Running Springs:** Community members concerns are confirmed by data. This location is among the top five concentrations of pedestrian-involved collisions.
- **SR-138 in Crestline:** Community members concerns are confirmed by data. This location is among the top five concentrations of pedestrian-involved collisions.
- **SR-189 between Blue Jay and Lake Arrowhead:** Community members concerns are supported by data. SR-189 in Blue Jay is among the top five concentrations of pedestrian-involved collisions.



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- **SR-173 north of Cedar Glen:** Although community members express concern, this is not one of the highest concentrations of collisions.

All locations listed above are located on a state route. Four of the five are in commercial areas where automobiles are the dominant form of transportation. The fifth location (SR-173 north of Cedar Glen) is frequented by recreationalists and visitors and is adjacent to Lake Arrowhead Elementary School.

Perceptions of safety expressed by Rim ATP stakeholders and locations of collisions corroborate one another and indicate key areas where improvements for safety should be a top priority. These areas include Crestline, Twin Peaks, Rimforest, and Running Springs, as well as locations near schools such as Lake Arrowhead Elementary and Henck Intermediate School.



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master plan of regional trails and the trail route and use descriptions shown in Figures 2-11A through 2-11C of the Circulation Background Report.

2. Work with local, state, and federal agencies, interest groups and private landowners in an effort to promote an interconnecting regional trail system and to secure trail access through purchase, easements or by other means.

Policy OS 2.2 Utilize public funding mechanisms whenever possible to protect and acquire lands for open space uses.

Programs

1. Actively seek state, federal, and private grants for the purpose of financing open space and trail acquisition, construction, and operation.
2. Use general funds, user fees, proceeds from concession operations, and other sources that may be available to finance open space and trail acquisition, construction, and operation.
3. Include open space and trail acquisition and development in the County's Capital Improvement Programs.

Policy OS 2.3 Locate trail routes to highlight the County's recreational and educational experiences, including natural, scenic, cultural, and historic features.

Policy OS 2.4 Use lands already in public ownership or proposed for public acquisition, such as right-of-way for flood control channels, abandoned railroad lines, and fire control roads, for trails wherever possible, in preference to private property.

Policy OS 2.5 Encourage the dedication or offers of dedication of trail easements where appropriate for establishing a planned trails system alignment or where an established trail is jeopardized by impending development or subdivision activity.

Policy OS 2.6 Do not develop or open trails to public use until a public agency or private organization agrees to accept responsibility for their maintenance.

Policy OS 2.7 Monitor all dedicated public trails and/or easements on a continuing basis and maintain an up-to-date map of all existing and proposed dedicated public trail easements on the Open Space Overlay Map. Existing trail easements or alignments will be mapped in their correct positions; proposed alignments will be mapped in general locations. The Open Space Overlay Map will be reviewed during consideration of applications for permits or development approvals to ensure that new development does not result in loss of existing or potential public use of dedicated easements.

Policy OS 2.8 Where feasible, link local equestrian trails and hiking paths with other regional trails or routes.

Policy OS 2.9 Use active and abandoned road, utility, and railroad rights-of-way for non-vehicular circulation in all new development when found feasible.



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Policy OS 2.10 Require proposed development adjacent to trail systems to dedicate land for trailhead access points. Existing rights-of-way and surplus public properties should be utilized for these staging areas whenever possible.

Policy OS 2.11 Begin acquisition of trail easements or rights-of-way after a trail route plan has been adopted, unless a trail segment is to be acquired through dedication in conjunction with development activity or acts of philanthropy that occur prior to adoption of a route plan.

Policy OS 2.12 Establish an education program to communicate to the community an understanding of the trail system's goals and objectives and to convey aspects of trail use. Education in trail use etiquette and low impact use is a key measure towards the reduction of negative trail use impacts.

Policy OS 2.13 Establish an education program to acquaint potential trail users with safety considerations, especially for bicycle routes, and on the rules and regulations that apply when using specific trail segments. The primary purpose of this program will be to avoid threats to public safety and minimize accidents.

Policy OS 2.14 To expand recreational opportunities in the County, the County will utilize small parcels adjacent to flood control facilities for equestrian, pedestrian and biking staging areas. The County Department of Real Estate Services will contact the Regional Parks Department or other County open space agency prior to disposing of any surplus lands.

Goal M/OS 2. Improve and preserve open space corridors throughout the Mountain Region.

Policy M/OS 2.3 In the communities of Lake Gregory, Lake Arrowhead, Grass Valley Lake, Fawnskin and Big Bear City, establish a system of bicycle and hiking routes connecting major activity centers, where feasible.

Policy M/OS 2.4 Develop a system of bicycle routes to link new and existing residential areas with major activity and commercial centers.

Policy M/OS 2.5 Encourage the addition of bicycle routes whenever existing highways are widened or significant lengths of highways are improved.

Policy M/OS 2.6 Where appropriate, require pedestrian walkways in commercial, industrial and major multiple family residential developments.

Policy M/OS 2.7 Provide pedestrian linkages between adjacent commercial areas and adjoining residential areas, to encourage foot traffic and reduce automobile trips.

Policy M/OS 2.8 Where desired by the local community, establish a system of equestrian trails and facilities, where appropriate in individual neighborhoods.

Policy M/OS 2.9 Where feasible, link local equestrian trail and hiking paths with other regional trails or routes.



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Land Use Element

The General Plan Land Use Element establishes development policies and a land use plan for ultimate buildout of the county. Goals LU 5 and LU 6 are intended to align land use and transportation planning with communities where employment and housing are close together, thus reducing demand for automobiles, and where future development is planned to be located in existing communities.

GOAL LU 5. Reduce traffic congestion and air pollution and improve the quality of life for County residents by providing employment and housing opportunities in close proximity to each other.

Policy LU 5.2 Provide sufficient incentives to encourage development of areas designated for commercial and industrial uses to be developed to provide employment opportunities.

Programs

1. Develop a priority application process for commercial and industrial development that would improve the County's jobs/housing balance.

GOAL LU 6. Promote, where applicable, compact land use development by mixing land uses, creating walkable communities, and strengthening and directing development towards existing communities.

Policy LU 6.1 Mixed-use developments will be encouraged in unincorporated areas of the County for projects that have adequate acreage to accommodate different land uses while providing buffers and other mechanisms to minimize or avoid land use conflicts.

Policy LU 6.2 To expand opportunities for future employment centers in the unincorporated County, recruit industrial and commercial development to urban infill areas.

Programs

1. The County Economic Development Agency will provide information to prospective firms regarding targeted in-fill areas.

Policy LU 6.3 To support the expansion of opportunities for future employment, promote use of grants for upgrading infrastructure in urban infill areas.

Programs

1. Prioritize capital improvements and public works to upgrade urban infill areas, including supporting creation of improvement districts, except where prohibited by other regulations and policies.

Policy LU 6.4 To facilitate future development of employment centers, design incentive actions to be consistent and compatible with adopted applicable city sphere of influence policies and other regulations and policies.



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5.2. Community Plans

Each major community in unincorporated San Bernardino County has its own community plan, which is used to guide development and services in a way that complements the environment and culture of that community. The Rim ATP planning area aligns with three community plans: the Crest Forest Community Plan (CF), the Lake Arrowhead Community Plan (LA), and the Hilltop Community Plan (HT).

Common Goals and Policies

While many aspects of the community plans are different, the following goals and policies demonstrate a consistent commitment to walking, bicycling, and horseback riding in all Rim of the World mountain communities.

GOAL CF/LA/HT LU 2. Ensure that commercial and industrial development is compatible with the forest and mountain character and meets the needs of local residents and visitors.

Policy CF/LA/HT/LU 2.1 Concentrate future commercial development within existing commercial nodes, centralized areas, or neighborhood centers that are designed with the mountain character in mind to avoid strip commercial development along roads.

Policy CF/LA/HT/LU 2.2 In coordination with the community, develop site design standards for commercial development within the plan area to ensure that architectural detailing and signage are compatible with the mountain character of the community, to ensure that sites are designed to be more pedestrian-friendly, and to provide adequate parking and buffers between commercial and adjacent residential uses.

Policy LA/LU 2.7 Commercial recreation and tourist facilities should be located, designed, and controlled to protect the residential-recreation character of the area. This can be accomplished by limiting commercial tourist facilities to Lake Arrowhead Village, Blue Jay and Cedar Glen along State Highway 18.

GOAL CF/LA/HT CI 2. Ensure safe and efficient non-motorized traffic circulation within the community.

Policy CF/CI 2.1 Establish and coordinate a system of pedestrian and bicycle trails connecting residential areas, schools, recreational facilities, the National Forest and commercial activity centers. Promote safe and attractive crossings at logical points on major roads, and pursue opportunities to separate pedestrian and bicycle traffic from vehicular traffic particularly along SR-18, SR-138, and SR-189.

Policy LA/CI 2.1 Establish and coordinate a system of pedestrian and bicycle trails connecting residential areas to recreational facilities, the National Forest and commercial activity centers. Promote safe and attractive pedestrian and bicycle crossings at logical points on Circulation Element roads and, where feasible, pursue opportunities to separate pedestrian and bicycle traffic from vehicular traffic particularly along SR-18, SR-173 and SR-189.

Policy HT/CI 2.1 Establish and coordinate a system of pedestrian and bikeway trails connecting residential areas to recreational facilities, the National Forest, and downtown Running Springs.



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Promote safe and attractive crossings at logical points on major roads, and pursue opportunities to separate pedestrian and bicycle traffic from vehicular traffic particularly along SR-18 and SR-330.

Policy CF/LA/HT/CI 2.2 Provide pedestrian improvements in commercial activity centers to enhance safety, provide a high quality visitor experience, enhance the mountain character of the area, and reduce the need for vehicular travel.

Policy CF/HT/CI 2.3 Encourage the addition of bicycle routes whenever existing highways are widened or significant lengths of highways are improved.

Policy LA/CI 2.3 Research the feasibility of using excess right-of-way not needed for road construction for bicycle and pedestrian trails. Priority shall be given to providing trails within the right-of-way (or adjacent to) the following roadways:

- A. Work with Caltrans to establish bicycle trails along one side of State Highways 173 and 189 through the plan area. Encourage connections to trails outside the plan area.
- B. Provide trails along North Bay Road, Grass Valley Road, Hook Creek Road and Cumberland Road. Encourage connections to local and/or regional trails.

Policy LA/CI 2.4 Require school bus stop shelters as needed when road improvement or widening is required as part of an adjacent development.

GOAL CF/LA/HT/CI 4. Promote alternative modes of transportation.

Policy CF/LA/HT/CI 4.1 In coordination with the community, define the existing and future transportation needs as they may relate to transit for residents, employees and visitors in the mountain region. When transportation needs are defined, the Public Works Department shall conduct a feasibility study to determine the feasibility and cost-effectiveness of instituting alternative transportation recommendations.

Policy CF/LA/HT/CI 4.2 Evaluate additional service needs that could be provided by the Mountain Area Regional Transit Authority (MARTA) through coordination with MARTA, the County and residents of the mountain communities.

GOAL CF/LA/HT/OS 1. Ensure the preservation and proper management of National Forest lands within the Crest Forest/Lake Arrowhead/Hilltop Community Plan area.

Policy CF/LA/HT/OS 1.2 Work with USFS to explore land exchange opportunities that would provide additional areas for open space, recreational opportunities and watershed protection; and offer the community the first right of refusal on lands available for exchange prior to being offered to the general public.

GOAL CF/LA/HT OS 3. Establish a community-wide trail system.

Policy CF/LA/HT/OS 3.1 Support coordination between the community and the San Bernardino County Trails and Greenways Committee in their effort to develop and maintain a system of public trails for hiking, bicycling and horseback riding. Particular attention shall be given to



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providing safe and convenient travel, and where feasible provide connections to the local trail system.

Policy CF/LA/HT/OS 3.2 Establish a plan for the development of a local multi-purpose (pedestrian, bicycle, and equestrian) trail system within the plan area. The plan shall incorporate the following recommendations:

- A. Where feasible, pursue opportunities to separate pedestrian/bicycle/equestrian traffic from motorized vehicle traffic.
- B. Provide trail heads that link regional trails and those on National Forest System to those in recreational areas, residential areas, neighborhood trail systems, and commercial nodes.

Policy CF/HT/OS 3.3 When an approved trails plan is developed, require dedication of trail easements as a condition of approval for all development projects consisting of 5 or more residential lots, to facilitate community wide pedestrian accessibility and to capitalize on recreation opportunities within the plan area. The trail easement shall allow unobstructed trail access and provide connections to off site trails.

Policy LA/OS 3.3 When an approved trails plan is developed, require dedication of trail easements as a condition of approval for all residential development projects to facilitate community-wide pedestrian accessibility and to capitalize on recreation opportunities within the plan area. The trail easement shall allow unobstructed trail access and provide connections to off site trails.

Policy CF/OS 3.4 Review site plans to determine if residential and commercial uses are designed for pedestrian use. Where feasible, future developments shall contain an internal system linking residential areas, schools, recreational facilities, the National Forest and commercial activity centers.

Policy LA/HT/OS 3.4 Review site plans to determine if residential and commercial uses are designed for pedestrian use. Future developments shall contain an internal system linking residential areas, recreational facilities, the National Forest and commercial activity centers.

Policy CF/LA/HT/OS 3.5 Support the improvement and extension of United States Forest Service (USFS) trails by encouraging USFS to maintain existing trails and to develop new hiking and biking trails.

In addition to goals and policies, the community plans establish land use designations to guide future development.

Crest Forest Community Plan Land Use

The Crest Forest Community Plan area is predominantly designated single-family residential. In addition, the plan area includes land designated for resource conservation, multiple-family residential, various types of commercial, some industrial, institutional, and floodway. The resource conservation and floodway areas may be well suited for recreational pathways or segments of the intermountain trail



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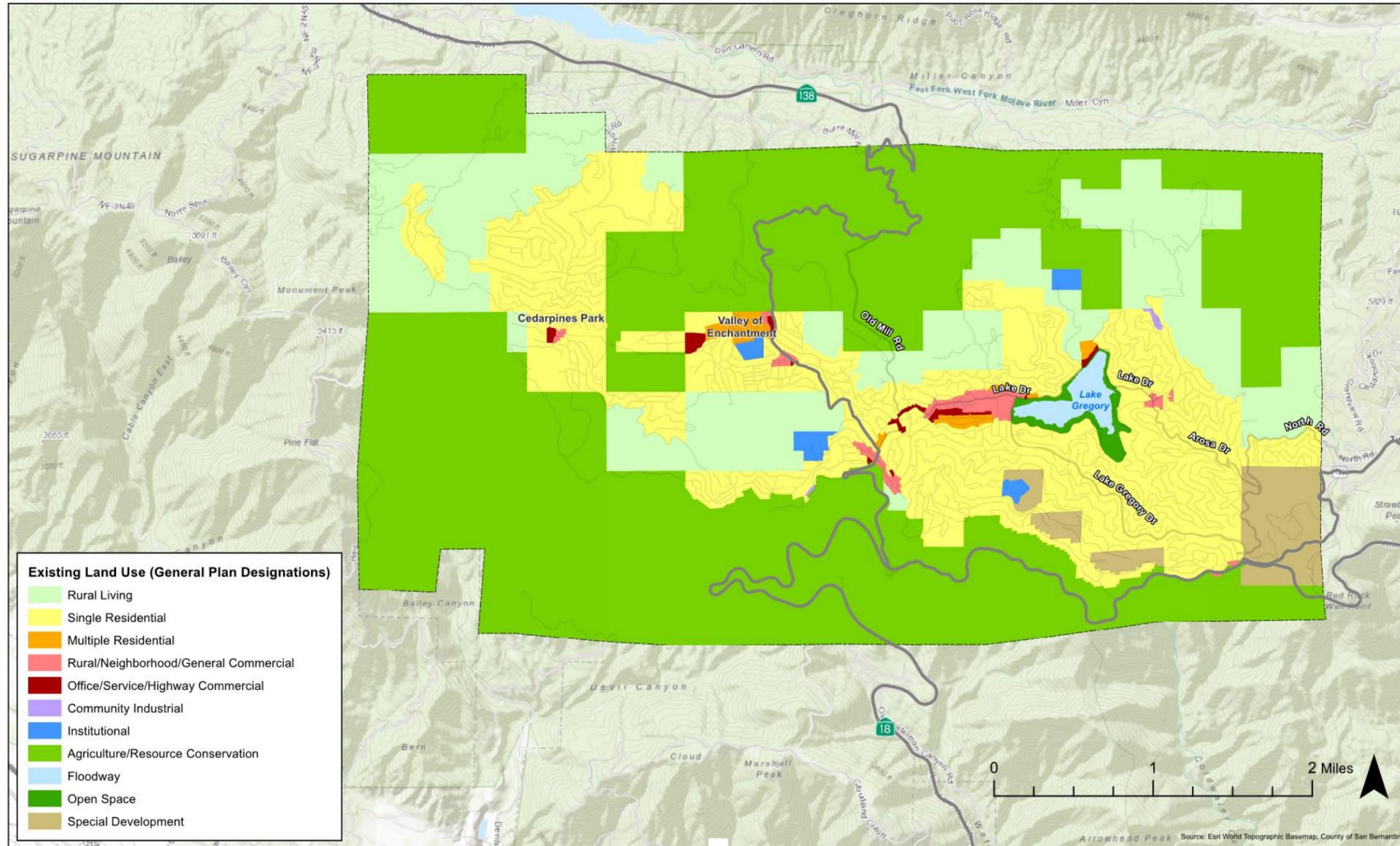
system. The multiple-family residential, commercial, industrial, and institutional uses are ideal opportunities to align active transportation and transit with land use.



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Figure 5-1. Crest Forest Community Plan Land Use





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Lake Arrowhead Community Plan Land Use

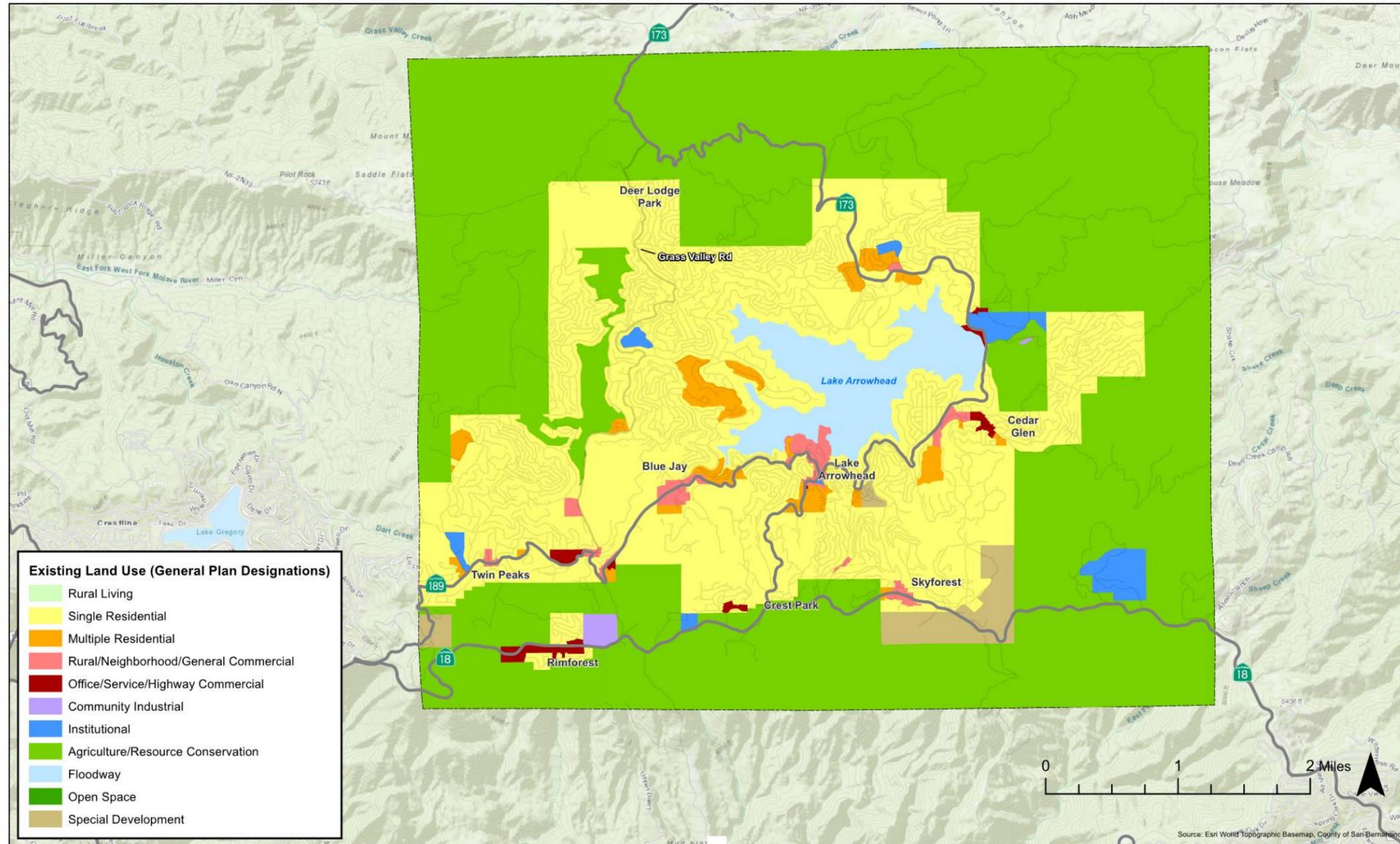
The Lake Arrowhead Community Plan area is made up of a similar composition of land uses with single-family residential being the most prominent, and resource conservation and floodway areas well suited to recreational and intermountain trail systems. The commercial land uses are concentrated in four villages: Blue Jay, Lake Arrowhead, Cedar Glen, and Rim Forest



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Figure 5-2. Lake Arrowhead Community Plan Land Use





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Hilltop Community Plan Land Use

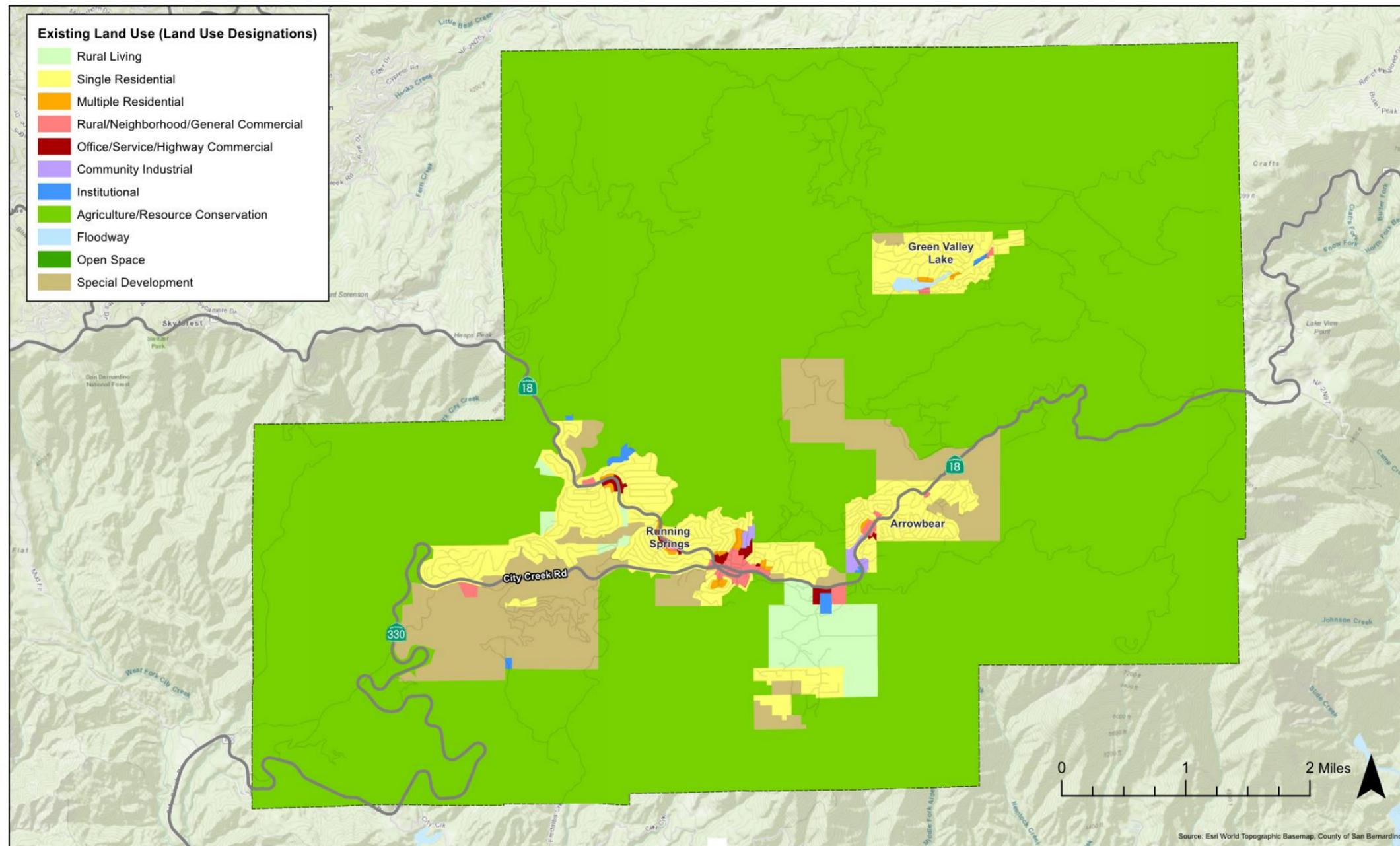
The Hilltop Community Plan area is similar to the Lake Arrowhead and Crest Forest plan areas. However, Hilltop has a larger percentage of and more interface with the National Forest. Beyond the National Forest, the plan area is composed of single-family residential, resource conservation, multiple-family residential, various types of commercial, institutional, and floodway. While commercial uses are located in other parts of the Hilltop area, commercial uses are predominantly in the village of Running Springs, which is an important hub for transit and other alternative modes of transportation.



