

BIGGS AREA BICYCLE TRANSPORTATION PLAN



DRAFT

PREPARED FOR:

THE CITY OF BIGGS
3016 6TH STREET
BIGGS, CA 95917



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TABLE OF CONTENTS

CHAPTER ONE: INTRODUCTION.....	2
PREVIOUS PLANNING EFFORTS	3
DEFINITIONS	4
PUBLIC PARTICIPATION PROCESS	4
CHAPTER TWO: SETTING.....	6
LAND USE PATTERNS	7
COMMUTE PATTERNS	9
REGIONAL CONTEXT	10
CHAPTER THREE: ISSUES.....	12
CHAPTER FOUR: BIKEWAY FACILITY INVENTORY.....	13
BIGGS EXISTING FACILITIES	14
BIGGS PLANNED FACILITIES	15
CHAPTER FIVE: BICYCLE SUPPORT FACILITIES	16
BICYCLE PARKING	17
INTERMODAL CONNECTIONS	18
SHOWER AND LOCKER FACILITIES	18
CHAPTER SIX: BICYCLE SAFETY AND EDUCATION.....	20
CHAPTER SEVEN: GOALS, POLICIES AND OBJECTIVES.....	22
CHAPTER EIGHT: BIKEWAY FUNDING SOURCES.....	26
STATE OF CALIFORNIA	26
LOCAL	27
APPENDICES.....	28
ILLUSTRATED BIKEWAY CLASSIFICATIONS	

CHAPTER ONE

INTRODUCTION



INTRODUCTION

Bicycling has become an increasingly popular method of travel. Now more than ever, many are attracted to the known cost and energy savings, environmental benefits, and health advantages. Others simply may not be able to drive due to youth, finances, or otherwise, and use bicycles as their primary means of transportation.

Biggs is perfectly suited for bicyclists due to the flat terrain, shade trees, low traffic volumes, and favorable climate. The city's numerous low volume streets and flat terrain provides a strong basis for the establishment of a bikeway system. One physical obstacle facing bicycle circulation in the City of Biggs is the railroad tracks, which create a barrier to east-west travel within the city. But careful and coordinated planning efforts are underway, and intend to provide the best and safest access throughout the City and plan area.

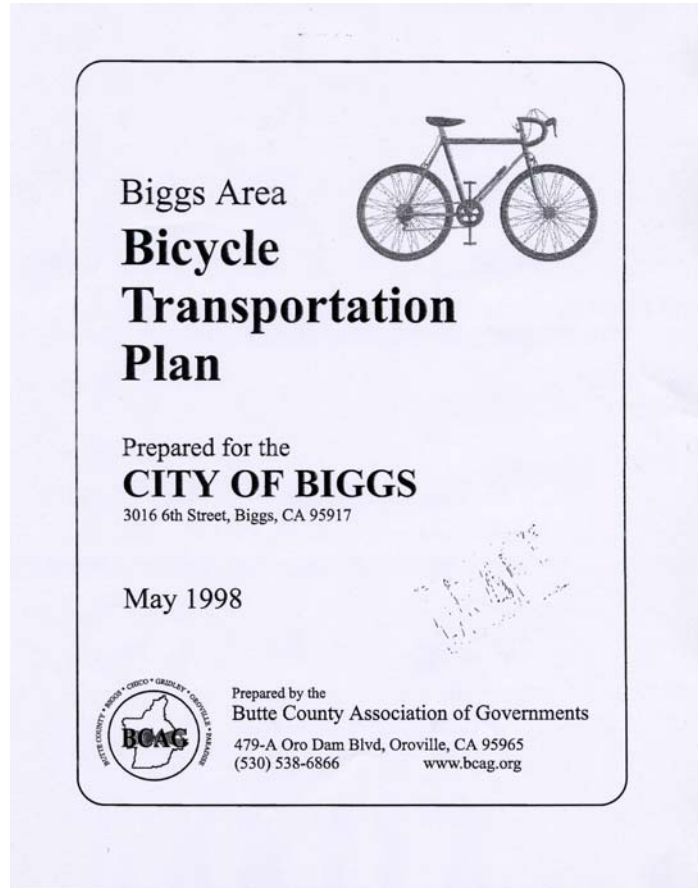


Depending on the location, overall development of bikeways may be a responsibility of local, state, or federal government. The City of Biggs plans bikeways within its sphere of influence. The City is responsible for the development of bikeways within its incorporated limits, while the county is responsible for the remainder of the urban area. Although there have been no joint bikeway projects constructed in the Biggs Urban Area, the County of Butte and the Butte County Association of Governments (BCAG) have traditionally cooperated with other cities on local bikeway projects. Caltans is responsible for the development and maintenance of bikeways along state highways or where established bikeways are interrupted by highway construction. The federal government would be responsible for funding bikeways on federal lands, such as national forests, or along interstate highways if their provision will enhance safety.

