2024

ACTIVE TRANSPORTATION PLAN

TAHOE REGIONAL PLANNING AGENCY || lake tahoe

FINAL
April 2024

2024 ACTIVE TRANSPORTATION PLAN PREFACE

The Tahoe Regional Planning Agency (TRPA), as the federally designated Metropolitan Planning Organization (MPO), is committed to keeping the Active Transportation Plan (ATP) up-to-date to ensure it supports the planning and funding needs of local jurisdictions. Every four years, TRPA assesses the need for a plan update. The 2024 ATP update will inform the 2025 Regional Transportation Plan (RTP) update. The 2024 ATP includes extensive public outreach, major changes to proposed facilities, new infrastructure recommendations, new policies and actions, and comprehensive data analysis and environmental screening, as outlined below.

Collaboration with Local Jurisdictions:
The ATP update would not have been possible without active participation from local jurisdictions. Implementing agencies provided updated project information, progress on planning, design, and funding of projects.

PLAN OVERVIEW:

Table of Contents
The Table of Contents and List of Figures & Tables have been updated with new page numbers, new map figures, and new tables.

Chapter 1: Introduction
The introduction includes a brief overview of the 2024 Active Transportation Plan update, highlighting key themes, plan organization, public outreach, local agency roles and responsibilities, as well as a brief explainer of Tahoe's regional land use.

Chapter 2: Existing Conditions and Needs Analysis
A fully updated needs assessment is a part of this update, as well as new data, maps, figures, and tables. This chapter introduces the Bicycle Levels of Traffic Stress and Pedestrian Experience Index analyses, current challenges and solutions to safety, connectivity, implementation, and maintenance issues.

Chapter 3: Goals, Policies, & Performance Measures
This chapter is helpful for agencies to align regional goals with local project development. It includes a brief overview of the future of active transportation in the Tahoe Basin, and how performance metrics dictate how the TRPA, as the Transportation Metropolitan Planning Organization (TMPO) and its partnering agencies, organizations, and private entities can work together to improve active transportation and increase its use.

Chapter 4: Network Recommendations
Each corridor map has been updated to illustrate existing conditions and highlight projects nearing implementation. Since the 2018 ATP adoption, new data analyses are available that enrich the existing and proposed infrastructure maps and project lists. This includes existing and proposed bicycle parking locations. Specifically, each corridor section now includes:

- New maps highlighting network recommendations
- A map of the existing and proposed bicycle and pedestrian infrastructure network (shared-use paths, sidewalks, bike lanes, bike routes, and bicycle parking)
- An updated map of the corridor crash analysis
- An updated priority project list

Chapter 5: Programs
This section provides an update on regional active transportation programs, such as Bike Month activities, Safe Routes to School, education, and awareness campaigns.

Chapter 6: Implementation Plan
This chapter provides a detailed look at how TRPA can best support implementation of our region's priority projects.

Appendices:

A. **Lake Tahoe Complete Streets Resource Guide**
B. **Tahoe Transportation Survey**
C. **Bicycle Level of Traffic Stress and Pedestrian Experience Index Technical Memos**
D. **Lake Tahoe Bicycle & Pedestrian Monitoring Protocol**
E. **Maintenance Responsibilities Chart and Template**
F. **Existing and Proposed Project List**
G. **Adoption Resolutions (posted after adoption)**

ACKNOWLEDGMENTS

The 2024 update to the Lake Tahoe Active Transportation Plan, formerly the Bicycle and Pedestrian Plan, is a collaborative process that includes robust community, stakeholder, and staff participation. Everyone plays an important role in shaping the vision and developing the content of these documents.

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GLOSSARY: ACRONYMS AND DEFINITIONS

2010 BPP: The 2010 Lake Tahoe Bicycle and Pedestrian Plan

ADA: The Americans with Disabilities Act, https://www.ada.gov/

Active Transportation:

Transportation that does not rely entirely on a car to travel between origin and destination. This can include walking, biking, skateboarding, roller-skating, cross country skiing, using public transit, or driving to an intercept lot, parking, and then using another form of travel.

AMBBR: America's Most Beautiful Bike Ride

ATP: Active Transportation Plan

The 2015 Survey: 2015 Active Transportation Plan Survey

Active Transportation Network:

The facilities such as shared-use paths, bike lanes, bike routes, sidewalks, and intersection designs that promote safety and convenient travel for bicycling and walking and other forms of active transportation. The network can include on-street and off-street facilities that appropriately integrate with the roadway and existing and planned land-use design.

Bicycle Level of Traffic Stress:

A traffic stress analysis that quantifies the amount of perceived stress a cyclist may encounter while utilizing the on or off street transportation network.

Bike Share:

A transportation program, ideal for short distance point to point trips providing users the ability to pick up a bicycle at any self-serve bike station and return it to any other bike station located within the system's service area.[1]

Caltrans: California Department of Transportation

CDC: Center for Disease Control

CIP: Capital Improvement Program

CMAQ: Congestion Mitigation and Air Quality Improvement Program

[1] Pedestrian and Bicycle Information Center, 2015

Complete Streets:

Complete streets are streets for everyone**.** They are designed and operated to enable safe access for all users, including pedestrians, bicyclists, motorists, and transit riders of all ages and abilities. Complete streets make it easy to cross the street, walk to shops, and bicycle to work. They allow buses to run on time and make it safe for people to walk to and from train stations.[2]

CSLT: City of South Lake Tahoe

CTC: California Tahoe Conservancy

DMV: Department of Motor Vehicles

EIP: Environmental Improvement Program

FAST Act: Fixing America's Surface Transportation Act

FHWA: Federal Highway Administration

First and Last Mile:

Transit systems usually involve some multi-modal connection in order to get a person from point to point. This is referred to as the "first-and-last mile" problem. In order to encourage more ridership, transit needs to provide safe, accessible, and convenient options that enable point to point connections. Biking and walking can be a simple solution to encourage access to transit because active transportation can be more convenient than other modes.[3]

FLTP: Federal Lands Transportation Program

GIS: Geographic Information Systems

HSIP: Highway Safety Improvement Program

ICE: Intersection Control Evaluation

IVGID: Incline Village General Improvement District

Level of Traffic Stress (LTS):

An analysis that measures the ability for active transport users to travel between origin and destination without using links that exceed their tolerance for perceived safety and that do not involve an undue level of detour. There are four levels of traffic stress. LTS 1 is suitable for children; LTS 2, represents stress that most adults will tolerate; LTS 3 & 4 represent greater levels of stress. [4]

[2] Smart Growth America, 2015
[3] Advocacy Advance, 2014
[4] Mekuria, Furth, & Nixon, 2012

Tim Blagden, Executive Director of the Bike-Walk Alliance of New Hampshire, explains, “Low-stress streets that connect to places people want to go are the beginner slopes of bicycling.”

LTBC: Lake Tahoe Bicycle Coalition

LTUSD SRTS Master Plan: Lake Tahoe Unified School District Safe Routes to School Master Plan

MAP-21: Moving Ahead for Progress in the 21st Century

Multi-Modal Level of Service (MMLOS):

Multi-modal level of service analysis is a method for assessing how well an urban street serves the needs of all users. The method for evaluating the multi-modal level of service estimates the auto, bus, bicycle, and pedestrian level of service on an urban street using a combination of readily available data and data normally gathered by an agency to assess auto and transit level of service. The MMLOS user’s guide was published as NCHRP Document 128.

MTUCD: Manual on Uniform Traffic Control Devices

NDOT: Nevada Department of Transportation

NHPP: National Highway Performance Program

NHS: National Highway System

NTPUD: North Tahoe Public Utility District

Quality of Life in the Tahoe Region:

Provides for a unique identity and a sense of “place” for Lake Tahoe residents and visitors where they can walk, bike and play.

Sharrows:

“Sharrow” is short for “shared lane bicycle marking.” This pavement marking includes a bicycle symbol and two white chevrons and is used to remind motorists that bicyclists are allowed to use the full lane. Sharrows are also used for wayfinding and to correctly position the bicyclist.

SHSP: State Highway Safety Plan

SRTS: Safe Routes to School

STP: Surface Transportation Program

Support & End of Trip Facilities:

Facilities that accompany bicycle and pedestrian infrastructure such as bicycle parking, benches, transit shelters, water fountains, showers, and lockers.

SWITRS: Statewide Integrated Traffic Records System

RTP: Regional Transportation Plan, *Mobility 2035.*

TAC: Technical Advisory Committee

TAMBA: Tahoe Area Mountain Bike Association

TAP: Transportation Alternatives Program

TCPUD: Tahoe City Public Utility District

TDM: Transportation Demand management

TMDL: Total Maximum Daily Load

TMPO: Tahoe Metropolitan Planning Organization

TRPA: Tahoe Regional Planning Agency

TTD: Tahoe Transportation District

USEPA: United States Environmental Protection Agency

USFS: United States Forest Service

VMT: Vehicle Miles Traveled

Washoe County RTC: Washoe County Regional Transportation Commission

CHAPTER 1: INTRODUCTION

Lake Tahoe's quiet forests, expansive meadows, and sunny beaches invite and attract all types of outdoor enthusiasts and promote an active lifestyle. Lake Tahoe is a favorite playground not only for the Region's 55,836 residents[1], but also the more than 15 million yearly visitors that frequent the Tahoe Basin. The Tahoe Regional Planning Agency (TRPA) Regional Transportation Plan Sustainable Communities Strategy (RTP/SCS) and Active Transportation Plan (ATP) serve to connect residents and visitors to their destinations, while helping protect this beautiful natural environment by providing a framework for a comprehensive multi-modal transportation system.

Meyers Bikeway, Sawmill Pond Connection. Photo: Mike Vollmer

Bicycling, walking, rolling, and other forms of active transportation are important methods of travel that promote healthy lifestyles, improve air quality, reduce congestion, boost the local economy, and enhance the quality of life for the community's residents and visitors alike. Active transportation includes any method of travel that does not rely on a car to travel between origin and destination. This can include walking, biking, rolling (wheelchair, scooter, electric one-wheel, etc.), or cross-country skiing. This plan uses the terms "walking" and "pedestrian" broadly to include people of all ages and abilities, including those walking and those using assisted mobility devices like wheelchairs. It uses the term "bicycling" to include people riding traditional bicycles and a wide variety other human-powered and electric-assisted devices that use typical bicycle facilities, including devices adapted for use by people with disabilities. While the Tahoe Region takes great pride in its ample recreation and natural beauty the region provides, this plan focuses primarily on the transportation network element, and how to best connect residents and visitors with the restaurants, shops, trailheads, mobility hubs, places of employment, and homes in a way that does not require a personal automobile. By supporting these bicycle and pedestrian networks, TRPA is working toward its goal of reducing Vehicle Miles Traveled (VMT), which serves the region by protecting the environment and reducing congestion on Tahoe's roadway network.

[1] U.S. Census Bureau, 2020

1.1 PLAN OVERVIEW

The *2024 Active Transportation Plan (ATP, the plan)* presents a guide for planning, designing, constructing, and maintaining a regional active transportation network that includes international best practice infrastructure recommendations, support facilities, and awareness programs. The infrastructure network includes on and off-street bike facilities such as protected bicycle lanes, designated bicycle routes, and intersection designs that promote safe and convenient travel for bicycling, walking, and rolling. The network also includes off-street, shared-use paths, footbridges, and sidewalks that help connect users to destinations that the roadway does not typically carry them. This plan outlines goals, policies, and actions that support implementation of high priority projects and guides long-term policies and planning that will transform Tahoe's transportation system. To support this process, the plan includes analysis of existing conditions via an updated "Bicycle Level of Traffic Stress" (BLTS) and "Pedestrian Experience Index" (PEI) analyses, provides data for future projects, and outlines tiers of project priorities. To help ensure feasible implementation, the plan identifies potential funding sources and recommended designs to encourage consistent and safe access for our most vulnerable roadway users.

Plan Vision - Complete Streets

This plan seeks to improve the environment and quality of life in the Tahoe Region by increasing safe and convenient active transportation travel. While Lake Tahoe's active transportation network has made significant improvements since the last plan amendment in 2018, there is still much to accomplish in regard to helping the region achieve its goals. Many of the town centers throughout Tahoe are well positioned to be very bicycle and pedestrian friendly. The short-trip destination options of Tahoe's town centers lend themselves to bicycle, pedestrian, or even scooter trips. However, lack of sidewalk connectivity, existence of low-stress on-street bicycle networks, or general lack of reliable bicycle parking, are all barriers for people who may otherwise consider walking, biking, or rolling to their destination.

Another component of this plan's vision is to further hone the implementation of "complete streets[2]". Through a complete street approach, this plan promotes transportation projects that accommodate the needs of all travelers when designing transportation improvements on and off-roadways. Complete streets are designed and operated to facilitate safe, comfortable, and efficient travel for roadway users of all ages and abilities such as pedestrians, bicyclists, scooter riders, transit riders, motorists, commercial vehicles, and emergency vehicles. A complete street approach also supports economic vitality by designing for aesthetic improvements, place-making, and by building natural partnerships between private, public, and community entities. With all this in mind, TRPA recognizes that complete streets may not be a "one size fits all" approach. This can easily be seen in a residential neighborhood near a school, which may warrant more focus on bicycle or pedestrian travel and traffic calming, while main arterials may require a transit-centric focus with protected bicycle lanes. These catered visions for each respective need will help Tahoe plan and implement a more holistic vision for its transportation network while meeting its transportation and environmental goals. This vision can be realized by creating a high-quality environment that makes active transportation more appealing than driving in the Tahoe Region and beyond.

Plan Development and Approval Process

The 2024 Active Transportation Plan updates the previous plan, that was technically amended in 2018. To develop this plan, staff undertook more than five months of public and stakeholder outreach. TRPA planning staff also convened a Technical Advisory Committee (TAC) three times to collectively develop and review the plan's goals, policies, actions, and project criteria. The TAC invitees were made up of federal, state, local, and advocacy representatives. After all community and stakeholder feedback was consolidated and integrated into the draft plan, staff went back to each local jurisdiction to vet all recommendations with a specific focus on new infrastructure locations and actions related to goals and policies. Beyond the outreach and TAC engagement, staff developed a Tahoe Transportation Survey, which provided valuable community feedback incorporated into this plan.

[2] The modernization of the term "complete streets" has come to mean street infrastructure beyond simply transportation. This could apply to stormwater facilities, street furniture, transit infrastructure, or any placemaking feature that enhances the overall quality and character of a street. While all incredibly important components of complete streets planning, this plan and its reference to complete streets refers almost solely to the active transportation element of the definition.

TRPA released a draft of the plan for public comment on February 27, 2024. The final day to comment was March 27, 2024, and comments were incorporated into the plan as appropriate.

Overview of Public Outreach

Public input is an essential part of creating a strong active transportation plan that guides funding, planning, and implementation of the existing and future active transportation network. As the Region continues to focus on improving active transportation options, understanding users, who they are, how they act, what their needs are, and why, is critical. Comprehensive public participation, whether in the form of community member survey, tabling events, and agency stakeholder feedback, is the backbone of a successful active transportation plan. TRPA staff met with all local jurisdictions during the development of this plan and solicited detailed guidance from the Technical Advisory Committee through regular meetings.

Extensive outreach was conducted throughout Lake Tahoe and its surrounding areas to gain public input on the existing and future active transportation network. Activities included community gatherings, association presentations, booths at community events, and a bilingual survey available online and in hard copy from June 2023 to September 2023. Staff released an interactive webmap that allowed respondents to provide location specific feedback about the existing and proposed active transportation network. Staff collected feedback that clarified current active transportation trends in Tahoe, specific locations that are working well or need improvements and gathered quantitative and qualitative crash data to supplement law enforcement reporting. Additionally, the data collected helped identify the types of infrastructure that users are interested in seeing constructed in the Lake Tahoe Region and provides guidance for project prioritization. TRPA staff conducted many of these public outreach initiatives alongside TRPA's concurrent Vision Zero Strategy planning process.

Staff shared opportunities for input via flyer distribution, advertisements in print and online newspapers, social media, and coordination with partner networks such as Lake Tahoe Unified School District and the Lake Tahoe Bicycle Coalition. The range of outreach sought to reach a wide variety of demographics throughout the region. Because the Latino community makes up over 20 percent of the total regional population, all outreach materials were translated into Spanish, and bilingual staff offered interpretation services at tabling and community gatherings.

Additionally, the ATP incorporates feedback collected through TRPA's Transportation Equity Study, which was completed and endorsed by the Governing Board in 2023. Development of the study included significant public outreach and engagement with local community-based organizations and social services representatives, with a focus on Tahoe's priority communities including persons without private transportation, seniors, persons living below the poverty line, individuals with a disability, youth, and BIPOC (Black, Indigenous, and People of Color). The community collectively identified seven major barriers to accessing equitable transportation options, including the following which were of particular importance to the ATP update:

- **Accessibility and safety –** Network walkability, terrain, and ADA accessibility are inadequate or

lead to travel challenges in some areas of Tahoe.

- **Adequacy of transportation conditions –** The lack of sidewalk clearing in the winter and limited number of crosswalks can create travel and safety challenges.

The ATP incorporates the challenges identified in the Transportation Equity Study and proposes projects that address them.

Community Outreach Highlights:

- Staff reached hundreds of people at multiple tabling events from April to September 2023 such as farmers' markets, Bike Kitchens, and other events around the basin, while staff received 279 webmap response for location specific feedback.

- Participants identified a host of improvements to our bicycle and pedestrian network, particularly closing connectivity gaps that limit the ability to get from one destination to another, safer crossings and access for pedestrians and disabled folks, as well as providing safe, low stress on-street facilities for cyclists as the top priorities for active transportation planning.

Photo: Ryan Murray

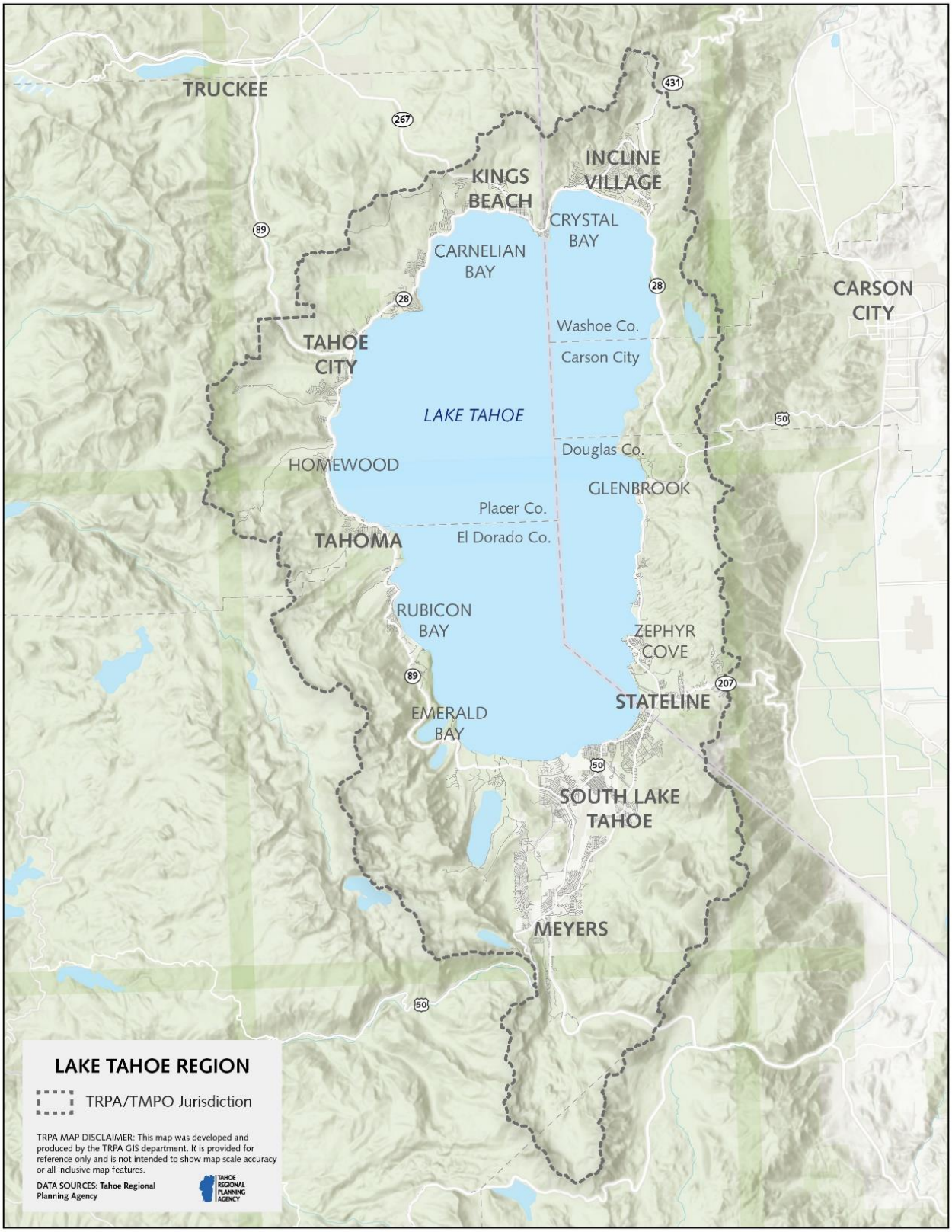
1.2 STUDY AREA

The Lake Tahoe Region is located on the California-Nevada border between the Sierra Nevada Crest and the Carson Range. Approximately two-thirds of the Region is in California and one-third is in Nevada. In total, the region comprises about 501 square miles including the waters of Lake Tahoe, which measures 191 square miles. Lake Tahoe is the dominant natural feature of the region and is the primary focus of local environmental regulation seeking to protect and restore its exceptional water clarity. The region contains the incorporated area of the City of South Lake Tahoe and portions of El Dorado County and Placer County in California, and Washoe and Douglas counties and the rural area of Carson City in Nevada. It is situated within the Fourth Congressional District of California and the Second Congressional District of Nevada. TRPA is a separate legal entity governed by a body of seven voting delegates from California and seven voting delegates from Nevada. There is also a non-voting federal representative to the Governing Board. TRPA Board, with the addition of a representative from the U.S. Forest Service, serves as the Tahoe Metropolitan Planning Organization Board. In the State of California, TRPA serves as the Regional Transportation Planning Agency.

View from Castle Rock. Photo: Tom Lotshaw

Most of the area can be characterized as rolling to mountainous terrain with limited areas of level terrain along the North and South shores of the lake. Approximately 90 percent of the land in the region is publicly owned: 78 percent is managed by the U.S. Forest Service and the balance by state and local agencies. These areas are rural compact towns and are in lands predominantly protected for open space or natural resource.

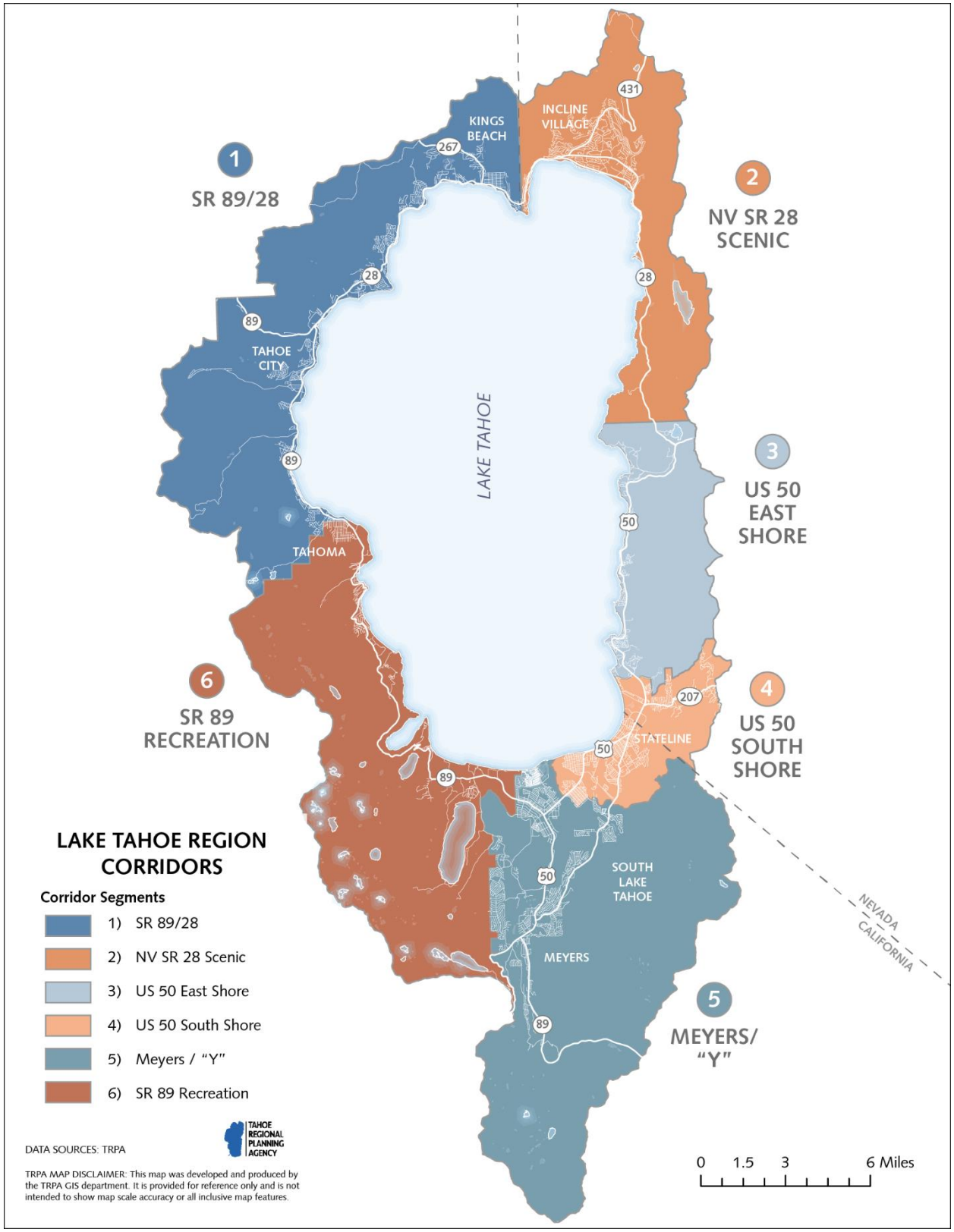
FIGURE 1-1: LAKE TAHOE REGION MAP



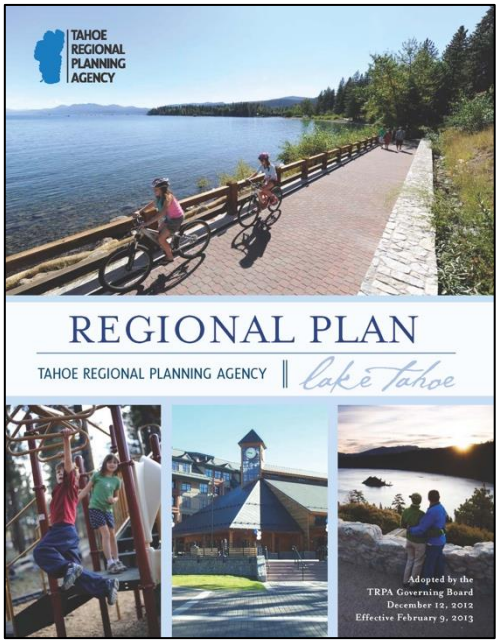
Corridor Connection Planning

As part of developing the Regional Transportation Plan, TRPA partners with agencies such as the U.S. Forest Service, State Parks, the state DOTs and the Tahoe Transportation District (TTD) to conduct corridor planning. Agencies throughout the region and the public are participating in the corridor planning process to create holistic projects that serve all current and future users of the transportation system. Corridor plans are ongoing around the lake and play an important role in improving active transportation. The eight individual corridor plans (encompassing six corridors around the lake plus two inter-regional entry corridors) will address multi-modal transportation solutions, environmental improvement, safety for all roadway users, support for economic vitality, quality of life, and accelerated delivery of projects and services. Some examples of the specific concerns that corridor plans aim to address are peak-period congestion, inadequate transit service, active transportation and vehicle conflict, lack of funding for infrastructure and maintenance and insufficient safe, environmentally responsible parking. Figure 1-2 illustrates the six corridors within the region. This plan uses the corridor connection plan framework for organizing data and illustrating existing and proposed infrastructure.

FIGURE 1-2: LAKE TAHOE REGIONAL CORRIDORS



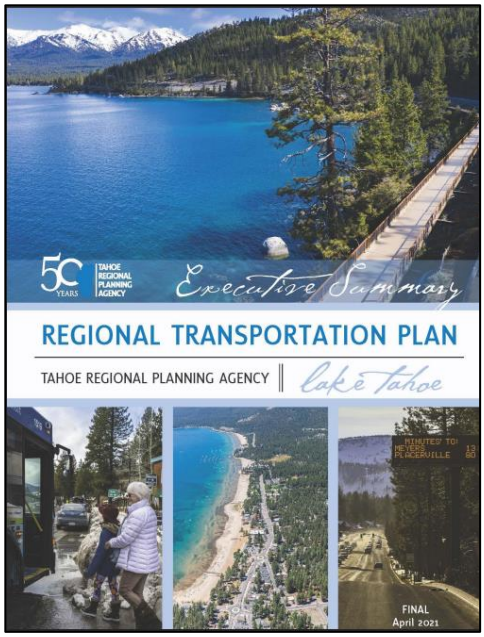
Agency Roles & Responsibilities



Implementation of the Active Transportation Plan is a multi-agency collaboration, and the plan fulfills multiple agency requirements. As the TMPO document, the plan is incorporated by reference into TRPA's Regional Transportation Plan and meets federal and state requirements for active transportation planning. The Active Transportation Plan is also part of TRPA's Regional Plan. Projects listed in the plan are eligible for federal, state, and local grants. To apply for these grants, in most cases local jurisdictions will need to formally adopt the plan via a resolution. Adoption should take place shortly after the plan is approved by the TMPO branch of the TRPA Board.

The primary responsibility for construction and maintenance of the active transportation network lies with local jurisdictions, including the counties, the City of South Lake Tahoe, public utility districts, state transportation agencies, regional transportation districts, and public lands agencies. Private developers also play an important role in implementation of the network by providing easements and constructing and maintaining segments that are adjacent to their property.

Input from the public, advocacy community, and other associations are also an essential part of project implementation. The content within this plan is intended to assist and guide the project implementation process.



TRPA's primary role as the TMPO is to carry out the goals and policies located herein and to support our regional partners in the implementation of the identified priority projects. TRPA will have an active role in the implementation of certain policies, such as working with private developers to accommodate active transportation into their project plans. Other policies note the importance of annual monitoring and reporting on plan implementation and provide data for regional project analysis. Finally, there are many instances where TRPA will have an advisory role, providing technical assistance through collaborating with partnering agencies to encourage best-practice design and the implementation of projects and programs that support the realization of a complete transportation network.

TABLE 1-1: AGENCIES & RESPONSIBILITIES

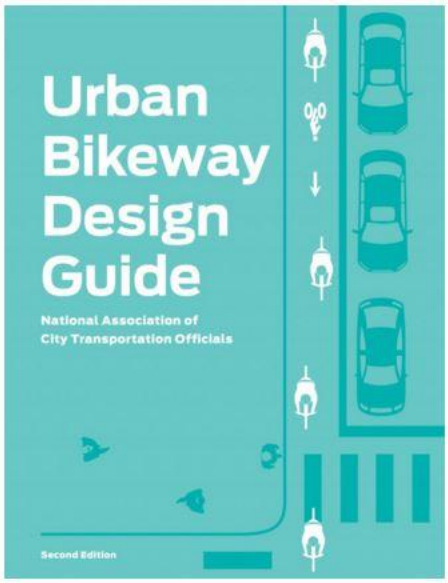
AGENCY TYPE	AGENCY	RESPONSIBILITY				
		Planning	Design	Construction	Maintenance	Funding
FEDERAL	U.S. Forest Service	X	X	X	X	X
	Federal Lands	X	X	X		X
STATE	Caltrans	X	X	X	X	X
	Nevada Department of Transportation (NDOT)	X	X	X	X	X
	California Tahoe Conservancy (CTC)	X			X	X
	California State Parks	X	X	X	X	X
	Nevada State Parks	X	X	X	X	X
LOCAL JURISDICTION	Counties	X	X	X	X	X
	City of South Lake Tahoe	X	X	X	X	X
PUBLIC UTILITY DISTRICTS	North Tahoe Public Utility District (NTPUD)			X	X	X
	Tahoe City Public Utility District (TCPUD)	X	X	X	X	X
REGIONAL TRANS. DISTRICT	Tahoe Transportation District (TTD)	X	X	X	X	X
METRO-PLANNING ORG.	Tahoe Regional Planning Agency / Tahoe Metropolitan Planning Organization (TRPA/TMPO)	X				X

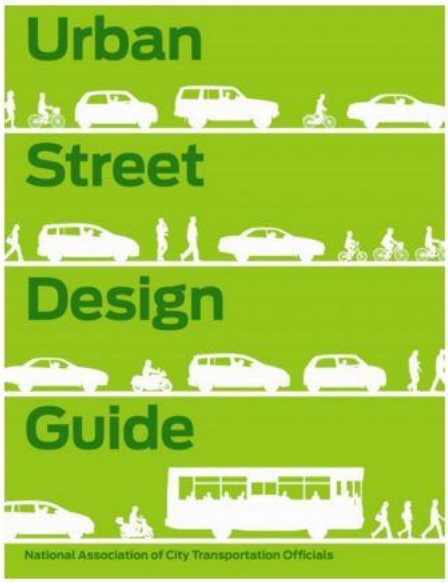
Associated Plans, Policies, & Codes

To ensure this plan meets all requirements and is consistent with other planning efforts, staff reviewed and incorporated relevant plans, policy documents, and codes. Described below are some of the most often cited documents that affect active transportation planning.