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Figure 5-3. Hilltop Community Plan Land Use





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5.3 San Bernardino County Non-Motorized Transportation Plan

The San Bernardino County Non-Motorized Transportation Plan (NMTP) was adopted in 2001 and most recently updated in 2014. The plan identifies the existing active transportation network and provides an overview of bicycle planning as well as policies, implementation actions, and programs to guide expansion, maintenance, enhancement, and funding of the active transportation system. The plan is primarily focused on the bikeway system, with goals to increase access, travel, accommodation, and safety for all users in the county.

The NMTP includes the Rim of the World communities where portions of 21 roads are proposed Class II bicycle facilities. These proposed improvements are listed in the table below and illustrated in **Figure 5-4: San Bernardino County Non-Motorized Transportation Plan Map of Bicycle Facilities**, including the ROTW ATP Area.

Table 5-1. Proposed Bicycle Improvements included in the San Bernardino County Non-Motorized Transportation Plan

Street/Path	From	To	Class	Length (mi.)	Cost Estimate
Arosa D. (1296)	Dart Canyon Rd.	North Rd.	II	1.17	\$58,500
Bear Springs Rd. (1287)	SR 18	SR 189	II	1.22	\$61,000
Crest Forest Dr. (1300)	Crestline Rd.	SR 18	II	3.35	\$167,500
Daley Canyon Rd. (1288)	SR 189	SR 18	II	0.54	\$27,000
Fern Dr. (857)	Crest Forest Dr.	Lake Dr.	II	0.41	\$20,500
Grass Valley Rd. (1290)	SR 189	SR 173	II	4.70	\$235,000
Kuffel Canyon Rd. (1293)	SR 173	SR 18	II	1.23	\$61,500
Lake Dr. (1299)	SR 138	Dart Canyon Rd.	II	2.39	\$119,500
Lake Gregory Dr. (1297)	Lake Dr.	SR 189	II	2.21	\$110,500
Live Oak Dr. (853)	SR 330	SR 18	II	1.64	\$82,000
North Rd. (1295)	Lake Gregory Dr.	SR 189	II	2.14	\$107,000
North Bay Rd. (854)	SR 173	Golden Rule Ln.	II	0.35	\$17,500
San Moritz Dr. (856)	Lake Gregory Dr.	Arosa Dr.	II	1.60	\$80,000
SR 138 (1301)	Waters Dr.	Lake Dr.	II	0.96	\$48,000
SR 173 (1292)	Loch Leven Rd.	Kuffel Canyon Rd.	II	0.63	\$31,500
SR 18 (1289)	Bear Springs Rd.	Daley Canyon Rd.	II	0.43	\$21,500
SR 18 (1298)	Crest Forest Dr.	Lake Gregory Dr.	II	0.15	\$7,500
SR 189 (1294)	North Rd.	Bear Springs Rd.	II	0.21	\$10,500
SR 189/Blue Jay CTF (1291)			II	0.90	\$45,000
SR 189/Lakes Edge Rd. (1302)	Blue Jay CTF	Loch Leven Rd.	II	1.78	\$89,000
Waters Dr. (858)	Crest Forest Dr.	SR 138	II	1.60	\$80,000

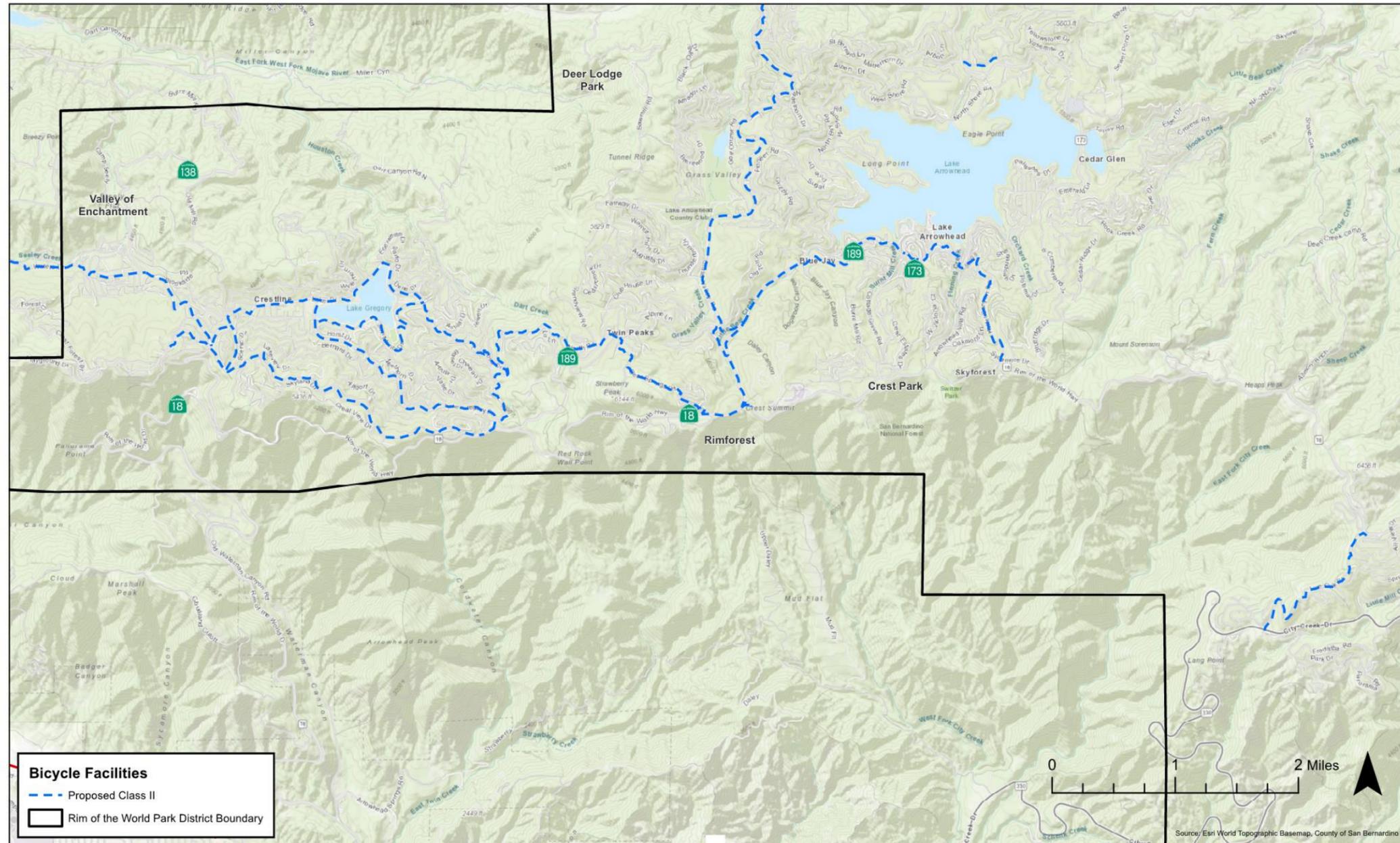
As part of the plan development, the projects included in the NMTP were considered and recommendations were made to modify and add projects as warranted



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Figure 5-4: San Bernardino County Non-Motorized Transportation Plan Map of Proposed Bicycle Facilities in the ROTW ATP Area





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5.4 San Bernardino National Forest Land Management Plan

The Rim of the World ATP project area is located within the San Bernardino National Forest. The Mountaintop Ranger District manages the majority of the forest lands in the project area and a small portion is managed by the Front Country Ranger District.

The Land Management Plan for the San Bernardino National Forest was adopted in 2006 with a 10- to 15-year planning horizon. Part 2 of the Land Management Plan includes the San Bernardino National Forest (SBNF) Strategy, wherein Arrowhead is one of several Place-Based Programs. The Arrowhead Place, as it is called in the SBNF Strategy, is a broad area that extends far beyond the Lake Arrowhead community and includes the entire Rim of the World area. Although the SBNF Strategy recognizes that facilities and trails in the Arrowhead Place need maintenance and improvements to meet public demand and manage impacts to resources, the Land Management Plan does not include any proposed trail improvements in the Arrowhead Place.

5.5 Bikeway and Trail Plans of Neighboring Jurisdictions

Existing and proposed improvements in the Big Bear Valley Pedestrian, Bicycle, and Equestrian Master Plan were considered in the development of the Rim ATP. The proposed improvements in Chapter 7 are intended to connect at the Big Bear dam and through the National Forest.

In addition, the Rim ATP includes paved routes intended to connect to Silverwood Lake State Recreation Area and unpaved trails that may connect to jurisdictions at the base of the mountains, including the cities of Highland, San Bernardino, Hesperia, and Victorville, and the Town of Apple Valley as well as other tourist areas adjacent to the USFS San Bernardino National Forest, such as land belonging to the San Manuel Band of Mission Indians.



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CHAPTER 7. PROPOSED IMPROVEMENTS

This chapter describes, maps, and lists proposed pedestrian, bicycle, access to transit, and safe routes to school improvements, organized by community. The proposed improvements included in this chapter are not prioritized; see Chapter 11 for a discussion of prioritization. The projects are the result of a collaborative effort between the project team, community members, and stakeholders. The projects are conceptual in nature and require further analysis. In many cases design and engineering will be necessary prior to construction. To support consideration of future improvements, this chapter also provides optional facility types and enhancements.

7.1 Pedestrian Facilities

Pedestrian improvements primarily include crossings and sidewalks. They are focused in activity centers and near schools, as these locations tend to have higher levels of pedestrian activity. In general, pedestrian improvements are proposed in locations that would allow greater mobility within and adjacent to activity centers and schools, while minimizing any disruptions to the natural aesthetic of each area. Pedestrian crossings may also be used by bicyclists.

The lists of pedestrian projects included in the Rim ATP are the result of multiple steps. First, the project team performed site visits to examine conditions and to identify prospective improvements. Based on input from the first phase of public outreach, the project team prepared a map and list of conceptual improvements. The final steps included presentations of concepts at Community Workshop #2, revisions, and a final presentation of concepts at Community Workshop #3 to confirm the list and map of proposed concepts to incorporate into the Rim ATP. In some cases, community members expressed demand for improvements in constrained environments. Where project team members determined that such projects were infeasible due to narrow roadways, limited sight distance, or other constraints, off-road facilities may be more practical and are described in Chapter 8.

When considering design of pedestrian projects, improvement types and enhancements in Table 7-1 should be evaluated for feasibility and public support. Throughout the plan area, trees directly abutting roadways and other existing conditions would make installation of a sidewalk cost prohibitive. Moreover, residents in rural or mountainous areas often prefer roadways without sidewalks. Therefore,



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the list of proposed sidewalks should be carefully evaluated through street view applications, windshield surveys, and public outreach. In addition, controlled pedestrian crossing locations are required to meet certain factors described in the California Manual on Uniform Traffic Control Devices (CMUTCD) before installation is permitted. The conditions at proposed pedestrian crossing locations will need to be evaluated against controlled pedestrian crossing warrant criteria found in the CMUTCD.

Table 7-1. Pedestrian Improvement Types

Improvement	Definition	Example
Advance Warning Signs at Pedestrian Crossings	Alerts motorists to potential pedestrians in the roadway.	
Sidewalk, curb and gutter	Improves safety by providing pedestrians a separated path of travel.	
Pedestrian Countdown Timers	Aids pedestrians crossing the street with visible and audible signals counting down the time remaining to cross.	
Controlled Bicycle/Pedestrian Crossing	Requires automobiles to stop, allowing pedestrians to cross in a controlled environment.	
Pedestrian Bulbouts	Reduces the crossing distance at intersections and provides traffic calming.	



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Improvement	Definition	Example
Pedestrian Curb Ramps	Assists pedestrians, including the visually and physically impaired, enter and exit crossings.	
Median Refuge Island	Allows pedestrians to cross one direction of traffic at a time when gaps in traffic permit.	

On the following pages, proposed pedestrian facilities appear by named communities in the three San Bernardino County Community Plan areas.

Crest Forest Community Plan area

The Crest Forest area includes four named communities, which are also identified as activity centers: Valley of Enchantment, Top Town, Crestline, and Lake Gregory.

Valley of Enchantment

Improved pedestrian facilities for Valley of Enchantment include sidewalks and a shared pedestrian/bicycle crossing. Sidewalks are intended to enhance connectivity to Valley of Enchantment Elementary School; to two existing Mountain Transit bus stops, one at the northeast corner of the school campus and a second at the Valley of Enchantment Mobile Home Park; and to commercial areas along Waters Drive and SR-138 bus stop. The shared pedestrian/bicycle crossing is meant to increase safety for students and people accessing nearby commercial or residential areas.

The proposed pedestrian improvements are listed in Table 7-2 and shown in Figure 7-2.

Table 7-2. Proposed Pedestrian Improvements in Valley of Enchantment

Street/Path/Location	From	To	FACILITY
SR-138 (north side)	Waters Drive	Brookside Road	Sidewalk
Waters Drive (south side)	Spruce Drive	SR-138	Sidewalk
Spruce Drive (west side)	Fir Lane	Waters Drive	Sidewalk
Fir Lane (both sides)	Spruce Drive	Elm Drive	Sidewalk



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Street/Path/Location	From	To	FACILITY
Seeley Lane (west side)	Fir Lane	Byron Road	Sidewalk
SR-138 at Waters Drive	n/a	n/a	Shared Pedestrian/Bicycle Crossing

Top Town

In Top Town, sidewalks are located to enhance connectivity to commercial areas along Crest Forest Drive near SR-138 and to connect Top Town to the commercial areas of Crestline. crossing Shared pedestrian/bicycle crossing should enhance safety for people crossing SR-138 to access nearby commercial and residential neighborhoods. These improvements are listed in Table 7-3 and shown in Figure 7-3.

Table 7-3. Proposed Pedestrian Improvements in Top Town

Street/Path/Location	From	To	FACILITY
Crest Forest Drive (both sides)	S. Village Lane	Fern Drive	Sidewalk
Fern Drive (both sides)	Crest Forest Drive	Lake Drive	Sidewalk
Lake Drive (both sides)	Fern Drive	Pioneer Camp Road	Sidewalk
SR-138 at Crest Forest Drive	n/a	n/a	Shared Pedestrian/Bicycle Crossing

Crestline Village

Lake Drive through Crestline Village is an amalgamation of old and newer development. Ideally, a Specific Plan would be adopted with development and design standards that could realize a unique vision for the commercial area. As an ATP, this document does not plan for place-making, but recommendations are included in Chapter 9 regarding Economic Development. The area includes a significant length of sidewalk in places where no curb separates vehicular traffic from parking areas. In the existing conditions, vehicles park parallel, perpendicular, and at acute angles to the highway interrupting the flow of pedestrians. A Specific Plan could also establish standards for the roadway and incorporate spaces for people to walk and bicycle; however, the Rim ATP may be implemented prior to adoption of another development-related document. Regardless of when pedestrian improvements are implemented, proposed sidewalks and crossings should be designed by locals in collaboration with Caltrans, applying context sensitive solutions and including a positive barrier between nonmotorized and motorized traffic. Where parking is necessary along the street, sidewalks should be located between the parking areas and the buildings or away from street.

Sidewalks are proposed for the full length of Lake Drive through the commercial area and a paved trail is



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proposed along the creek south of the commercial corridor. The improvements are intended to enhance connectivity and pedestrian safety by filling gaps in the existing sidewalk and provide pathways to access Mountain Transit bus stops. Five shared pedestrian/bicycle crossings are also proposed to encourage people to walk across the street at designated locations. The improvements are listed in Table 7-4 and shown in Figures 7-1.

Table 7-4. Proposed Pedestrian Improvements in Crestline

Street/Path	From	To	FACILITY
Lake Drive (both sides)	Pioneer Camp Road	Lake Gregory Drive	New/Infill Sidewalk
Lake Drive at Springwater Road	n/a	n/a	Shared Pedestrian/Bicycle Crossing
Lake Drive at Knapps Cutoff	n/a	n/a	Shared Pedestrian/Bicycle Crossing
Lake Drive at Old Mill Road	n/a	n/a	Shared Pedestrian/Bicycle Crossing
Lake Drive at Fern Drive	n/a	n/a	Shared Pedestrian/Bicycle Crossing
Lake Drive at Pioneer Camp Road	n/a	n/a	Shared Pedestrian/Bicycle Crossing
Crestline Creek Trail	Friendly Lane	Forest Shade Road	Multi-Use Path

Lake Gregory

This plan includes a proposed shared pedestrian/bicycle crossing near the Crestline Sanitation District to improve access to the public restroom on the north side of Lake Drive for those using the recreational trail around Lake Gregory. The crossing is shown in Figure 7-1 and listed in Table 7-5. Unpaved connections are possible from Lake Gregory to the Pacific Crest Trail, Silverwood Lake, Pilot Rock, Miller Creek, and other areas. These connections could be accomplished through partnership with San Bernardino County Regional Parks and the Crestline Sanitation District as both agencies are landowners in the potential corridor. These connections should be explored through efforts described in Chapter 8.



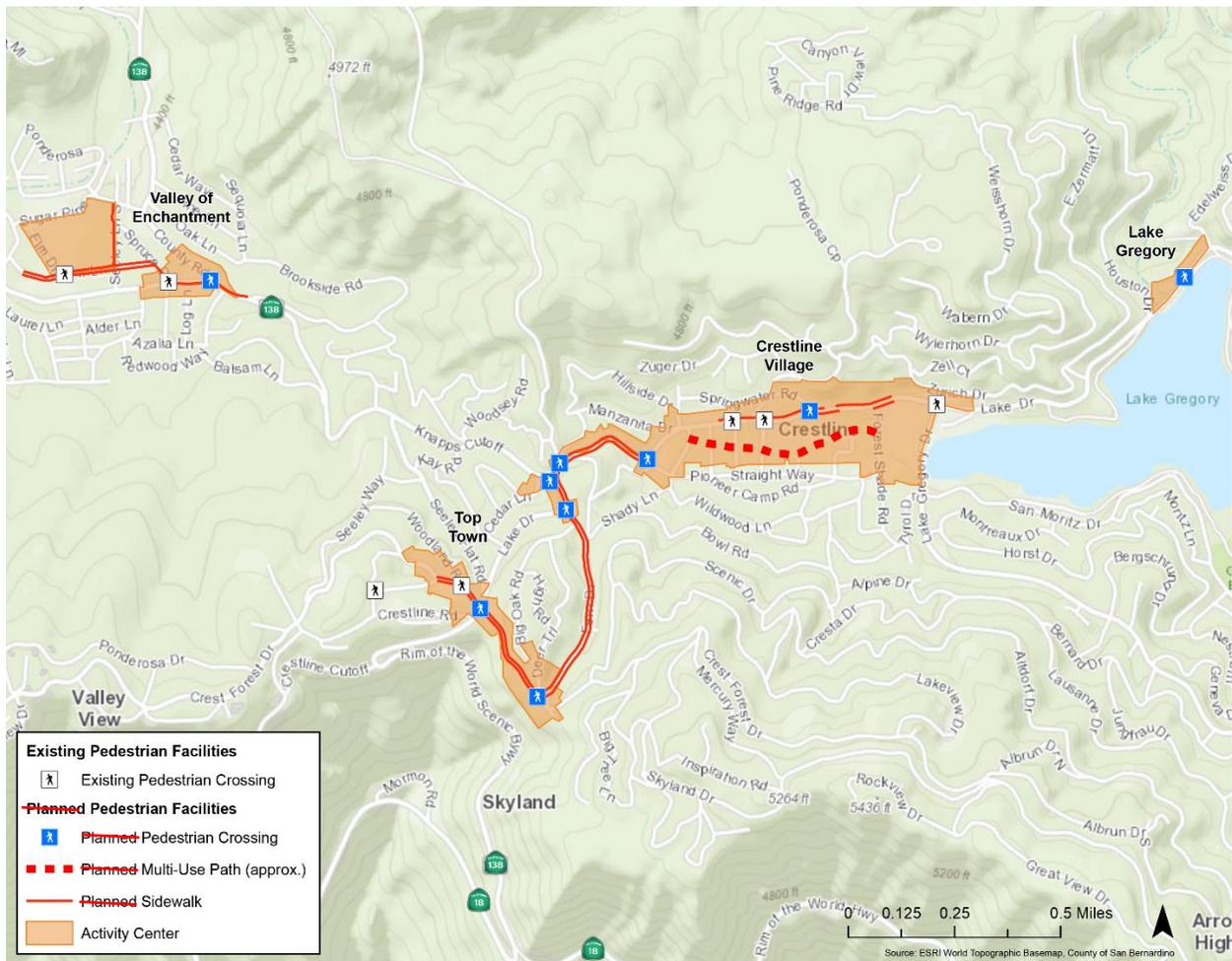
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Table 7-5. Proposed Pedestrian Improvements in Lake Gregory

Street/Path	From	To	FACILITY
Lake Drive near Crestline Sanitation District	n/a	n/a	Shared Pedestrian/Bicycle Crossing

Figure 7-1. Crest Forest Proposed Pedestrian Improvements



Lake Arrowhead Community Plan Area

The Lake Arrowhead Community Plan Area includes seven named communities, which are also activity centers: Twin Peaks, Rimforest, Agua Fria, Blue Jay, Lake Arrowhead, Skyforest, and Cedar Glen. In addition, the Rim ATP has identified the vicinity of Mountains Community Hospital and Mackay Park as an eighth activity center.



