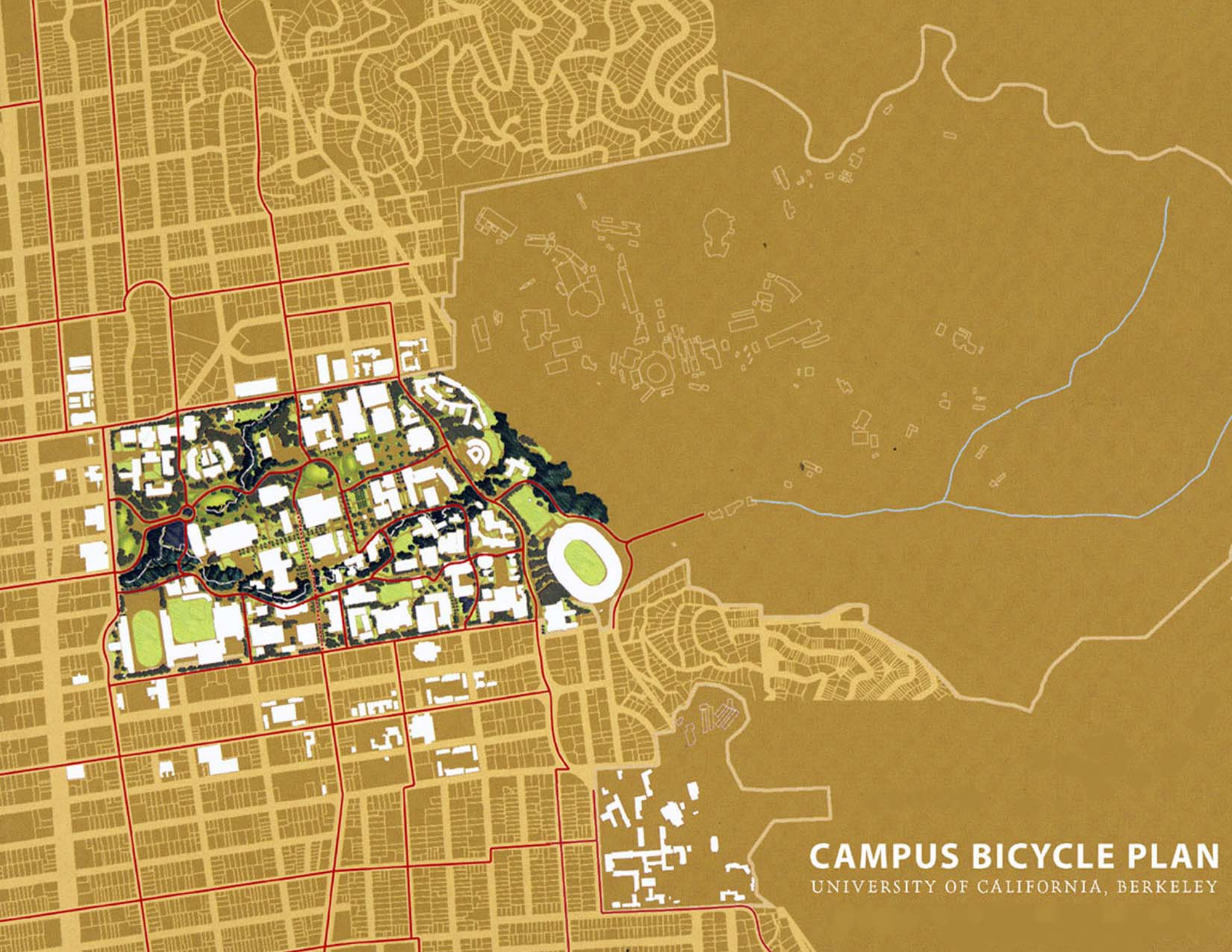
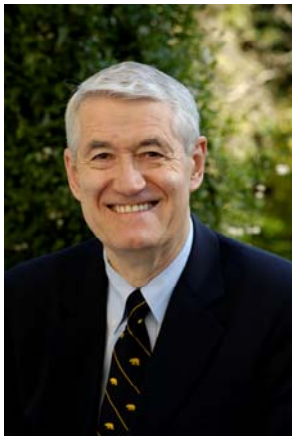

CAMPUS BICYCLE PLAN
UNIVERSITY OF CALIFORNIA, BERKELEY



Encouraging alternative transportation to our campus is one of the important ways in which UC Berkeley contributes to attaining a sustainable environment. I am pleased that thousands of faculty, staff and students choose to commute by bicycle on a regular basis. The Campus Bicycle Plan, the first ever for UC Berkeley, furthers our commitment to support cycling as an environmentally-friendly way to travel.

This plan is the latest in a series of planning documents that will guide future development on campus. Building upon the Landscape Master Plan, guided by the 2020 Long Range Development Plan, and reflective of the UC Policy on Green Building Design, Clean Energy Standards, and Sustainable Transportation Practices, the goal of this Plan is to improve bicycle access and safety for students, faculty, staff, and visitors and to increase the number of commuters choosing to bicycle to and from campus.

The Campus Bicycle Plan focuses on the central campus to create a long-term physical and programmatic vision supported by a variety of implementation measures. The plan envisions that an improved campus bikeway system, linked with City systems and coupled with bicycle education programs, will create a more bicycle-friendly campus. As the campus is part of the larger urban area, this plan will support our work to integrate more effectively the campus with the larger bicycle network in the City of Berkeley and the region.

In the coming years, the campus will have many new opportunities to incorporate safe bicycle access and secure bicycle parking into the building of new facilities and the upgrading of existing ones. As we move forward to create a more bicycle-friendly campus, I encourage each of you to consider what you can do to practice more sustainable and healthy travel – bicycling even one day or two days a week for part or all of your commute can make a positive difference.

Sincerely,

Robert J. Birgeneau
Chancellor
August 2006

ACKNOWLEDGEMENTS

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UCB Design Review Committee

UCB Executive Campus Planning Committee

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UCB Chancellor's Parking & Transportation Oversight Committee

The University extends its thanks to the Alameda County Transportation Improvement Authority, which provided grant funds in support of this plan.

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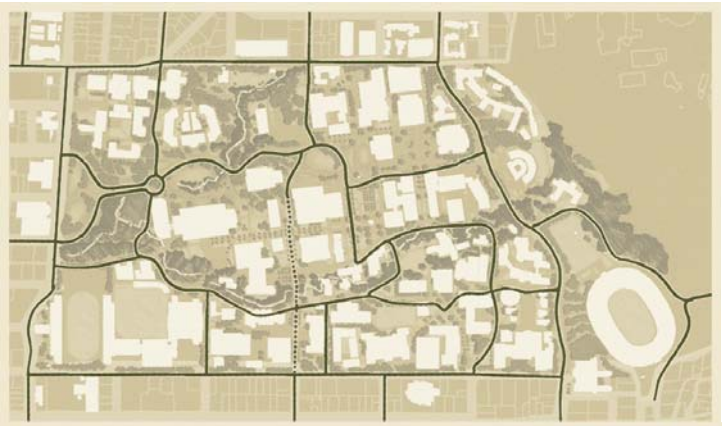
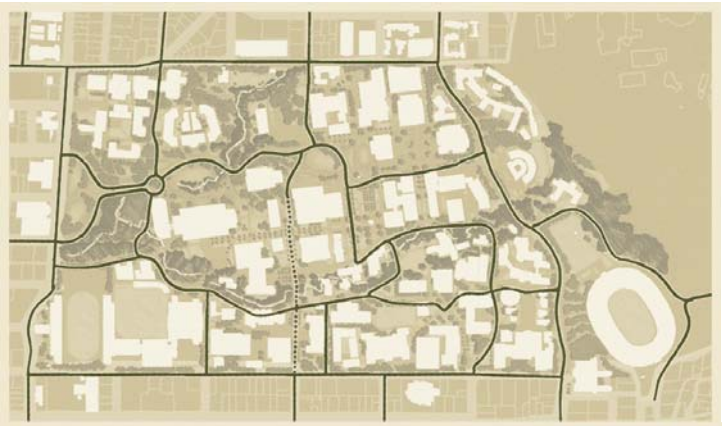


I. EXECUTIVE SUMMARY

The purpose of the University of California, Berkeley (UCB) Campus Bicycle Plan is to improve bicycle access for students, faculty, staff and visitors. As the first-ever bicycle plan for UC Berkeley, this document initiates the formal integration of bicycling into campus policies. The Plan is also an effort to educate people about the importance of bicycling to the campus.

The Campus Bicycle Plan focuses on the central campus park to create a long-term physical and programmatic vision supported by a variety of implementation measures. While dealing with existing conditions and issues on the central campus, the Plan also considers connections to the larger urban context. The Plan offers an improved campus bikeway system, connected with City and regional systems. This travel network, coupled with bicycle education, enforcement and promotional programs, will create a more bicycle-friendly campus and community. The anticipated result is an increase in commuters choosing to bicycle to/from campus.

The Plan's goal is to implement the projects and programs described in the plan within the next ten years. Updates to the bicycle plan every five years are recommended to capture the current vision and to ensure that campus bicycling needs continue to be addressed.



II. INTRODUCTION

PURPOSE OF THE PLAN

As the premier public university in the world, the University of California is renowned for the exceptional quality of its instruction, research, and public service. For almost 150 years, the UC Berkeley campus has fulfilled its role as a public trust, developing a rich legacy of physical systems, traditions, and visions that culminate in the campus experienced today. In addition to developing buildings and a landscape that bring value to the University and community, UCB continually seeks to enhance the quality of life on campus. Despite the challenges of topography on its hillside site, UC Berkeley aims to be a model bicycle-friendly urban campus.

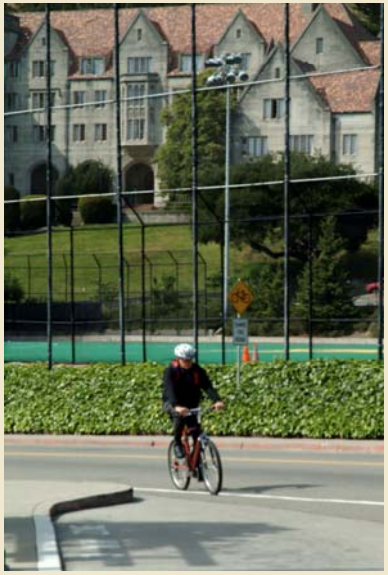
Although UC Berkeley can be said to resemble a city in many ways, a significant difference distinguishes UCB: the physical campus gives priority to pedestrians rather than vehicles. In this aspect, the campus resembles more a park within a city, one where alternative modes of movement predominate. Bicycling is a vital component of the campus fabric, an important means of movement on and about campus and a valued campus commute mode.

