# LAKE TAHOE REGION BICYCLE AND PEDESTRIAN PLAN

# EXECUTIVE SUMMARY 2010







ESTABLISHING THE FOUNDATION FOR
A WORLD-CLASS BICYCLE AND
PEDESTRIAN COMMUNITY AT LAKE TAHOE





## **INTRODUCTION**

Lake Tahoe communities have identified biking and walking opportunities as critical components of a well-rounded transportation system. A strong bicycle and pedestrian network draws people out of their cars, in turn boosting the economy, improving air quality, and creating attractive, healthy communities. Connected bicycle paths, sidewalks, and transit are the backbone of a people-oriented transportation system that supports neighborhoods, commercial districts, and recreation areas. This connected transportation system that centers on non-motorized travel will also help Lake Tahoe meet Tahoe Regional Planning Agency (TRPA) environmental thresholds and greenhouse gas reduction targets.

The TRPA and the Tahoe Metropolitan Planning Organization (TMPO) seek to improve bicycling and walking Region-wide in order to protect Lake Tahoe, provide multiple mobility options, and maintain healthy communities. Ultimately, Lake Tahoe communities envision an efficient and attractive bicycle and pedestrian network that encircles the Lake, and provides complete connections between people and places.

The Lake Tahoe Bicycle and Pedestrian Plan (BPP) presents a guide for planning, constructing, and maintaining a regional bicycle and pedestrian network and support facilities and programs. The network includes on-street bicycle lanes and bicycle routes, and off-street paths and sidewalks. The BPP includes updated maps and prioritized project lists for the bicycle and pedestrian network, and lays out policies for local governing bodies and transportation agencies. Finally, to help ensure implementation, the BPP identifies potential funding sources and specifies preferred designs to encourage consistency and safety Region-wide.

# BENEFITS OF BICYCLING AND WALKING AT LAKE TAHOE

Bicycling and walking can provide multiple benefits to Lake Tahoe communities, including reducing air pollution, meeting greenhouse gas reduction targets, improving the local economy, and improving public health. Beyond the tangible benefits, biking and walking are pleasurable, relaxing outdoor activities that residents and visitors to Lake Tahoe seek out and enjoy. Biking and walking are critical for meeting the TRPA Compact goals of attaining environmental thresholds and reducing dependency on the private automobile.

Identified benefits of the Lake Tahoe Bicycle and Pedestrian Network:

• The built-out bicycle and pedestrian network is estimated to reduce Vehicle Miles Traveled (VMT), a TRPA air quality threshold indicator, by 8,500 miles on a peak summer day.



- Overnight and day visitors who visit Lake Tahoe primarily for cycling purposes are estimated to bring between \$6 and \$23 million in local direct expenditures annually to Lake Tahoe communities. This compares favorably to an average of \$3 million per year (over the last 10 years) spent on construction of the existing network.
- Neighborhood design, including the proximity
  of transportation systems, parks, and paths,
  is related to physical activity levels. Changing
  the built environment, such as introducing traffic
  calming, paths, and bicycle infrastructure
  increases levels of physical activity in the
  community.

### New in the 2010 Bicycle and Pedestrian Plan

- "Complete Streets" Bicycle and Pedestrian Accommodation Policy
- · Tahoe Bicycle Trail User Model for estimating use on Tahoe bikeways
- · Design and Maintenance Recommendations
- · Path Maintenance and Crosswalk Research

## **Accomplishments**

In 2003 the TRPA/TMPO published a comprehensive Bicycle and Pedestrian Plan. Since that time, local agencies and organizations have made major improvements to the bicycle and pedestrian network, as well as increasing activities to encourage safe bicycling and walking.