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Twin Peaks

Sidewalks and shared pedestrian/bicycle crossings are proposed in Twin Peaks. The sidewalks are intended to enhance connectivity between the commercial area near Rose Lane and the bus stop at the intersection of Grandview Road. The shared pedestrian /bicycle crossings are intended to improve pedestrian safety for people accessing nearby commercial and residential areas. The improvements are listed in Table 7-6 and shown in Figure 7-2.

Table 7-6. Proposed Pedestrian Improvements in Twin Peaks

Street/Path	From	To	FACILITY
SR-189 (south side)	Mile Pine Road/Rose Lane	Glen View Lane	Sidewalk
SR-189 (north side)	Grandview Road	Glen View Lane	Sidewalk
SR-189 at Rose Lane	n/a	n/a	Shared Pedestrian/Bicycle Crossing

Rimforest

A sidewalk and two shared pedestrian/bicycle crossing are proposed in Rimforest. The sidewalk is intended to enhance connectivity between the commercial area and the Mountain Transit bus stop on SR-18. A significant length of sidewalk is proposed in a section along SR-18 where vehicles park perpendicular to the highway. During the design process, careful consideration should be given to circulation patterns for people on foot and people driving cars. One option would be to place the sidewalk between the cars and the buildings. Another option would be to redesign the parking area and accommodate sidewalks in the process. The shared pedestrian/bicycle crossings are located to enhance safety for people walking to businesses in the commercial corridor. The proposed improvements are listed in Table 7-7 and shown in Figure 7-2.

In addition to these on-street improvements, unpaved improvements should also be considered to create linkages between Rimforest, Agua Fria, and Twin Peaks. The USFS District Office near Rimforest is included as a recommended trailhead and Rim ATP stakeholders should work with the USFS San Bernardino National Forest through the efforts described in Chapter 8 to determine the most appropriate pathways between the three communities.

Table 7-7. Proposed Pedestrian Improvements in Rimforest

Street/Path	From	To	FACILITY
SR-18 (south side)	Approximately 26415 SR-18	Pine Avenue (east)	Sidewalk



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Street/Path	From	To	FACILITY
SR-18 at Pine Ave (east)	n/a	n/a	Shared Pedestrian/Bicycle Crossing
SR-18 at Bear Springs Road/Black Foot Trail	n/a	n/a	Shared Pedestrian/Bicycle Crossing

Agua Fria

Proposed improvements in Agua Fria include a sidewalk and shared pedestrian/bicycle crossings. The sidewalks are intended to enhance connectivity and access to the commercial areas as well as the Crest Forest Fire Department and existing transit bus stops along SR-189. The shared pedestrian/bicycle crossings should enhance pedestrian safety for people seeking to access nearby commercial and residential neighborhoods. The proposed improvements are listed in Table 7-8 and shown in Figure 7-2.

Table 7-8. Proposed Pedestrian Improvements in Agua Fria

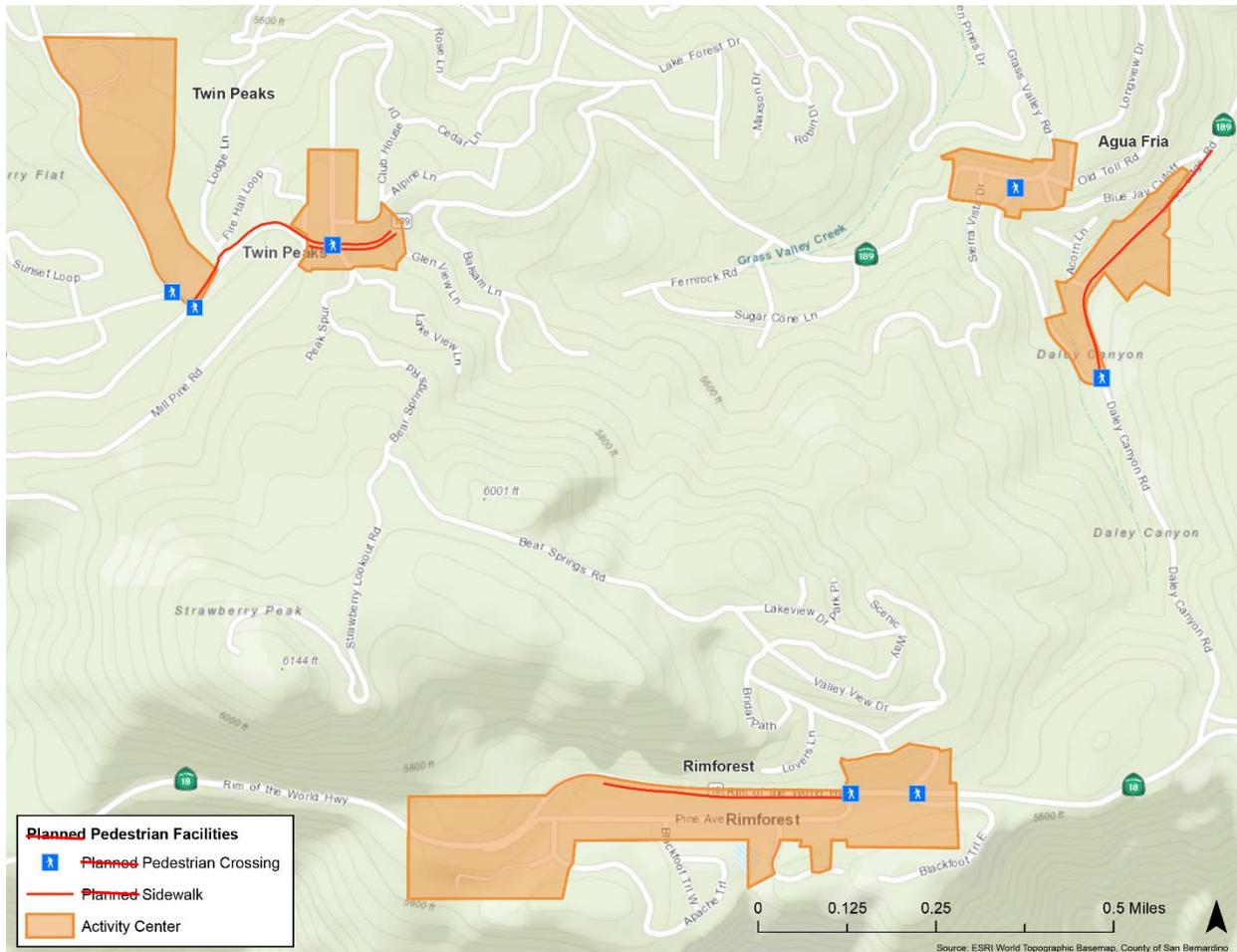
Street/Path	From	To	FACILITY
SR-189	Daley Canyon Road	Blue Jay Cutoff	Sidewalk
SR-189 at Grass Valley Road	n/a	n/a	Shared Pedestrian/Bicycle Crossing
SR-189 at Daley Canyon Road	n/a	n/a	Shared Pedestrian/Bicycle Crossing



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Figure 7-2. Twin Peaks, Rim Forest, and Agua Fria Proposed Pedestrian Improvements



Blue Jay

Sidewalks are proposed on both sides of SR-189 in Blue Jay. These extend pedestrian improvements in both directions from an existing shared pedestrian/bicycle crossing and Mountain Transit bus stop and offer pathways to the library, Jensen’s grocery store, the movie theater, and other commercial businesses. The proposed sidewalks are listed in Table 7-9 and shown in Figure 7-3.

Table 7-9. Proposed Pedestrian Improvements in Blue Jay

Street/Path	From	To	FACILITY
SR-189 (north side)	Existing private sidewalk at approximately 27221 CA-189	North Bay Road	Sidewalk
SR-189 (south side)	27187 CA-189	North Bay Road	Sidewalk



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Lake Arrowhead

Sidewalks and one shared pedestrian/bicycle crossing are proposed in Lake Arrowhead. They are intended to provide improved connections between residential areas and the village and to improve access to an existing Mountain Transit bus stop. In addition, improvements are proposed for two existing shared pedestrian/bicycle crossings (SR-173 at Village Road and SR-189). The improvements are listed in Table 7-10 and shown in Figure 7-3.

Table 7-10. Proposed Pedestrian Improvements in Lake Arrowhead

Street/Path	From	To	FACILITY
SR-173 (both sides)	Lake Arrowhead Community Church	Lake Arrowhead Village	Sidewalk
SR-189 (north side)	SR-173	Village Bay	Sidewalk
SR-189 at Village Bay	n/a	n/a	Shared Pedestrian/Bicycle Crossing
SR-173 at Village Road and SR-189	n/a	n/a	Shared Pedestrian/Bicycle Crossing
SR-173 at Torrey Road	n/a	n/a	Shared Pedestrian/Bicycle Crossing

Skyforest

Sidewalks and pedestrian crossings are proposed in Skyforest. They are proposed to promote safety and provide connections between parking areas and the Mountain Transit bus stop to the post office and commercial businesses in the area. The proposed improvements are listed in Table 7-11 and shown in Figure 7-3.

Table 7-11. Proposed Pedestrian Improvements in Skyforest

Street/Path	From	To	FACILITY
SR-18 (south side)	Approximately 28561 Rim of the World Highway	E Rim Drive (bus stop)	Sidewalk
SR-18 (north side)	Approximately 28598 Rim of the World Highway	Approximately 28626 Rim of the World Highway (bus stop)	Sidewalk

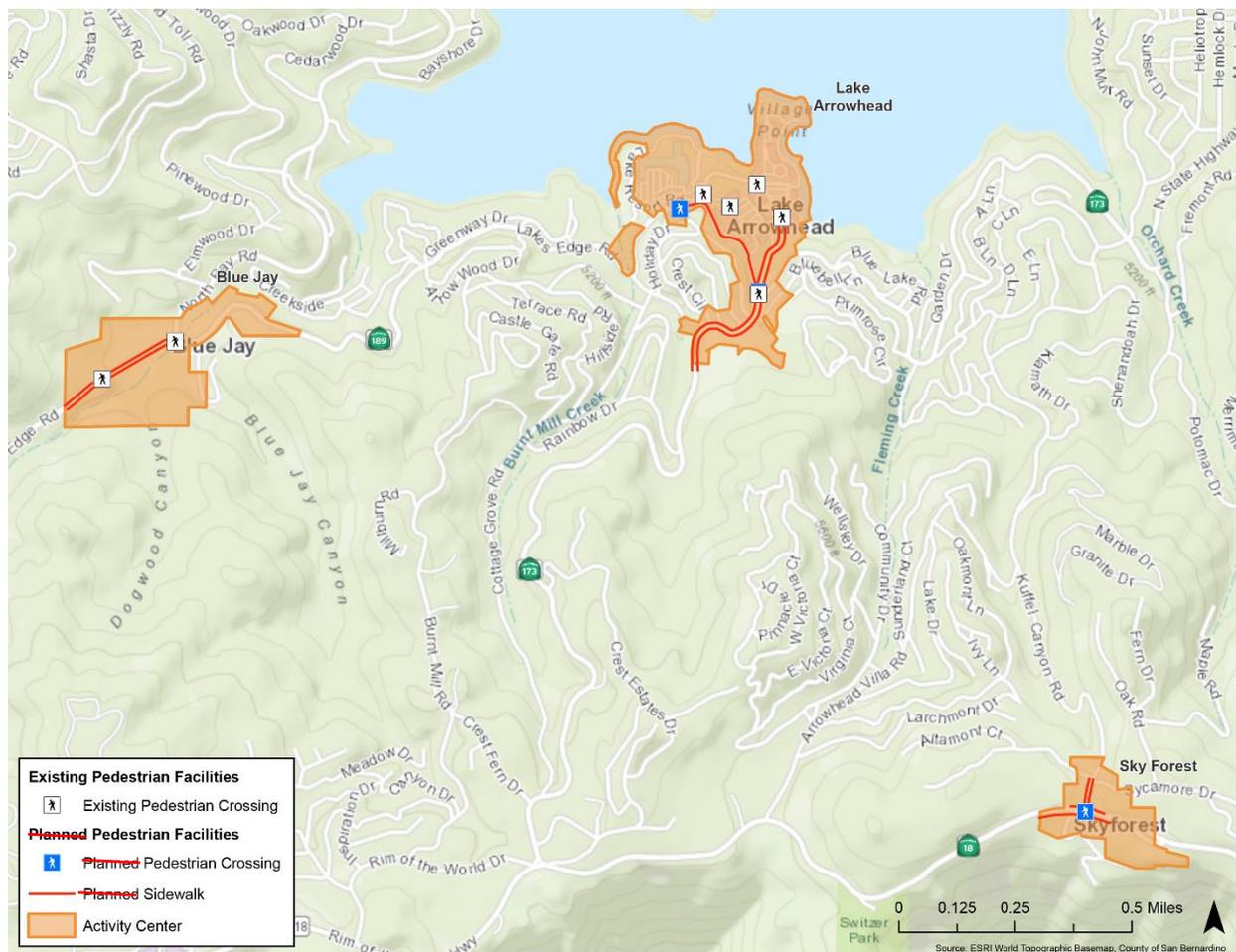


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Street/Path	From	To	FACILITY
Kuffel Canyon Road (both sides)	SR-18	Sycamore Drive	Sidewalk
SR-18 at Kuffel Canyon Road	n/a	n/a	Shared Pedestrian/Bicycle Crossing
SR-18 at SkyPark	n/a	n/a	Shared Pedestrian/Bicycle Crossing

Figure 7-3. Blue Jay, Lake Arrowhead, and Skyforest Proposed Pedestrian Improvements



Cedar Glen

Sidewalks and a pedestrian crossing are recommended in two commercial areas of Cedar Glen. These would connect commercial and residential areas in Cedar Glen, including businesses along SR-173 and Hook Creek Road. They also would improve access to two Mountain Transit bus stops. The pedestrian



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crossing is intended to enhance pedestrian safety for people walking to the bus stops or to the commercial areas. Pedestrians currently use a worn path between a parking lot, which services the post office and RB’s Steakhouse) and the portion of Hook Creek in front of the Cedar Glen Malt Shop. A Class I facility or a trail is not proposed at this time without further analysis and resulting reconfiguration of the parking lot. The proposed improvements are listed in Table 7-12 and shown in Figure 7-4.

During a future update, an additional Class III route should be considered to connect from Cedar Glen to Splinters Cabin, which offers connection to the Pacific Crest Trail beyond the historic attraction. This consideration should be made in conjunction with emergency response professionals and volunteers who respond to a high rate of calls in and around Aztec Falls.

Unpaved connections may be possible from Cedar Glen to MacKay Park by way of neighborhood streets (such as Oak Drive, Lakeview Drive, and Lilac Way) and new trails through land currently owned by CSD 70 and Wildhaven Ranch. Consideration of these connections should be made in consultation with local residents.

Table 7-12. Proposed Pedestrian Improvements in Cedar Glen

Street/Path	From	To	FACILITY
SR-173 (east side)	Fremont Road	Sunset Drive	Sidewalk
Hook Creek Road (north side)	SR-173	Lakeview Drive	Sidewalk
SR-173 at Hook Creek Road	n/a	n/a	Shared Pedestrian/Bicycle Crossing

Vicinity of Mountains Community Hospital and MacKay Park

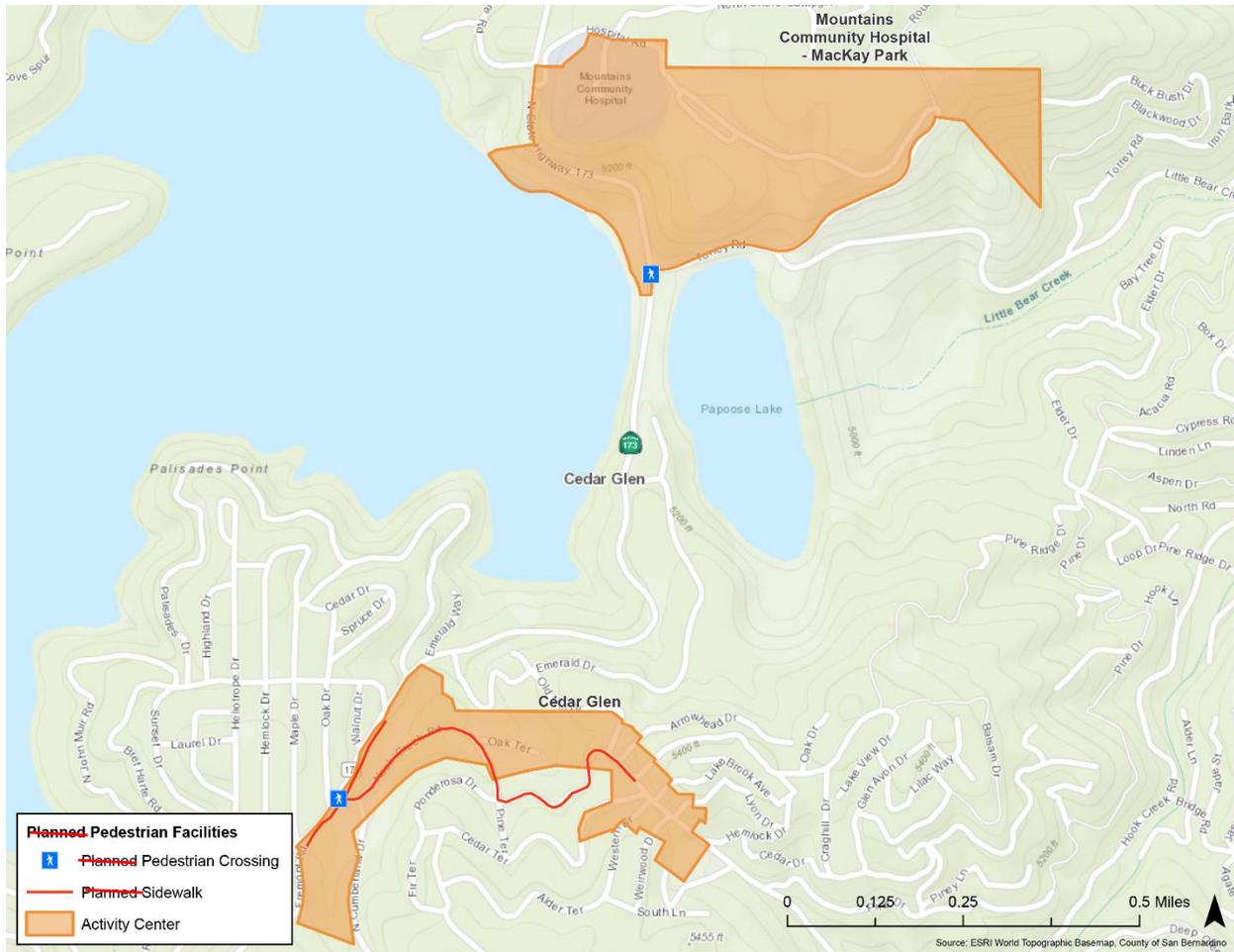
A shared pedestrian/bicycle p crossing is proposed to help pedestrians make connections between MacKay Park, the Arrowhead Lake Association, and the parking area adjacent to Dam Lake. The proposed crossing is listed in Table 7-13 and shown in Figure 7-4.

Table 7-13. Proposed Pedestrian Improvements in Vicinity of Mountains Community Hospital and MacKay Park

Street/Path	From	To	FACILITY
SR-173 at Torrey Road	n/a	n/a	Shared Pedestrian/Bicycle Crossing



Figure 7-4. Cedar Glen, Mountains Community Hospital, MacKay Park Proposed Pedestrian Improvements



Hilltop Community Plan Area

On-street pedestrian improvements are proposed in two key activity centers in the Hilltop area: Running Springs and Green Valley Lake. See Chapter 8 for off-road connections which are recommended to connect the Children’s Forest and Arrowbear Lake to other destinations.

Running Springs

The village of Running Springs is well suited for pedestrian improvements, accompanied by other village improvements to vehicular circulation, parking, streetscape enhancements, and façades. These would be best addressed through an integrated plan such as a Specific Plan. Proposed sidewalk and pedestrian improvements should improve connections and enhance pedestrian safety between commercial and residential areas and to Mountain Transit bus stops. The library, banking, a grocery store, a park, the farmers market, and several retail stores and restaurants are all within walking distance of each other and should be connected for pedestrian access. Moreover, Running Springs offers opportunities for



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visitors to park in a village area and walk to trailheads for access into the San Bernardino National Forest. The proposed sidewalks and crossings are listed in Table 7-14 and shown in Figure 7-5.

In the future, consideration should be given to signed walkways from Hunsaker Way to Deep Creek Narrows. Consideration of these connections should be made in consultation with local residents and emergency responders who receive regular calls from the Deep Creek area.

Table 7-14. Proposed Pedestrian Improvements in Running Springs

Street/Path	From	To	FACILITY
SR-18 (north side)	View Drive	Mountain View Drive	Sidewalk
SR-18 (south side)	Palo Alto Way	Holiday Lane	Sidewalk
Holiday Lane	SR-18	Hunsaker Way	Sidewalk
Commercial Way	Palo Alto Way	SR-18	Sidewalk
Palo Alto Way (west side)	SR-18	Existing Sidewalk	Sidewalk
Palo Alto Way (west side)	Existing Sidewalk	Whispering Pines Drive	Sidewalk
Palo Alto Way (east side)	SR-18	Whispering Pines Drive	Sidewalk
Whispering Pines Drive (north side)	Palo Alto Way	Hunsaker Drive	Sidewalk
SR-330	Hunsaker Drive	Soutar Drive	Sidewalk
Hunsaker Way (both sides)	SR-330	West Drive	Sidewalk
SR-18 at Palo Alto Way	n/a	n/a	Shared Pedestrian/Bicycle Crossing
Palo Alto Way at Commercial Way	n/a	n/a	Shared Pedestrian/Bicycle Crossing
SR-18 at Mountain View Drive	n/a	n/a	Shared Pedestrian/Bicycle Crossing
SR-330 at Hunsaker Way	n/a	n/a	Shared Pedestrian/Bicycle Crossing

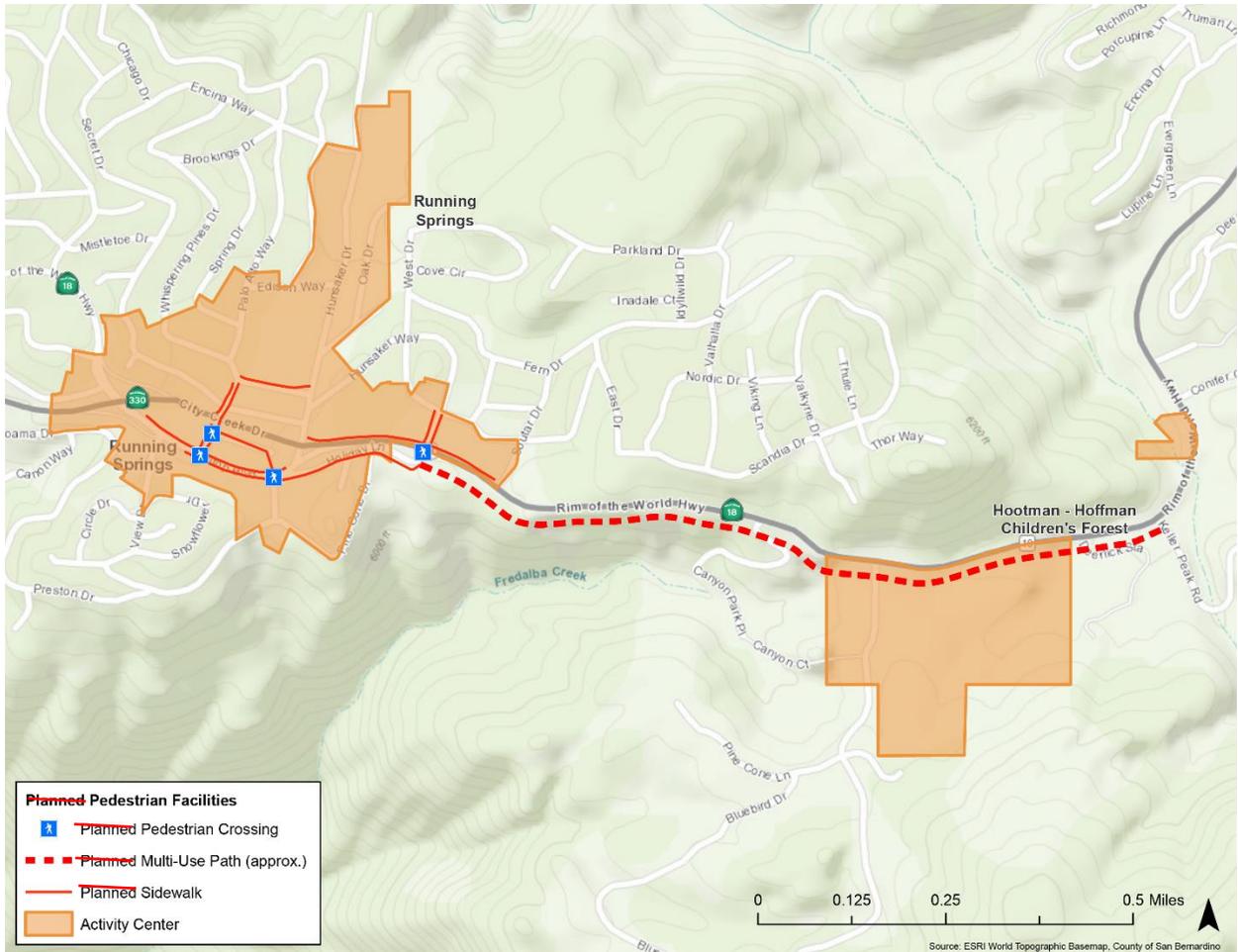


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Street/Path	From	To	FACILITY
Running Springs Path (south of SR-18)	Hunsaker Way	Keller Peak Road	Multi-Use Path

Figure 7-5. Running Springs Proposed Pedestrian Improvements



Green Valley Lake

A sidewalk and a pedestrian crossing are proposed in Green Valley Lake. These improvements are intended to enhance connectivity between residential and commercial areas on Green Valley Lake Road and Angeles Drive and enhance pedestrian safety for people accessing the lake or nearby commercial areas. The proposed improvements are listed in Table 7-15 and shown in Figure 7-6.