FEDERAL:

Manual on Uniform Traffic Control Devices (MUTCD) defines standards used by road managers nationwide to install and maintain streets, highways, bikeways, and private roads open to public travel. The Federal MUTCD is published by the Federal Highway Administration (FHWA). The most current MUTCD is the 11th addition, adopted December 19, 2023. The new MUTCD is purported to have much more robust design standards on approved traffic control devices for pedestrian and bicycle facilities. As with previous renditions of the MUTCD, the FHWA supports design flexibility through referring planners and engineers to guides published by the American Association of State Highway and Transportation Officials, the National Association of City Transportation Officials, and the Institute of Transportation Engineers.





STATE - *California:*

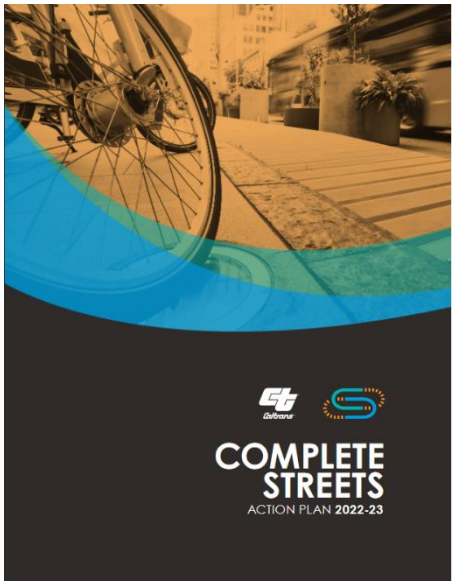
California Active Transportation Program (California ATP), signed by Governor Brown in 2013, consolidates existing federal and state transportation programs, including the TAP, Bicycle Transportation Account, and State Safe Routes to Schools, into a single program with a focus to make California a national leader in active transportation. The California ATP is administered by the California Department of Transportation Division of Local Assistance, Office of Active Transportation and Special Programs. The program offers grant funds for projects that:

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

Director's Policy DP-37, made effective December 2021 directs Caltrans to implement complete streets in all its funded transportation projects.

"…all transportation projects funded or overseen by Caltrans will provide comfortable, convenient, and connected complete streets facilities for people walking, biking, and taking transit or passenger rail unless an exception is documented and approved."

To continue to support this directive, Caltrans published the District 3 Active Transportation Plan in 2022 and their Complete Streets Action Plan in 2022-23. The goals stated in the Caltrans plans are to reduce dependency on single-occupancy vehicles, facilitate safe travel for all users, work towards Vision Zero measures, promote equitable solutions, and address long term maintenance needs.

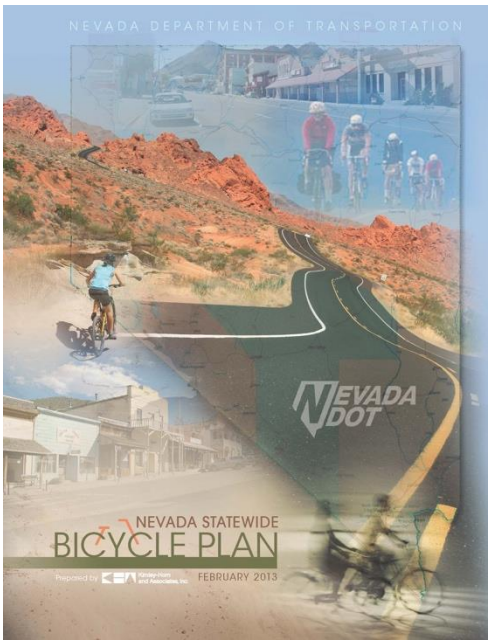


California Highway Design Manual, Chapter 1000: Bikeway Planning and Design, 7th Edition was revised in September 2023. This manual, along with the California MUTCD, identifies specific design and signage standards for active transportation facilities. Design Information Bulletins should also be reviewed during project design.

2014 Caltrans Memorandum "Design Flexibility in Multi-Modal Design" provides for flexibility in design through experimental project processes. The memo identifies design documents such as the National Association of City Transportation Officials' "Urban Street Design Guide," "Urban Bikeway Design Guide," and the Institute of Transportation Engineers' "Designing Urban Walkable Thoroughfares" as important resources when considering designs that accommodate all users.

STATE - *Nevada:*

The Nevada Statewide Bicycle Plan, published in February 2013, includes policies, standards, and performance measures to increase active transportation use and improve safety through its "Zero Fatalities" initiative. All design recommendations in the Nevada Statewide Bicycle Plan utilize federal standards found in the MUTCD.



Nevada Strategic Highway Safety Plan (SHSP), revised in February 2021, was developed to save lives by addressing the frequency, rate, and primary factors contributing to fatal and severe injury crashes in Nevada. The plan identifies four critical emphasis areas, including incorporating equity, prioritizing safe speed, "double down" on what is working, and accelerating advanced technology. Focusing on the statistically most dangerous intersections and roadway segments is the main driver behind these four areas of emphasis. The plan also focuses on the 6 "E's" of traffic safety: Equity, Engineering, Education, Enforcement, Emergency Response and Everyone. The strategy seeks to utilize its core principles to align with the Road to Zero Coalition's initiatives to achieve the goal of zero roadway fatalities by the year 2050.

REGIONAL:

Tahoe Regional Planning Agency Bi-State Compact

Article I(b) of the compact established TRPA's responsibility to establish environmental threshold carrying capacities. TRPA adopted thresholds for the Region in Resolution 82-11 in 1982. The thresholds cover various environmental components of the Tahoe Region, including air and water quality standards that are linked to transportation.

In addition, the Compact states that the goal of transportation planning shall be:

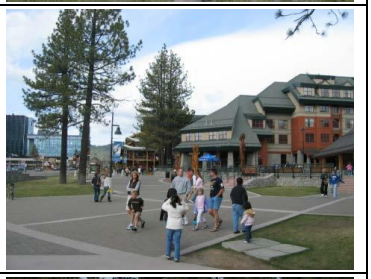
a) To reduce dependency on the automobile by making more effective use of existing transportation modes and of public transit to move people and goods within the region.

b) To reduce to the extent feasible air pollution which is caused by motor vehicles.

TRPA Regional Plan & the 2020 Regional Transportation Plan contains general transportation goals and policies, many of which relate to active transportation. These are the backbone of the more specific goals, policies, actions, and performance measures found in the ATP.

The TRPA Code of Ordinances implements TRPA's policies by informing public and private project permitting. Relevant transportation code sections include:

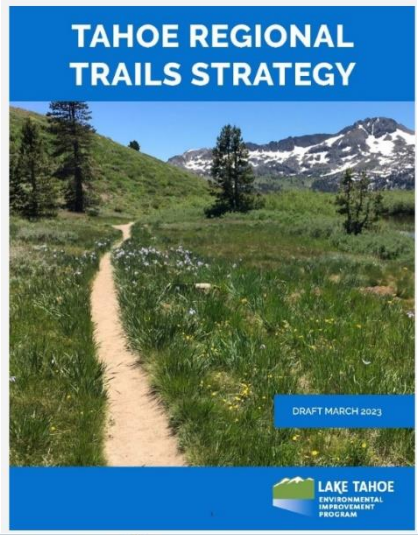
Transportation Code Affecting Bicycle and Pedestrian Facilities
August 21, 2013

Code Description	Section	
Bicycle Path Coverage Waiver *	30.4.6.D.3	
Accommodation of Bicycle and Pedestrian Facilities in Projects	65.3	
Bicycle and Pedestrian Facility Maintenance Plan	36.5.5	
Traffic and Air Quality Mitigation Program	65.2	
Vehicle Level of Service Exemption	Policy T-10.7	

*Code section 30.4.6.D.3 is currently not recognized by Lahontan Regional Water Quality Control Board.

Tahoe Regional Trails Strategy

TRPA collaborated with local partners to develop the region's first ever Tahoe Regional Trails Strategy in 2023. It outlines preliminary priorities and implementation strategies for Lake Tahoe's recreational trails over the next 15 years. The strategy leaves implementation decisions of any singular project in the hands of land managers and trail stewards. The strategy was led by TRPA staff in conjunction with the Washoe Tribe of Nevada and California, the USDA Forest Service Lake Tahoe Basin Management Unit, Tahoe Area Mountain Biking Association, Tahoe Fund, Tahoe Rim Trail Association, California State Parks, Nevada State Parks, California Tahoe Conservancy, and Achieve Tahoe. The team crafted the strategy with the goal of planning trails to be environmentally sustainable, equitable, connected, enjoyable, and feasible. The strategy is a living document and acknowledges that priority projects could change over time. Following completion of the strategy, the strategy development team formed a recreational trails working group within the Environmental Improvement Program (EIP) to regularly discuss regional trail priorities and to make funding decisions.

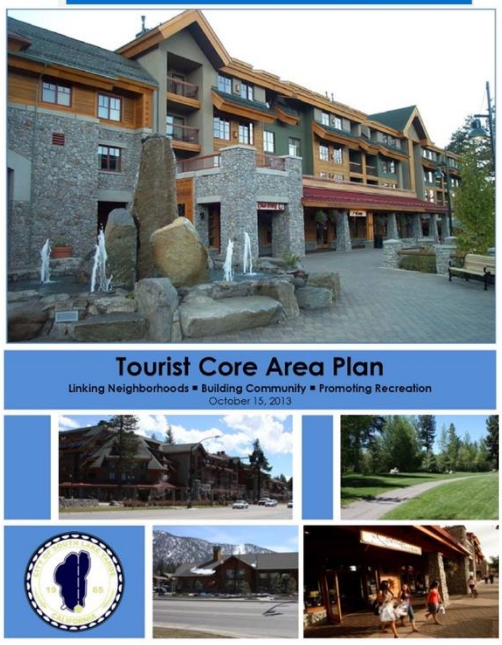


While Tahoe's dirt trails and their proposed amenities are the focus of the Trails Strategy, connections to Tahoe's existing and proposed active transportation network were heavily considered in making the recommendations laid out within the strategy. The document does not provide specific recommendations for paved paths, as this plan does, but ensures that trailheads should have adequate bicycle parking, and provide access to and from low-stress active transportation facilities that connect users to these popular recreation destinations without a car.

LOCAL:

Plans for Specific Geographic Areas within the Region

After adoption of the 1987 Regional Plan, over 170 different plans were adopted for certain geographic areas. These include plan area statements, community plans, and other detailed specific or master plans. With adoption of the 2012 Regional Plan, local, state, federal, and tribal governments are encouraged to adopt area plans to supersede the older plans. Area plans must be found in conformance with the Regional Plan. Some examples of adopted local area plans include the *2013 Tourist Core Area Plan* and *Tahoe Valley Area Plan* for the City of South Lake Tahoe and the 2013 Douglas County *South Shore Area Plan,* that are frequently updated.



1.3 BENEFITS OF ACTIVE TRANSPORTATION

Active transportation provides multiple benefits to Lake Tahoe communities by reducing air pollution and traffic congestion, meeting greenhouse gas reduction targets, and improving the local economy and public health. Beyond these tangible benefits, biking and walking are pleasurable and relaxing outdoor activities that residents and visitors seek out and enjoy. Additionally, at least 30 percent of Lake Tahoe's residential population are considered transportation disadvantaged and are more likely to rely on biking or walking as their primary form of transportation. Increasing active transportation is critical for meeting TRPA goals of attaining environmental thresholds and reducing dependency on the private automobile. To help quantify the benefits of active transportation, TRPA compiled data from national and global research.

Environmental Benefits:

NV Stateline to Stateline Bikeway. Photo: Mike Vollmer

Bicycle and pedestrian facilities have positive impacts on multiple environmental threshold areas including air quality, water quality, soil, wildlife, and recreation. It is no secret that supporting walking, bicycling, and rolling as viable means of transportation have direct positive impacts on reducing greenhouse gas emissions, as well as having positive public health outcomes.

According to the United States Environmental Protection Agency, the transportation sector accounted for the largest share of greenhouse gas emissions (28%) in the United States in 2018. Light-duty vehicles, which include passenger vehicles and light-duty trucks, account for the majority of transportation sector

emissions at 59%. Vehicle emissions are determined by fuel efficiency, carbon content of fuel, and vehicle miles traveled[3].

Supporting active modes of transportation and reducing our reliance on the automobile are critical to TRPA environmental goals.

Equity Benefits:

Multi-modal infrastructure provides transportation options for those who cannot afford a car or are unable to drive due to age or disability. Typically, large portions of the population are unable to drive due to a variety of reasons. The following priority communities are considered transportation disadvantaged and are more likely to walk, bike, roll, or take transit according to the Transportation Equity Study:

- **Persons without private transportation (zero vehicle households):** Lack of a personal vehicle is a significant factor for transit or active transportation use. In 2022, 80 percent of Tahoe transit riders did not have access to a personal vehicle.
- **Seniors (individuals 65 years and older):** Elderly individuals may choose not to drive or can no longer drive to due to age-related health issues. Accessible and convenient transportation is crucial to maintaining their independence, accessing healthcare, and participating in community activities.
- **Persons living below the poverty line:** Purchasing and maintaining a personal vehicle might be difficult for households with limited income, making them dependent on transit or active transportation modes.
- **Individuals with a disability:** Disability status may impact an individual's ability to live independently, including driving a personal vehicle. Lack of wheelchair accessibility, limited sensory aids, or other accommodations can contribute to transportation challenges.
- **Youth (individuals under 18 years old):** Most people under 18 do not drive and even those with driver's licenses often do not have the means to purchase or maintain a personal vehicle.
- **BIPOC (Black, Indigenous, and People of Color):** People of color are more likely to live in densely populated areas, are less likely to have access to a car, and are more likely to bike, walk, and use public transportation to commute to work.

[3] https://www.pedbikeinfo.org/factsfigures/facts_environment.cfm

Table 1-2 below shows the demographic breakdown of these identified priority communities within the Lake Tahoe Region:

Table 1-2 Tahoe Transportation Demographics

Priority Community	Population	Percent (%) of Total
Zero vehicle households (ZVH)*	845	3.61%
Seniors (individuals 65 years and older)	10,981	19.67%
Persons living below the poverty line*	5,037	9.34%
Households living below the poverty line*	2,114	9.03%
Working-age individuals with a disability*	2,833	8.38%
Youth (individuals under 18 years old)	9,658	17.30%
BIPOC (Black, Indigenous, and People of Color)	17,246	30.89%
TOTAL Lake Tahoe Population (2020 Census)	55,836	
TOTAL Lake Tahoe Households (2020 Census)	22,413	

*Calculated using 2021 American Community Survey Estimates

Improving multi-modal infrastructure provides transportation options for those that depend on its safety and functionality while also serving those who prefer to use active modes by choice. Lake Tahoe residents primarily travel by car (84 percent), however, 58 percent of survey respondents noted they would prefer to travel by foot, bike, or transit.

Figure 1-3 Primary Mode of Transportation

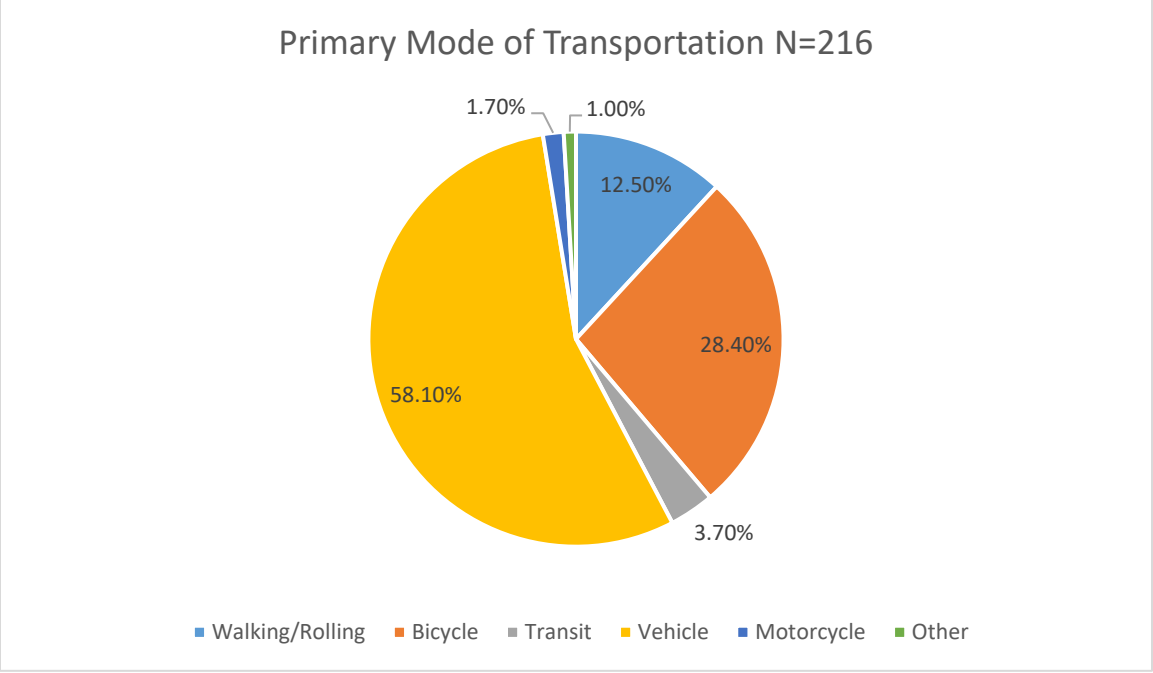


Figure 1-33: Primary Mode of Transportation. Source: Tahoe Transportation Survey

Economic Benefits:

Bicycle and pedestrian facilities provide many economic benefits including increased direct expenditures at local businesses, increased property values and employment opportunities, and personal savings from reduced vehicle use (or the need to own a car at all). Increases in transportation efficiency through multi-modal options also reduce costs related to roadway rehabilitation, support facility needs and potential property damage due to vehicle collisions.

Safe and convenient bicycle infrastructure increases the draw of the region to visitors and residents, encouraging those interested in living a recreational and healthy lifestyle to extend their stay and spend more money. Approximately 13 percent of visitors surveyed in a North Carolina Northern Outer Banks study stated that their average visit duration was three to four days longer due to the excellent bicycling opportunities.[4]

Catering to these characteristics in visitors is a focus for many businesses, organizations, and agencies in the region. Media campaigns recognize the economic benefit to businesses by attracting active, health-minded people to Lake Tahoe.

Harrison Avenue. Photo: Tom Lotshaw

[4] Lawrie, 2004

National research on the connection between active transportation users and high direct expenditures continues to grow. A study in Portland, Oregon illustrated that customers who frequent businesses by bicycle spend $10 more per month than customers who arrive by vehicle. This also held true across multiple studies, both national and international. Many countries, such as Canada, Germany, Switzerland, and the United States support this research, showing that though active transport users often buy less per visit to restaurants, bars, and convenience stores, they typically frequent businesses more often, giving them more opportunities to purchase items that may not be on the shopping list.[5] A survey conducted in Bern, Switzerland indicates businesses profited almost $2,000 more per square meter of bicycle parking than vehicle parking. [6]

East Shore Kayakers. Photo: Mike Vollmer

Employment opportunities increase when multi-modal transportation is accessible and offered as a convenient method of travel. Lower-income people who depend on public transportation systems are more able to access educational and employment opportunities. This increases the quality and quantity of the low wage labor pool for service-oriented industries, which is the predominant employment in Lake Tahoe.

From increasing retail visibility to raising real estate value, the economic impact of active transportation on a community can take many forms. Studies across various U.S. cities by the Urban Land Institute find houses located in areas with above-average walkability or bike-ability are worth up to $34,000 more than similar homes in areas where those features are average. As for businesses, people who arrive by bicycle have been shown to spend more overall while making more frequent visits. There are other personal user economic benefits of active transportation such as job creation and overall savings from fuel consumption, car payments, maintenance, parking, and car storage. Savings from these sources can free up discretionary income and allow both residents and visitors to spend more in Lake Tahoe communities.[7]

[5] Angus, 2023
[6] Szczepanski, 2013
[7] FHWA, 2015

Health Benefits:

Increasingly, the health benefits related to active transportation are being recognized by health professionals, urban planners, and policy makers. Funding opportunities for active transportation are tied to how projects illustrate production of health benefits for community members, such decreasing adult and youth obesity and blood pressure. Federal and state policies seek to increase physical activity not only for direct health benefits to constituents, but also because healthier people produce cost savings and reduce strain on the health care system. Annual per capita health cost savings from physical activity have been found to vary between $19 and $1,175, with a median value of $128.[8]

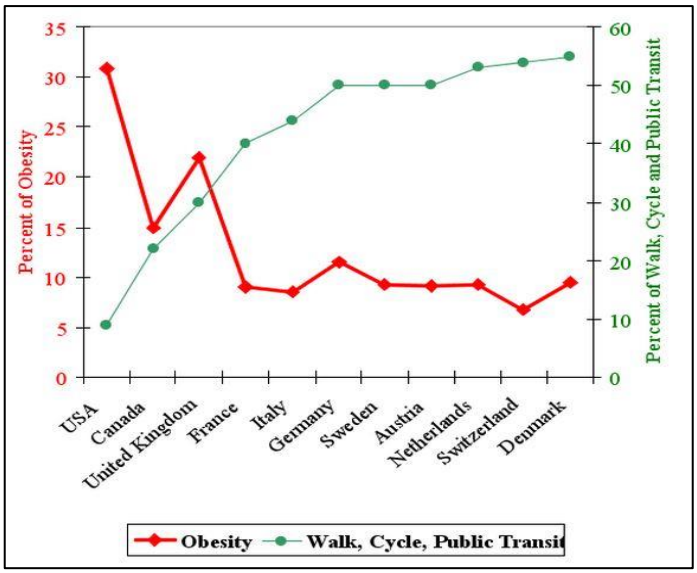


Figure 1-4-4: Obesity vs. Activity. Source: Bassett et al

Reliance on the automobile, often due to the layout of the built environment, has led to a lack of physical activity in the United States. Multiple studies indicate that areas with unconnected, "sprawl" land-use patterns and low multi-modal transportation have the highest obesity rates (Figure 1-4).

Other issues related to inadequate physical activity can include heart disease, diabetes, osteoporosis, dementia, and mental health. The 2012 Barton Community Health Needs Assessment prioritizes mental health and dementia as two priority focus areas for South Lake Tahoe residents. There is research that indicates consistent walking and biking reduces appearance of dementia and long-term cognitive decline.[9] Additionally, exercise, social interaction, and sunlight have been identified as the most effective treatment for mental illness, particularly depression.[10] In general, a sense of higher overall well-being has also been connected to the amount of time people spend in active transport in comparison to time in vehicle transport.[11]

The U.S. Center for Disease Control (CDC) recommends 22 minutes of moderate physical activity per day for adults. Active transportation is one of the most effective ways to achieve this goal. That is why the CDC has instituted the Healthy People 2020 program focusing on promoting walking and biking. In South Lake Tahoe, roughly 58 percent of residents consistently meet the recommended physical activity levels, which is above national and state averages.[12] This percentage illustrates the importance of physical

[8] TRPA, 2009.
[9] Litman, 2015.
[10] Owen, 2015
[11] Litman, 2015.
[12] Barton Health, 2012

activity to Lake Tahoe residents. Offering infrastructure that provides opportunities for increased biking and walking can be considered a critical element of meeting physical activity goals.

Enhanced Quality of Life

One goal in the Regional Transportation Plan is to support a region that offers the ability to walk, work, and play within our communities. Tahoe residents have called for walkable, mixed-use town centers with reliable and convenient public transit, and streets that encourage biking and walking. A balanced transportation system can help provide a unique identity and a sense of "place" in each community. These goals are supported by recent reports and studies. A report by The National Association of Realtors found that there has been a 25 percent increase in walking to destinations since 2001. The association also found that millennials prefer walking to driving by 12 percent, and prefer short, active transport commutes to work and recreation.[13]

"Mountain Beach Loop"
Created by Design Workshop

[13] National Association of Realtors, 2015

CHAPTER 2: EXISTING CONDITIONS AND NEEDS ANALYSIS

This chapter details the existing state of bicycle and pedestrian infrastructure in Lake Tahoe, discusses how the existing transportation network functions, and makes recommendations for improved infrastructure. High-use routes are shown through qualitative and quantitative data. Future use is estimated based on the Bike Trail User Model. This chapter also identifies common barriers to active transportation found throughout the Lake Tahoe Region. The plan offers strategies to create a convenient and safe network for bicycling and walking.

2.1 EXISTING CONDITIONS

In Lake Tahoe, the active transportation network serves many purposes. Infrastructure such as shared-use paths, bike lanes, and sidewalks are both recreational resources and year-round transportation modes for a recreation-based economy. While recreation as a destination activity is an important component of our active transportation network, The Regional Transportation Plan models that recreation may only account for half of all active transportation related trips. This plan highlights the importance of improving utility trips, such as trips to the grocery store, medical appointments, school, work, or other trips that may serve residents' day-to-day needs while also providing low-stress active transportation facilities to recreation destinations such as beaches and trailheads. When planning and designing projects, implementers must consider the needs of different user groups beyond auto drivers and how they *intuitively interact* with existing land-uses. Some important questions to consider are:

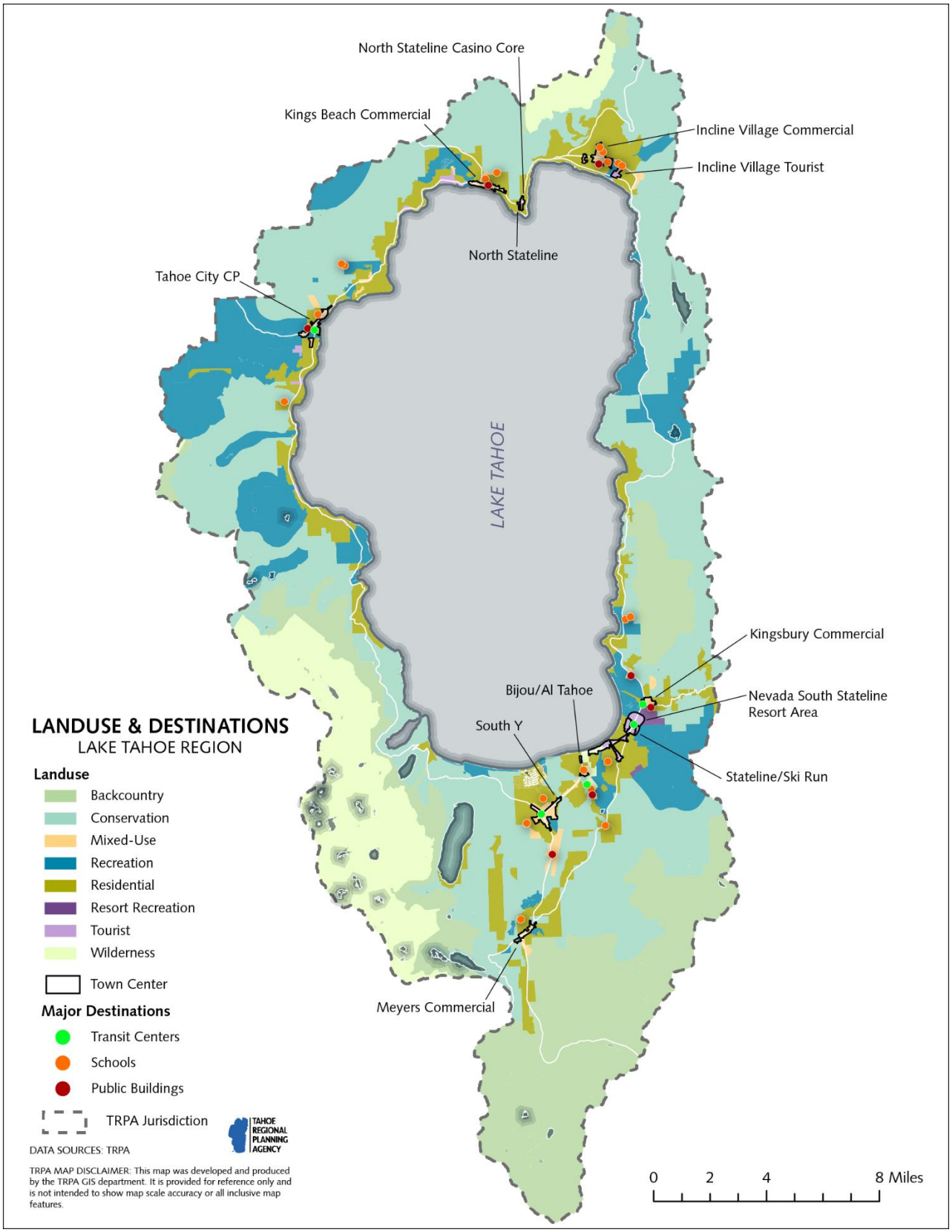
- Where do people want to go?
- Which way are people going already, even without existing facilities?
- How are implementers supporting low-stress walking, biking, and rolling, particularly as compared to existing auto-centric land use?
- Is the utility of the network viable, or are there gaps in the network?

Common Infrastructure & Users Found at Lake Tahoe

The Lake Tahoe Region weaves a variety of infrastructure types together to create its active transportation network. To get from origin to destination, a bicyclist may take a bike route to a shared-use path to a bike lane. In many locations no designated active transportation infrastructure is present. Existing land-use, such as retail, restaurants, homes, services, and recreation destinations dictate where people want to go. The type of infrastructure available and its level of stress prescribes, in part, how people will choose to get to their destinations. Figure 2-1 illustrates the locations of town centers and where the opportunity for low-stress active transportation infrastructure could have the highest impact of what mode people select to travel.

Mid-block crossing without infrastructure. Photo: Mike Vollmer

FIGURE 2-1: REGIONAL LAND USE AND TOWN CENTERS



The main types of bicycle and pedestrian infrastructure currently in place in the Lake Tahoe Region are described below.

- **Shared-Use Path (Class I)**

  A shared-use path is a completely separate trail from the road network for active transport users. The path is recommended to be 10 feet wide and provide for two-direction travel.

Bike Route Sharrows, Tahoe City.

- **Bike Lane (Class II)**

  Bike lanes are striped four to six feet wide lanes and provide one-way travel on a shared roadway with vehicles.

- **Bike Route (Class III)**

  A bike route (boulevard) is a shared roadway typically located on low-volume and low-speed streets. Signs and painted "sharrows" assist with wayfinding and show the preferred location of the biker within the roadway.

- **Sidewalk**

  Sidewalks are at least five feet wide and offer pedestrians a separated path of travel along the street, reducing the conflicts between cyclists/scooter riders and pedestrians.

- **Marked Crosswalk**

  Painted markings that span a roadway to indicate where pedestrians have the right of way. Crosswalks can be accompanied by traditional signals or stop signs.

- **Pedestrian-Activated Flashing Beacon**

  Lights, accompanied by signage, flash when activated by pedestrians when they want to cross a street. In California, and Nevada all cars are required to yield to pedestrians attempting to cross the street. Depending on the type of beacon (Pedestrian Hybrid (PHB) vs. Rectangular Rapid Flashing Beacon (RRFB)), cars are required to yield to cyclists when lights are flashing. Some driver education is required for compliance and signal understanding.

Pedestrian-Activated Beacon (Rectangular Rapid Flashing Beacon)

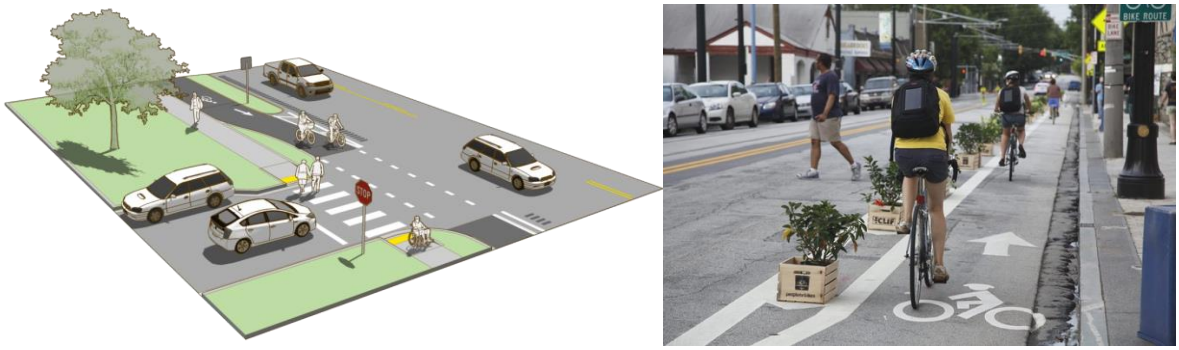
While TRPA and regional partners have made great progress in expanding the active transportation network over the years, there is more that can be done to support active transportation users. Below is a list of facilities that should be implemented to reduce the stress of the on-street network.