#### Notable accomplishments include:

- Over three miles of new sidewalk in the Incline Village Commercial Area
- New bicycle lanes in the Incline Village and Kings Beach areas
- Links in the Lakeside Bike Trail in Tahoe City
- Shared-use paths on both sides of Ski Run Boulevard in South Lake Tahoe
- Completion of the 15th Street Bike Trail, linking the City of South Lake Tahoe to popular beaches, hiking trails, and the Forest Service Bike Path
- Began construction in 2010 of bike lanes or wide shoulders from Tahoe City to Kings Beach, from Tahoe City to Squaw Valley, and from Meyers to Luther Pass
- City of South Lake Tahoe allocation of \$25,000 towards community bicycle racks
- Completion of the first two phases of the Sawmill Bike Path in Meyers



- Sixty thousand copies of the Lake Tahoe Bicycle Trail Map distributed
- Since 2006, an annual "Bike Week" event, attracting over 700 participants regionwide
- Recognition of the City of South Lake
   Tahoe as a bronze-level League of American Bicyclists (LAB) Bicycle-Friendly
   Community
- Recognition of North Lake Tahoe-Truckee Resort Triangle with "Honorable Mention" by LAB Bicycle-Friendly Community Program

## INFRASTRUCTURE AND PROGRAMS

The infrastructure that supports bicycling and walking in the Tahoe Region includes shared-use paths, bicycle lanes and routes, sidewalks, and end-of-trip support facilities such as bicycle parking and showers. Multi-modal inter- and intra-regional connections, safety and outreach programs, and facility maintenance are also critical aspects of a well-rounded system that encourages safe and efficient bicycling and walking.

## **Bicycle and Pedestrian Facility Types**

The Bicycle and Pedestrian Plan addresses the following facility types:

**Class I/Shared-Use Path** – Provides a completely separated right-of-way for the exclusive use of bicycles and pedestrians with cross-flow from vehicles minimized.

**Class II/Bike Lane** – Provides a striped lane for one-way bicycle travel on a street or highway.

**Class III/Bike Route** – Provides for shared use with bicycle or motor vehicle traffic, typically on lower volume roadways.

**Sidewalks** – Minimum 5-foot-wide paved walking area, primarily in commercial areas.

See Classification schematics on the following page.

There are currently 99 miles of existing shared-use path, bicycle lanes, bicycle routes, and sidewalk in the Lake Tahoe Region. (See table below.)

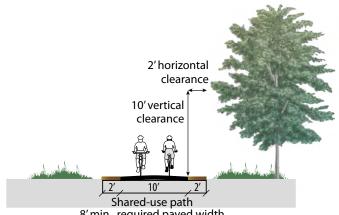
Jurisdiction	Class I Path	Class II Bike Lane (1)	Class III Bike Route	Sidewalk	Total
El Dorado County, CA	9	7	4	0	20
City of South Lake Tahoe	8	8	9	4	29
Placer County, CA	14	2	2	1	19
Douglas County, NV	2	0.1	1	1	5
Washoe County, NV	10	4	7	6	26
Carson City, NV	0	0	0	0	0
Total	43	21	22	12	99

Miles of Existing Bicycle and Pedestrian Facility

# Shared-Use Path (Class I)

Provides a completely separated right of way for the exclusive use of bicycles and pedestrians with crossflow minimized.



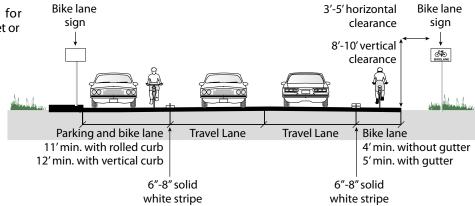


8' min. required paved width 2' graded shoulders recommended 12' min. total width recommended

## Bike Lane (Class II)

Provides a striped lane for one-way bike travel on a street or highway.

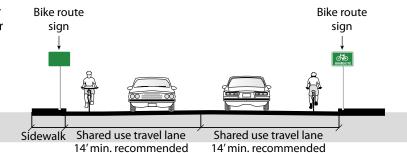




# Signed Shared Roadway (Class III/Bike Route)

Provides for shared use with pedestrian or motor vehicle traffic, typically on lower volume roadways.





