

2011 BUTTE COUNTY BICYCLE PLAN



Adopted June 14, 2011

Prepared by:

Butte County Public Works

Butte County Public Works
7 County Center Drive
Oroville CA 95965

Contacts:
Paul Lundbom 530-538-7681, Email: PLundbom@buttecounty.net
Thomas Blixt 530-538-7266, Email: tblixt@buttecounty.net

TABLE OF CONTENTS

EXECUTIVE SUMMARY	6
Introduction.....	6
Regional Setting	6
Climate.....	7
Demographics.....	7
Table 1-1 BCAG Regional Population Projections 2006 – 2030**	9
Table 1-2 BCAG Regional Housing Unit Projections 2006 – 2030**	10
Table 1-3 BCAG Employment Projections 2006 – 2030*	10
Existing Conditions.....	10
Goals and Policies	10
Bikeway Network.....	11
Implementation Plan	11
CHAPTER 1 - INTRODUCTION	12
Purpose and Need	12
Relationship to Other Documents.....	13
Butte County General Plan.....	13
Other Local Bicycle Plans.....	13
Regional Transportation Plan for Butte County.....	13
Caltrans Bicycle Transportation Account Checklist.....	13
Table 1-4 Caltrans Bicycle Transportation Plan Checklist	14
Community Participation Process.....	15
CHAPTER 2 – EVALUTATION OF EXISTING CONDITIONS	16
Background	16
Table 2-1 Car Ownership – Butte County	16
Existing Bicycle Commuting Activity	17
Table 2-2 Means of Transportation	17
Table 2-3 Travel Time to Work	18
Bicycle Projections.....	18
Table 2-4 Estimated Increase In The Number Of Bicycle Commuters Resulting From The Implementation Of The Plan	19
Bicycle and Pedestrian Safety	19
Pedestrian Injuries	19
Table 2-5 Butte County Pedestrian Injuries, 1998 to 2007 Fatal Injuries By Age Group	19
Table 2-6 Butte County Pedestrian Injuries, 1997 to 2006 Non-Fatal Hospitalized By Age Group	20
Factors Contributing to Pedestrian Injuries for Children under the Age of 14.....	20
Helmet Use in Butte County Elementary Schools - Observational Survey.....	20
Bicycle Injuries.....	21
Table 2-7 Butte County Bicycle Injuries, 1997 to 2006 Non-Fatal Hospitalized By Age Group.....	21
Table 2-8 Butte County Bicycle Injuries, 1997 to 2006 Fatal Injuries By Age Group	22

CHAPTER 3 - GOALS, OBJECTIVES & POLICIES	22
GOAL 1: <i>Provide a safe and efficient bikeway system.</i>	22
GOAL 2: <i>Provide continuous and convenient bicycle access to and between major destinations throughout the county.</i>	23
GOAL 3: <i>Promote bicycling as a part of the inter-modal transportation system...</i>	23
GOAL 4: <i>Improve bicycling safety through driver and cyclist education.....</i>	24
GOAL 5: <i>Develop a bikeway system that encourages and facilitates bicycle commuting as an alternate means of transportation.</i>	24
GOAL 6: <i>Develop a bikeway system that encourages and facilitates recreational use.....</i>	24
GOAL 7: <i>Promote fitness and health benefits through increased opportunities for bicycling activity.....</i>	25
GOAL 8: <i>Pursue and obtain maximum funding available for bikeway projects and programs.</i> 25	
CHAPTER 4 – EXISTING & PROPOSED BICYCLE NETWORK	26
Bikeway Classifications.....	27
Class I - Bike Path.....	27
Class II – Bike Lane.....	27
Class III – Bike Route.....	28
2011 Existing Bikeways within Butte County Unincorporated Areas by Classification	29
Table 4-1 Class 1 Bike Paths – Butte County Existing Facilities.....	29
Table 4-2 Class 2 Routes – Butte County Existing Facilities.....	29
2011 Planned Bike Routes within Butte County Unincorporated Areas by Classification.....	29
Table 4-3 Class 1 Routes – Butte County Proposed Facilities.....	29
Table 4-4 Class 2 Routes – Butte County Proposed Facilities.....	30
Table 4-5 Class 3 Routes – Butte County Proposed Facilities.....	31
Multi Use Trails and Routes.....	31
Table 4-6 Planned - Multi Use Routes.....	32
CHAPTER 5 – ATTRACTORS & GENERATORS	33
Major Employment Centers.....	33
Table 5-1 Butte County Largest Employers for 2009.....	33
Schools.....	34
Parks & Recreation Attractors.....	34
Bidwell Park.....	34
Lake Oroville.....	35
CHAPTER 6 – SUPPORT FACILITIES	36
Pedestrian Facilities.....	36
Bicycle Parking.....	36
Table 6-1 Jurisdictional Bicycle Parking Requirements.....	37
Table 6-2 Bicycle Parking Inventory Areas of Regional Significance.....	37
Showers & Locker Facilities.....	39
Bicycle Safety Education.....	39
CHAPTER 7 – CONNECTIVITY AND GAP CLOSURES	41

CHAPTER 8 – SHORT TERM PRIORITIES FOR GRANT FUNDING	41
High Priority Projects	41
Bikeway Cost Reference Data	42
CHAPTER 9 – FUNDING	42
Current Funding Sources	42
<i>Federal</i>	43
<i>State</i>	43
Local	45
MAPS	47
CITY OF CHICO INTERMODAL FACILITY LOCATIONS MAP	47
CITY OF CHICO SHOWER AND LOCKER FACILITY LOCATIONS MAP	48
COUNTY BIKE ROUTE MAPS – COUNTY WIDE MAP	49
COUNTY BIKE ROUTE MAPS – DETAIL A	50
COUNTY BIKE ROUTE MAPS – DETAIL B	51
COUNTY BIKE ROUTE MAPS – DETAIL C	52
COUNTY LAND USE DESIGNATION MAP	53

EXECUTIVE SUMMARY

Introduction

The Bikeway Master Plan embodied herein is the County of Butte's vision for making bicycling an integral part of the transportation system within its unincorporated limits. This plan is an update of the previously adopted Countywide Bikeway Master Plan. As such, it may recommend projects, programs, and policies that differ from those of the previous plan. The purpose for this update is to encourage use of bicycling as a sensible, non-polluting, healthy, and affordable mode of transportation and recreation in the County unincorporated areas through the provision of feasible improvements which promote interconnectivity between similar facilities in local communities, parks, and other recreational areas within the County. At this point in time, the five incorporated cities in the County all have their own bicycle master plans, such that it is more practical to simply coordinate with them, rather than attempt to incorporate their facilities into a countywide plan.

The Master Plan Update for the unincorporated areas of the County includes emphasis on regional connectivity between the local cities of Biggs, Chico, Gridley, Oroville and the Town of Paradise, in addition to the various rural communities and recreational opportunities that exist within Butte County. To facilitate the Butte County Bicycle Plan Update the existing bicycle and trail way conditions were evaluated, the goals and policies for bicycle transportation were reviewed and confirmed, and practical projects to implement the network were identified. Finally, after assessment of public comments on the draft, the updated plan contains the overall recommended programs and support facilities that will help improve bicycling as a viable and practical mode of transportation and recreation for Butte County.

The Bicycle Plan Update includes nine chapters: 1) Introduction, 2) Evaluation of Existing Conditions, 3) Goals, Objectives and Policies, 4) Existing and Proposed Bicycle Network, 5) Attractors and Generators, 6) Support Facilities, 7) Connectivity and Gap Closures, 8) Short Term Priorities for Grant Funding, and 9) Funding.

Regional Setting

Key to understanding the goals and objectives proposed in the Bikeway Master Plan for the unincorporated areas of Butte County is an understanding of the challenges associated with its location, geography, climate, and demographics. Butte County is primarily an area of rural character encompassing 1,665 square miles in north central California. The western portion of the County is located in the flat agricultural lands of the northern Sacramento Valley, while the eastern portion extends beyond the rugged foothills and into the lower ridges of the Sierra Nevada Mountain Range. Elevations can range from 50 feet above sea level at the Butte Sink along the Sacramento River in the southwest portion of the County to 7,087 feet above sea level at Humboldt Summit near the County's northeastern border. The County is often characterized by the relatively flat terrain of the western valley region, where a majority of the County's population

centers are located. However, traveling eastward, the land rises from the valley to the rolling terrain of the foothills followed by steeper mountainous ridges found in the more remote eastern areas of the County.

Butte County has five incorporated cities which range from smaller farming communities to larger regional urban centers. The Cities of Biggs and Gridley are two smaller agri-based valley communities located approximately five miles apart along State Route 99 in the southwest portion of the County. This area is starting to receive increased development pressure as witnessed by the recent residential development in Live Oak located on State Route 99 immediately to the south in Sutter County. The City of Chico, located approximately 21 miles to the north of Gridley along State Highway 99, is the largest and fastest growing urban and commercial hub in the County. It still retains much of its agricultural roots and college town atmosphere as home to popular Chico State University. The historical county seat and second largest urban center is the City of Oroville located approximately 20 miles to the southeast of the City of Chico along State Route 70, the Feather River, and the Sierra Nevada foothills. The adjacent unincorporated foothill area to the east and valley area to the south supports a moderately large population and is regionally known as the Greater Oroville Urban Area. The Town of Paradise is located in the more isolated north central part of the County on a high foothill ridge of the Sierras. The town may be accessed via several routes, including Clark Road (State Route 181) and Pentz Road leading off of State Route 70 and the Skyway arterial between Paradise and Chico.

Numerous unincorporated communities also dot Butte County. Feather Falls, Berry Creek, and Brush Creek are located the Sierra foothills in the eastern portion of the county, while Paradise Pines, Magalia, Stirling City, Forest Ranch, Cohasset, and Butte Meadows are Located in the foothills in the northern county area. Other unincorporated communities include Dayton, Durham, Nelson, and Richvale, located in the western portion of the valley, and Palermo, Wyandotte, and Honcut located in the valley/foothill interface area to the south of Oroville.

Climate

The climate in Butte County is generally categorized as Mediterranean, with hot, dry summers reaching over the 100 degree Fahrenheit mark, and cool, wet winters. Average annual rainfall varies from 17 inches in the valley to over 90 inches in the remote mountain areas located in northeastern Butte County. The valley floor experiences tule fog during the winter months from November through January, which can become quite dense at times. The valley floor rarely receives snowfall, while the mountainous areas may receive an average of 15 feet of snowpack annually.

Demographics

The 2010 census has recently released the population figure for Butte County as 220,000 people. The Census Department has not released more comprehensive census data so this update will use information from the 2000 census. That data shows

there were 203,171 people, 79,566 households, and 49,410 families residing within the county. In terms of demographics: 28.40% of the recorded households had children under the age of 18 living with them; 46.70% were married couples; 11.20% had a female householder with no husband present; and 37.90% were made up of non-families. 27.20% of all households were only individuals living alone and 11.10% had someone living alone who was 65 years of age or older. The average household size was 2.48 and the average family size was 3.02.

In the unincorporated county area, the population was spread out with 24.00% under the age of 18, 13.60% from 18 to 24, 24.80% from 25 to 44, 21.80% from 45 to 64, and 15.80% who were 65 years of age or older. The median age was 36 years.

The median income for a household countywide was \$31,924, and the median income for a family was \$41,010. The per capita income was \$17,517. About 12.20% of the families and 19.80% of the population were found to be living below the poverty line, including 23.80% of those under age 18 and 7.30% of those aged 65 or over.

These statistics indicate the potential importance and value that bicycling has the opportunity to provide to local residents as a cheap, sustainable source of local transportation and recreation, provided that adequate bicycling facilities and opportunities are provided. An example of this is the City of Davis where university students and local residents alike are realizing that potential, especially in an environment that is very similar to that surrounding Chico State University and that area of Butte County.

Regional population growth for the County has historically been at a predictably slow growth rate. However, projections developed for 2006-2030 by the Butte County Association of Governments (BCAG) staff in collaboration with city, town, and county planning staffs indicate growth patterns that could prove to be significant in the next twenty-two years. This is especially anticipated in the south county communities of Oroville, Gridley, and Biggs due to the above average job growth and increasing land costs in the Sacramento metropolitan area resulting in "bedroom community" housing development spilling into neighboring counties to satisfy the market need for more "affordable" housing that is still within a reasonable commute distance.

BCAG has developed countywide population projections through a two step process. First, building permit data for the past 15 years prior to 2006 was reviewed for each jurisdiction in the County to develop average growth rates based on past trends that could be extended into the future. Then, anticipated changes to these rates were determined through discussions with each local agency on development activity and subdivision applications. From this, the potential population growth was determined by multiplying the housing unit projections by the accepted average persons per housing unit estimate. Per unit estimates were calculated from 2006 Department of Finance data by dividing population estimates by their housing unit estimates for each jurisdiction.

The full details of these projections for each jurisdiction are available on the BCAG website at:

http://www.bcag.org/documents/demographics/pop_emp_projections/Final_Regional_Growth_Projections.pdf

As an overview, the Cities of Oroville, Gridley, and Biggs showed low levels of development activity until the mid-2000 housing boom when a significant increase in applications began to reflect the trend anticipated for housing in the south county. The economic downturn in the last several years of the 2000's has slowed growth considerably but growth is expected to pick up again to anticipated levels. The City of Chico has experienced a fairly constant housing unit growth rate of 2% over the last 10-15 years, which is anticipated to continue through 2030. This equates to approximately 20,000 new housing units by 2030. The Town of Paradise has experienced a slow rate of growth in the past which is also expected to continue into the future. Contributing factors to Paradise's slow growth are the lack of sewer infrastructure and prohibitive geography that involves steep canyons and dense lava cap rock. The Town expects new housing growth to primarily occur through infill development and along the southern Town Limits. BCAG's annual growth rate projections for the unincorporated county areas are based on the premise that the past housing growth rate of 1.0% will continue into the future. Since it is anticipated that new construction in city spheres of influence will be annexed to the local municipalities, this growth rate only takes into account new units that are anticipated to remain in the County unincorporated area.