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 the transportation monies may be spent, expanding project eligibility to include bicycle and pedestrian paths. However, many discretionary funding sources require that bikeway projects must be part of a bicycle transportation plan in order to be eligible for funding. It is up to the individual jurisdictions to either propose bikeway projects for these funding sources, or decide to use transportation allocations on bikeways.

PREVIOUS PLANNING EFFORTS

This plan updates and revises the BIGGS AREA BICYCLE TRANSPORTATION PLAN from May of 1998. The City of Biggs, in conjunction with Butte County Association of Governments (BCAG), developed a comprehensive bikeway plan as part of that 1998 effort.



Some projects were identified in the *draft Countywide Master Plan*, May 1994. Bikeway and pedestrian facilities are discussed in the Circulation Element of the *City of Biggs General Plan 1997-2015*, which was adopted after extensive public input. These goals and policies form the core on which the policy element of this bicycle transportation plan is based.

DEFINITIONS

The City of Biggs uses Caltrans' design standards, as described in Chapter 1000 of the Caltrans Highway Design Manual, dated July 1993*. There may be cases where the city's design standards may vary from those used by Caltrans. A careful evaluation of conditions for a specific bikeway may justify an easing of some requirement, or necessitate a more stringent requirement, as the case may be.

**Class I
Bike Path** Provides a completely separated facility designed for the exclusive use of bicycles and pedestrians with minimal crossflows by motorists. Caltrans Standards call for Class I bikeways to have 8 feet (2.4 meters) of pavement with 2 foot (0.6 meters) graded shoulders on either side, for a total right-of-way of 12 feet (3.6 meters). These bikeways must also be at least 5 feet (1.5 meters) from the edge of a paved roadway.

**Class II
Bike Lane** Provides a restricted right-of-way designated for the exclusive or semi-exclusive use of bicycles within through travel by motor vehicles or pedestrians prohibited, but with vehicle parking and crossflows by pedestrians and motorists permitted. Caltrans standards generally require a 4 foot (1.2 meters) bike lane with a 6-inch (150mm) white stripe separating the roadway from the bikelane.

**Class III
Bike Route** Provides a right-of-way designated by signs or permanent markings and shared with pedestrians and motorists. 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.

** Appendix A shows illustrations of each bikeway classification.*

PUBLIC PARTICIPATION PROCESS

The 1998 *Biggs Urban Area Bicycle Transportation Plan* was developed by the Butte County Association of Governments for the City of Biggs. A cornerstone of this plan's contents was the city's General Plan, which was obtained after extensive citizen participation.

The 2005 update was proposed and undertaken by the City of Biggs, utilizing resources including the *City of Biggs General Plan*, *County of Butte General Plan*, the *City of Biggs/BCAG 1998 Biggs Urban Area Bicycle Transportation Plan*, and current City of Biggs project and budget information.

Additional citizen input will be obtained through the hearing process prior to the adaptation of a bikeway plan. Public hearings will be held by the City as part of the consideration of this document.