#### **Bike Paths**

Over 13 miles of nearly continuous Class I/Shared-Use Path stretch from the mid-point of Tahoe's west shore at Sugar Pine Point State Park through Tahoe City and north to Squaw Valley. There are other segments of 1 to 5 mile-long paths scattered throughout Stateline, NV, Meyers, CA, El Dorado County, CA and Kings Beach, CA.

Major gaps in the network are along the east shore of Lake Tahoe, around Emerald Bay and Homewood on the west shore, between Tahoe City and Kings Beach, Crystal Bay and Incline Village, and Meyers, CA and South Lake Tahoe, including connections to both the South Tahoe "Y" and Stateline. There are also localized gaps. There are two gaps in South Lake Tahoe's otherwise continuous network. One is a section along the Lake from El Dorado Beach to Ski Run Blvd, and a section along Harrison Avenue, a short street near U.S. Highway 50 fronting several blocks of businesses.

There are also missing links in the Lakeside Trail in Tahoe City, and at Homewood, on the west shore. These gaps in otherwise continuous paths are the highest priority for completion. Other priorities are extensions to existing paths that begin to complete the round-the-lake network, such as Phase 1 of the Nevada Stateline-to-Stateline Bikeway.

## Walking

A safe and comfortable walking environment is vital to the success of tourist-centered communities. At some point, virtually all travelers become pedestrians, walking from their parked car to a storefront, stepping off a bus, or strolling from their accommodations to the Lake. Planning for pedestrian safety and convenience requires integrating pedestrian needs



into street design and building design from the earliest stages. In addition to sidewalks and paths, slow vehicle speeds, convenient and safe crossings, and mixed land-uses support walking.

In the Tahoe Region, Tahoe City and Incline Village have emphasized construction and maintenance of their sidewalk network in providing an attractive frontage and access to businesses and recreation areas along major travel routes. Significant gaps in the sidewalk network are most noticeable in South Lake Tahoe and Kings Beach. Both of these communities have high volumes of pedestrians, many of whom access transit along the main highway. Most sidewalks along U.S. Highway 50 in South Lake Tahoe are planned to be constructed by 2012 through a Caltrans water quality project. The sidewalks in Kings Beach are planned to be constructed through an upcoming commercial core improvement project.

In addition to sidewalks, the Bicycle and Pedestrian Plan recommends enhanced crossing protections such as advance stop bars and in-roadway warning signs, pedestrian-activated flashing beacons, and street and land-use design that considers pedestrians as primary users of the transportation systems.

## GOALS

The Bicycle and Pedestrian Plan contains the following Goals to reach its vision of an efficient and attractive bicycle and pedestrian network that provides complete connections between people and places.

# GOAL 1: Complete a bicycle and pedestrian network that provides convenient access to Basin destinations and destinations outside the Basin.

FOCUSED GOAL: A COMPLETE BICYCLE AND PEDESTRIAN NETWORK Construct, upgrade, and maintain a complete regional network of bicycle and pedestrian facilities that connects communities and destinations.

FOCUSED GOAL: BICYCLIST AND PEDESTRIAN ACCOMMODATION Create and maintain bikeable, walkable communities through existing and new development.

#### FOCUSED GOAL: TRANSIT INTEGRATION

Integrate the transit, bicycle and pedestrian networks to provide seamless transitions and stimulate both increased transit ridership and increased use of the bicycle and pedestrian network.

#### FOCUSED GOAL: MAINTENANCE

Maintain the bicycle and pedestrian network to a high standard that encourages ridership and improves the safety of all users.

# GOAL 2: Raise awareness of the bicycle and pedestrian network and encourage safe and increased bicycling and walking.

#### FOCUSED GOAL: EDUCATION AND OUTREACH

Cultivate enthusiasm for bicycling and walking at Lake Tahoe and awareness of the bicycle and pedestrian network through education, outreach, and signage.

#### FOCUSED GOAL: ENFORCEMENT

Encourage safe bicycling and walking through enforcement of traffic and parking violations.