Included herein are tables with the latest demographic projections downloaded from BCAG's website, where it is noted that these growth projections will be updated in three year intervals to insure any unexpected changes in trends are integrated into the projections. The importance of these projections to the planning of future bicycling facilities in the county unincorporated area can be related in terms of the apparent need for future facilities surrounding and interconnecting south county jurisdictions with connections to Chico metro area, schools, and local recreational facilities so that demands for bicycling for local recreation and alternative transportation can be met. The demographics for the Town of Paradise and other outlying areas in the County emphasize the continuing need for regional and recreational bicycling facilities.

Table 1-1 BCAG Regional Population Projections 2006 – 2030**

Jurisdiction	2006*	2010	2015	2020	2025	2030	Total Increase 2006-2030	Percent Increase 2006-2030	Average Annual Growth Rate
Biggs	1,780	1,955	2,311	3,062	3,533	3,997	2,217	125%	5.2%
Chico	79,091	85,610	94,520	104,358	115,220	127,212	48,121	61%	2.5%
Gridley	5,949	7,231	9,141	10,804	11,928	13,170	7,221	121%	5.1%
Oroville	13,550	15,696	20,033	23,447	25,888	28,582	15,032	111%	4.6%
Paradise	26,516	27,592	29,433	30,781	32,192	33,667	7,151	27%	1.1%
Unincorporated	90,323	93,991	98,786	103,825	109,121	114,687	24,364	27%	1.1%
Total County	217,209	232,075	254,224	276,277	297,882	321,315	104,106	48%	2.0%

*Source: Department of Finance

**http://www.bcag.org/documents/demographics/pop_emp_projections/Final_Regional_Growth_Projections.pdf

Table 1-2 BCAG Regional Housing Unit Projections 2006 – 2030**

Jurisdiction	2006*	2010	2015	2020	2025	2030	Total Increase 2006-2030	Percent Increase 2006-2030	Average Annual Growth Rate
Biggs	622	683	807	1,070	1,234	1,397	775	125%	5.2%
Chico	32,864	35,573	39,276	43,363	47,877	52,860	19,996	61%	2.5%
Gridley	2,224	2,703	3,417	4,039	4,459	4,923	2,699	121%	5.1%
Oroville	5,785	6,701	8,553	10,010	11,052	12,203	6,418	111%	4.6%
Paradise	12,707	13,223	14,105	14,751	15,427	16,134	3,427	27%	1.1%
Unincorporated	39,181	40,772	42,852	45,038	47,335	49,749	10,568	27%	1.1%
Total County	93,383	99,655	109,010	118,271	127,384	137,266	43,883	47%	2.0%

*Source: Department of Finance

**http://www.bcag.org/documents/demographics/pop_emp_projections/Final_Regional_Growth_Projections.pdf

Table 1-3 BCAG Employment Projections 2006 – 2030*

Jurisdiction	2006**	2010	2015	2020	2025	2030
Butte County	88,714	92,181	98,109	103,487	114,646	123,539

* http://www.bcag.org/documents/demographics/pop_emp_projections/Final_Regional_Growth_Projections.pdf

**Note: 2006 estimate based on ratio of 0.95 jobs/housing unit ratio

This ratio decreases to 0.925 for 2010, 0.90 for 2015 and 0.875 for 2020

to reflect anticipated bedroom community effect in southern portion of county

The ratio then increases to 0.90 for 2025 and 2030

Existing Conditions

The transportation mode split for bicycling varies depending on the unincorporated area. Based on the 2000 Census Journey to Work information, the mode split for bicycling for Butte County was 2.6% overall. The development trend since adoption of the Countywide Bikeway Master Plan in 1998 has been more compact development with context sensitive planning such as dedicated trails, routes, and access for non-motorized transportation.

Many existing roadways in the unincorporated areas were built to rural standards and currently do not have adequate width for designated bike lanes. However, there has been considerable progress identifying the travel ways preferred by bicyclists for both commute and recreation in an effort to adequately stripe or incorporate bike lanes, markings, or signs in the future.

Goals and Policies

Butte County's eight main goals for bicycle transportation in the unincorporated areas include:

1. Provide a safe and efficient bikeway system.
2. Provide continuous and convenient bicycle access to and between major destinations throughout the county.
3. Promote bicycling as a part of the intermodal transportation system.
4. Improve bicycling safety by providing driver and cyclist education programs.

5. Develop a bikeway system that encourages and facilitates bicycle commuting as an alternate means of transportation.
6. Develop a bikeway system that encourages and facilitates recreational use.
7. Promote fitness and health benefits through increased opportunity for bicycling activities.
8. Pursue and obtain maximum funding available for bikeway projects and programs.

In Chapter 3, "Goals, Objectives, and Policies," planning objectives related to each of the above goals identify specific proposed tasks to accomplish these goals, while planning policies further specify methodology of how the objectives can be implemented and realized.

Bikeway Network

The proposed bikeway network consists of a variety of facility types in order to serve the various needs and abilities of the bikeway system users in the unincorporated areas. The network was designed to connect and serve the various major destinations in the area. In doing so, the bikeway network was selected to coordinate and align with the existing and proposed bikeway facilities of the adjacent jurisdictions of Biggs, Chico, Gridley, Oroville, and Paradise. The bikeway system was also selected to provide the most practical routes and facilities, where possible, along with already identifiable recreational routes frequented by more avid bicyclists in the County.

Implementation Plan

The final chapter of the plan identifies distinct projects that, when funded and completed, will create a more comprehensive network of bicycling facilities. This chapter also presents funding opportunities and strategies for delivering bicycle projects. The implementation of the plan will provide a positive impact on promoting non-motorized transportation. The anticipated long term results of implementing the bikeway Master Plan are decreased automobile congestion, improved air quality, improved physical health, and an increase in the quality of life by providing alternative transportation options and more local recreational opportunities for people living in Butte County.

CHAPTER 1 - INTRODUCTION

Purpose and Need

The Countywide Bikeway Master Plan originally adopted in 1998 is currently outdated. With the recent growth within the County, the advent of individual communities adopting their own bike plans, and the decline of many funding sources, there is a need to define new more practical projects in addition to reprioritizing projects identified in the past. The purpose of the 2011 Butte County Bicycle Plan Update is to address the unincorporated areas of the County, specifically addressing safety and connectivity between the local communities and with the rural areas of the County. The Bicycle Plan Update is necessary to ensure the County remains eligible to compete for available federal and State grant funds, in particular Safe Routes to Schools (SRTS and SR2S) and Bicycle Transportation Account (BTA) funding.

In addition, the Bicycle Plan Update serves as a tool to identify the County's proposed bicycle network within the County General Plan Circulation Element and proposed local development reviews that may involve existing or proposed portions of the network. The Bicycle Plan Update addresses all the unincorporated areas of Butte County, but more importantly focuses on connectivity between the Cities of Biggs, Chico, Gridley, Oroville, and the Town of Paradise.

The Butte County Department of Public Works is responsible for maintaining and improving all local roadways in the unincorporated areas of the County. As such, the Bicycle Plan Update will also assist the County in its efforts to safely and equitably provide contiguous bicycle facilities in the future, as well as, implement roadway projects that are bicycle friendly throughout the unincorporated areas.

The proposed County bikeway network has been coordinated with those of the adjacent communities. Recommended bike projects from the proposed network have been prioritized in Chapter Eight to maximize the benefit of scarce County resources and to facilitate the grant solicitation process for future grant applications. The proposed bikeway network outlined in the master plan also helps future land development and routine roadway rehabilitation projects address the future needs of the bicycle network during these undertakings. In addition, the State's Bicycle Transportation Account (BTA) requires that any project funded by BTA be included in an adopted bicycle plan. Other funding sources also encourage, if not require, that funded projects be part of a coordinated bicycle plan. Safe Routes to School grant applications and the County's proposed Safe Access to Schools Program, to be developed in consultation with the local schools, will also rely on the network identified in the Bikeway Master Plan.

Relationship to Other Documents

Butte County General Plan

The Butte County General Plan has recently been updated and those of several of the local jurisdictions are currently in the process of being updated. The Circulation Element of the General Plan and the County's Bikeway Master Plan have both been reviewed to ensure consistency.

Other Local Bicycle Plans

During initiation of the process to update the Bikeway Master Plan, the County Public Works staff met with each of the local agencies to discuss their respective bicycle plans regarding existing and proposed bike routes. The 2011 County Bicycle Plan Update reflects information gathered from community comments received during the update process. In the future, it is also recommended that the Butte County Association of Governments (BCAG) host annual regional forums to be certain each of the local communities is communicating with each other. This will create consistency between the respective bicycle plans and general plans, and ensure future updates or amendments to the bicycle plans can be made with minimal effort.

Regional Transportation Plan for Butte County

The Regional Transportation Plan was updated by the Butte County Association of Governments (BCAG) in 2008. It included an entire chapter on non-motorized transportation which discusses existing conditions and plans for bikeways on a jurisdictional and regional basis and provides short and long range policy direction that is supportive of the goals, policies, and objectives contained in this bike plan update.

Caltrans Bicycle Transportation Account Checklist

The purpose of the following table is to identify and respond to the various review areas for a Bicycle Transportation Plan as identified by the Caltrans Bicycle Facilities Unit (BFU). The BFU is responsible for reviewing bicycle plans and making funding recommendations for BTA funds.

Table 1-4 Caltrans Bicycle Transportation Plan Checklist

Requirement	2011 Update
(a) Estimated number of existing bicycle commuters in the plan area and the estimated increase in the number of bicycle commuters resulting from implementation of the plan.	√
(b) A map and description of existing and proposed land use and settlement patterns which shall include, but not be limited to, locations of residential neighborhoods, schools, shopping centers, public buildings, and major employment centers.	√
(c) A description and maps of existing and proposed bikeways.	√
(d) A map and description of existing and proposed end-of-trip bicycle parking facilities. These shall include, but not be limited to, parking at schools, shopping centers, public buildings, and major employment centers.	√
(e) A map and description of existing and proposed bicycle transport and parking facilities for connections with and use of other transportation modes. These shall include, but not be limited to, parking facilities at transit stops, rail and transit terminals, ferry docks and landings, park and ride lots, and provision for transporting bicyclists and bicycles on transit or rail vehicles, or ferry vessels.	√
(f) A map and description of existing and proposed facilities for changing and storing clothes and equipment. These shall include, but not be limited to, locker, restroom and shower facilities near bicycle parking facilities.	√
(g) A description of bicycle safety and education programs conducted in the area included within the plan, efforts by the law enforcement agency having primary traffic law enforcement responsibility in the area to enforce provisions of the Vehicle Code pertaining to bicycle operation, and the resulting effect on accidents involving bicyclists.	√
(h) A description of the extent of citizen and community involvement in development of the plan including, but not limited to, letters of support.	√
(i) A description of how the bicycle transportation plan has been coordinated and is consistent with other local or regional transportation, air quality, or energy conservation plans including, but not limited to, programs that provide incentives for bicycle commuting.	√
(j) A description of the projects proposed in the plan and a listing of their priorities for implementation.	√
(k) A description of past expenditures for bicycle facilities and future financial needs for projects that improve safety and convenience for bicycle commuters in the plan area.	√

Community Participation Process

The Butte County Bikeway Master Plan for Unincorporated Areas was developed by the County Public Works staff. The development of proposed projects also included the input of stakeholders such as a long time local bicycle expert representing the Chico Velo Bicycle Group and a public health practitioner representing the Butte County Safe Kids Coalition.

The development team provided key insight to the history of previous local bike route priorities, key issues to consider, and general oversight as to the general direction, content, and priority of the proposed projects. During development of the plan update and prior to completion of the draft document, advertised public workshops were held in Paradise, Oroville, and Chico to solicit input and receive comments on the preliminary route plans. In addition, the local Public Works staffs from each jurisdiction were invited to attend these workshops and meetings were held with them immediately after the workshops to discuss the proposed plans and any comments received and to also gather further information regarding possible upcoming changes their respective bicycle and local planning documents. The Chico Bicycle Advisory Committee was consulted for their input primarily regarding the urbanized area in and around Chico.

The update document will be discussed at a public hearing by the Butte County Board of Supervisors prior to adoption. It will be distributed to the BCAG Transportation Advisory Committee (TAC) which represents each of the cities and County, the Butte County Air Quality Management District, Caltrans District 3, the local Native American Rancherias, local bicycle shops, and local libraries.

All information will be posted and available for public review on the County's Public Works website.

It is recommended the County host occasional public workshops to ensure the Bikeway Master Plan embodied herein remains current and consistent with the bike master plans of the independent local jurisdictions within Butte County.

CHAPTER 2 – EVALUTATION OF EXISTING CONDITIONS

Background

Bicycling has become an increasingly popular method of travel and recreation throughout the Butte County region. Many are attracted to the energy and cost savings, environmental benefits, and health advantages, while others who are not able to drive due to age or finances use bicycles as a primary means of transportation. The valley areas of the county are particularly attractive to bicyclists due to the flat terrain. Local land use and transportation planning within the region has been sensitive to the attributes necessary to promote and encourage bicycling and walking. Almost 8% percent of households in the unincorporated area have no cars and 35.3% only have one car, resulting in a significant percentage of the adult populations and children, who do currently or could use bicycles as their primary mode of transportation

Table 2-1 Car Ownership – Butte County

Vehicles Available	Number	Percent
None	6,087	7.7
1	28,058	35.3
2	29,960	37.7
3 or more	15,461	19.4
Total Occupied Housing Units	79,566	100.0

Source: 2000 Census Income and Poverty Levels DP4

http://www.bcaq.org/demographics/documents/2000_census/2000_DP-4_xls.pdf

Other bicyclists may own or could afford a car, but for personal or environmental reasons choose to use their bikes for transportation. The environmental trade-offs with bicycling for transportation are reductions in air pollution, noise pollution, and water pollution, including green house gasses and roadway storm water run-off. Other reasons cited include convenience of parking, conservation of natural resources, and independence from foreign oil. Bicycling also produces additional benefits to society in addition to the environment. One of these is the reduced vehicle miles resulting in a reduction in motor vehicle collisions, which is the second leading cause of injuries among teenagers and young adults (ages 16-24) as well as children in Butte County according to the Butte County Public Health Department.