CHAPTER TWO

SETTING



SETTING

LOCATION

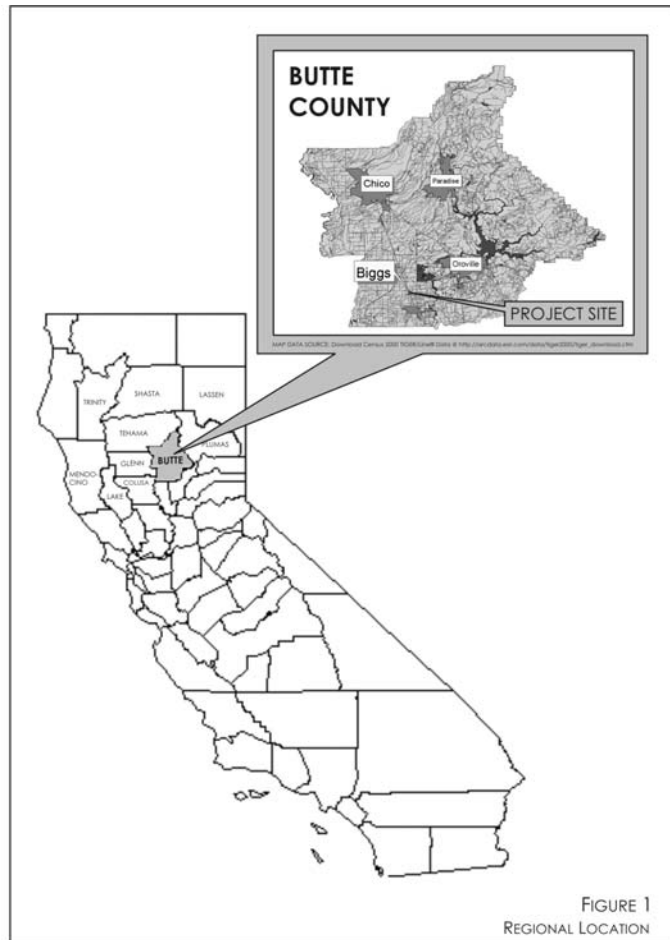
The Biggs Urban Area is located in the southwestern portion of Butte County, in the northern Sacramento Valley (Figure 1). Biggs is the county's smallest incorporated city, with an estimated 2004 population of approximately 1,815 (Source: U.S. Census Bureau, 2004 Population Estimates, Census 2000, 1990 Census). The city currently encompasses 338 acres. The Biggs Urban Area is characterized by very flat terrain, averaging less than 100 feet above sea level, with an average slope of only 3 or 4 feet per mile. Please see figure at right.

CLIMATE

Biggs' climate, like that of the rest of the northern Sacramento Valley, is generally categorized as Mediterranean, with hot, dry summers and cool, wet winters. Average winter rainfall is approximately 20 inches annually.