# GOAL 3: Provide environmental, economic, and social benefits to the Region through increased bicycling and walking.

#### FOCUSED GOAL: REDUCED ENVIRONMENTAL IMPACTS

Reduce vehicle miles traveled (VMT), emissions, erosion, runoff, and other environmental impacts through careful implementation of the bicycle and pedestrian network.

#### FOCUSED GOAL: EVALUATION

Attain bicycle and pedestrian goals and environmental thresholds through performance measures consistent with the Regional Transportation Plan and the Regional Plan for the Lake Tahoe Basin.



## PROPOSED SYSTEM

Construction of the bicycle and pedestrian network itself is critical to meeting bicycling and walking goals. Local jurisdictions and roadway agencies have identified 162 miles of new infrastructure necessary for a complete bicycle and pedestrian network. Of these identified facilities, those that close gaps, will attract high use and reduce VMT, provide multi-modal connections, and improve safety have been prioritized.

A few of the highest priority facilities include:

OWNER or LOCATION	FACILITY	
CITY OF SOUTH LAKE TAHOE	US HWY 50-EL DORADO BEACH TO SKI RUN BLVD PATH	0.7
TAHOE CITY PUBLIC UTILITY DISTRICT	LAKESIDE TRAIL PHASES V, VI, VII	1
DOUGLAS COUNTY	NV STATELINE TO STATELINE BIKEWAY SOUTH DEMO PATH	3
CALTRANS/TCPUD	STATE ROUTE 89-HOMEWOOD BIKE LANES AND SHARED-USE PATH	0.8
PLACER COUNTY	NORTH TAHOE BIKE PATH FROM DOLLAR HILL TO NORTH TAHOE REGIONAL PARK	9
PLACER COUNTY	KINGS BEACH SIDEWALKS	1.5
CITY OF SOUTH LAKE TAHOE	US HWY 50 SIDEWALKS	4
CALTRANS	US HWY 50 BIKE LANES	4
CALIFORNIA TAHOE CONSERVANCY	SOUTH TAHOE GREENWAY PATH	9
CITY OF SOUTH LAKE TAHOE	PIONEER TRAIL SIDEWALKS	1
TAHOE CITY PUBLIC UTILITY DISTRICT	FANNY BRIDGE PEDESTRIAN/BICYCLE IMPROVEMENTS	0.6
EL DORADO COUNTY	SAWMILL 2 PATH FROM US HWY 50 TO LAKE TAHOE BLVD	2

Implementation of facilities can face significant obstacles. The priority project list (including additional facilities not listed above) is estimated to cost approximately \$200 million to construct. This does not include maintenance or safety and outreach activities. In addition to funding, implementation of facilities can face other obstacles. These include right-of-way acquisition, environmental constraints, concerns from adjacent property owners, and permit-