- **Class IIb Bike Lanes (Buffered Bike Lane)**

  Class IIb bike lanes, also referred to as a "buffered bike lane" is a striped bike lane, that also stripes a "buffer zone" that allows for more space and a greater sense of safety for the cyclists as they pedal alongside the travel lane. This buffer zone also allows extra space for faster cyclists to overtake or allows a cyclist to make emergency adjustments without having to veer into the travel lane. Buffer zones have also been shown to have a traffic calming effect on automobiles in the adjacent travel lanes.

- **Class IV Bike Lanes (Separated/Protected Bike Lane)**

  Class IV bike lanes are any on-street bike facility that is protected by vertical separation. This is ideally concrete infrastructure, but could be grade separation, other devices such as flex posts, inflexible posts, or on-street parking. Separated bikeways typically operate as a one-way bicycle facility in the same direction as auto travel but can be utilized as a two-way separated bikeway (cycletrack).



Two example images of Class IV (separated) bikeways. Source: Alta

Two example images of Class IIb (buffered) bike ways. Source: NACTO

Existing Network

A list of all existing projects can be found in Appendix H, *Existing & Proposed Project Lists.* Table 2-1 illustrates existing mileage by jurisdiction and class.

Table 2-1: Existing Facility Mileage. Source: TRPA

Jurisdiction	Path Class I	Bike Lane Class II	Bike Route Class III	Sidewalk	TOTAL
El Dorado County	16.8	10.7	0.6	0.1	**28.3**
City of South Lake Tahoe	10.4	13.9	8.5	16.4	**49.2**
Placer County	18.9	16.7	1.7	4.9	**42.2**
Douglas County	4.9	1.3	0.2	3.4	**9.8**
Carson City	0	0	0	0	**0**
Washoe County	10.0	3.7	0	4.1	**17.9**
TOTAL	**61.1**	**46.3**	**11.1**	**29.0**	**147.5**

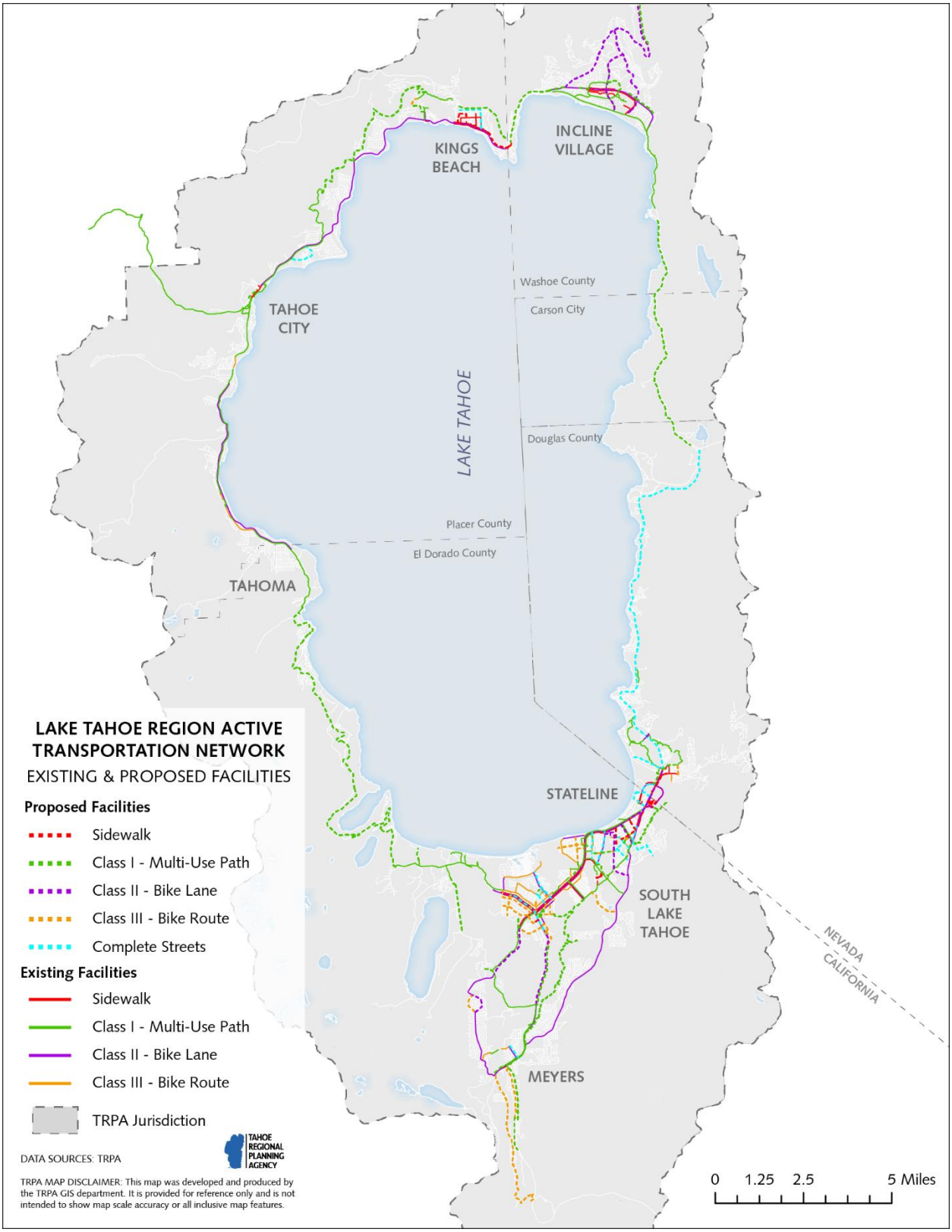
**El Dorado County sidewalk is roughly .06 miles.*

Table 2-2: Existing Bicycle and Safety Facilities. Source: TRPA

Jurisdiction	Enhanced Crossings (RFBS, HFBS, median islands, etc.)	Intersections with Marked Crosswalks	Bike Racks
El Dorado County	4	20	47
City of South Lake Tahoe	4	77	184
Placer County	4	77	137
Douglas County	2	26	29
Carson City	0	0	0
Washoe County	4	41	35
TOTAL	**18**	**241**	**432**

Viking Way and Lake Tahoe Boulevard. Photo: Mike

FIGURE 2-2: REGIONAL EXISTING & PROPOSED ACTIVE TRANSPORTATION NETWORK MAP



Map can be viewed at: www.trpa.gov/atp

The Four Types of Cyclists and Bicycle Level of Traffic Stress

A new analytical introduction to the Plan's update are the concepts summarized in the "Bicycle Levels of Traffic Stress", that correlate to the four generalized bicyclist typologies. Originally developed by Roger Geller at the City of Portland, the "Four Types of Bicyclists" are meant to guide efforts (in broad terms) of what certain members of the population may want from any particular bicycle facility. The four types of bicyclists are:

1. ***Strong and Fearless:*** This group is willing to ride a bicycle on any roadway regardless of traffic conditions. They are generally comfortable taking the lane and riding in a vehicular manner on major streets without designated bicycle facilities.

2. ***Enthused and Confident:*** This group consists of people riding bicycles who are confident riding in most roadway situations but prefer to have a designated facility. Comfortable riding on major streets with a bike lane.

3. ***Interested but Concerned:*** This group is more cautious and has some inclination towards bicycling, but are held back by concern over sharing the road with cars. Not very comfortable on major streets, even with a striped bike lane, and prefer separated pathways or low traffic neighborhood streets.

4. ***No Way, No How:*** This group comprises residents and visitors who simply are not interested at all in bicycling, may be physically unable, or don't know how to ride a bicycle and they are unlikely to adopt bicycling in any way.

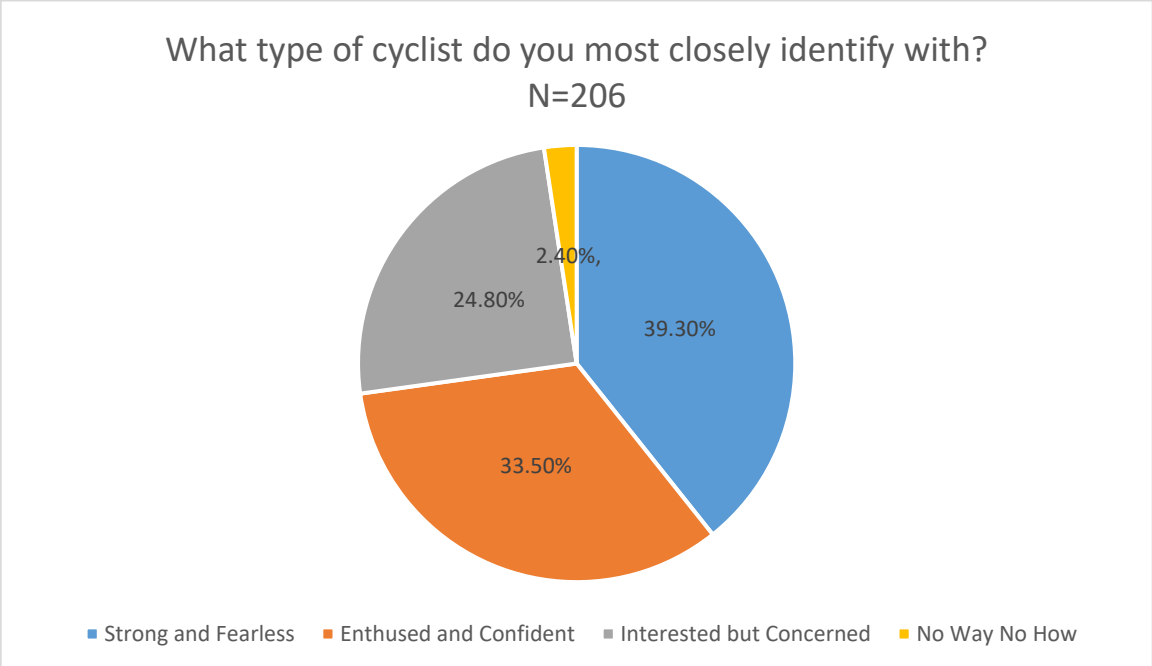
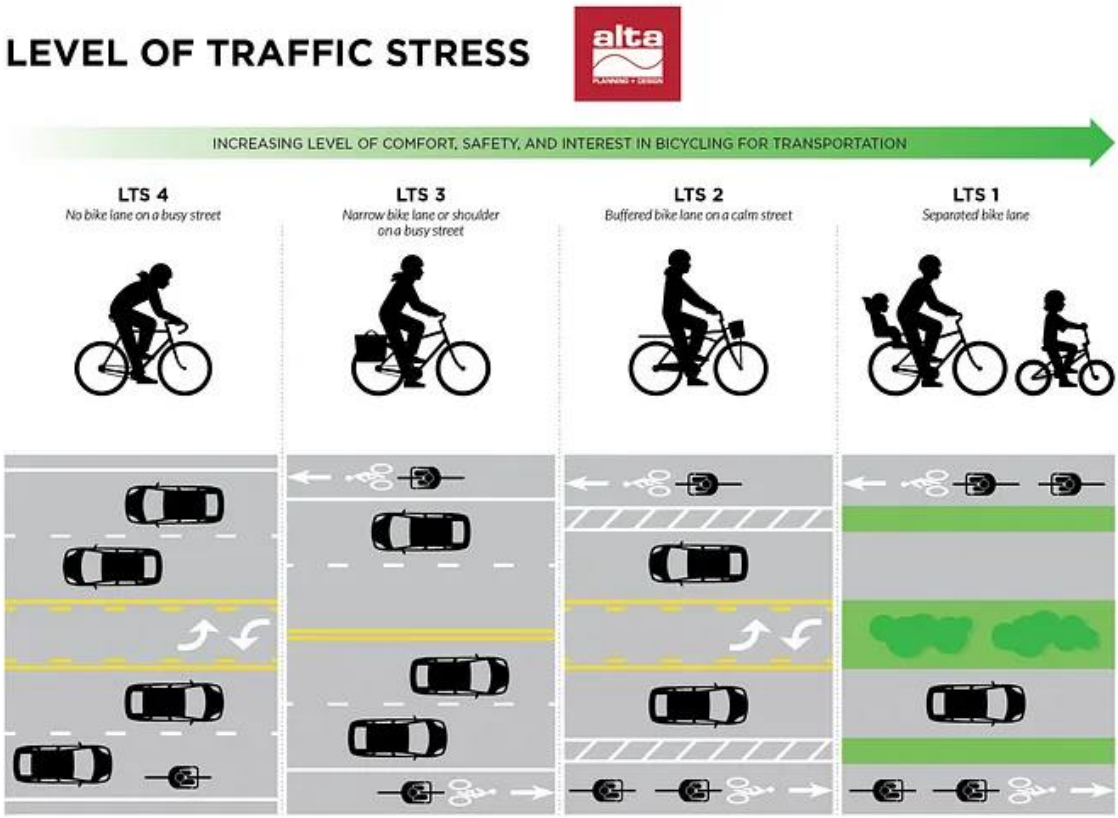


Figure 2-3 What type of Cyclist do you most closely identify with? Source 2023 Tahoe Transportation Survey

These informal category designations encourage engineers to design the roadway to meet the most vulnerable users' needs, thus capturing the largest amount of mode shift (switch from automobile to bicycle) as possible. People currently in the "No Way, No How" and "Interested but Concerned" categories, may currently choose to drive rather than walk or bicycle to a destination, however, if a high-quality (low-stress) facility was in place, these users may choose instead to walk or bicycle to their destination rather than drive, thus reducing the automotive impact on our transportation network. Furthermore, since the "Enthused and Confident" and "Strong and Fearless" categories are more willing to use our existing roadway network as is, the "share the road" option would still exist for those more confident. Thus, low-stress on-street bicycle facilities make our bicycling network more equitable for people who are most reticent to ride a bicycle as a means of transportation, while still supporting the needs of the most confident riders.



Example of the Four Types of Cyclists and the corresponding potential roadway features that contribute to Bicycle Levels of Traffic Stress. Image courtesy of Alta Planning and Design. Note: These roadway types serve as examples and are not always indicative of locations specific conditions.

What is Bicycle Level of Traffic Stress?

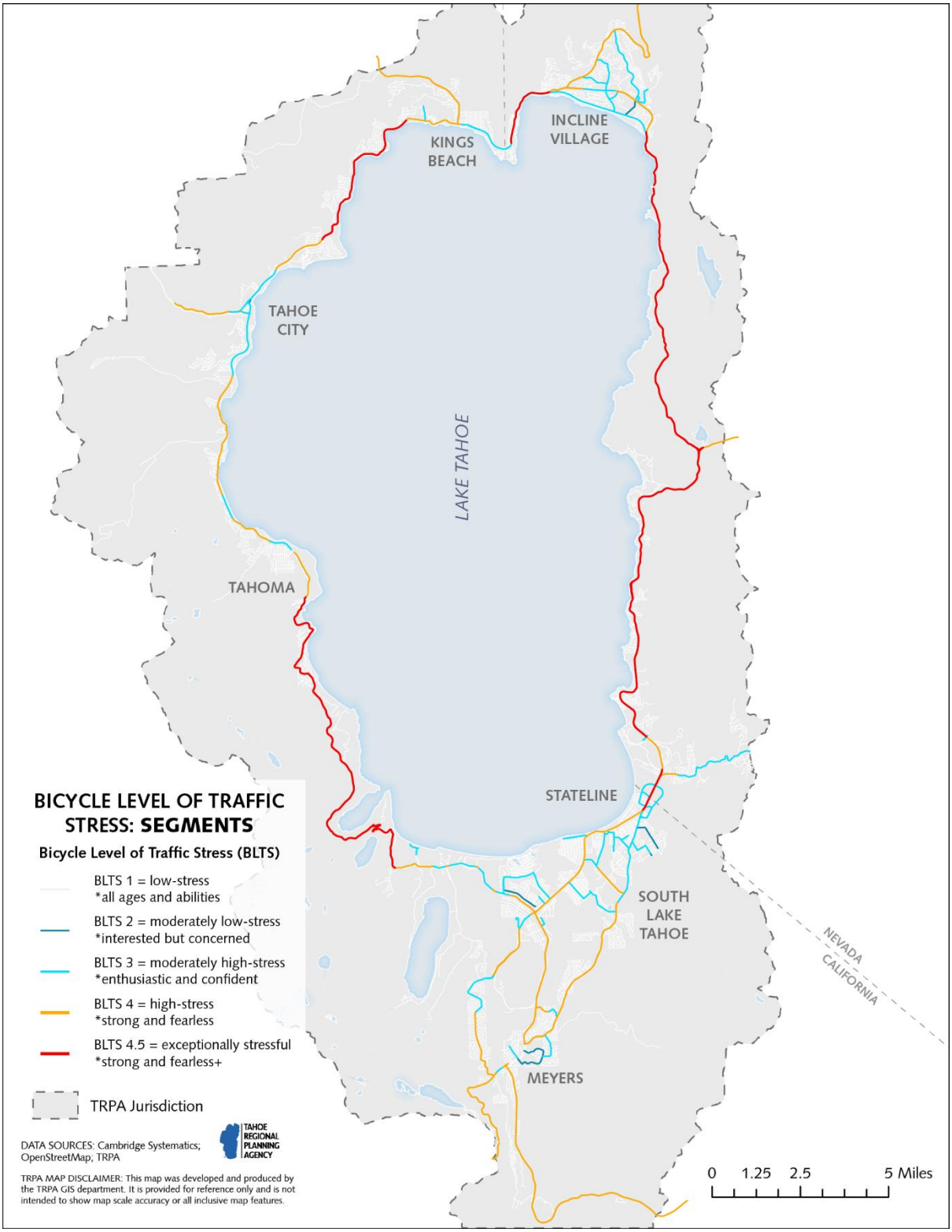
Building on the Four Types of Cyclists, a Bicycle Level of Traffic Stress (BLTS) analysis was conducted for the entire Tahoe Basin. Traffic stress is the perceived sense of danger associated with riding in or adjacent to vehicle traffic. Studies have shown that traffic stress is one of the greatest deterrents to bicycling.[1] The less stressful, and therefore more comfortable a bicycle facility is, the wider its appeal to a broader segment of the population. A bicycle network is likely to attract a larger portion of the population if it is designed to reduce stress associated with potential motor vehicle conflicts while still connecting people to where they want to go. A BLTS analysis is an objective, data-driven evaluation model which identifies streets with a high level of traffic stress, gaps in the bicycle network, and gaps between streets with low levels of traffic stress. More information on the BLTS analysis and methodology can be found in the technical memo published in Appendix C.

For a Tahoe specific analysis, more than 50 percent of respondents to the question "what type of cyclist do you most closely identify with" answered "interested but concerned" or "enthused and confident". This tells us that safe, low-stress (high-quality) bicycle infrastructure would capture the majority of riders, thus increasing bicycle mode share (as shown in figure 2-3). An online version of the BLTS map can be found at www.trpa.gov/atp.

Lake Tahoe Boulevard bike lane. Photo: Mike Vollmer

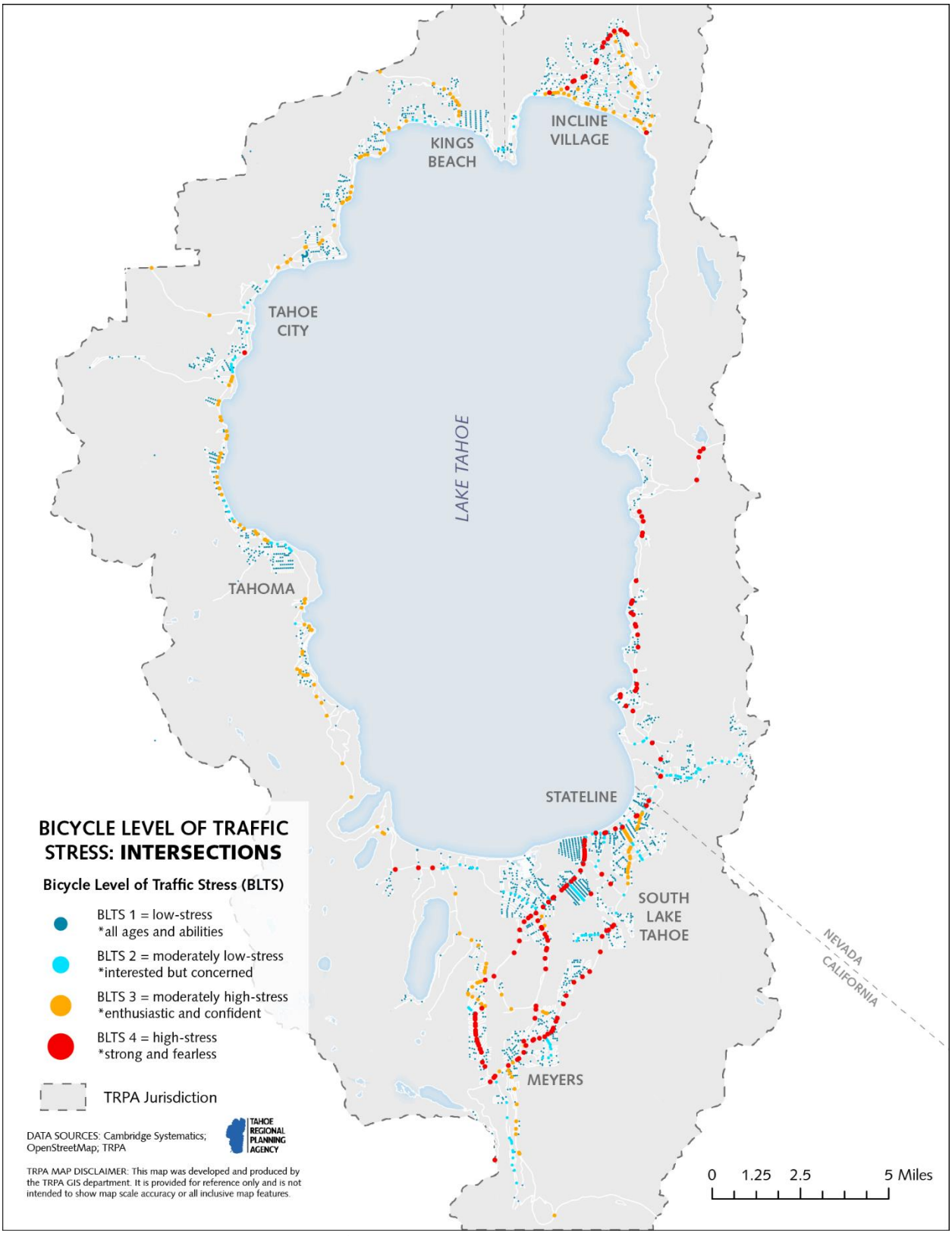
[1] M. Winters, G. Davidson, D.N. Kao and K. Teschke, "Motivators and deterrents of bicycling: comparing influences on decisions to ride", Transportation 38, 153-168 (2011).

FIGURE 2-4: REGIONAL BICYCLE LEVEL OF TRAFFIC STRESS ANALYSIS MAP (Segments)



Map can be veiwed at: www.trpa.gov/atp

FIGURE 2-5: REGIONAL BICYCLE LEVEL OF TRAFFIC STRESS MAP (Intersections)



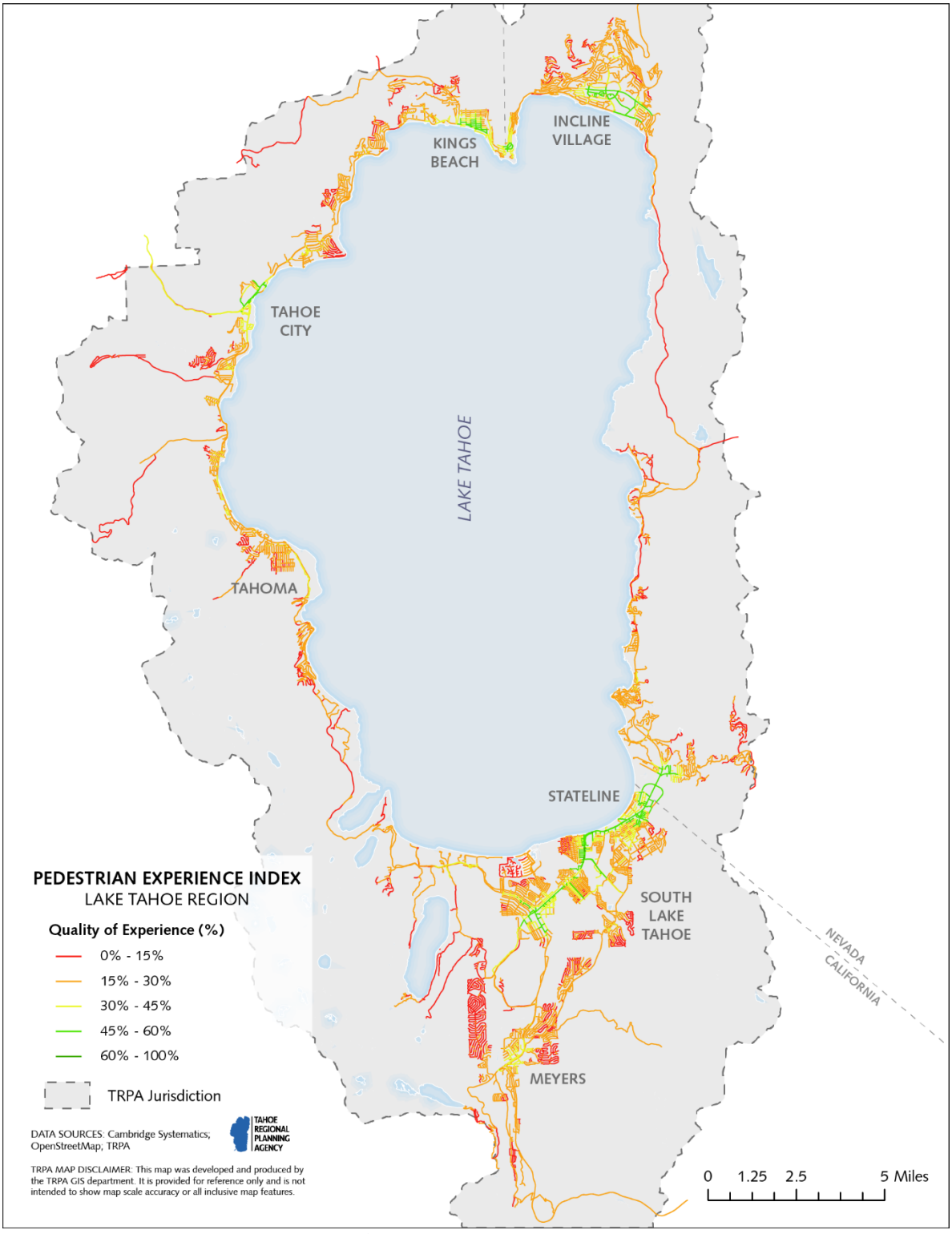
Map can be viewed at: www.trpa.gov/atp

What is the Pedestrian Experience Index?

The "Pedestrian Experience Index" (PEI) is a pedestrian complement to the Bicycle Level of Traffic Stress analysis. It incorporates similar built environment data such as presence of sidewalks, sidewalk condition, posted travel speeds, and other metrics (found in Appendix C) to qualify the pedestrian experience for each block face. The value of this analysis is for local agencies to look more holistically at the pedestrian network, separately from the bicycle network, and make appropriate project recommendations based on improving the overall pedestrian experience. As mentioned in the introduction to the plan, vibrant pedestrian spaces bring a host of positive benefits, such as economic vitality, increased public health, and safer spaces for all users. An online version of the PEI map can be found at www.trpa.gov/atp.

Photo: Novus Select 2019

FIGURE 2-6: REGIONAL PEDESTRIAN EXPERIENCE INDEX MAP



Map can be viewed at: www.trpa.gov/atp

BLTS and PEI Recommendations

As with both of the LTS and PEI analyses tools, the central focus is to create a low-stress, safe, and enjoyable bicycle and pedestrian network that has both utility purpose (taking Tahoe residents and visitors to and from their destinations), while also helping reduce Tahoe's reliance on the automobile – both in line with TRPA's environmental goals as well as creating a more vibrant quality of life for all who live in or visit the Tahoe Basin.

The overarching view of the BLTS analysis tells a compelling story for Tahoe's on street network for cyclists. While the region's patchwork of Class I trails are an extreme boon and useful facility for Tahoe's residents and visitors, careful consideration must be given to where these facilities are placed. Class I paths that cross multiple intersections and driveways create conflicts for cyclists. CA Highway Design Manual states the Class I trails are not recommended adjacent to streets or highways, or to be used as a substitute for designing the on-street bicycle facilities to be safe and low-stress. Tying this back to the four cyclist typologies, if engineers work to design low-stress on-street bicycle facilities that accommodate "no way no how" and "interested but concerned" riders, then the mode choice behavior of Tahoe's residents and visitors can begin to shift. A positive externality of this approach is that by moving away from Class I shared-use paths adjacent streets and highways and instead designing the road network to be low-stress, then the potential space becomes available to build dedicated pedestrian infrastructure, such as sidewalks. As the prevalence of electric mobility devices continues to grow, such as e-bicycles and shared mobility (scooters), this approach provides greater mode separation, creating a more pleasant and safe experience for pedestrians who no longer have to compete for space with the faster moving e-bikes/scooters.

Regarding the PEI analysis, sidewalks, particularly in town centers and commercial areas, are critical to accommodate the movement of pedestrians across our transportation network in a safe and efficient manner. A large component of this includes compliant ADA design and access for the disabled community. Noncontiguous sidewalks, lack of curb ramps, safe midblock crossings, or poor sidewalk quality are barriers for able-bodied pedestrians, and absolutely critical issues for the disabled community. Based on feedback from in-person and online public outreach, the Tahoe community seems evenly divided on sidewalks. Many locals related that they experience concern over the "urban" look associated with sidewalks. While being sensitive to these concerns, there are many residents who related they would appreciate and utilize a sidewalk should one exist, mostly for simple reasons such as walking their dog, a short trip to the grocery store, or feeling comfortable letting their child walk to school. When addressing project design, implementers should take great care at public outreach meetings on how to address residents' concerns over the aesthetics of sidewalks, while also highlighting they are an essential infrastructure tool for pedestrian safety, increasing walking as a mode share, supporting the disabled community, as well as a heightened overall pedestrian safety and experience. The plan's recommendation is to prioritize implementation of safer pedestrian infrastructure on arterial or commercial roads with access to shops and businesses, as well as collector streets that serve as main thoroughfares through residential neighborhoods. Focusing on destinations including, but not limited to, schools, transit hubs, grocery stores, and recreation destinations is also a recommended approach for

implementing dedicated pedestrian facilities (e.g. sidewalks, leading pedestrian intervals, refuges islands, etc.).

Bicycle and Pedestrian Facilities Winter Maintenance

Existing Challenges and Recommendations

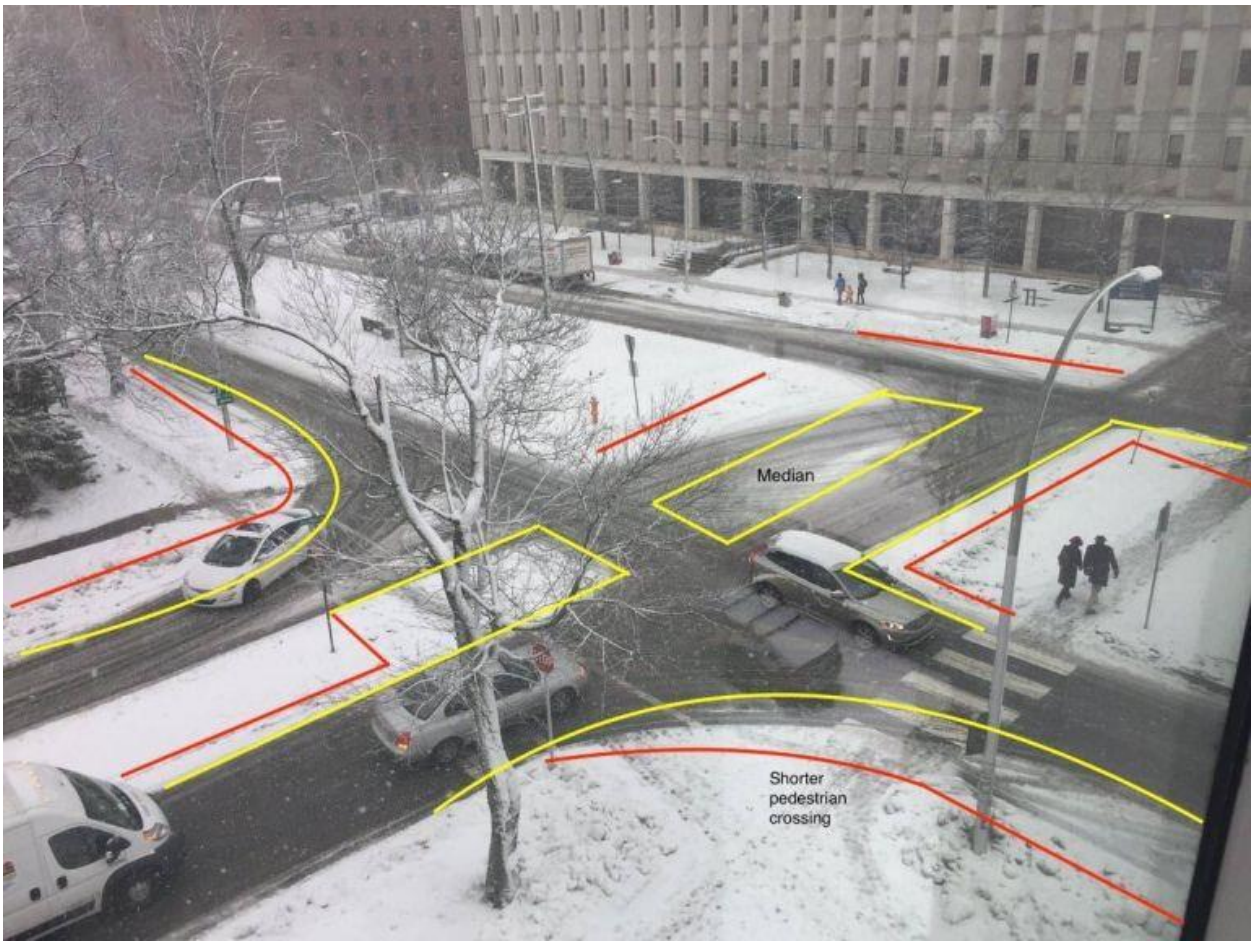
It is no secret that over the winter months Lake Tahoe can receive enormous quantities of snowfall, the annual average being approximately 275 inches. These weather events present very real maintenance challenges for our active transportation network. While TRPA recognizes these challenges, drawing upon the solutions implemented by other snowbound locations, and how they address these challenges can be a helpful tool.

