

2.1 Study Area

The study area of the El Dorado County Bicycle Transportation Plan is the same as the planning area of the Regional Transportation Planning Agency (RTPA) of El Dorado County Transportation Commission (EDCTC). EDCTC was designated as the RTPA for El Dorado County on July 23, 1975. This planning and programming authority does not include that portion of the County within the Tahoe Regional Planning Agency (TRPA) boundaries. TRPA is the RTPA for the Tahoe Basin area.

As the RTPA for El Dorado County, EDCTC has prepared the Bicycle Transportation Plan for El Dorado County Department of Transportation. The plan will maintain consistency with the TRPA's Lake Tahoe Regional Bicycle and Pedestrian Plan. The TRPA programs and allocates funds for transportation and bikeway projects in the Tahoe Basin. The transportation projects in the TRPA jurisdiction and in the City of South Lake Tahoe (El Dorado County) are developed by El Dorado County Department of Transportation, but paid for by TRPA. For this reason, the El Dorado County Bicycle Transportation Plan will emphasize projects in the West Slope of El Dorado County, and reference the Lake Tahoe Regional Bicycle and Pedestrian Plan for projects within the Tahoe Basin.

2.2 Setting

El Dorado County is located in the foothills and mountains of the Sierra Nevada, extending eastward from the eastern portion of California's Central Valley. The western portion of the county is characterized by rolling foothills, increasing in elevation to the east. The rolling hills provide a bicyclist with beautiful landscapes and challenging terrain. Many of the regional routes have gradual slopes that are navigated with relative ease by an intermediate cyclist. The foothills and mountains of El Dorado County make it a popular destination for recreational cyclists. In total, the county contains 1,805 square miles ranging in elevation from 200 feet above sea level to 10,881 feet above sea level at the highest mountain peak.

El Dorado County is bordered by Placer County to the north, Amador County to the south, Sacramento County to the west and the State of Nevada to the east. A portion of Lake Tahoe is located in El Dorado County.

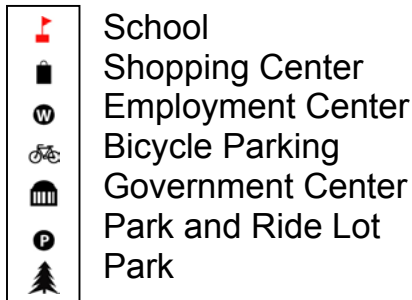
The weather in El Dorado County varies greatly depending on the elevation - from warm, dry summers and mild winters in El Dorado Hills and Placerville to cool summers and snowy winters in South Lake Tahoe. Typically, temperatures in the lower elevations are higher in summer and winter, while mountain temperatures are lower. The rainy season in occurs between November and April, but excessive rainfall and damaging winter storms are rare.

2.3 Land Use Discussion

The City of Placerville, the county seat, is the only incorporated city in the western slope of El Dorado County. The primary population centers in the western slope are the communities of El Dorado Hills, Cameron Park and the City of Placerville. Numerous other unincorporated communities dot El Dorado County. These include Shingle Springs, El Dorado, Diamond Springs, Latrobe, Fairplay, Somerset, Grizzly Flat, Camino, Pollock Pines, Coloma/Lotus, Garden Valley, Georgetown, Rescue, Mt. Akum, Pleasant Valley, Kyburz, Strawberry, and Cool.

Some of the small communities of El Dorado County provide unique opportunities for increased local bicycle commute trips.

As a bicycle transportation plan, this document complies with Caltrans Streets and Highways Code, section 891, sections A-K. One of the requirements is to identify land uses on maps in order to demonstrate transportation connections on proposed bike routes. Each map has a set of icons to indicate areas of land use. Land uses indicated on the maps include schools, shopping centers, employment centers, bicycle parking facilities, government centers, park and ride lots and parks as follows:



A review of the population and land use in El Dorado County is a necessary first step in developing accurate bicycle commuter projections. In 2003, El Dorado was the tenth fastest growing county in California, with a 6% annual growth rate. Future growth and changes in land use will affect both the bikeway system and the number of potential bicycle commuters. Many new bikeway projects will be constructed as part of new developments and road construction. Construction of new employment centers will change the travel times and distances to work, making bicycling a more attractive commute mode. It is recognized that El Dorado County has a jobs-housing imbalance, evidenced by the high average travel time to work (28 minutes in 2000).