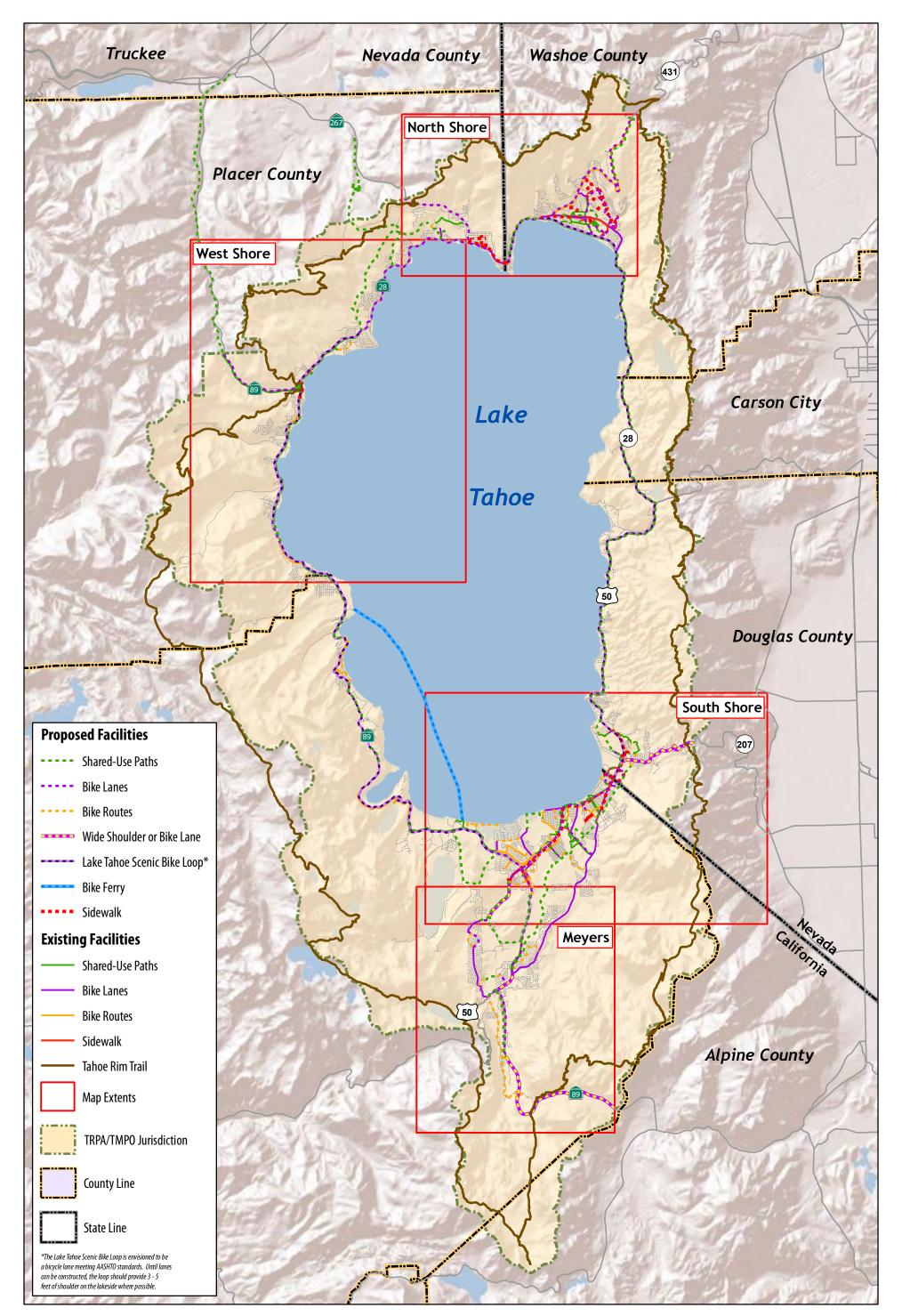
ting requirements. Successful completion of the network will require aggressive pursuit of funding at the local, state and federal levels, community outreach, harnessing support for proposed facilities, and coordination between agencies. A significant opportunity for cost savings exists through concurrent construction of bicycle and pedestrian facilities with roadway and new or re-development projects.

See the maps at the end of this document for existing and proposed bicycle pedestrian network.

In the complete BPP, readers can find information on the community benefits of bicycle paths and bicycling and walking. The plan contains information about existing and predicted levels of demand for the network, and Tahoe-specific recommendations for support of bicycling and walking in new and redevelopment, such as enhanced crossing treatments, provision of bicycle racks, and accommodating bicyclists and pedestrians along roadways. It also includes crash data and safety recommendations, as well as potential sources of funding for construction, maintenance and outreach.