Existing user created trails demonstrate extensive opportunities to connect from Green Valley Lake to many areas in the USFS San Bernardino National Forest, including the potential to tie into Deep Creek, Crab Flats, Crafts Peak, Little Green Valley Lake, the Pacific Crest Trail, and beyond. However, community members have expressed concern about significant increases in local traffic. Therefore,



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these potential pathways should be considered in collaboration with local residents and the USFS San Bernardino National Forest.

Table 7-15. Proposed Pedestrian Improvements in Green Valley Lake

Street/Path	From	To	FACILITY
Green Valley Lake Road (south side)	Angeles Drive	Robin Drive	Sidewalk
Green Valley Lake Road midblock between Angeles Drive and Robin Drive	n/a	n/a	Shared Pedestrian/Bicycle Crossing

Figure 7-6. Green Valley Lake Proposed Pedestrian Improvements





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7.2 Bicycle Facilities

Proposed bicycle improvements primarily include new Class II and Class III facilities, crossing enhancements, and bicycle storage. Class II facilities and bicycle storage locations are focused within activity centers and near schools, as these locations tend to have higher levels of cycling activity, and are the locations where many bicycle trips begin or end.

The lists of bicycle projects included in the Rim ATP are the result of multiple steps that parallel those for pedestrian projects. First, the project team compiled a list of projects included in the San Bernardino County Non-Motorized Transportation Plan and routes regularly used by local road cyclists and for the Tour de Lake Arrowhead. Second, the project team performed site visits to examine conditions and the feasibility of previously proposed and to identify other prospective improvements. Based on input from the first phase of public outreach and the results of steps one and two, the project team prepared a map and list of conceptual improvements. The final steps included presentations of concepts at Community Workshop #2, revisions, and a final presentation of concepts at Community Workshop #3 to confirm the list and map of proposed concepts to incorporate into the Rim ATP. In some cases, community members expressed demand for improvements in constrained environments. Where project team members determined that such projects were infeasible due to narrow roadways, limited sight distance, topology, or other constraints, off-road facilities may be more practical and are described in Chapter 8.

Like pedestrian improvements, bicycle improvements are recommended in locations that would allow greater mobility within and between activity centers and near schools. At locations where bicycle crossings are proposed, pedestrians may use the crossing as well.

The Rim ATP is focused on an interconnected system of pathways across a large area. At this scale, proposed bicycle facilities are conceptual in nature and will require further analysis to assess overall feasibility. When considering design of bicycle projects, improvement types and enhancements in Table 7-16 should be evaluated.

Table 7-16. Bicycle Improvement Types

Improvement	Definition	Example
<p>Class II Bikeway (Bicycle Lane)</p>	<p>Provides a striped lane for one-way bicycle travel on a street or highway.</p>	



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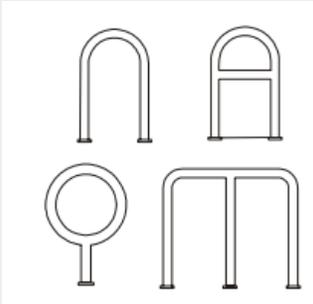


Improvement	Definition	Example
Class III Bikeway (Bicycle Route)	Allows shared use with pedestrians or motor vehicle traffic. Typically designated by “share the road” signs and sharrows symbols painted on the road.	
Bike Box	Allows bicyclists to move to the head of the queue at signalized intersections, increasing visibility to drivers.	
Bicycle Signal Heads	Improves traffic operations at busy intersections through an electrically powered traffic control device for bicycles.	
Intersection Crossing Markings	Guides bicyclists on a safe, direct path through intersections.	



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Improvement	Definition	Example
Median Refuge Island	Allows bicyclists to cross one direction of traffic at a time when gaps in traffic permit.	
Bike Racks	Open-air devices to which a bicycle is locked and ideal for short-term parking. Recommended racks include the inverted “U” rack, the “A” rack, and the post and loop.	
Bike Lockers	Secure storage containers often used for long-term parking. Can be controlled with traditional key systems or technology-based subscription systems (e.g., e-lockers, park-by-phone).	

Crest Forest Community Plan area

The Crest Forest community includes four named communities, which are also activity centers: Valley of Enchantment, Top Town, Crestline, and Lake Gregory.

Valley of Enchantment

In Valley of Enchantment, Class III routes, a shared pedestrian/bicycle crossing and a bicycle storage facility are proposed. The bicycle route guides bicyclists as they ride through the commercial area and connect to other destinations. The shared pedestrian/bicycle crossing is intended to serve both pedestrians and bicyclists to increase visibility for motorists and provide a designated crossing for students en route to Valley of Enchantment Elementary. Lastly, the storage facility will offer bicyclists a secure place to store their bicycles when working in or visiting commercial businesses. The proposed improvements are listed in Table 7-17 and shown in Figure 7-8.



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Table 7-17. Proposed Bicycle Improvements in Valley of Enchantment

Street/Path	From	To	FACILITY
SR-18	Waters Drive	Old Mill Road	Class III
Waters Drive	Crest Forest Drive	SR-138	Class III
SR-138 at Waters Drive	n/a	n/a	Shared Pedestrian/Bicycle Crossing
Waters Drive at Log Lane	n/a	n/a	Bicycle Storage

Top Town

Top Town is a busy commercial area with a wider right-of-way to accommodate a dedicated bicycle lane, also known as a Class II bicycle lane, which is generally appropriate for a central area. Class III bicycle routes are also proposed on several key roads leading into Top Town. The Class II and III routes are intended to enhance connections for cyclists between Top Town and nearby communities, including Valley of Enchantment and Crestline. Shared pedestrian/bicycle crossings are intended to be combined with pedestrian crossings to enhance safety for both cyclists and pedestrians. Bicycle storage facilities are proposed to provide cyclists with a place to securely store their bicycles while working or visiting commercial businesses. The proposed improvements are listed in Table 7-18 and shown in Figure 7-8.

Table 7-18. Proposed Bicycle Improvements in Top Town

Street/Path	From	To	FACILITY
Crest Forest Drive	South Village Lane	23493 Crest Forest Drive	Class II
Crest Forest Drive	23493 Crest Forest Drive	SR-18	Class III
Crest Forest Drive	Waters Drive	South Village Lane	Class III
SR-138	Lake Drive	Waters Drive	Class III
Fern Drive	Crest Forest Drive	Lake Drive	Class III
SR-138 at Crest Forest Drive	n/a	n/a	Shared Pedestrian/Bicycle Crossing
Crest Forest Drive at Fern Drive	n/a	n/a	Shared Pedestrian/Bicycle Crossing



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Street/Path	From	To	FACILITY
Lake Drive at Woodland Road	n/a	n/a	Bicycle Storage

Crestline Village

Class II and Class III bicycle routes are proposed in Crestline. The Class II lane is intended to provide bicyclists with a dedicated lane in an area where motorists often travel at speeds above the posted limit. The Class III route would connect bicyclists from Crestline to other destinations, including Top Town and Lake Gregory. Shared pedestrian/bicycle crossings are intended to be shared with pedestrian crossings. A new shared pedestrian/bicycle crossing is proposed to enhance safety in a popular crossing location. Lastly, two bicycle storage stations are proposed to provide bicyclists a place to securely store their bicycles when working at or visiting local businesses. The proposed improvements are listed in Table 7-19 and shown in Figure 7-8.

Off-road opportunities exist between Crestline and Lake Silverwood. Social trails are currently used by mountain bikers in the area. As part of the efforts described in Chapter 8, dirt trails should be considered between Crestline and Lake Silverwood.

Table 7-19. Proposed Bicycle Improvements in Crestline

Street/Path	From	To	FACILITY
Lake Drive	Pioneer Camp Road	Lake Gregory Drive	Class II
Old Mill Road	Lake Drive	Transition to Dirt Road	Class III
Lake Drive at Fern Drive	n/a	n/a	Shared Pedestrian/Bicycle Crossing
Lake Drive between Wildrose Lane and Springwater Road	n/a	n/a	Bicycle Storage
Lake Drive at Lake Gregory Drive	n/a	n/a	Bicycle Storage
Lake Drive at Springwater Road	n/a	n/a	Shared Pedestrian/Bicycle Crossing
Lake Drive at Knapps Cutoff	n/a	n/a	Shared Pedestrian/Bicycle Crossing



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Street/Path	From	To	FACILITY
Lake Drive at Old Mill Road	n/a	n/a	Shared Pedestrian/Bicycle Crossing
Lake Drive at Pioneer Camp Road	n/a	n/a	Shared Pedestrian/Bicycle Crossing

Lake Gregory

A Class III route, a shared pedestrian/bicycle crossing, and a bicycle storage facility are proposed for Lake Gregory. The bicycle route would be a recreational route around the lake and also guide bicyclists through Lake Gregory and connect with destinations such as Crestline. The crossing is intended to be shared with pedestrians and provide access to public restrooms. The storage facility is proposed to serve recreational riders as well as employees of or visitors to the Crestline Sanitation District. The proposed improvements are listed in Table 7-20 and shown in Figure 7-8.

Table 7-20. Proposed Bicycle Improvements in Lake Gregory

Street/Path	From	To	FACILITY
Lake Drive	Lake Gregory Drive	San Moritz Drive	Class III
San Moritz Drive	Lake Gregory Drive	Lake Drive	Class III
Lake Gregory Drive	Lake Drive	SR-189	Class III
Arosa Drive	Lake Drive	North Road	Class III
North Road	Lake Gregory Drive	Grandview Road	Class III
Lake Drive near Crestline Sanitation District	n/a	n/a	Bicycle Crossing
Lake Drive near Crestline Sanitation District	n/a	n/a	Bicycle Storage



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Figure 7-8. Crest Forest Proposed Bicycle Improvements



Lake Arrowhead Community Plan area

The Lake Arrowhead community includes several named communities, which are identified in the Rim ATP as activity centers: Twin Peaks, Rimforest, Agua Fria, Blue Jay, Lake Arrowhead, Skyforest, and Cedar Glen.

Twin Peaks

Twin Peaks offers a node of connectivity between several destinations for bicyclists. To support recreational bicycling and provide connections for nonrecreational bicyclists, several Class III routes are proposed, along with bicycle storage and crossings. The storage facilities would provide secure parking for bicycles while people work in or visit local businesses. The crossings are intended to be shared with pedestrian crossings, where possible, and to make bicyclists more visible to motorists. The proposed improvements are listed in Table 7-21 and shown in Figure 7-9.

Table 7-21. Proposed Bicycle Improvements in Twin Peaks



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Street/Path	From	To	FACILITY
Grandview Road	SR-189	Fairway Drive	Class III
Fairway Drive	Grandview Road	Clubhouse Drive	Class III
Brentwood Drive	Fairway Drive	Grass Valley Road	Class III
SR-189	Grandview Road	Grass Valley Road	Class III
Bear Springs Road	SR-189	SR-18	Class III
SR-189 at Rose Lane	n/a	n/a	Shared Pedestrian/Bicycle Crossing
SR-189 at Grandview Road	n/a	n/a	Shared Pedestrian/Bicycle Crossing
Grandview Road at North Road	n/a	n/a	Shared Pedestrian/Bicycle Crossing
SR-189 at Grandview Road	n/a	n/a	Bicycle Storage
SR-189 at Rose Lane	n/a	n/a	Bicycle Storage

Rimforest

Bicycle routes through Rimforest include Bear Springs Road (listed under Twin Peaks, above) and SR-18 (included as a Regional Bicycle Facility at the end of Section 7.2). In addition, two bicycle crossings shared with pedestrians and a bicycle storage facility are proposed. The crossings are intended to increase visibility and provide a marked location for pedestrians and bicyclists to cross SR-18. The bicycle storage facility is proposed as a secure place to park bicycles while working at or visiting local businesses. The crossings and storage facility are listed in Table 7-22 and shown in Figure 7-9.

Table 7-22. Proposed Bicycle Improvements in Rimforest

Street/Path	From	To	FACILITY
SR-18 at Bear Springs Road/Blackfoot Trail	n/a	n/a	Shared Pedestrian/Bicycle Crossing
SR-18 at Pine Ave (east)	n/a	n/a	Bicycle Storage



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Street/Path	From	To	FACILITY
SR-18 at Pine Ave (east)	n/a	n/a	Shared Pedestrian/Bicycle Crossing

Agua Fria

Agua Fria is a crossroads for several Class III routes. In addition, a bicycle storage facility is proposed to provide secure parking for bicyclists who work at or are visiting businesses. The proposed improvements are listed in Table 7-23 and shown in Figure 7-9.

Table 7-23. Proposed Bicycle Improvements in Agua Fria

Street/Path	From	To	FACILITY
Grass Valley Road	SR-189	SR-173 (Deer Lodge Park)	Class III
SR-189	Grass Valley Road	Blue Jay Cutoff	Class III
Daley Canyon Road	SR-18	SR-189	Class III
Blue Jay Cutoff	Grass Valley Road	SR-189	Class III
SR-189 at Acorn Lane	n/a	n/a	Bicycle Storage
SR-189 at Grass Valley Road	n/a	n/a	Shared Pedestrian/Bicycle Crossing
SR-189 at Daley Canyon Road	n/a	n/a	Shared Pedestrian/Bicycle Crossing

Blue Jay

Like other commercial areas in Lake Arrowhead, Blue Jay is a crossroads. To facilitate connections between communities and provide recreational facilities, three Class III routes are proposed through Blue Jay. A Class II bicycle route is also proposed. The Class II route would provide a dedicated path of travel adjacent to motorized vehicles. For employees and visitors to businesses in the area, a bicycle storage facility is also proposed. The proposed improvements are listed in Table 7-24 and shown in Figure 7-9.



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Table 7-24. Proposed Bicycle Improvements in Blue Jay

Street/Path	From	To	FACILITY
SR-189	27159 SR-189	North Bay Road	Class II
SR-189	North Bay Road	SR-173 (Lake Arrowhead)	Class III
Golf Course Road	Grass Valley Road	Old Toll Road	Class III
Old Toll Road	Golf Course Road	Peninsula Drive	Class III
Peninsula Drive	Old Toll Road	West Shore Road	Class III
SR-189 near the grocery store	n/a	n/a	Bicycle Storage

Lake Arrowhead

Several Class III bicycle routes are proposed to meander through the residential areas of Lake Arrowhead. They are intended to offer choices to bicyclists who seek different experiences and/or different lengths of travel. In addition, Class II routes are proposed for targeted commercial or recreational corridors to provide bicyclists with a dedicated travel lane that is separate from motorized vehicles. Bicycle storage is proposed in Lake Arrowhead Village in two locations; these secured parking spaces are intended to be used by employees of and visitors to local businesses. The proposed improvements are listed in Table 7-25 and shown in Figure 7-9.

Table 7-25. Proposed Bicycle Improvements in Lake Arrowhead

Street/Path	From	To	FACILITY
West Shore Road	Peninsula Drive	North Shore Road	Class III
North Shore Road	West Shore Road	SR-173	Class III
North Bay Road	SR-189 (Blue Jay)	Golden Rule Road	Class III
Golden Rule Road	SR-173	North Bay Road	Class III
SR-173	Pinnacles Trail 3W16	Torrey Road	Class III
SR-173	Torrey Road	Fremont Road	Class II
SR-173	691 CA-173	Emerald Way (Cedar Glen)	Class III
SR-173	Fremont Road	SR-189	Class III
SR-173	SR-189	Crest Circle	Class II



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Street/Path	From	To	FACILITY
SR-173	Crest Circle	SR-18	Class III
Cottage Grove Road	SR-189	Burnt Mill Road	Class III
Burnt Mill Road	Cottage Grove Road	Rim of the World Drive	Class III
Rim of the World Drive	Burnt Mill Road	SR-18	Class III
SR-173 at Village Bay	n/a	n/a	Shared Pedestrian/Bicycle Crossing
Lake Arrowhead Village near Village Road	n/a	n/a	Bicycle Storage
Lake Arrowhead Village near entrance to pedestrian-only area	n/a	n/a	Bicycle Storage
SR-189 at Village Bay	n/a	n/a	Shared Pedestrian/Bicycle Crossing
SR-173 at Village Road and SR-189	n/a	n/a	Shared Pedestrian/Bicycle Crossing

Skyforest

Skyforest is proposed to be connected to Lake Arrowhead by a Class III bicycle route that would provide signed connections to cyclists traveling between Skyforest and other destinations. In addition, a shared pedestrian/bicycle crossing and bicycle storage are proposed to serve businesses along SR-18. The proposed improvements are listed in Table 7-26 and shown in Figure 7-9.

Table 7-26. Proposed Bicycle Improvements in Skyforest

Street/Path	From	To	FACILITY
Kuffel Canyon Road	SR-173	SR-18	Class III
SR-18 at Kuffel Canyon Road	n/a	n/a	Shared Pedestrian/Bicycle Crossing
SR-18 near Kuffel Canyon Road	n/a	n/a	Bicycle Storage



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Street/Path	From	To	FACILITY
SR-18 at SkyPark	n/a	n/a	Shared Pedestrian/Bicycle Crossing

Cedar Glen

Through Cedar Glen, SR-173 is proposed to be a Class II route that separates bicyclists and motorists in the commercial area. Beyond the commercial area, SR-173 is proposed to be a Class III route (see bicycle improvements proposed for Lake Arrowhead). A shared pedestrian/bicycle crossing and two storage facilities are proposed. The crossing is intended to make bicyclists more visible to motorists. The storage facilities would offer secure parking for employees of and visitors to local businesses, including Jensen’s Grocery Store, Cedar Glen Inn, and the post office. The proposed improvements are listed in Table 7-27 and shown in Figure 7-9.

Table 7-27. Proposed Bicycle Improvements in Cedar Glen

Street/Path	From	To	FACILITY
SR-173	Fremont Road	Emerald Way	Class II
Near 292 SR-173	n/a	n/a	Bicycle Storage
Near 28942 Hook Creek Road	n/a	n/a	Bicycle Storage
SR-173 at Hook Creek Road	n/a	n/a	Shared Pedestrian/Bicycle Crossing

Vicinity of Mountains Community Hospital and MacKay Park

A shared pedestrian/bicycle crossing is proposed to help make connections between MacKay Park, the Arrowhead Lake Association, and the parking area adjacent to Dam Lake. The proposed crossing is listed in Table 7-28 and shown in Figure 7-9.

Table 7-28. Proposed Bicycle Improvements in Vicinity of Mountains Community Hospital and MacKay Park

Street/Path	From	To	FACILITY
SR-173 at Torrey Road	n/a	n/a	Shared Pedestrian/Bicycle Crossing
Torrey Road	SR-173	Rouse Ranch Road	Class III
Rouse Ranch Road	Torrey Road	MacKay Park Road	Class III

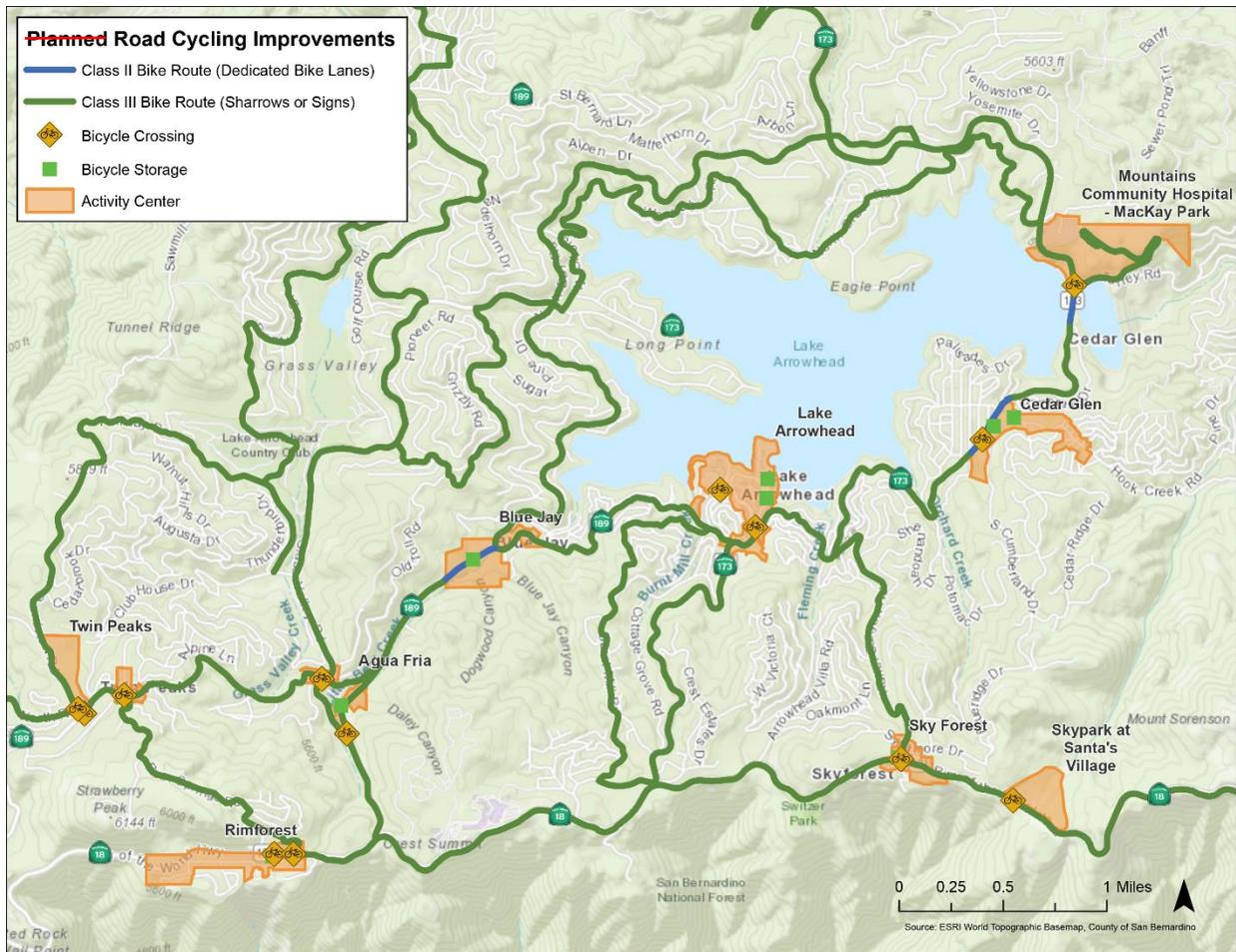


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Street/Path	From	To	FACILITY
MackKay Park Road	Rouse Ranch Road	MackKay Park Road (loops at end of road)	Class III

Figure 7-9. Lake Arrowhead Proposed Bicycle Improvements



Hilltop Community Plan area

The Hilltop community includes three named communities, which the Rim ATP identifies as activity centers: Running Springs, Green Valley Lake, and Arrowbear Lake. In addition, the vicinity of the Children’s Forest, Hootman Senior Center, and Hoffman Elementary School is identified as an activity center. Paved bicycle facilities are only proposed in Running Springs, and off-road improvements in and around the Hilltop Community Plan area are discussed in Chapter 8. Users have mapped trails connecting the Children’s Forest with Arrowbear to the west and Snow Valley to the east. These should be evaluated for incorporation into the USFS Trail System as part of the efforts described in Chapter 8.