The first is implementing creative road design. Understanding the need for snow storage, maintenance plans adopted alongside the design of active transportation projects, as well as utilizing the equipment and technology available to be able to design safe active transportation facilities that also allow for snow clearing is paramount. Rolled curbs and grading/snow plowing equipment designed to be used with rolled curbs are one option. Snow collection trucks following the street snowblowers and depositing the snow into snow melting devices (some are branded as “snow dragons”) is another recommendation. This option also has a water quality benefit, as you can filter and release the snow melt in a controlled manner, rather than allowing to let it collect particulate and debris over the months it takes for a snow storage pile to melt on its own.

Left: Snow Dragon snow melting device. Right: Snowplow designed specifically for sidewalks and bicycle facilities (image: streetsblog.org)

Another important tool to use is the snow itself! Geographic locations that receive a lot of snowfall use the snow to build what could otherwise be hardscape concrete features to pilot their safety measure options before spending the dollars on the more expensive hardscape infrastructure. Pedestrian bulbouts (commonly referred to as “sneckdowns”), protected intersections, pedestrians refuge islands, protected bike lanes, and most any hardscape feature can feasibly be implemented with snow before concrete. This is also a great way to pilot these preferred infrastructure projects as a way for the public to get a feel for how they work, and provide feedback, before the money is spent to design, engineer, and construct it out of concrete or other hardscape element.

Graphic depicting how to design, plan, and then implement a hardscape project first using snow.



Example of a “sneckdown” in action. Image source: headingtonliveablestreets.org.uk



Left: Small plow designed to fit within protected bike lane (source: @Lanefab/Twitter)
Right: Protected bike lane that was cleared using a machine that uses brushes instead of a plow (source: Nina Grossman/Sooke News Mirror, City of Victoria, B.C.)

Multi-Modal Connections

A complete transportation network offers multiple methods of travel to residents and visitors. A major component to successfully encouraging people to get out of their automobile and use active transportation or public transit relies on offering a convenient, timely, low-stress, and safe system. Multi-modal connections help reduce barriers to active transportation, such as long distances, physically challenging topography, or a lack of active transport facilities. Additionally, multi-modal systems must consider "first and last mile," which is how people get to and from pick-up and drop-off points to their destinations. Shared mobility has been a huge boon for the first and last mile connections in the City of South Lake Tahoe. Figure 2-7 below highlights the high number of shared scooter trips taken in South Lake Tahoe.

Some marks of a strong multi-modal system include:

- Transit stations are safely accessible by biking, walking, and rolling
- Quality and sufficient parking is available for bicycles
- Transit stations have a protected waiting area with support amenities such as benches, bathrooms, and water fountains
- Buses have sufficient bicycle carrying capacity
- Transit is timely and convenient
- Ticket prices are affordable (or free/subsidized)
- Long stretches of connected active transportation facilities
- Land use that supports a multi-modal approach

Tahoe City Transit Center. Photo: Bruce R. Damonte

Tahoe City Transit Center. Photo: Placer County

FIGURE 2-7: SHARED MOBILTY SCOOTER TRIPS MAP

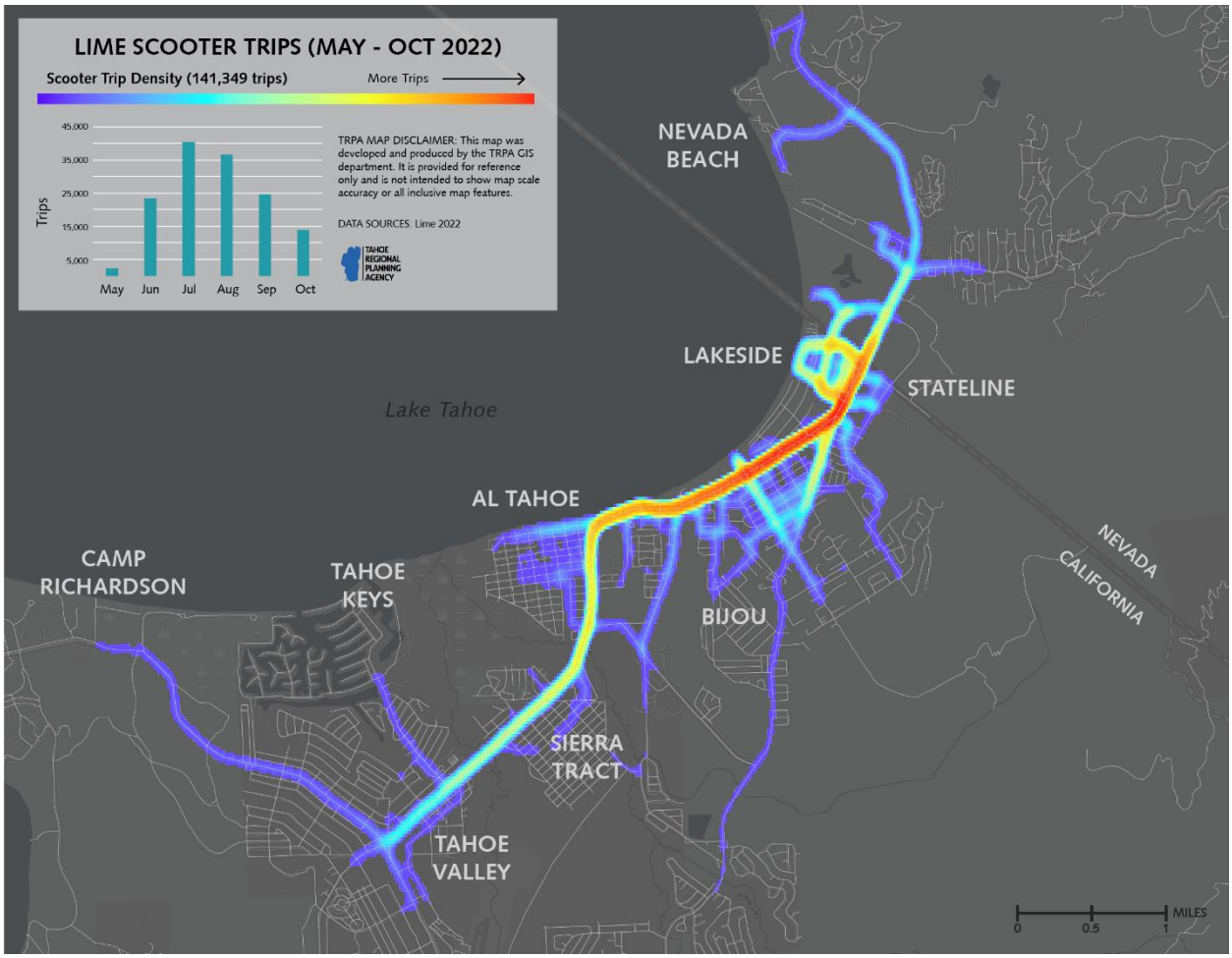
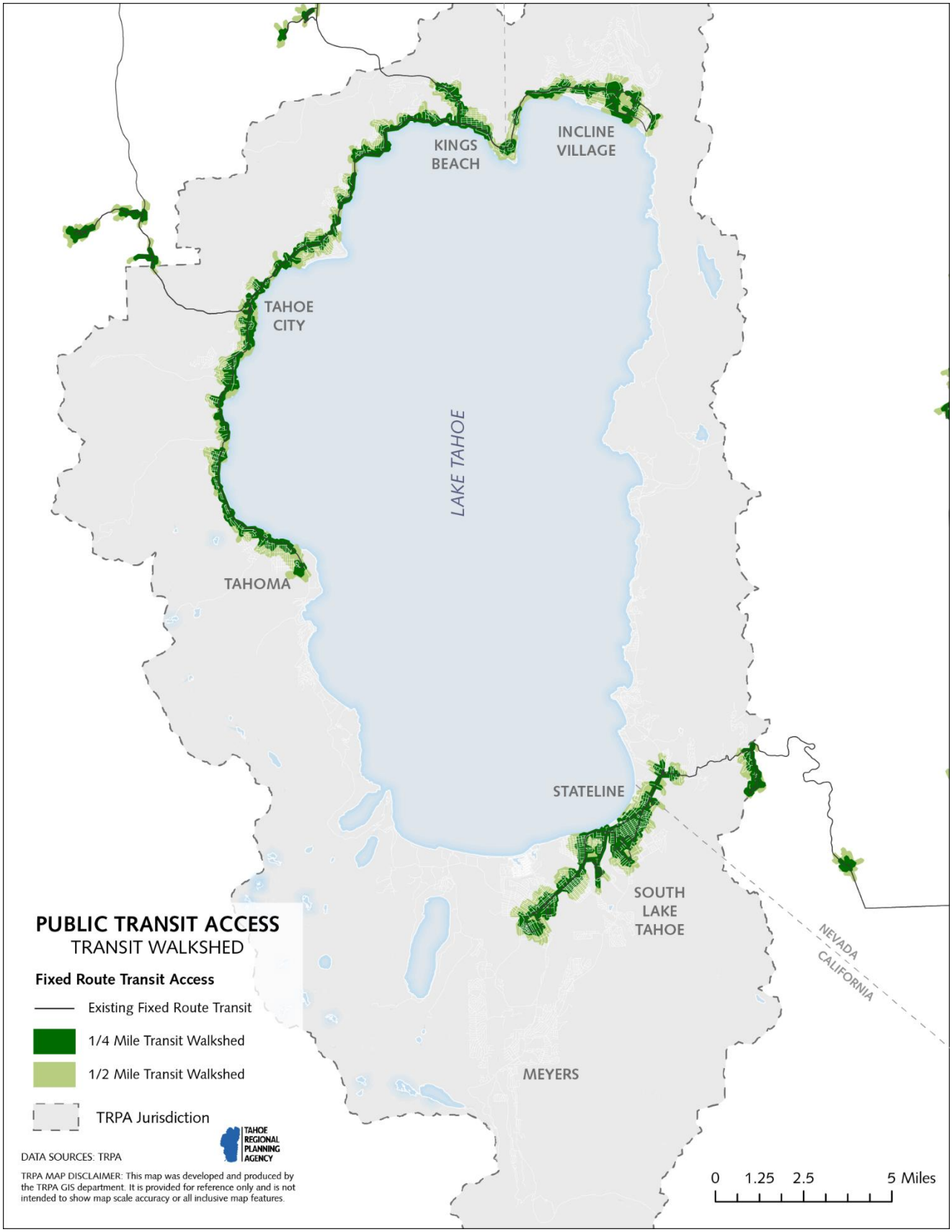
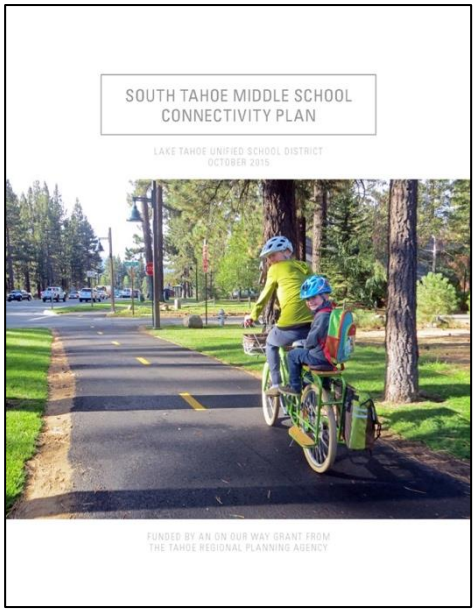


FIGURE 2-8: EXISTING PUBLIC TRANSIT WALKSHED ACCESS



Connectivity



Gaps in connectivity impact a variety of user types in different ways. The Bicycle Level of Traffic Stress analysis is an important tool to highlight network viability, and to understand where to best close gaps in connectivity. For a family of riders, parents may only feel comfortable taking their children on shared–use paths because they are completely separated from vehicular traffic. If a family cannot take the path from origin to destination, they may choose to drive even if they would prefer to bike. More experienced riders may be more comfortable riding in bike lanes with traffic but may choose not to ride because bike lanes are not well maintained, are poorly designed, or inconsistent. If sidewalks do not extend the entire distance of a common commute or do not exist at all, and pedestrians are forced to walk along the road, they, too, may decide to drive. In many cases, people do not have multiple transportation choices. During TRPA's in-person outreach, community gatherings, and tabling events, attendees related that network connectivity was a top priority.

Regional Paths (Class I Shared Use Trails)

Beyond designing our existing roadway network to be low-stress for walking, biking, or rolling, long stretches of connected shared-use paths enable users to travel long distances where roads may not always take them. The Lake Tahoe Region has a variety of Class I paths that connect users through entire towns or provide access across town. Regional path connections serve residents who live on one side of town but work on the other, or visitors who want to explore large swaths of Tahoe by bike or foot. Many regional paths already exist, are programmed for construction over the next few years, or are still in the planning phase. While these regional paths are an incredible amenity to the Tahoe Region, TRPA does not want to rely solely on their implementation for active transportation, particularly if they are planned to run adjacent to an existing street or highway.

Once all regional paths are connected around the lake, these paths will make up the **"**Tahoe Trail**"** which is a collaborative vision of the public and local, state, and federal agencies, under the Environmental Improvement Program (EIP). Once complete, the Tahoe Trail will allow users a continuous, mostly separated, shared use path around the entirety of Lake Tahoe. Separately, North Lake Tahoe local, state, and federal agencies are working to construct a 40-mile connected paved path known as the "Resort Triangle" that will join the communities of Kings Beach, Tahoe Vista, Tahoe City, Alpine Meadows, Olympic Valley, Truckee, Martis Valley, and Northstar in a continuous loop of Class I shared use path. The portion of the Resort Triangle between Tahoe City and Tahoe Vista will also be a segment of the Tahoe Trail allowing connection between the two regional pathways.

Current Use Patterns

Active transportation trips are not easily measured or projected for an entire region without extensive data collection efforts. To better understand where people are going and how they are getting there, TRPA and regional partners implemented a comprehensive bicycle and pedestrian monitoring program. In addition to consistent monitoring, TRPA also surveys on a project-by-project basis. Implementers use monitoring data to understand demand, support construction grant applications and reports, and for future planning. Figure 2-8 illustrates all monitored locations by equipment type. For more detailed analysis and up-to-date data visit the Bicycle and Pedestrian Monitoring page on Lake Tahoe Info: https://monitoring.laketahoeinfo.org/BikePed.

Lake Tahoe Info Monitoring Dashboard

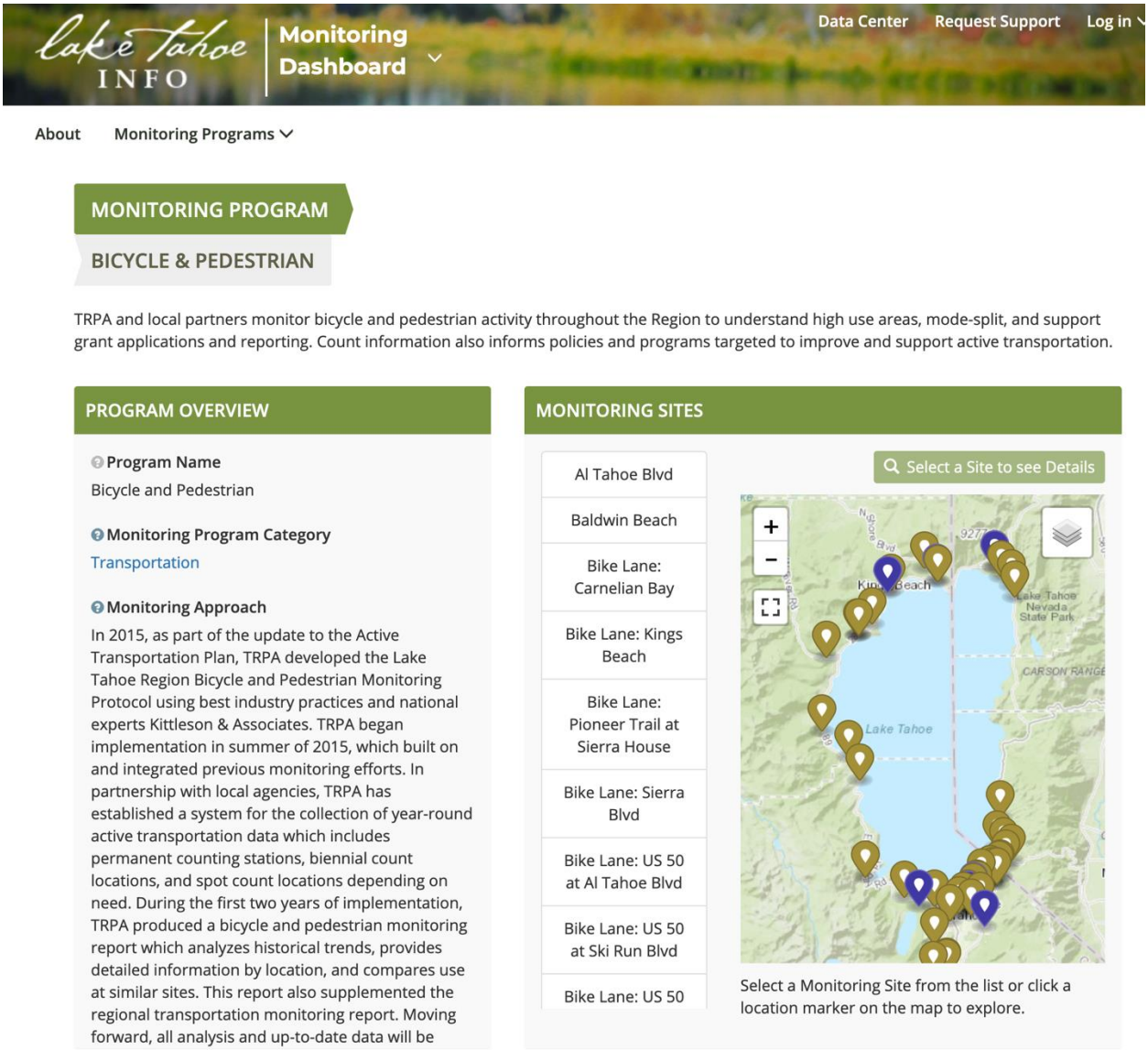
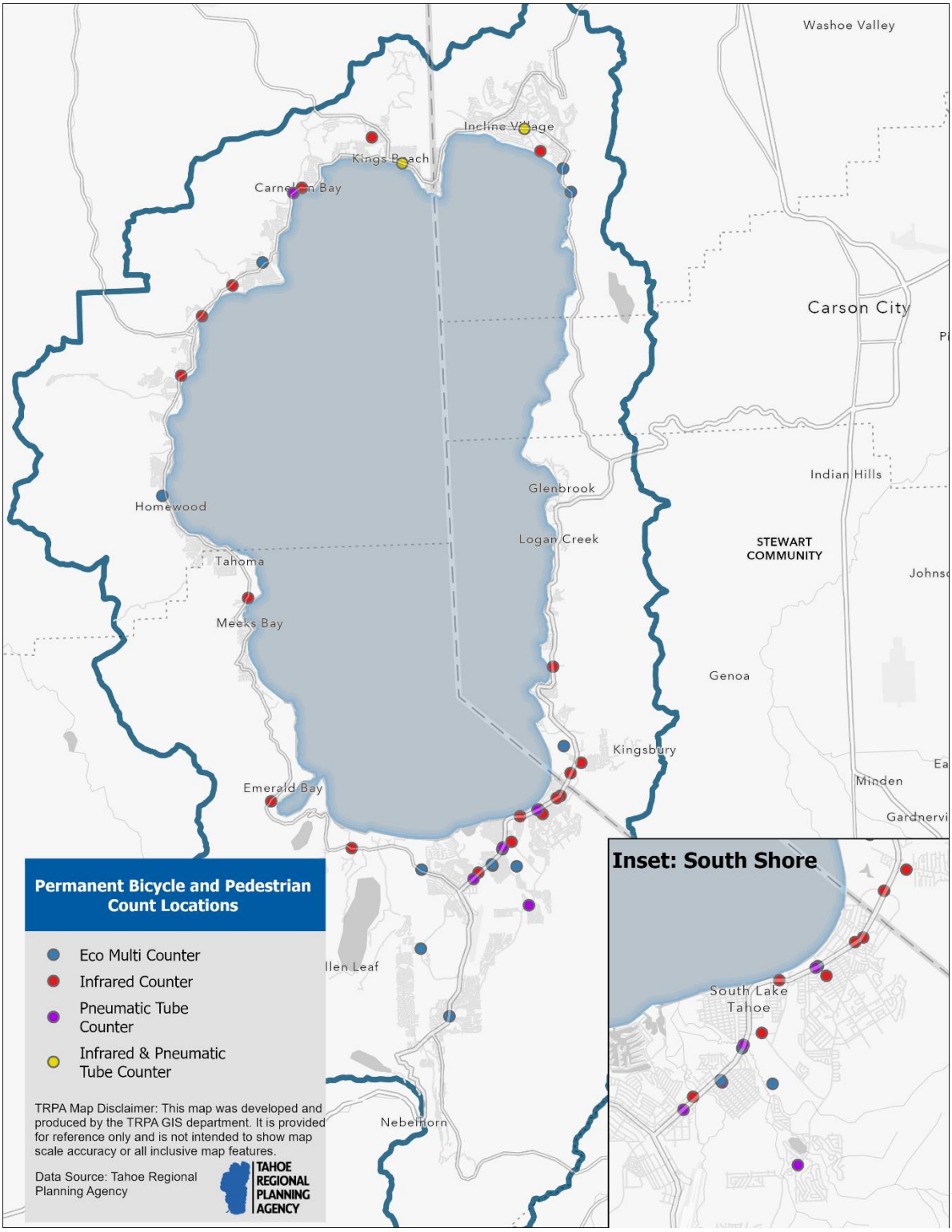


FIGURE 2-9: PERMANENT BICYCLE AND PEDESTRIAN COUNT LOCATIONS



Bicycle and Pedestrian Monitoring Protocol Overview

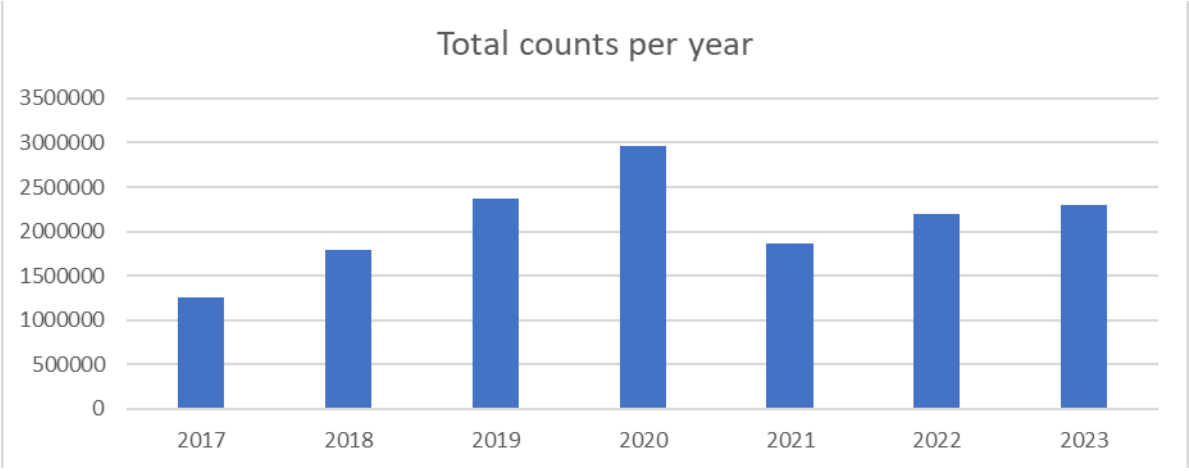
In 2015, as part of the update to the Active Transportation Plan, TRPA developed the Lake Tahoe Region Bicycle and Pedestrian Monitoring Protocol. Implementation began in 2015 with seasonal videos recorded and limited automated counting. In 2016, TRPA purchased automated bicycle and pedestrian counters that collect year-round data, differentiate between the two different users, and collect directional information. Through partnerships with local jurisdictions, counters were installed on paths throughout the Region, and are now required to be installed during construction of new shared use paths.

As of 2023, there are 48 active monitoring locations. TRPA and local partners monitor bicycle and pedestrian activity to understand high use areas and trends, measure mode-split, and support infrastructure grant management and reporting. Count information also informs policies and programs targeted to improve and support active transportation. All data can be found at https://monitoring.laketahoeinfo.org and downloaded at https://www.tahoeopendata.org/datasets/bike-and-pedestrian-counts/explore.

Results

A comparison of total users counted by the monitoring network shows that the busiest year to date is 2020 with almost 3 million users. Counts dropped drastically in 2021 and have been climbing back up since. 2.29 million users were counted across all sites in 2023.

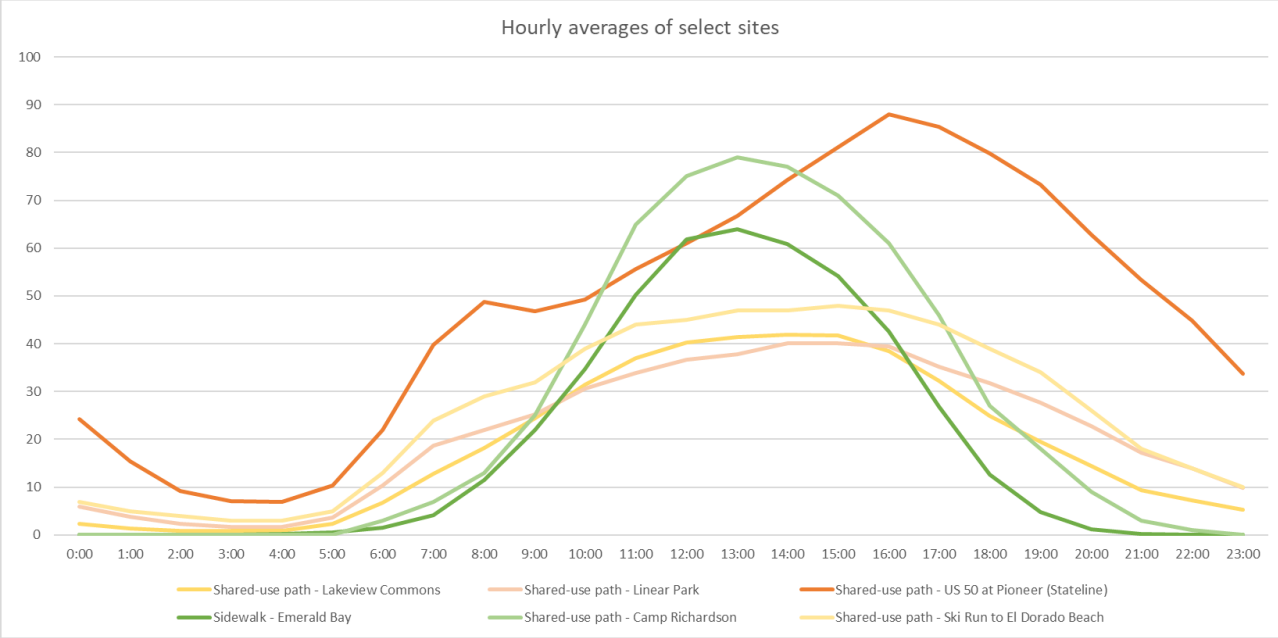
FIGURE 2-10: Total Bicycle and Pedestrian Counts Per Year



Hourly Use

Hourly usage varies across different monitoring locations. In the figure below, several sites have been selected to show popular destination locations and how they are used throughout the day vs. locations in the city of South Lake Tahoe that are used for commuting. The sites in the city have higher usage throughout the day rather than concentrated use between 10am and 4pm. US 50 and Pioneer Trail, Linear Park, Ski Run and Lakeview commons (shown in orange- yellow) have high use throughout the day whereas, Emerald Bay and Camp Richarson (shown in green) have a more prounouced peak period between 10 and 4.

FIGURE 2-11: Hourly Use of Select Sites

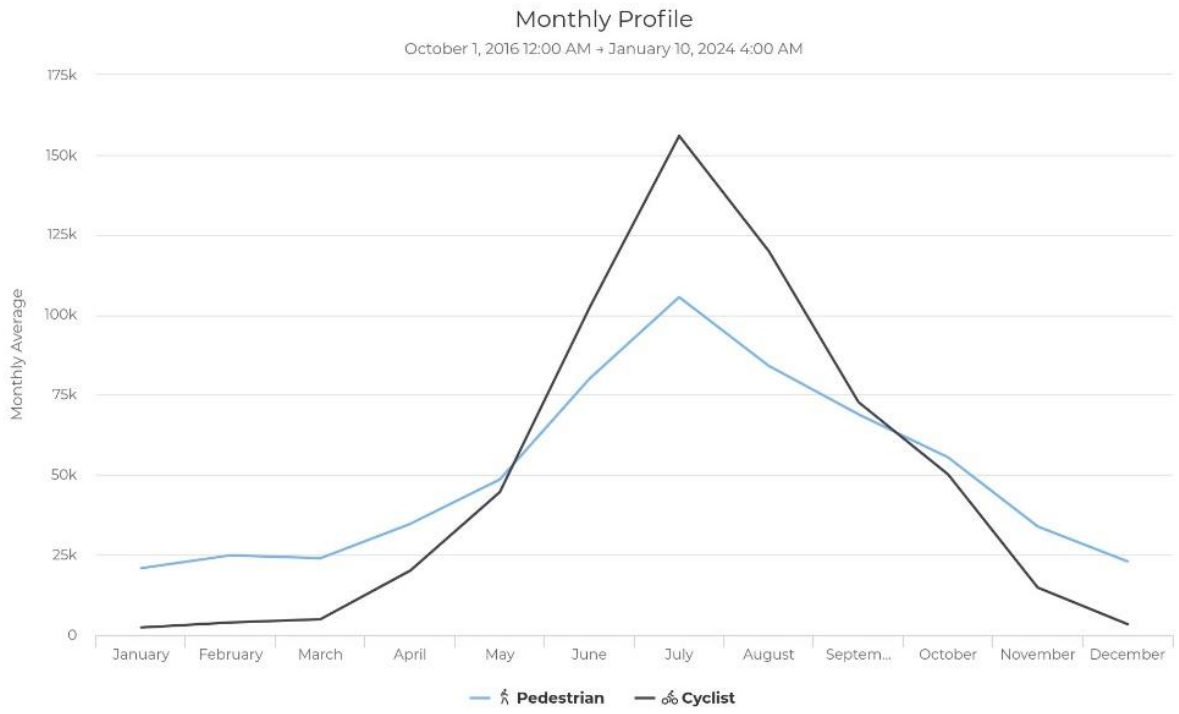


Seasonal Use

Not surprisingly, usage is strongly driven by the weather. 62 percent of usage is during summer months, then off-season use accounts for 25 percent (April, May, October, November), and lastly winter use, 13 percent. TRPA also recognizes more cyclists using trails during the warmer months from May-October and more pedestrians during the winter. Atmospheric conditions are certainly a factor, but as noted above, the trail being clear of snow or not also plays an important role in when people choose to walk, bike, or roll.

Figure 2-10: Seasonal use percentages across all sites

FIGURE 2-12: Monthly Usage Type by User



Note: Trail counters may differentiate between pedestrians and cyclists, but have less accuracy differentiating between cyclists and other "rollers", such as wheelchair users, scooter riders, or other, non-bicycle wheeled devices. For this figure, "cyclist" refers to any wheeled device recorded by the counter(s).

Project Monitoring

In addition to regular trend monitoring outlined in the monitoring plan, TRPA also conducts some pre/ post project monitoring. The Al Tahoe Safety and Mobility Enhancement Project completed a bike path in 2020. Before bike path construction, a dirt path had an average of 54 users per day. After construction there is an average of 167 users per day, over a 300% increase.