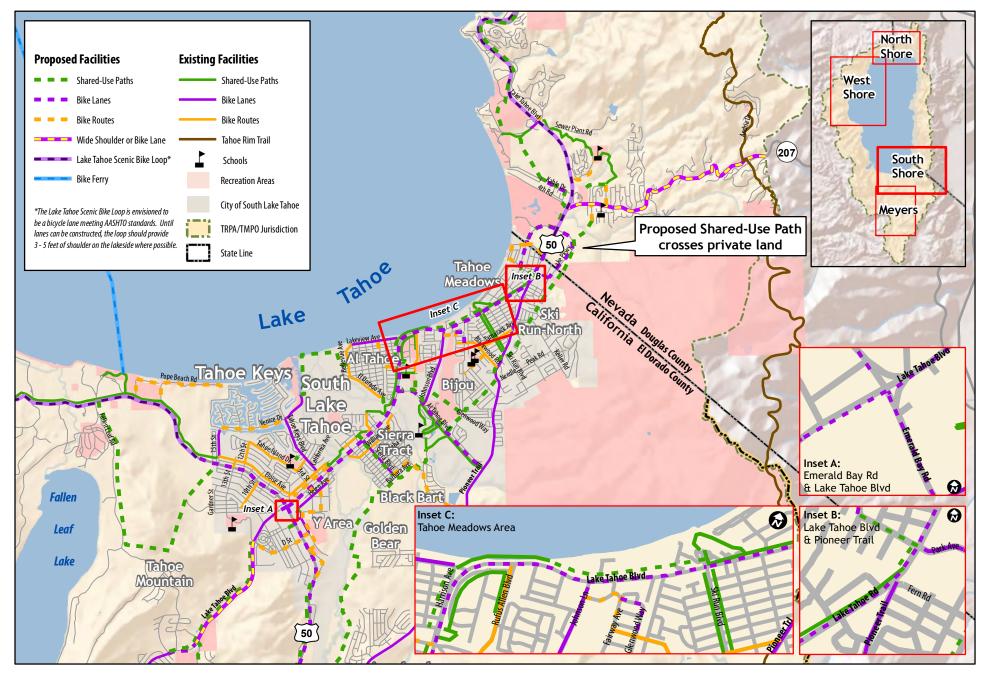


The complete Bicycle and Pedestrian Plan can be downloaded at: www.tahoempo.org



TRPA Existing and Proposed Bicycle and Pedestrian Network



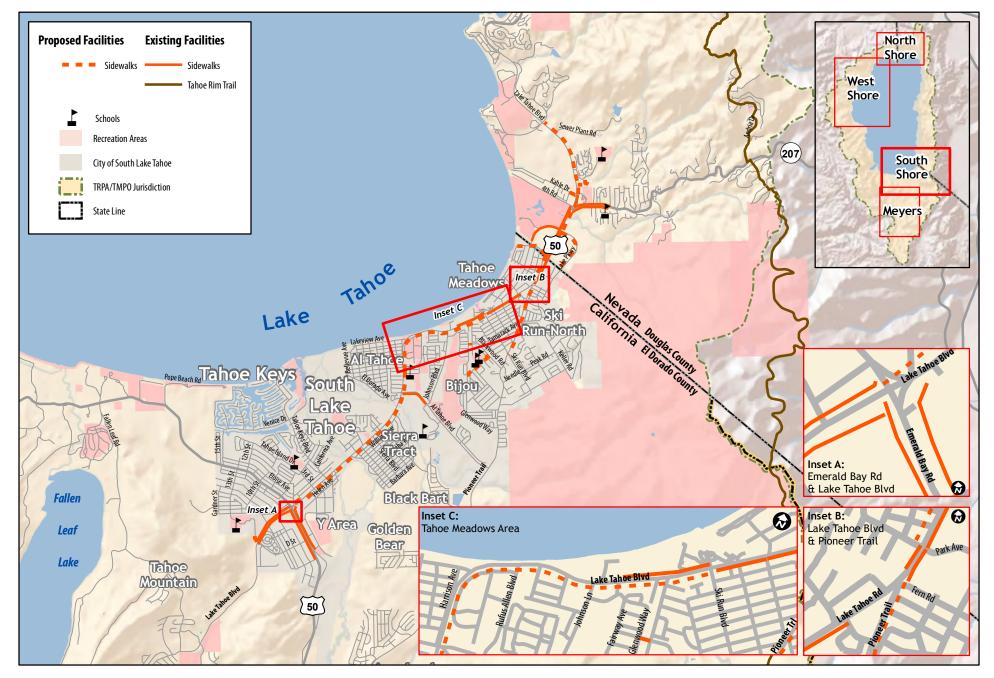


South Shore: Existing and Proposed Bikeways Only

Tahoe Regional Planning Agency TRPA Bicycle and Pedestrian Plan

0 0.5 1 Miles