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Running Springs

A Class III bicycle route is proposed through Running Springs on SR-330. Given the regional nature of SR-330, this route is included along with Regional Bicycle Routes (see following section). In Running Springs, a Class III bicycle route is proposed to guide cyclists between SR-18 and SR-330. In the village area, a storage facility is proposed to provide secure parking for employees of and visitors to businesses such as Jensen’s Grocery Store and restaurants on Hilltop. The proposed improvements are listed in Table 7-29 and shown in Figure 7-10.

Table 7-29. Proposed Bicycle Improvements in Running Springs

Street/Path	From	To	FACILITY
SR-18 at Palo Alto Way	n/a	n/a	Shared Pedestrian/Bicycle Crossing
Palo Alto Way and Commercial Drive (near public restrooms)	n/a	n/a	Bicycle Storage
Palo Alto Way at Commercial Drive	n/a	n/a	Shared Pedestrian/Bicycle Crossing
SR-18 at Mountain View Drive	n/a	n/a	Shared Pedestrian/Bicycle Crossing
SR-330 at Hunsaker Way	n/a	n/a	Shared Pedestrian/Bicycle Crossing
Running Springs Path (south of SR-18)	Hunsaker Way	Keller Peak Road	Multi-Use Trail

Children’s Forest

No on-street bicycle improvements are proposed in the Children’s Forest area. This area is better served by multipurpose dirt trails (see Chapter 8).

Arrowbear Lake

No on-street bicycle improvements are proposed in the Arrowbear Lake area. This area is better served by multipurpose dirt trails (see Chapter 8).



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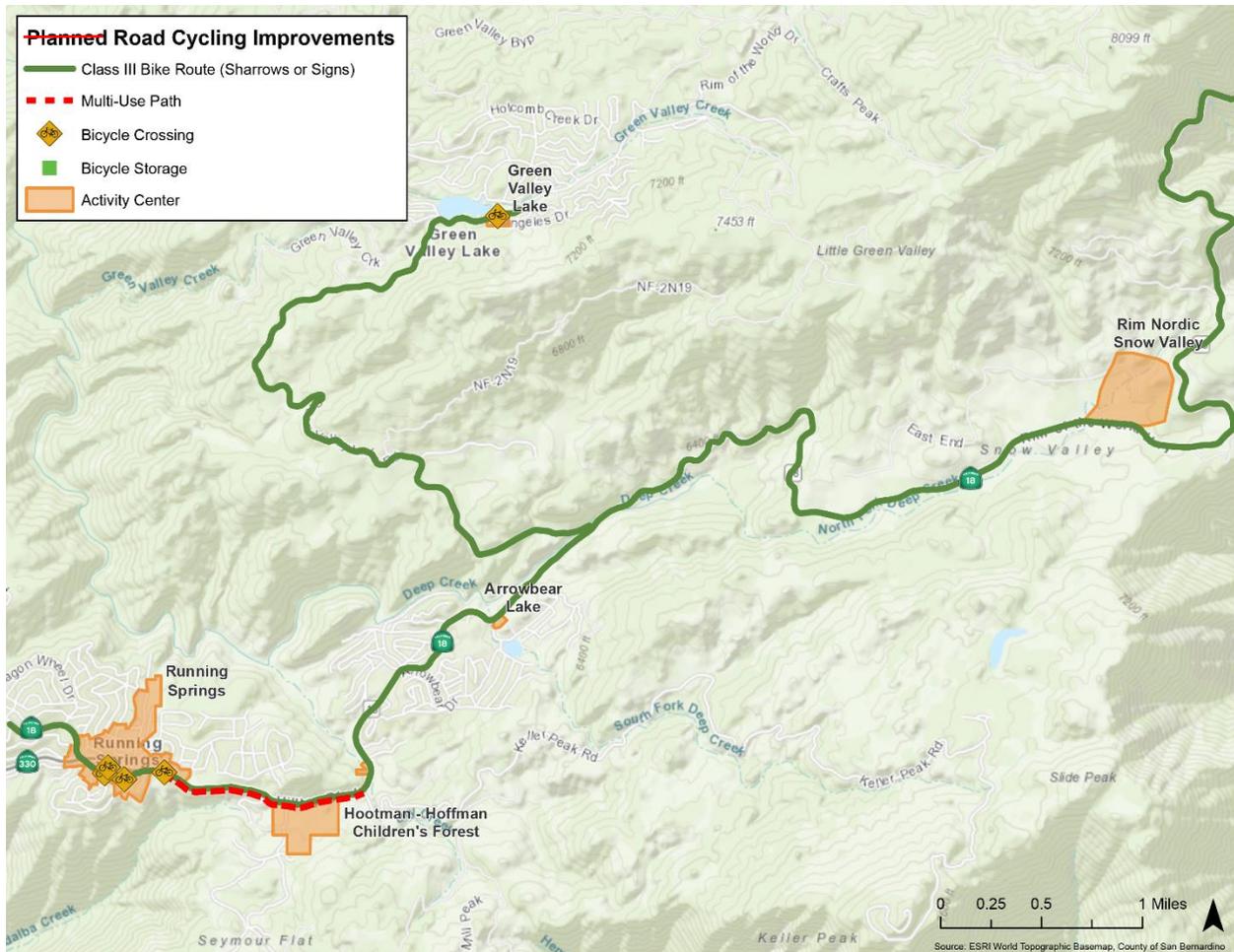
Green Valley Lake

Two improvements are proposed for Green Valley Lake to facilitate road cycling to and from Green Valley Lake and to provide a crossing, which will be most beneficial to young bicyclists and their families. The proposed improvements are listed in Table 7-30 and shown in Figure 7-10.

Table 7-30. Proposed Bicycle Improvements in Green Valley Lake

Street/Path	From	To	FACILITY
Green Valley Lake Road	SR-18	Robin Drive	Class III
Green Valley Lake Road between Angeles Drive and Robin Drive	n/a	n/a	Shared Pedestrian/Bicycle Crossing

Figure 7-10. Hilltop Proposed Bicycle Improvements





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Regional Bicycle Routes

Two bicycle Class III routes with regional significance are proposed. These facilities are intended to serve the demands of athletic road bicyclists and are not intended to serve the needs of people who are uncomfortable sharing roadways with vehicles traveling at speeds higher than 35 m.p.h. The proposed improvements are listed in Table 7-31 and shown in Figure 7-11.

Figure 7-11. Comprehensive Proposed Bicycle Improvements

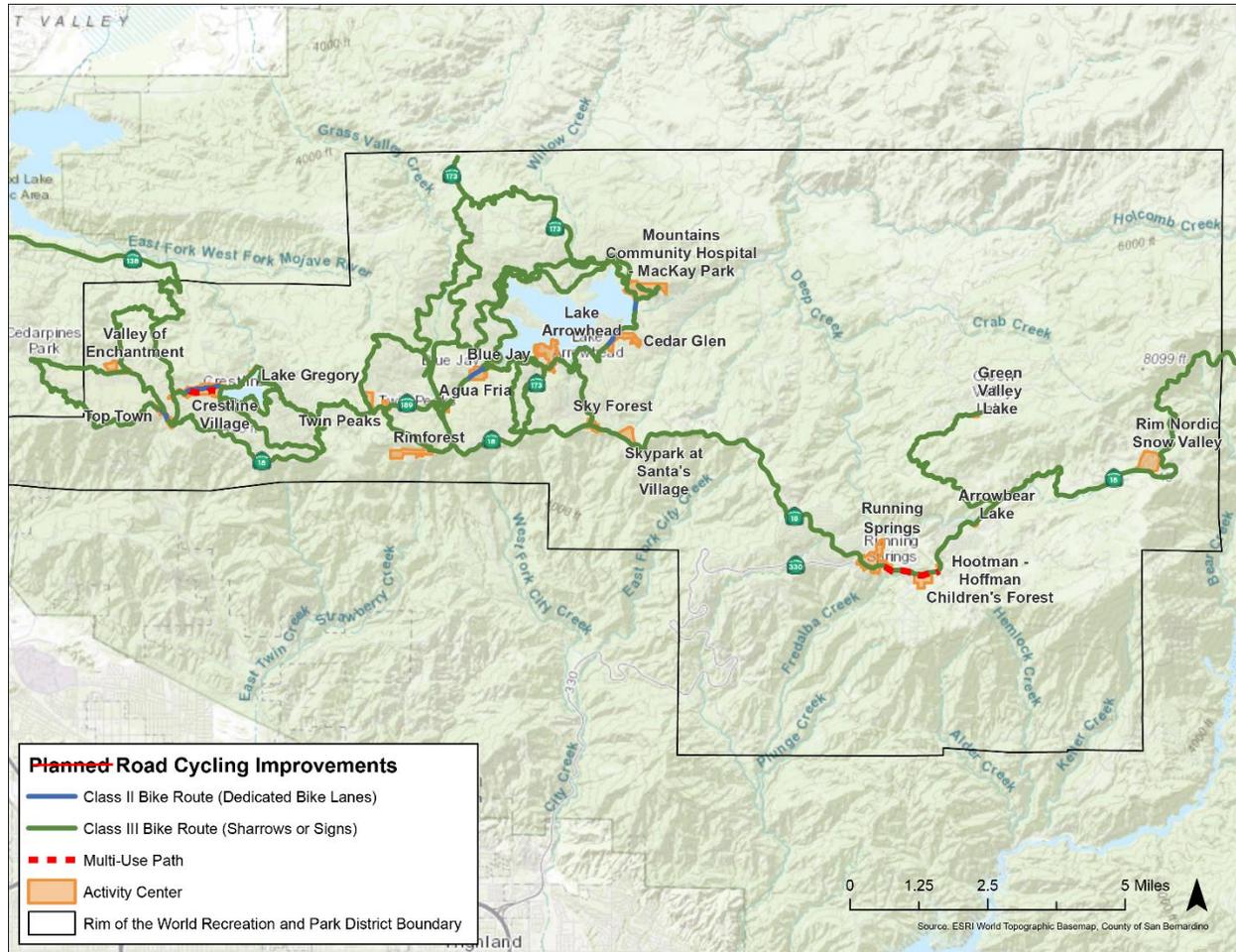


Table 7-31. Proposed Regional Bicycle Improvements

Street/Path	From	To	FACILITY
SR-138	Old Mill Road (North of Crestline)	Santa Fe Road (Cajon Junction)	Class III
SR-18	Bear Springs Road (Rimforest)	SR-38 (Big Bear Lake - off the map)	Class III



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7.3 Transit Facilities

The proposed transit bus stop improvements primarily include amenities that improve passenger comfort while they wait for buses to arrive. Table 7-32 summarizes the improvement types. Transit and SR2S improvements are proposed in concert. Maps of these facilities are included at the end of this chapter. All proposed improvements are conceptual in nature and will require further analysis. In some cases, the proposed improvements will also need design and engineering.

Table 7-32. Types of Transit Stop Improvements

Improvement	Definition	Example
<p>Bus Stop Shelter</p>	<p>Provides shelter from sun or inclement weather.</p>	
<p>Bus Stop Bench</p>	<p>Provides passengers with a place to rest while waiting for buses to arrive.</p>	
<p>Bus Stop Wayfinding</p>	<p>Directional signs to identify bus stop location at common approaches to the stop, followed by directional signs for automobiles, bikes, and pedestrians at key decision points to lead transit users to the bus stop.</p>	



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Improvement	Definition	Example
Sidewalk, curb, and gutter	Improves safety by providing pedestrians a separated path of travel to and from bus stops.	

Proposed Transit Improvement

As noted, Mountain Transit offers bus service in the Rim of the World and Big Bear Valley areas. Through coordination with Mountain Transit, the project team identified the following high-use stops for analysis as part of the Rim ATP:

- Valley of Enchantment Mobile Home Park (VOE MHP)
- Top Town (Linder Tires)
- SR-189 & Grandview Drive (Sheriff Station)
- 7-11/Goodwin’s Market Lake Gregory at Lake Drive
- Lake Drive & Lake Gregory (7-11)
- SR-189 & North Bay Road (Blue Jay Library)
- McDonalds (Blue Jay) SR-189 & North Bay Road
- SR-18 and Kuffel Canyon Sky Forest
- SkyPark @ Santa's Village

Bus Shelters and Bus Benches

It is recommended that either bus shelters or bus stop benches be installed at each key transit stop location. As inclement weather is possible year-round, it is recommended that bus shelters be explored as a preferred improvement. However, bus stop benches may be a more cost-effective alternative for bus stops with lower ridership.

Bus Stop Wayfinding

With regard to bus stop wayfinding, each bus stop location should be evaluated individually to assess the potential need for installing signage near each transit stop. For example, pedestrian activity may be higher in some areas, and including transit bus stop signage could potentially improve ridership.

Pedestrian Access

Sidewalks are proposed near each of the bus stops listed above, except for bus stops along Lake Drive and the stop at SkyPark at Santa’s Village. The addition of sidewalks would provide passengers with a safe path of travel to and from each bus stop.

Overlap with School Bus Stops

Key transit stops are located near school bus stops at several locations in the plan area, and are



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summarized below in Table 7-33. Where feasible, transit stops and school bus stops should be co-located.

For each location noted below, opportunities for transit bus stop improvements that may be designed to meet the needs of school children should be explored. This would require school bus stops to be relocated to an area adjacent to each transit bus stop. The relocation of school bus stops will require further analysis to assess overall feasibility. A potential benefit of consolidating transit and school bus stops is that it would provide user benefits to both transit riders and schoolchildren while only requiring capital investment at fewer locations.

Table 7-33. Proximate Transit and School Bus Locations

Transit Bus Stop(s)	Adjacent School Bus Stop
SR-189 & Grandview Drive (Sheriff Station)	Northwest of the transit bus stop along Grandview Drive
7-11/Goodwin’s Market Lake Gregory at Lake Drive; Lake Drive & Lake Gregory (7-11)	Intersection of Lake Drive and Lake Gregory Drive
McDonalds (Blue Jay) SR-189 & North Bay Road	Intersection of SR-189 and Blue Jay Canyon
SR-18 and Kuffel Canyon Sky Forest	Along Kuffel Canyon Road north of SR-18

7.4 Safe Routes to School

The Safe Routes to School (SR2S) program emphasizes the benefits of walking or cycling to school to increase physical activity and active lifestyles, while also addressing traffic safety, congestion, and air quality issues around schools. The program’s multifaceted approach is often described in terms of the 6 “E”s, which are described in more detail in the following sections:

- **Engineering:** Implementing operational and physical changes to the infrastructure near schools to provide a safer environment for students.
- **Enforcement:** Improving compliance with traffic laws near schools through increased enforcement.
- **Education:** Teaching best practices in biking and walking safety.
- **Encouragement:** Hosting neighborhood events and other incentives to enhance participation.
- **Evaluation:** Assessing program outcomes through data collection and before-and-after analysis.
- **Equity:** Ensuring initiatives benefit all demographic and socioeconomic groups.

The recommendations of the Rim ATP should be incorporated with the San Bernardino County Transportation Authority’s Safe Routes to School Plan.

Proposed Safe Routes to School Improvements

Several improvements have been identified to enhance access to and from schools in the plan area.



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Proposed improvements include sidewalks and intersection crossings. Crossings could be used by both pedestrians and bicyclists.

Improvements are focused in areas adjacent to the following schools:

- Charles Hoffman Elementary School
- Lake Arrowhead Elementary School
- Mary Putnam Henck Intermediate School
- Rim of the World High School (includes Mountain High School)
- Valley of Enchantment Elementary School

Proposed improvements were identified using the following approach. First, the project team visited the schools to examine the feasibility of potential improvements near each. The team developed initial concepts with information collected during site visits and phone interviews with key faculty members. Lastly, initial improvement concepts were presented to community members at a public workshop to gather feedback on the appropriateness of each improvement.

Proposed improvements are recommended in locations where there are fewer constraints. At times, improvements were deemed infeasible due to limited right-of-way or other constraints, such as limited roadway sight distance.

As noted in earlier sections of this chapter, some proposed pedestrian, bicycle, and access to transit improvements included above would also benefit schoolchildren accessing the schools listed above. A more detailed summary of improvements is included below. The figures at the end of this chapter illustrate transit and SR2S improvements, which were proposed to function in concert.

Charles Hoffman Elementary School

A sidewalk is proposed along Running Springs School Road, just west of the school. This sidewalk would allow schoolchildren and staff members to walk during pickup and drop-off hours. The sidewalk would also connect with a proposed multi-use path that would connect the village of Running Springs to the elementary school, ball fields in the vicinity, the senior center, and the Children's Forest along the south side of SR-18. See Figure 7-18.

Lake Arrowhead Elementary School

A sidewalk is proposed along the west side of Golden Rule Lane between Sequoia Drive and SR-173. This sidewalk would connect the existing crosswalks at the intersections of Sequoia Drive and SR-173. See Figure 7-14.

Mary Putnam Henck Intermediate School

No pedestrian or bicycle improvements were proposed at this location due to the absence of major destinations within walking distance. See Figure 7-17.

Rim of the World High School (includes Mountain High School)

No pedestrian or bicycle improvements were proposed at this location due to the absence of major destinations within walking distance. See Figure 7-15.



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Valley of Enchantment Elementary School

The following improvements are proposed near Valley of Enchantment Elementary School; see Figure 7-10:

- Sidewalks on the north side of SR-138, the south sides of Waters Drive and Spruce Street, both sides of Fir Lane, and the west side of Seeley Lane. These will enhance connectivity to the elementary school.
- A pedestrian crossing at the intersection of SR-138 and Waters Drive, which could help increase safety for students walking to school and people accessing nearby commercial or residential areas.

Safety Programs

Maintenance, monitoring, and marketing campaigns are important aspects of safe access to schools.

School staff should be provided with training materials and appropriate equipment to maintain clean school facilities and keep them free of obstructions. All facilities should be cleaned at appropriate intervals and debris that collects should be removed manually.

Collision monitoring and counts should be conducted throughout the plan area to confirm if there is a reduction in the number of pedestrian- and bicycle-involved collisions. Monitoring should be done in areas with historically high collision rates where a reduction will be more readily seen. If reductions are not observed, improvements should be reassessed and additional measures considered that could help reduce the potential for conflicts.

The Rim of the World Recreation and Park District should work with local libraries, schools, and community centers to create a “Share the Road” campaign to inform the community about safe usage practices on bike facilities. Elements of the campaign could include pop-up workshops or other community events.

Enforcement Programs

Enforcement is a vital component of creating safe routes to school. To help foster a safe environment for students who walk or bike to school, strategies can be implemented at the regional, school district, and school site level to enforce safe driver, and bicycle and pedestrian behavior. Local law enforcement and California Highway Patrol are also important resources for the safety of pedestrians and cyclists.

The California Highway Patrol can support the success of SR2S in the following ways:

- Provide enforcement operations such as speed control, tickets to drivers not yielding to pedestrians, warnings for student jaywalking, and enforcement presence during school drop-off and pickup procedures.
- Use trailer feedback signs to provide simple safety messages during construction zones, back to school week, in high-traffic areas, and as needed for school events.
- Assess school zones to determine which schools have speeding and other unlawful motorist behavior, and conduct targeted enforcement activities in a 2-mile zone around targeted schools.
- Provide training and supervising of School Safety Patrols.



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- Provide assistance to school authorities.
- Conduct demonstrations and lectures on pedestrian and bicycle safety and rules of the road.
- Review location and signing of school bus stops to assist with compliance and demand.

Education and Encouragement Programs

The implementation and ongoing funding of bicycle and pedestrian education activities for students is a key factor to developing long-lasting habits of safe behavior. Below are recommendations for SR2S education implementation programs:

- Schools may offer regular bicycle safety courses, also known as bike rodeos, to educate children on how to ride a bicycle, complete a bicycle safety check, and learn the rules of the road for cyclists.
- The Rim of the World Unified School District may adopt or develop public service announcement materials to promote safe bicycle and pedestrian behavior in the community. Student can also participate in education efforts through a safety campaign.
- School districts can incorporate safe walking curriculums into the school year's education plan to increase safety among students.
- Schools can provide a transportation-focused curriculum that teaches students about the options available and the overall costs and consequences associated with each type of transportation.
- Schools or individual teachers may offer "Outdoor Classroom Day" (<https://outdoorclassroomday.com>) as an incentive for walking or bicycling to school bus stops or to school.

Encouragement programs can be implemented at the school district and school site level that promote students physical activity such as walking, biking, or skateboarding to school and engaging in outdoor recreation such as trail running and mountain biking after school. Below are strategies that may be used to engage students and families in the SR2S initiative.

- Celebrate International Walk to School Day (W2SD), held annually in October. This is a celebration where millions of people around the world walk to school, helping create safe pedestrian-friendly communities and promoting healthier habits and environmental conservation. W2SD celebrates, promotes, and create awareness about walking and physical activity among all students.
- Active4.me helps to increase the number of students using active transportation to and from school. This data collection manages and verifies program effectiveness. This service uses an inexpensive online barcode technology to track trips to school and compute the impact each trip has on carbon dioxide, gas, dollars, and calories. Students who choose to participate receive a unique barcode tag and are entered into the active4.me database.
- Celebrate National Bike to School Day, held annually in May. This event encourages schools and families to take part in a national movement.
- Organize a community or family bike ride to engage families, school staff, elected officials, and sheriffs in SR2S encouragement activities.



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- The SR2S National Partnership Fire Up Your Feet Challenge is a national contest, usually in spring or fall. As part of the challenge, schools track their physical activity level and input the data into a website.
- Hold a walking school bus for pedestrians or a bike train for cyclists and provide multiple community benefits. Children are picked up from their homes or along designated pickup stops. Parent volunteers help their neighbors who are unable to accompany their children to school.

Evaluation and Equity Programs

Evaluation and data collection is a key component in supporting the foundation of a regional SR2S program. Rim ATP stakeholders should encourage the County to provide centralized data collection and analysis for schools in its jurisdictional boundaries. Conducting bicycle and pedestrian counts allows the County to use observable data to determine how roadways currently serve the needs of bicyclists and pedestrians. Having count data will also be effective when applying for grant funding, providing inputs to any demand modeling, and acknowledging biking and walking as a viable mode of transportation.