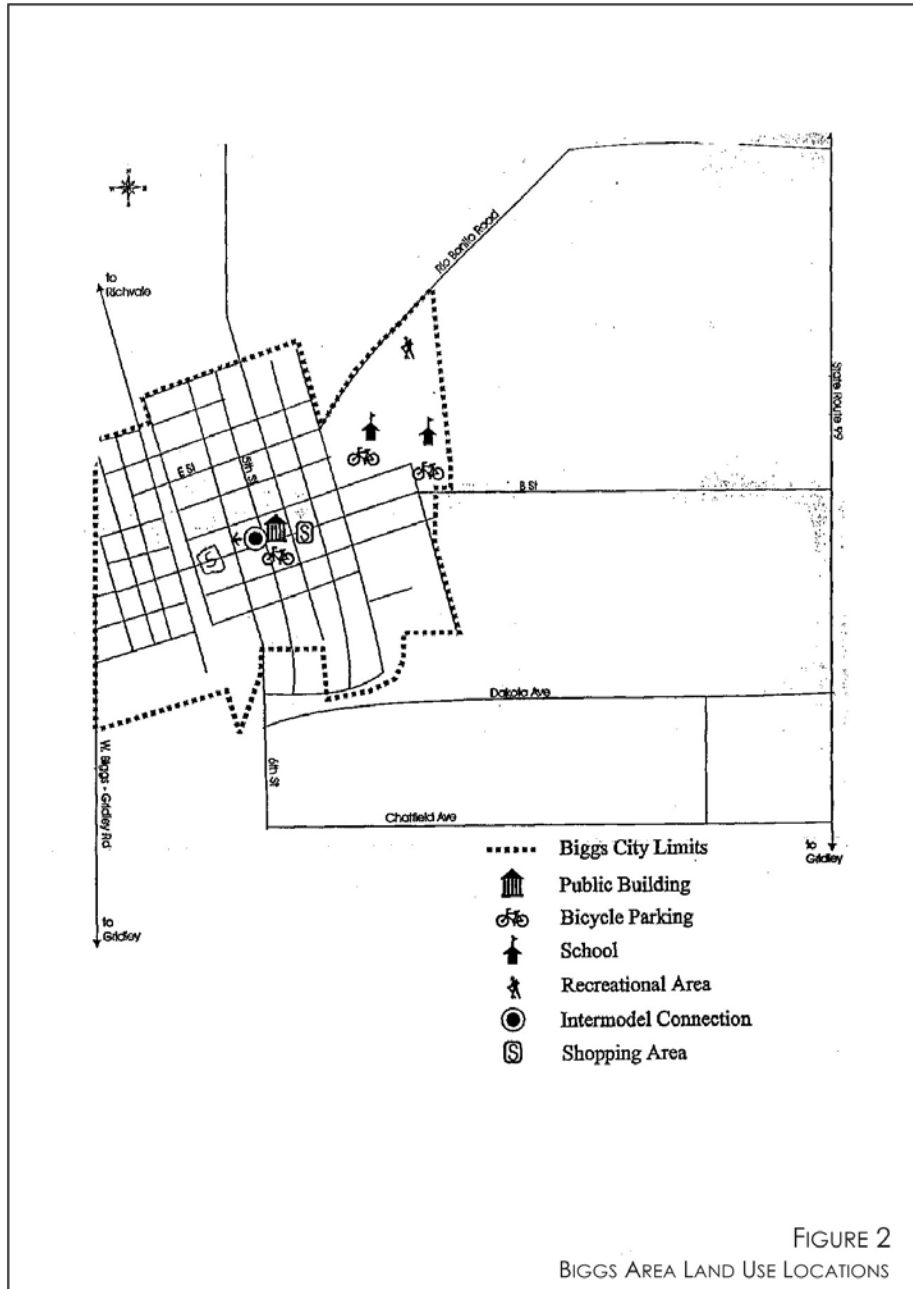
CHARACTER

Biggs is primarily an agricultural community. It's rich, productive soils and commitment to agriculture are the characteristics that sets Biggs apart from other Butte County communities. Typified by an image of small town America, one of Biggs' most attractive qualities is a quiet, safe environment. The city's downtown area supplies necessary goods and services to local residents, with a grocery store, post office, and a number of small stores located along B Street.



LAND USE PATTERNS

Land use defines trip origins and destinations, providing the traffic generation patterns which delineate the need for bikeways. Figure 2 map of these land use patterns:



PMC
PACIFIC MUNICIPAL
CONSULTANTS

Specific examples of the land use patterns that warrant bikeways are as follows:

Residential Areas

Large or concentrated residential areas are both the origin and destinations of large numbers of bicycle trips. Residential areas comprise most of the city.

Schools

Bicycling is a primary form of transportation for many school children. Safe routes between schools and the adjacent residential areas are important not only for the students' safety, but can provide an easy means of reducing of reducing vehicular trips by reducing the need for parents to drop off and pick up the kids at school. Biggs Elementary, Middle and High Schools are located adjacent to each other along B and C Streets at First Street.

Shopping Areas

Shopping areas provide a destination for bicyclists. The downtown area, B Street between Fourth and Seventh Streets, is the major shopping area of the city.

Public Buildings

Public buildings include city, county, state, and federal offices. City of Biggs offices are located on Sixth Street, between B and C Streets. The County library branch is located at the corner of B Street and Fifth Street in the downtown area. The fire station is also located on B Street near the City offices.

Major Employment Centers

The largest employment segments for Biggs residents are agriculture, retail sales, construction, and education. The city's largest employer is the Biggs Unified School District. Another major employer is SunWest Rice Milling, located in the southwest corner of the City.

Recreational Areas

The City is currently in the process of reconstructing Biggs Family Park, which is located centrally, on Eights Street between B and C Streets. When complete, the newly improved facility will include a multi-sport court, a children's play area, open turn and picnic facilities, and a skate plaza.

city's main recreational facility is Biggs City Park located on West Rio Bonito Road. In addition, Grey Lodge Wildlife Area and the Feather River are each located within a few miles of Biggs.

COMMUTE PATTERNS

The existing commute patterns for travel within the Biggs area heavily favors automobiles. Support for this can be found in the 2000 U.S. census, which shows that only 18% of the city's workers 16 and older were actually employed in Biggs; about 58% worked elsewhere in the county, and nearly 24% worked outside of the county. Approximately 37% of the work force travel less than 15 minutes to work, while another 37% travel more than 30 minutes to work.

Still, for those who work in or near the city, the health benefits of bicycling, the wide, shady streets, the short distances between home and work, and mild temperatures for all but midsummer afternoons provide inducements to bicycle commuting.