Bicycling also has direct benefits for the individual. Bicycling is the least costly mode of transportation (other than walking). Currently, the federal expense reimbursement rate for driving a vehicle is 51 cents per mile whereas a local B-Line one-way bus fare is \$1.40. As such, at approximately 7 cents a mile, bicycling is chosen by people both with and without cars as the most cost-effective way to travel where practical. Finally, bicycling is popular among those concerned with health and fitness. Bicycling provides excellent cardiovascular conditioning and studies have shown that employees who regularly bike to work are sick less than the average employee. From a public policy point of view, it is a worthy goal to provide safe and convenient personal mobility to

those without cars. Those without cars need access to employment, shopping and recreation just as those who can afford cars. In sum, investing in bicycling as an independent mode of transportation is a fiscally and environmentally sound expenditure of public funding. As with recycling programs, the win-win situation that can be achieved through bicycling to improve the environment, while saving public dollars in the long run, is something that will hopefully continue to catch on in the daily lives of area residents.

Existing Bicycle Commuting Activity

According to the 2000 Census Journey to Work data, 2.6% of the total 80,809 means of transportation trips are taken by bicycle in Butte County. The census however, does not measure is how many people use their bicycle for other transportation trips such as shopping, errands, or visiting friends. The local community with the highest bicycle commute percentage is Chico at 5.2% according to the same journey to work data.

Table 2-2 Means of Transportation

Means of Transportation and	Number	Percent
Carpooling Workers 16 and Over	80,809	100.0
Car, truck or van	70,749	87.6
Drove alone	60,001	74.3
Carpooled	10,748	13.3
Workers per car, truck or van	1.009	
Public transportation	899	1.1
Motorcycle	172	0.2
Bicycle	2,064	2.6
Walked	2,754	3.4
Other Means	686	0.8
Worked at home	3,485	4.3
Total	80,809	100.0

Source: U.S. Census Bureau, Census 2000 Summary File 4 PCT55, PCT56, PCT58, PCT 59, and PCT60
http://www.bcaq.org/demographics/2000_census.html

As a rural county with significant distances between communities, the existing commute patterns for intercity travel in Butte County heavily favor automobiles and transit. Aside from distances, lack of safe routes between major regional origins and destinations, local weather, and seasonal temperatures make bicycle travel more of a challenge for the daily commuter. However, intercity travel on the flat terrains between Chico, Durham, Biggs, Gridley, and most of Oroville makes it immensely suitable for bicycle travel. The health benefits of bicycling, the beautiful natural settings of Butte County's rural areas, and mild temperatures for all but midsummer also provide inducements to bicycle commuting.

The pertinent factors in predicting how many persons will bike ride in the future include safe and convenient facilities, but also the number of residents who live within a reasonable bicycle distance of their workplace, school, and shopping areas. The

following table identifies the travel time to work which would reflect the closer your distance to work, the higher the likelihood to use a bike or walk for work.

Table 2-3 Travel Time to Work

Minutes	Number	Percent
		77,324
Less than 10 Minutes	18,572	24
10 to 14 Minutes	18,985	24.6
15 to 19 Minutes	11,807	15.3
20 to 24 Minutes	7,211	9.3
25 to 29 Minutes	2,960	3.8
30 to 34 Minutes	7,391	9.6
35 to 44 Minutes	3,200	4.1
45 or More Minutes	7,198	9.3
Mean travel time to work In Minutes	20.9	

Source: U.S. Census Bureau, Census 2000 Summary File 4 PCT55, PCT56, PCT58, PCT 59, and PCT60. http://www.bcag.org/demographics/2000_census.html

Bicycle Projections

Estimating the increase in new riders as a result of implementation of this plan is difficult to accurately predict without developing a comprehensive study or survey. However, a reasonable conservative assumption of 10 to 15% increase could be realized. Factors include type, scale, location (geography), proximity to other existing facilities and dynamics of area population. A new facility in a new developed area attracting younger crowds in Chico would have a higher likelihood than Paradise which does not have as many Class 1 or Class 2 facilities and has a higher age population. The 2000 census identified 2,064 persons with the bicycle as their primary means of transportation. However, the targeted group would be those individuals who live and work within a 20 minute commute. It would be a reasonable assumption to state that, as a result of the full implementation of this plan, would result in an increase of 15% new bicycle commuters. A recommendation to the future is for the County to work with Caltrans on methods to better capturing and projecting bicycle commuters.

Table 2-4 Estimated Increase In The Number Of Bicycle Commuters Resulting From The Implementation Of The Plan

Means of Transportation (From Table 2-2)	Number of Bicyclists Before Plan Implementation	Number of Bicyclists After Plan is Fully Implemented
Bicycle	2,064	2,374 (15% increase)

Bicycle and Pedestrian Safety

Bicycles and pedestrians go hand in hand as the primary modes of non-motorized transportation. The purpose of this section is to document the available countywide statistics concerning injuries related primarily with non-motorized transportation.

Pedestrian Injuries

Table 2-5 Butte County Pedestrian Injuries, 1998 to 2007 Fatal Injuries By Age Group

	<1	1-4	5-12	13-15	16-20	21-44	45-64	65+	Total
2007	0	0	1	0	1	1	3	0	6
2006	0	0	0	0	0	2	1	1	4
2005	0	0	0	0	2	0	2	2	6
2004	0	0	0	0	0	2	1	0	3
2003	0	0	0	0	2	1	1	0	4
2002	0	0	2	0	0	0	1	3	6
2001	0	0	0	0	0	1	1	0	2
2000	0	0	0	0	0	3	2	0	5
1999	0	1	0	0	0	2	3	0	6
1998	0	0	0	0	0	2	0	0	2
Total	0	1	3	0	5	14	15	6	44

Source: California Development of Health Services, EPI Center
<http://www.apps.cdph.ca.gov/epicdata/>

Table 2-6 Butte County Pedestrian Injuries, 1997 to 2006 Non-Fatal Hospitalized By Age Group

	<1	1-4	5-12	13-15	16-20	21-44	45-64	65+	Total
2006	0	1	5	0	2	5	2	2	17
2005	0	1	1	0	2	13	9	1	27
2004	0	0	3	1	0	12	9	0	25
2003	0	2	1	3	1	6	2	4	19
2002	0	2	3	2	0	10	4	4	25
2001	0	2	1	2	3	7	9	4	28
2000	0	3	3	4	4	5	5	5	29
1999	0	1	2	0	0	7	0	3	13
1998	0	1	3	0	1	5	9	3	22
1997	0	1	6	0	1	3	6	4	21
Total	0	14	28	12	14	73	55	30	226

Source: California Development of Health Services, EPI Center

<http://www.apps.cdph.ca.gov/epidata/>

Factors Contributing to Pedestrian Injuries for Children under the Age of 14

According to the “Report to the Community” developed by the Butte County Safe Kids Coalition, the primary reasons children are injured in pedestrian related crashes are immaturity and lack of supervision, safe play areas, or traffic education. These young pedestrians are at high risk in traffic because of their physical and cognitive development. The short stature of children under the age of 14 makes it difficult for them to see over obstacles such as parked cars and makes them more difficult for a driver to see. Children also think that if they can see the car, then the driver sees them. Physically, a child’s field of vision is much narrower than adults. Traffic research suggests that children perceive traffic very differently than adults. Until a child is about 8 years of age, it is difficult for them to assess whether a vehicle is moving or not.

Law enforcement and street design changes are two primary factors that can help reduce child pedestrian injuries in the unincorporated areas, including: slowing speeders in residential areas; constructing designated bikeways and walkways; initiating crossing guard programs near schools; and discouraging pedestrians from cross streets at locations other than designated crosswalks. Traffic calming measures to slow traffic speeds are also associated with a reduction in the risk of injury or death among children struck by an automobile in neighborhoods and school zones.

Helmet Use in Butte County Elementary Schools - Observational Survey

The majority of all fatal bicycle crashes involve head injuries. According to a Fall 2005 Observational Survey by the Butte County Safe Kids Coalition, over 50% of Butte County Children observed riding their bikes to and from school were either not wearing bike helmets, had their helmet hanging from their handlebar, or had a helmet on, but unbuckled and therefore offering no protection from injury. Helmets, if worn properly, are more than 85% effective at reducing the impact of head injuries. Statewide

Integrated Traffic Reporting Systems (SWITRS) data collected by the California Highway Patrol listed 83 countywide bicycle related collisions for children under age 15 in the five-year period of 2000-2004. Fifty-six of the children involved in the collisions did not have a helmet. The single fatality recorded by SWITRS during this time period did not have a helmet.

Bicycle Injuries

According to the same Butte County Safe Kids Report, during the period of 2000-2004 there were 58 child bicycle crashes reported countywide for children under the age of 15, including one fatality and 57 hospitalizations. The fatality involved a female bicyclist between the ages of 5 and 9, and involved a collision with a motor vehicle. The majority (78%) of the bicycle injury-related hospitalizations did not involve a motor vehicle while the remaining 22% of the hospitalizations were the result of a bicycle collision with a motor vehicle. Most hospitalizations involved male children between the ages of 10 and 14 years old. The majority of crashes occurred between 2:00 and 5:00 p.m. when children are frequently riding bikes after school. Fifty-one percent of the hospitalization costs were covered by government sources. The following tables identify all age group data for the period between 1991 and 2004.

All Age Groups

Table 2-7 Butte County Bicycle Injuries, 1997 to 2006 Non-Fatal Hospitalized By Age Group

	<1	1-4	5-12	13-15	16-20	21-44	45-64	65+	Total
2006	0	0	3	2	2	13	11	4	35
2005	0	0	8	2	0	5	12	1	28
2004	0	0	16	4	6	11	9	4	50
2003	0	0	4	4	3	17	9	4	41
2002	0	0	3	5	3	19	14	1	45
2001	0	2	6	5	6	19	12	6	56
2000	0	0	7	6	6	16	9	5	49
1999	0	0	8	9	8	10	9	1	45
1998	0	0	5	1	1	22	10	1	40
1997	0	0	5	3	1	10	6	2	27
Total	0	2	65	41	36	142	101	29	416

Source: California Office of Statewide Health Planning and Development, Patient Discharge Data

Table 2-8 Butte County Bicycle Injuries, 1997 to 2006 Fatal Injuries By Age Group

	<1	1-4	5-12	13-15	16-20	21-44	45-64	65+	Total
2006	0	0	0	0	0	0	1	0	1
2005	0	0	0	0	0	1	0	1	2
2004	0	0	0	0	0	0	0	0	0
2003	0	0	0	0	0	2	0	0	2
2002	0	0	0	0	0	2	0	0	2
2001	0	0	0	0	0	0	0	0	0
2000	0	0	1	0	0	0	0	0	1
1999	0	0	0	0	0	0	1	0	1
1998	0	0	0	0	0	0	1	0	1
1997	0	0	1	0	0	1	0	0	2
Total	0	0	2	0	0	6	3	1	12

Source: California Office of Statewide Health Planning and Development, Patient Discharge Data

CHAPTER 3 - GOALS, OBJECTIVES & POLICIES

Goals and Objectives

Goals, objectives, and policies are an integral part of any bikeway plan, as they provide a clear direction for decision makers in implementing a comprehensive bikeway system. Goals are the broad expression of the long term vision, while objectives identify tasks to accomplish the goals. Policies are even more specific statements of how the objectives can be realized. All are part of the planning process necessary to identify the issues to be solved. Planning and legislation are integral to the solution as are the five E's of education, engineering, enforcement, encouragement, and evaluation. It should be noted that while policies are identified for education, enforcement, encouragement, and evaluation, the Bikeway Plan Update for the unincorporated areas primarily focuses in detail on planning and engineering issues.

GOAL 1: *Provide a safe and efficient bikeway system.*

- Objectives:
1. Minimize potential conflicts between autos, bikes, and pedestrians.
 2. Minimize or eliminate safety hazards.

- Policies:
1. Require new bikeways and roadways to be designed to current Caltrans bikeway design guidelines (Caltrans Highway Design Manual, Fourth Edition, Chapter 1000).
 2. Identify and prioritize projects which mitigate and/or eliminate safety hazards for bicyclists.
 3. Incorporate standard signage and traffic controls in accordance with Caltrans bikeway design guidelines.

4. Optimize safety conditions for bicyclists through traffic engineering and law enforcement efforts.
5. Encourage greater animal control on bike routes to minimize bicyclist-canine conflicts.
6. Strive to maintain bikeways free of debris.
7. Monitor bikeways for potential safety hazards.

GOAL 2: *Provide continuous and convenient bicycle access to and between major destinations throughout the county.*

Objective: Develop a bikeway program that identifies inter-regional bikeway needs.

- Policies
1. Provide inter-jurisdictional coordination and prioritization for the implementation of an inter-regional bikeway program.
 2. Include provisions for bikeway facilities when making improvements to regional roadways, where feasible.
 3. Identify and give funding priority to projects that connect existing regional bikeway facilities.
 4. Encourage linkages between local bikeways to regional bikeways.
 5. Promote bikeway linkages to regional educational, recreational, shopping, governmental, and other attractions.
 6. Emphasize directness of connections between population centers.