A visible difference between the city and UCB's campus bikeways is the campus' allowance of bicycle travel on non-recreational pathways shared with pedestrians. Further compared with a city, campus traffic is minimal and relatively slow-moving, making lane striping to separate vehicles and cyclists unnecessary as well as a visually dissonant element in the campus landscape. While the campus setting is unique, this plan strives to incorporate universal bicycle standards where feasible and sensible and intuitive features when those standards are not applicable.

The Campus Bicycle Plan embodies UC Berkeley's commitment to support bicycling to, from and on the Berkeley campus. The Plan organizes and consolidates scattered approaches and responsibilities into a comprehensive document that gives direction to University administration, planning and design staff and design consultants. The Plan will increase the visibility and accessibility of bicycling on campus with the implementation of physical and programmatic improvements.

In underscoring bicycling's importance to the campus, the Plan supports the traffic mitigation elements of the UCB 2020 Long Range Development Plan (LRDP) and the principles of both the UCB Landscape Master Plan and the UCB Landscape Heritage Plan. The Plan also supports previous transportation studies and reflects the goals of the UC Sustainable Transportation Policy. As the campus is part of the larger urban area, this Plan strives to better integrate the campus with the larger bicycle network in the City of Berkeley and the region. The Plan also provides the basis required for applications to granting agencies for financial assistance with further improvements.

This Plan emphasizes that bicycling is permitted everywhere on the UC Berkeley campus - with the exception of the dismount zone during zone enforcement hours of 8 am to 6 pm Monday through Friday.



SCOPE OF THE PLAN

The Campus Bicycle Plan focuses on UCB's 178-acre central campus, which is bound by the roadways of Gayley-Piedmont, Bancroft, Oxford-Fulton, and Hearst. The 1,000 acres east of Memorial Stadium, primarily natural open space known as the Hill Campus, and other UCB properties are not included in the scope of this plan because of limited resources.

As UCB's first Campus Bicycle Plan, this effort has had much to accomplish. While the Plan may not address all aspects of campus bicycle issues, every effort has been made to be as comprehensive as possible given the resources available at this time. The Plan tackles a bikeway network, bicycle parking, transit access, programs, design guidelines, an implementation plan and priorities. It is anticipated that future revisions will expand the Plan's scope and further elucidate the vision.

IMPLEMENTATION

The Parking & Transportation Department (P&T) currently plays the lead role in developing and maintaining the campus' bicycle infrastructure, programs, and education. P&T, in collaboration with the UC Police Department (UCPD), both of which are part of the Public Safety and Transportation unit, provides bicycle licensing and bike racks on campus transit, manages secure bicycle parking facilities, and enforces bicycle riding and parking rules. P&T also sponsors the campus Bicycle Subcommittee that develops recommendations on campus bicycle issues (see Appendix C).

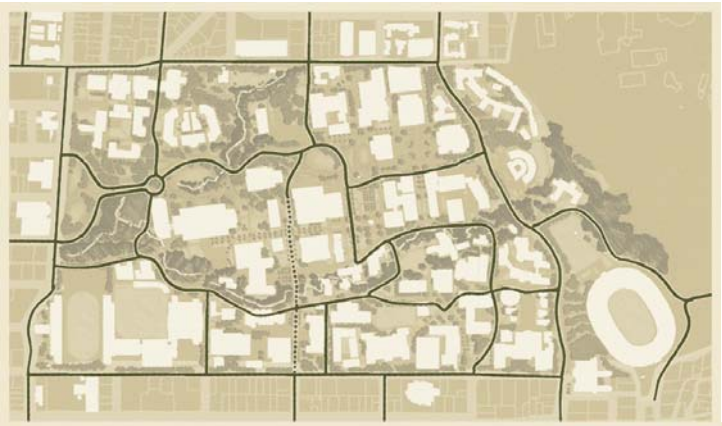
While P&T will continue to provide a leadership role in the implementation of the Campus Bicycle Plan, a major intention of the Plan is to bring bicycling issues to the forefront of campus planning, development, and maintenance. By sharing advocacy leadership with other campus units, particularly Facilities Services, the possibility of achieving the goals of the Plan is much more realistic. This comprehensive approach to campus bicycling issues will also facilitate the implementation of co-productive improvements with the City of Berkeley.

The goal of the plan is to complete the projects and programs within the next ten years. Implementation will improve bicycling access and will help the campus achieve an increase in bicycling commuters as advocated in the UCB 2020 Long Range Development Plan.

RELATED PLANS

The study team used the following plans and documents to better understand existing conditions and future growth related to the Campus Bicycle Plan:

- UCB 2020 Long Range Development Plan
- UCB Landscape Master Plan
- UCB Landscape Heritage Plan
- UCB New Century Plan
- UC Policy on Green Building Design, Clean Energy Standards, and Sustainable Transportation
- Campus Bicycle Planning Policies and Initiatives developed by the UCB Bicycle Subcommittee, P&T, and Facilities Services, 2002
- UCB Bicycle Charette, 2003
- City of Berkeley Bicycle Plan
- Alameda Countywide Bicycle Plan
- UCB Path-of-Travel Study
- Gayley Road Concept Plan
- Draft City of Berkeley Southside Plan
- City of Berkeley/University of California, Berkeley: Southside/ Downtown Transportation Demand Management Study, 2003



III. GOALS AND OBJECTIVES

GOALS

The following goals are broad policy statements that reflect the vision of the Campus Bicycle Plan.

Increase Bicycling: This plan supports the bicycle ridership goal of the 2020 LRDP and aspires to exceed it. The LRDP anticipates an increase of approximately 500 faculty, staff and student bicycle commuters over the next 14 years. By adding an average of 50 new bike commuters a year, as the campus population grows over this period, the campus will maintain the current bicycle commute rate of about 10 percent.

Integrate Bicycling: UCB wants to make bicycling a routine part of campus planning, design, and construction activities. The intent is to weave bicycle riding into the fabric of the campus and the adjacent community.

Implement Plan: This plan presents a blueprint for action and provides the direction needed to assure bicycling will have a greater presence in the process of campus decision making. The Campus Bicycle Plan will assist in securing new grant and campus funding sources as well as provide a means to evaluate progress.

OBJECTIVES

The following objectives provide more detailed direction as to the steps needed to achieve the stated goals.

General Objectives

- Find consistent and committed funding to implement the Plan, including funds for a campus bicycle coordinator staff position
- Develop and collect survey data to assess the efficacy or success of implemented improvements.

Objective 1 – Bicycle - Related Infrastructure

1A – Bikeway Network

- Improve the campus bikeway network and close route gaps by implementing the projects proposed in Section V
- Discourage prohibitions against bicycling by identifying improvements to bicycle traffic flow and pedestrian safety
- Provide bicycle parking convenient, secure, and adequate to all campus destinations
- Maintain campus bikeways and bicycle parking areas on a regular basis
- Discourage bicycle riding from damaging landscape areas and sensitive habitats, especially high-priority areas discussed in the Landscape Master Plan
- Incorporate bicycle facilities and amenities in project programming,

design guidelines, and construction documents.

1B – New Development and Construction

- Provide bicycle parking and other amenities in all new development and substantial remodels
- Add secure bike parking facilities (i.e., cages or interior rooms) and shower facilities with lockers to new and significantly remodeled buildings
- Provide adequate temporary bicycle parking and circulation during construction
- Accelerate campus bicycle improvements by coordinating with the Path of Travel improvement projects and campus maintenance projects
- Use the Capital Projects Checklist (Appendix E) in planning and project management.

Objective 2 – Develop and Improve Planning and Programs

2A – Interagency Coordination

- Coordinate bikeways and bicycle parking with agencies such as:
  - Alameda Contra Costa County Transit (AC Transit)
  - Bay Area Regional Transit District (BART)
  - City of Berkeley
  - East Bay Regional Park District (EBRPD)
  - Lawrence Berkeley National Laboratory (LBNL)
- Include UCB bicycle projects and programs in planning and regional funding documents by working with planning agencies such as:
  - Alameda County Congestion Management Agency (ACCMA)
  - Alameda County Transportation Improvement Agency (ACTIA)
  - Bay Area Air Quality Management District (BAAQMD)
  - City of Berkeley
  - Metropolitan Transportation Commission (MTC)
- Work with the City of Berkeley to more rapidly implement City bikeway improvements related to campus travel
- Advocate for two-way traffic streets with bicycle enhancements – and/or bicycle access improvements to one-way streets - on the southside of campus
- Integrate bicycle-related enhancements into AC Transit Bus Rapid Transit projects
- Build and support relationships with bicycle advocacy groups, community groups, local businesses and other jurisdictions.

2B – Education and Incentive Programs

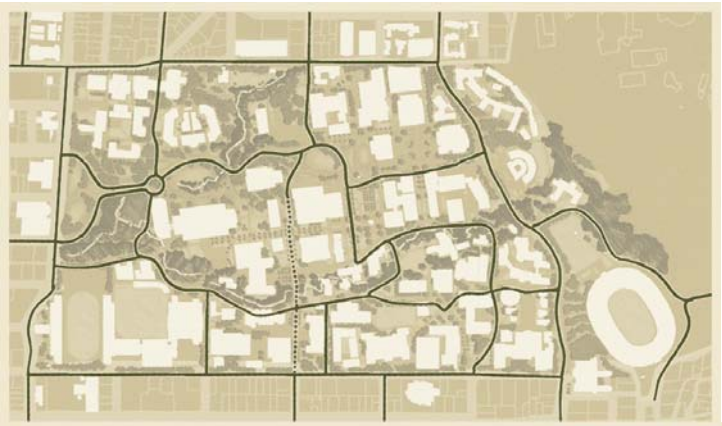
- Implement the programs listed in Section VIII
- Work with bicycle advocacy groups, bicycle-related businesses and other agencies to enhance campus programs
- Support transportation programs that provide flexibility for bicycle commuters
- Improve and expand bicycle-related communications and marketing.