The U.S. census provides some indication of the numbers of people using the bicycle as a means of travel. In Biggs Urban Area, no employed persons bike to work as according to the 2000 Census. However, the census figures specifically exclude bicycle to school trips as part of its reporting.

Estimates of numbers of bicycle to school commuters are more difficult to calculate, as there are no official sources of this type of data. All types of schools, serving all grade levels, generate bicycle traffic. Caltrans' 1991 Statewide Travel Survey estimates that 8.5% of Butte County students bicycle their way to school on a regular basis. Based on total public school enrollment of 850, it is estimated that this adds an additional 72 bicycle commuters. Combined with bicycle to work figures, the current total of bicycle commuters in the Biggs Urban Area is estimated at about 75, or about 4.4% of its total population.

According to the *City of Biggs General Plan*, the population of the city is expected to increase at a rate of 2% annually. This equates to a city population of approximately 2,400 by the year 2015. With the implementation of the policies in this document, as well as those contained in the General Plan, it can be expected that the bicycle commuting will increase at the same rate as the population. Bicycle to school commuting can be expected to increase as well. The Biggs Unified School District does not calculate long-term projections from school enrollment. However, using the overall city population projections of a 2% annual growth as a guide, total public school enrollment is expected to grow to 1,200 in 2015, thus adding another 30 bicyclists. Combined with existing numbers, the total amount of bicycle commuters is expected to reach approximately 105, or 4.4% of the population, at build out.

REGIONAL CONTEXT

An important consideration in planning bikeways in the Biggs area is the linkage to regional facilities. These linkages are critical to the development of a comprehensive bicycle transportation system for Biggs and Butte County. Planned regional bikeways linking with the Biggs Urban Area are as follows:

- Class II bike lanes on Biggs East Highway/B Street from Larkin Road to W. Biggs Gridley Road

Status: Not currently scheduled. Included as low priority in draft Countywide Bicycle Transportation Plan.

- Class I "rails with trails" route along SP lines from Durham to Gridley.

Status: Not currently scheduled. Included as low priority in draft Countywide Bicycle Transportation Plan.

- Class II bike lanes on W. Biggs-Gridley Road from Magnolia Avenue in Gridley to B Street in Biggs

Status: Not currently scheduled. Included as low priority in draft Countywide Bicycle Transportation Plan.

CHAPTER THREE

ISSUES



ISSUES

Bicycle/Railroad Conflicts

The Southern Pacific Railroad tracks bisect the center of Biggs on a north-south alignment between Seventh and Eighth Streets. There are two at-grade crossings, one at B Street and the other at E Street. The numerous daily trains that use this line can create traffic delays for bicycles as well as automobiles.

There has been speculation in 2005 about the future of the existing crossings, and even some speculation about relocation of one crossing or possibly even a new crossing. The current regulatory environment prevents this plan from specific consideration of those options, but any future crossing is anticipated to be planned in coordination with this and all corresponding traffic, transportation, and safety plans.

Pavement Width

Many of the city's streets are not paved from curb to curb. The irregular pavement width can create challenges for bicycle riders using the shoulder areas.