Several actions can be taken to ensure equity distribution across programs so that disadvantaged communities fully share the benefits of SR2S programs. Equity programs address the needs of low-income communities in a way that provides substantial community asset through infrastructure improvements and bicycle and pedestrian education, while avoiding substantial burdens on the community's resources.

7.5 Safe Routes to Transit

The Safe Routes to Transit (SRTT) program focuses on the first- and last-mile dilemma. Fixed route transit service allows people to get close to their destination, but walking and biking conditions discourage use of transit when they have an alternative option. Pedestrian and bicycling infrastructure in the first- and last-mile entice more people walk or ride bike to transit stops. The program uses the same multifaceted approach used for SR2S. Each of the 6 E's are described in more detail below as they relate to improving connections to transit.

Proposed Access to Transit Improvements

As noted above, this plan focuses on the following key bus stops:

- Valley of Enchantment Mobile Home Park (VOE MHP)
- Top Town (Linder Tires)
- SR-189 & Grandview Drive (Sheriff Station)
- 7-11/Goodwin's Market Lake Gregory at Lake Drive
- Lake Drive & Lake Gregory (7-11)
- SR-189 & North Bay Road (Blue Jay Library)
- McDonalds (Blue Jay) SR-189 & North Bay Road
- SR-18 and Kuffel Canyon Sky Forest

Some proposed pedestrian, bicycle, and access to transit improvements included in section 7.1, 7.2, and 7.3 would benefit transit riders. Additional improvements intended to enhance pedestrian and bicycle



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access to each bus stop are described in more detail below.

Valley of Enchantment Mobile Home Park (VOE MHP)

Sidewalks are proposed on the north side of SR-138, the south sides of Waters Drive and Spruce Street, both sides of Fir Lane, and the west side of Seeley Lane. These would enhance connectivity between the existing bus stop and commercial areas along Waters Drive west of SR-138.

Top Town (Linder's Tires)

The following conceptual pedestrian improvements are proposed near the bus stop in Top Town:

- Sidewalks on both sides of Crest Forest Drive, which will enhance connectivity between the bus stop and the commercial areas along Crest Forest Drive near SR-138.
- A pedestrian crossing at the intersection of SR-138 and Crest Forest Drive, which could enhance pedestrian safety for people crossing SR-138 to access nearby commercial and residential land uses.

SR-189 & Grandview Drive (Sheriff Station)

The following improvements are proposed near the bus stop at SR-189 and Grandview Road:

- Sidewalks on the south side of SR-189 between Mile Pine Road and Glen View Lane, and on the north side of SR-189 between Grandview Road and Glen View Lane. These would enhance connectivity between the bus stop and the commercial area near Rose Lane.
- Pedestrian crossings along SR-189 near Rose Lane and Grandview Road, and at the intersection of Grandview Road and North Road, which could enhance pedestrian safety between the bus stop and nearby commercial and residential areas.

Lake Gregory Transit Stops

Sidewalks on both sides of Lake Drive, including filling in gaps in sidewalks on both sides of Lake Drive in Crestline Village, would enhance connectivity between the two key bus stops and the nearby commercial land uses.

Blue Jay Transit Stops

Sidewalks are proposed on both sides of SR-189. These would leverage the existing pedestrian crossing at the intersection of Blue Jay Canyon Road, enhancing connectivity between the nearby transit stops and the adjacent commercial land uses.

SR-18 and Kuffel Canyon/Skyforest

The following conceptual pedestrian improvements are recommended near the existing bus stop in Skyforest:

- Sidewalks on both sides of SR-18, continuing to both sides of Kuffel Canyon Road. These would enhance connectivity between commercial areas along SR-18 and the transit bus stop at the intersection of SR-18 and East Rim Drive.

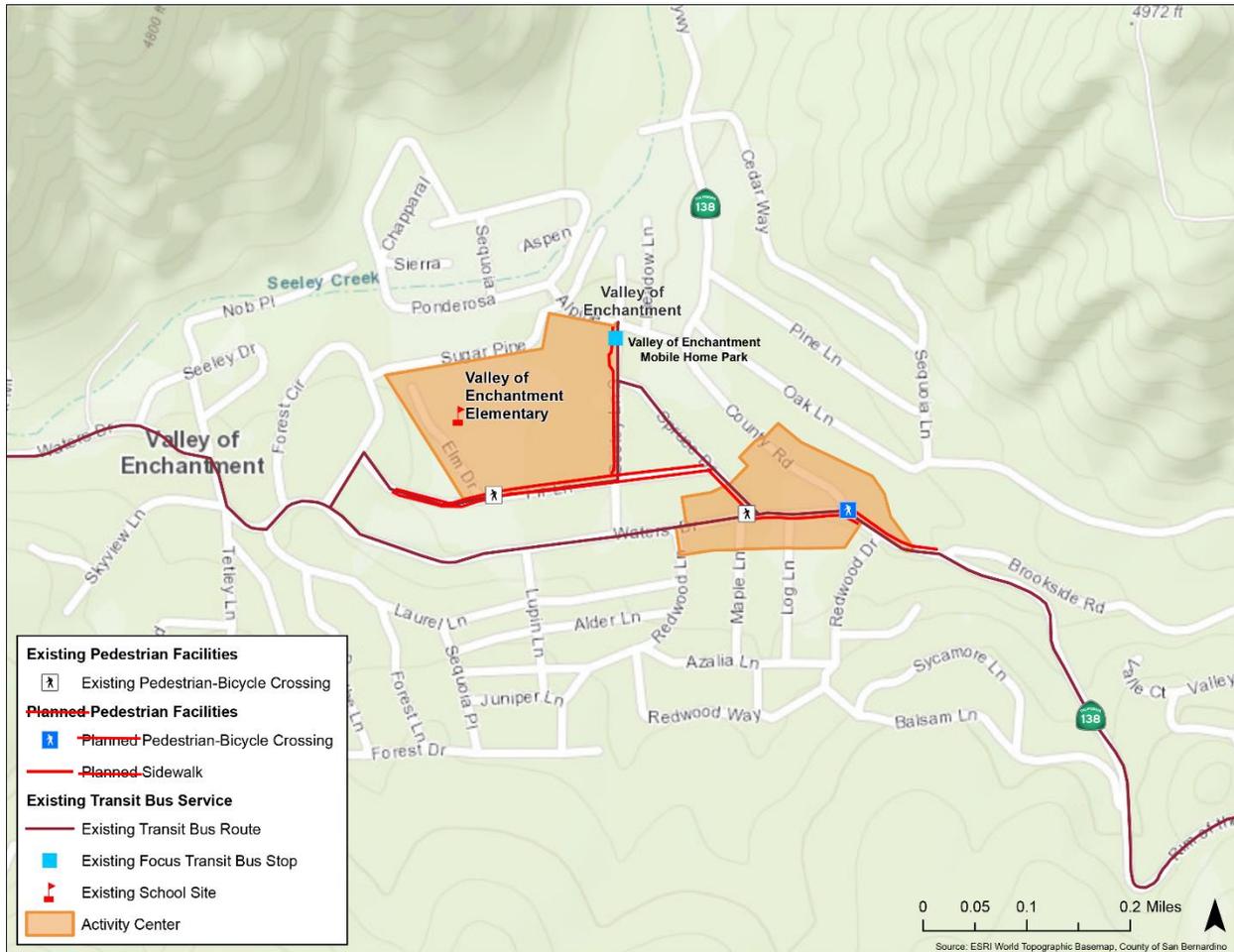


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- A pedestrian crossing at the intersection of SR-18 and Kuffel Canyon Road. This could increase pedestrian safety for people wishing to access the commercial and residential land uses on the north side of SR-18.

Figure 7-10. Proposed Transit and SR2S Improvements – Valley of Enchantment





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Figure 7-11. Proposed Transit Improvements – Lake Gregory

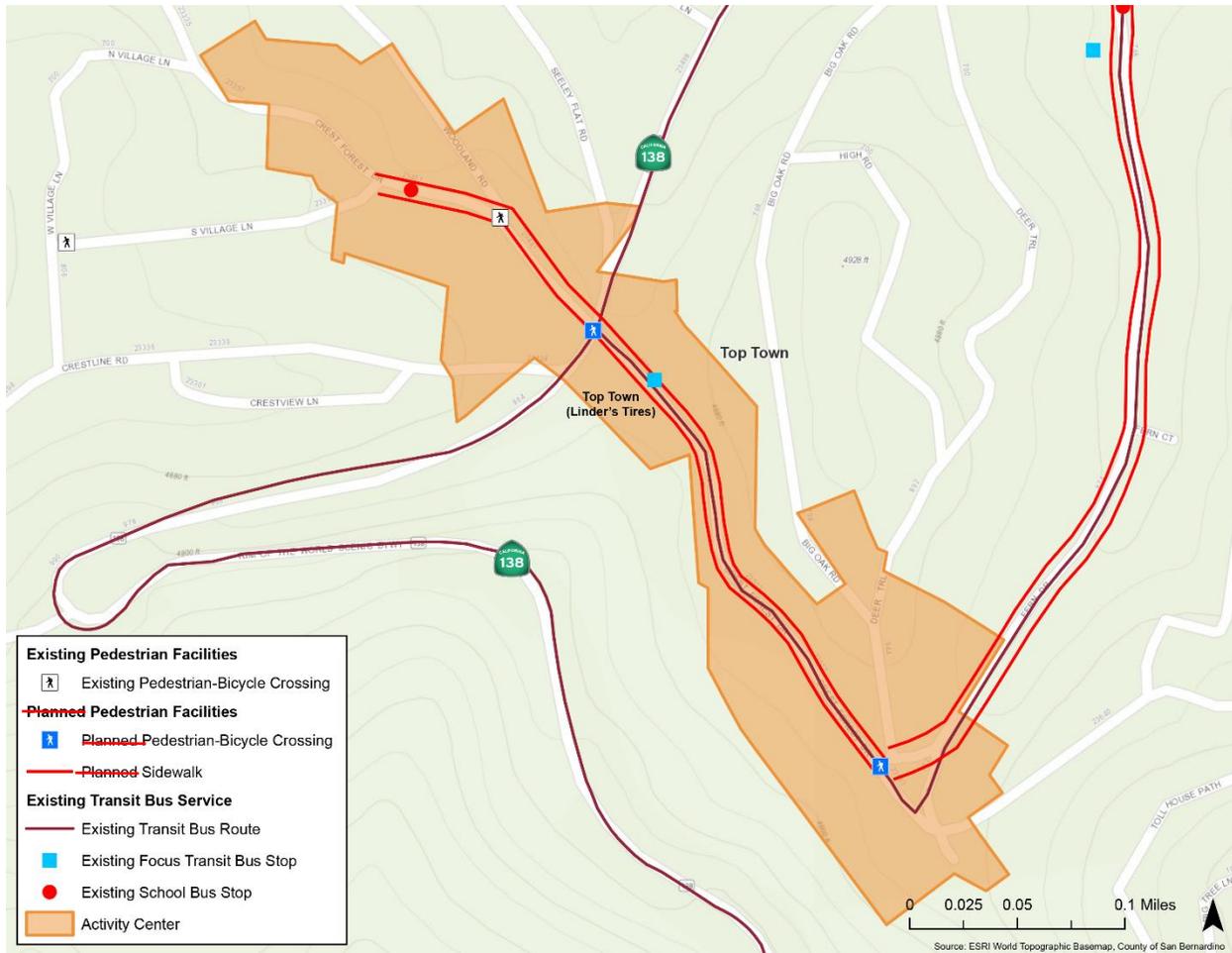




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Figure 7-12. Proposed Transit and SR2S Improvements – Top Town

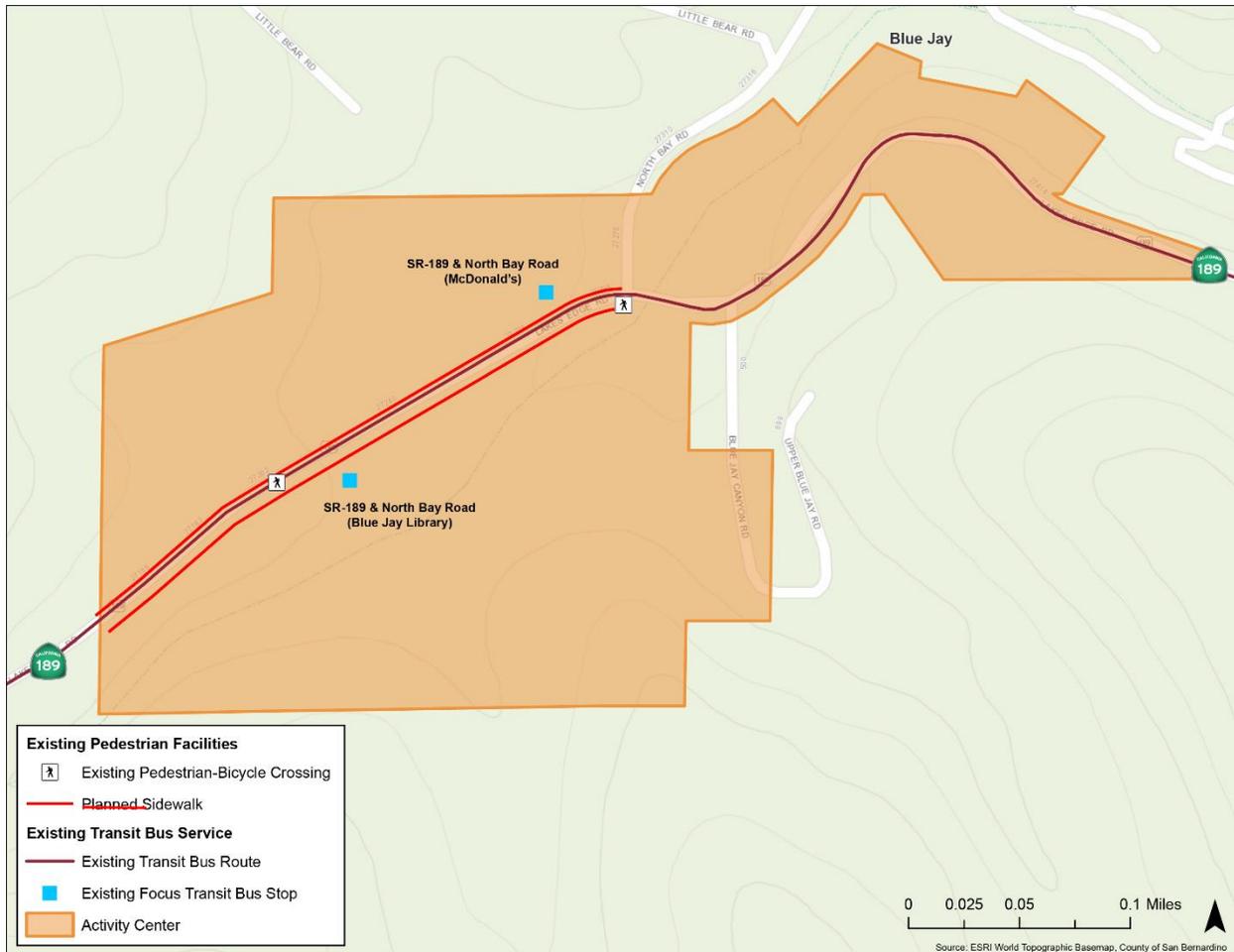




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Figure 7-13. Proposed Transit Improvements – Blue Jay

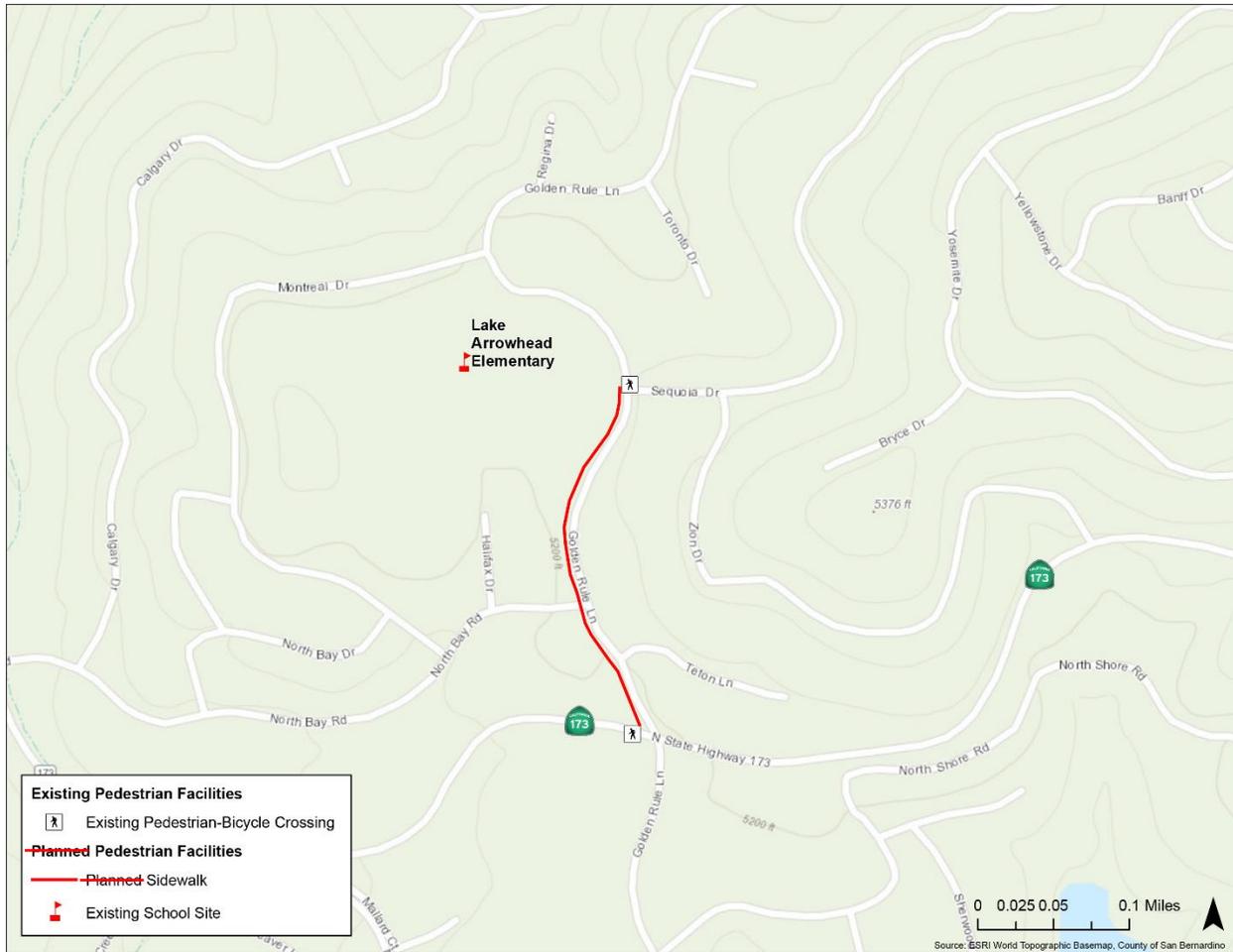




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Figure 7-14. Proposed Transit and SR2S Improvements – Lake Arrowhead Elementary





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Figure 7-15. Proposed Transit and SR2S Improvements – Rim of the World High School

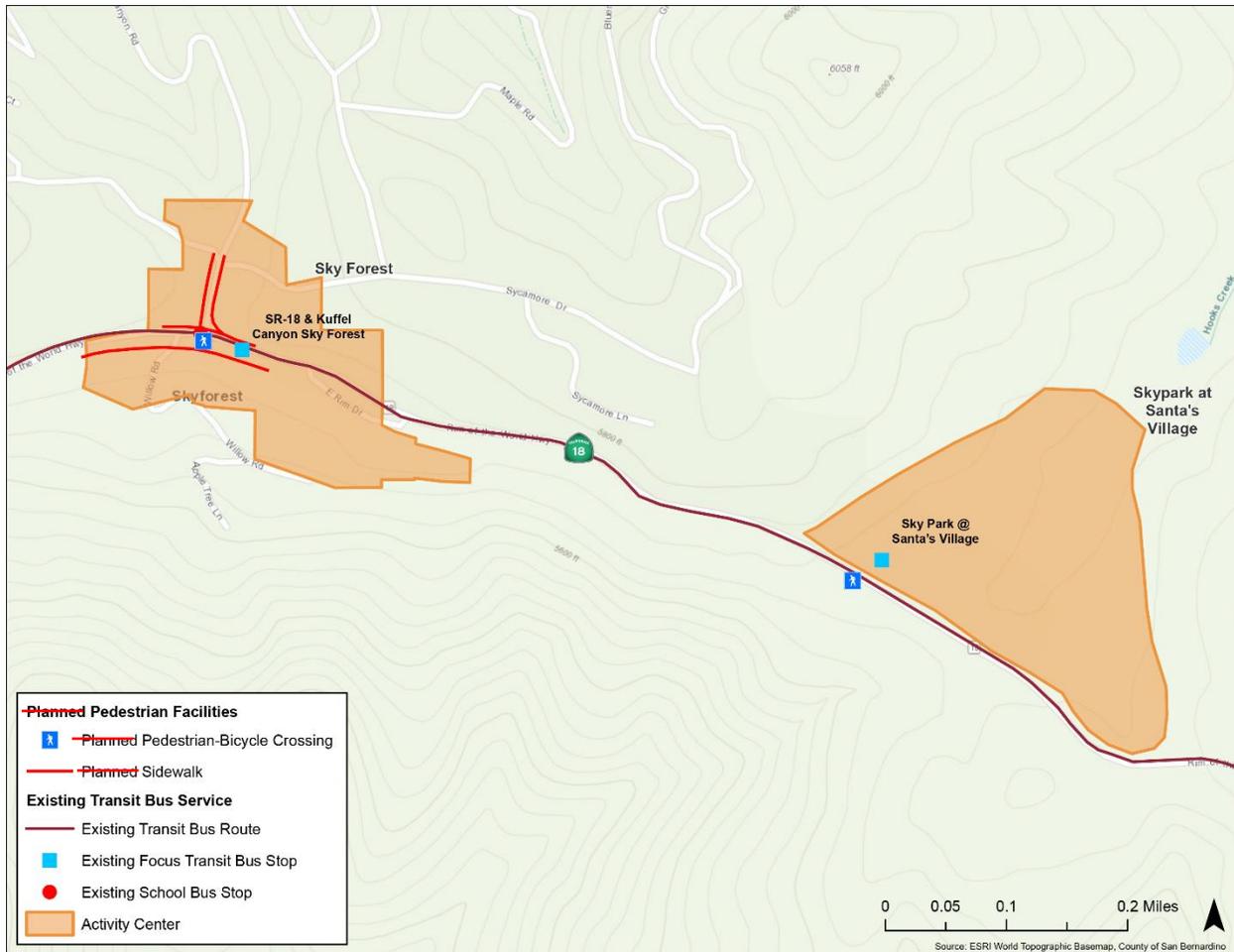




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Figure 7-16. Proposed Transit and SR2S Improvements – Skyforest