El Dorado County Population & Travel Time to Work; U.S. Census					
	1980	1990	2000	Total Change 20 years	Percent Change 20 years
Population	85,812	125,995	156,299	70,487	82%
Mean travel time to work	21 min	24 min	28 min	7 min	33%

The following features describe the land use in the west slope of El Dorado County:

- Major agricultural regions, including the South County Wine Region and the orchards of the Camino area’s “Apple Hill”
- Highway 50 is the major transportation corridor in El Dorado County
- The City of Placerville, with a population of 9,630 in 2000
- Consumnes River College in Diamond Springs, near Placerville
- Residential ‘suburbs’ of Cameron Park and El Dorado Hills
- The El Dorado Hills Business Park

Areas in the county where the major development will occur include El Dorado Hills and Cameron Park. El Dorado Hills was recently added as part of the Sacramento Metropolitan

Area, and is rapidly conjoining with the City of Folsom. As shown in the table below, El Dorado County is poised for explosive growth in the coming years.

El Dorado County Growth Projections: Developed by SACOG							
	<u>2000</u>	<u>2005</u>	<u>2010</u>	<u>2015</u>	<u>2020</u>	<u>2025</u>	<u>Historical 1990</u>
Total El Dorado County	124,910	140,395	158,085	174,950	186,250	194,415	94,674
City of Placerville	9,630	10,580	11,710	12,630	13,680	14,930	8,225
Unincorporated El Dorado County	115,280	129,815	146,375	162,320	172,570	179,485	86,449

2.4 Bicycle Commuter Projections

A common term used in analyzing choices people make in transportation is “mode split.” Mode split refers to the transportation option a person chooses, be it taking a bus, walking, carpooling, driving or bicycling. Mode split is often used to evaluate transportation mode choices, and the trend in the Sacramento region today is to create a more evenly distributed mode split. The census data in the table below shows a .3% bicycle mode split for El Dorado County. Bicycle commute habits are difficult to measure accurately without extensive data collection efforts. The Census records only “Means of Transportation to Work” and thus, home-to-school, trips to the store, trips to a friend’s house, or other transportation related trips remain unaccounted for. Additionally the Census asks specifically for the “primary mode” of transportation to work, so those who bicycle less than 50% of the time, or combine the bicycle with other commute modes are likely unaccounted for.

U.S. Census Data: Means of Transportation to Work for Workers age 16 and over; Census 2000 – El Dorado County (includes the Lake Tahoe area)		
Transportation Mode	Number of Persons	Percent of Work Trips or Mode Split
Drove alone	54,656	76%
Carpooled	9,599	13%
Public Transportation	1,294	1.7%
Motorcycle	123	.2%
Bicycle	244	.3%
Walked	1,570	2.2%
Other means	418	.6%
Worked at home	4,215	6%
TOTAL	72,119	100%

Many recent studies document the potential of the bicycle as a transportation mode. A Harris Poll conducted in 1991 found that nearly half (46%) of American adults age 18 or above had bicycled in the past year. Of these;

- 46% stated they would sometimes commute by bicycle if safe bicycle lanes were available
- 53% would if they had safe, separate, designated paths on which to ride

- 45% would if their workplace had showers, lockers, and secure bicycle storage; and
- 47% would if their employer offered financial or other incentives

Source: *National Bicycling and Walking Study, U.S. Dept. Of Transportation*

Many factors influence the decision to bicycle, and studies show that the primary factor is lack of safe facilities. Some retrofitting would be required, but El Dorado County has the unique opportunity to integrate the bicycle as a part of the transportation system today as new development occurs. The 1990 Nationwide Personal Transportation Survey (NPTS) determined that two out of five travel trips are two miles or less, and nearly half are three miles or less. The small communities of El Dorado County provide unique opportunities for increased short, local bicycle transportation trips. With improved bicycle facilities, the county could increase the mode split for bicycles and become a “bicycle friendly community.”