Existing and planned bikeways are shown below, in Figure 3

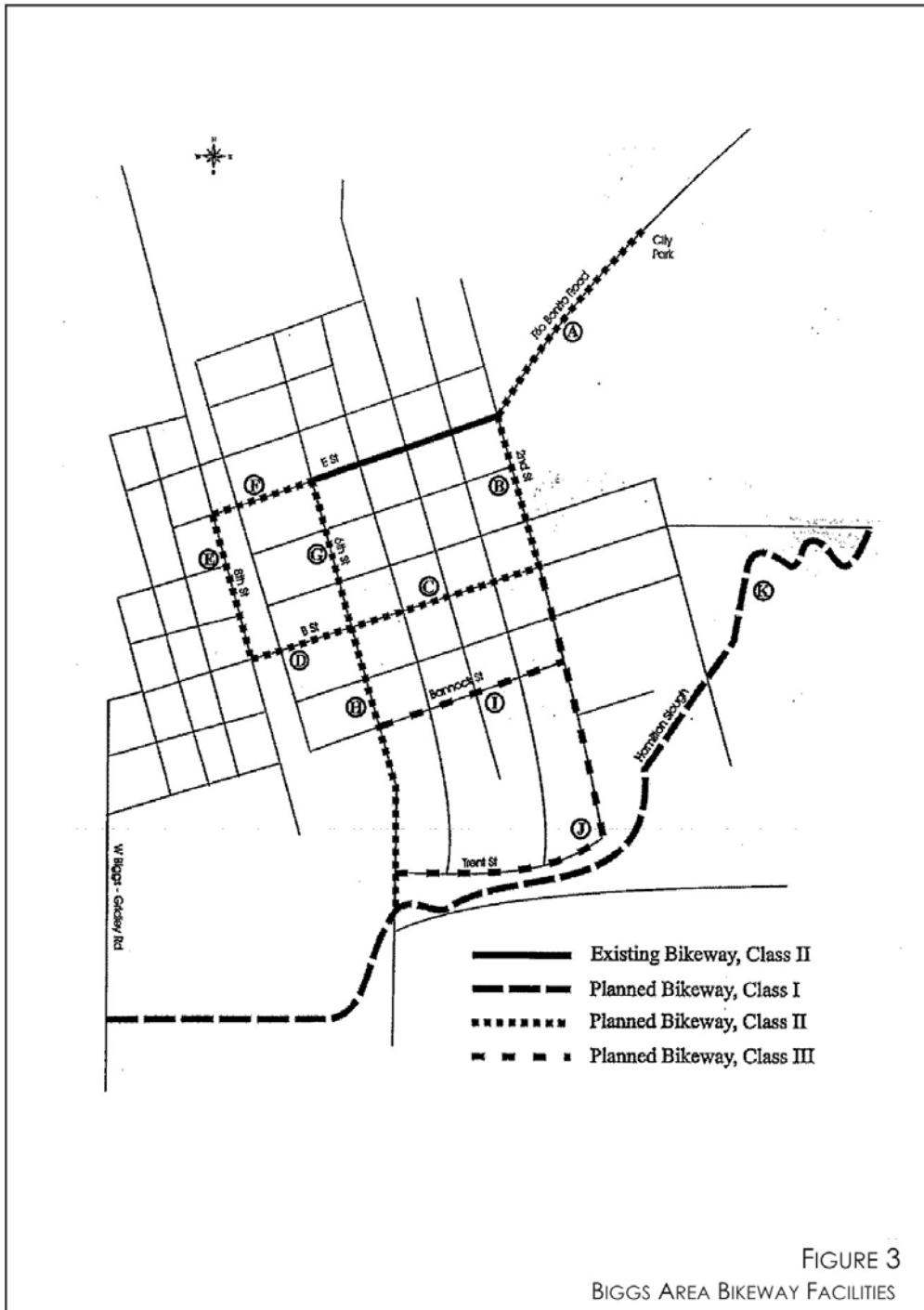
CHAPTER FOUR

BIKEWAY FACILITY INVENTORY



BIGGS EXISTING FACILITIES

- Class II bike lanes on E Street from Second Street to Sixth Street



BIGGS PLANNED FACILITIES

(Planned bikeways are listed in no priority order-Letters are for map purposes only)

- A. Class II bike lanes on E Street/West Rio Bonito Road from Second Street to Biggs City Park

Status: *IN PROCESS – 2nd to 6th COMPLETED*

- B. Class II bike lanes on Second Street from E Street to B Street

Status: *Scheduled for 2006*

- C. Class II bike lanes on B Street from Sixth Street to Second Street

Status: *Not currently scheduled*

- D. Class II bike lanes on B Street from Sixth to Eighth Street

Status: *Not currently scheduled*

- E. Class II bike lanes on Eighth Street from E Street to B Street

Status: *Scheduled for 2006*

- F. Class II bike lanes on E Street from Sixth Street to Eighth Street

Status: *Scheduled for 2006*

- G. Class II bike lanes on Sixth Street from E Street to B Street

Status: *Scheduled for 2006*

- H. Class II bike lanes on Sixth Street from B Street to southern edge of planning area

Status: *Not currently scheduled*

- I. Class III bike route on Bannock Street from Second Street to Sixth Street

Status: *Not currently scheduled*

- J. Class III bike route on Second Street/Trent Street from B street to Sixth Street

Status: *Not currently scheduled*

- K. Class I bike path along Hamilton Slough from W. Biggs/Gridley Road to B Street

Status: *Not currently scheduled*

CHAPTER FIVE

BICYCLE SUPPORT FACILITIES



BICYCLE PARKING

A good bicycle can be expensive. So, bicyclists may leave their bicycles safe at home unless there is a secure spot to park their bicycle at their destination. Therefore, bicycle parking is a key component on an effective overall bikeway system.