GOAL 3: *Promote bicycling as a part of the inter-modal transportation system.*

- Objectives:
1. Promote adequate bicycle access to transit, rail, parking, and alternative transportation facilities.
 2. Promote adequate accommodations for bicyclists on transit, rail, and alternative transportation modes.

- Policies:
1. Prioritize bikeways that provide connections to park-and-ride lots, transit hubs, rail stations, and other intermodal facilities.
 2. Encourage bicycle parking facilities at transit hubs, park and ride lots, rail stations, and other intermodal transfer facilities.
 3. Encourage transit operators to provide bicycle racks on all transit buses.
 4. Work towards provisions to allow bicycles on buses when bike racks are full and it is safe to do so.

GOAL 4: *Improve bicycling safety through driver and cyclist education programs.*

Objective: Enhance awareness of rights and responsibilities in interacting with motorists, bicyclists and pedestrians.

- Policies:
1. Develop a visually clear, simple, and recognizable bicycle system with clearly defined areas and boundaries.
 2. Include basic rules for interaction between bicyclists and motorists, pedestrians, and other bicyclists in regional bikeway maps and literature.
 3. Encourage the development and distribution of pamphlets on "rules of the road" for bicyclists to bicycle shops, schools, and the Department of Motor Vehicles.
 4. Support the development of bicycle/helmet safety education programs in schools and by other agencies.
 5. Encourage the Department of Motor Vehicles to include bicycle interaction rules and regulations on drivers licensing tests.

GOAL 5: *Develop a bikeway system that encourages and facilitates bicycle commuting as an alternate means of transportation.*

Objective: Provide facilities that address the needs of the bicycle commuter.

- Policies:
1. Emphasize bikeways that provide connections between regional activity centers, such as regional shopping areas, schools, government offices, and employment centers.
 2. Promote adequate bicycle parking facilities at regional activity centers where warranted by demand.
 3. Work with Caltrans to develop bicycle commuter projections.

GOAL 6: *Develop a bikeway system that encourages and facilitates recreational use.*

Objective: Encourage recreational bicycling by providing a bikeway system that responds to the riding needs of both the avid cyclist and the "weekend" rider.

- Policies:
1. Emphasize connections to regional recreational centers, such as Bidwell Park, Lake Oroville, the Afterbay, and along the Sacramento River.

2. Plan bikeway facilities to take full advantage of the scenic qualities of Butte County for the enjoyment of residents and visitors alike.
3. Promote adequate bicycle parking facilities at regional recreation areas where warranted by demand.

GOAL 7: *Promote fitness and health benefits through increased opportunities for bicycling activity.*

- Objective:
1. Encourage fitness by prioritizing bikeway system improvements that provides convenient commute and recreational bicycling opportunities near the more densely populated areas of the County.
 2. Emphasize health and fitness benefits by collaborating with area agencies, schools, and groups to promote and educate local residents on the available opportunities and benefits provided by the County bikeway system.

- Policies:
1. Emphasize bikeways that provide convenient connections between regional activity centers, such as regional shopping areas, schools, colleges, government offices, and employment centers.
 2. Collaborate with area schools on programs to encourage and educate children to safely bicycle to school as a means of transportation and fitness.
 3. Collaborate with County Health Services on the development and dissemination of educational materials that promote the health benefits of bicycling for all age groups.
 4. Promote adequate bicycle parking facilities at regional recreation areas where warranted by demand.

GOAL 8: *Pursue and obtain maximum funding available for bikeway projects and programs.*

- Objectives:
1. Identify all possible funding sources for bikeway projects and bicycle safety programs.
 2. Develop a bikeway project list that includes projects that meet requirements for a variety of funding sources.

- Policies:
1. Develop ongoing contacts with regional, state, and federal agencies, and private entities to identify available funding sources.

2. Work with appropriate agencies to obtain grants and other allocations to fund bikeway projects and bicycle safety programs.
3. Provide for an ongoing bicycle planning process.
4. Develop and maintain a comprehensive, prioritized list of bicycle projects which includes a variety of project types. The project list may include educational programs, bicycle parking, hazard elimination programs, and projects that facilitate intermodal transfer, as well as bikeway design and construction projects.
5. Ensure local planning departments are aware of respective bicycle systems as development occurs.
6. Seek grant funding for a bicycle/pedestrian safety liaison coordinator to work with County, local jurisdictions, and local schools on bicycle and pedestrian issues.

CHAPTER 4 – EXISTING & PROPOSED BICYCLE NETWORK

The planning and implementation of bikeways is not a mandated process, but one undertaken by communities at their discretion. Funding programs have become increasingly flexible about how transportation money may be spent, expanding project eligibility to include bicycle paths and related facilities. However, many funding sources require that bikeway projects be part of a current Bicycle Transportation Plan in order to be eligible for funding.

The state legislature passed AB 1020 which increased Bicycle Transportation Account (BTA) funding for bicycle projects; however, this legislation also required the development and adoption of a bicycle plan. In order to compete for BTA funds, local jurisdictions must have plans approved by the state and include the following elements:

- *Estimated number of existing and proposed bicycle commuters;*
- *Land use and population density;*
- *Existing and proposed bikeways;*
- *Existing and proposed bicycle parking facilities;*
- *Transportation interfaces or intermodal coordination;*
- *Existing and proposed shower facilities;*
- *Bicycle safety and education programs;*
- *Citizen and community participation;*
- *Consistency with long range transportation, air quality and energy plans;*
- *Project descriptions and priority listings; and*
- *Past expenditures and future financial needs description.*

Dependent upon location, the overall planning, development, and maintenance of non-motorized transportation facilities may be the responsibility of the local, state, or federal government. Cities and counties are responsible for planning and development of the

bikeways in their respective jurisdictions, whereas planning, development, and maintenance of regional bike and trail way facilities may be shared with local recreation and park districts. The State Department of Transportation (Caltrans) has jurisdiction over bikeways and associated facilities along or crossing state highways or where established bikeways are interrupted by highway construction. The development and maintenance of bike and trail way facilities located on State and federal lands, such as the Lake Oroville State Recreation Area and the Lassen or Plumas National Forests, are the responsibility of the respective State and federal agencies within whose jurisdiction they are located.

Bikeway Classifications

Bikeways are generally categorized by three different designations: paths, lanes, or routes. As with most jurisdictions, the County uses the design standards for these facilities as described in Chapter 1000 of the Caltrans Highway Design Manual, Sixth Edition, dated September 2006, as described below. This is done for safety purposes and to assure conformance with certain funding eligibility requirements. However, there may be specific locations where a design exception is justified by the County after careful evaluation of the conditions and determination as to whether adequate safety is maintained.

Class I - Bike Path

Provides a completely separated facility designed for the exclusive use of bicycles and pedestrians with minimal cross flows by motorists. Caltrans standards call for Class I two-way bike paths to have 8 feet (2.4 meters) of pavement width with 2 foot (0.6 meters) wide graded shoulders on either side, for a total right-of-way width of 12 feet (3.6 meters). Designated one-way bike paths are allowed 5 feet (1.5 meters) of minimum pavement width. Class I bike paths must also be at least 5 feet (1.5 meters) from the edge of a paved roadway, 8 feet from an obstruction, and meet specified minimum horizontal and vertical curve requirements for the speeds anticipated.

Class II – Bike Lane

Provides a restricted on-street right-of-way designated for the exclusive or semi-exclusive use of bicycles with through travel by motor vehicles or pedestrians prohibited, but with vehicle parking and crossflows by pedestrians and motorists permitted. Caltrans standards generally require a minimum 4 foot (1.2 meters) bike lane with a 6-inch (150-mm) white stripe separating the roadway from the bike lane. Where raised curbs without permitted parking or designated marked parking exists, a minimum 5 foot (1.5 meters) bike lane adjacent to the traffic lane is required. Where parking is permitted, but unmarked, the 6-inch (150-mm) white stripe

separating the traffic lane from the bike lane must be a minimum of 12 feet from the raised curb.

Class III – Bike Route

Provides a preferred shared route with motorists on the street, or to a more restricted extent, with pedestrians on sidewalks where designated by signs or permanent markings. The main purpose of designated bike routes is to provide continuity to the bikeway network by connecting discontinuous segments of Class I and II bikeways and may also be used to direct bicyclists to a route of higher degree of service or use. Roadways designated as Class III bike routes should have sufficient width to accommodate motorists, bicyclists, and pedestrians. Other than a street sign, there are no special markings required for a Class III bike route.

This Chapter describes the proposed bikeway network facilities for the unincorporated areas of Butte County in terms of what improvements currently exist countywide and what are proposed to fulfill the goals and objectives of Chapter 3. This includes practical considerations made to serve all existing and potential users, improve safety, and serve all attractors and generators of bicycle traffic with contiguous and non-circuitous routes. As such, many of the planned facilities identified herein are needed to provide a continuous and comprehensive system of bikeways in the unincorporated county area that interconnect with those of the adjacent jurisdictions. For that reason, the presently identified bikeways within the local jurisdictions are also indicated for informational purposes. This additional data may provide information much like that of the countywide bike plan, however this plan only addresses policies and proposed improvements within the unincorporated regions of Butte County. This additional data was gathered directly from the most current bicycle plans of each of the local agencies and/or through consultation with their staff. The facilities identified in this Chapter are not in any order of priority. Chapter 7 identifies proposed projects to complete these facilities with priorities proposed for their development.

Planned projects identified within the County's jurisdiction have also been developed with the following criteria considered necessary in anticipation of pursuing both Bicycle Transportation Account (BTA) and Safe Routes to Schools (SRTS) grant funding:

- **Safety:** Will the project eliminate a dangerous existing situation for bicyclists? Will the project encourage increased awareness of bicycle safety issues?
- **Connectivity:** Does the project connect or create an important regional bikeway? Is the route a direct connection between activity centers?
- **Cost Effectiveness:** Are the benefits proportionate to the costs? What is the cost per foot of new bikeway? How many bikeway users are

anticipated per dollar spent? What funding sources is the bikeway eligible for?

- **Route Conditions:** Does the bikeway include steep grades? Is there sufficient road width to accommodate the proposed Class II and III bikeways? Is existing pavement character suitable for bicycling? Are traffic patterns compatible with bicycle and pedestrian traffic?
- **Type of Use:** Will the bikeway be primarily used as by commuters or recreational users?

2011 Existing Bikeways within Butte County Unincorporated Areas by Classification

Table 4-1 Class 1 Bike Paths – Butte County Existing Facilities

	Route	From	To
1	Midway - Abandoned Sacramento Northern Railroad Right of Way	Jones Ave.	Hegan Ln.
2	Palermo Rd. - Modified Class 1 Bike Path	Lincoln Blvd.	Palermo-Honcut Hwy.
3	Skyway	Potter Road	Honey Run Road
4	Table Mountain Blvd. (across Green Bridge)	Oroville City Limits	Oroville City Limits

Table 4-2 Class 2 Routes – Butte County Existing Facilities

	Route	From	To
1	Durham-Dayton Hwy.	Midway	McAnarlan Avenue
2	Durham-Dayton Hwy.	Midway	Esquon Road
3	El Monte Ave.	Chico City Limits	Chico City Limits
4	Lincoln Blvd.	Oroville City Limits	Walmer Road
5	Manzanita Ave.	Centennial Ave.	Chico Canyon Road
6	West East Ave.	Hwy 32	Chico City Limits

2011 Planned Bike Routes within Butte County Unincorporated Areas by Classification

Table 4-3 Class 1 Routes – Butte County Proposed Facilities

	Route	From	To
1	Along SPRR Tracks	Gridley City Limits (Orange Ave.)	Biggs City Limits (8 th Street)
2	Skyway*	Honey Run Road	Paradise Town Limits
3	South Side Oroville	Lincoln Blvd. 0.15 mile North of Virginia	Baggett-Marysville Road
4	Lower Wyandotte Road*	Mooretown Rancheria	Golden Hills Drive

*(May have sections of Class 2 depending on Right-of-Way)

Table 4-4 Class 2 Routes – Butte County Proposed Facilities

	Route	From	To
1	Autrey Lane	Via Canela	Las Plumas Ave.
2	B Street	Biggs City Limits	SR 99
3	Bay Ave.	Chico City Limits	Chico City Limits
4	Biggs East. Hwy	Larkin Road	SR 99
5	Burlington Ave.	Oroville Bangor Hwy.	Oroville City Limits
6	Canyon Drive	Olive Hwy.	Royal Oaks Drive
7	Cherokee Road	Oroville City Limits	SR 70
8	Chico River Road	City Limits	River Road
9	Clark Road	Durham Pentz Road	SR 70
10	Cohasset Road	Chico City Limits	Mud Creek Road
11	Colusa Hwy	Gridley City Limits	Pennington Road
12	Dayton Road	Durham Dayton Hwy.	Chico City Limits
13	Dunstone Drive	Grubbs Ave.	Foothill Blvd.
14	Durham-Dayton Hwy.	Esquan Road	SR 99
15	Durham-Dayton Hwy.	McAnarlan Road	Dayton Road
16	Durham-Dayton Hwy	Goodspeed Street	Midway
17	Durham Pentz Road	SR 99	Pentz Road
18	E. Gridley Road	Feather River	Gridley City Limits
19	Feather River Blvd.	Ophir Road	Georgia Pacific Way
20	Foothill Blvd.	Miners Ranch Road	Oroville City Limits
21	Garner Lane	Esplanade	Keefer Road
22	Glenwood Avenue	Oak Way	SR 32
23	Grubbs Rd	Reservoir Road	Dunstone Drive
24	Hicks Lane	Chico City Limits	Keefer Road
25	Honey Run Road	Skyway	Centerville Road
26	Humboldt Road	Chico City Limits	SR 32
27	Keefer Road	Cohasset Road	SR 99
28	Kelly Ridge Road	Olive Hwy.	End
29	LaPorte Road	Lower Honcut Hwy	Oro Bangor Hwy
30	Larkin Road	Oroville City Limits	E. Gridley Road
31	Las Plumas Ave.	Walmer Road	Lower Wyandotte Road
32	Lincoln Boulevard	Walmer Road	South Villa
33	Lott Road	Oro Chico Hwy	Durham Dayton Hwy
34	Lower Honcut Rd.	Palermo Honcut Hwy	LaPorte Road
35	Lower Wyandotte Road	Foothill Blvd.	Oroville City Limits
36	Midway	Durham Dayton Hwy.	Richvale Hwy
37	Miners Ranch Road	Olive Hwy.	Oroville Bangor Hwy.
38	Monte Vista Ave.	Lincoln Blvd.	Lower Wyandotte Road
39	Mt. Ida Road	Foothill Blvd.	Oakvale Ave.
40	Muir Ave.	West Sacramento Ave.	SR 32
41	Myers Street	Lincoln Blvd.	Oroville City Limits
42	Neal Road	Paradise Memorial Trailway	Oro-Chico Hwy
43	Nelson Ave.	Afterbay	Oroville City Limits