Source: *National Bicycling and Walking Study, U.S. Dept. Of Transportation*

2.5 Types of Bicyclists

Bicyclists can be divided into three general categories:

EXPERIENCED: These are cyclists who can operate under most traffic conditions. They comprise the majority of the users on collector and arterial streets and usually prefer direct access to destinations. The existing street and highway system provides them the opportunity to operate at maximum speed with minimum delays. Experienced bicyclists negotiate streets in much the same manner as motor vehicles, merging across traffic lanes to make left turns and avoiding bike lanes that contain gravel and glass. The experienced bicyclist will benefit from and prefers wide curb lanes, bike lanes and loop detectors at signals.

CASUAL: These are new adult and teenage riders who are less confident of their ability to operate in traffic without special provisions for bicycles. The casual rider is uneasy about riding in traffic and unsure about lane positioning when making turns. In some cases, casual riders may perceive side streets (or sidewalks) as being safer alternatives than major through routes, when in fact they may be less safe. Casual cyclists ride shorter distances than the experienced rider and are unfamiliar with the rules of the road.

Some casual riders will develop greater skills and progress to the advanced level, but there will always be ‘casual cyclists.’ Casual cyclists prefer: comfortable access to destinations - preferably by a direct route, using either low-speed, low traffic volume streets or designated bike facilities, and well-defined separation of bicycles and motor vehicles on arterial and collector streets (bike lanes or shoulders) or separated paths or trails.

CHILDREN: These are pre-teen riders whose roadway use is initially monitored by parents. Eventually they are accorded independent access to the transportation system. Children and their parents feel most comfortable in a transportation system with the following attributes: access to key destinations surrounding residential areas including schools, recreation facilities, shopping or other recreational areas; residential streets with low traffic volumes and car speeds; well defined separation of bicycles and motor vehicles on arterial and collector streets; or separated bike paths.

2.6 Bicycle Safety & Education Programs

Bicycle safety and education programs are an important component of any bicycle transportation system. For both existing and potential users, perceptions about safety directly affect the numbers of potential bicyclists in the County. Bicycle education programs and accident data were reviewed as a component of this plan.

2.6.1 Accident Data

The California Department of Health Services, EPIC Branch, has compiled data on bicycle injuries and fatalities in El Dorado County for the time period of 1991-2002. The table below displays a summary of the annual totals of non-fatal hospitalized injuries and fatal injuries to bicyclists throughout the time period. The EPIC Branch data includes details on the person's age when the injuries and fatalities occurred. The age ranges of 5-12 years and 21-44 years accounted for 64 and 84 of the 247 total bicycle injuries and were the highest over the time period. Likewise in fatal injuries, the age ranges of 5-12 and 21-44 were highest with 3 and 2 of the 6 total fatalities during the time period.

El Dorado County Bicycle Injuries, 1991-2002		
Year	Non-Fatal Hospitalized Injuries	Fatal Injuries
1991	14	0
1992	21	1
1993	15	1
1994	23	0
1995	19	2
1996	12	0
1997	30	0
1998	22	0
1999	23	0
2000	27	0
2001	19	1
2002	22	1
TOTAL	247	6

The California Highway Patrol maintains Statewide Integrated Traffic Records System (SWITRS) accident data. The data is contained in the "California Report of Fatal and Injury Motor Vehicle Traffic Collisions." The most recent data available is from 2001, and the El Dorado County portion relating to bicycles and pedestrians is listed below.

