

I. INTRODUCTION

The Lake Tahoe Regional Bicycle and Pedestrian Master Plan (BPMP) was prepared by Fehr & Peers Associates, Inc. with support from Parsons Brinckerhoff Quade & Douglas, Inc. and the Tahoe Regional Planning Agency (TRPA) to provide a blueprint for developing a regional bicycle and pedestrian system that includes both on-street and off-street facilities as well as support facilities and programs throughout the Lake Tahoe region. This report contains background information about how the plan was developed, and focuses on the development of the proposed bicycle and pedestrian system with specific consideration given to advancing individual facilities from the planning stage to construction. Please note that all alignments identified in this plan are conceptual, with only the beginning and the end of the proposed trail being project specific.



STUDY AREA

The study area includes the entire Lake Tahoe Basin, which is located on the California-Nevada border between the Sierra Nevada Crest and the Carson Range (refer to Figure 1). Approximately two-thirds of the Basin is in California and one-third in Nevada. In total, the Basin contains 501 square miles with the Lake representing almost 200 square miles. The Basin includes the incorporated area of the City of South Lake Tahoe, California, portions of El Dorado and Placer Counties, California, portions of Douglas and Washoe Counties, Nevada, and the rural area of Carson City, Nevada. Most of the area can be characterized as having rolling to mountainous terrain with limited areas of level terrain along the north and south shores of the Lake. Population and employment centers are clustered around the urbanized communities highlighted on Figure 1. Other areas of significance in the Lake Tahoe Region include the Carson Valley, NV (25 miles), Reno, NV (37 miles), and Truckee, CA (15 miles).

PLANNING AND DESIGN STANDARDS

Bicycle planning and design in the California portion of the Lake Tahoe Basin typically rely on the guidelines and design

standards established by the California Department of Transportation (Caltrans) as documented in Chapter 1000: *Bicycle Planning and Design* contained in the Highway Design Manual, Fifth Edition, California Department of Transportation (Caltrans), July 1, 1995¹. This chapter of the design manual was the basis for standards of the American Association of State Highway and Transportation Officials (AASHTO) and the Federal Highway Administration (FHWA), which are used by the State of Nevada and the Nevada portion of the Lake Tahoe Basin. AASHTO and Chapter 1000 identify specific design standards for various conditions and the relationship of bikeways to roadways. The Caltrans Chapter 1000 and AASHTO standards provide for three distinct types of bicycle facilities as generally described below and shown in Figure 2. The Class I, Class II, and Class III classifications are unique to the Caltrans, while state of Nevada classifies bicycle facilities as Shared Use Path, Bicycle Lane, and Bicycle Route. Since the study area encompasses both the State of California and the State of Nevada, this document will refer to facilities in the following manner to appease both state Departments of Transportation guidelines:

- Class I Bikeway / Shared Use Path - Provides a completely separated right of way for the exclusive use of bicycles and pedestrians with cross-flow minimized.
- Class II Bikeway /Bike Lane - Provides a striped lane for one-way bike travel on a street or highway.
- Class III Bikeway /Bike Route - Provides for shared use with bicycle or motor vehicle traffic on streets and highways.



¹ Available at <http://www.dot.ca.gov/hq/oppd/hdm/pdf/chp1000.pdf>, 1.29.03

Other important policy documents that affect bicycle and pedestrian planning and design in the Lake Tahoe Basin include:

- *California Streets and Highways Code*
- California and Nevada Vehicle Codes
- California Bicycle Transportation Act (1994)
- *Nevada Revised Statutes* Chapters 408, 484, and 486
- *Tahoe Regional Planning Agency Regional Plan*
- *Tahoe Regional Planning Compact*
- *Manual on Uniform Traffic Control Devices (MUTCD) Millennium Edition, December 2000*
- *American Association of State Highway and Transportation Officials, 1999*

The *Tahoe Regional Planning 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*

The California Bicycle Transportation Act (1994) amends the Streets and Highways Code (Chapter 517) and requires Caltrans to take certain actions that further promote bicycle programs. A key component of this act is the requirement for cities and counties to complete bicycle master plans containing the following eleven elements as a condition of applying for state funding through the Bicycle Lane Account:

1. Estimated number of existing and future bicycle commuters;
2. Land use and population density;
3. Existing and proposed bikeways;
4. Existing and proposed bicycle parking facilities;
5. Existing and proposed multi-modal connections;
6. Existing and proposed facilities for changing and storing clothes and equipment;

7. Bicycle safety and education programs;
8. Citizen and community participation;
9. Consistency with transportation, air quality, and energy plans;
10. Project descriptions and priority listings; and
11. Past expenditures and future financial needs.

