

## **IX. IMPLEMENTATION**

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This section addresses a number of issues related to implementation of the proposed system. It includes a discussion of phasing and priorities for implementing specific routes and also contains typical design standards for each bikeway classification.

### **BICYCLE SYSTEM PHASING**

The specific implementation of any given route, with all other things considered equal, should be based on the following criteria:

- Where an opportunity, such as a road widening or re-paving, makes implementation favorable;
- Where an eminent loss of an opportunity, such as the sale of a railroad right-of-way, makes implementation necessary;
- Where resolution of a major obstacle, such as access to flood channel right-of-way, makes implementation necessary; and
- Where the segment is not disconnected or otherwise poorly accessible from the rest of the system.

In many situations, the most needed bicycle improvement may not be implemented first. In these cases, external factors such as new road construction create opportunities to provide new bicycle and pedestrian facilities without consideration for need. Therefore, the proposed system does not include a ranking of specific routes, but does include the following list of high priority routes.

### **PRIORITY ROUTES**

Priority routes were selected based on expected use, type of route, connectivity, and potential improvements to safety. The table on the next page lists the routes with the highest priority for implementation (not in priority order). The facilities recommended in Appendix B are within the jurisdiction of the Tahoe Metropolitan Planning Organization (TMPO). Since the TMPO jurisdiction consist of four counties, two states, one incorporated city, federal land, and a rural portion of Carson City, the responsible implementing agency will vary. The responsible implementing entities for the bicycle and pedestrian facilities are the City of South Lake Tahoe, El Dorado County, Placer County, Caltrans, NDOT, Douglas County, Carson City, Washoe County, California State Parks, Nevada Division of State Parks, United States Forest Service, Tahoe City Public Utility District, North Tahoe Public Utility District, Tahoe Transportation District, and General Improvement Districts.

Table 10: High-Priority Bicycle Improvements

Jurisdiction	Facility Name	From	To	Class/Trail Type
CARSON CITY	NSR 28	WASHOE COUNTY	CHIMNEY BEACH	C-III/Bike Route
CITY OF SOUTH LAKE TAHOE	EL DORADO BEACH TRL	SKI RUN BLVD	EL DORADO BEACH TRL.	C-I/Shared Use Patf
CITY OF SOUTH LAKE TAHOE	AL TAHOE TRL.	LAKE TAHOE BLVD/US HWY 50	AL TAHOE TRL	C-I/Shared Use Patf
CITY OF SOUTH LAKE TAHOE	TAHOE VALLEY ELEMENTARY	WYOMING	TAHOE VALLEY ELEMENTARY	C-I/Shared Use Patf
CITY OF SOUTH LAKE TAHOE	LINEAR PARK	LINEAR PARK/EXISTING CLASS 1	STATELINE	C-I/Shared Use Patf
CITY OF SOUTH LAKE TAHOE	LAKE TAHOE BLVD/US HWY 50	LAKEVIEW AVE	LOS ANGELES AVE	C-I/Shared Use Patf
CITY OF SOUTH LAKE TAHOE	LAKE TAHOE UNIF SCH DIST	CAMPGROUND BY THE LAKE TRL.	AL TAHOE TRL	C-I/Shared Use Patf
CITY OF SOUTH LAKE TAHOE	SKI RUN BLVD	LAKE TAHOE BLVD/US HWY 50	PIONEER TRL	C-I/Shared Use Patf
CITY OF SOUTH LAKE TAHOE	LINEAR PARK	LINEAR PARK/EXISTING CLASS 1	STATELINE	C-II/Bike Lane
CITY OF SOUTH LAKE TAHOE	LAKE TAHOE BLVD	STATELINE	US HWY 50/CSR 89	C-II/Bike Lane
DOUGLAS COUNTY	LOOP RD	US HWY 50	EL DORADO COUNTY	C-I/Shared Use Patf
DOUGLAS COUNTY	US HWY 50	ZEPHYR COVE	ROUNDHILL/ELKS POINT TRL	C-I/Shared Use Patf
DOUGLAS COUNTY	US HWY 50	CAVE ROCK	ZEPHYR COVE	C-I/Shared Use Patf
DOUGLAS COUNTY	STATELINE	NSR 207	EL DORADO COUNTY	C-I/Shared Use Patf
DOUGLAS COUNTY	US HWY 50	ELKS POINT TRL	LAKE PKY	C-I/Shared Use Patf
DOUGLAS COUNTY	US HWY 50	NSR 28/US HWY 50	GLENBROOK	C-I/Shared Use Patf
DOUGLAS COUNTY	LOOP RD	US HWY 50	EL DORADO COUNTY	C-II/Bike Lane
DOUGLAS COUNTY	NSR 207/KINGSBURY GRADE	BASIN BNDY/SPOONER SUMMIT	US HWY 50	C-II/Bike Lane
DOUGLAS COUNTY	US HWY 50	CAVE ROCK	ELKS POINT RD	C-II/Bike Lane
DOUGLAS COUNTY	US HWY 50	USHWY 50/NSR 28	CAVE ROCK	C-II/Bike Lane
EL DORADO COUNTY	SAWMILL RD	LAKE TAHOE BLVD	EMERALD BAY RD/US HWY 50	C-I/Shared Use Patf
EL DORADO COUNTY	U.S.F.S TRL.	SPRING CREEK	CASCADE	C-I/Shared Use Patf
EL DORADO COUNTY	WEST SHORE TRL	EMERALD BAY (NORTH END)	D.L. BLISS STATE PARK	C-I/Shared Use Patf
EL DORADO COUNTY	WEST SHORE TRL	D.L. BLISS STATE PARK	MEEKS BAY	C-I/Shared Use Patf
EL DORADO COUNTY	WEST SHORE TRL	MEEKS BAY	SUGAR PINE POINT S. PARK	C-I/Shared Use Patf
EL DORADO COUNTY	US HWY 50	SAWMILL RD	US HWY 50/CSR 89-SOUTH WYE	C-I/Shared Use Patf
EL DORADO COUNTY	US HWY 50	MEYERS TRL	SAWMILL RD	C-I/Shared Use Patf