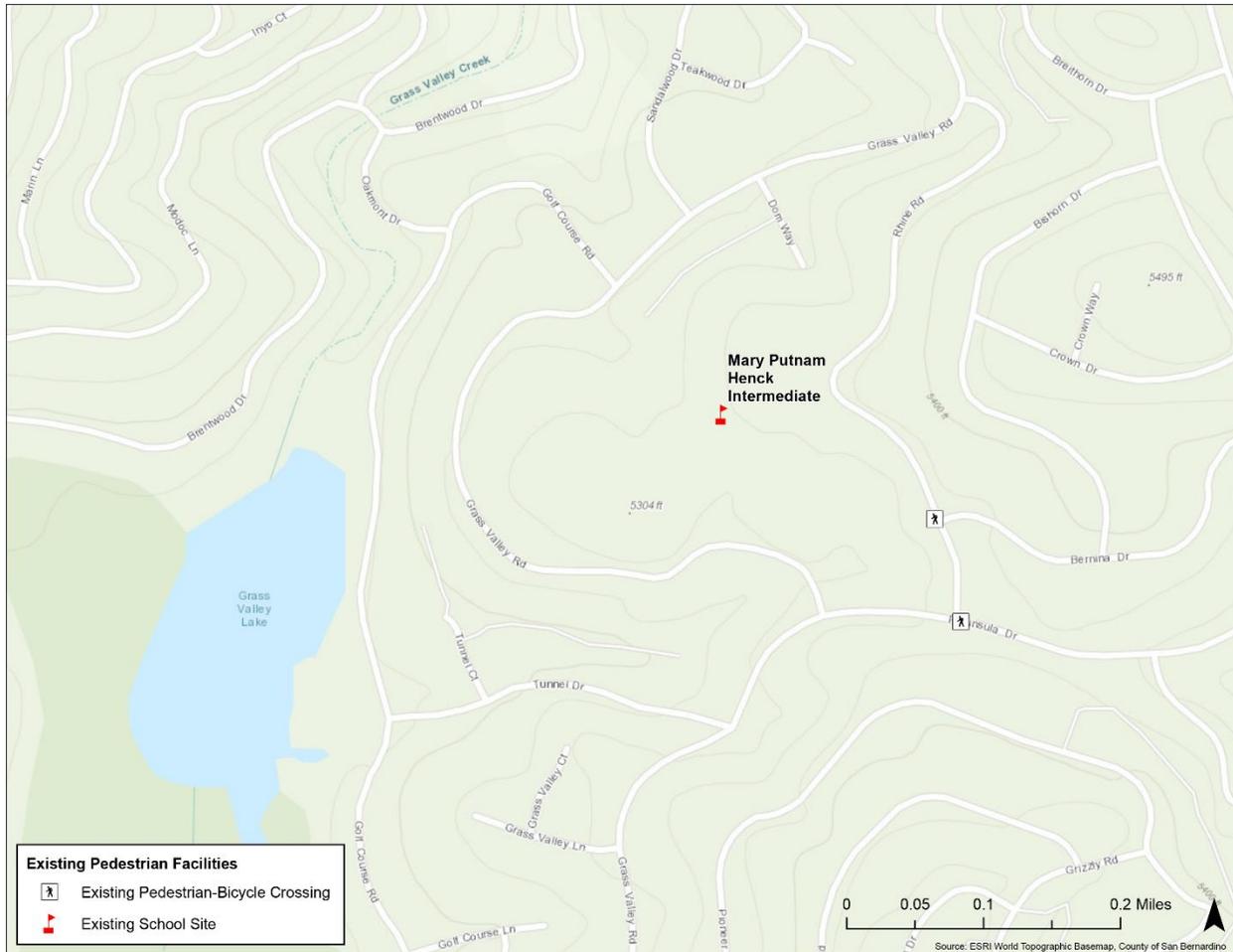




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Figure 7-17. Proposed Transit and SR2S Improvements – Henck Intermediate





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Figure 7-18. Proposed Transit and SR2S Improvements – Charles Hoffman Elementary





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CHAPTER 8. FOREST SERVICE TRAIL SYSTEM

8.1 Existing Road and Trail System

Types of Facilities

The USFS system of roads and trails is made up of four types of facilities:

- **Nonmotorized Trails Open to the Public:** These are dirt pathways for use by people on foot (hiking, trail running), on wheels (mountain biking), and on horseback.
- **Pacific Crest Trail (PCT):** The PCT is a National Scenic Trail for hikers and equestrians that runs through the plan area. Mountain biking and motorized vehicles are not allowed on the single-track dirt trail. The Pacific Crest Trail Association maintains the PCT with the support of thousands of volunteers.
- **Motorized Trails Open to the Public:** Motorized vehicles are allowed on these dedicated, width-restricted dirt trails, which are designed specifically for off-highway vehicles and are not appropriate for hikers, bicyclists, and equestrians.
- **Roads Open to the Public:** Forest system roads are open to all users. They are wide enough for street-legal vehicles, and are important connectors for hikers, trail runners, bikers, and equestrians to extend their recreational opportunities and make connections between nonmotorized trails.

Electric Bicycles

Electric bicycles (or e-bikes) are increasingly popular in the United States. They are like other bicycles, but have heavier frames and rechargeable batteries that “assist” riders. They are also increasingly controversial. Some proponents advocate for the ability to ride e-bikes on nonmotorized trails whereas opponents believe that e-bikes should only be allowed where motorized vehicles can go. The USFS’s Travel Management Rule classifies e-bikes with other motor vehicles and restricts their use to motorized roads and trails; however, administrative units and ranger districts may consider new trail-riding opportunities for e-bikes. Such changes would involve environmental analysis and public participation.



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Existing USFS Trails and Trailheads

Generally, hikers, trail runners, mountain bikers, and equestrians prefer single-track trails. The existing USFS trail system is shown as part of existing conditions in Chapter 6, Figure 6-2. The system is densest in the northern and eastern portions of the plan area. Communities to the west of the plan area have few to no USFS trail system options. Across the plan area, there are fewer than 20 USFS system trails. Two shorter trails offer a loop experience in proximity to neighborhoods. There are no trails that provide connections between communities. In addition, wayfinding signage is limited, which makes navigation challenging for many people.

Trailheads are important anchors to trail systems. They are gateways into the National Forest, provide space for signage and educational information, and can be used for parking, restrooms, trash, and recycling to minimize human impact. Only six trailheads were identified on a trail guide distributed by the USFS. They provide parking and/or access to:

- Tunnel II Trail near Grass Valley
- Heaps Peak Arboretum along the Rim of the World Highway between Skyforest and Running Springs
- Exploration Trail and Children’s Forest in Running Springs
- Keller Peak Fire Lookout
- 2W09 east of Snow Valley
- Splinter’s Cabin and the PCT





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8.2 Unmet Demand and Open Space Resources

Demand for Additional System Trails

In the plan area, observed demand for single-track trails extends far beyond those in the USFS system. In some places, users have created new trails because of repeated foot traffic. In other places, users have constructed their own trails to meet their needs. By collecting data and mapping trails used by Rim ATP stakeholders and comparing trail use to USFS System roads and trails, the project team has conducted a preliminary assessment of unmet trail demand. Information was provided on a voluntary basis by trail enthusiasts and was not systematically collected to cover the entirety of the plan area. As a result, the information skews toward areas where the volunteers live or recreate most often. In addition, the project team collected map markers and related comments from members of the public as described in Chapter 3 Community & Stakeholder Engagement. The distribution of map markers relevant to the National Forest is spread more evenly across the plan area and reveals several areas of higher demand. Table 8-1 groups nodes of higher demand by named areas, parks, and activity centers.

Table 8-1. Nodes of Higher Demand for Off-Road Trails

Nodes by Community Plan Area Identified by Place Names, Recreational Centers, and Activity Centers
Crest Forest Community Plan Area <ul style="list-style-type: none"> • Dart Canyon, Sawmill Road
Lake Arrowhead Community Plan Area <ul style="list-style-type: none"> • Red Rock Scenic Overlook, Strawberry Peak, Daley Canyon Road, and Dogwood Campground • MacKay Park, Cedar Glen • Crest Park, Switzer Park Picnic Area, SkyPark at Santa’s Village, Heaps Peak, 2N23/Sheep Creek
Hilltop Community Plan Area <ul style="list-style-type: none"> • Fisherman’s Group Campground, Green Valley Creek, Deep Creek, Running Springs, Arrowbear • Little Green Valley (2N19), Green Valley Bypass (2N54), Craft’s Peak

In these areas, Rim ATP stakeholders should work with the USFS to consider sustainable ways to respond to demand such as:

1. Repurposing decommissioned roads as single-track trails
2. Incorporating user-created trails into the USFS system



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3. Constructing new trailheads
4. Adding new trails

Open Space Resources

To create a sustainable network of trails, the Rim ATP stakeholders and the USFS should consider potential impacts of recreational use on open space resources, such as water quality, habitat, and cultural resources. Environmentalists and proponents of ecotourism advocate for a system of trails distributed across the plan area rather than concentrating human impacts in limited areas. In the process of identifying how to best distribute trails, the potential for resources should be mapped and field-verified to minimize potential impact.

8.3 USFS Planning and Decision-Making Process

In the past decade, the San Bernardino National Forest Mountaintop Ranger District has demonstrated a commitment to collaborative problem solving in Big Bear Valley. There, user-built trails created water quality impacts as recreational activity and weather conditions generated elevated levels of erosion. At the same time, recreationalists recognized that trail resources could be taken away if not improved and maintained. A group of trail advocates created a nonprofit and began to work with USFS staff and the Southern California Mountains Foundation to repair old trails. Because of these efforts, the USFS successfully sought grant funding to expand the effort of repairing old trails and close trails that could not be repaired, which opened the door for constructing new trails.

The Rim ATP stakeholders may learn from the Big Bear Valley stakeholders and work collaboratively with the USFS and the Southern California Mountains Foundation to systematically assess, plan for, and construct a district-wide single-track trail system. The following steps provide a general overview of how Rim ATP stakeholders would work with the USFS through the planning and decision-making process:



1. Organize group of stakeholders (Rim ATP stakeholders).
2. Meet with USFS representatives to express goals of the group (Rim ATP stakeholders and USFS staff).
3. Collect information, including a survey of user-created trails and areas to avoid due to potential human impact to natural resources (Rim ATP stakeholders under direction of USFS staff).



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4. Prioritize and select a mutually beneficial project such as incorporating a user-created trail into the USFS trail system (Rim ATP stakeholders and USFS staff).
5. Pin flag a proposed alignment of the proposed trail for planning purposes (Rim ATP stakeholders with USFS staff).
6. Evaluate impacts through National Environmental Policy Act process (USFS staff with support from Rim ATP stakeholders).
7. Make decision (USFS).
8. Refine pin flag alignment of the proposed trail for construction purposes (Rim ATP stakeholders with USFS staff).
9. Gather and schedule resources, including funding, trained volunteers, equipment, and materials (Rim ATP stakeholders with USFS staff and/or partner organizations).
10. Construct trail (Rim ATP stakeholders with USFS staff and/or trail crews).
11. Maintain trail (Rim ATP stakeholders under direction of USFS staff).

8.4 Recommended Programs

Developing a trusting, collaborative partnership with the USFS may take time. Tackling smaller projects that produce benefits for multiple stakeholders will likely forge and expedite relationship building. The following projects and programs offer short-term wins and should be considered by Rim ATP stakeholders to enhance the existing Forest Service trail system, increase awareness about user impacts, and improve trail maintenance.





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- **Wayfinding signage:** Signs at existing trailheads and along existing trails help keep users on the trail. The Southern California Mountains Foundation has developed and implemented a sign program in Big Bear Valley. The program is consistent with USFS requirements and offers several different sign types as well as the opportunity for a consistent appearance across the San Bernardino National Forest. Sign types include kiosks well suited for trailheads, freestanding signs, and trail markers.
- **Adopt-a-Trail:** Recruiting a group of volunteers dedicated to a single trail promotes a sense of ownership and long-term stewardship. While the recruitment process is an ongoing effort that takes time and organization, the Southern California Mountains Foundation has an established program that could be used as a model.
- **Youth Engagement Program:** Youth tend to be an overlooked resource. More importantly, they need purpose and accomplishments to build self-esteem and develop a sense of civic responsibility. Also, they have energy and ideas that older generations may lack. In addition, cross-country runners, mountain bike team members, and Boy Scouts and Girl Scouts troops regularly use trail resources. The Pacific Crest Trail Association has a suite of youth trail maintenance programs, which may be used as models in the San Bernardino National Forest.



8.5 Future Projects

Once Rim ATP stakeholders have established a productive relationship with the USFS, they should work with the USFS to implement infrastructure improvements. Trailhead improvements and trails that connect communities are two of the highest priority improvements of the Rim ATP. The relationship between schools and the outdoors has been another top priority among participants during outreach events. Where possible, new trail projects should be developed to help increase students' access to the outdoors. Such trails could be used to facilitate "Outdoor Classroom Day" (<https://outdoorclassroomday.com>) and other similar programs. Where trailheads may be developed near school parking lots, the parking lots may be used by the general public to access the trails when school is not in session.



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- **Trailhead Improvements:** The plan area lacks sufficient numbers of improved trailheads to support demand and promote sustainable recreation for locals and tourists. Under the leadership and guidance of the USFS, Rim ATP stakeholders should evaluate the number, location, amenities, and conditions at existing and potential trailheads. Once assessment is complete, Rim ATP stakeholders should work with the USFS, the County of San Bernardino Public Works Department, Caltrans, and/or other agencies responsible for the adjacent right-of-way to evaluate, fund, design, construct, and maintain trailhead improvements, which may include:
 - Parking facilities for bicycles, motorized vehicles, and trucks pulling horse trailers
 - Restroom facilities
 - Refuse and recycling receptacles
 - Crosswalks and other access to transit enhancements
 - Information kiosks

Through the community outreach activities of this project, the following recommended trailheads were identified:

- Near the beginning of trail to access Heart Rock
- At the beginning of trail to access The Pinnacles
- Enhancements, including parking for horse trailers, near the existing Tunnel II trailhead
- Near the end of SR-173
- At Crestline Sanitation District
- At MacKay Park
- At the top of the decommissioned Forest Service Road near Daley Canyon Road Monument
- At or near SkyPark
- At Snow Valley/Rim Nordic
- **Intermountain Trail Network:**
 - Multipurpose trail adjacent to SR-18 serving as the main artery connecting Rim of the World communities and recreational activity centers along SR-18 from SR-138 in Crestline to Nob Hill in Running Springs.
 - Multipurpose community-to-community trails such as Lake Gregory to Grass Valley, Lake Gregory to Twin Peaks, Blue Jay to Lake Arrowhead, Running Springs to Arrowbear, and Arrowbear to Green Valley Lake.
 - Multipurpose trails connecting to recreational activity centers and communities beyond Rim of the World, such as north to Silver Lake State Recreation Area, south to CSU San Bernardino, San Manuel Casino, City Creek Fire Station, and the Seven Oaks Dam, and east to Snow Valley/Rim Nordic and the Big Bear Valley trails network.



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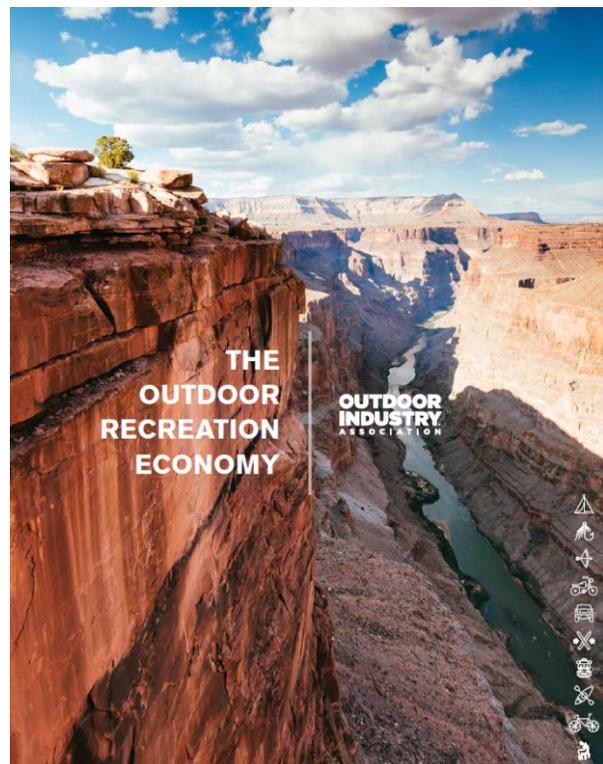
CHAPTER 9. TRAIL-BASED ECONOMIC DEVELOPMENT

9.1 The Case for Outdoor Industry

Recognizing the impact of outdoor recreation in the United States, the federal government signed the bipartisan Outdoor Recreation Jobs and Economic Impact (REC) Act into law in 2016. As a result, data has become available to better understand the impact of the outdoor recreation industry on national and regional economies. Using such data, the Outdoor Industry Association prepared a report called “The Outdoor Recreation Economy” in 2017.¹ The outdoor recreation industry is made up of outdoor recreation products, which include gear, apparel, footwear, equipment, services and vehicle purchases, and trip and travel spending on airfare, fuel, lodging, groceries, lift tickets, guides, lessons, and more. According to the report, in 2017 consumers spent \$887 billion on outdoor recreation products, trips, and travel. They spent less on pharmaceuticals and fuel combined (\$770 billion).

Benefits associated with outdoor recreation economics include tax revenue and jobs across the skill spectrum. Investment in outdoor recreation infrastructure also offers benefits to communities including lower crime rates, increased educational outcomes, and lower long-term medical costs.

The Rim of the World is in a state that embraces trail running, day hiking, backpacking, rock climbing, bicycling, and viewing wildlife. Californians participate in these and other recreational activities at a higher rate than other Americans and spend



¹ https://outdoorindustry.org/wp-content/uploads/2017/04/OIA_RecEconomy_FINAL_Single.pdf



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\$92 million a year. Outdoor recreation in California also generates 691,000 jobs, \$30.4 billion in salaries, and \$6.2 billion in state and local tax revenue.

9.2 Policy Context for Economic Development in Rim of the World

The County of San Bernardino recognizes the importance of tourism to the local economy and has adopted goals and policies in the Community Plan portion of the General Plan that support development of the outdoor recreation industry in communities across Rim of the World. These goals and policies are included below.

GOAL M/ED 1. Promote economic development that is compatible with the character of the Mountain Region.

Policy M/ED 1.1 Encourage development and business activities that capitalize on the amenities and recreational activities contained within the National Forest and offered by the mountain communities including skiing, biking, fishing, hiking and camping.

Policy M/ED 1.2 Support commercial development that is of a size and scale that complements the natural setting, is compatible with surrounding development, and enhances the alpine character.

Policy M/ED 1.3 Support the development of design standards for commercial development within the mountain region. Design standards should focus on improving parking and circulation, enhancing the pedestrian experience, and focusing on building architecture and site design that is compatible with the mountain character.

Policy M/ED 1.4 Establish development and design standards for tourism operations that address potential impacts such as noise, hours of operation, signage and traffic.

Policy M/ED 1.5 Work with the County Economic Development Agency to pursue appropriate grant funding to assist in economic development activities.

Policy M/ED 1.6 Encourage the creation of hiking and biking trails as tourist attractions.

Goal CF/ED 1. Promote economic development that is compatible with the mountain character of the Crest Forest community.

Policy CF/ED 1.1 Encourage development and business activities that capitalize on the amenities and recreational activities contained within the National Forest and offered by the Lake Gregory Regional Park including skiing, biking, fishing, hiking and camping.

Policy CF/ED 1.3 Support specific planning for downtown Crestline, with an emphasis on improving parking and circulation, enhancing the pedestrian experience, and improving building architecture and site design to be compatible with the mountain character.

Policy CF/ED 1.4 Work with County Economic and Community Development to pursue appropriate grant funding to assist in economic development activities.



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Goal HT/LU 3. Enhance development within the existing downtown commercial area of Running Springs.

Policy HT/LU 3.1 Support revitalization of the existing downtown commercial area.

Policy HT/LU 3.2 Pursue cooperative funding sources, such as County CDBG funding, Chamber of Commerce, and Board of Realtors, to establish a public rest stop in downtown Running Springs. Research the feasibility of obtaining the parcel located across from the Unocal 76 Gas Station for this purpose.

Policy HT/LU 3.3 Encourage the provision of additional public parking for use by patrons of the downtown area of Running Springs through public and/or private funding sources, and examine opportunities for shared parking by businesses.

Goal HT/OS 2. Develop parks and recreation facilities to meet the recreational needs of the community.

Policy HT/OS 2.3 Research the opportunity to acquire land within the downtown Running Springs area to dedicate as a central community park.

9.3 World-Class Destinations

Part of the Rim of the World vision is to become a world-class destination for outdoor recreation, which ties directly to the local outdoor recreation industry. Existing businesses have invested time and money into infrastructure and amenities that contribute to becoming a world-class destination, such as Lake Arrowhead Resort, Pali Mountain, Rim Nordic Ski Area/Bike Park, SkyPark at Santa's Village, Snow Valley, The Tudor House, and Wake and Wheel. To strengthen progress, business groups should define and work toward a common vision. In preparing a strategy for becoming a world-class destination, Rim ATP stakeholders may consider a range of trail users and the types of places and amenities sought by the desired target markets.

Trail Users

No two trail users are the same and often trail users seek shared experiences. The most attractive destinations will offer something for everyone with varying abilities and interests, in every stage of life:

- Parents carrying children on their backs.
- Multigenerational families such as grandparents on the trail with small grandchildren.
- Teenagers gaining independence and looking for places of exploration and adventure.
- Thrill seekers who want steep climbs or higher speeds.
- Nature lovers who want slower, contemplative moments.





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- People who want loops and/or to be able to walk their dogs near their homes.
- People who want to travel to a destination for an all- or multiday trek.
- Tourists desiring car-light vacations.



Trail Types

The most desirable destinations have trail networks comprising a variety of trails, offering people choice. Sources of trail diversity include:

- Surface materials such as paved, wooden, decomposed granite, dirt, or water.
- Steepness and curves, particularly for various types of mountain biking.
- Difficulty level including a mixture of pathways—easy for children and beginners, intermediate for skill building, and advanced for the most experienced.
- Distances ranging from short pathways for short trips that can be done in less than an hour and longer trips that can last several days.
- A mix of facilities for pedestrians, bicyclists, and horseback riders on shared pathways or single-purpose pathways.



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Environment, History, and Culture

A sense of place enriches experiences and drives the desire among tourists to stay longer, return more often, and create digital content that encourages others to visit. For recreation destinations, sense of place may be enhanced by:

- Offering trails and other experiences that reflect local history and culture.
- Creative environments that incorporate public art, natural features such as rocks, trees, and water, and outdoor amenities like benches, firepits, and water features.
- Retailers and galleries sell products and artwork that can't be found in everyday stores.



Travel Services

Tourists are drawn to places where their unique needs are met and interests are reflected in the provision of travel services:

- Lodging options appeal to a wide range of tastes and budgets including:
 - Places for traditional, back-to-basics camping and more luxurious glamping.
 - Vacation home rentals for individuals to large families.
 - Motels, hotels, and inclusive resorts.
- Transportation, like car sharing and fixed-route shuttles, combined with walkable and bikeable village areas enable people to enjoy car-light vacations.
- Food is available from grocery stores, specialty markets, and farm to table settings.
- Entertainment and spirits are offered from an eclectic mix of restaurants along with breweries, wineries, or distilleries.
- Medical services, rainy day activities, and child-care services are available when needed.



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CHAPTER 10. EXPENDITURES & FUNDING

10.1 Planning Level Cost Estimates

The Rim ATP will be implemented over many years as funding allows. The County does not have the resources to construct all proposed improvements in the short term, nor can the County implement all proposed projects immediately. The following table includes all proposed improvements (excluding recommended projects in the National Forest) with a planning level cost estimate. Estimates are based on type of facility, industry standards for construction, and length of facility.