2C – Bicycle Enforcement and Theft Prevention

- Reduce bicycle thefts through improved security measures and education programs
- Support enforcement policies and practices that promote safe bicycling and support the bicycling community
- Provide education and enforcement measures, such as bicycle safety training and education sessions in lieu of fines.

Objective 3 – Future Issues

- Provide updates to the Campus Bicycle Plan every five years to encompass changed conditions, meet planning requirements, and evaluate high-priority bicycling projects and programs
- Address and evaluate:
  - Another crossing on the South Fork of Strawberry Creek to facilitate north-south bicycle movements
  - Dismount Zone policies
  - Extension of bike parking standards to off-campus UCB leased and owned properties
  - Bicycle improvements for the Oxford Street entrances and other high-use entrances to campus
  - Bikeway connections to/from University housing and other UC sites separate from the core campus
  - Improvements to and integration with the hill campus
  - Off-road bicycle riding policies for campus wildland areas that:
    - help complete regional bikeways
    - protect sensitive landscapes and habitats
    - offer recreational opportunities.



IV. STUDY AREA

SETTING

The UCB campus is located in a dense urban area bound by the City of Berkeley on the north, west and south sides. On the east side, the campus climbs the east bay hills with the City of Oakland to the south and the East Bay Regional Park District's Tilden Park to the north. UCB's compact 178-acre central campus hosts about 45,000 students, faculty, staff and visitors on a daily basis. The elevation changes on campus are about 200 feet west to east and 40 feet south to north. The campus is well known for its tree canopies, open glades, classical buildings, Strawberry Creek and views of San Francisco Bay.

Bicycling is permitted everywhere on campus except for the peak-period dismount zone, located through Sproul and Dwinelle Plazas between Bancroft Avenue and Doe Memorial Library. Some campus bikeways exist; however, a comprehensive campus bikeway network does not.

Bicycling between the campus and the City of Berkeley is a challenge, especially on the south side where bikeway connections between the two entities lack continuity. This lack of continuity results primarily from:

- The network of one-way streets on the south side, particularly Bancroft, Durant, Telegraph and Dana
- The terminus of two major bicycle access streets at the campus: Telegraph Avenue, ending at the campus dismount zone at Sproul Plaza, and Bowditch Street, which ends at a wall alongside the historic Hearst Gym
- High traffic volumes, narrow streets and changes in elevation.

The City of Berkeley produced its first Bicycle Plan in 2000 and completed an administrative update in 2005. Since the release of the plan, the City has implemented large segments of its Bicycle Boulevard network, and added bicycle lanes on Oxford Street and on the two-way traffic portion of Telegraph Avenue. Several of the City's planned connections with the UC campus remain to be implemented.

Extensive surface transit serves Berkeley, existing on all major streets surrounding and leading up to the campus. Transit usage is high since downtown Berkeley is a transportation hub of the East Bay with BART, AC Transit and the campus BearTransit all serving the area with established bikes-on-board policies. Conflicts between transit buses and bicycles are not a reported problem in the area around campus.

On the central campus, bicycle parking is available either at racks adjacent to buildings or in more secure, consolidated parking areas located in parking garages. P&T evaluates bicycle parking needs.

The campus currently provides approximately 7,000 motor vehicle parking spaces on the central campus and at its perimeter, and believes that current parking demand exceeds

supply. UCB provides a comprehensive campus shuttle system, transit pass programs for faculty, staff and students, an extensive pedestrian network, bicycle amenities, and a variety of supporting transportation demand management (TDM) programs. To educate the UCB community about bicycling on campus, a bicycle map with safety tips and riding policies is distributed throughout campus and is available on the P&T website (www.berkeley.edu/transportation).

The UCB 2020 Long Range Development Plan (LRDP) projects the campus to grow to 51,000 faculty, staff, students and visitors over the next 15 years. To address continuing congestion and demand for limited space, the LRDP proposes the following transportation initiatives:

- Increase motor vehicle parking to supply 9,900 spaces but not build out to maximum if AC Transit Bus Rapid Transit comes to Berkeley
- Prioritize new motor vehicle parking in locations that maximize shared public and campus use
- Provide annual funding to continue and improve transportation demand management (TDM) programs
- Concentrate development on the central campus and areas directly adjacent to the central campus and reject remote campus development
- Identify future student campus-affiliated housing within a one-mile radius of the central campus, or within a twenty-minute transit trip to the central campus.

As the facilities expand beyond the central core, bicycling can become an increasingly attractive alternative to walking, which commonly is not undertaken at distances greater than a half mile.

BICYCLE USE

Since the 1960s the campus has recorded the transportation modal split of faculty, staff and students. Mode split refers to the proportion of transportation modes used by commuters to get to/from campus and is used to gauge the performance of these different modes.

The bicycling rates at UCB are higher than most jurisdictions, which is common for university campuses. For example, the 2000 Census shows that 5.6 percent of Berkeley residents bicycle to work and in Alameda County overall, 1.2 percent of residents commute by bicycle. Based on the latest surveys, approximately 4,200 bicyclists commute to campus each day – almost ten percent of the current campus population.

According to the Long Range Development Plan, bicycle use is expected to increase by about 500 bicyclists. Thus, by 2020 about 4,700 bicyclists are expected to travel to the UCB campus each day, which would be approximately ten percent of the future campus population. This plan supports the bicycle ridership goal of the LRDP and aspires to exceed it.

UCB Student Housing and Transportation Survey

UCB conducted student housing and travel surveys in 1992, 1996 and 2000. These transportation surveys show that students commuted by bicycle to/from campus at almost nine percent in 2000 compared to almost 17 percent in 1992 (Figure 1). Transit use and walking were on the rise in 2000, whereas drive alone rates remained stable from 1992 to 2000.

A comparison with earlier surveys shows that, compared to previous years, the number of student bicyclists has decreased and the number of faculty/staff riders has increased. The loss of student ridership is believed to be due, in part, to the implementation of the Class Pass program, which subsidizes public transportation for students. In 2000 when the student population was 31,274, most students (82.5 percent) lived less than five miles from campus, an ideal distance for bicycling. Figure 2 shows the student mode split combined with the distance from campus. This figure demonstrates that bicycling occurred at the greatest rate when students lived less than 5 miles from campus.

UCB Faculty and Staff Housing and Transportation Survey

UCB conducts a faculty and staff housing and transportation survey about every five years. The population of full and part time faculty and staff was 11,534, in 2001 when the last survey was conducted.

The survey shows that faculty and staff bicycle commuters to/from campus increased from five percent in 1990 to almost ten percent in 2001 (Figure 3). Transit use also was on the upswing in 2001, whereas walking and driving alone declined.

The main reasons given for why faculty and staff favored driving alone were convenience and travel time. About one half of the respondents needed vehicle transportation during the workday. Another 7 percent of the respondents transported their children by vehicle to/from daycare, making it difficult to bicycle to/from work.

In 2001, about 43 percent of faculty and staff lived within five miles of campus, an ideal bicycle ride length (Figure 4).

Bicyclists commuting to campus in 2001 rode mainly from the following communities:

- Berkeley: 21 percent
- Oakland: 13 percent
- Albany: 17 percent
- Kensington: 9 percent
- El Cerrito: 4 percent

2001 Faculty & Staff Mode Split:	
Drive Alone:	51%
Public Transit:	18%
Walk:	8%
Bicycle:	10%
Rideshare:	9%
Motorcycle:	1%
Other:	3%

2000 Student Mode Split:	
Drive Alone:	11%
Public Transit:	23%
Walk:	53%
Bicycle:	9%
Rideshare:	2%
Motorcycle:	1%
Other:	1%

Figure 1: UCB Student Transportation Mode Trends

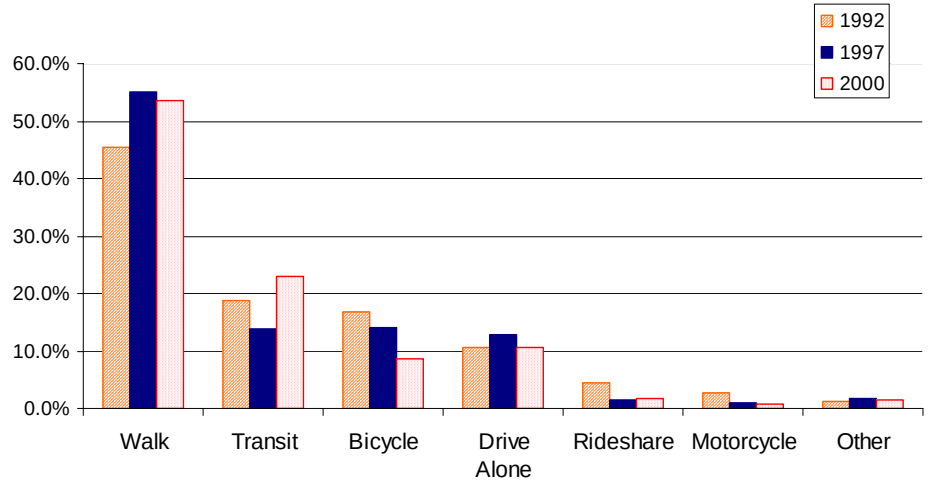


Figure 2: UCB Student Transportation Modes and Distances (2000)