<b>Jurisdiction</b>	<b>Facility Name</b>	<b>From</b>	<b>To</b>	<b>Class/Trail Type</b>
EL DORADO COUNTY	MEYERS TRL EXTENSION	EXISTING CLASS I	N. UPPER TRUCKEE RD	C-I/Shared Use Path
EL DORADO COUNTY	OLD HWY 50 ROW	DOUGLAS COUNTY	CSR 89-MEYERS	C-I/Shared Use Path
EL DORADO COUNTY	US HWY 50	MEYERS TRL	SAWMILL RD	C-I/Shared Use Path
EL DORADO COUNTY	CSR 89	EMERALD BAY	U.S.F.S RD 14	C-II/Bike Lane
EL DORADO COUNTY	PIONEER TRL	SHEPHERDS RD	LAKE TAHOE BLVD/US HWY 50	C-II/Bike Lane
EL DORADO COUNTY	SAWMILL RD	LAKE TAHOE BLVD	EMERALD BAY RD/US HWY 50	C-II/Bike Lane
EL DORADO COUNTY	UPPER TRUCKEE RD	GRIZZLY MOUNTAIN DR	LAKE TAHOE BLVD	C-II/Bike Lane
EL DORADO COUNTY	CSR 89	CASCADE	N. EMERALD BAY	C-III/Bike Route
ELDORADO/PLACER COUNTY	WEST SHORE TRL IMPROVEMENTS	CSR 28/89	EMERALD BAY	C-I/Shared Use Path
PLACER COUNTY	SEQUOIA TRL	FIR AVE	SEQUOIA AVE	C-I/Shared Use Path
PLACER COUNTY	KINGS BEACH TRL	CSR 267	CHIPMUNK ST	C-I/Shared Use Path
PLACER COUNTY	DOLLAR HILL TRL	DOLLAR HILL	N. TAHOE REGIONAL PARK	C-I/Shared Use Path
PLACER COUNTY	HOMEWOOD	TAHOE SKI BOWL WAY	CHERRY ST	C-I/Shared Use Path
PLACER COUNTY	LAKESIDE TRL	BURTON CREEK ST PARK	CSR 89/FANNY BRIDGE	C-I/Shared Use Path
PLACER COUNTY	NATIONAL AVE.	N TAHOE REG PARK	CSR 28	C-I/Shared Use Path
PLACER COUNTY	BROCKWAY SUMMIT	KINGS BEACH / CSR 28	BROCKWAY SUMMIT	C-II/Bike Lane
PLACER COUNTY	KINGS BEACH TRL	CSR 267	CHIPMUNK ST	C-II/Bike Lane
PLACER COUNTY	CSR 28	DOLLAR HILL	NORTH STATELINE	C-II/Bike Lane
WASHOE COUNTY	LK TAHOE-NEVADA ST PK	INCLINE VILLAGE	SAND HARBOR	P-I
WASHOE COUNTY	COLLEGE DR	MT ROSE HWY	VILLAGE BLVD	C-II/Bike Lane
WASHOE COUNTY	COUNTRY CLUB DR	VILLAGE BLVD	NSR 28	C-II/Bike Lane
WASHOE COUNTY	LK TAHOE-NEVADA ST PK	INCLINE VILLAGE	SAND HARBOR	C-II/Bike Lane
WASHOE COUNTY	NSR 28	SAND HARBOR	CHIMNEY BEACH	C-II/Bike Lane
WASHOE COUNTY	NSR 28	SAND HARBOR	CHIMNEY BEACH	C-III/Bike Route