44	Oakvale Ave.	Mt. Ida Road	Olive Hwy.
46	Old Skyway	Coutolenc Road	Paradise Town Limits
47	Olive Hwy.	Oroville City Limits	Kelly Ridge Road
48	Ophir Road	Pacific Heights Road	Lower Wyandotte Road
49	Ord Ferry Road	Dayton Road	Glenn County Line
50	Oro Bangor Hwy	LaPorte Road	Foothill Drive
51	Oro Chico Hwy.	Midway	Durham Dayton Highway
52	Pacific Heights Road	Welsh Road	Georgia Pacific Way
53	Palermo Honcut Hwy	Palermo Road	Lower Honcut Road
54	Pennington Road	Colusa Hwy	Rutherford Rd
55	Pentz Road	SR 70	Durham Pentz Road
56	River Road	Chico River Road	SR 32
57	River Road	Ord Ferry Road	Chico River Road
58	Royal Oak Drive	Canyon Drive	Kelly Ridge Road
59	Skyway	Old Skyway	Lovelock Road
60	South Villa Ave	Lincoln Blvd	Reservoir Rd
61	SR 162	Wilbur Road	Oroville City Limits
62	SR 32	Chico City Limits	Glenn County Line
63	SR 32	Chico City Limits	0.13 Miles south of Tehama County Line
64	SR 70	Table Mountain Blvd.	Cherokee Road
65	SR 99	Garner lane	Tehama County Line
66	Table Mountain Blvd.	SR 70	Oroville City Limits
67	Twentieth Street	Grand Ave.	Nelson Ave.
68	Walmer Road	Lincoln Blvd.	Las Plumas Ave.
69	West Rio Bonito Road	Biggs City Limits	Hawkins Lane
70	West Sacramento Ave.	Chico City Limits	River Road

Table 4-5 Class 3 Routes – Butte County Proposed Facilities

	Route	From	To
1	Centerville Road	Honey Run Road	Nimshew Road
2	Coutolenc Road	Old Skyway	Lovelock Road
3	Humboldt Road	SR 32	Skyway
4	Jones Avenue	Midway	Durham Dayton Hwy
5	Nimshew Road	Centerville Road	Skyway
6	Skyway	Lovelock Road	Humboldt Road
7	Pentz Road	Paradise Town Limits	Durham Pentz Road

Please refer to the bike plans adopted by the other jurisdictions within Butte County for their listing of existing and proposed facilities.

Multi Use Trails and Routes

The following table identifies information collected from the various jurisdictions concerning future potential multi use trails. A multi use route is defined as route for bicycle, pedestrians, equestrians etc so long as it is non-motorized transportation.

While bicycle plans do not focus on multi use trails, the following projects are identified to document the intent to pursue future study or consideration. The following projects do not represent a commitment. Where a multi use trail traverses thru state parks, it is anticipated that the “Recreation Trails Program” would be pursued for funding.

Table 4-6 Planned - Multi Use Routes

	Agency / Route	From	To
1	Old Diamond Match Railway adjacent to Coutolenc Road	Skyway	Paradise Lake

Historic Sawmill Trail – This project would be a non-paved multi use trail from Skyway at Coutolenc Road to Paradise Lake. In essence this trail would simply define the route with signs and ensure access for non motorized transportation such as mountain biking, horseback riding or hiking. This project would require extensive research on land ownership and route alignment consensus on or near the old railroad grade. Portions of this trail are in the Lassen National Forest. The purpose of identifying this trail in the countywide bike plan is to highlight recreation destinations and connectivity to the Paradise Memorial Trail.

CHAPTER 5 – ATTRACTORS & GENERATORS

There are a number of attractors of bicycle traffic within Butte County. These include recreation, major employment centers, shopping centers, colleges, elementary thru high schools, and transit stations. In addition, due to the relative rural atmosphere of the cities in Butte County, it is practical to use bicycling to access major destinations such as California State University Chico, Chico Mall, Butte County Government Center, Lake Oroville Recreation Areas, Bidwell Park, Riverbend Park, Durham Park and many other local parks.

Major Employment Centers

The largest employers for the county are presented to demonstrate which industries employ the largest number of workers. The following table identifies the largest employers for 2009. The following table is ranked by number of employees.

Table 5-1 Butte County Largest Employers for 2009

Employer	Number of employees
County of Butte	2,384
California State University, Chico	1,825
Enloe Medical Center	1,500
Chico Unified School District	1,400
Butte College	1,200
Oroville Hospital	950
Pacific Coast Producers	725
Wal-Mart	661
Feather River Hospital	650
Gold County Casino	450
Feather Falls Casino	450
City of Chico	442
Sierra Nevada Brewing Company	325
SunGard	200
Lundberg Farms	180
Chico Enterprise-Record	150
Sierra Pacific Industries	135
Currier Square	127
Smucker's (Knudsen Beverages)	125
City of Oroville	119
The Home Depot	105
Roplast Industries	103
RCBS	96

Source: 2009 City's Comprehensive Annual Financial reports

Schools

There are two colleges in Butte County: California State University (CSU) Chico with an enrollment of approximately 16,250 and Butte Community College with approximately 15,000 students spread through its various campuses in Butte and Glenn Counties.

California State University Chico is located in downtown Chico with several bike routes serving the area. A primary transit hub is also located on south side of the University adjacent to downtown. The western portion of the university is a heavy college student population.

Butte Community College has the primary campus in the middle of Butte County with several off site campuses throughout Butte and Glenn Counties.

There are 14 local school districts serving 74 schools with an approximate enrollment of 30,000 students in Butte County. Safe connectivity to these schools is an important goal to address safe routes to schools. The following table identifies the 14 school districts:

Bangor Union Elem. School District	Manzanita Elem. School District
Biggs Unified School District	Oroville City Elementary District
Chico Unified School District	Oroville Union High School District
Durham Unified School District	Palermo Union School District
Feather Falls Union Elem. School District	Paradise Unified School District
Golden Feather Union Elem. School District	Pioneer Union Elem. School District
Gridley Unified School District	Thermalito Union School District

Parks & Recreation Attractors

Two major parks are located in Butte County, Bidwell Park in Chico and Lake Oroville State Recreational facilities in Oroville. Other large recreation areas include the Durham Community Park and the Riverbend State Park on River Road along the Sacramento River.

Bidwell Park

Bidwell Park was established July 20, 1905 through the donation by Annie Bidwell of approximately 2,500 acres of land to the City of Chico. Since that time, the City has purchased additional land, such as Cedar Grove in 1922, and 1,200 acres of land south of Big Chico Creek in Upper Park in 1995. Today, the total Park size is 3,670 acres (nearly 11 miles in length), making it one of the largest municipal parks in the United States. Approximately 200,000 to 250,000 people visit the park each year.

Bidwell Park is "divided" by Manzanita Avenue. The area west of Manzanita Avenue is referred to as Lower Park and the area to the east is referred to as Upper Park. The noticeable difference between Upper and Lower Park is the terrain. Upper Park is located in the foothills of the Sierra Nevada Mountains. It has steep terrain and contains many rock formations, including the unique Chico Formation sandstone and Lovejoy

Basalt rocks. Lower Park is flat and level with a thick canopy of trees that provide ample shade for the visitor. Lower park is a major recreation destination for riding bikes, walking, hiking, swimming, picnicking, softball, Frisbee, BBQ-ing, etcetera, whereas Upper Park is more common for hiking and mountain biking. Additional information can be found at the City of Chico's website at:

http://www.chico.ca.us/General_Services_Department/Park_Division/Bidwell_Park.asp

Lake Oroville

Near the City of Oroville this man-made lake was formed by the tallest earth-filled dam (770 feet above the stream bed of the Feather River) in the country. The lake offers a wide variety of outdoor activities including mountain biking, camping, picnicking, horseback riding, hiking, sail and power boating, water-skiing, fishing, swimming, boat-in camping, floating campsites and horse camping. Lake Oroville Visitor Center has a museum, exhibits, videos and a store. The view from the 47-foot tower, with two high-powered telescopes, is a spectacular panoramic view of the lake, Sierra Nevada's, valley, foothills, and the Sutter Buttes mountain range (smallest mountain range in the world).

The area includes the Feather River Fish Hatchery, built by the Department of Water Resources to replace lost spawning areas for salmon and steelhead. Displays on the State Water Project and the area's natural and cultural history are featured at the visitor's center. The hatchery is a common parking location for mountain bikers heading up the face of the dam. Additional information can be found at the California Department of State Parks website at: http://www.parks.ca.gov/?page_id=462

CHAPTER 6 – SUPPORT FACILITIES

Pedestrian Facilities

The majority of the pedestrian facilities located within the urban areas of unincorporated Butte County consist of sidewalk facilities which were placed in conjunction with site improvements for subdivisions and commercial development. Newer sidewalk facilities include access ramps that meet both County and American with Disabilities Act (ADA) standards, while older facilities are being gradually upgraded to include access ramps as part of the County's Capital Improvement Program. To create uniform pedestrian corridors, sidewalk improvements will also have to be added to complete existing facilities that presently terminate without accessible ramps or connections to adjacent facilities.

The County Public Works Department has set up the following criteria for the improvement of sidewalks within County's jurisdiction:

- Provide access ramps and complete sidewalk improvements in areas which are adjacent to or provide routes to schools.
- Construct minimum twenty five-foot radius curb returns at intersections and County standard access ramps in urban areas where sidewalks already exist.
- Continue sidewalks to interconnect with those already existing to create uniform pedestrian corridors in the unincorporated urban areas of the County.

The County of Butte's Development Standards typically require proposed residential and commercial developments located in the County's urban areas to construct curb, gutter, and sidewalk improvements within the County roadways fronting development. Residential developments located within the Chico Urban Area that have lot sizes greater than one acre come under a separate rural standard that presently does not require curb, gutter, and sidewalks to be constructed. Elsewhere sidewalks are presently constructed to County Public Works Standards with a four-foot wide sidewalk in residential areas and a five-foot wide sidewalk within commercial areas.

Bicycle Parking

A good bicycle can be expensive. Because of this, bicyclists will tend to leave their bicycles safe at home unless there is a secure location and facility to park their bicycle at their destination. Therefore, secure bicycle parking is a key component in an effective overall bikeway system.

Bicycle parking requirements vary by jurisdiction. A survey of local bicycle parking requirements is shown below:

Table 6-1 Jurisdictional Bicycle Parking Requirements

Jurisdiction	Bicycle Parking Requirement
Biggs	No requirements.
Gridley	An "adequate number" of bicycle parking spaces are required for new commercial development.
Oroville	No current requirements, although bicycle parking has been included in commercial development agreements for the past year. For large retailers, 10 bicycle parking spaces were required; for smaller commercial projects, a bicycle rack and parking area were required with no size specified. The City plans to develop bicycle parking standards in the update of the zoning regulations following adoption of the General Plan.
Paradise	No requirements.
Chico	For multi-family residential uses, bicycle parking equal to 20% of the number of off-street automobile parking spaces are required. For commercial or industrial development, bicycle parking equal to 10% of the number of off-street automobile parking spaces are required.
Butte County	No requirements.

In general, bicycle parking is not abundant or even readily available at many regional attractions; parking is most commonly found at shopping areas and in the Chico area than at other locations. The specific findings of a field survey of bicycle parking at locations of regional significance are shown in Table 6-1.

Table 6-2 Bicycle Parking Inventory Areas of Regional Significance

Location	# Spaces	# Locations
Gridley		
Downtown area	unknown	2
Biggs-Gridley Hospital - 240 Spruce	unknown	1
Gridley High School	unknown	2
Biggs		
Downtown area	46	2
City of Biggs Offices	12	2

Location		# Spaces	# Locations
U.S. Post Office		9	1
County library - 464A B Street		0	0
Oroville			
County Center complex		8	1
Downtown area		8	1
County library - 1820 Mitchell		32	2
Oro Dam Blvd shopping centers	Las Plumas Plaza	4	1
	Currier Square	7	1
	Wal-Mart	15	1
Lake Oroville Recreation Area		0	0
Greyhound Station		0	0
Oroville Municipal Airport		0	0
Park and Ride lot		0	0
Paradise			
Clark Rd shopping areas	Paradise Plaza	8	1
County Library		6	1
Park and Ride lot		5	1
Chico			
County offices – Oleander – Municipal Court		13	2
CSU, Chico		4,719	44
Bidwell Park		64	5
North Valley Plaza Mall		66	7
Chico Mall		69	5
Downtown area		160	23
Enloe Hospital		6 lockers / 27 loop rack	2
Butte College - Chico Center		40	4

Location	# Spaces	# Locations
County library	30	1
Amtrak / Greyhound station	7	1
Chico Municipal Airport	6	1
Park and ride lot	8 lockers / 10 loop rack	2
Miscellaneous		
Durham Park	0	0
Grey Lodge	0	0
Butte College	50	2
Downtown Durham	0	0

Showers & Locker Facilities

Shower and locker facilities are not yet available for bicyclists on a widespread basis. CSU, Chico has shower, locker, and restroom facilities for students, faculty, and staff to use, as does Butte College. Several major employers, such as the City of Chico (Maintenance), Sierra Nevada Brewery and Enloe Hospital, also provide shower and locker facilities for their employees. Restrooms are available near bicycle parking facilities at the county libraries, government offices, shopping areas, and some Bidwell Park locations.