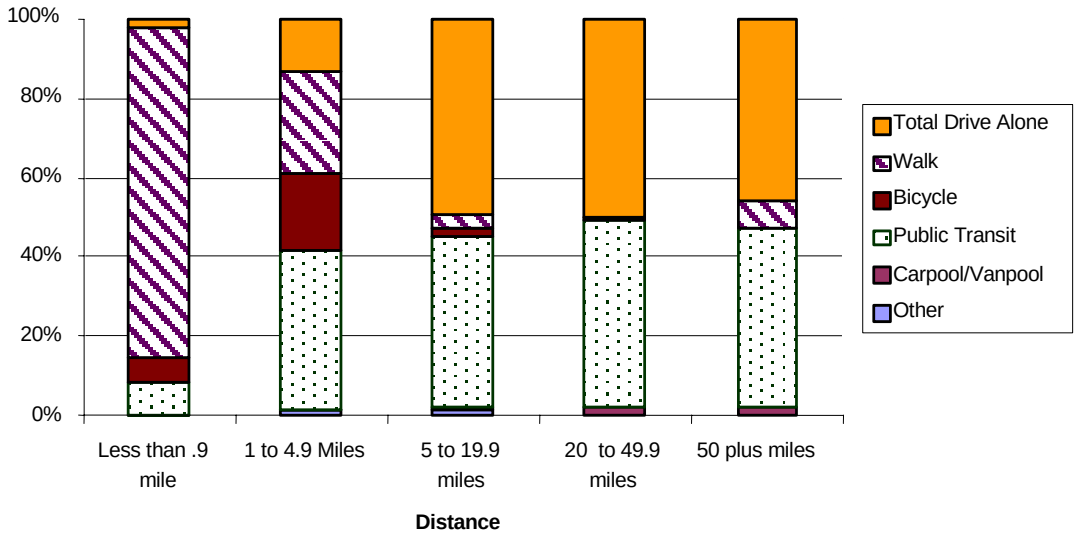


Figure 3: UCB Faculty and Staff Transportation Mode Trends

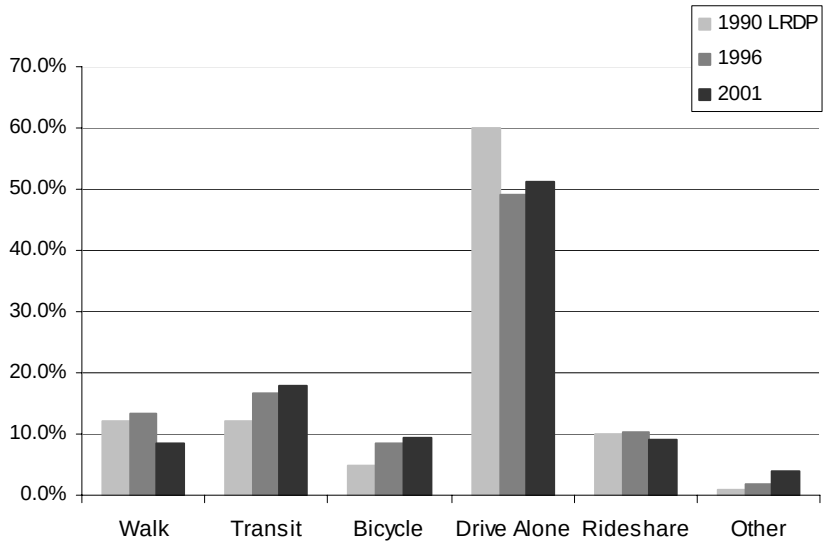
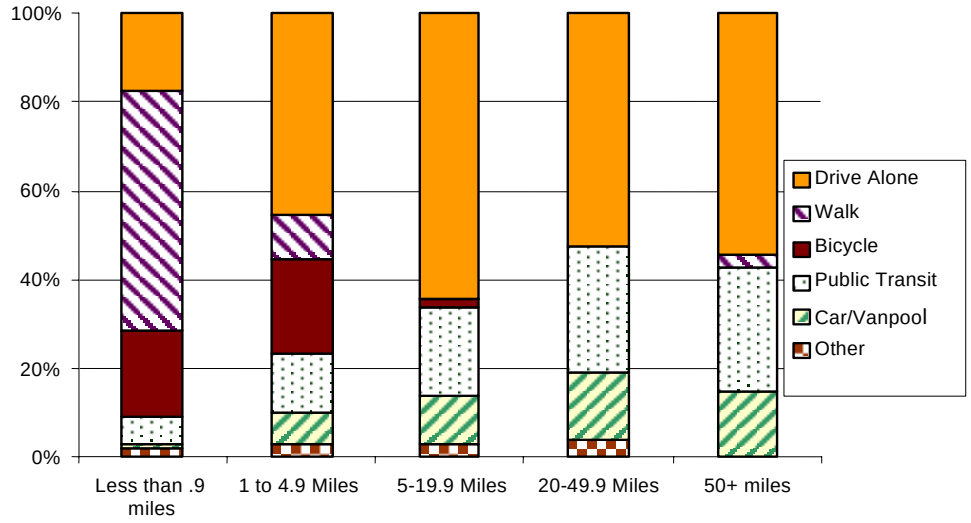


Figure 4: UCB Faculty Staff Transportation Modes and Distances



Bicycle Counts (2003)

The 2020 LRDP presents existing and projected bicycle volumes for peak hours at campus entrances (Table 1). Also in 2003, the City of Berkeley conducted bicycle counts at numerous intersections in the vicinity of campus (Figure 5). City figures agree with LRDP statistics that bicycle volumes during peak hours are heaviest at the west entrances to campus. Figure 5 illustrates the LRDP count for campus entrances and uses City figures for nearby intersections.

The city bicycle counts recorded that, on one-way streets such as Telegraph Avenue and Dana Street, over 40 percent of the bicyclists were riding the wrong way.

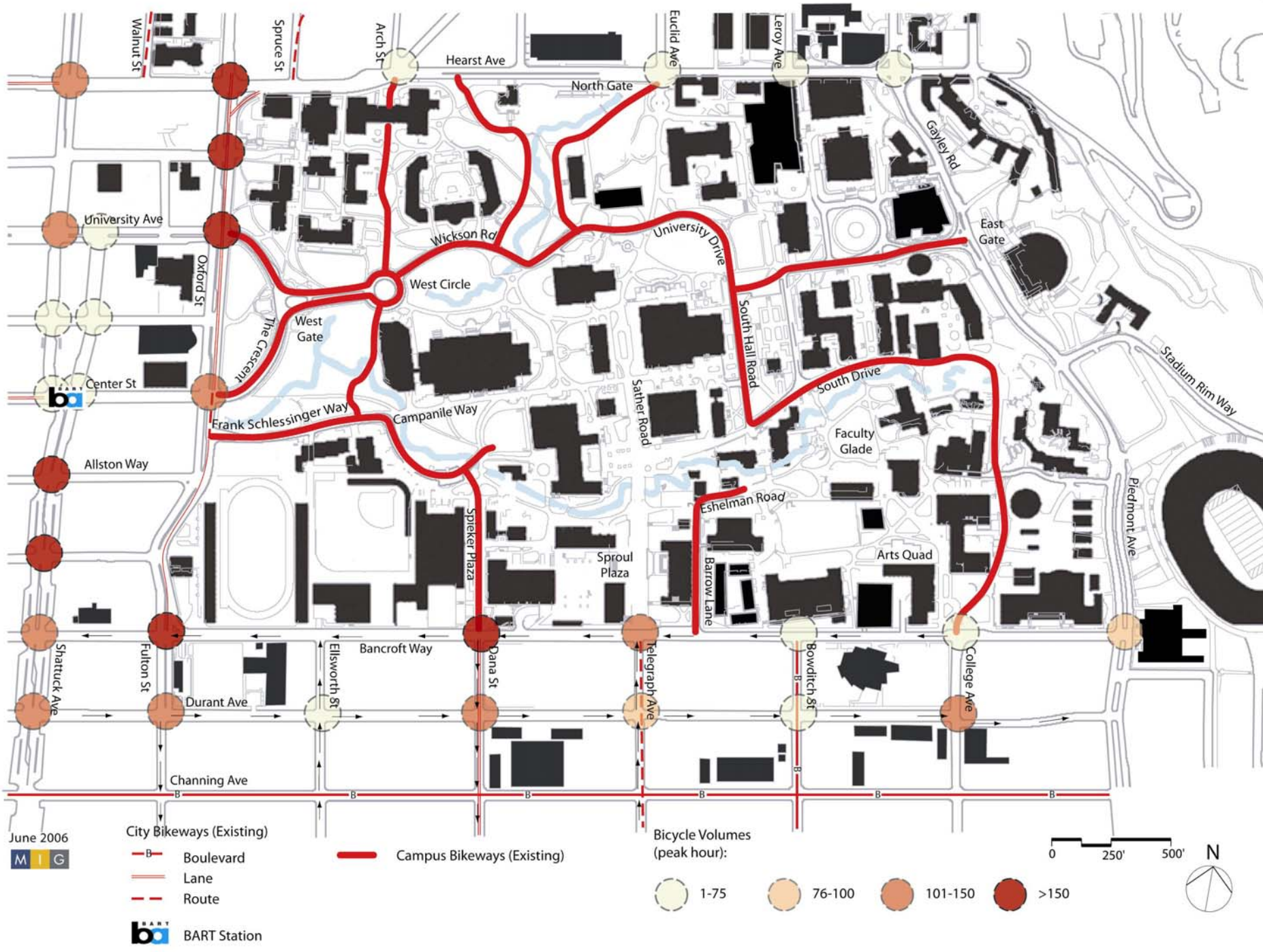
Table 1: Peak Hour Campus Entry Bicycle Volumes

Entry Point	Existing Bicycle Volume	New LRDP Bicycle Trips	Future Bicycle Volume	Percent Increase
Hearst at				
Oxford	266	24	290	9%
Arch	37	3	40	8%
Euclid	54	5	59	9%
LeRoy	31	3	34	10%
La Loma	38	3	41	8%
Oxford at				
Berkeley	159	14	173	9%
University	679	60	739	9%
Center	132	12	144	9%
Bancroft	201	18	219	9%
Bancroft at				
Dana	152	13	165	9%
Telegraph	131	12	143	9%
Bowditch	71	6	77	8%
College	61	5	66	8%
Piedmont	85	8	93	9%

A. Based on existing peak hour bicycle volumes, and AM peak hour LRDP trip generation. B. Existing bicycle volumes as reported in the Downtown / Southside TDM Study.

Source: Fehr & Peers Associates, June 2003

Figure 5: Peak Hour Bicycle Volumes near Campus



BICYCLE SAFETY

Bicycling is not reported as a significant safety issue on campus: an average of seven bicyclist collisions are reported to the UC Police Department each year. Table 2 shows the bicyclist collisions reported to UCPD between the school years of 2001/2002 and 2004/2005. Most of these collisions involved injuries, and almost half involved only a solo bicyclist. Bicyclist collisions with automobiles or pedestrians were even less common. The locations of bicyclist collisions were interspersed throughout campus.

Table 2: Bicyclist Collisions at UCB

Year	Total	Auto	Pedestrian	Solo	Injuries	Non-Injuries
01/02	7	NA	NA	0	6	1
02/03	7	0	0	2	2	1
03/04	8	2	1	5	7	1
04/05	5	1	1	3	5	0
Avg	**7**	**1**	**1**	**3**	**5**	**1**

NA = Information not available

BICYCLE ENFORCEMENT

Enforcement-Citations

The majority of the warnings and citations given are for Dismount Zone violations. Since 2001, compliance has improved annually (Table 3).