## **BICYCLE DESIGN STANDARDS**

The Caltrans "Highway Design Manual", AASHTO "Guide for the Development of Bicycle Facilities" and the Manual on Uniform Traffic Control Devices, Millennium Edition, December 2000 provide extensive detail on the design for bikeways. These design standards provide a good framework for future implementation, but may not always be feasible given the terrain and environmental constraints of the region. Bikeway design and planning standards are continually changing and expanding. For example, there is pressure from the bicycling public to allow bike lanes that are narrower than current standards to be installed on existing streets. However, local jurisdictions must be protected from liability concerns so most agencies adopt the Caltrans or AASHTO standards as a minimum. Examples of typical standard design treatments for Class I/Shared Use Path, Class II/Bike Lane, and Class III/Bike Routes are provided in Figures 10 through 12. This information is provided to assist local agency staff in the design and construction of future bicycle facilities. With these standards and other information contained in this BPMP, the region is prepared to take the next step in advancing bicycle and pedestrian projects from the planning stage to the design and construction phase.

## **SIGNAGE AND STRIPING OF PATHS AND LANES**

**Class I / Shared Use Path**-This type of facility will require the proper use of signage and striping that meets Caltrans, NDOT, and/or MUTCD standards (depending on jurisdiction). Striping the center of the path should be considered to separate direction of travel and reduce user conflicts. Some paths may contain obstacles, such as narrow bridges, and warning should be provided in areas such as these.

**Class II / Bike Lane** - These lanes should be separated from traffic by a 6'' solid white line, changing to a broken line before an intersection. Bike lanes should be marked with the appropriate signage and pavement markings. In the Region, "Bike Route" signs are currently used on many Class II/Bike Lanes. This signage should be changed to "Bike Lane" signs that meet Caltrans, NDOT, and the MUTCD standards (depending on jurisdiction). Signage should also be installed where the lanes begin and end where they currently do not exist.

**Class III / Bike Route** - These routes should also be designated with a specific bike route sign that meets Caltrans, NDOT, and MUTCD standards (depending on jurisdiction). It may be necessary, with these facilities, to show the direction of the bike route at intersections. It should be

designated, as well, when bike routes begin and end to increase user friendliness.

### PEDESTRIAN SYSTEM PHASING

The Plan also contains recommended pedestrian improvement projects. The table below outlines the length and cost of these improvements. All of the pedestrian improvements are considered high priority projects.

**Table 11: Pedestrian System Lengths and Costs**

<b>Municipality</b>	<b>Length<sup>14</sup></b>	<b>Cost</b>
Douglas County	3.25 (5.23)	\$14,440,000
City of South Lake Tahoe	5.69 (9.15)	\$34,455,500
Placer County	1.96 (3.16)	\$ 4,510,000
Washoe County	0.51(0.82)	\$ 425,000
System Total	10.09 (16.24)	\$ 53,830,500

<sup>14</sup> Miles (Kilometers)

The segment names, origins, and destinations are included in the table in Appendix B.