Bicycle Safety Education

The California Highway Patrol (CHP) is the law enforcement agency having primary enforcement responsibility for bicycle safety in Butte County. As such, the CHP has developed several educational pamphlets to inform bicyclists about how to ride safely, some geared towards children while others more suitable for adults. The CHP also issues press releases and other media information to spotlight bicycle safety issues. In addition, the Chico Area Recreation District has offered classes on safe, effective cycling.

Recent efforts have centered on the need for bicycle safety helmets, and to inform people that these are now required for all children under age 15. Butte County Public Health "Safe Kids" Coalition has spearheaded several efforts to reduce unintentional injuries and deaths among kids including bicycle and pedestrian accidents. Meetings are held between various public health professionals, including law enforcement, bicycle advocates and local government agencies to address injury prevention targeted towards children

Other efforts include Enloe Medical Center Chico which conducts the Think First Safety education program that has a component on Bike/helmet safety along with other safety messages. The Butte County Sheriff's Department provides new and refurbished bicycles and helmets to low income children every Christmas. Helmets were received through a grant from the California Kid's Plate Program.

Other agencies and community groups provide information and other resources to promote bicycling and bicycling safety.

CHAPTER 7 – CONNECTIVITY AND GAP CLOSURES

The Butte County Bike Plan focuses only on the unincorporated areas. As such, a significant component to this bike plan is to identify the connectivity between the various incorporated cities to each other via the County system. The ability of bicyclists to connect to other transportation modes is of great importance to regional mobility. The primary method in which this is accommodated is by transit. The B-Line buses provide bicycle racks on all of their fixed route buses.

Greyhound Bus Lines does not have provisions for bicycle transport, other than as luggage. Amtrak's Coast Starlight service, which serves Chico, shares Greyhound's bicycle-as-luggage transport policy. However, Chico is not an Amtrak baggage stop at this time.

Bicycle parking at intermodal facilities includes bicycle racks at the park-and-ride lot in Chico. Bicycle parking will also be included in the construction of the new transit hub center in downtown Chico. As shown in the inventory discussed previously, no other bicycle parking facilities at intermodal locations are currently available.

CHAPTER 8 – SHORT TERM PRIORITIES FOR GRANT FUNDING

The purpose of this section is to identify the bicycle projects or programs which the County's intends to pursue within the next 5 years. Costs for segments shown below are estimated using Caltrans Department of Bicycle Facilities data on cost per mile by type of bikeway. These cost estimates do not include right of way acquisition, if any. Some bikeway segments are planned for roadways with insufficient pavement width; in those cases, costs for adding pavement width are included in the cost estimate. Some roadway segments also have varying pavement widths, which may increase or decrease costs for portions of the segment. Bridge construction and/or widening, culverts, and utility relocation are also not included in the cost estimates. The projects identified are considered in priority order.

High Priority Projects

Segment	Length	Preliminary Estimated Cost
Neal Road – remaining section	1.7 Miles	\$750K
Oro-Chico Hwy.	4.9 Miles	\$2M
Durham Pentz (Butte College)	3.9 Miles	\$100K

Bikeway Cost Reference Data

Bikeway Type	Estimated Cost per Linear Foot**
Class I Bike Path	\$160.00
Class II Bike Lane Signage and striping only	\$4.00
Class II Bike Lane Additional pavement only	\$80.00 (two sides of street)
Class III Bike Route Signage only	\$1.00

*Based upon estimated construction costs associated with right-of-way acquisition, tree felling and stump removal, inadequate shoulder widths and topographical constraints characteristic of bicycle path construction and establishment in Butte County

Resources:

<http://www.calbike.org/resources.htm#design>

CHAPTER 9 – FUNDING

Current Funding Sources

There are a variety of sources used to fund transportation projects and programs. Most funding comes from the federal and state programs earmarked for specific types of transportation improvements, although some funds are generated through local programs. There are a few funding sources specifically designed for bicycle and pedestrian facilities; however, at the discretion of the local jurisdiction, most funding available for local streets and roads may also be spent on bikeway improvements. The following fund sources represent the typical funding associated with bicycle projects. For a comprehensive report on bicycle funding, please see, "A Guide to Bicycle Project and Program Funding in California" compiled by Ms. Gail Payne in February 2002 as part of a combined effort of the California Bicycle Coalition, Caltrans Bicycle Facilities Unit and the Planning and Conservation League Foundation. Copies of the guide are available the California Bicycle Coalition's web site a www.calbike.org.

Federal

Safe, Accountable, Flexible, Efficient Transportation Equity Act : A Legacy for Users (SAFETEA-LU)

SAFETEA-LUTEA-21 is a federal program to fund highways, transit and safety programs over the five year period between federal fiscal years 2004/05 (FFY 05) through 2008/09 (FFY09). Of the many sections that make up SAFETEA-LU, several contain potential funding sources for bicycling and are listed as follows:

Nation Highway System (NHS): May be used to construct bicycle transportation facilities on land adjacent to any highway on the NHS (other than interstate highways).

Surface Transportation Program (STP): May be used for construction of bicycle transportation facilities for carrying out non-construction projects related to safe bicycle use.

Congestion Mitigation and Air Quality (CMAQ): May be used for either construction of bicycle transportation facilities or non-construction projects related to safe bicycle issues.

Scenic Byways Program: May be used to construct bicycle facilities along scenic highways.

National Recreational Trails Fund: May be used for a variety of recreational trails. Projects must be consistent with the Statewide Comprehensive Outdoor Recreation Plan.

High Priority Projects: A congressional earmark may also be applied for at the time legislation is written through the congressperson's office.

Further SAFETEA-LU information could be viewed at:

<http://www.fhwa.dot.gov/safetealu/legis.htm>

State

Bicycle Transportation Account (BTA)

The Bicycle Transportation Account (BTA) provides state funds for city and county projects that improve safety and convenience for bicycle commuters. To be eligible for BTA funds, a city or county must prepare and adopt a Bicycle Transportation Plan (BTP) that complies with Streets and Highways Code Section 891.2 and the following:

1. The governing body of a city or county must adopt the BTP by resolution or certify that it is current and complies with Streets and Highways Code Section 891.2.

2. The city or county must submit the BTP to the appropriate Metropolitan Planning Organization (MPO) or Regional Transportation Planning Agency (RTPA) for review and approval for compliance with Streets and Highways Code Section 891.2 and the regional transportation plan (RTP).
3. Following regional approval, the city or county must submit the BTP, the resolution adopting the BTP, and the letter of approval from the MPO/RTPA to the Caltrans Bicycle Facilities Unit (BFU) for review and approval.

Additional information concerning this program can be found on the Caltrans website.

Apportioned from fuel tax revenues, eligible projects under this statewide competitive grant program include bikeway and pedestrian projects included in Bicycle Transportation Plans. Priority is given to commuter bikeway projects.

State Transportation Improvement Program (STIP)

The STIP is a biannual process through which the California Transportation Commission allocates the State Highway Account to transportation projects. It is made up of essentially two programs - a local discretionary fund called the Regional Improvement Program and a state discretionary fund called the Interregional Improvement Program. Specific STIP information could be found on the Caltrans website.

Regional Improvement Program: Regions are given a county bid target in which to develop the Regional Transportation Improvement Program (RTIP). The BCAG Board of Directors have the discretion to select and program transportation improvement projects for the region including highways, local roads, transit, bike lanes, etc. Additional RTIP information and the identification of BCAG's regional priorities for RIP funds can be found on their website.

Transportation Enhancement Program (TE): Portions of the Regional Improvement Program Funds are required to be programmed for Transportation Enhancement Activities. Funds are to be used for transportation related projects that enhance quality-of-life, in or around transportation facilities, including bicycle and pedestrian facilities. Additional information could be found at the Caltrans TE website at: <http://www.dot.ca.gov/hq/TransEnhAct/TransEnact.htm>

Transportation Development Act (TDA)

Passed in 1971, this legislation provides a regular, guaranteed source of funds for local transit. These funds are administered by the Regional Transportation Planning Agency (RTPA) and apportioned to jurisdictions on a per-capita basis. While there are funding programs provided under TDA, only one can be used for bikeways.

Local Transportation Fund (LTF): One-quarter of one percent (1.0%) of the statewide sales tax is returned to the county in which it was generated for use in local transit. The law also provides that if it can be shown, through an annual process, that all unmet transit needs that are reasonable to meet are being provided for, the remaining LTF funds can be used for streets and roads, including bicycle and pedestrian projects. In addition, 2% of the available funds can be directed toward bikeway and pedestrian facilities.

Local

Air Quality Management District (AQMD)

The Butte County Air Quality Management District imposes a motor vehicle registration fee to be used to reduce air pollution from motor vehicles. Although not required to distribute any of these fees to outside agencies, the AQMD annually makes some of these funds available to non-District public agencies, or public agency sponsored programs.

Traffic Mitigation/Impact Fees

Local fees may be assessed on new development projects which, as a result of their construction, are expected to generate additional traffic. Criteria of such fees are set by the local jurisdiction. Most jurisdictions employ some type of traffic mitigation fee. They may be assessed area-wide, only in target sections on a project-by-project basis, or by a combination of these options.

Potential Funding Sources - Reliable funding is required before a commitment can be made to individual transportation projects. The largest sources of potential funds are state and federal transportation funds and are generally allocated based on population. As a result, rural areas, such as Butte County, are at a funding disadvantage relative to the large urban areas of the state and nation. Butte County and its respective municipalities must look to a variety of funding mechanisms, including innovative funding strategies, if the full lists of needed bikeway improvements are to be implemented.

Potential methods of enhancing the revenues available for transportation, including bikeways, are discussed below.

Local Sales Tax Increase

The state legislature has given local jurisdictions the ability to increase the retail transaction use tax, or sales tax, up to 1 percent, which can be earmarked for specific purposes. A super-majority (2/3) vote is required on such an increase. A number of California counties, including Sacramento, San Francisco, Contra Costa, Santa Clara, and Santa Cruz Counties and others, have voted an increase in the sales tax to finance specific transportation improvements.

Bond Measures

Cities and counties may issue general obligation bonds payable through increased property taxes by a 2/3 majority vote of the general electorate. These bonds may be used to fund government services including transportation improvements.

Assessment Districts

Cities and counties may form benefit assessment districts to provide specific services or facilities to groups of people who would benefit from their availability.

New Construction

Future road widening and construction projects are one means of providing bike lanes and pedestrian infrastructure. To ensure that roadway construction projects provide bike lanes where needed, appropriate and feasible, it is important that an effective review process is in place so that new or improved road infrastructure meets the needs of the community.

Other

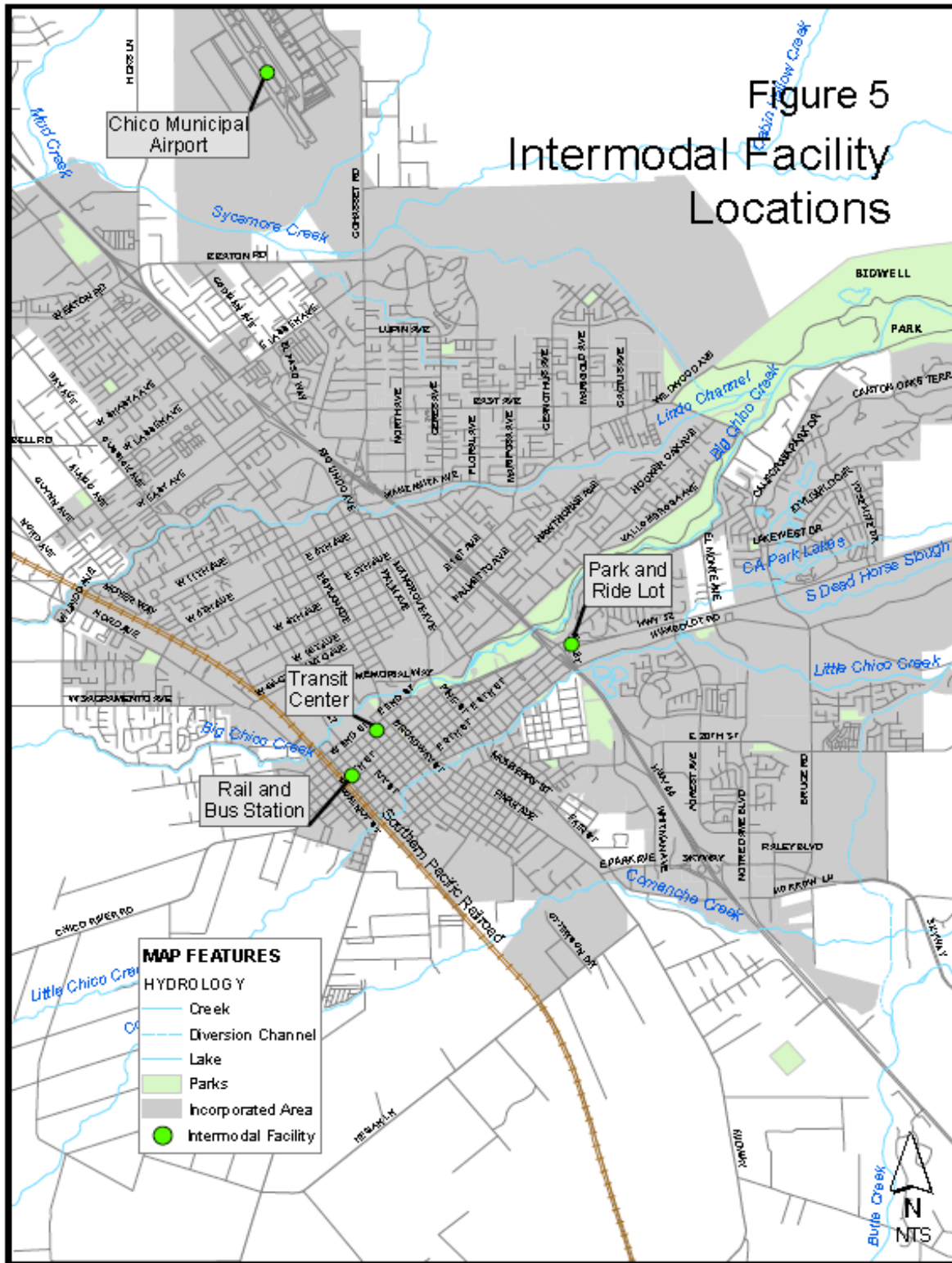
Alternative methods such as volunteer programs may substantially reduce the cost of implementing some of the proposed pathways. Use of groups such as the California Conservation Corp who offers low cost assistance will be effective at reducing project costs. Local schools or community groups may use the bikeway or pedestrian project as a project for the year, possibly working with a local designer or engineer. Work parties may be formed to help clear the right of way where needed. A local construction company may donate or discount services. A challenge grant program with local businesses may be a good source of local funding, where businesses or corporations "adopt" a bikeway and help construct and maintain the facility.