Table 3: Bicycle Warnings and Citations

	Verbal Warning	Written Warning	Citations
2001	564	521	212
2002	929	191	146
2003	NA	NA	NA
2004	NA	NA	111

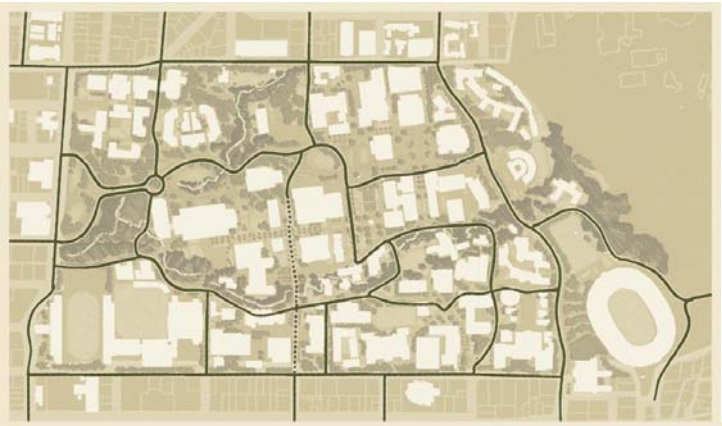
NA = Information not available

Security-Thefts and Recoveries

UC Police Department (UCPD) statistics show that there were 260 bicycle thefts in 2000, 254 in 2001, 233 in 2002, and 229 in 2004 (2003 NA). Not all thefts are reported. In general, less than one percent of stolen bicycles are recovered each year.

LICENSES

Parking & Transportation sold California Bicycle Licenses from 1996-2003; an average of 750 licenses were issued each year during this time period. UCPD currently provides free California Bicycle Licenses to campus affiliates three hours per week. Bike licenses need renewal every three years.



V. BICYCLE NETWORK

This Plan presents the UCB campus' first comprehensive bicycle network.

DEFINITIONS

As defined by Caltrans (unless otherwise noted), the standard bicycle facilities used in California are:

Bikeways – Used as a general term to refer to all bicycle facilities, including paths, bicycle lanes, bicycle routes and bicycle boulevards

Paths (Class 1) – Non-vehicular pedestrian and bicycle trails that run parallel to the road or are located on their own right-of-way not associated with an adjacent roadway

Bicycle Lanes (Class 2) – Dedicated one-way bikeways usually along collector and arterial streets

Enhanced Bicycle Routes (Class 2.5) – The City of Berkeley uses an enhanced shared facility where bicycle lanes are not possible at critical connectors. At a minimum, enhancement requires bike route signage and may include other measures such as "Share the Road" signs and pavement markings

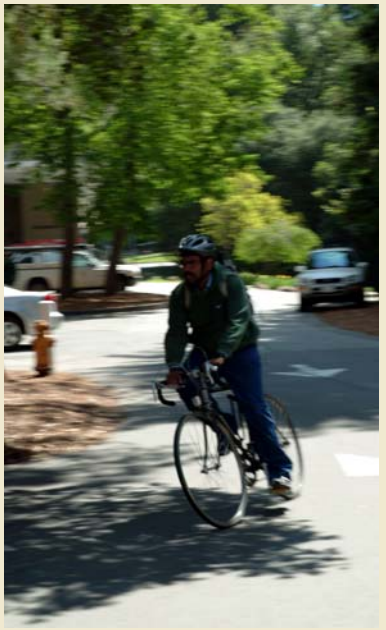
Bicycle Routes (Class 3) – Shared facilities with motor vehicles on the roadway or with pedestrians on the sidewalk

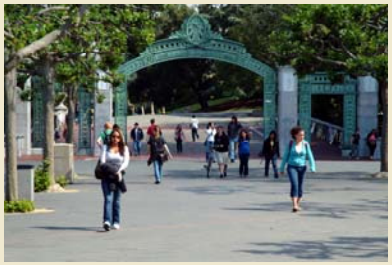
Shared Roadway – a roadway that permits bicycle use but does not meet other bikeway definitions

Currently, campus bikeways are a combination of paths (Class 1), enhanced bicycle routes (Class 2.5: Gayley Road), and Shared Roadways. Future projects may enable Gayley Road and Stadium Rim Way to be upgraded from Class 2.5 to Class 2 (bicycle lanes). For more information on the visual and physical components of the proposed bikeways, refer to Section IX – Design Guidelines.

CAMPUS BICYCLE NETWORK GOALS

- Create a network of primary and secondary bikeways supporting bicycle movements to all central campus destinations
- Create primary bikeways that facilitate access between the City of Berkeley and campus as well as cross-campus movement
- Connect campus bikeways with the City of Berkeley's bikeways and transit
- Accommodate a multi-user environment with pedestrians, wheel chair users, motor vehicles, and other users
- Determine and implement improvements needed on each campus bikeway segment.





ON-CAMPUS BICYCLE CIRCULATION

Existing On-campus Bicycle Circulation

Bicycling is permitted everywhere on the UC Berkeley campus - with the exception of the Dismount Zone during zone enforcement hours of 8 am to 6 pm Monday through Friday. The campus has two cross-campus bikeways and a few minor bikeway segments. (Figure 6)

The north-south cross-campus bikeway travels between the Arch Street/Hearst Avenue intersection, West Circle, the Eucalyptus Grove, Frank Schlessinger Way, Spieker Plaza and the Bancroft/Dana Street intersection. Completed in 2002, this bikeway was funded in part by a Bay Area Air Quality Management District (BAAQMD) grant.

The east-west cross-campus bikeway extends between East Gate and West Gate, traveling along University Drive and Wickson Road. The perimeter campus roads – Hearst Avenue, Bancroft Way, Oxford Street, and Piedmont Avenue – are City of Berkeley public rights-of-way.

Bikeway Gaps

The abovementioned bikeways do not comprise a comprehensive campus bikeway system that adequately connects campus bicyclists to their multiple destinations. Stairways, buildings and natural features create obstacles that contribute to bikeway discontinuity. The routing of bicyclists is complicated by the peak-period Dismount Zone and by poor interface between southside Berkeley bikeways and major campus entry/exit points.

Dismount Zone

In 2001, at the Chancellor's request, a Dismount Zone was formally established extending from Sproul Plaza at the Bancroft/Telegraph intersection along Sather Road to Moffitt Library; a short branch of the zone extends east from Dwinelle Plaza to South Hall. In effect between 8 am and 6 pm Monday through Friday, the Dismount Zone appears successful in minimizing conflicts in the most heavily-used pedestrian area of campus. The Dismount Zone continues to frustrate some bicyclists because it covers the most direct north-south access through the center of campus and affects a campus entrance (at Telegraph and Bancroft) that many bicyclists favor.

Proposed On-campus Bicycle Circulation

Bikeways

The proposed campus bikeway network assists bicyclists to access the central campus at multiple locations along each side of the campus perimeter (Figures 7 and 8). The network consists of primary bikeways and secondary segments characterized as follows:

Primary Bikeways

- Located mainly on campus roadways with some use of pathways
- Shared use on roadways with low volume, slow-moving vehicles

- An internal loop that acts as a hub with 'spokes' to the perimeter that together form two north-south and two east-west cross-campus bikeways.

Secondary Segments

- Located on pathways
- Short bikeways with lower bicycling use
- Connect with primary bikeways
- Shared use with pedestrians and wheelchair users.

Appendix A describes the proposed bikeway improvement projects for the primary and secondary bikeway system, including the project location on each bikeway segment. This Plan recommends approximately 200 bikeway improvements to create a comprehensive bikeway system. See Chapter X for cost projections and priorities.