A monitor located on Al Tahoe before the Al Tahoe Safety and Mobility Project

After the Al Tahoe Safety and Mobility Project

Accessibility for the Disabled

Via the plan's outreach, stakeholder engagement, and subsequent comment period on the draft ATP, TRPA staff heard that Tahoe can be a challenging place for the disabled community. In many regards, the region is far behind other regions in accommodating and incorporating accessibility in all projects, programs, messaging, and planning processes. First and foremost, awareness of the needs of the disabled community is critical in understanding how to best build infrastructure that accommodates their needs. Staff dedicated to ensuring that Americans with Disabilities Act (ADA) or Universal Design standards are met alongside targeted outreach to underserved populations is needed to create a more holistic and accessible transportation network.

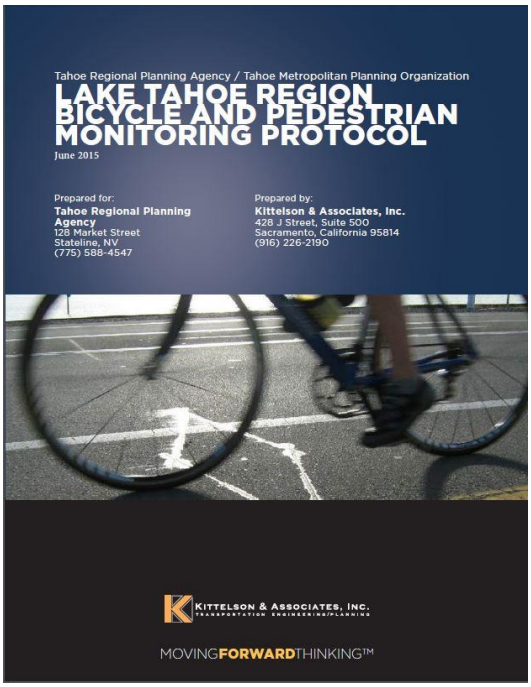
Beyond taking a proactive approach on facility design, many funding opportunities require transportation facilities to be brought up to current ADA standards during the design and construction of any new transportation facility. A common example of this are curb ramps, which have specific design specifications so that the curb ramp can be navigated by people with various levels of mobilities and impairments. A brand-new ADA compliant curb ramp is certainly laudable, however if the curb ramps are used as snow storage during the winter months their utility of being accessible completely fails. This can be a dangerous and insurmountable barrier for people using assisted mobility devices.

Accessibility considerations should not stop at transportation network design but be included in all planning and programmatic processes. Access to recreation, beaches, emergency evacuation procedures, and programs should always receive careful consideration and inclusion when implementing agencies are moving forward with any of the aforementioned initiatives. Regional equity goals highlight that the disabled communities' needs are a priority in all planning and programmatic initiatives.

Another note on accessibility is the inclusion of the disabled community in the BLTS and PEI analyses. While these analyses did not include an analysis of ADA accessibility specifically, the disabled community stands to gain similar benefits by agencies providing safe, low-stress facilities. In transportation planning terms, "pedestrian" can refer to people walking, using assisted mobility devices such as walkers, rollators, four-wheeled walkers, crutches, wheelchairs (electric or self-powered), or any assistive device that helps this community move about. Compliant sidewalks connecting to calm, signalized, and plentiful roadway crossings not only benefit abled-bodied pedestrians, but also people who rely on the range of mobility devices available. This is also true for the BLTS analysis. Low-stress roadways benefit more than just able-bodied transportation users. It is this plan's recommendation that local agencies implement location specific ADA transition plans, to further understand how they can support the disabled community in all of Tahoe's planning, programs, and construction projects.

Estimating Future Volumes

Future active transportation trips depend on multiple factors, including population, employment, climate, land-use development, and active transportation network build-out. For many years, TRPA has maintained a transportation model that estimates future vehicle trips based on land-use scenarios that is utilized in Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) updates. In the 2010 Bike and Pedestrian Plan, a bike trail user model was developed to forecast regional active transportation rates and expected use of individual facilities. The most recent 2045 model run for the 2020 RTP/SCS is used for the purposes of estimating future volumes.



Estimates of existing and future counts are calculated using the model, big data sources, literature research and actual path counts from 48 bicycle and pedestrian counters throughout the region. The future estimate assumes a high-quality, well-maintained network of Class I shared-use paths on all major corridors where use is most common in the Tahoe Region, as well as building out a Class II comprehensive network in-line with complete street strategies and advancement in technologies supporting micromobility options. The daily average is estimated to be 47,000 bicycle and pedestrian trips on the entire network, about a 17 percent mode share for active transportation. With the full build out of the network including more prevalent bike parking, and e-bike incentives and promotions, that mode share is estimated to increase to about 19 percent, which amounts to approximately 55,000 daily trips.

2.2 CHALLENGES & STRATEGIES

Although Lake Tahoe offers many regional paths, sidewalks, multi-modal connections, and on-street facilities, barriers to active transportation still exist. Challenges that discourage active transportation and the development of projects that improve active transportation infrastructure include safety, gaps in connectivity, and the high cost of operations, maintenance, and implementation. This section discusses these challenges and offers strategies to alleviate barriers.

Safety

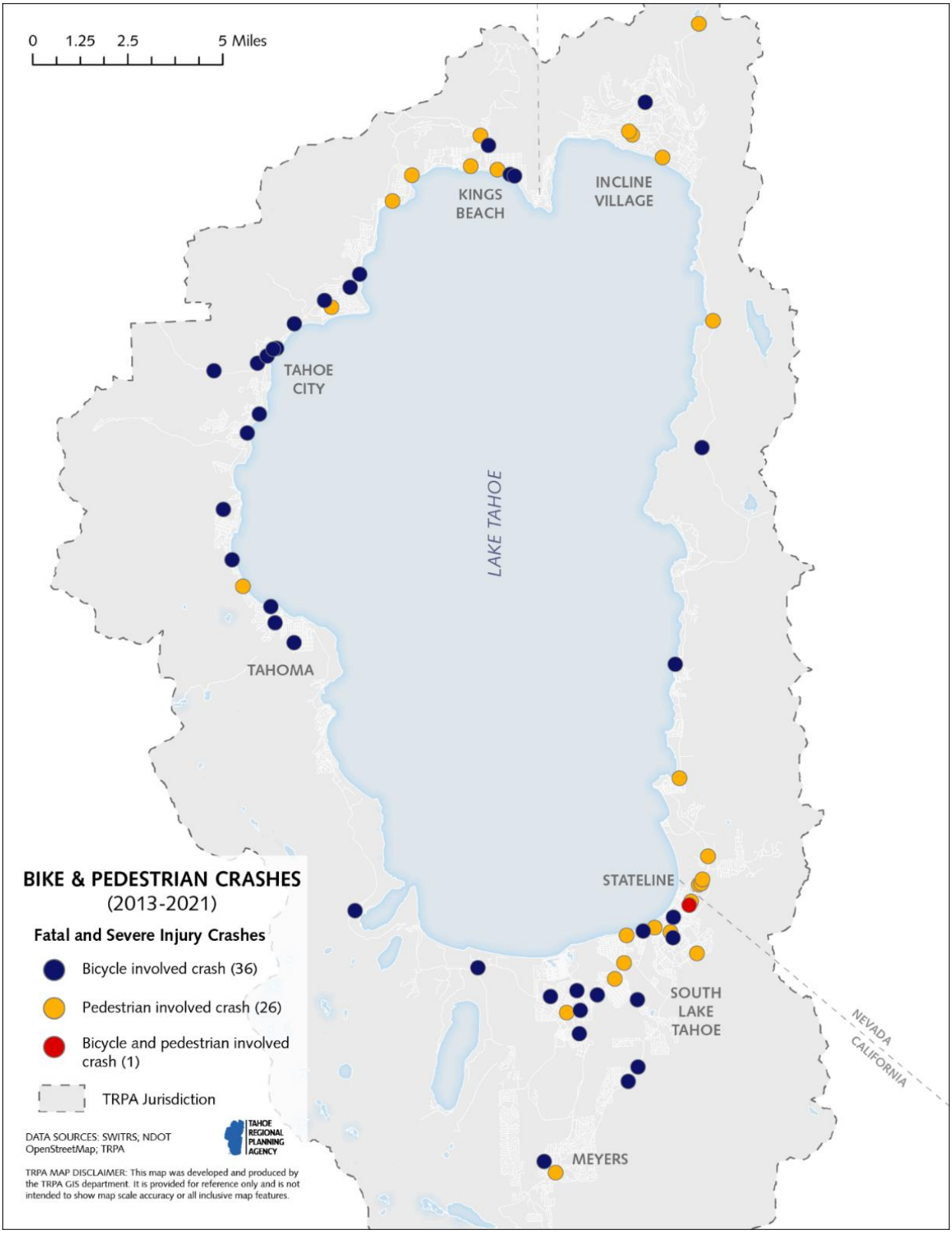

Photo: Mike Vollmer

A bicycle and pedestrian network that people feel safe using is a high priority in active transportation planning and could be a key factor in getting people out of their cars and onto the active transportation network. Road users not surrounded by a protective structure, including pedestrians, bicyclists (or e-bicyclists), skateboarders, scooter users, or highway workers in work zones, sustain a greater risk of injury in any collision with a vehicle. These road users are classified as Vulnerable Road Users (VRU) by the Federal Highway Administration. While pedestrians and bicyclists make up 14 percent of all injury crashes in the Tahoe Region, these road users are involved in 28 percent of all fatal and serious crashes and a further 31 percent of all fatal crashes. The higher percentage of vulnerable road users involved in fatal and serious crashes shows that the transportation system needs to be designed to prioritize safety of these users. Table 2-3 illustrates the latest crash data involving bicycles and pedestrians, reported by local and state law enforcement agencies to the states of California and Nevada between 2013 and 2021.

TABLE 2-3 LAKE TAHOE CRASH DATA STATISTICS

Mode	All Levels of Injuries (Count)	All Levels of Injury (Percentage of Total)	Fatal & Serious Injury Crashes (Count)	Fatal & Serious Injury Crashes (Percentage of Total)
Bicycle-Involved	145	9%	36	16%
Pedestrian-Involved	92	5%	26	12%
Bicycle & Pedestrian	3	0.2%	1	0.4%

FIGURE 2-13 LAKE TAHOE BICYCLE AND PEDESTRIAN SEVERE AND FATAL COLLISION MAP



Connectivity:

The Lake Tahoe Region has a few key locations that sever the active transportation network and act as barriers to increased use.

Gaps in Connectivity are illustrated by the following physical infrastructure issues:

- Lack of infrastructure
- Discontinuous infrastructure
- Aged facilities that no longer feel safe
- Intersections that do not accommodate all users
- Lack of wayfinding to direct users to a preferred network

Strategies to improve conditions and reduce connectivity gaps can involve small efforts such as installing wayfinding signage or big, large-scale construction projects. Implementing agencies should prioritize closing network gaps by placing these projects on their capital improvement program lists. Recently, the City of South Lake Tahoe and El Dorado County have installed wayfinding signage on their trail systems through funding provided by Measure R and Measure S. Placer County, in coordination with the North Lake Tahoe Resort Association, has created a wayfinding manual to assist in the implementation of a comprehensive wayfinding network. Washoe County, as part of a TRPA On Our Way Grant Program, created a Signage Master Plan for the State Route 28 Corridor. These are great starts to assisting users on regional trails. The on-street network could benefit from similar efforts.

- For regional connectivity gaps, implementation of large-scale projects may be necessary. These projects can be done in phases, such as first adding bike lanes and later providing a Class I shared-use path when funding is available. Interim projects can help close gaps more quickly at reduced costs. Constructing interim projects may allow more robust planning, outreach, and funding analysis to be conducted while still meeting the short-term needs of the community.

West Shore Wayfinding. Photo: Alta Planning + Design

- For more localized connectivity gaps, wayfinding signs are a small improvement that can generate a large benefit. Tourists and residents may not understand that the Lake Tahoe network is comprised of various types of infrastructure, such as bike lanes that connect to bike routes that connect to a shared-use path. Wayfinding offers people recommendations about preferred routes, provides destination and distance information, and acts as a key landmark in case of emergency.

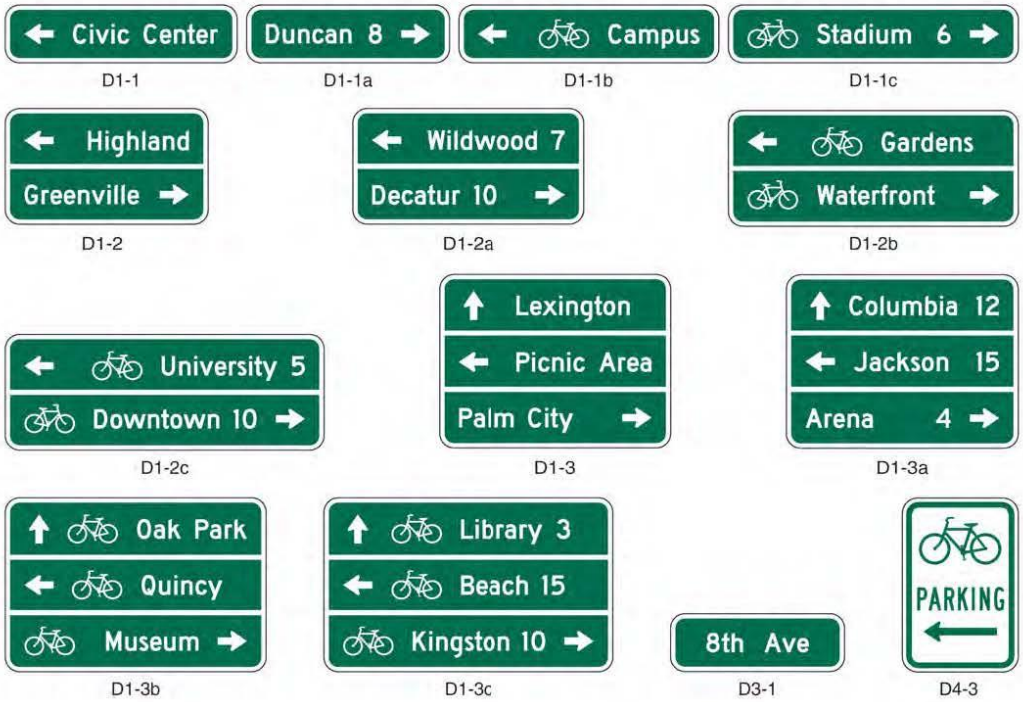
Strategies for improving wayfinding include:

- Be Consistent and use the 4 "D's"
  - Distance
  - Direction
  - Destination
  - Duration

- Integrating wayfinding into structures in the public right-of-way, such as bus shelters, permanent trash cans, and other street furniture. Information must be accessible to people with disabilities.

- Install signs to direct users in the right direction, especially at route decision points.

Figure 9B-4. Guide Signs and Plaques for Bicycle Facilities (Sheet 1 of 2)



CHAPTER 3: GOALS, POLICIES, & PERFORMANCE MEASURES

The goals, policies, actions, and performance measures in the Active Transportation Plan provide specific direction on how TRPA and partnering agencies, organizations, and private entities can work together to improve the active transportation network and increase use. The policy framework provides solutions to opportunities and challenges.

3.1 GOALS

The goals provided below expand on the more general transportation goals set forth in the Bi-State Compact, the TRPA Regional Plan, and the 2020 Regional Transportation Plan/Sustainable Communities Strategy.

- Increase connectivity by completing the active transportation network.
- Improve safety for bicyclists and pedestrians.
- Increase mode shift toward walking, bicycling, and rolling by reducing the stress of the on-street network for cyclists/shared mobility and providing dedicated pedestrian facilities.
- Increase and support consistent project implementation through technical assistance and funding.
- Develop sustainable funding sources for post project operations and maintenance.

Kingsbury Grade. High stress! Photo: Tom Lotshaw

3.2 POLICIES

Policies provide direction for partners on how to meet goals. The policies often outline critical activities in which partners are already engaged as part of their day-to-day work. Once the TRPA Board approves the Active Transportation Plan, the policies in this section will support the broader Regional Plan and will be implemented through the Code of Ordinances where distinct requirements are applied to projects, the transportation department's overall work plan as applicable, and through agreements with partnering organizations who construct and maintain the active transportation network. Policies, and associated actions are captured in matrices within each section. Many policies are fulfilled by multiple actions, and in some cases new specific actions were not identified as needed to fulfill each policy because they are already a part of daily activities.

SECTION 1: NETWORK DESIGN

1.1 Accommodate the needs of all travelers by designing and operating roads to provide for safe, comfortable, low-stress and efficient travel for roadway users of all ages and abilities, particularly vulnerable road users such as pedestrians, bicyclists, scooter riders, and other non-automotive forms of transportation.

1.2 Continue public/private collaboration in developing, funding, and implementing a complete Class I/shared-use path network around Lake Tahoe.

1.3 Through location-specific, flexible, and context-sensitive approaches, collaborate with agency stakeholders and community members to determine design solutions that meet requirements and incorporate best practices based on international, national, and state standards for active transportation.

1.4 Balance the needs of all roadway users when considering intersection improvements and impacts to level of service. Encourage implementing agencies to evaluate project design alternatives through methods other than and/or in addition to vehicular Level of Service (LOS) such as reduction in vehicle miles traveled (VMT), access for the disabled, number of increased active transportation trips, Multi-Modal Level of Service (MMLOS) and reduction in Level of Traffic Stress (LTS).

1.5 Utilize design flexibility and pursue "experimental status" when adherence to published standards is not feasible or where different standards would provide safety, economic, environmental, social, or connectivity benefits.

1.6 Construct, upgrade, and maintain active transportation facilities along major travel routes as part of all roadway improvements. In constrained locations, all design options should be considered such as restriping, signalization, and narrowing travel lanes.

1.7 Support and encourage local jurisdictions and school districts in removing barriers to active transportation planning, facility design, and implementing projects and programs.

1.8 Incorporate applicable Best Management Practices (BMPs) into facility and maintenance design to support environmental and financial sustainability.

Section 1: Network Design Policy Action Matrix

Policy Number	State	Regional	Local	Private	Community
1.1	**X**	**X**	**X**	**X**	**X**
1.2	**X**	**X**	**X**	**X**	**X**
1.3	**X**		**X**	**X**	
1.4	**X**	**X**	**X**	**X**	
1.5	**X**	**X**	**X**		
1.6	**X**		**X**		
1.7	**X**		**X**		**X**
1.8	**X**	**X**	**X**	**X**	

SECTION 2: FACILITY MAINTENANCE

2.1 Collaborate with agencies responsible for maintenance of active transportation facilities to ensure year-round use and condition of active transportation facilities, including prioritizing that connections are not blocked during snow removal or are quickly made available through clearing. This also includes maintaining and upgrading infiltration devices, clearing snow, sweeping, and re-striping where needed during the season and before major cycling events. State agencies should provide timely highway maintenance in the spring of each year and coordinate with local agencies on snow storage and operations maintenance. Active transportation facilities should not serve as temporary snow storage areas.

2.2 Prior to permit issuance, all projects containing active transportation facilities are required to submit a Maintenance Responsibilities Chart and Plan. These plans will clarify roles for annual and capital infrastructure operating and maintenance and identify funding needs and possible sources. This information will be included in the approved permits. See Appendix E, for *Maintenance Responsibilities Chart and Plan Template.*

2.3 Support long-term operations and maintenance activities for existing and future facilities by encouraging local jurisdictions to request use of available TRPA Mobility Mitigation Funds.

Section 2: Facility Maintenance Policy Action Matrix:

Policy Number	State	Regional	Local	Private	Community
2.1	X		X		
2.2	X	X	X	X	
2.3		X	X		

SECTION 3: MULTI-MODAL CONNECTIONS

3.1. Create convenient intermodal connectivity which considers first and last mile facility needs and connects all modal options by providing necessary infrastructure, and schedule coordination.

3.2. Encourage local jurisdictions to work with public and private entities to analyze space devoted to bicycle parking on existing and planned projects to ensure that space is allocated appropriately.

3.3. Maximize bicycle carrying capacity on all transit vehicles, prioritizing high-use multi-modal routes, reflecting current state policy, and using best available technology.

3.4. Encourage jurisdictions and other maintenance agencies to identify opportunities for efficient and innovative parking strategies that reallocate roadway space to provide for the active transportation network. This policy also applies to the repurposing of automobile parking for compliant bicycle parking.

Section 3: Multi-Modal Connections Policy Action Matrix:

Policy Number	State	Regional	Local	Private	Community
3.1		X	X	X	X
3.2		X	X	X	
3.3		X	X		
3.4	X	X	X		

SECTION 4: PROJECT IMPLEMENTATION

4.1 Support agencies Region-wide in adopting complete street policies and resolutions.

4.2 Actively pursue funding for priority projects, programs, and maintenance in collaboration with partnering agencies, private entities, and community groups.

4.3 If construction impacts an active transportation route, projects must adhere to the appropriate MUTCD which requires the implementing agency to provide appropriate temporary signage, alternate routes, and safe accommodations for all modes.

4.4 Incorporate segments of the proposed active transportation network into new and redeveloped commercial, tourist, multi-family, public service, and recreation projects consistent with this plan. Implementation of the facilities will be conducted through construction, easements, or in-lieu fees as appropriate to the scale of development per the TRPA Code of Ordinances, section 65.3.2.

4.5 During project planning and permit approval, identify and address the need for support and end-of-trip active transportation facilities including bicycle parking, water fountains, benches, and restrooms at commercial, tourist, recreational, transit, lodging, and government centers.

4.6 Projects should go forward regardless of where they are on the priority list when an opportunity or eminent loss of an opportunity makes implementation favorable or necessary.

Section 4: Project Implementation Policy Action Matrix:

Policy Number	State	Regional	Local	Private	Community
4.1		**X**	**X**		
4.2		**X**	**X**		**X**
4.3	**X**		**X**		
4.4		**X**	**X**	**X**	
4.5		**X**	**X**	**X**	
4.6		**X**	**X**		**X**

SECTION 5: EDUCATION, ENCOURAGEMENT, EVALUATION, AND ENFORCEMENT PROGRAMMING

5.1 In collaboration with law enforcement, school districts, and community groups, educate roadway users about their legal rights and responsibilities through education and encouragement programming.

5.2 Through public/private partnerships, continue to prioritize and implement consistent Region-wide wayfinding and path etiquette strategies.

5.3 Evaluate active transportation trends and project effectiveness through implementation of the Lake Tahoe Bike & Pedestrian Monitoring Protocol in partnership with local and state jurisdictions.

5.4 Evaluate implementation of active transportation goals and policies and report on benchmarks through the development of the Biennial Transportation Performance Report.

5.5 Update the Active Transportation Plan facility improvements and programmatic opportunities as needed every four to five years in conjunction with each Regional Transportation Plan update.

5.6 As new mobility technologies emerge, partnering agencies should analyze data and determine if regulation or new design considerations are necessary to accommodate all users and continue to support increased mode share.

5.7 Encourage all state and local law enforcement agencies to develop and implement an enforcement program that reduces behaviors that act as barriers to safe active transportation, including parking restrictions, distracted driving, impaired driving, 3-foot laws, and other known crash-inducing behaviors.

5.8 All active transportation projects and improvements should consider including permanent monitoring and detection infrastructure such as inductive loops, passive infrared, and signal detection systems.

Section 5: Education, Encouragement, Evaluation, and Enforcement Programming Policy Action Matrix:

Policy Number	State	Regional	Local	Private	Community
5.1		X	X		X
5.2		X	X	X	X
5.3		X	X		X
5.4		X			
5.5		X			
5.6	X	X	X		X
5.7	X		X		
5.8	X		X		

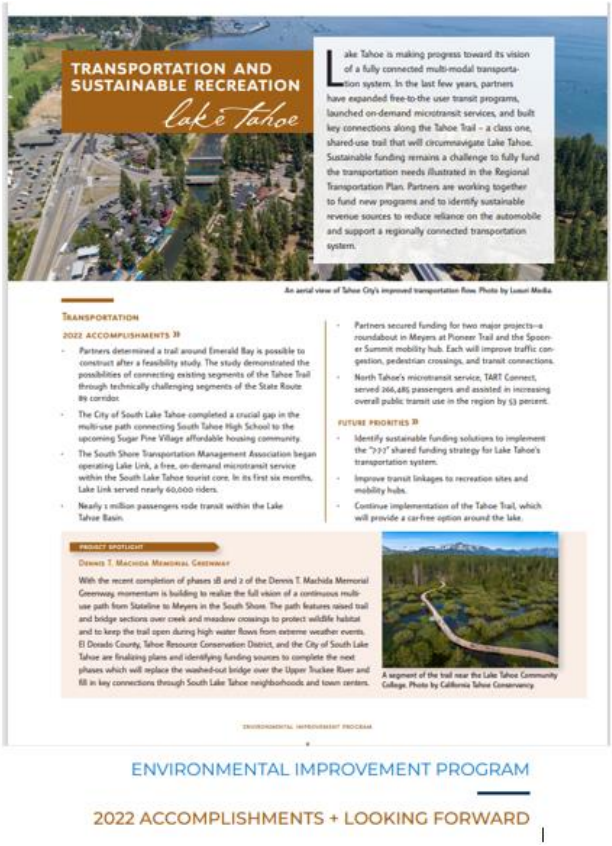
3.3 PERFORMANCE MEASURES

Setting performance measures for plans, projects, and programs is crucial when determining where funding, infrastructure improvements and other resources should be directed. The TRPA Research and Analysis Department, in coordination with other TRPA departments and agencies throughout the region, manage robust monitoring efforts that track progress. Active transportation performance measures are aligned with appropriate TRPA Environmental Improvement Program (EIP) and Regional Plan targets and thresholds as well as broader targets set by the federal and state governments. A variety of online tools exist to help illustrate progress, including the EIP Project Tracker and the Sustainability Dashboard (http://www.ltinfo.org/).

Performance Measure Evaluation and Monitoring

By monitoring effectiveness, agencies can be adaptive and flexible, ensuring progress. The most recent transportation performance biennial report identified three measures for tracking active transportation goals and strategies and outlines a process for adaptive management as needed.

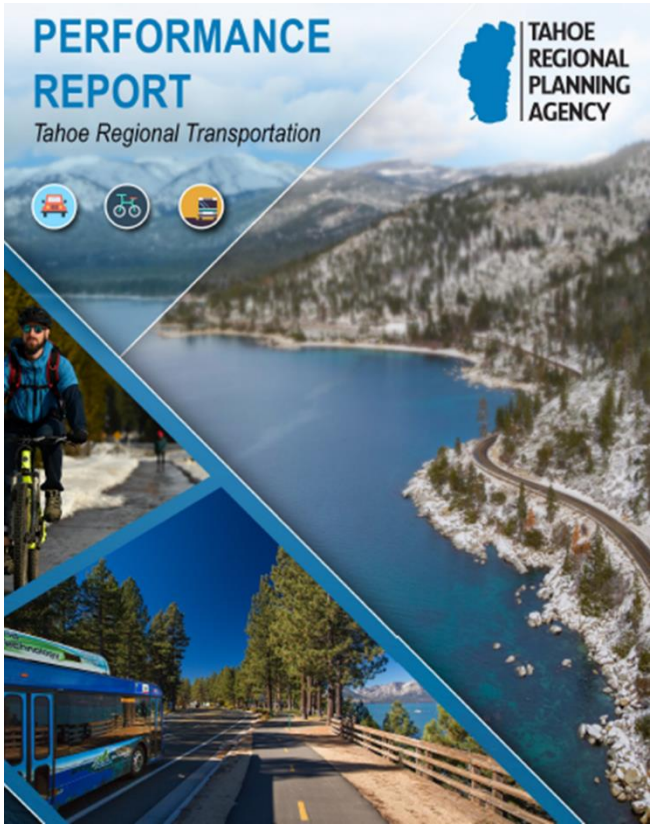
To align transportation performance measures across the many planning efforts conducted region-wide, this plan is incorporating the 2020 RTP/SCS biennial performance report that provides a holistic review of performance for not just active transportation but includes transit and auto metrics that must work together for active transportation to advance in the region. These newer metrics will also be folded into the 2025 Regional Transportation Plan update. These measures and a brief analysis are listed below. Baselines and methods are provided and should be used for comparison during the next Active Transportation Plan update.



The measures listed below are not the only way the plan's effectiveness will be monitored. The goals and policies put forth in this plan are tracked through several other reports, such as the TRPA Environmental Improvement Program accomplishments, and every other year through the Transportation Performance Report, first becoming available for review June 30th, 2024.

Performance Measure 1 (RP #5): *Increase percentage of all trips using non-automobile modes of travel (transit, bicycle, pedestrian).*

Analysis: The biennial performance report will include information on bicycle and pedestrian activity for the Regional Plan performance measures. Transit data will also be included in the full biennial Transportation Performance Report with all mode shares. Collecting active transportation data at Lake Tahoe was previously completed using intercept surveys at commercial and recreation sites in the winter and summer months. Most recently, TRPA modified its data collection methodology to utilize new, and more reliable data sources. Estimates of existing and future counts are calculated using a transportation model, big data sources, literature research and actual path counts from 48 shared use path counters throughout the region. The future estimate assumes a high-quality, well-maintained network of Class I shared-use paths on all major corridors as proposed in this plan where use is most common in the Tahoe Region, as well as building out a Class II(b), Class III, and Class IV comprehensive bikeway network in-line with complete street strategies and advancement in technology supporting micromobility options.



The daily average is estimated to be 47,000 active transportation trips on the entire network, which is about 17 percent of the total mode share. Through the implementation of the recommendations and projects within this plan, including more prevalent bike parking and e-bike incentives and promotions, the active transportation mode share is estimated to increase to 19 percent, which would be about 55,000 daily trips for the region.

Performance Measure 2 (RP #6): *Decrease annual average daily vehicle miles traveled (VMT) per capita (excluding through-trips).*

Analysis: The Regional Transportation Plan's main strategy to reduce greenhouse gas emissions is to reduce VMT by increasing access to active transportation facilities and multi-modal connections. Thus, a reduction in VMT should directly reflect an increase in active transportation access and use. TRPA set a decrease target of 1 percent daily VMT by 2024, from 2018. A full evaluation of this performance measure will be made later in 2024 and included in the 2024 Biennial Transportation Performance Report.

Performance Measure 3 (new): *Reduce Bicycle Levels of Traffic Stress at intersections and along roadway segments.*

Analysis: A transportation performance technical advisory committee was created during the approval process of the 2020 RTP/SCS. The technical committee proposed to monitor the region's bicycle level of traffic stress (BLTS) which includes identifying locations, intersections and segments that need to be prioritized for improvements. Reducing levels of traffic stress through programmatic improvements, like removing gaps in the network and designing bicycle improvements with physical separation within on-street bicycle facilities, will help increase the number of trips on the bicycle network. The BLTS at intersections is measured in levels 1 through 4, and 1 through 4.5 for segments, one being least stressful, and 4-4.5 being this most stressful. The goal is to continually reduce the number of stressful intersections (currently 156) and segments (currently 104) with a BLTS score of 4 or higher over time. This measure will be consistently tracked in the biennial Transportation Performance Report and updated in the next RTP/SCS update and any accompanying active transportation plans.

Performance Measure 4 (new): *Increase the total number of "best" quality lane miles for pedestrians.*

Analysis: A transportation performance technical advisory committee was created during the approval process of the 2020 RTP/SCS. The technical committee proposed to monitor the pedestrian experience and report the number of "quality" lane miles provided. This can be measured using the "Pedestrian Experience Index" (PEI) which incorporates built environment data such as presence of sidewalks, sidewalk condition, posted travel speeds, and other metrics to quantify the quality of the pedestrian experience for each block face. The value of this analysis is for local agencies to focus more holistically on the pedestrian network, separately from the bicycle network, and make appropriate project recommendations based on improving the overall pedestrian experience. Removing stress through either programmatic improvements, like safe routes to school education awareness and events, or by physical improvements, like additional crossings and lighting, will help to increase the number of trips made by foot. The Pedestrian Experience Index provides an index rating quantifying a poor-to-best quality of pedestrian user experience of the roadway network. Zero percent to 45 percent being quantified as a low-quality experience (no sidewalk present) and 45 percent to 100 percent being a higher quality of experience. The goal is to increase the pedestrian experience index to 45 percent or higher outside of town centers and increase the pedestrian experience within town centers to reside between a 60 percent to 100 percent index rating. This measure will be consistently tracked in the biennial Transportation Performance Report and be updated in the next RTP Update.