There are a number of different types of bicycling parking. Most common are bicycle racks. These racks may be freestanding, or bolted to the ground or to a structure. Bicycles are secured to the racks with the rider's bicycle lock. Bicycle racks come in a large variety of configurations, with different designs and numbers of parking spaces. Another common, but more expensive, form of bicycle parking are bicycle lockers. These are enclosures that contain the entire bicycle behind a locked door. Bicycles lockers are used for longer-term storage and security of bicycles, such as at park and ride lots.

Bicycle parking requirements vary by jurisdiction. However, the City of Biggs currently does not have bicycle-parking requirements for existing or new development.

A field survey of bicycle parking available at identified land use designations was conducted in April 1998. In general, bicycle parking is somewhat limited. The specific findings of the field survey are listed in Table 1. A map of bicycle parking availability is shown on Figure 2 (page 6).

**TABLE 1
BICYCLE PARKING INVENTORY
BIGGS URBAN AREA**

Location	# Spaces	# Locations
Schools		
Biggs High School/Elementary School	45	2
Parks		
Biggs City Park	on-street	1
Shopping Areas		
Downtown Area	46	2
Government Offices		
Butte County Library	0	0
City of Biggs Offices	12	2
U.S. Post Office	9	1

INTERMODAL CONNECTIONS

The ability of bicyclists to connect to other transportation modes can be of great importance to overall mobility. The primary method in which this is accommodated is the transit connection. Butte County Transit (BCT) provide bicycle racks on all of their large fixed route buses, while Butte College buses so not have bicycle racks. Bicycle parking is available at the BCT bus stop in front of the Biggs City Hall. This BCT route allows Biggs residents access to all the other cities in Butte County. No other public transportation modes, including passenger rail service, are currently available in Biggs.

SHOWER AND LOCKER FACILITIES

Because the Biggs Urban Area is compact in nature, shower and locker facilities are not pivotal to encouraging bicycle commuting. As a result, shower and locker facilities are not available for bicyclists on a widespread basis. Biggs High School has a shower, locker, and restroom facilities for students, faculty, and staff to use.

Public restrooms are available for bicyclists at Biggs City Park.

CHAPTER SIX

BICYCLE SAFETY AND EDUCATION



BICYCLE SAFETY AND EDUCATION

The City of Biggs is served by the Biggs-Gridley Police Department, which is staffed by a police Chief, one Police Lieutenant, two Sergeants and eight sworn officers. Support services include Animal Control, a Reserve Force, Gang Task force, Volunteer Senior Corps and a Volunteer Radio Team. The department is also involved with a bicycle rodeo and coordination of Police Services during the Butte County Fair each August

The California Highway Patrol, which has jurisdiction over bicycle safety in the county area, has published 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.

The California Highway Patrol keeps records of traffic accidents, including bicycle accidents. In both 1995 and 1997, there was one bicycle accident reported in the Biggs Urban area, this accidents involved an injury. In 1996 no accidents, injury or otherwise, were reported. The very low number of bicycle accidents is likely due to a combination of low bicycle ridership as well as local bicycle safety education efforts. However, the number of bicycle accidents cited may not be truly representative, as many minor collisions are not reported to the authorities.

CHAPTER SEVEN

GOALS, OBJECTIVES AND POLICIES



GOALS, OBJECTIVES, AND POLICIES

Goals, objectives, and policies are an integral part of any bikeway plan, as they provide a clear direction for decision makers in developing a comprehensive bikeway system.

GOAL 1: Provide a system of bikeways throughout the Biggs Urban Area that will increase bicycle access to facilities, shopping, schools, work centers, and points of interest, and will increase the utility of bicycles not only for recreation, but also as a viable mode of transportation.

Objective 1: Use bikeways to link schools, shopping areas, and public facilities.

Objective 2: Establish bicycling as a viable alternative transportation method for short trips around the Biggs area.