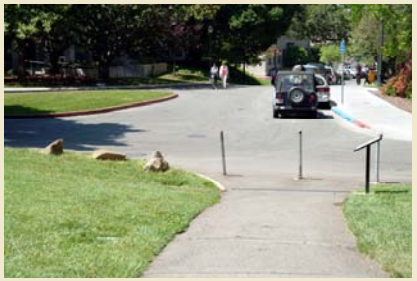


Figure 6 – Pre 2006 Campus Bikeways

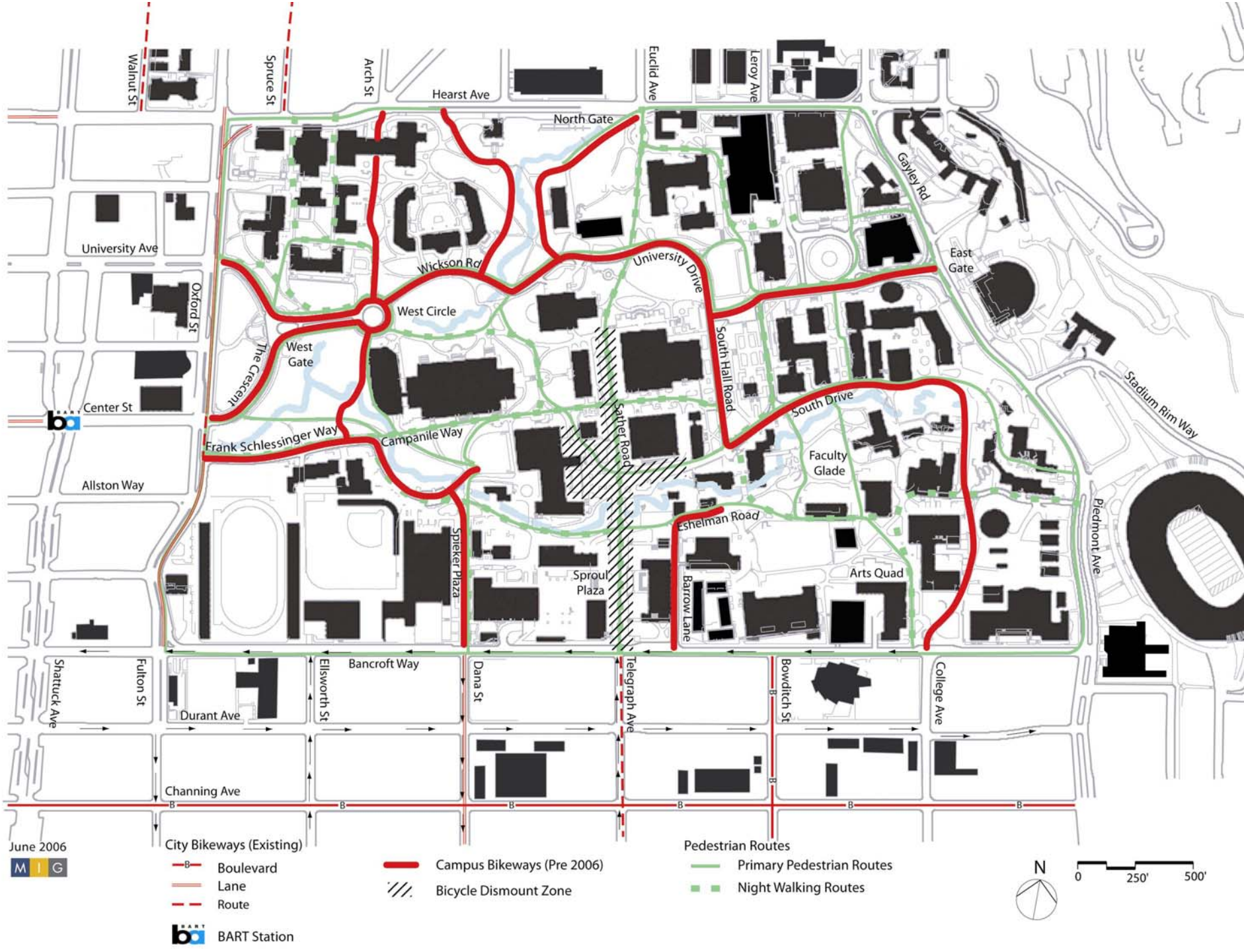


Figure 7 – Campus Primary Bicycle Network

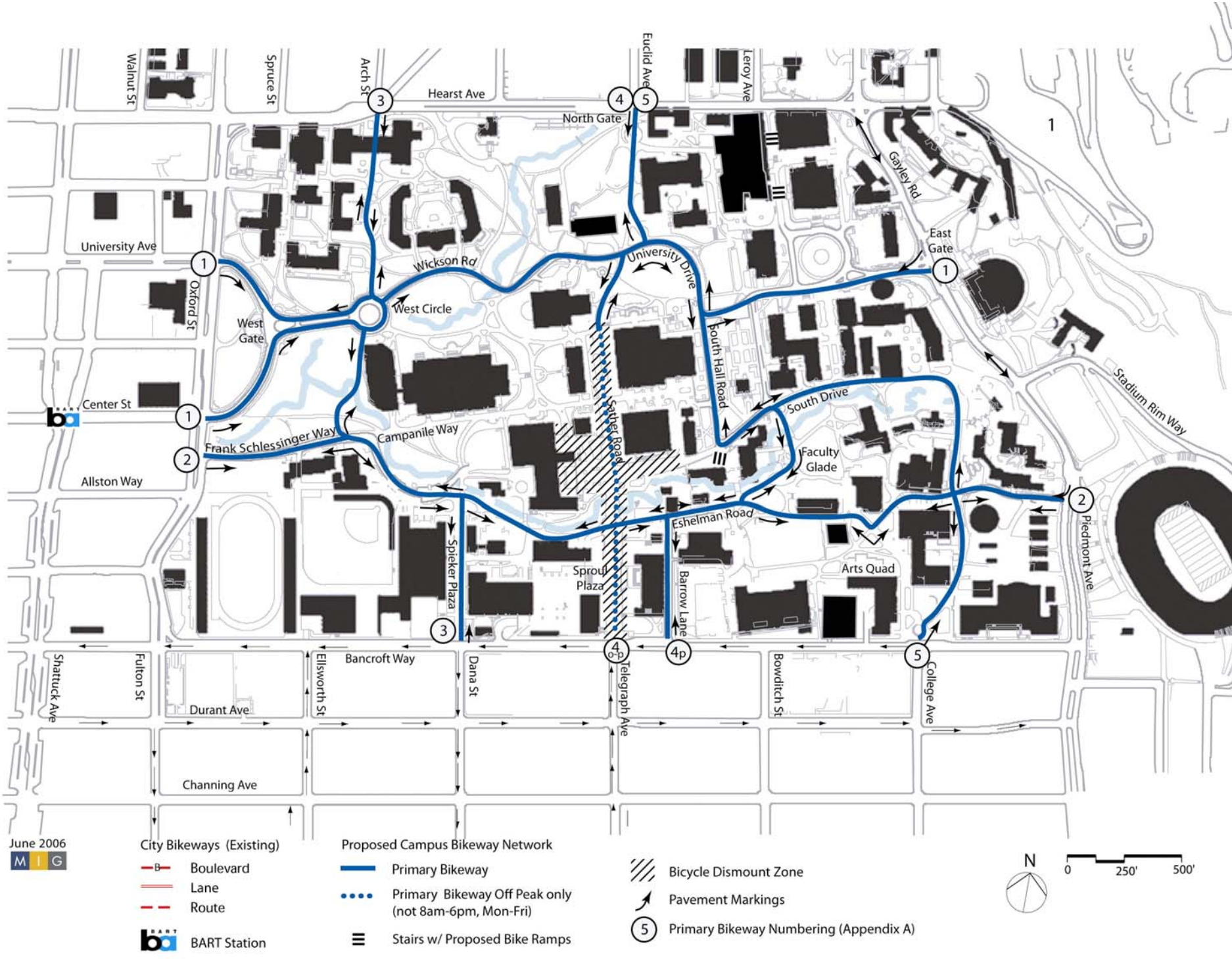
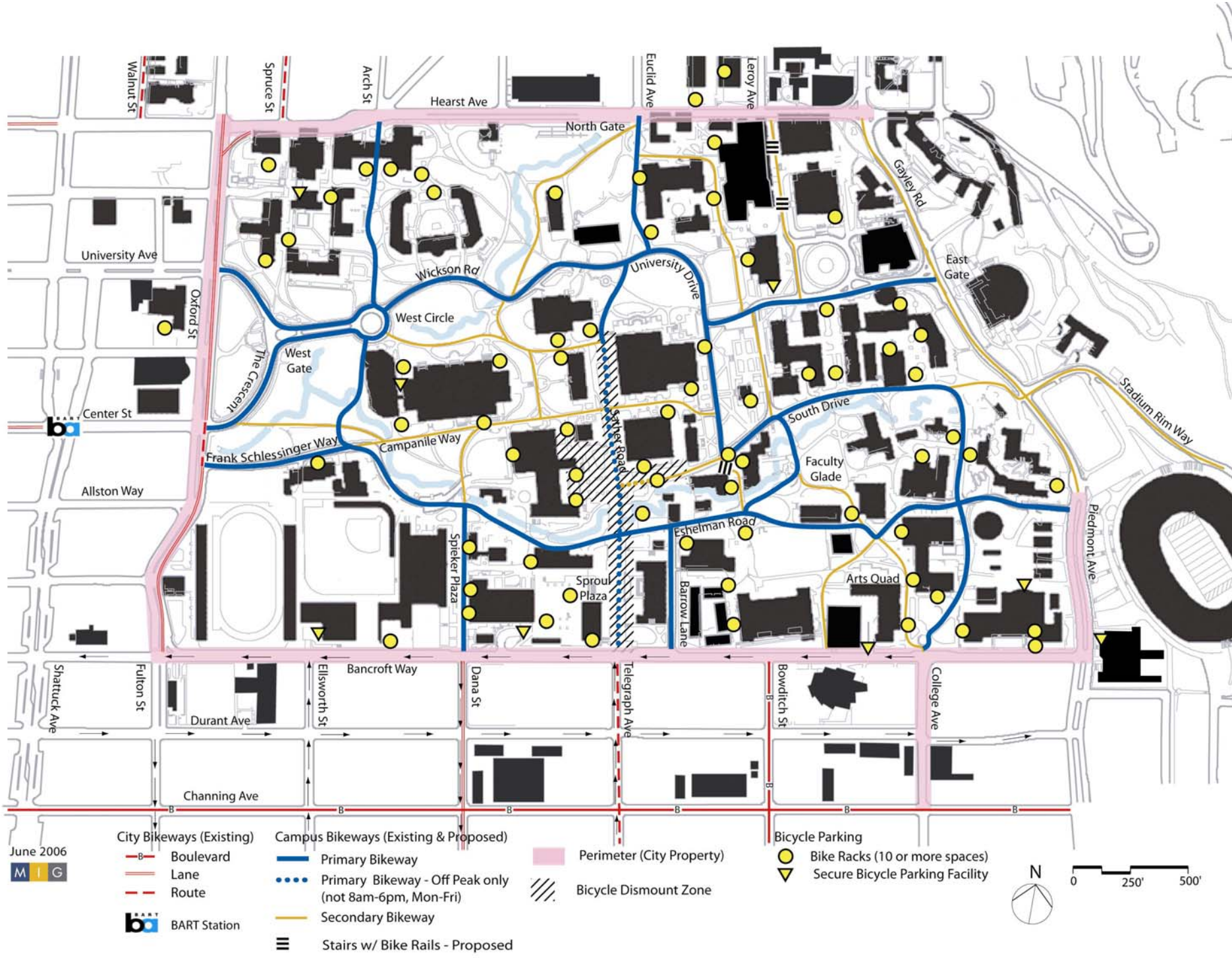


Figure 8 – Campus Primary and Secondary Bicycle Network



Lighting

Additional lighting on campus bikeways would improve bicyclists' safety and security. Because of the expense and impact involved, lighting installations should be coordinated with the Campus Landscape Architect, and prioritized to best serve both pedestrians and bicyclists. Lighting priorities for campus bicycling are the primary bikeways, key intersections, and bicycle parking. Appendix A describes 55 new light poles recommended on primary and secondary bikeways.

Pavement Markings

Pavement markings, recommended only on primary campus bikeways, assist in wayfinding and encourage bicyclists to use these key bikeways. The Caltrans standard pavement marking for shared roadways is described in the Design Guidelines, Section IX. Figure 7 shows placement of the pavement markings at key intersections on the bicycle network. Appendix A describes 70+ pavement markings to be installed, updated, or removed.

Signage

Approximately 35 bicycle-related signs are recommended for circulation clarifications and at potential conflict areas to alert bicyclists, pedestrians and motorists.

Most of the signage projects pertain to updating signs that read "Pedestrians and Emergency Vehicles Only…" without specific mention of bicyclists. These projects, totaling about 20 signs, would add a small supplementary sign affirming that bicyclists are allowed to ride on the path by noting "BICYCLES ALLOWED".