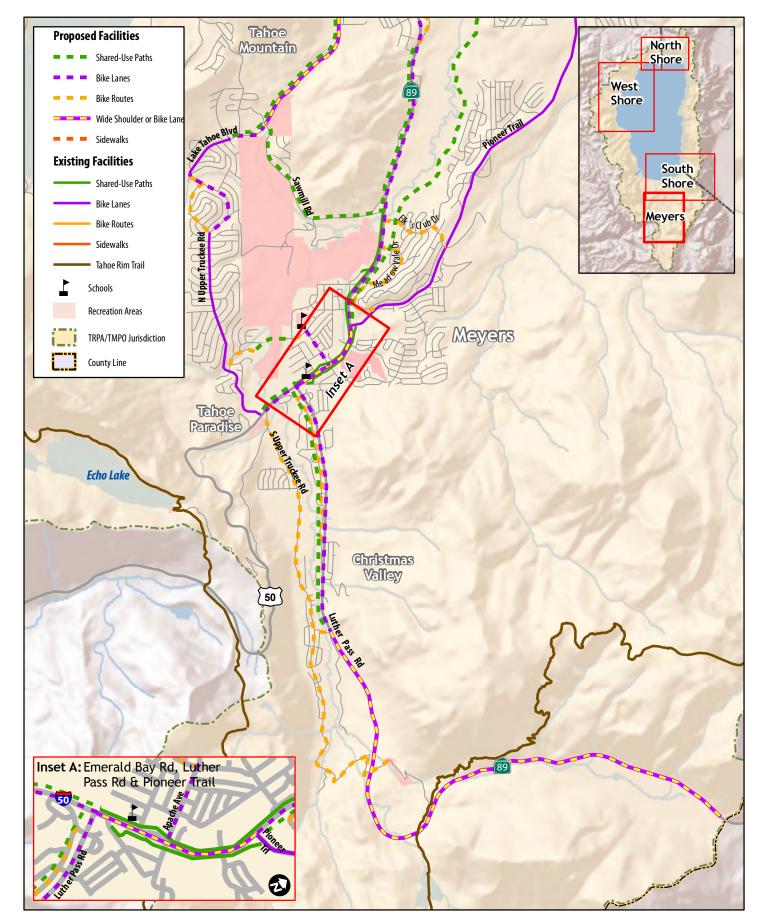


South Shore: Existing and Proposed Sidewalks Only

Tahoe Regional Planning Agency TRPA Bicycle and Pedestrian Plan

0 0.5 1 Miles





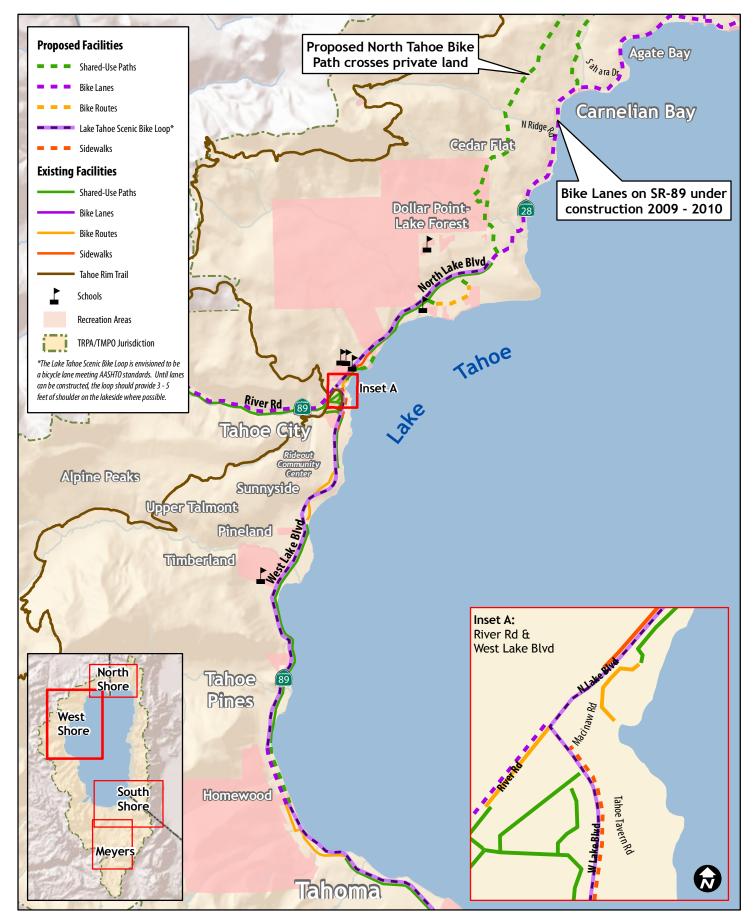
Meyers Area: Existing and Proposed Bicycle and Pedestrian Network

Tahoe Regional Planning Agency TRPA Bicycle and Pedestrian Plan