Performance Measure 5 (Federal Performance Measures): *Decrease serious injuries for bicycles and pedestrians and reduce fatalities to zero by 2050.*

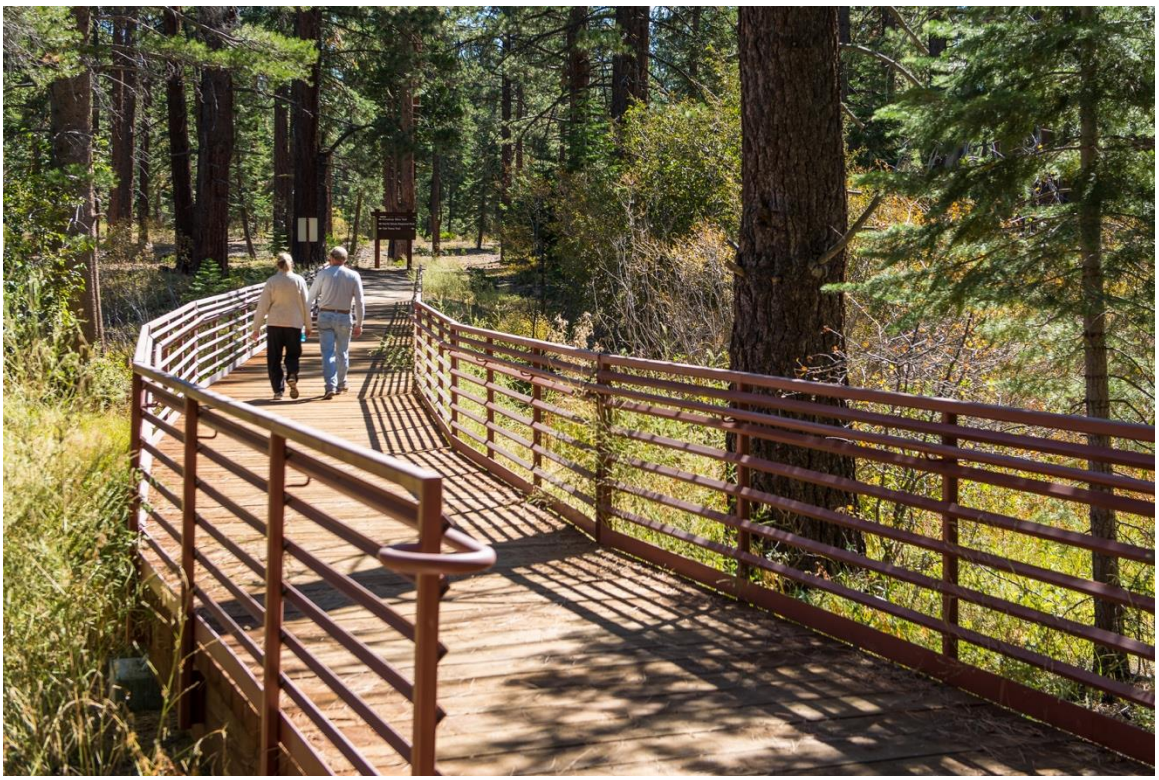
Analysis: the 2017 and 2020 Regional Transportation Plan/Sustainable Communities Strategy incorporated new performance measures consistent with the Moving Ahead for Progress in the 21st Century Act (MAP-21, P.L. 112-141). Performance measures related to safety include the number of serious injuries and fatalities for non-motorized (bicycles and pedestrians) with the goal of reducing fatalities to zero by 2050. The Vizion Zero Strategy (strategy), endorsed by the TRPA Governing Board in

February of 2024, provides a full analysis of fatalities and serious injuries. The strategy includes a preemptive solution that identifies high-injury networks to help prioritize the implementation of projects. Analyzing a 5-year rolling average per the federal rule, between 2016 and 2020 there were 102 total reported serious injuries reported, 27 of which included bicyclists and pedestrians in the Tahoe Region. Twenty fatalities occurred, with eight of those being bicycle and pedestrian deaths during this time period. Pedestrian and bicycle collisions amount to 25% of the serious injuries and about 30% of the fatalities that occur in the Tahoe Basin. Bicycle and pedestrian collision reporting is not always accurate. This measure is reported annually to each state and reported in each RTP/SCS.

Lotshaw 2015.

3.4 NOTABLE ACCOMPLISHMENTS

Since 2010, many active transportation projects throughout the region have broken ground and are providing excellent commute and recreational opportunities. Funding, implementation, and ongoing maintenance of these projects are the joint effort of many agency partnerships.



Snow Creek Restoration Project. Photo: Tom Lotshaw

Shared-Use Paths: In total, **9.3 miles** of path have been constructed since 2018.

- Dollar Creek Shared Use Trail: *Placer County*
- Jameson Beach Road Path: *U.S. Forest Service*
- Lake Tahoe Blvd Class I: *City of South Lake Tahoe*
- Tahoe East Shore Trail: *Nevada Department of Transportation*
- West Shore Tahoe Trail to Meeks Bay: *Tahoe Transportation District*
- E to W San Bernadino Bike Path: *El Dorado County*
- Baldwin Beach Bike Path: *U.S. Forest Service*
- Al Tahoe Blvd Connector: *City of South Lake Tahoe*
- Sierra Blvd Complete Streets: *City of South Lake Tahoe*
- Dennis Machida Memorial Greenway Phase 1b & 2: *El Dorado County*

Bike Lanes: In total, almost 2 miles of bike lanes have been added since 2018.

- US Hwy 50, South Tahoe “Y” to Trout Creek: *California Department of Transportation*

Sidewalks: In total, 4.8 miles of sidewalk have been constructed since 2018.

- Sierra Blvd Complete Streets: *City of South Lake Tahoe*
- US Hwy 50 "Y" to Trout Creek Sidewalks: *California Department of Transportation*
- US Hwy 50 at Herbert Avenue to Ski Run Blvd: *City of South Lake Tahoe*

Enhanced Crosswalks: Since the last plan update, the region saw three new pedestrian-activated beacons installed in the City of South Lake Tahoe, and in Incline Village by Nevada Department of Transportation. The City of South Lake Tahoe also installed a flashing stop sign to increase driver yielding rates at the crosswalk. The California Department of Transportation and Nevada Department of Transportation each converted one unsignalized intersection into a signalized intersection, with crosswalks.

- Al Tahoe: Mid-block flashing beacon and enhanced crossing paint connecting the new Dennis T. Machida trail segment (City of South Lake Tahoe)
- Lake Tahoe Blvd & Julie Ln: flashing beacon crosswalk installed (City of South Lake Tahoe)
- Tahoe Keys Blvd & Washington Ave: flashing stop sign installed (City of South Lake Tahoe)
- Ski Run Blvd and Tamarack Ave: flashing stop signs installed (City of South Lake Tahoe)
- Lodi Ave & U.S. 50: Intersection converted from a two-way stop to a traffic signal with all-way crossings installed (Caltrans)
- Warrior Way & U.S. 50: Traffic signal installed with crosswalk (NDOT)
- SR 28/Incline Village Shopping Center West: crosswalk upgraded to a flashing beacon and reflective signs (NDOT)

Roundabouts: Implemented by Nevada Department of Transportation, Caltrans, Placer County, and Washoe County

Properly designed roundabouts reduce traffic congestion, lower vehicle speeds, reduce pedestrian exposure, and add aesthetic value to communities. Roundabouts are most appropriate where pedestrian volumes are low, but care should be taken to understand if pedestrian volumes could be higher if infrastructure was there to support them. If pedestrian volumes are high, or could be increased through pedestrian supportive infrastructure, signal controls and wider crosswalk widths, should be used. Roundabouts should include raised crossings and pedestrian hybrid beacons to better provide access for visually impaired pedestrians. Special considerations need to be taken for multilane roundabouts, as safety benefits for pedestrians and bicycles are reduced compared to single lane roundabouts and may discourage active transportation utilization.

A new roundabout was constructed at the intersection of U.S. 50 and SR 89 in Meyers, El Dorado County. Two roundabouts were constructed in Tahoe City in 2019. The easterly roundabout at W Lake Blvd & Lake Blvd includes a crosswalk with a pedestrian island, connecting to the Class 1 multi-use path. The westerly roundabout at W River Rd and Lake Blvd includes a new bridge over the Truckee River with an underpass for active transportation users. This is most ideal as trail users do not need to interact with the unsignalized intersection at all while still traveling adjacent the roadway network. A third roundabout is planned for the Tahoe City "wye" intersection, along with the rebuild of Fanny Bridge and a complete street project.

Kings Beach Roundabouts. Photo: Placer County

CHAPTER 4: NETWORK RECOMMENDATIONS

This chapter provides in-depth details and recommendations for each corridor in the Lake Tahoe Region. Through review of existing plans, community outreach, agency stakeholder professional expertise, and previously programmed projects, each corridor illustrates proposed active transportation routes and infrastructure. This chapter is made up of seven sections that contain:

- Physical Geographic Description
- Context Relevant Plans & Studies
- Additional Corridor Considerations
- Existing & Proposed Active Transportation Network Maps
- Crash Analysis Map
- Corridor Project List and Cost Estimates

4.1 PROPOSED NETWORK

The proposed network is comprised of planning and design level projects. Projects are included in the planning level project list if they live in planning documents (such as area plans) but have not yet begun in depth project development. Design level projects are further along in project development and could be undergoing design, environmental review, or are ready for construction. More information and recommendations regarding planning and design level projects is provided below.

****Alignments found in this plan are conceptual***. As the region progresses towards the implementation of complete streets, pre-determining location-specific infrastructure or routes may not be the best solution to meet the needs of all users. Infrastructure type and route recommendations found in this plan should be used as a catalyst for project development and for programming into TRPA's EIP and local jurisdiction's capital improvement programs (CIPs).

Some areas on the *Existing & Proposed Active Transportation Network* maps are displayed as "complete street" segments of roadway. These locations are chosen based on many factors such as: residential and commercial density, preponderance of high-injury collisions, lack of existing active transportation infrastructure, and existing plans for redevelopment. These designations do not exclude any other project from being considered for complete street improvements. The "complete streets" category specifically was designed as a catch-all designation, implying that further study alongside preliminary engineering and design must first be completed before understanding the appropriate facility type. The cost estimates of complete streets designated projects are a bit inflated, to accommodate the myriad of infrastructure that is associated with larger and more complex projects. That said, these cost estimates could be much lower if a lesser facility type is determined to be more appropriate. All projects within the region should consider improving the streetscape to increase safety, economic vitality, and mobility for all users.

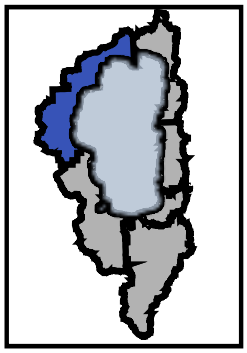
To follow best practice road design, to provide increased capacity for the various new forms of mobility devices such as electric mobility (e.g. bicycles, scooters), as well as to increase utility trips for cyclists who wish to use the roadway network, support for low stress, on-street bicycle facilities, coupled with accessible sidewalks should be the standard design choice in commercial corridors, residential areas, and town centers. Class 1 trails (shared use paths) should only be considered in locations where the road network already does not take you (such as through an undeveloped forest or meadow) or where intersection conflicts are minimal and should not be used as a substitute for designing the road network to be safer. The result of this recommendation is mode separation between pedestrians and often faster moving electric mobility devices, while also achieving a more safely designed roadway, increasing cycling mode share and utility connection for commuter cyclists. This approach is supported by Chapter 1000 of the California Highway Design Manual[1]. During project design, implementers should review alternatives that seek to meet all user needs by increasing safety, addressing connectivity gaps, and considering constructability.

Project priority tiers were developed in collaboration with each implementing agency, community outreach, stakeholder input, TRPA Vision Zero Safety Strategy data analyses, and existing projects carried forth from the 2018 ATP.

Not all projects listed in this section have been prioritized and added to the Environmental Improvement Program (EIP) priority list at this time. Active Transportation Plan projects may be added to the EIP priority list as part of the Regional Transportation Plan process.

[1] Chapter 1000 CA Highway Design Manual – Bicycle Transportation Design https://dot.ca.gov/-/media/dot-media/programs/design/documents/chp1000.pdf

STATE ROUTE 89 / STATE ROUTE 28 CORRIDOR



Physical Geographic Description: This corridor starts at the northern boundary of Sugar Pine Point State Park and extends to the California/Nevada state line in Crystal Bay. The corridor includes both Placer and El Dorado counties, and contains the Tahoma, Homewood, Tahoe City, Carnelian Bay, and Kings Beach areas.

Context Relevant Plans & Studies:

- Resort Triangle Transportation Plan (2021)
- North Lake Tahoe Community Wayfinding Signage Design Standards Manual
- Tahoe Basin Area Plan (2023)
- Tahoe City Road Safety Audit (2015)
- Fanny Bridge / SR 89 Community Revitalization Project

Additional Corridor Considerations:

Community Input: Public outreach in this corridor yielded desire for more robust on-street facilities, better crossing treatments where Class 1 trails intersect the state highway, as well as more robust pedestrian infrastructure (sidewalks, lighting) within the town centers. Concern over electric bicycles was expressed, in that low-stress on-street facilities should be made, or space to accommodate both e-bikes and pedestrians should be provided. The town centers within this corridor, as with many of Tahoe's town centers, are positioned to be very bicycle and pedestrian friendly. Thoughtful design should be incorporated to ensure these modes are supported.

New SR 89 Bridge & Bike Trail. Rendering: Tahoe Transportation District

FIGURE 4-1: SR 89/28 CORRIDOR – EXISTING AND PROPOSED ACTIVE TRANSPORTATION NETWORK

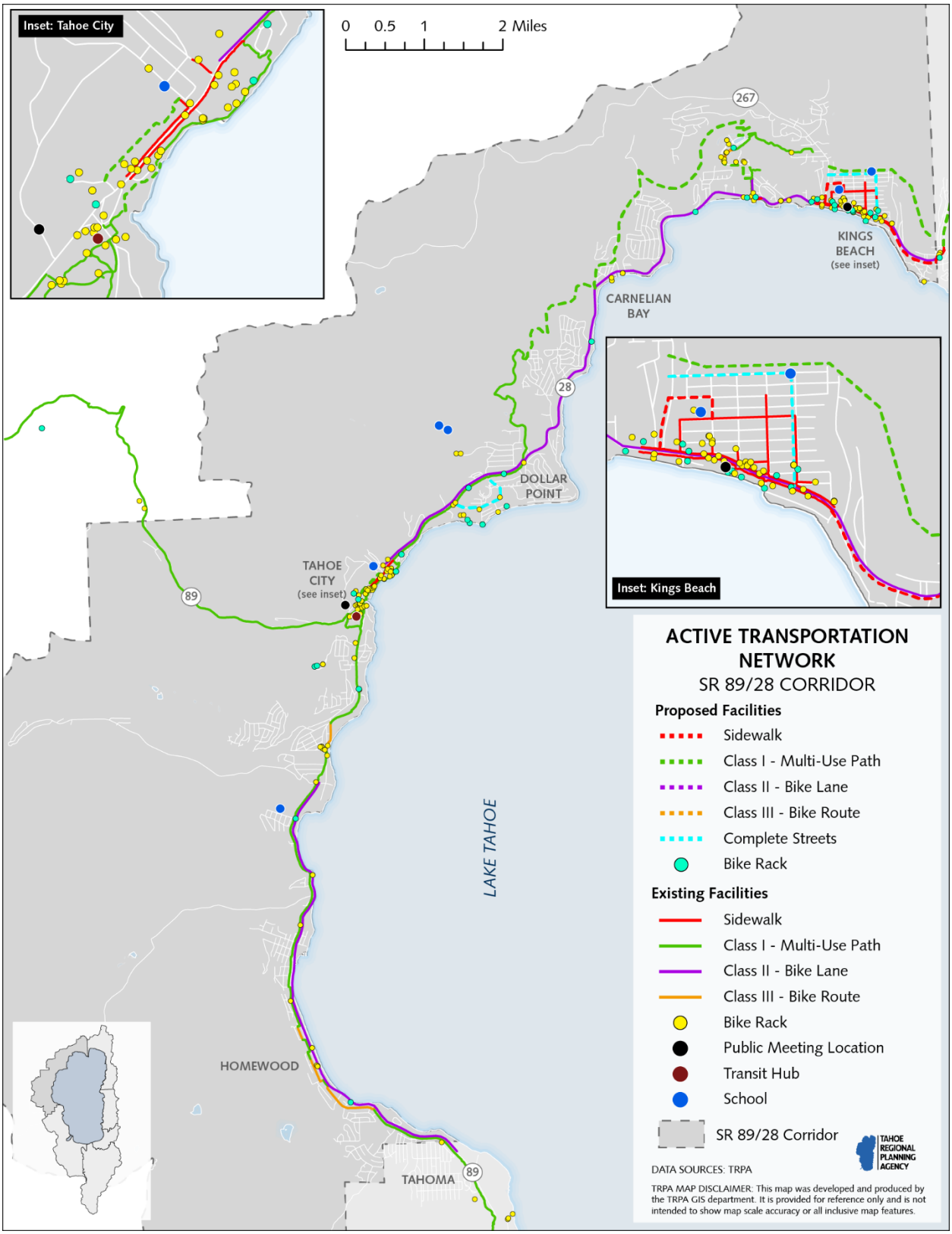
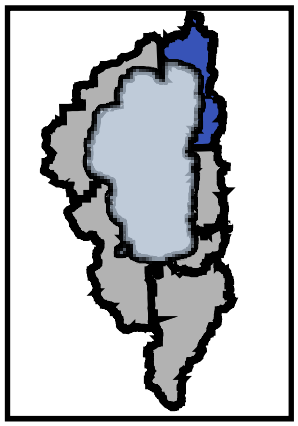


TABLE 4-1 SR 89/28 CORRIDOR PROJECT LIST:

PRIORITY TIER	EIP #	PROJECT	IMPLEMENTER	MILES	ESTIMATED COST	PHASE	EST. COMPLETE YEAR
1	01.01.01.0168	Kings Beach Western Approach – Sidewalks	Placer County	0.26	$14,222,000	Planning/Design	2026
1	NOT LISTED	Stateline to Kings Beach Sidewalks	California Department of Transportation	0.8	$184,000	Planning	2040
1	03.02.02.0003	N Tahoe Trail (Carnelian Ave to N Tahoe Park - 1)	Placer County	2.6	$26,020,000	Planning/Design	2030
1	NOT LISTED	N Tahoe Trail (Carnelian Ave to Carnelian Bay – 2)	Placer County	1.77	$17,700,000	Planning/Design	2040
1	01.01.01.0086	N Tahoe Trail (Dollar Point to Carnelian Bay - 2)	Placer County	1.73	$7,730,000	Planning/Design	2025
1	03.02.02.0089	Tahoe City Lakeside Trail Missing Link	Placer County	0.19	$1,000,000	Planning/Design	2024
1	NOT LISTED	Fox & Speckled Complete Streets	Placer County	1.16	$20,010,000	Planning/Design	2035
1	NOT LISTED	Dolly Varden/Deer St Sidewalks	Placer County	0.31	$62,000	Planning	2040
2	NOT LISTED	Kings Beach to Stateline Shared Use Path	Placer County	1.88	$36,754,000	Planning/Design	2045
2	NOT LISTED	Tahoe City Golf Course Shared-use Path	Placer County	0.35	$4,025,000	Planning/Design	2028
2	NOT LISTED	TCPUD Multi-Use Trail System Reconstruction and Safety Enhancement Project	Tahoe City Public Utility District	13.1	$11,707,200	Implementation	2030
2	NOT LISTED	Lake Forest Rd Complete Streets	Placer County	0.9	$15,525,000	Planning/Design	2035
3	NOT LISTED	North Tahoe Regional Trail (Segment 4)	Placer County	0.53	$6,095,000	Planning/Design	2035
3	NOT LISTED	Donner Rd Bike Route	North Tahoe Public Utility District	0.22	$1,265	Planning/Design	2035

NV STATE ROUTE 28 NATIONAL SCENIC BYWAY CORRIDOR

Physical Geographic Description: This corridor includes State Route 28 starting from the intersection with U.S. Highway 50 in the southeast to the state line in Crystal Bay. This corridor is located in Washoe County and Carson City. Incline Village, Sand Harbor State Park, and parts of State Route 431 are also located in this corridor.



Context Relevant Plans & Studies:

- Mount Rose State Route 431 Corridor Management Plan (2015)
- State Route 28 Corridor Management Plan (2013)
- Incline Village Commercial and Tourist Community Plans
- Washoe County Master Plan
- Washoe County Tahoe Transportation Plan (2023)
- Washoe County Tahoe Area Plan (2023)
- SR 28 National Scenic Byway Corridor Signage Master Plan (2016)

Additional Corridor Considerations:

Community Input: Stakeholders in this region were mostly focused on pedestrian safety, as well as destination management around popular recreation sites. Cars parked in the shoulder on the state highway, often with no dedicated pedestrian infrastructure can make for unsafe conditions. Also incorporated into this plan is the work conducted on Washoe County's Tahoe Transportation Plan. The Washoe County Tahoe Transportation Plan underwent extensive community engagement that yielded the bulk of the priority project list identified in this plan.

Proposals include:

1. SR 28 Class I Crystal Bay to Incline
2. SR28 Preston to Northwood Bike Path

FIGURE 4-2: NV SR 28 CORRIDOR – EXISTING AND PROPOSED ACTIVE TRANSPORTATION NETWORK

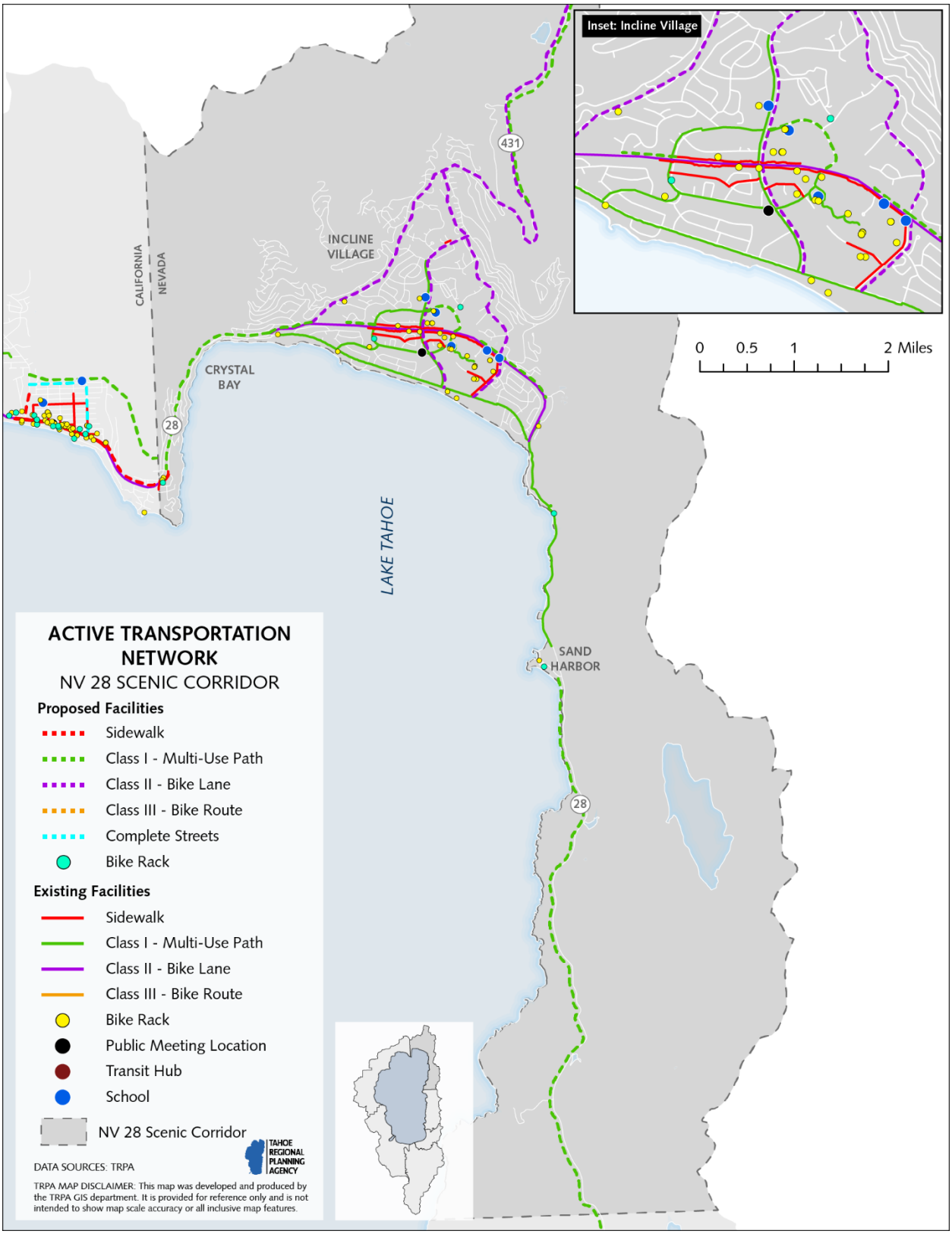
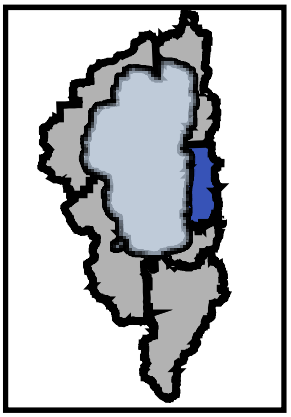


TABLE 4-2 NV SR 28 CORRIDOR PROJECT LIST:

PRIORITY	EIP #	PROJECT	IMPLEMENTER	MILES	ESTIMATED COST	PHASE	EST. COMPLETE YEAR
1	NOT LISTED	Northwood Blvd Bike path	Washoe County	0.61	$7,015,000	Planning/Design	2035
1	03.02.01.0061	Sand Harbor to Thunderbird Cove Bike Path	Tahoe Transportation District	1.21	$46,000,000	Planning/Design	2027
1	03.02.02.0062	SR 28 Class I Crystal Bay to Incline	Washoe County	2.63	$16,200,000	Planning/Design	2040
1	03.02.02.0072	SR28 Preston to Northwood Bike Path	Washoe County	0.3	$3,450,000	Planning	2030
1	NOT LISTED	Village Blvd Bike Lanes	Washoe County	1.92	$331,200	Planning/Design	2035
2	NOT LISTED	SR28 Class 1 Country Club to Glen	Washoe County	0.26	$2,990,000	Planning	2035
2	NOT LISTED	SR28 Class 1 Country Club to Sweetwater	Washoe County	0.67	$7,705,000	Planning	2035
2	NOT LISTED	Country Club Dr Bike Lanes	Washoe County	2.68	$462,300	Planning/Design	2035
2	NOT LISTED	Mt. Rose Hwy Bike Lanes	Nevada Department of Transportation	6.63	$1,906,125	Planning/Design	2045
2	03.02.01.0017	Thunderbird Cove to Spooner Bike Path	Tahoe Transportation District	5.93	$100,810,000	Planning/Design	2040
3	NOT LISTED	Mt. Rose Bike Path	Nevada Department of Transportation	2.54	$29,210,000	Planning/Design	2045

U.S. HIGHWAY 50 EAST SHORE CORRIDOR



Physical Geographic Description: This corridor starts at the intersection of U.S. Highway 50 and State Route 28 and extends to roughly 950 feet northwest of Elks Point Road. This latter point is the northern end of the Round Hill Mall commercial center, and marks where the predominantly rural, low-density areas to the north transition to the predominantly developed areas to the south. This corridor is located in Douglas County.

Context Relevant Plans & Studies:

- Tahoe Douglas Area Plan
- Douglas Co Safe Routes to School Action Plan (2023)
- Douglas Co Trails Strategy (2023)
- Round Hill Community Plan
- Complete Street Focused Road Safety Assessment Report (2016)

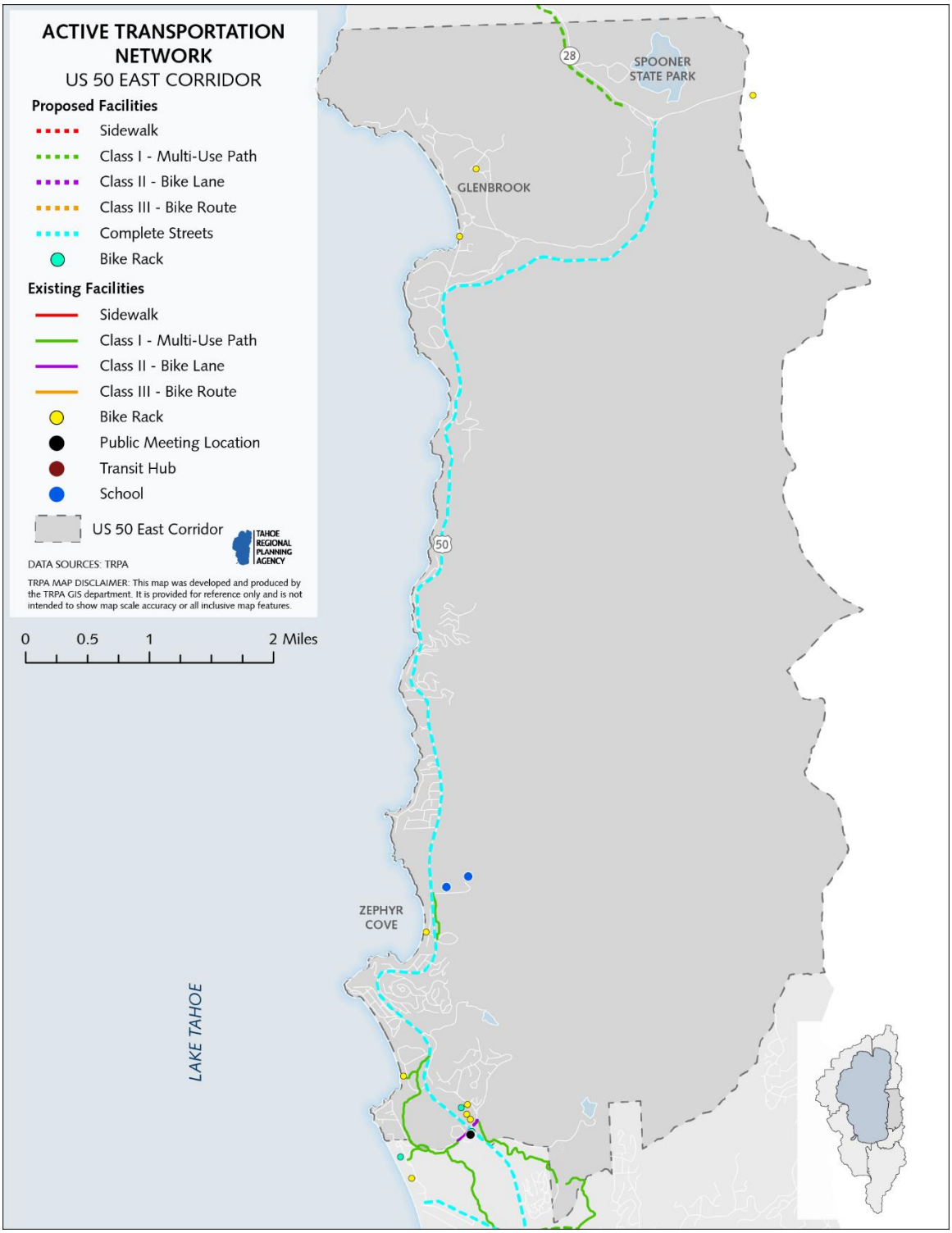
Additional Corridor Considerations: *Community Input:* Stakeholders largely agree that the US 50 East Shore corridor is a very dangerous stretch of highway for all modes of travel. Due to high-speeds, four-lane highway, sprawling land use, and lack of bicycle and pedestrian infrastructure, walking, biking, and rolling is not the default travel choice. NDOT recently has undergone the US 50 East Shore Corridor Management Plan, and the community received the study team's draft recommendations with mixed reviews. Limited location lane reductions, proposed to help reduce vehicle speeds, make for safer pedestrian crossings, safer turning movements for vehicles out of driveways and neighborhoods, and to provide right-of-way space for bicycle facilities at locations with an abnormally high rate of fatal and severe injury crash occurrences (of all modes) were a part of the early draft analyses *and are not being pursued as a response to concerns voiced from the community*. As of April 2024, the draft recommendations, that do not include lane reductions, focus on parking management, advanced-warning signs, closing gaps in the active transportation network and intersection improvements. While lane reductions implemented properly have proven benefits to increasing roadway safety for all users, these difficult conversations are needed and continue to be had, as implementers strive to deliver on the desires of the community to have safe streets that support a variety of modes[2].

Proposals include:

1. Complete streets study at "hot spot" (high rates of collisions) locations on US 50 East Shore
2. Stateline to Stateline Bikeway (multi phased – focus on Zephyr Cove to Round Hill Pines)

[2] Special care should be taken when implementing lane reconfigurations regarding evacuation management. Class 1 trails built to withstand heavy vehicles, wide enough to convert into a travel lane or emergency vehicle access, as well as implementing mountable/rolled curb, or simply paint, can capture the safety benefits of lane repurposing while retaining the existing roadway carrying capacity in the event of an evacuation. Directional capacity can even be increased if counterflow traffic control is planned for and implemented in the event of an evacuation. More information on road reconfigurations can be found at: https://highways.dot.gov/safety/proven-safety-countermeasures/road-diets-roadway-reconfiguration

FIGURE 4-3: U.S. 50 EAST SHORE CORRIDOR - EXISTING AND PROPOSED ACTIVE TRANSPORTATION NETWORK



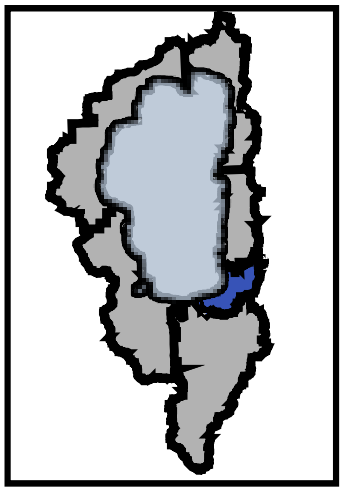
Note: Complete Streets alignment on map simply follows the US 50 roadway. Further study is needed to understand where and if a Class 1 trail, or any other improvement facility would be appropriate. All alignments shown in the plan are conceptual.