Other projects involve updating, replacing, or removal of signs. The Plan recommends including primary bikeways and bicycle parking areas on campus directories and locator maps.

Roadway Hazards – Grates and Bot Dots

The main roadway hazards to bicyclists on campus are drainage grates in the travelway that run parallel to the bicyclists' path of movement, slippery bot dots, and gate arms that hinder passage of bicyclists (see Appendix A for details). Only one campus location has bot dots that need removal and one guard gate needs its arms shortened. Appendix A identifies about 15 drainage grates located throughout the campus for upgrading.

Bikeway Upgrades

The major initiatives on the primary bikeways are improvements to the multi-use path through Faculty Glade (Bikeway 4-Peak) and a widened travelway north of Caesar Chavez Student Center (Bikeway 2). The Southeast Campus Integrated Project (SCIP) should bring comprehensive bicycle improvements to Bikeways 2 and 5 in the southeast area of campus.

Upgrades proposed on secondary bikeway segments include Class 2.5 upgrades to Gayley Road and Stadium Rim Way, and travelway improvements to the short connector between South Drive and Gayley Road north of Girton Hall. SCIP should examine the opportunity to make these improvements as well as upgrade

Gayley Road and Stadium Rim Way to Class 2 bikeways.

Pavement Improvements

Pavement improvements may be asphalt overlays or replacements at various locations along both primary and secondary bikeways as noted in Appendix A.

Traffic Calming

Where bicycle speeding is a concern, primarily on steep downhill segments, traffic circles or other traffic calming devices are recommended. A total of two traffic calming devices or landscape features are recommended at the Arts Quad and in Faculty Glade. These features require study and individualized design.

Bicycle Stair Ramps

Bicycle stair ramps, also called bike rails or channels, allow bicyclists to dismount and easily move their bicycle up or down stairs. Bicycle stair ramp projects are recommended at two locations to complete gaps in the campus bikeway system (see Figure 8). See the design guidelines in Chapter IX for further details.

Vehicular Restrictions

Currently, anyone may drive onto the UCB campus, although parking is by permit only. The 2020 LRDP proposes to limit all internal vehicular access at the west and east gates to permit only between 8 a.m. and 5 p.m. These changes should enhance bicycle access and movement on campus.

Surface Parking Changes

Another long-term strategy in the LRDP is to eliminate parking on campus streets, except for loading and disabled parking, and to consolidate it into parking structures. The released space could provide enhancement opportunities for bikeways and bicycle parking. All future parking structures should provide secure bike parking.

CITY / CAMPUS BICYCLE CIRCULATION

Existing City / Campus Bicycle Circulation

Bicyclists travel to campus using the City of Berkeley's surface streets. Some of the City bikeways terminate prior to reaching campus or dead-end at locations where there is no direct entry into campus. City bikeways that lead to the UCB campus are shown in Figures 7 and 8.

The City's bicycle boulevards attract the highest volume of bicyclists within the City because these streets are designed to accommodate bicycling as a primary mode of travel. Only one bicycle boulevard – Bowditch Street – reaches the central campus and it ends at a campus wall by Hearst Gym. The City plans to institute Class 2 and Class 2.5 bikeways on campus perimeter roads. Class 2 bike lanes already exist on most of Oxford Street, the western perimeter of campus.

In 2002, the City improved bicycle access to Frank Schlessinger Way. As part of the project to repave Oxford Street, the City created a break in the median enabling southbound

Oxford Street bicyclists to turn left directly onto Frank Schlessinger Way.

As described in the Study Area (Section 4), cyclists seeking direct routes often ride in the counter direction on one-way streets in the vicinity of the campus.

Proposed City / Campus Bicycle Circulation

The City's Bicycle Plan proposes improvements including bicycle lanes on portions of Hearst Avenue, Class 2.5 bike routes on some of the streets, and potentially bicycle contra-flow lanes on one-way streets on the Southside. Gayley Road and Stadium Rim Way on the east side of central campus are UCB owned rights-of-way, are considered part of the central campus bikeway system, and are being recommended to be made Class 2.5 bikeways at a minimum.

UCB supports the City of Berkeley's Bicycle Plan and will work with the city to create a seamless bikeway system between the two jurisdictions. A description of key campus bikeway connections with the City of Berkeley, along with a description of potential improvements, follows and is included in Appendix A. In general, any signalization installed on City streets around the central campus should include bicycle loop detectors and left-turn bike pockets.

The City's Draft Southside Plan considers converting Bancroft Way, or portions of it, to two-way traffic. This change could provide bike lanes and other bicycle enhancements that reduce bicycle/vehicle/transit conflicts and improve access between the City and Campus bikeways. A two-way street also would negate counter-flow bicycle traffic and create a safer environment for cyclists.

Bancroft Way / College Avenue Intersection
Issue: Bicyclists share curb cuts with pedestrians at congested pedestrian crosswalks.
Potential Improvements: A rolled curb on the north side of the intersection to allow easier and more direct bike passage with fewer pedestrian conflicts. A rolled curb also can benefit emergency vehicle access and service vehicles.

College Avenue: Bancroft Way to Channing Way
Issue: No City bike connection to primary UCB bikeway at an important southside campus entrance.
Potential Improvements: Bikeway upgrades to connect the City's Bicycle Boulevard on Channing Way with the campus entrance at College.

Dana Street: Bancroft Way to Dwight Way
Issue: One-way street southbound causes wrong way bicycling on a direct and popular northbound route to campus.
Potential Improvements: City of Berkeley's Bicycle Plan proposes a two-way street or a contraflow Class 2 bike lane and a signal or stop sign at Bancroft and Dana.

Bancroft Way / Ellsworth Street Intersection
Issue: Lack of traffic control.

Potential Improvements: A signal at this intersection is a potential mitigation in the 2020 LRDP. Bicycle loop detectors and left-turn bike pocket on Ellsworth would improve bicycling safety.

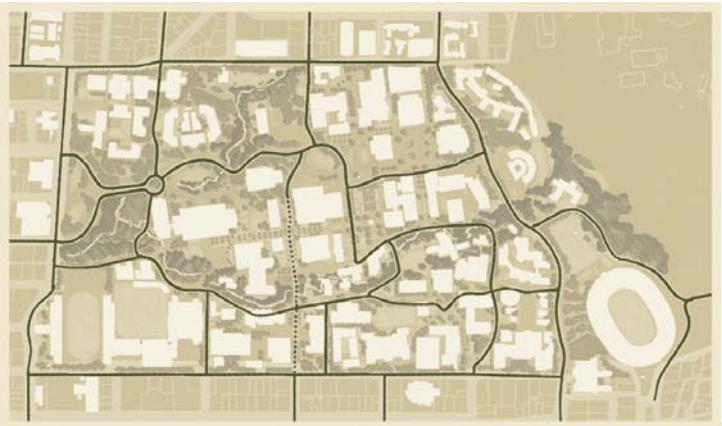
Oxford Street from Frank Schlessinger Way to Center Street
Issue: No bike lane in northbound direction due to intersecton configuration.
Potential Improvements: If/when the Center Street/Oxford intersection is redesigned, include bikeway improvements to this section.

Oxford Street / Center Street Intersection
Issue: Lack of space for bicyclists and pedestrians.
Potential Improvements: Include bike safety elements with any intersection redesign.

Oxford Street Intersections at Kittredge, Allston, and Addison
Issue: Lack of signalization.
Potential Improvements: Signals at these intersections are a potential mitigation in the 2020 LRDP. Bicycle loop detectors and left-turn bike pockets would improve bicycling safety.

Oxford Street / University Avenue Intersection
Issue: Heavily-utilized, multi-use intersection creates safety concerns, especially for westbound bicyclists exiting campus and facing 2 lanes of on-coming left-turning vehicles.
Potential Improvements: Traffic control changes that improve bicycle safety.

Hearst Avenue: Oxford Street to Gayley Road
Issue: No designated space for bicyclists to ride slowly uphill in the eastbound direction.
Potential Improvements: City of Berkeley's Bicycle Plan proposes a Class 2 bike lane between Oxford and Arch and a Class 2.5 between Arch and Gayley.



VI. BICYCLES AND TRANSIT

EXISTING BICYCLE ACCESS TO TRANSIT

Figure 10 shows the various transit services available through and around the central Berkeley campus:

- AC Transit
- BearTransit
- BART

On weekdays, AC Transit and the campus BearTransit operate over 14 different bus lines, sharing roadways with bicyclists. Bus-bicycle conflicts are most hazardous to the bicyclist.

Both surface transit systems accommodate bicyclists with exterior racks that hold two bicycles. BART allows bicycles on the trains with some restrictions on times of day. Bike access on these transit systems does not incur an additional charge. Bicycle access to transit is hindered by a lack of bikeways adjacent to key bus stops or transit stations and bicycle parking at these transportation hubs is limited.

AC Transit: bus routes exist on all major streets surrounding and leading up to the campus. Bike racks exist on all buses.

BearTransit: operates on the perimeter of campus, through campus between West Gate and East Gate, to the Hill campus, and off-site to Richmond Field Station. Regularly-used buses provide bike racks. Replacement buses that lack bike racks frustrate and deter bicycle commuters.

BART: BART allows bikes on BART trains during all hours for the Richmond-Fremont line. Other lines have restrictions during commute hours. The Downtown Berkeley BART station provides attended bicycle parking at no charge.

PROPOSED BICYCLE ACCESS TO TRANSIT

Bicycles on Board Buses

- Recommend a policy change to allow bicycles inside buses during evenings and weekends when the bus bike rack is full and it does not hinder passenger loads (BearTransit and AC Transit)
- Provide bike racks or other accommodations on all replacement buses (BearTransit).

Bicycle Parking at Transit Stations and Bus Stops

- Monitor the need for bicycle parking at the two major transit hubs on campus: the Mining Circle and The Crescent
- Work with BART to increase the bicycle parking offered to commuters at BART stations.

Bicycle-Transit Conflicts

- Work with the City of Berkeley and transit agencies to reduce conflicts between bicyclists and buses.