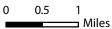




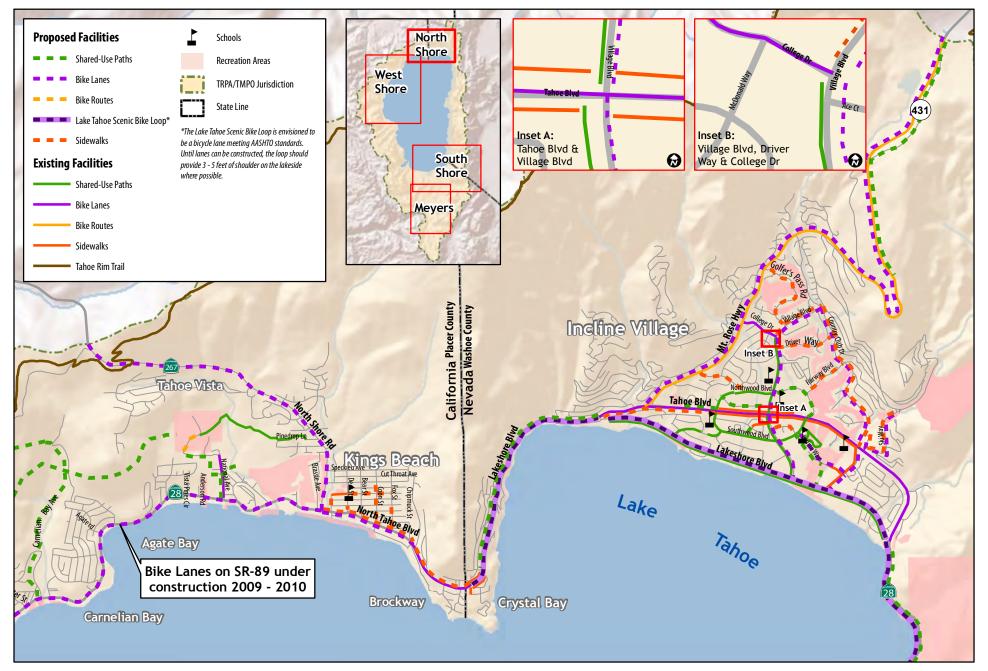
West Shore: Existing and Proposed Bicycle and Pedestrian Facilities

Tahoe Regional Planning Agency TRPA Bicycle and Pedestrian Plan









North Shore: Existing and Proposed Bicycle and Pedestrian Network

Tahoe Regional Planning Agency TRPA Bicycle and Pedestrian Plan