In addition, the Bicycle Nevada Guidelines for an Acceptable Plan outline elements necessary for an acceptable plan for the Nevada portion of the Lake Tahoe Basin. The Guidelines are as follows:

1. The Plan should contain goals, objectives, and strategies
2. A map depicting the major generators and attractors in the community and their relationship to bicycle travel and the plan layout
3. A map reflecting any existing and proposed bicycle facilities, bicycle lanes, bicycle paths, and multi-use trails considered part of the non-motorized transportation system
4. Information for each of the proposed bicycle facilities including road widths, daily traffic volumes, and posted speed limits
5. A listing of the types of environments and programs that promote and initiate the area's transportation improvements and a detailed maintenance policy
6. Approval by the local government and, as appropriate, by the Metropolitan Planning Organization (MPO)
7. Proof of public involvement in the development and approval of the bicycle plan

This plan addresses each of the components in the remaining sections of this document, which are outlined below.

CONSISTENCY WITH OTHER PLANS

Preparation of this plan included a review of the following plans:

- *State of Nevada Bicycle Plan 2003*
- *Federal Transportation Plan/Regional Transportation Plan (FTP/RTP) for the Lake Tahoe Region, August 2000*
- *Caltrans State Route 89 Cascade to Rubicon Bay Bikeway Study, February 2003*
- *Environmental Improvement Program for the Lake Tahoe Region, February 1998*
- *Regional Transportation Plan - Air Quality Plan for the Lake Tahoe Region, December 1994*
- *Regional Plan for the Lake Tahoe Region, Code of Ordinances Rules of Procedure, May 1987*
- *Regional Plan for the Lake Tahoe Region, Goals and Policies, September 1986*
- *Placer County Regional Bicycle Plan, August 2001*
- *Stateline/Ski Run Community Plan, February 1994*
- *Tahoe City Community Plan, February 1994*
- *Bijou/Al Tahoe Community Plan, October 1995*
- *South Stateline Community Plan, November 1995*
- *Kingsbury Community Plan, November 1993*
- *Round Hill Community Plan, August 1993*
- *Meyers Community Plan, October 1993*
- *Round Hill Community Plan, November 1993*
- *Stateline Community Plan, November 1993*
- *North Lake Tahoe Tourism Development Plan, April 1995*
- *North Stateline Community Plan, April 1996*
- *Incline Village Commercial Community Plan, April 1996*
- *Ponderosa Ranch Community Plan, April 1996*
- *Kings Beach Community Plan, April, 1996*
- *Tahoe Vista Community Plan, April, 1996*
- *Incline Village Tourist Community Plan, April 1996*

Goals and policies from these documents are incorporated into this plan. In addition, specific improvement projects contained in the 2000 *Regional Transportation Plan* (FTP/RTP), 2001 TRPA Environmental Improvement Program, and the 1992 TRPA *Regional Transportation Plan/Air Quality Plan* are reflected in the proposed system of bikeways and pedestrian facilities.

COMMUNITY PARTICIPATION

Community participation was an important component of this plan update in obtaining input on existing bicycling and walking conditions, potential roadways for improvement to accommodate bicycling and walking, and the type of support facilities or programs needed to improve bicycling and walking in the region. The community participation effort included two public written comment periods, four public workshops, and presentations to Tahoe Transportation District Board, the Tahoe Transportation Technical Advisory Committee, the Truckee/North Tahoe Transportation Management Association, the South Shore Transportation Management Association, and the Tahoe Regional Planning Agency/Tahoe Metropolitan Planning Organization Boards. Additional review was also conducted by the Nevada Governor's Bicycle Advisory Board as well as the Tahoe Region Advocates for Cycling, a local bicycle advocacy group. In addition to the above-mentioned meetings, staff also made the document available on the TRPA/TMPO website for during the public comment period.

The first two public meetings were held on June 11 and June 13, 2001 in the City of South Lake Tahoe, CA and Kings Beach, CA, respectively. During this initial review period the plan only consisted of a bicycle element. After further consideration, it was determined that the plan should address both bicycle and pedestrian facilities. As the new plan was updated and expanded, two additional workshops were held on July 9 and July 10, 2003, in Kings Beach, CA and Stateline, NV, respectively.

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Key public comments considered in the development of the BPMP are summarized below.