TABLE 4-3 U.S. 50 EAST SHORE CORRIDOR PROJECT LIST:

PRIORITY	EIP #	PROJECT	IMPLEMENTER	MILES	ESTIMATED COST	PHASE	EST. COMPLETE YEAR
1	NOT LISTED	Elks Point Rd Bike Lane Extension	Douglas County	0.09	$8,280	Planning/Design	2035
2	03.02.01.0032	Stateline to Stateline Bikeway D, E, F	Nevada Department of Transportation	11.39	$150,000,000	Planning/Design	2045

Conceptual Stateline to Stateline Bikeway: SR 28 National Scenic Byway Corridor Management Plan

U.S. 50 SOUTH SHORE CORRIDOR

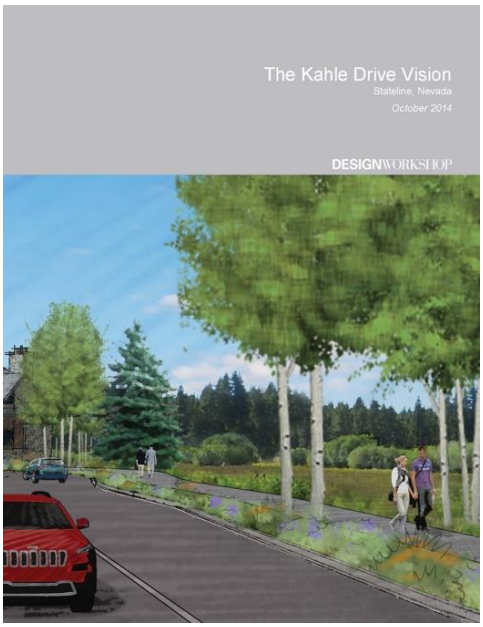


Physical Geographic Description: This corridor starts at U.S. Highway 50 from roughly 950 feet northwest of Elks Point Road in Douglas County to the Upper Truckee River Bridge (just west of River Street), in the City of South Lake Tahoe. The corridor also includes Pioneer Trail east of the Trout Creek Bridge (just northeast of Golden Bear Avenue) and State Route 207 (Kingsbury Grade) west of Pine Ridge Drive.

Context Relevant Plans & Studies:

- Tahoe Douglas Area Plan
- South Shore Area Plan (2013)
- Tourist Core Area Plan
- South Shore Wayfinding Plan
- Lake Tahoe Unified School District Safe Routes to School Master Plan (2015)
- South Tahoe Middle School Area Connectivity Plan (2015)
- Kahle Drive Vision (2014) and Complete Street Project (2022)
- U.S. Highway 50 Road Safety Audit (2018)

Additional Corridor Considerations:



Community Input: Stakeholders in previous outreach shaped a variety of Class I/Shared-use path options including updated pedestrian infrastructure and midblock crossings, as well as lighting to address safety concerns that are soon to be constructed. Beyond the Class 1 network, South Lake Tahoe residents largely felt that the on-street network, particularly US 50 and SR 89 could be made to be lower stress and have more of a "main street" feel.

The focus on reducing the level of stress of US 50 has many potential benefits. Increased safety for all modes through design features, while encouraging residents and visitors to walk, bike or roll more would be in-line with the region's goals to reduce vehicle miles traveled (VMT) as well as creating economically vibrant corridors that support businesses, public health, and thriving communities. Many of these initiatives and project implementations are currently underway by various agencies, including the Nevada Tahoe Resource Conservation District, Nevada Department of Transportation, City of South Lake Tahoe, Caltrans, TRPA, and Tahoe Transportation District alongside local and regional stakeholders.

FIGURE 4-4: U.S. 50 SOUTH SHORE CORRIDOR – EXISTING AND PROPOSED ACTIVE TRANSPORTATION NETWORK

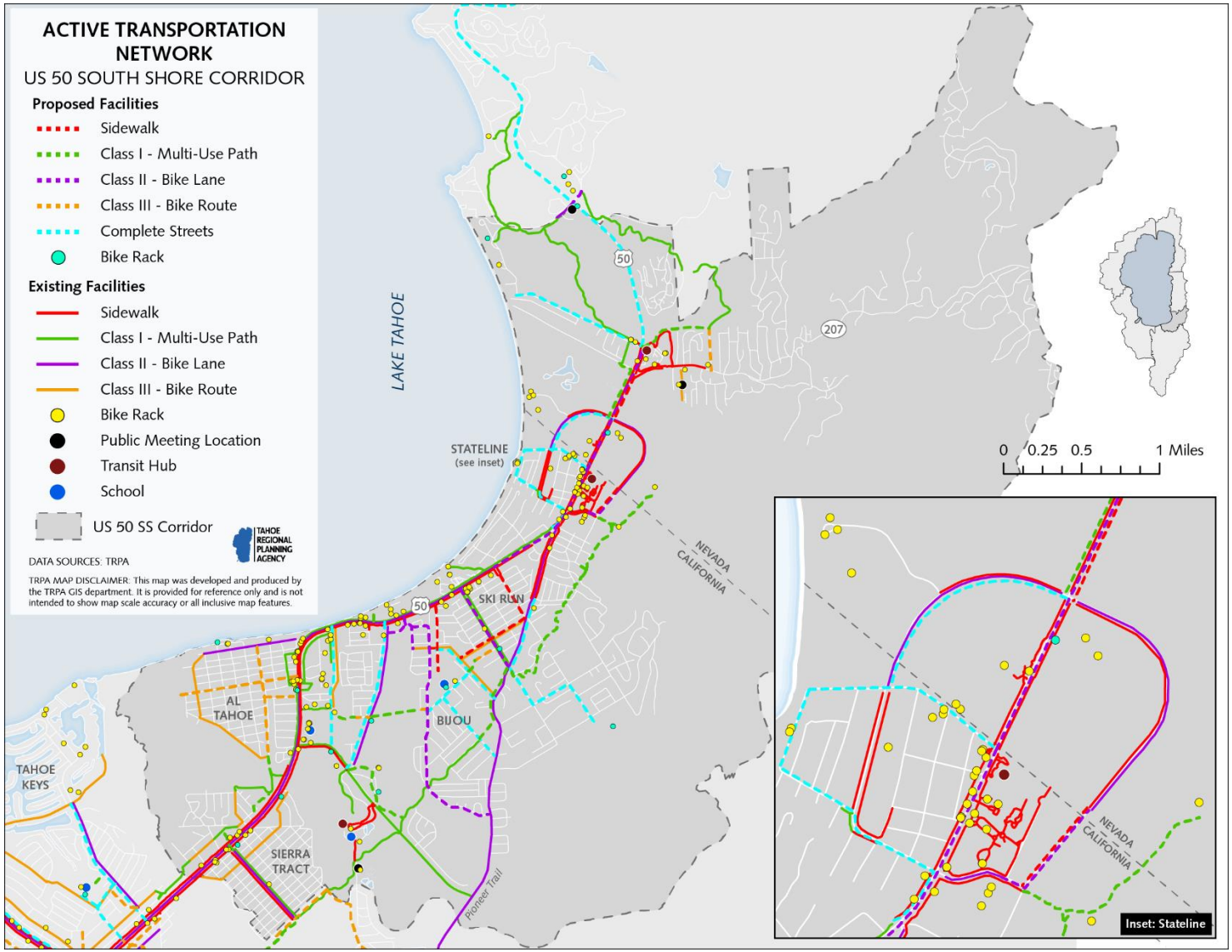
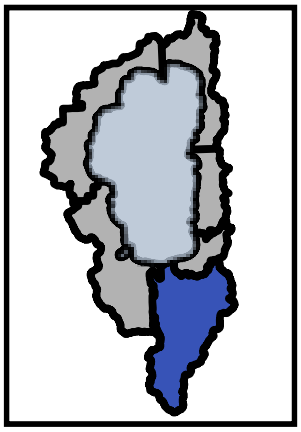


TABLE 4-4 U.S. 50 SOUTH SHORE CORRIDOR PROJECT LIST:

PRIORITY	EIP #	PROJECT	IMPLEMENTER	MILES	ESTIMATED COST	PHASE	EST. COMPLETE YEAR
1	03.02.02.0058	Kingsbury to Stateline Sidewalk	Douglas County	0.3	$500,000	Planning/Design	2035
1	03.02.02.0092	Bijou Bike Park Connector	City of South Lake Tahoe	0.57	$1,849,056	Planning/Design	2025
1	03.02.02.0055	Laura Dr to Stateline Bike Path	Tahoe Transportation District	0.42	$4,830,000	Planning/Design	2030
1	03.02.02.0095	South Tahoe Greenway Phase 1c	California Tahoe Conservancy	0.54	$9,500,000	Planning/Design	2028
1	NOT LISTED	Hwy 50 at Stateline Bike Lanes (NV)	Nevada Department of Transportation	0.86	$247,250	Planning/Design	2035
1	03.02.02.0093	Johnson Blvd Complete Streets	City of South Lake Tahoe	0.98	$4,346,450	Planning/Design	2028
1	03.02.01.0055	Kahle Drive Complete Street	Nevada Tahoe Conservation District	0.88	$3,631,339	Planning/Design	2025
1	03.02.01.0060	Park Avenue and Lake Tahoe Blvd Complete Streets	City of South Lake Tahoe	0.73	$6,500,000	Planning/Design	2030
1	03.02.02.0097	Spruce and Blackwood SRTS	City of South Lake Tahoe	0.89	$15,352,500	Planning/Design	2030
1	03.02.02.0096	Stateline Avenue Complete Streets Project	City of South Lake Tahoe	0.45	$6,750,000	Planning/Design	2030
1	NOT LISTED	Lake Pkwy South Sidewalks	City of South Lake Tahoe	0.22	$44,000	Planning	2040
1	03.01.02.0030	Van Sickle Phase III Shared Use Trails	California Tahoe Conservancy	0.44	$6,000,000	Planning/Design	2025
1	NOT LISTED	Herbert Ave Complete Streets	City of South Lake Tahoe	0.51	$7,650,000	Planning/Design	2040
2	NOT LISTED	Herbert Ave Sidewalks	City of South Lake Tahoe	0.47	$75,200	Planning	2045
2	03.01.01.0005	Alta Mira Public Access Improvements	California Tahoe Conservancy	0.08	$8,000,000	Implementation	2030
2	NOT LISTED	Johnson Blvd to Lester Ave bike path connector	City of South Lake Tahoe	0.32	$3,680,000	Planning/Design	2045
2	03.02.02.0094	Palmira Ave Connector	City of South Lake Tahoe	0.14	$1,370,000	Planning/Design	2027

2	NOT LISTED	Fairway Dr Bike Lanes	City of South Lake Tahoe	0.37	$34,040	Planning/Design	2035
2	NOT LISTED	Glenwood Way bike lanes	City of South Lake Tahoe	1.6	$147,200	Planning/Design	2045
2	NOT LISTED	Lake Pkwy South Bike Lanes	City of South Lake Tahoe	0.27	$46,575	Planning/Design	2045
2	NOT LISTED	Ski Run Blvd Bike Lanes	City of South Lake Tahoe	0.59	$101,775	Planning/Design	2035
2	03.02.01.0007	Lake Pkwy Complete Streets	Tahoe Transportation District	0.52	$8,970,000	Planning/Design	2027
2	03.02.02.0076	Greenway Phase 3 – Ski Run Blvd to Van Sickle	California Tahoe Conservancy	1.45	$25,000,000	Planning	2032
2	NOT LISTED	Complete street to Cal Base	City of South Lake Tahoe	0.9	$13,500,000	Planning	2050
2	NOT LISTED	Spruce connector bridge	City of South Lake Tahoe	0.08	$1,360,000	Planning	2030
2	NOT LISTED	Link Road to Sussex Ave	California Tahoe Conservancy	0.16	$6,000,000	Planning	2032
3	NOT LISTED	Spruce bike route	City of South Lake Tahoe	0.15	$750	Planning/Design	2030
3	NOT LISTED	Marlette Cir to Rufus Allen class I connector	City of South Lake Tahoe	0.1	$1,150,000	Planning/Design	2035
3	NOT LISTED	Oakland Ave class I bridge over trout creek	City of South Lake Tahoe	0.12	$2,346,000	Planning/Design	2045
3	NOT LISTED	Pine Ridge Dr to Kahle Class I	Douglas County	0.48	$5,520,000	Planning/Design	2045
3	NOT LISTED	Hwy 50 at Stateline Bike lanes (CA)	California Department of Transportation	0.89	$255,875	Planning/Design	2035
3	NOT LISTED	Los Angeles Ave bike route	City of South Lake Tahoe	0.19	$1,093	Planning/Design	2035
3	NOT LISTED	Marlette Cir bike route	City of South Lake Tahoe	0.1	$575	Planning/Design	2035
3	NOT LISTED	Oakland Ave bike route	City of South Lake Tahoe	0.71	$4,083	Planning/Design	2045
3	NOT LISTED	Pineridge Dr Bike route	Douglas County	0.27	$1,553	Planning/Design	2045
3	NOT LISTED	San Francisco Ave bike route	City of South Lake Tahoe	0.75	$4,313	Planning/Design	2045
3	NOT LISTED	Victor St bike route	City of South Lake Tahoe	0.05	$288	Planning/Design	2035
3	03.02.02.0080	Rufus Allen Blvd Complete Streets	City of South Lake Tahoe	0.76	$13,110,000	Deferred	2035
3	NOT LISTED	Tamarack Ave Sidewalks	City of South Lake Tahoe	0.48	$96,000	Planning	2050
3	NOT LISTED	Wildwood Ave Sidewalks	City of South Lake Tahoe	0.32	$64,000	Planning	2050
Construction 2024	03.02.02.0078	Pioneer Trail Sidewalk	City of South Lake Tahoe	0.46	$5,118,028	Implementation	2024

MEYERS / Y CORRIDOR



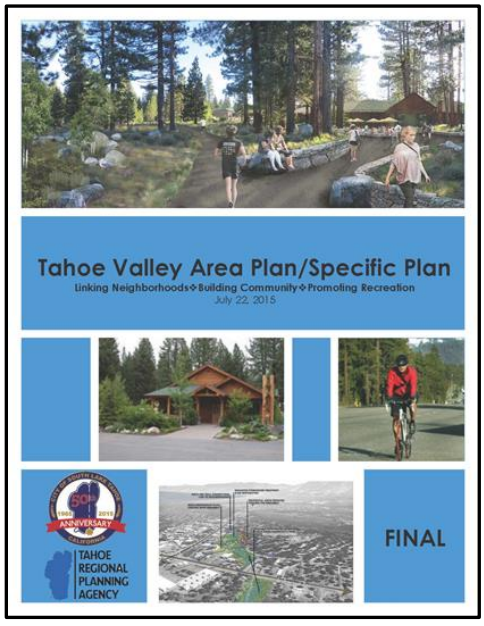
Physical Geographic Description: This corridor begins at US Highway 50 west of the Upper Truckee River in the City of South Lake Tahoe and extends to just north of the South Tahoe "Y" and south to include Meyers, located in El Dorado County.

Context Relevant Plans & Studies:

- Meyers Area Plan (2018)
- Tahoe Valley Area Plan (2015)
- Tahoe Valley Area Plan Bicycle Facility Evaluation (2014)
- Lake Tahoe Unified School District Safe Routes to School Master Plan (2015)
- South Tahoe Middle School Area Connectivity Plan (2015)
- Meyers, El Dorado County, California Road Safety Audit (2016)
- U.S. Highway 50 Road Safety Audit (2018 & 2023)

Additional Corridor Considerations:

Community Input: Stakeholders suggested a variety of Class I / Shared-use paths. Connections from Meyers to the City of South Lake Tahoe were high community priorities. As with all of our corridors, potential wildfire evacuations were a concern, and special care must be taken to plan for these evacuations, while providing low-stress facilities for people who would like to walk or bicycle to their destinations.



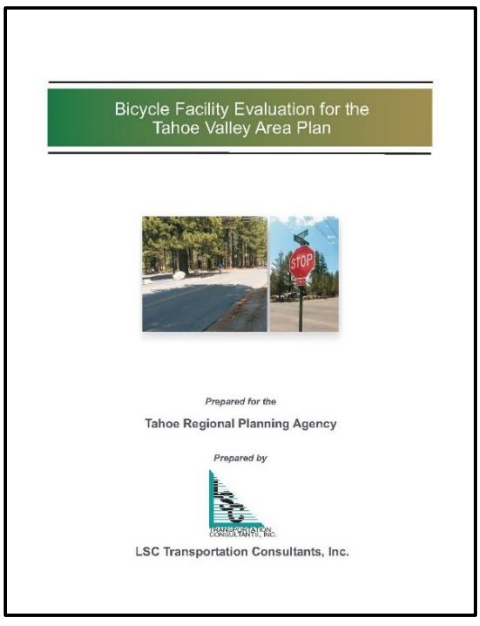


FIGURE 4-5: MEYERS Y CORRIDOR – EXISTING AND PROPOSED ACTIVE TRANSPORTATION NEWTORK

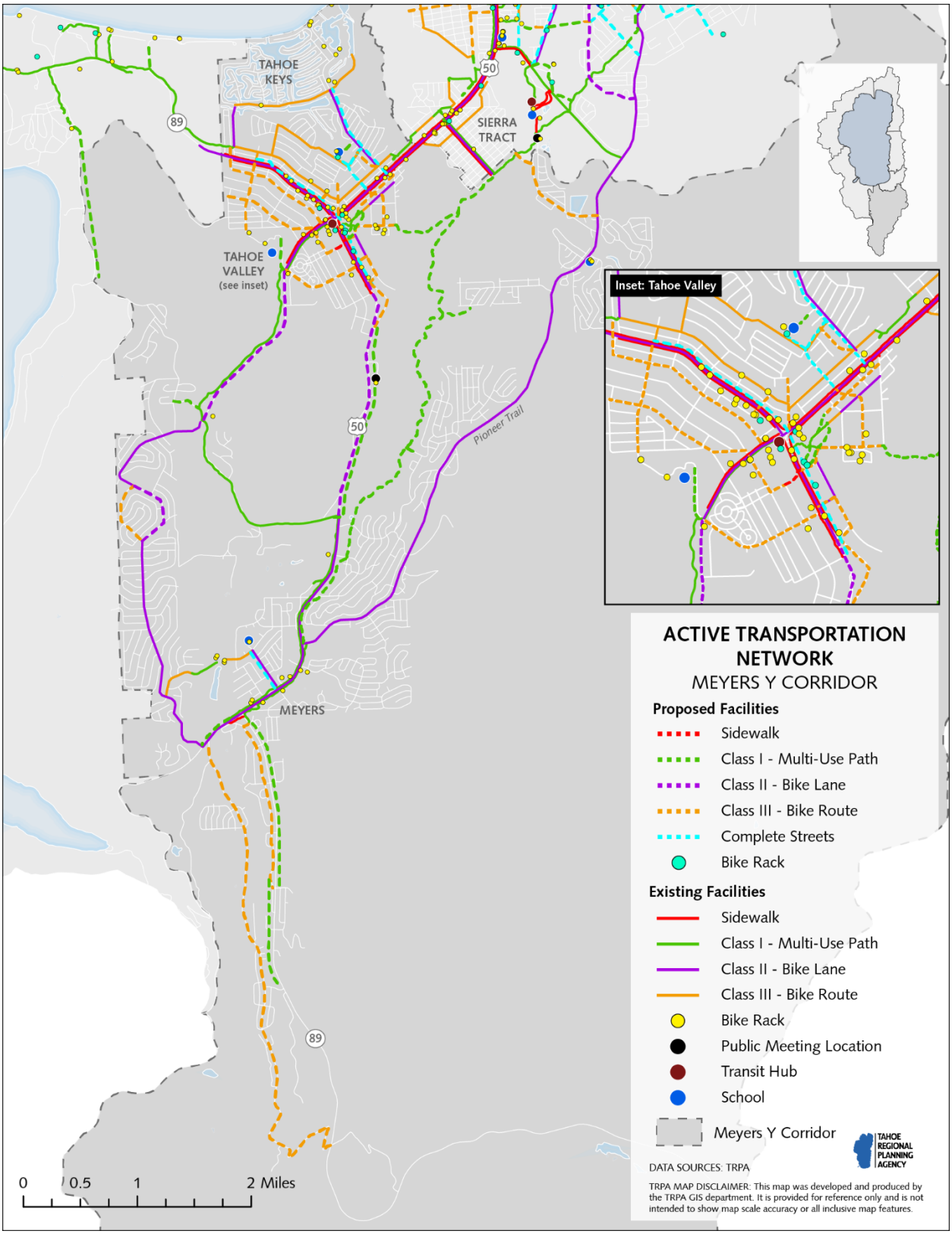
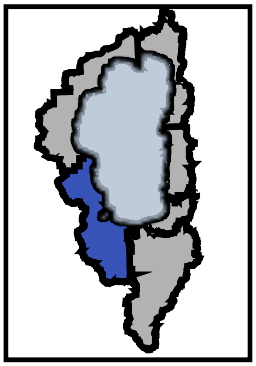


TABLE 4-5 MEYERS Y CORRIDOR PROJECT LIST:

PRIORITY	EIP #	PROJECT	IMPLEMENTER	MILES	ESTIMATED COST	PHASE	EST. COMPLETE YEAR
1	03.02.02.0085	Johnson Meadow Bridge	El Dorado County	1.14	$9,153,626	Planning/Design	2027
1	NOT LISTED	Lake Tahoe Blvd bike lanes	El Dorado County	1.59	$274,275	Planning	2030
1	01.01.01.0033	Tahoe Valley Greenbelt Class 1 Paths	City of South Lake Tahoe	0.51	$15,000,000	Implementation	2025
1	03.02.02.0022	Third St Complete Streets	City of South Lake Tahoe	0.39	$6,727,500	Planning/Design	2035
1	NOT LISTED	US Hwy 50 Complete Streets Improvements	California Department of Transportation	1.6	$2,300,000	Planning/Design	2035
2	NOT LISTED	B Street Overpass	California Department of Transportation	0.12	$8,050,000	Planning/Design	2035
2	03.02.01.0054	Fallen Leaf Road Bike Path	El Dorado County	1.56	$3,050,000	Planning/Design	2027
2	NOT LISTED	Greenway 4a - Pioneer to Elks Club	El Dorado County	1.2	$13,800,000	Planning	2028
2	NOT LISTED	Greenway 4b - Elks Club to Nottaway	El Dorado County	1	$11,500,000	Planning	2030
2	NOT LISTED	Greenway 4c - Nottaway to Golden Bear	El Dorado County	1.74	$20,010,000	Planning	2032
2	NOT LISTED	Greenway 4d - Golden Bear to Johnson	El Dorado County	1.12	$12,880,000	Planning	2032
2	NOT LISTED	Hwy 50 to NUT Bike Path	California Department of Transportation	0.34	$4,140,000	Planning/Design	2035
2	NOT LISTED	Viking Rd Bike Path	City of South Lake Tahoe	0.28	$3,220,000	Planning/Design	2045
2	NOT LISTED	Lake Tahoe Blvd bike lane - gap closure	El Dorado County	0.71	$65,320	Planning/Design	2032
2	01.01.01.0033	Barton Ave Bike Route	City of South Lake Tahoe	0.16	$920	Implementation	2025
2	NOT LISTED	Black Bart bike route	El Dorado County	1.02	$5,865	Planning/Design	2035
2	NOT LISTED	Kyburz Ave Bike Route	City of South Lake Tahoe	0.48	$2,760	Planning/Design	2035
2	NOT LISTED	Mt. Rainier Bike Route	El Dorado County	0.58	$3,335	Planning/Design	2025

2	NOT LISTED	S Upper Truckee Rd Bike Route	El Dorado County	4.66	$26,795	Planning/Design	2030
2	01.01.01.0033	South Ave Bike Route	City of South Lake Tahoe	0.52	$2,990	Implementation	2025
2	NOT LISTED	Tahoe Keys Blvd Complete Streets	City of South Lake Tahoe	0.9	$15,525,000	Planning/Design	2040
2	03.02.02.0059	Washington Ave Complete Streets	City of South Lake Tahoe	0.19	$3,277,500	Planning/Design	2040
3	03.02.02.0028	Christmas Valley Bike Path	El Dorado County	2.44	$28,060,000	Deferred	2030
3	03.02.02.0071	Hwy 50 bike path to airport	City of South Lake Tahoe	0.4	$4,600,000	Planning/Design	2045
3	NOT LISTED	James Ave Class I connection	City of South Lake Tahoe	0.03	$345,000	Planning/Design	2032
3	03.02.02.0065	Sawmill to City Bike Path	California Department of Transportation	1.39	$15,985,000	Deferred	2026
3	NOT LISTED	Tahoe Mtn to Lake Tahoe Blvd Class I Connector	El Dorado County	0.25	$2,875,000	Planning/Design	2045
3	NOT LISTED	Wyoming Tahoe Valley Connector	City of South Lake Tahoe	0.06	$690,000	Planning/Design	2040
3	NOT LISTED	13th St Bike Route	City of South Lake Tahoe	0.58	$3,335	Planning/Design	2030
3	NOT LISTED	3rd St Bike Route to Barton	City of South Lake Tahoe	0.41	$2,358	Planning/Design	2035
3	NOT LISTED	B St/Tata Ln Bike Route	City of South Lake Tahoe	0.31	$1,783	Planning/Design	2035
3	NOT LISTED	Barbara Ave bike route	City of South Lake Tahoe	0.45	$2,588	Planning/Design	2035
3	NOT LISTED	Blitzen Rd bike route	El Dorado County	1.53	$8,798	Planning/Design	2045
3	NOT LISTED	C St Bike Route	City of South Lake Tahoe	0.1	$575	Planning/Design	2035
3	NOT LISTED	Julie Ln Bike Route	City of South Lake Tahoe	0.87	$5,003	Planning/Design	2030
3	NOT LISTED	Council Rock Dr bike route	City of South Lake Tahoe	0.22	$1,265	Planning/Design	2035
3	NOT LISTED	D St Bike Route	City of South Lake Tahoe	0.69	$3,968	Planning/Design	2035
3	NOT LISTED	Dunlap Dr Bike Route	City of South Lake Tahoe	0.27	$1,553	Planning/Design	2035
3	NOT LISTED	E St Bike Route	City of South Lake Tahoe	0.11	$633	Planning/Design	2035
3	NOT LISTED	Glorene Ave Bike Route	City of South Lake Tahoe	1.14	$6,555	Planning/Design	2030
3	NOT LISTED	Melba Dr Bike Route	City of South Lake Tahoe	0.19	$1,093	Planning/Design	2035
3	NOT LISTED	US Hwy 50 bike lane Meyers to City	California Department of Transportation	2.01	$606,625	Planning/Design	2035
3	NOT LISTED	5th Ave Bike Route	City of South Lake Tahoe	0.15	$750	Planning	2030
Construction 2024	03.02.02.0006	Apache Avenue Complete Streets	El Dorado County	0.4	$4,058,000	Planning/Design	2026

STATE ROUTE 89 RECREATION CORRIDOR



Physical Geographic Description: This corridor begins at the northern edge of the City of South Lake Tahoe just past the South Tahoe "Y" and extends to the north into El Dorado County, just past Meeks Bay.

Context Relevant Plans & Studies:

- SR -89 Cascade to Rubicon Bay Bikeway Study
- West Shore Area General Plan
- El Dorado County General Plan
- SR 89 Recreation Corridor Management Plan (Under Development)
- The Cascade to Meeks Trail Feasibility Study (2022)

Additional Corridor Considerations:

Community Input: The Cascade to Meeks Trail Feasibility Study, completed in 2022, examined potential alignments for a Class I trail between Meeks Bay and the current terminus of the Tahoe Trail at Spring Creek/Cascade Lake. Tahoe residents, homeowners in the corridor, conservation and recreation organizations provided input throughout the process to identify buildable segments. A multi-agency stakeholder steering committee including California State Parks, TRPA, Caltrans, El Dorado County, the Washoe Tribe, and the US Forest Service have begun planning and environmental analysis for the trail, focused on DL Bliss and Emerald Bay State Parks.

At Meeks Bay, A Class I trail is planned through the recreation site and campground. The Highway 89 bridge over Meeks Creek will also be replaced to accommodate stream restoration and trail connectivity north and south, eventually closing the gap between Tahoe's west shore and South Lake Tahoe.

FIGURE 4-6: SR 89 RECREATION CORRIDOR – EXISTING AND PROPOSED ACTIVE TRANSPORTATION NETWORK

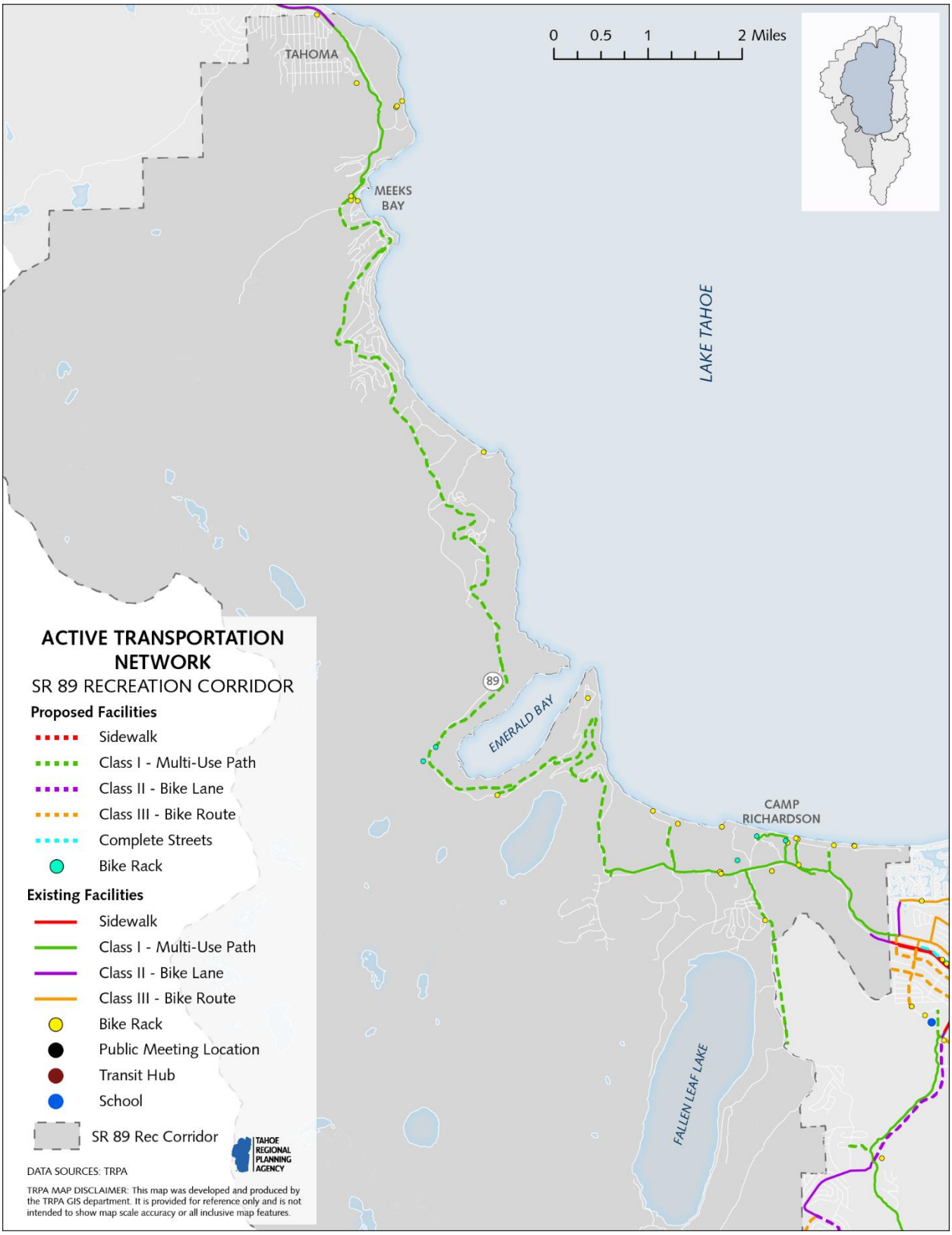


TABLE 4-6 SR 89 RECREATION CORRIDOR PROJECT LISTS:

PRIORITY	EIP #	PROJECT	IMPLEMENTER	MILES	ESTIMATED COST	PHASE	EST. COMPLETE YEAR
2	03.02.02.0029	Baldwin Beach Bike Path	U.S. Forest Service - Lake Tahoe Basin Management Unit	0.36	$1,450,000	Implementation	2025
2	NOT LISTED	Cascade to Meeks Trail - Segment 1	Unknown	1.61	$11,772,259	Planning/Design	2050
2	NOT LISTED	Cascade to Meeks Trail - Segment 2	Unknown	0.93	$13,084,385	Planning/Design	2050
2	NOT LISTED	Cascade to Meeks Trail - Segment 3	Unknown	2.05	$12,780,296	Planning/Design	2050
2	NOT LISTED	Cascade to Meeks Trail - Segment 4	Unknown	1.87	$37,258,815	Planning/Design	2050
2	NOT LISTED	Cascade to Meeks Trail - Segment 5	Unknown	0.88	$7,930,359	Planning/Design	2050
2	NOT LISTED	Cascade to Meeks Trail - Segment 6	Unknown	1.2	$35,062,182	Planning/Design	2050
2	NOT LISTED	Cascade to Meeks Trail - Segment 7	Unknown	1.51	$35,355,831	Planning/Design	2050
2	NOT LISTED	Cascade to Meeks Trail - Segment 8	Unknown	0.95	$94,426,500	Planning/Design	2050
2	NOT LISTED	Cascade to Meeks Trail - Segment 9	Unknown	1.41	$35,186,430	Planning/Design	2050
2	NOT LISTED	Cascade to Meeks Trail - Segment 10	Unknown	1.49	$19,669,449	Planning/Design	2050
2	03.02.02.0030	Pope Beach Bike Path	U.S. Forest Service - Lake Tahoe Basin Management Unit	0.17	$1,955,000	Deferred	2030

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CHAPTER 5: PROGRAMS

Awareness programming is a major aspect of encouraging community members and visitors to use multi-modal methods of transportation. Successful programs require a joint effort between state departments of transportation, local jurisdictions, law enforcement, advocacy groups, and local organizations. Campaigns that include encouragement, education and awareness, evaluation, and enforcement all work together to increase active transportation, improve safety, and gather valuable community feedback. Agencies and organizations currently involved in awareness programs include:

Type of Organization	Organization Name	Location	Responsibility
Government & Agency Associations	Counties, CSLT, TMAs	Region-wide	Funding, staff time, materials
Public Safety	City of South Lake Tahoe Police Department	South Lake Tahoe	Funding, staff time, materials
	California Highway Patrol	California	
	Nevada Highway Patrol	Nevada	
Advocacy	Community Mobility Group	South Lake Tahoe	Volunteer time & program development
	Lake Tahoe Bicycle Coalition	Region-wide	Volunteer time & program development
	Tahoe Mountain Biking Association	South Lake Tahoe	Volunteer Time
	The League to Save Lake Tahoe	Region-wide	Funding, staff time, and materials
Education	NDOT Safe Routes to School Program	East Shore	Funding, staff time, program development
	NDOT Bicycle/Pedestrian Education Program	East Shore	Funding, staff time, program development
	School Districts	Region-wide	Funding, staff time, program development
	Lake Tahoe Community College	South Lake Tahoe	Funding, staff time, program development
	South Tahoe Environmental Education Coalition (STEEC)	South Lake Tahoe	Funding, staff time, program development
	North Tahoe Environmental Education Coalition (NTEEC)	North Lake Tahoe	Funding, staff time, program development
	Boys & Girls Club	South Lake Tahoe	Funding, staff time, program development

Table 5-1: Agencies Involved in Awareness Programming. Source: TMPO

5.1 ENCOURAGEMENT:

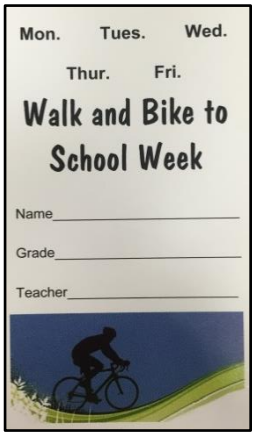
Encouragement to use active transportation as a method of travel can be conducted in many ways. Below are examples of existing and recommended programs that should be implemented.