Policies:

1. Update the Biggs Bicycle Transportation Plan as needed.
2. Pursue funding from the state's Bicycle Lane Accountant and other funding resources.
3. Reduce conflicts between bicycles and other vehicles by:
 - designating on-street bike lanes;
 - providing signage and markings for bike routes
 - monitoring the success of the routes and devising a system to improve their utility as necessary; and
 - adhering to proper design and construction criteria and standards.
4. Include Class II bike lanes in resurfacing projects, where feasible. Encourage Butte County to do the same.
5. Coordinate the construction and/or improvement of the bicycle system with development projects adjacent to the routes, park and recreational facilities, schools, and residential subdivisions, and require developments located on designated bikeways to provide for bicycle use within and adjacent to project boundaries.
6. Design cul-de-sac streets in urban residential areas to Permit bicycle and pedestrian access between cul-de-sacs, adjacent streets, and/or open space areas.

GOAL 2: Improve safety conditions, efficiency, and comfort for bicyclists and Pedestrians through traffic engineering and law enforcement efforts.

Objective: Minimize potential conflicts between autos, bikes, and pedestrians.

Objective: Minimize or eliminate safety hazards.

Policies:

1. Require that new bikeways be designed to meet or exceed Current Caltrans bikeway design guidelines (Caltrans Highway Design Manual, Fourth Edition, Chapter 1000)
2. Increase bicycle safety by:
 - Providing bicycle paths and lanes that promote bicycle use;
 - Ensuring that bikeways are delineated and signed in accordance with Caltrans standards and lighting is provided, where needed.
 - Ensuring that all new and improved streets have bicycle-safe drainage grates and are free of hazards such as uneven pavement and gravel.
2. Identify and prioritize projects which mitigate and/or eliminate safety hazards for bicyclists.
3. Support strong enforcement of the vehicle code as it pertains to bicyclists.
4. Initiate a bicycle use public awareness program.
5. Monitor bicycle accidents to identify hazardous locations and causal factors to develop recommendations for traffic engineering improvements and/or targeted enforcement.
6. Encourage the provision of bicycle safety education programs for both children and adults, emphasizing traffic law and helmet use.

GOAL 3: Provide adequate bicycle support facilities.

Objective: Improve availability of bicycle parking facilities at a variety of land uses.

Objective: Provide adequate support facilities to encourage bicycle ridership.

Policies:

1. Develop and adopt bicycle parking standards for new commercial developments.
2. Provide incentives for businesses to include bicycle parking as part of facility expansions. Incentives may include reduced fees or reduced parking requirements.
3. Encourage the school district to provide safe, secure, convenient, covered bicycle parking for students and staff.
4. Provide convenient, safe, well-lighted bicycle parking racks or other parking facilities in public places, and encourage residential, commercial, and industrial developers to do the same.
5. Continue to provide restroom and water fountain facilities at public buildings and recreational areas.

CHAPTER EIGHT

BIKEWAY FUNDING SOURCES



BIKEWAY FUNDING SOURCES

There are a variety of sources used to fund transportation projects and programs. Most funding comes from state programs earmarked for specific types of transportation improvements, although some funds may be generated through federal and local programs. There are a few funding sources specifically 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.

Potential bikeway funding sources include (listed by source):

STATE OF CALIFORNIA:

Bicycle Lane Account (BLA)

In late 1997 a substantial increase in funding towards the BLA account was authorized from \$360,000 per year statewide (a figure which it sat at for 25 years) to incremental million dollar annual increases until 2004 when it reaches \$5,000,000 and will stay at that amount annually thereafter. Apportioned out of 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 State Transportation Improvement Program (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 pot called the Regional Improvement Program and a state discretionary pot called the Interregional Improvement Program.

Regional Improvement Program: Regions have the discretion to select and program transportation improvement projects that they deem necessary – including highways, local roads, transit, bike lanes, ect. Locally a portion of these Regional Improvements Program funds are allocated to jurisdictions using a formula based on population, road mileage maintained, and vehicle miles traveled.

Transportation Enhancement Activities (TEA): A portion of the Regional Improvements 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 pedestrian facilities.

Transportation Development Act (TDA)

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

Local Transportation Fund (LTF): ¼ % of the 7 ¼ % statewide sales tax is returned to the county in which it was generated for use in local transit. The law 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.

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. Although the City of Biggs does not currently have an assessment program, the feasibility and implementation of such a fee program could be explored in the future.

APPENDICES

ILLUSTRATED BIKEWAY

CLASSIFICATIONS