JUNE 11, 2001 – SOUTH LAKE TAHOE SENIOR CENTER:

- Existing bike trail at Thomas Reagan Beach terminates at curve. The “Missing Link” onto Harrison Avenue needs to be provided.
- The BPMP should explore year-round use of bike paths as a tourist attraction. This could include snowmobile use in the winter.
- More Class I/Shared Use Paths are needed. If new bike facilities are built they should be Class I facilities. They are safer and promote more use.
- A high bicycle accident location seems to be near the Safeway in South Lake Tahoe. Safety in this area needs to be improved for bicyclists.
- Adequate parking areas need to be provided around the Region for access to bike trails.
- All forms of transit in the Basin must be bike friendly and include bike racks.
- The BPMP must include the current planning working being done by Tahoe Regional Advocates for Cycling (TRAC).
- Carson City has some bike planning language in a recent Open Space Initiative that would include the Carson City rural area in the Region. This should be included in the BPMP.

- Douglas County Parks & Recreation Commission is planning a project along Elks Point Road to Nevada Beach. This should be included in the BPMP.
- NDOT has some bike projects included in the Incline Village area in their Annual Construction Calendar. This should be included in the BMP.
- Development of the Measure S program in the City of South Lake Tahoe included a survey in which bike paths were ranked highly. This information may be helpful in helping prioritize bike path projects.
- Constraints to a Class I/Shared Use Path exist along SR 89 in the Emerald Bay area, SR 28 in the Carson City rural area, and along SR 28 between Incline Village and Kings Beach.
- The BPMP should be an agenda item at the next TRAC meeting (2nd Tuesday of each month). Bike trail user groups, like TRAC, should be consulted with, through formal meetings, as part of the process.
- The Tahoe Coalition of Recreation Providers (TCORP) has an existing survey of bike trail users. We should talk with the California-Tahoe Conservancy (CTC) about getting a copy. This information should be included in the BPMP.
- The Tahoe City Public Utility District (PUD) also has conducted a survey of bike trail users. This should be included in the BPMP.
- Put the BPMP process on fact sheets and distribute to interested parties.
- Class I/Shared Use Paths along Highway 50 are more desirable compared to Class II or III.

JUNE 13, 2001 – NORTH TAHOE CONFERENCE CENTER:

- Class I/Shared Use Paths along SR 89 in El Dorado County are preferred where you can physically construct a Class I facility. No Class II or III facilities should be constructed in this area. Do not let politics dictate the location of Class I facilities.
- Placer County recently completed a BPMP and includes planning in the Tahoe Region. The BPMP TRPA is preparing should be consistent with the Placer County planning efforts.
- NDOT should place bike route signage along SR 28 in Nevada. NDOT is also in the process of updating the Nevada Statewide Bike Plan. The BPMP TRPA is preparing should be consistent with the NDOT planning efforts.
- The existing bike trails in the North Shore are better than those in the South Shore. Design standards should include bike paths for all new roads in the Region.
- Bike trails need to be usable for commuters and locals, not just recreational users.
- Bike paths could be included with water quality projects. Please investigate if this is possible.

JULY 09, 2003 – NORTH TAHOE CONFERENCE CENTER:

No comments were received at this public workshop.

JULY 10, 2003 – TRPA OFFICES, STATELINE, NV:

Consider referencing the most recent University of California at Berkeley study regarding crosswalk data

Please include legend on Figure 3

Please include American River Trail from Placerville to Tahoe Basin via US HWY 50 and/or Hawley Grade.

Please add the following projects: Class 2/Bike Lane on Mount Rose Highway and Class 2/Bike Lane on Hwy 89 from Squaw Valley to Truckee.

Increase the size of the existing and proposed project list.

Make US Hwy 50 projects more of a priority due to cluster of accidents illustrated in accident data.

Please include newly passed Nevada Legislation (Question 1) in potential funding sources.

List Zephyr Cove to Stateline, NV Class 2/Bike Lane a high priority.

ORGANIZATION OF THE PLAN

The remainder of this document includes the following sections:

Section II. Benchmarks

Section III. Bicycles

Section IV. Pedestrians

Section V. Existing Conditions

Section VI. Analysis of Demand

Section VII. Proposed System

Section VIII. Cost and Funding Analysis

Section IX. Implementation

The information presented for each of these components is the result of the data collection efforts of TRPA staff and the consultant. The components have been organized to provide the reader with a logical discussion of how this plan was prepared, which began with the development of bicycle and pedestrian goals and policies to direct the planning effort.