El Dorado County Collisions - 2001				
Incorporated Cities and type of Roadway	Collisions			
	Pedestrian Involved		Bicycle Involved	
	Fatal	Injury	Fatal	Injury
City of Placerville	0	2	0	1
South Lake Tahoe	1	11	0	20
Unincorporated State Highways	0	4	0	1
County Roadways	1	10	0	11
County Total	2	27	0	33

2.6.2 Education Programs

School Districts, Police Departments, and the California Highway Patrol have been the primary organizations responsible for improving bicycle safety conditions in California. Despite their efforts, the lack of education for bicyclists, especially younger children, is a leading cause of

accidents. For example, the most common type of reported bicycle accident in California involves a younger person (between eight and 16 years of age) riding on the wrong side of the road during the evening hours. Studies of accident locations around California consistently show the greatest concentration of accidents is directly adjacent to elementary, middle and high schools. In addition, many less-experienced adult bicyclists are unsure how to negotiate intersections and make turns on city streets.

The El Dorado County Sheriff’s Department and the California Highway Patrol are the primary organizations performing bicycle education activities in western El Dorado County. The two organizations frequently work with the American Automobile Association (AAA) or State Farm Insurance groups to conduct bicycle rodeos. The curriculum is provided by the insurance companies.

Summary of Bicycle Education Programs, El Dorado County Western Slope		
Agency	Contact Person	Programs Offered
El Dorado County Sheriff – Placerville Office	Deputy Phil Chovanec – School Resources Officer Deputy Chovanec is a P.O.S.T. (Peace Officers Standard Training) certified bicycle instructor. Phone Number: 530-677-2281 x245	The Sheriff’s Office will conduct safety programs upon request. Generally at Schools, Church’s and Scout events. The 2-hour program includes: <ol style="list-style-type: none"> 1. General knowledge of the bike 2. Mechanical safety 3. Basic laws, age appropriate 4. Actual riding skills event
California Highway Patrol (CHP)	Craig Beckley – Public Affairs and Community Outreach Officer 3031 LoHi Way Placerville 95667-1417 530-622-1110	Conducts Bicycle Rodeos upon request. The CHP generally tries to ensure that at least 1 Bicycle Rodeo is conducted each year. The Bicycle Rodeo has four phases: <ol style="list-style-type: none"> 1. Registration 2. Bike Inspection 3. Safety and Helmets 4. Obstacle Course The CHP also distribute safety information at events such as “Kids Expo” and County Fair.

Special events such as “Bike to Work Day” encourage people to try bicycle commuting and provide bicycle products, information, equipment and educational resources to bicyclists. In 2003, El Dorado County had their first annual Bike to Work Day events in El Dorado Hills and the City of Placerville. The 2003 and 2004 events had nearly 30 participants each, and several reported that they commute by bicycle on a regular basis.

2.6.3 Safety Programs

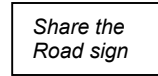
Motorist education on the rights of bicyclists is virtually non-existent. Many motorists mistakenly believe that bicyclists do not have the right to ride in travel lanes and that they should be riding on sidewalks. Many motorists do not understand the concept of ‘sharing the road’ with bicyclists, or why a bicyclist may need to ride in the travel lane if there is no shoulder.



Bicycle Warning Sign

In El Dorado County, there are a few locations where the bicycle warning sign exists. In some cases the bicycle warning sign (W11-1) is used in conjunction with the share the road message sign (W16-1) to be placed on

narrow roads where motorists and bicyclists must share the traffic lane. Some California counties are actively promoting a “Share the Road” campaign and combining the use of signs with other promotional items that increase awareness such as, bumper stickers, special posters, T-shirts and water bottles.



Bicycle Warning Sign Locations in El Dorado County:

- Pleasant Valley Road (Highway 49) near Koki Lane and Union Mine High School
- Latrobe Road near the town of Latrobe and the Amador County Line
- On Highway 49 near the Historic town of Coloma
- On Salmon Falls Road