Tahoe Bike Month

Since 2005, the Lake Tahoe Bicycle Coalition (LTBC) and TRPA, with support from other local and regional partners, organize the Tahoe Bike Month every year in June. The goal of Tahoe Bike Month is to encourage people regionwide to forego driving and instead bike as often as possible. Each year, hundreds of cyclists join teams or ride as individuals and record their total number of bicycle trips through the online site: http://tahoebikemonth.org. Sponsors also organize a variety of events, group rides, and incentive opportunities throughout the month to increase awareness and participation. In 2023, over 450 participants took 7,109 trips by bicycle racking up 52,789 miles and 3,749,683 vertical feet of elevation. The impact of Tahoe Bike Month on the environment each year is tremendous, preventing carbon dioxide emissions, and encouraging the community to opt for two-wheels instead of four.

June 30, 2015 TRPA Car Free Day

Safe Routes to School



Bike to School Week promotes active transportation at schools by coordinating group rides, providing route information, and offering recognition for participants. During the first week of June 2015, the Community Mobility Group led a pilot program for Bike to School week. All elementary schools within the City of South Lake Tahoe and the town of Meyers participated. Coordinated rides included a series of drop off points where parents could take students if they were too young to bike alone, didn't have a bike, or lived too far away. Volunteers were stationed at each school to pass out and hole-punch cards for each day students used active transportation. At the end of the week, participating students were recognized with prizes.

Regional Advocacy Efforts

Bike Maps:
User maps and mobile applications are another method of encouraging people to use active transportation. A variety of Lake Tahoe organizations, including the TCPUD and LTBC, produce free hard-copy maps for the community. LTBC annually distributes 10,000 hard-copy paper maps to bike shops, retail stores, and major recreation destinations around the Lake Tahoe and Truckee Regions. LTBC also maintains an interactive online bike map that includes information about construction projects and winter plowing operations. These efforts are supported through funds from TRPA and other local jurisdictions.

Bike Valet:
A bike valet – like a coat check for your bike! - is a free service that provides safe and convenient valet bicycle parking for Tahoe's community events. Event vendors and hosts can attract more people to their event and reduce their environmental impact by providing a bike valet for attendees. Organizations like the Lake Tahoe Bicycle Coalition and Town of Truckee provide their bike valet gear and services at local events and more organizations are beginning to provide these services. Permanent bike valet locations may be established in town centers or at major event destinations such as the new Tahoe South Event Center, or in the Casino Core in South Lake Tahoe.

Bike Safety Education:
Several agencies around the region support bicycle safety education and advocacy efforts. The Lake Tahoe Bicycle Coalition's "Bike Safe Lake Tahoe" campaign includes education and awareness messaging for drivers and cyclists sharing the road. The Tahoe Fund also supports LTBCs campaign through funding for subsidized bike lights that LTBC both gives out and sells at a reduced cost.

Bike Kitchen & Donation Program:
The Lake Tahoe Bicycle Coalition started the Bike Kitchen & Donation program in 2021 by collecting bikes from donors, performing needed repairs and maintenance to the bikes, and then donating them to community members by working directly with local social services organizations to identify individuals. Since its inception, LTBC has fixed up and donated 72 bicycles to individuals in need throughout the Lake Tahoe and Truckee region.

As part of this program, LTBC also organizes bike kitchen pop-up events to fix donated bikes and to teach the community how to fix up their own bicycles. At the pop-up events, paid bicycle mechanics assist LTBC volunteers in repairing donated bicycles and teach community members how to perform basic maintenance and repairs to their own bikes. These events provide a space for the community to gain the skills necessary to maintain their bicycles throughout the riding season while increasing the inventory of bicycles available for community members who have limited access to other forms of transportation.

Transportation Demand Management

Transportation Demand Management (TDM) is a combination of strategies that incentivize use of non-auto modes of transportation. TDM makes it easier for travelers to shift some trips from driving alone to multi-modal methods.[1] Offering a connected, safe, and convenient active transport network and support facilities are all methods of TDM. The TRPA *2015 Tahoe Basin ITS Strategic Plan* recommends adding bicycle detection, flashing-beacon crosswalks, and other pedestrian-signal upgrades that directly impact accessibility as TDM strategies.

***2020 Linking Tahoe: Regional Transportation Plan/Sustainable Communities Strategy* outlines the Employer Trip Reduction Ordinance, which includes many of the below TDM strategies.**

- Flexible work schedules
- Telecommuting
- Bicycle fleets for commuting to meetings within a specified distance
- Financial incentives such as subsidized transit passes or pre-tax deductions for bicycle commute costs.
- Support facilities such as secure bike parking, showers, and dressing rooms with lockers.

Boulder BCycle.
Photo: Erica Van Steenis

Cities, counties, and private entrepreneurs can also offer more bike carrying capacity on buses, or bikeshare programs that assist users in their first and last mile when conducting travel in combination with public transit. The 2015 Survey asked respondents if their most common transit stops provide secure bicycle parking. Not offering adequate bike parking discourages people from leaving their bike at bus stops or using multi-modal methods. This issue is compounded by many buses not having enough bike carrying capacity available for users, as currently Lake Tahoe buses only have capacity for two bikes at a time. Survey respondents indicated that bike rack space is not available 11 percent of the time.

Increasing capacity on buses is one solution, while another is a bikeshare program. Bike share or scooter share programs can be offered by governments or private entities, such as scooter share in the City of South Lake Tahoe or the BCycle electric bicycle sharing offered by the Town of Truckee.

[1] SANDAG, 2012

5.2 EDUCATION & AWARENESS:

Education and awareness programming should engage people of all ages and include local community members and visitors to the region. One overarching approach that increases education and awareness is the "Vision Zero" initiative. Vision Zero contends that *no loss of life is acceptable* and asks partners to focus resources on solutions that stop roadway conflict fatalities from occurring. Vision Zero began in Sweden in the mid-1990s and has quickly spread to many countries, as well as to states and cities throughout the United States. Nevada reflects the Vision Zero initiative through its "Zero Fatalities" program (http://www.zerofatalitiesnv.com/) with a goal of zero fatalities by 2050. California prioritizes Vision Zero in the Vulnerable Road User Safety Assessment, which outlines a vision of zero fatalities and serious injuries by 2050. TRPA has developed the 2024 Vision Zero Strategy to identify strategies that will increase community awareness towards sharing the road safely with all users and eliminating roadway fatalities.

Safe Routes to School

Some existing programs have been conducted in an ad hoc manner over the last 10 years, such as bicycle rodeos. There are also several supporting programs sponsored by organizations serving the local student-age population, including the Boys and Girls Club and the Recreation Center summer camp program. In addition, during 2015 agencies and advocacy groups organized several pilot projects. These included Bike to School Week and Safe Routes to Schools activities at community events.

Bijou Bike Club Rider

This plan recommends a comprehensive and consistent Safe Routes to Schools Education & Encouragement Program that can be planned and implemented by a designated local SRTS coordinators and a partnership of agencies and volunteers. The Lake Tahoe Unified School District has adopted the programs listed below in their SRTS Master Plan, and it is recommended that other districts without a master plan pursue implementation of similar programs. Activities may be implemented in phases or as pilot projects.

Regional SRTS Coordinator:

Many counties, school districts, and regions throughout the country have SRTS coordinators that work with stakeholders to improve infrastructure, organize and teach education programs, and work with volunteers on encouragement campaigns and activities.

Safe Routes to School Volunteers on Bike to School Day

Educational Programs:
This plan recommends that all students in grades K-8 in all district schools participate in at least two to three education and encouragement activities each year.

Bicycle Rodeo, Grades K-5

A bicycle rodeo consists of multiple stations that students rotate through over the course of a physical education class. The stations educate students about bike skills and safety and include discussion of the environmental benefits of active transportation and physical activity. All stations are interactive. Station themes can range from checking to ensure helmets fit properly to properly signaling turns and weaving through an obstacle course of cones. Instruction and teaching materials become more advanced for older grades so students are able to refine their skills and learn new ones each year.

In-Class Education Series, Grades 2, 4, and 6

The Safe Routes to School program includes in-class curriculum geared towards grades 2, 4, and 6. The in-class education series teaches students about bicycle safety and the environmental benefits of active transportation. The curriculum outlines 75-minute sessions for each classroom of second, fourth, and sixth graders. In second grade, the focus is on safe walking and street safety, such as street crossing. In fourth and sixth grade, the focus is on bike safety and the traffic regulations that govern active transport. TRPA has partnered with the school districts since 2015 to teach this curriculum to fourth grade students. Moving forward, TRPA hopes to empower the teachers, parents and volunteers from local organizations to teach the series, and expand to other grades.

Slow Bike Race

Activity	Grade	Season	Partners
Bicycle Rodeos	K-6	Fall and/or Spring	Physical Education Teachers, CSLT PD, CHP, TRPA
In-Classroom Education Series	K -8	Winter	Science teachers, TRPA/TMPO, Parent Volunteers
Bike and Walk to School Days	K – 8	Tahoe Bike Month	Parent Volunteers, TRPA, Advocacy Groups
Walking School Bus & Bicycle Trains	All Grades	Monthly	Parent Volunteers

Table 5-2: Safe Routes to School Education & Encouragement Program Outline. Source: LTUSD SRTS Master Plan.

5.3 EVALUATION

Workshop Activity. Photo: Jen Cannon

Consistent evaluation of network facilities and programmatic efforts help to determine what is working and where investments and improvements are necessary. Data also helps implementers demonstrate project need for funding opportunities by showing current and estimated use patterns, crash data, and community desire. TRPA role is to act as a clearinghouse and provide analysis of collected information. Partnering entities are encouraged to monitor their programs and projects and coordinate with TRPA on data collection and analysis. Historically, monitoring of projects and programs is conducted on an infrequent or ad hoc basis. To better assist in this collaborative effort, TRPA produced the *Lake Tahoe Bicycle & Pedestrian Monitoring Protocol* found in Appendix C*,* will annually report on Active Transportation Plan progress through its annual report, and continue to conduct community surveys as appropriate.

Bike Trail User Model

The Bike Trail User Model estimates bicycle and pedestrian trips on Class I/shared-use paths and Class II/bicycle lanes in the region. This model is based upon observed facility use levels, characteristics of user types, and demographic and travel data. The model estimates reflect relatively urban or inter-community travel corridors, and are not applicable to mountain bike trails. The model is used to help estimate the impacts of bicycling and walking region-wide for the Regional Plan and Regional Transportation Plan, and is also used to estimate active transportation on individual trail segments. Jurisdictions, departments of transportation, and funders will find the model useful for estimating potential trail use for planned projects. Over the next four years, TRPA/TMPO will use bike trail user counts collected through the *Lake Tahoe Bicycle & Pedestrian Monitoring Protocol* to validate and update the model if necessary.

Lake Tahoe Region Bicycle & Pedestrian Monitoring Protocol

As described in Chapter 2, TRPA developed the *Lake Tahoe Region Bicycle and Pedestrian Monitoring Protocol* to establish a clear and consistent approach to collecting bicycle and pedestrian volume data in the Region. By implementing the protocol, TRPA is building on prior bicycle and pedestrian monitoring programs conducted by a variety of partners. This creates a coordinated and consistent, ongoing monitoring program that tracks changes in bicycle and pedestrian volumes. The data collected each year as part of this program will be used for a variety of purposes, including project prioritization, safety analysis, utilization trends, and support for grant applications. TRPA began implementing the protocol in 2015. More information can be found in Appendix D.

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CHAPTER 6: IMPLEMENTATION PLAN

Implementation is by far the most challenging aspect of creating a successful active transportation network. Significant obstacles can include acquisition of right-of-way, securing construction and maintenance funding, designing projects that provide access for all roadway users, and meeting environmental standards. Partners must work together to find common ground on project designs, locations, and funding mechanisms. This chapter outlines the actions that partnering agencies should take to implement the goals and policies in Chapter 3. To assist in project development, Section 6.2 contains cost estimates that can be used as a resource when estimating full project cost. This can be helpful for grant applications, or when budgeting various funding sources (such as TRPA Mobility Mitigation Fees) for project implementation. In section 6.3, the project list is explained, and can be found in Appendix E. Finally, this chapter also includes funding strategies.

Kahle and Laura Drive Intersection. Photo: Mike Vollmer.

6.1 ACTIONS

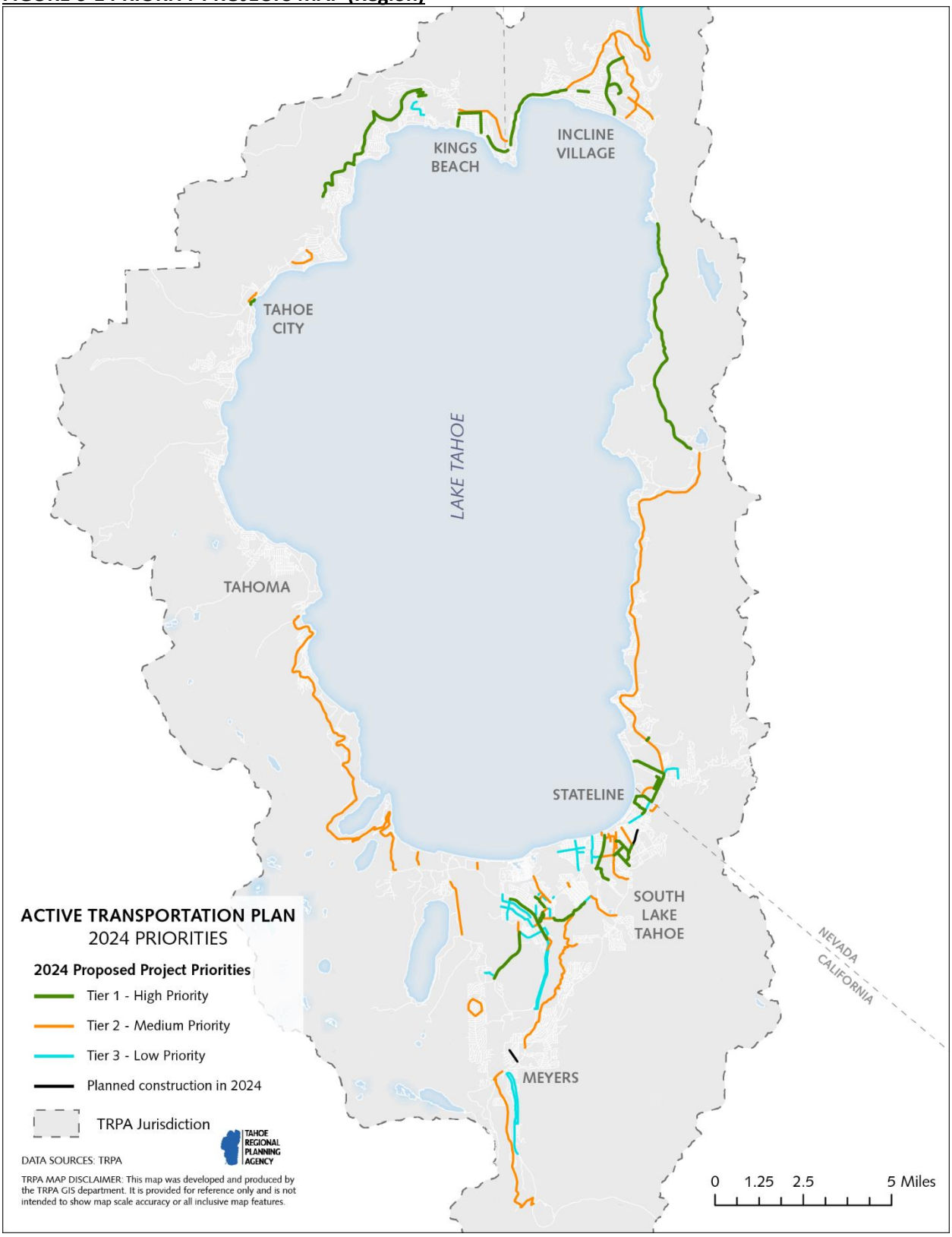
To initiate the implementation of the Active Transportation Plan, TRPA is focused on identified tier 1 priority projects, which are primarily updates to active transportation infrastructure within Tahoe's town centers. These improvements to areas that have a high probability of capturing mode shift (from automobile to walking, biking, or rolling) due to the short-distance nature of these trips. Creating a safe, low-stress connection from the neighborhoods to the commercial areas of town centers, recreation destinations, and transit hubs will help TRPA and the region reduce its VMT, allowing for a safer, more vibrant Tahoe environment and economy. The tier 1 priority projects include an emphasis on funding, offering technical assistance on preliminary engineering, design, and policy development, improving active transportation data collection, and enhancing regional efforts to improve the delivery of active transportation projects.

Tiered Priority Projects

To efficiently implement the plan, and to ensure we are moving toward our sustainability and safety goals, TRPA, alongside a collaborative effort with our local implementing partners, developed three priority tiers to help guide and focus on maximizing our efforts, in terms of funding and constructing active transportation projects. The methodology behind these priority tiers was simple. First, TRPA collaborated with the local agencies on what projects were identified as priority capital improvement projects, gaps in their network, remaining priority projects carried over from the last active transportation plan, or the most recent Regional Transportation Plan. As the regional MPO, TRPA also considered whether the project is regionally significant to help determine what was selected as a tier 1, 2, or 3 project. Competitiveness for funding was also considered as a factor.

Beyond coordination with local jurisdictions, identifying regional significance, and seeking to achieve stated mode shift and VMT reduction goals, TRPA recently conducted a Vision Zero high injury network analysis to develop its own priority project list. Utilizing the Bicycle Level of Traffic Stress analysis, collision data, and TRPA identified "Community Priority Zones" (an equity metric), the Vision Zero strategy identified several projects within the active transportation plan that rose to the level of being a tier 1 priority. This was a data-driven approach designed to emphasize reduction of the stress levels of the transportation network, to reduce severe injury and fatalities for all roadway users, and to support increased utilization of active transportation modes. Through these various goal-achieving, collaborative, and data-focused approaches, we arrived at our tiered priority projects list.

FIGURE 6-1 PRIORITY PROJECTS MAP (Region)



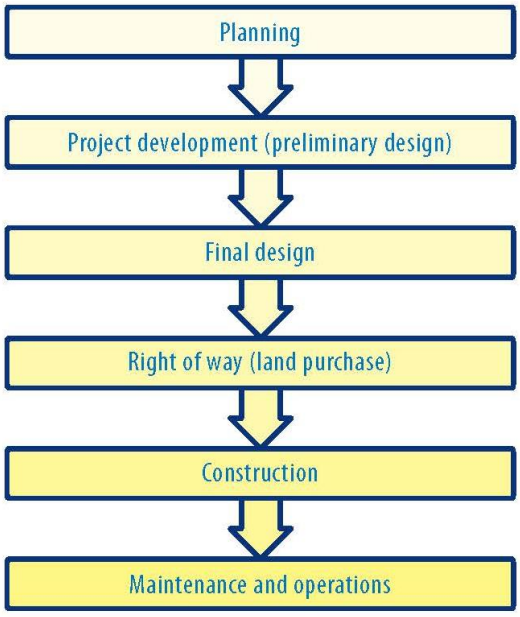
6.2 BALANCING COST AND BENEFITS

Implementation of the active transportation network incurs short and long terms costs, while also affording benefits to transportation users, the environment, and the community. To determine the potential effectiveness of a project in comparison to the cost, increasingly governmental agencies are conducting cost benefit analyses. This type of analysis compares potential benefits such as reduction in VMT, increased physical activity (health), and decreased crash incidence to total project cost. A variety of tools are available, such as the *California Active Transportation Program Benefit/Cost Tool*, which can be accessed on the Caltrans website. Cost/benefit tools are used for detailed analysis that quantifies data collected for specific projects. For high-level project prioritization, as is conducted for this plan, assessment of cost and benefits are conducted through the use of broad quantitative and qualitative criteria.

Sawmill Bike Path. Photo: Mike Vollmer

6.3 COST ESTIMATES AND PROJECT PHASES

Project Phase: Implementation of the active transportation network involves many planning phases and sources of funding. Often, active transport facilities are included as parts of other projects, such as water quality improvements on the state highway system. When considering the full cost of projects, implementers must factor in all phases of work, including planning, design, environmental review, construction, and on-going maintenance. It is difficult to assess the cost of each phase, as it is highly dependent on project type, size and the amount of community outreach and environmental review. This is based on a variety of factors such as ease of implementation, right-of-way constraints, level of community support, and geography. An extremely important cost, estimates of which are not included in this plan, are maintenance costs. The active transportation network is only as effective as its reliable maintenance, and TRPA along with local jurisdictions are committed to identifying sustainable funding for long-term maintenance of the active transportation facilities.



Project Type: High-level, average costs are used to generate an overall estimated cost by project type, such as implementation of a Class I/shared-use path, or a sidewalk. These are rough costs based on historical local cost data, current project data, national research, level of improvement, and geographic considerations. For this plan, the cost estimates represent projected costs from planning through construction phases. Below is a list of potential elements that could be included into any project and are not necessarily exclusive to one project type (e.g. a complete streets project may incorporate a Class I shared use trail, or a Class IV facility and a sidewalk.) For Class IV protected bikeway facilities, a subset of complete streets costs was used, however smaller elements like flexible delineators and vertical curb construction were not included with needs so preliminary.

Facility Type	Estimated Cost	Cost Unit
Class I Shared Use Path		
Minimal challenges to implement	$10,000,000.00	per mile
Substantial challenges to implement	$17,000,000.00	per mile
Class II (IIb) Bike lanes		
Striping w/ bicycle legend (residential)	$80,000.00	per mile
Striping, bicycle legends, and minor green paint (collectors)	$150,000.00	per mile
Striping, bicycle legends, with comprehensive green paint, intersection treatments (arterial)	$250,000.00	per mile
Class III Bicycle Boulevard		
Signage	$400.00	each
Striping/Sharrows	$1,000.00	each
Pedestrian		
Sidewalk (5ft)	$80,000.00	per mile
Rapid Rectangular Flashing Beacon	$20,000.00	each
Pedestrian Hybrid Beacon	$500,000.00	each
Crosswalk(s)	$13,000.00	each
Pedestrian Refuge Island	$30,000.00	each
Complete Streets		
Curb and gutter	$530,000.00	per mile
Storm drain	$15,000.00	each
Landscaping	$100,000.00	mile
Lighting	$15,000.00	each

Table 6-1: Project Type High Level Cost Estimate. Source: TRPA

6.4 FUNDING STRATEGIES

Construction of the active transportation network at Lake Tahoe is a partnership between federal, state, and local agencies. Partners work together to combine funding sources and construction and maintenance responsibilities. EIP Project expenditures are tracked by all agencies in the Region and are consolidated in the transportation tracker, located online at https://transportation.laketahoeinfo.org/. This helpful tool can segregate projects by infrastructure type, jurisdiction, funding source, estimated need and more.

Funding Sources

The funding needs for the Tahoe region's active transportation plans are not insignificant. Mountain geography construction mobilization, increased construction costs, as well as topographic and geologic challenges such as steep mountain sides and various soil types, all contribute to increased overall project costs. The total cost of Tahoe's entire active transportation project list stands at approximately $1.1 billion, for proposed projects through 2050. However, substantial portions of this cost relate to a small percentage of projects. High-profile Class I trails through steep mountainous sections that require complex geotechnical work are a large portion of this cost total. When parsed out for tier 1 priority projects only, the cost is a more manageable $294 million. These estimated totals represent the planning through construction phase costs.

Many projects will use federal and state funding sources made available through TRPA's Regional Grant Program (RGP), such as the Surface Transportation Block Grant Program (STBG).

LIST OF FEDERAL, STATE, AND LOCAL GRANT PROGRAMS:

**Note: The below list is non-exhaustive, but is a starting point when researching possible grant opportunities.*

The federal government offers a wide variety of funding sources. The FHWA offers a very helpful website that lists all funding opportunities and eligible project components on their website: Pedestrian and Bicycle Funding Opportunities (dot.gov)

Specific program requirements must be met and eligibility must be determined on a case-by-case basis. For example: Transit funds must provide access to transit; Congestion Mitigation and Air Quality Improvement Program (CMAQ) must benefit air quality; Highway Safety Improvement Program (HSIP) projects must be consistent with the State Strategic Highway Safety Plan and address a highway safety problem; NHPP must benefit National Highway System (NHS) corridors; the Federal Lands and Tribal Transportation Programs (FLTTP) must provide access to or within federal or tribal lands. Some (not all) of these funds below are channeled through the TRPA and distributed through our Regional Grant Program, which directly supports implementation of the plan.

Highway Safety Improvement Program (HSIP)

HSIP are federal funds that are administered by State departments of transportation. The purpose of the Highway Safety Improvement Program (HSIP) is to significantly reduce traffic fatalities and serious injuries on public roads, including non-state-owned public roads and roads on tribal land. HSIP funds are eligible for work on any public road or publicly owned bicycle or pedestrian pathway or trail, or on tribal lands for general use of tribal members, that improves safety for its users.

Congestion Mitigation and Air Quality Programs (CMAQ)

CMAQ was devised to provide a flexible funding source to State and local governments for transportation projects and programs to help meet requirements of the Clean Air Act. CMAQ funding is available to reduce congestion and improve air quality.

Surface Transportation Block Grant (STBG)

STBG promotes flexibility in State and local transportation decisions and provides flexible funding to best address State and local transportation needs.

Carbon Reduction Program (CRP)

CRP provides funds for projects designed to reduce transportation emissions, defined as carbon dioxide (CO2) emissions from on-road highway sources.

Nevada Transportation Alternatives Program (TAP)

TAP provides federal funds for a variety of smaller-scale, non-traditional, community-based transportation projects that improve safety, expand travel choices, and enhance the transportation experience. These projects are intended to integrate modes and improve the cultural, historic, and environmental aspects of our transportation infrastructure.

California Active Transportation Program (ATP)

The Active Transportation Program was created by Senate Bill 99 to encourage increased use of active modes of transportation, such as walking and biking.

Other potential funding opportunities:

There are also a host of discretionary, local, and state funding opportunities such as:

- City and County Funds
- TRPA Mitigation Funds
- Developer Fees
- Private Contributions
- Transient Occupancy Tax (TOT)
- Tourism Business Improvement District (TBID/BID)
- Safe Streets and Roads for All (SS4A)
- PROTECT (federal)
- Local Transportation Climate Adaptation Program (LTCAP)
- Other Taxes

Wildwood. Photo: Mike Vollmer.

Pilot Projects and Quick builds

If immediate funding for full construction is not available, a potential solution for local implementers are options such as “pilot projects” and or “quick builds”. These options are essential for piloting safety improvement projects using lower cost materials designed to be implemented quickly in order to determine the real-world efficacy of any roadway change. Utilizing before and after data collection, pilot projects are monitored to understand benefits and tradeoffs, with the goal of adjusting the final design once full funding becomes available.

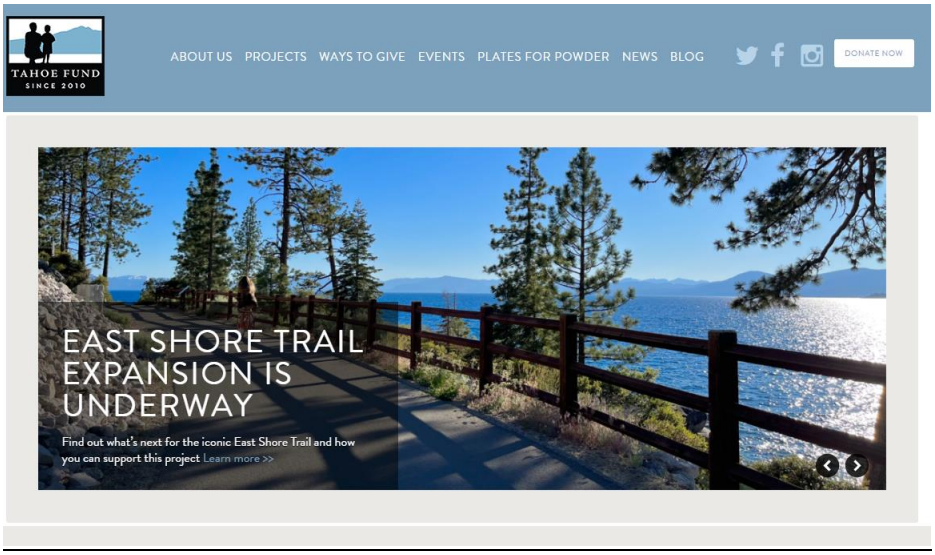
Technical Assistance:

TRPA and its knowledgeable staff are available to help provide planning and technical support to city, county, and state agencies. Assisting in preparing active transportation discretionary grant applications and reviewing projects to ensure consistency with the RTP can expedite implementation. This collaboration supports our regional partnerships, encouraging partners to utilize staff knowledge in taking projects from plans and concepts to detailed designs that can more easily compete for funding.

TAHOE-SPECIFIC:

Tahoe Fund

The Tahoe Fund inspires the private community to support environmental improvement projects that improve watersheds and lake clarity, enhance outdoor recreation, and build a greater sense of stewardship in the Tahoe Basin. The Tahoe Fund has supported the implementation of many projects region-wide, including a Bicycle Parking Program managed by the Lake Tahoe Bicycle Coalition.



League To Save Lake Tahoe (Keep Tahoe Blue)

Another organization with high-priority regional goals in mind is the League to Save Lake Tahoe. Partnerships with this organization have yielded great results in supporting active transportation initiatives, most noteably the League's support of shared mobility transportation in bringing first-mile-last-mile solutions to residents and visitors of Lake Tahoe. Shared mobility has seen excellent ridership in the City of South Lake Tahoe, and programs like this would not be feasible without the support of organizations such as the League to Save Lake Tahoe.

KEEP TAHOE BLUE®
League to Save Lake Tahoe

Image Sources: www.keeptahoeblue.org

THANK YOU!

Thank you to all project partners, community members, and elected officials, for your continued support promoting and building active transportation infrastructure at Lake Tahoe. This plan illustrates our progress in the Lake Tahoe Region and provides a vision for our continued success. Together, we can continue to support innovative complete street projects that improve the mobility and safety of all roadway users. And for those about to actively transport: We salute you!

Logan Shoals. Photo: Tom Lotshaw