Grant Based Financing

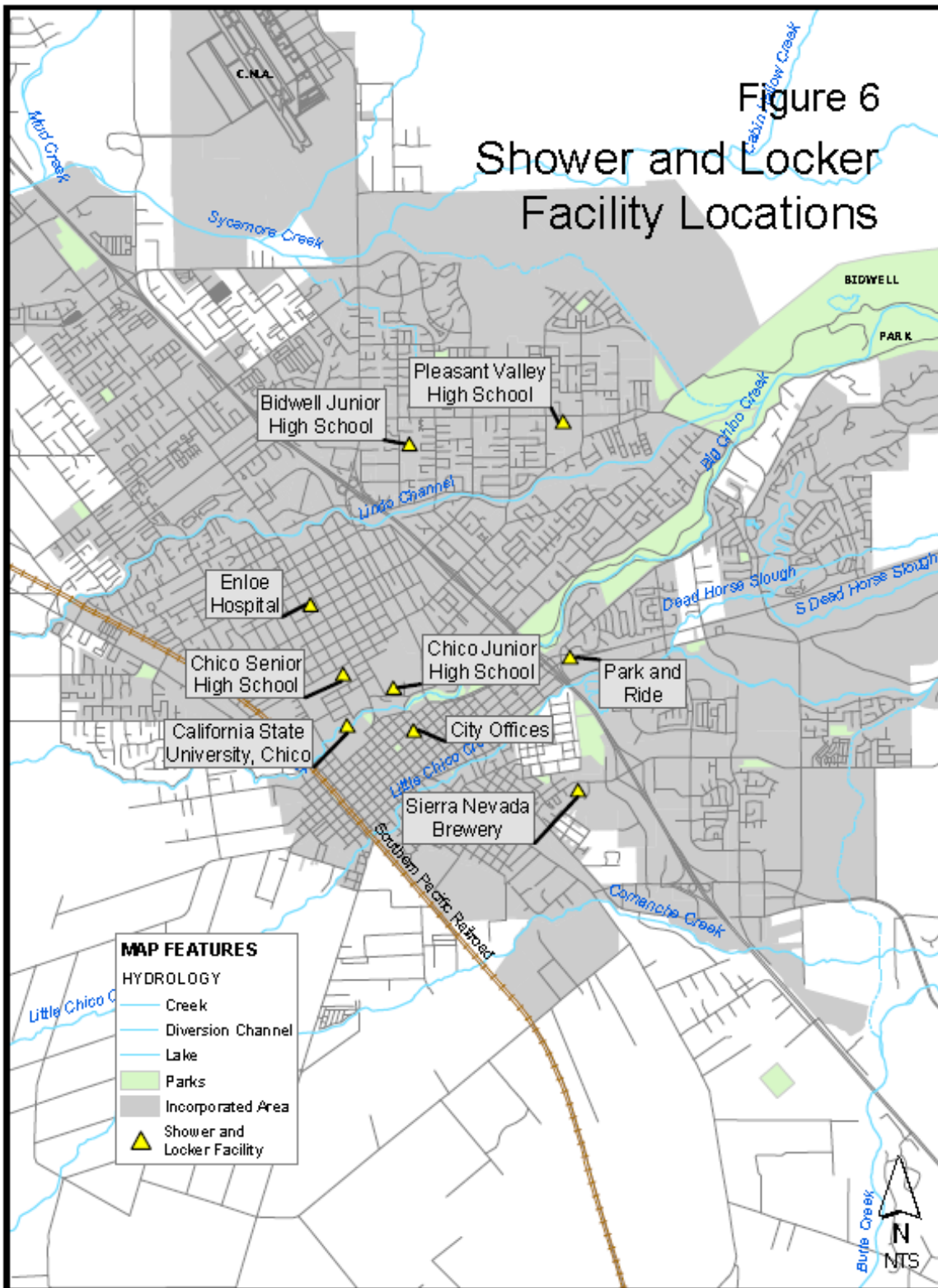
Proposed improvements and programs to be developed over the next 20 years in the County will rely heavily on competitive grant funding from federal and state resources. These funding sources are extremely competitive, and require a combination of sound applications, local support, and lobbying on the regional and state level.

MAPS

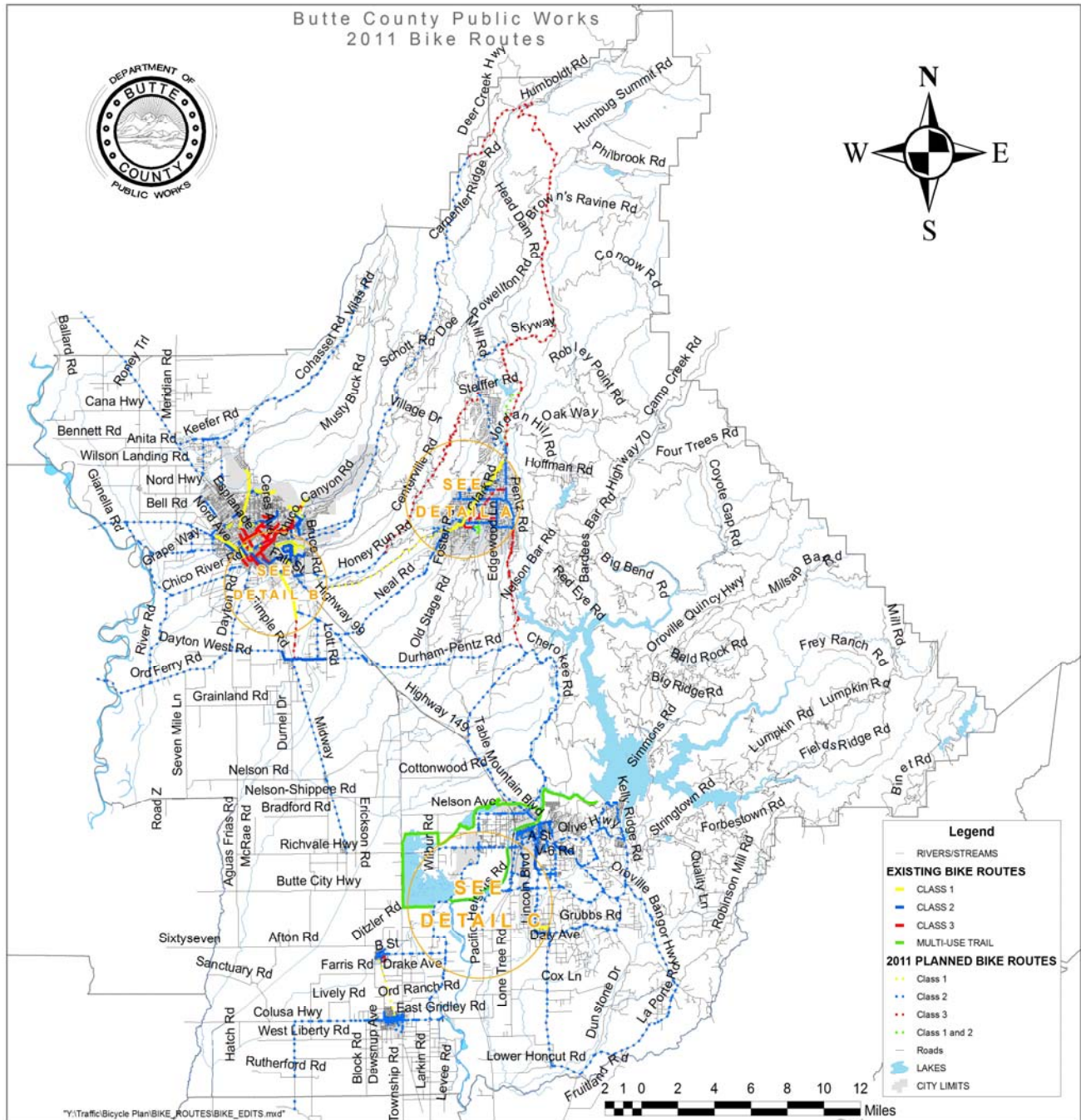
CITY OF CHICO INTERMODAL FACILITY LOCATIONS MAP
 (Figure 5 from City of Chico Bike Plan)



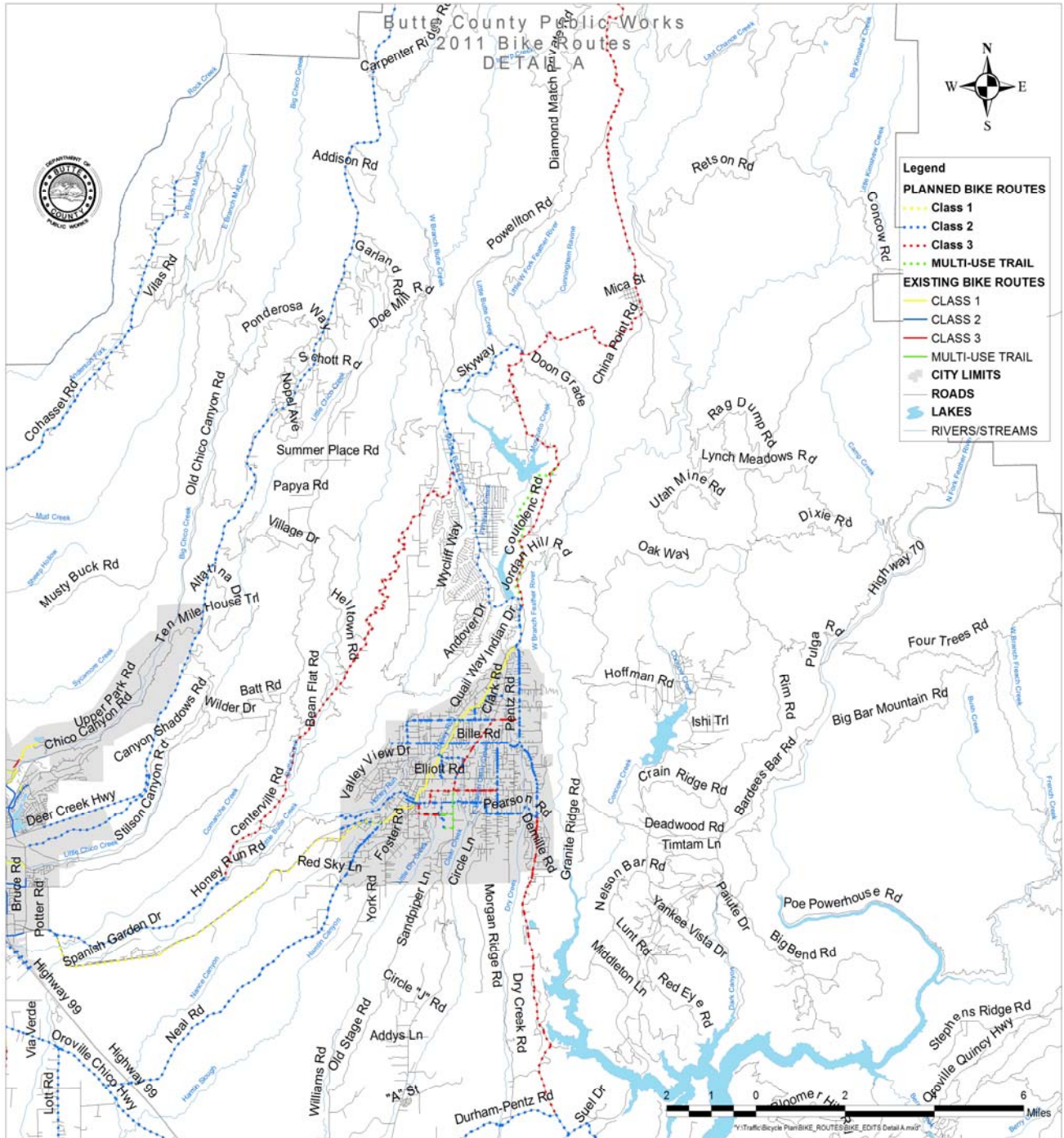
CITY OF CHICO SHOWER AND LOCKER FACILITY LOCATIONS MAP
 Figure 6 from City of Chico Bike Plan