Table 10-1. Cost Estimates for Proposed Shared Pedestrian/Bicycle Crossings

Street/Path	From	To	Quantity	Cost Estimate
Fern Drive at Crest Forest Drive	n/a	n/a	1	\$13,200
Grandview Road at North Road	n/a	n/a	1	\$13,200
Green Valley Lake Road midblock between Angeles Drive and Robin Drive	n/a	n/a	1	\$13,200
Lake Drive at Fern Drive	n/a	n/a	1	\$13,200
Lake Drive at Knapps Cutoff	n/a	n/a	1	\$13,200
Lake Drive at Old Mill Road	n/a	n/a	1	\$13,200
Lake Drive at Pioneer Camp Road	n/a	n/a	1	\$13,200
Lake Drive at Springwater Road	n/a	n/a	1	\$13,200
Lake Drive near Crestline Sanitation District	n/a	n/a	1	\$13,200
Palo Alto Way at Commercial Way	n/a	n/a	1	\$13,200
SR-138 at Crest Forest Drive on both sides of the intersection	n/a	n/a	1	\$13,200
SR-138 at Waters Drive	n/a	n/a	1	\$13,200
SR-173 at Hook Creek Road	n/a	n/a	1	\$13,200
SR-173 at Torrey Road	n/a	n/a	1	\$13,200
SR-173 at Village Road and SR-189	n/a	n/a	1	\$13,200
SR-18 at Bear Springs Road/Blackfoot Trail	n/a	n/a	1	\$13,200
SR-18 at Kuffel Canyon Road	n/a	n/a	1	\$13,200
SR-18 at Mountain View Drive	n/a	n/a	1	\$13,200



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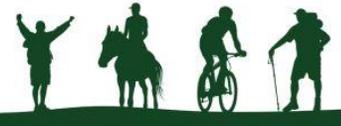
Street/Path	From	To	Quantity	Cost Estimate
SR-18 at Palo Alto Way	n/a	n/a	1	\$13,200
SR-18 at Pine Ave (east)	n/a	n/a	1	\$13,200
SR-18 at SkyPark/Santa's Village	n/a	n/a	1	\$13,200
SR-189 at Daley Canyon Road	n/a	n/a	1	\$13,200
SR-189 at Grandview Road	n/a	n/a	1	\$13,200
SR-189 at Grass Valley Road	n/a	n/a	1	\$13,200
SR-189 at Rose Lane	n/a	n/a	1	\$13,200
SR-189 at Village Bay	n/a	n/a	1	\$13,200
SR-330 at Hunsaker Way	n/a	n/a	1	\$13,200
TOTAL ESTIMATED COST – PEDESTRIAN/BICYCLE CROSSINGS				\$356,400

Table 10-2. Cost Estimates for Proposed Sidewalks

Street/Path	From	To	Length (Linear Feet)	Cost Estimate
Commercial Way	View Drive	SR-18	531	\$129,500
Crest Forest Drive (both sides)	S. Village Lane	Fern Drive	1975	\$960,900
Crest Forest Drive (both sides)	S. Village Lane	Fern Drive	2023	\$984,200
Daley Canyon Road (west side)	SR-189	Blue Jay Cutoff	2090	\$1,016,800
Fern Drive (both sides)	Crest Forest Drive	Lake Drive	2483	\$1,208,000
Fern Drive (both sides)	Crest Forest Drive	Lake Drive	2635	\$1,282,000
Golden Rule Lane (west side)	Sequoia Drive	SR-173	1000	\$486,500
Green Valley Lake Road (south side)	Angeles Drive	Robin Drive	1004	\$244,900
Holiday Lane	SR-18	Hunsaker Way	996	\$243,000
Hook Creek Road (north side)	SR-173	Lakeview Drive	3175	\$1,544,700
Hunsaker Way (both sides)	SR-330	West Drive	235	\$57,300
Hunsaker Way (both sides)	SR-330	West Drive	248	\$60,500
Kuffel Canyon Road (Kuffel Canyon Road)	SR-18	Sycamore Drive	333	\$81,200
Kuffel Canyon Road (Kuffel Canyon Road)	SR-18	Sycamore Drive	371	\$90,500
Lake Drive (both sides)	Pioneer Camp Road	Lake Gregory Drive	1325	\$644,600



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Street/Path	From	To	Length (Linear Feet)	Cost Estimate
Lake Drive (both sides)	Pioneer Camp Road	Lake Gregory Drive	275	\$133,800
Lake Drive (both sides)	Pioneer Camp Road	Lake Gregory Drive	305	\$148,400
Lake Drive (both sides)	Pioneer Camp Road	Lake Gregory Drive	700	\$340,600
Lake Drive (both sides)	Fern Drive	Pioneer Camp Road	1805	\$878,200
Lake Drive (both sides)	Fern Drive	Pioneer Camp Road	1840	\$895,200
North & south sides of Fir Lane	Spruce Drive	Elm Drive	1652	\$803,700
North & south sides of Fir Lane	Spruce Drive	Elm Drive	1594	\$775,500
Palo Alto Way (east side)	SR-18	Whispering Pines Drive	560	\$136,600
Palo Alto Way (west side)	SR-18	SR-330 Overpass	202	\$49,300
Palo Alto Way (west side)	SR-330 Overpass	Whispering Pines Drive	248	\$60,500
Seeley Lane (west side)	Fir Lane	Byron Road	765	\$372,200
Spruce Drive (west side)	Fir Lane	Waters Drive	274	\$133,300
SR-138 (north side)	Waters Drive	Brookside Road	488	\$237,400
SR-173 (both sides)	Lake Arrowhead Community Church	Lake Arrowhead Village	2282	\$1,110,200
SR-173 (both sides)	Lake Arrowhead Community Church	Lake Arrowhead Village	2280	\$1,109,300
SR-173 (east side)	Fremont Road	Sunset Drive	1123	\$546,400
SR-18 (north side)	City Creek Road	Mountain View Drive	1093	\$266,700
SR-18 (north side)	Approximately 28598 Rim of the World Highway	Approximately 28626 Rim of the World Highway (bus stop)	420	\$102,500
SR-18 (south side)	Approximately 26415 SR-18	Pine Avenue (east)	1879	\$914,200
SR-18 (south side)	Palo Alto Way	Holiday Lane	771	\$188,100
SR-18 (south side)	Approximately 28561 Rim of	E Rim Drive (bus stop)	836	\$204,000





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Street/Path	From	To	Length (Linear Feet)	Cost Estimate
	the World Highway			
SR-189 (north side)	Existing private sidewalk at approximately 27221 CA-189	North Bay Road	1487	\$723,500
SR-189 (north side)	SR-173	Village Bay	1418	\$689,900
SR-189 (north side)	Grandview Road	Glen View Lane	1802	\$876,700
SR-189 (south side)	27187 CA-189	North Bay Road	1465	\$712,800
SR-189 (south side)	Mile Pine Road	Glen View Lane	677	\$165,200
SR-330	Hunsaker Drive	Soutar Drive	1391	\$339,400
Waters Drive (south side)	Spruce Drive	SR-138	592	\$288,000
Whispering Pines Drive (north side)	Palo Alto Way	Hunsaker Drive	506	\$123,400
TOTAL ESTIMATED COST – SIDEWALKS				\$22,359,600

Table 10-3. Cost Estimates for Proposed Multi-Use Path

Street/Path	From	To	Length (Miles)	Cost Estimate
Crestline Creek Trail	Friendly Lane	Forest Shade Road	0.3	\$211,400
Crestline Creek Trail	Friendly Lane	Forest Shade Road	0.3	\$211,400
Runnings Springs Path	Pine Cone Drive	Keller Peak Road	0.5	\$1,041,000
Runnings Springs Path	Pine Cone Drive	Keller Peak Road	0.5	\$1,041,000
TOTAL ESTIMATED COST – MULTI-USE PATH				\$2,504,800

Table 10-4. Cost Estimates for Proposed Bicycle Storage

Location	Cost Estimate
At public restroom near Palo Alto Way and SR-330	\$1,400
Crest Forest Drive at Woodland Road	\$1,400
Lake Arrowhead Village near entrance to pedestrian-only area	\$1,400



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Location	Cost Estimate
Lake Arrowhead Village near Village Road	\$1,400
Lake Drive near Crestline Sanitation District	\$1,400
Lake Drive/Lake Gregory Drive	\$1,400
Near 28942 Hook Creek Road	\$1,400
Near 292 SR-173	\$1,400
SR-18 near Kuffel Canyon Road	\$1,400
SR-18/Pine Ave (east)	\$1,400
SR-189 at Acorn Lane	\$1,400
SR-189 at Grandview Road	\$1,400
SR-189 at Rose Lane	\$1,400
SR-189 near the grocery store	\$1,400
Waters Drive at Log Lane	\$1,400
Wildrose Lane/Springwater Road	\$1,400
TOTAL ESTIMATED COST – BICYCLE STORAGE	\$22,400

Table 10-5. Cost Estimates for Proposed Bicycle Lanes and Routes

Street/Path	From	To	Length (Miles)	Cost Estimate
Crest Forest Drive	South Village Lane	23493 Crest Forest Drive	0.6	\$253,600
Lake Drive	Pioneer Camp Road	Lake Gregory Drive	1.4	\$589,400
SR-173	Fremont Road	Emerald Way	0.6	\$899,100
SR-173	SR-189	Corona Circle	0.3	\$120,100
SR-173	Torrey Road	691 CA-173	0.4	\$146,800
SR-189	27159 SR-189	North Bay Road	0.6	\$231,200
Arosa Drive	Lake Drive	North Road	2.8	\$217,900
Bear Springs Road	SR-189	SR-18	2.9	\$229,200
Blue Jay Cutoff	Grass Valley Road	SR-189	0.6	\$44,100
Brentwood Drive	Fairway Drive	Grass Valley Road	6.3	\$496,600
Burnt Mill Road	Cottage Grove Road	Rim of the World Drive	3.7	\$292,500
Cottage Grove Road	SR-189	Burnt Mill Road	0.1	\$7,100





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Street/Path	From	To	Length (Miles)	Cost Estimate
Crest Forest Drive	23493 Crest Forest Drive	SR-18 & Lake Gregory Drive	6.8	\$533,900
Crest Forest Drive	Nardi Lane	South Village Lane	7.4	\$584,000
Daley Canyon Road	SR-18	SR-189	1.1	\$85,700
Fairway Drive	Grandview Road	Clubhouse Drive	3.5	\$276,900
Fern Drive	Crest Forest Drive	Lake Drive	1.0	\$77,200
Golden Rule Road	SR-173	North Bay Road	0.2	\$14,100
Golf Course Road	Grass Valley Road	Old Toll Road	1.6	\$123,100
Grandview Road	SR-189	Fairway Drive	2.9	\$226,800
Grass Valley Road	SR-189	SR-173 (Deer Lodge Park)	11.2	\$875,900
Green Valley Lake Road	SR-18	Robin Drive (Green Valley Lake)	8.7	\$679,700
Kuffel Canyon Road	SR-173	SR-18	2.9	\$229,600
Lake	Lake Drive	Old Mill Road	4.9	\$382,700
Lake Drive	Lake Gregory Drive	San Moritz Drive	3.0	\$236,000
Lake Drive	Fern Drive	Pioneer Camp Road	0.7	\$54,600
Lake Gregory Drive	Lake Drive	SR-189	5.4	\$424,800
Nardi Lane	Crest Forest Drive	Waters Drive	0.0	\$3,400
North Bay Road	SR-189 (Blue Jay)	Golden Rule Road	9.5	\$745,500
North Road	Lake Gregory Drive	Grandview Road	4.9	\$384,100
North Shore Road	West Shore Road	SR-173	3.9	\$305,300
Old Mill Road	Lake Drive	Transition to Dirt Road	3.5	\$272,300
Old Toll Road	Golf Course Road	Peninsula Drive	5.3	\$414,500
Peninsula Drive	Old Toll Road	West Shore Road	0.9	\$71,200
Rim of the World Drive	Burnt Mill Road	SR-18	0.6	\$44,300



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Street/Path	From	To	Length (Miles)	Cost Estimate
San Moritz Drive	Lake Gregory Drive	Lake Drive	3.9	\$304,300
SR-138	Old Mill Road	Santa Fe Road (Cajon Junction)	42.0	\$3,299,200
SR-138	Lake Drive	Waters Drive	2.3	\$180,200
SR-173	691 CA-173	Emerald Way (Cedar Glen)	1.4	\$109,000
SR-173	Corona Circle	SR-18	3.8	\$296,000
SR-173	Fremont Road	SR-189	3.8	\$301,200
SR-173	Pinnacles Trail 3W16	Torrey Road	13.9	\$1,089,600
SR-18	Bear Springs Road	SR-38 (Big Bear Lake)	51.3	\$4,030,200
SR-189	Grass Valley Road	Blue Jay	2.6	\$201,500
SR-189	North Bay Road	SR-173 (Lake Arrowhead)	3.0	\$232,800
SR-189	Grandview Road	Grass Valley Road	2.9	\$231,000
Waters Drive	Nardi Lane	SR-138	3.8	\$296,500
West Shore Road	Peninsula Drive	North Shore Road	5.0	\$393,100
TOTAL ESTIMATED COST – BICYCLE LANES/ROUTES				\$21,537,800

10.2 Funding

Local funding sources

While the County’s General Fund may be used to acquire, construct, and improve public facilities and real property, projects in the Rim ATP are among hundreds of other projects. If the County has funding available for any of the projects in the Rim ATP, each department would consider available resources and the relationship of the proposed project to the goals and policies of the General Plan. Rather than competing for limited funds, Rim ATP stakeholders should consider:

- **Resurfacing and Repaving:** When the County or Special Districts resurface and repave streets, they may paint bike facilities as well where sufficient pavement exists without adding significant expense. For any given project, the County or Special Districts would evaluate the feasibility of painting Class II lanes or Class III sharrows on a case-by-case basis.
- **New Construction:** Future road widening and construction are opportunities for adding bicycle lanes, sidewalks, and improved crossings. With the Rim ATP in hand, the County may





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require road dedication and street improvements as a conditions of approval if the proposed facility is determined to be appropriate.

- **Additional Tax Assessment or General Obligation Bonds:** Rim ATP stakeholders showed low levels of support for taxing themselves for active transportation improvements. Unless public opinion changes, these sources of funds are infeasible.
- **Impact Fees and Developer Mitigation:** At present, these are not among fees imposed by the County of San Bernardino.
- **Revenue-Generating Facilities and Programs:** Special events, rental or user fees may be funneled toward construction of active transportation facilities. When facilities and programs are tied to the trail-based economy, revenues generated are directed back into infrastructure expansion or enhancement.
- **Business Improvement Districts (BIDs)/Tourist Business Improvement Districts (TBIDs):** Business Improvement Districts (BIDs) are self-taxing. Business and property owners pay for capital improvements, maintenance, marketing, parking, and other items as jointly agreed to through systematic, periodic self-assessment. These districts may include provisions for pedestrian and bicycle improvements.
- **Landscape and Lighting Maintenance District (LMDs):** The Landscaping and Lighting Act of 1972 enables assessments to be imposed to finance the maintenance and servicing of landscaping, street lighting facilities, ornamental structures and park and recreational improvements. This could be used for bike paths as well as lighting and amenities along bike paths.

Private/Non-Profit Sources

- **Private Donations:** Donations for a variety of projects are generally available from foundations, institutions, and corporations that have major interests in these areas.
- **Donor Programs:** Some of the proposed improvements may lend themselves to a public campaign for donor gifts. Donor programs have been used very successfully in many cities in the United States for providing funds for streetscape and community design elements. Such programs can be tailored to solicit contributions from individuals, corporations, local businesses and community and business associations. Many improvements could be funded by donor gifts for items such as: benches, trash receptacles, street trees, street tree grates, public art elements and information kiosks. Donors could be acknowledged with a plaque on the element itself or other prominent display, such as a “wall of fame” with donor names.

Grant Funding Opportunities

A wide range of grant funding opportunities are available to the Rim of the World Recreation and Park District and its partners. The funds can be used to expand and enhance transportation and/or recreational facilities. The following list includes core grant fund opportunities as well as resources that can be used to keep up-to-date as funding programs evolve. Depending on who’s eligible for grant funds, the Rim ATP stakeholders should coordinate and non-profit partners to develop a



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strategy for pursuing grants.

Grant Programs

- Active Transportation Program
- SB 1 Sustainable Transportation Planning Grant Program
- SB 1 Adaptation Planning Grant
- Affordable Housing and Sustainable Communities
- Community Development Block Grant Economic Development (ED) Over the Counter
- Transit and Intercity Rail Capital Program
- Five Star and Urban Waters Restoration Grant Program
- Cooperative Watershed Management Program
- Land and Water Conservation Fund
- MSRC Local Government Partnership Program
- Environmental Enhancement and Mitigation

Grant Opportunities Tracking

The following organizations track grant opportunities and/or provide information to local government agencies.

- San Bernardino County Transportation Authority
- Western Riverside Council of Governments





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CHAPTER 11. IMPLEMENTATION & PRIORITIZATION

The Rim ATP began as a grass-roots effort led by three community members who combined their intellectual resources to apply for a Caltrans grant application. Parallel to their work, business owners and user groups independently invested other resources to build and maintain trails. To achieve the vision of Rim ATP stakeholders and build a network of interconnected trails across the mountaintop, collaboration is critical, resources must be aligned, and a diverse group of people and organizations must work toward a common vision. At the time of publication, no single agency, organization, or collaborative group was established to implement the Rim ATP. This chapter is intended to serve as a generic guide to implementation.

11.1 Collaborative Trail System Development

Building a Trails Collaborative

One of the first steps in building a collaborative is to identify leadership. Leaders should have relevant experience, a willingness to learn from others, and have or can form working relationships with agency partners. The leaders of the collaborative should convene stakeholders from various user groups and agencies and host a series of meetings intended to:

- 1) Educate group participants about the Rim ATP and the requirements of participating agencies, which will dictate or influence the role agencies play in the collaborative.
- 2) Identify common goals among the various partner organizations.
- 3) Identify and prioritize projects from Chapter 7 and 8 that contribute to those common goals.
- 4) Evaluate several types of partnership agreements to formalize the collaborative, and
- 5) Seek commitment to participate from decision-making bodies.
- 6) Create a brand to make the collaborative and the work it represents easy to understand and to attract supporters.

Who should be involved?

Successful trails collaboratives require skills and aptitudes from diverse types of people including the following:

- **Leaders:** the leader or leaders of the collaborative should be visionaries and champions willing to guide the collaborative down a path with distinct milestones toward a clear and tangible goal.



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- **Advisors/Agency Representatives** are people who study policies and understand technical details because of professional knowledge. While these may be professionals, they may also be dedicated volunteers who learn by watching webinars, attending meetings, reading newsletters, and other similar activities. They track changes that could impact implementation. For example, an advisor would be responsible for tracking Active Transportation Program grant cycles and updates to the San Bernardino County Active Transportation Plan and updating the trail collaborative.
- **Communicators** are people who identify key messages and messaging opportunities to brand, promote, educate, and campaign. They use webpages, social media, newsletters, brochures, special events, farmer’s market booths, speaking engagements, advertisements, and campaigns. Once an organization is formalized, communicators work with or also serve as secretaries and prepare meeting agendas and minutes. Strategic communications are paramount to increasing awareness for the trails collaborative and garnering resources for the organization in the form of donations of time, money, and materials.
- **Trail builders** are the worker bees. They use special tools and sweat equity to construct and maintain unpaved trail projects and their labor may contribute the local match required for many grant funds.
- **Crew leaders** are special trail builders who have honed their skills, understand safety, motivate others, and guide groups of trail builders.

In addition to involving people with these skills and aptitudes, the collaborative should include representatives from all types of user groups (pedestrian, road cycling, mountain biking, and equestrian) and all communities. In a place like Rim of the World, representation from all communities should be a goal at a minimum. Regardless of if individuals demonstrate interest, a space should be reserved at the table for a representative from each major community. The collaborative should also strive to include people of all ages. By participating on work days, youth build confidence, a sense of stewardship, and civic responsibility. The youngest can begin volunteering when they are old enough to carry bottles of water to trail builders provided they mind safety precautions under the supervision of an adult.

The Rim of the World Recreation and Park District made its best effort to invite and engage people during outreach activities as part of developing this plan. However, some people may have felt left out of the process, and they should be invited to participate in evaluating projects, defining priorities, identifying additional opportunities, and other aspects of implementation. More specifically, the trail collaborative should reach out to the following people and organizations.

- **Users and User Groups:**
 - Community members from across the entire plan area
 - Mountain Top Hiking Club
- **Community and Service Organizations:**
 - Mountain Community Alliance
 - Lilleberg Museum and Jim Reid Park
 - Rim of the World Historical Society



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- San Bernardino County Search and Rescue
- Nongovernmental Organizations
 - Southern California Mountains Foundation
- Local agencies including all fire districts within the plan area
- State and federal agencies including Caltrans, the California Highway Patrol, and San Bernardino County Sheriff's Department

Rim of the World Recreation and Park District Partner Organizations

While the Rim of the World Recreation and Park District led development of the Rim ATP. They are not a transportation agency. They do not have a Public Works department and they do not construct and maintain roads or trail networks. Therefore, they have a role to play in the collaborative, but they must be accompanied by other public agencies and community organizations. Mountain Transit is an important parallel partner because recreation and transit go hand in hand in Rim of the World.

Rather than listing the hundreds of potential partner organizations, a few of the most promising partners along with their key strengths are highlighted below.

Government Agencies

- Mountain Transit
- San Bernardino County Land Use Services and Public Works
- Caltrans
- San Bernardino County Transportation Authority

Non-Profit Trails and Open Space Organizations

- Sierra Club Mountains Group: frequent trail users with a large volunteer base
- San Bernardino Mountains Land Trust: experienced land owner with staff and expertise in biology, land acquisition, and conservation
- Southern California Mountains Foundation: a model for collaborative trail building located in the San Bernardino National Forest that includes paid dedicated staff, a long history of working with the National Forest, and the parent organization of the Big Bear Valley Trails Foundation

11.2 Resources

In addition to formalizing the collaborative, skill building is very important. Members of the collaborative should be provided with training to learn about working with government agencies, designing and constructing sustainable multi-use trails, and involving all ages, abilities and user types. In addition, they should have resources to provide technical assistance through the implementation process.

The following organizations offer technical expertise in specialized areas and may be valuable resources to Rim ATP stakeholders.

- San Bernardino County Active Transportation Network
- Safe Routes to Schools National Partnership
- Professional Trail Builders Association



Rim of the World Active Transportation Plan



- American Trails
- International Mountain Biking Alliance

11.3 Project Prioritization

At a regional scale, project prioritization is possible, but quickly becomes outdated due to changes in the population, funding programs, and political environment. Implementation should be phased with input from community stakeholders from a year-to-year basis. Such a frequency enables grant-writers to demonstrate community priorities to grant funding programs that demand frequent stakeholder consultation. Based on input from stakeholders, including agencies and community members, the first phase of improvements should prioritize signage, trailhead improvements, and a program for volunteers to maintain unpaved trails. SRTS received much attention during stakeholder outreach. Therefore, Safe Routes to School projects should receive careful attention in the prioritization process and, where feasible, be prioritized above non SRTS projects.

Once Rim ATP stakeholders gather momentum and build relationships through implementing sign, trailhead, and maintenance projects on existing facilities, then work should begin on design, engineering, and construction of more complex projects.

To facilitate regular and broadbased community prioritization, Rim ATP stakeholders should consider development of a web-based implementation tool to maintain a dynamic spreadsheet of proposed projects. The tool could be designed to support the trails collaborative and be updated to reflect the Intermountain Trail System as it is developed. In addition, the tool could be designed to integrate with social media and solicit public input about priorities as well as crowd source inputs and volunteer commitments.

As the trails collaborative moves forward with Rim ATP implementation, the following should be evaluated to determine project priorities as they change over time.

- Location by community
- Priorities of agency partners (i.e. water quality improvements, economic development, conservation, etc.)
- Feasibility to construct
- Land tenure
- Opportunities for short-term wins
- Opportunities for long-term flagship change
- Commitment of potential volunteers to construct and maintain

RIM OF THE WORLD

ACTIVE TRANSPORTATION PLAN

Appendix 1: Resolution

To be added upon approval of resolution by
County of San Bernardino