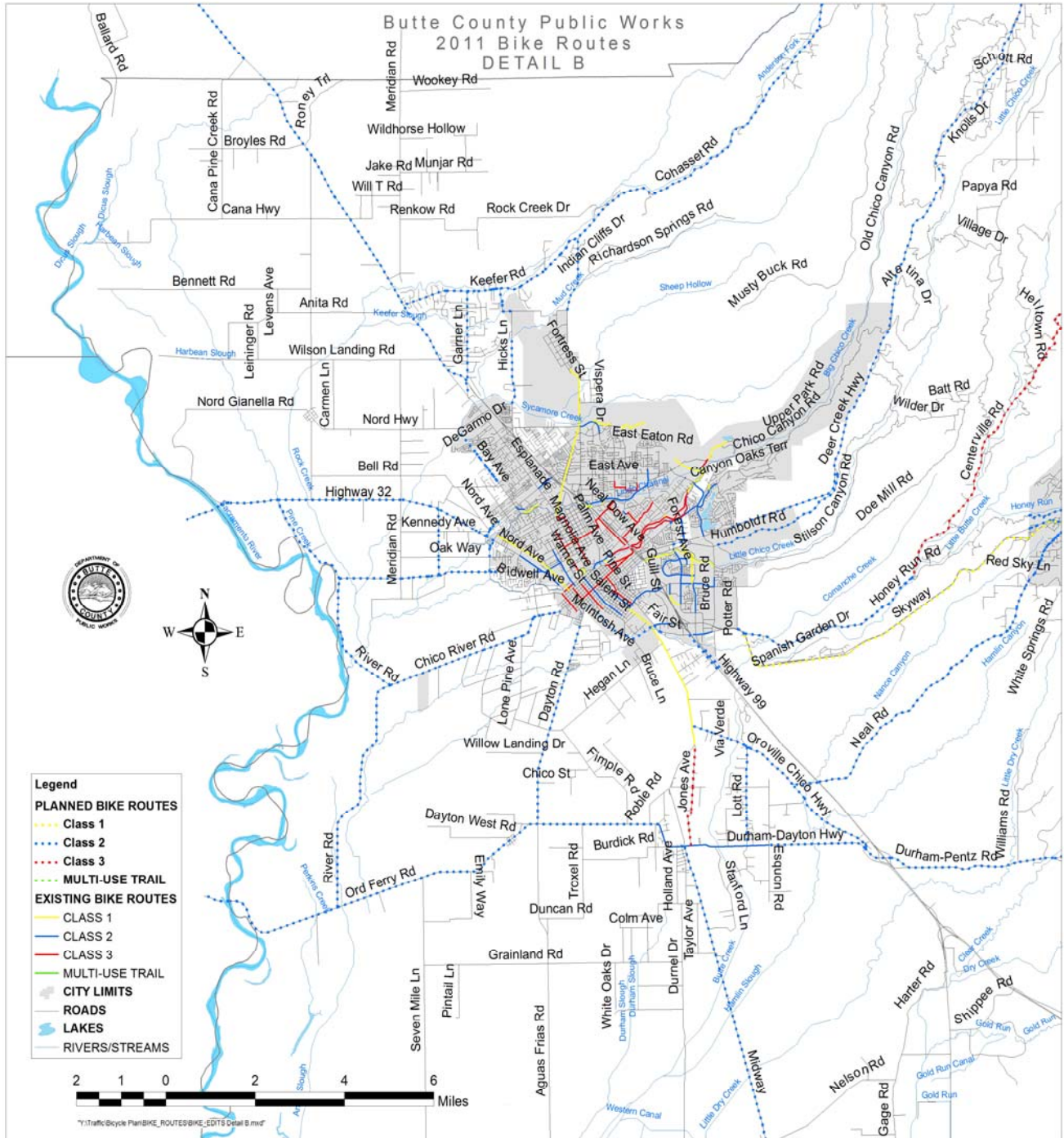
COUNTY BIKE ROUTE MAPS – COUNTY WIDE MAP



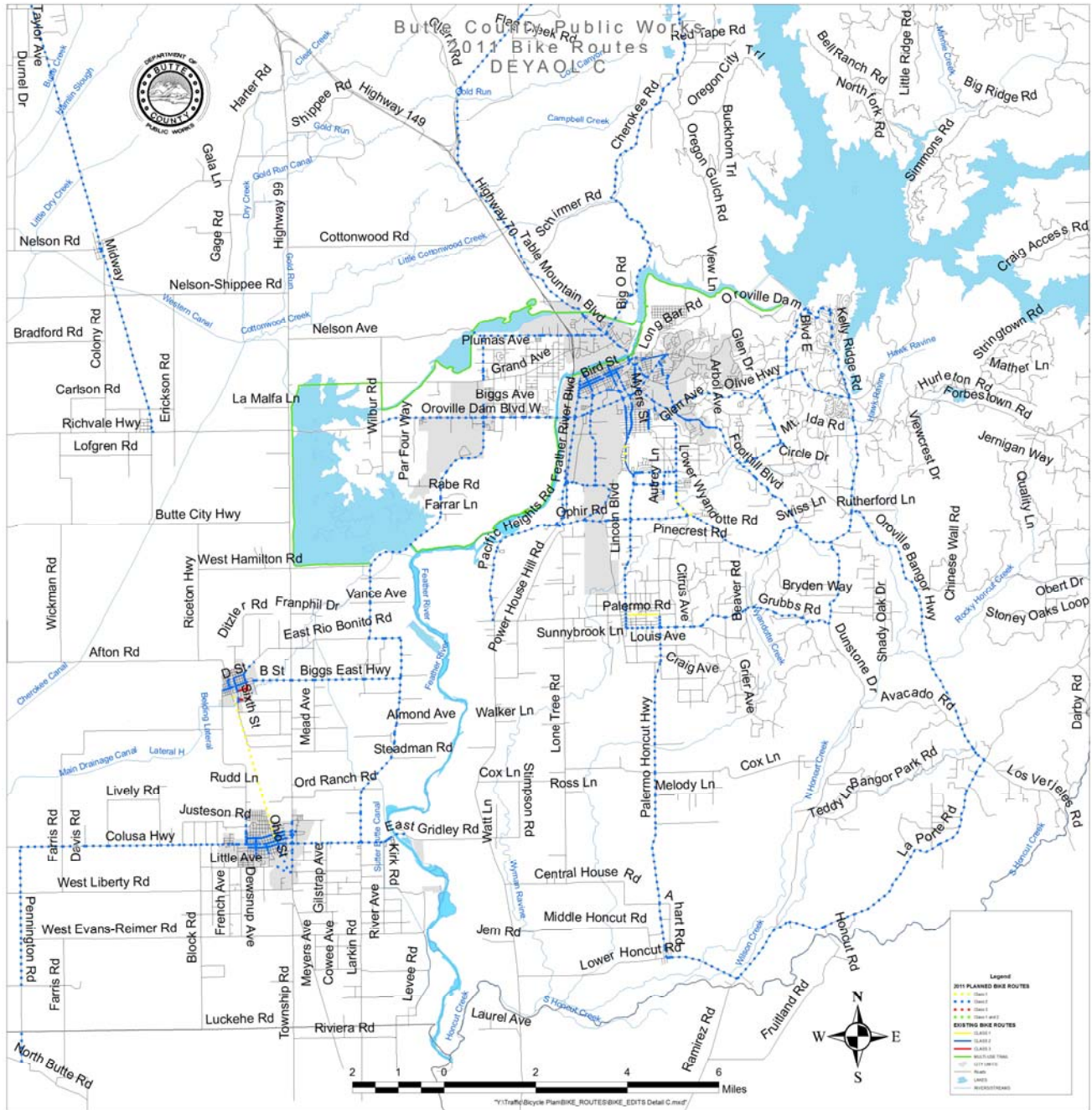
COUNTY BIKE ROUTE MAPS – DETAIL A



COUNTY BIKE ROUTE MAPS – DETAIL B

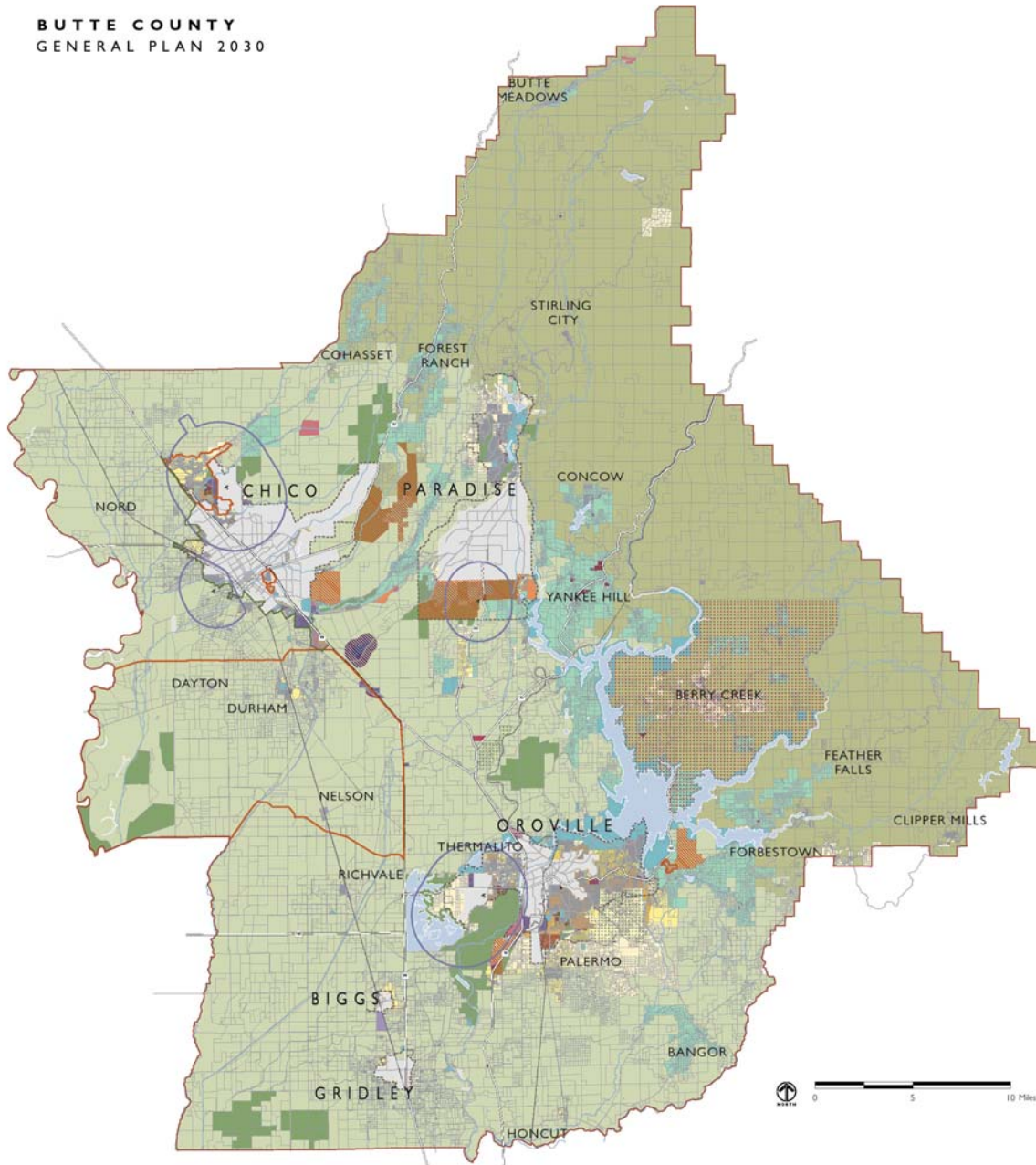


COUNTY BIKE ROUTE MAPS – DETAIL C



COUNTY LAND USE DESIGNATION MAP

BUTTE COUNTY
GENERAL PLAN 2030



Note: The Deer Head Migration Area Overlay and the Airport Land Use Compatibility Zones within the Airport Overlay are provided as separate maps.

<p>Agriculture/Timber/Conservation Designations</p> <ul style="list-style-type: none"> Agriculture (20-ac to 320-ac minimum) Agriculture Services (0.8 maximum FAR) Timber Mountain (160-ac minimum) Resource Conservation (40-ac minimum) <p>Residential Designations</p> <ul style="list-style-type: none"> Foothill Residential (1 to 40 ac/du) Rural Residential (5 to 10 ac/du) Very Low Density Residential (1 to 5 ac to 1 du/ac) Low Density Residential (1 to 3 du/ac) Medium Density Residential (3 to 6 du/ac) Medium High Density Residential (6 to 14 du/ac) High Density Residential (14 to 20 du/ac) 	<p>Commercial/Industrial Designations</p> <ul style="list-style-type: none"> Mixed Use (4 to 20 du/ac and 0.5 maximum FAR) Retail and Office (0.4 maximum FAR) Recreation Commercial (0.4 maximum FAR) Sports and Entertainment (0.4 maximum FAR) Industrial (0.4 maximum FAR) Research and Business Park (0.5 maximum FAR) <p>Other Designations</p> <ul style="list-style-type: none"> Public Planned Unit Development 	<p>Overlays</p> <ul style="list-style-type: none"> Existing Area, Neighborhood or Specific Plan Berry Creek Area Plan Specific Plans to be Developed Unique Agriculture Overlay Retail Overlay Solid Waste Management Facility Overlay Airport Overlay 	<ul style="list-style-type: none"> Airports Greenline Railroad Highways Major Roads Sphere of Influence City/Town Limits County Boundary
--	--	---	---

GENERAL PLAN LAND USE MAP
OCTOBER 26, 2010