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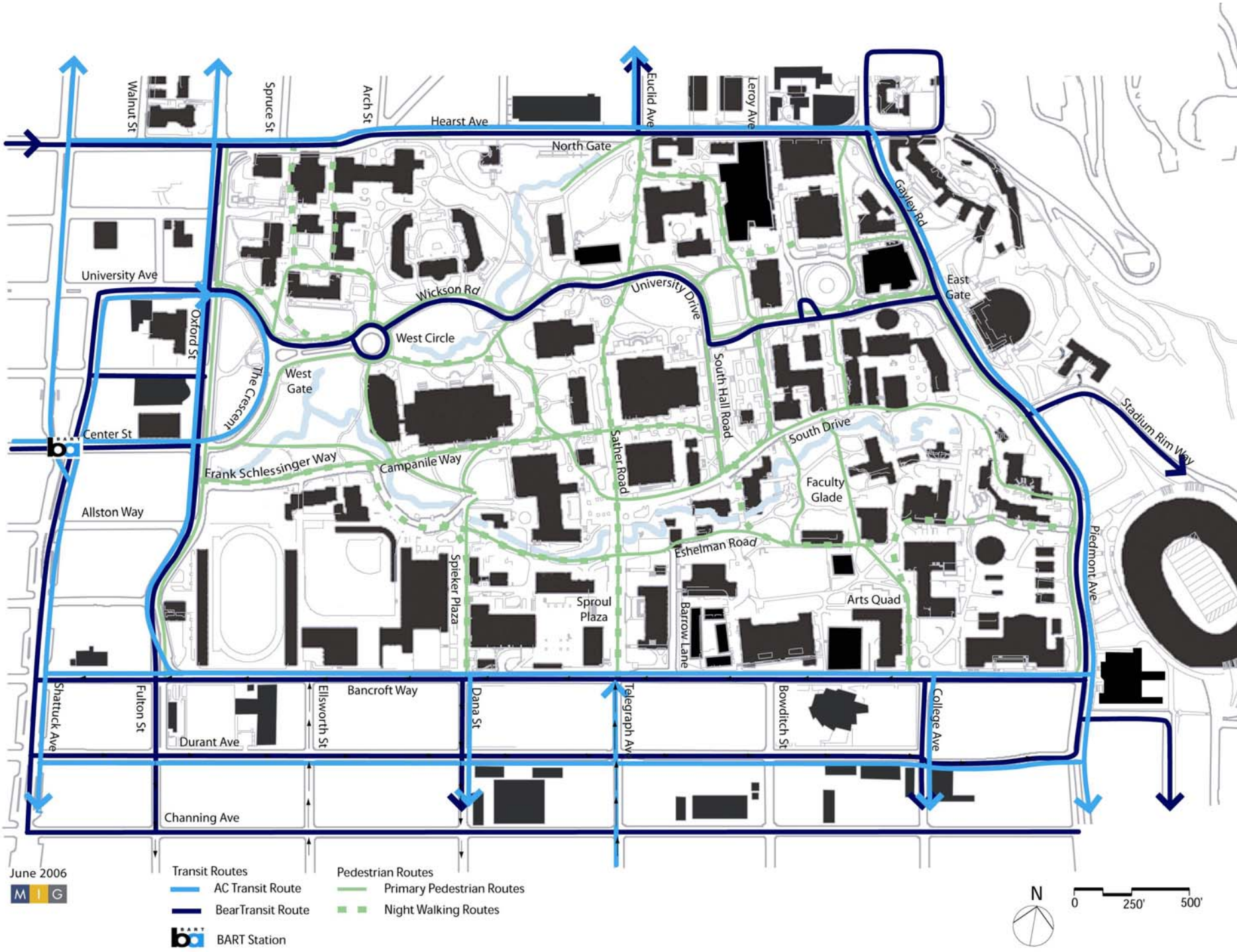
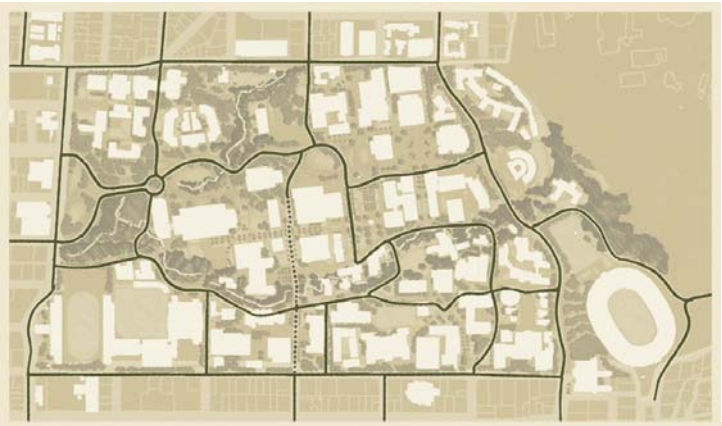
Figure 9 – Campus Transit Options





VII. BICYCLE PARKING

EXISTING BICYCLE PARKING

The UCB campus provides about 3700 bicycle parking spaces at racks and in secure cages on the central campus. Figure 8 shows campus locations that provide 10 or more bicycle parking spaces.

Employees often prefer to park their bicycles in their offices, a practice permitted by the Campus Fire Marshal as long as corridors, stairways and exits are not blocked.

Since a 2001 survey showing campus bike parking capacity at approximately 3000, bike parking spaces have increased to about 3700. P&T's has installed new bicycle racks and upgrades of old, obsolete racks, spending approximately $30,000 to $50,000 a year on bicycle parking facilities since the early 1990's. Since 2001, new bicycle parking installations have mainly occurred in areas that exceeded 90 percent utilization.

Secure Bicycle Parking

The central campus has seven secure bicycle parking cages with controlled access and one unfenced parking area utilizing video surveillance for security. Five of these facilities, installed in 2004, are managed by P&T and were funded in part by a grant from the Bay Area Air Quality Management District (BAAQMD). The secure parking spaces managed by P&T are primarily located in existing parking garages:

- Recreational Sports Facility Parking Garage
- Boalt Hall Parking Garage
- MLK Student Union Parking Garage
- Bancroft Parking Structure
- Evans Hall – 1st floor terrace

An access code, usable 24/7, is available by application and at no charge to UCB faculty, staff, and students. UC police, parking enforcement, and garage parking attendants monitor these facilities regularly.

Building managers maintain the other two secure bicycle parking areas and give out access codes or card keys:

- Genetics Garage
- East side of the Life Sciences Addition.

Valet Bicycle Parking

P&T in partnership with local bicycle coalitions provided free, attended bicycle parking at CAL home football games in the 2002 season. In 2004, P & T purchased three portable bike racks that park an average of 50 bicycles for use at future events.

PROPOSED BICYCLE PARKING

The campus wants to accommodate all central campus bicycle commuters with bicycle parking. Utilization surveys indicate that this can be done at a less than 1:1 ratio because of several factors, including daily variations in the number of bicycle commuters and bike parking allowed inside campus buildings.

Average Peak Occupancy counts by building (calculated 8 am – 5 pm, Monday through Friday) can be a tool for determining baseline needs. The targeted goal for bicycle parking provision on campus is ten percent of the campus population.

The campus may provide bicycle parking in a zone or area, not necessarily at each building. UCB prefers to consolidate bicycle parking for building groups rather than creating small bicycle parking facilities at each building. Utilization surveys will determine priority locations for bicycle parking projects.

Based on the targeted ten percent goal, about 1000 additional bicycle parking spaces are needed to fully accommodate the future bicycle commuting campus population. Much of the new bike parking will be added as part of new buildings, new parking garages, and major building remodels.

Bicycle Racks

The Landscape Heritage Plan details the standard campus bicycle rack as a continuous ribbon-style configuration. This Plan adds a compatible style, the single inverted U with a capacity for two bicycles, to the approved campus standard. These inverted U's are available to be installed individually or in a rack form. Although the ribbon or wave rack may still be used (or re-used), cyclists prefer the inverted U for the two locking points and support it provides for bicycles. Outdated racks, such as concrete blocks and t-racks, should be replaced and new installations should use the inverted-U rack.

The Design Guidelines in Section IX describe the campus bicycle parking standards.

Secure Bicycle Parking

Because most of the existing secure bicycle parking is located along the south side of campus, new secure spaces should be distributed about campus as much as possible. All new buildings should provide secure bicycle parking along with exterior bicycle racks to meet the baseline goal of ten percent of the building's average peak occupancy. New structures should make at least 10% of new bicycle parking, secure bike parking. New campus vehicle parking structures should also provide secure bicycle parking facilities. Secure bicycle parking is especially valuable for occupants of buildings that operate on a 24 hour basis, such as Wurster Hall and Bechtel Engineering Center.

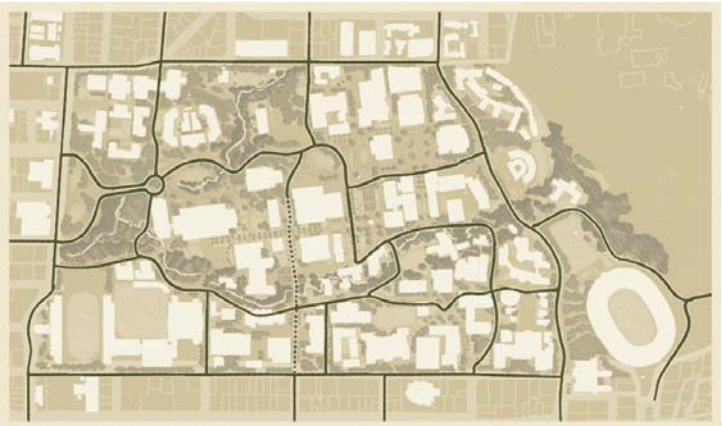
The existing secure parking areas not currently part of P&T's general facilities should be considered for eventual inclusion in a campus-wide secure parking system.

Valet Bicycle Parking

Valet bicycle parking should be used more frequently to create additional capacity in special event areas. For example, it is not sensible to provide permanent bicycle parking at the ten percent peak building occupancy for Memorial Stadium, which only reaches peak occupancy six to seven times per year. Valet bicycle parking can create the needed capacity on intermittent schedules at the Stadium and other similar locations on campus. SCIP, the Southeast Campus

Integrated Project, should identify a valet parking location for Memorial Stadium.

It is recommended that this type of special event bicycle parking be increased and promoted. Making this part of the home football games seasonally in coordination with the local bicycle coalition would be of benefit. In the future, this model could be expanded to other campus venues and events.



VIII. BICYCLE PROGRAMS

Bicycle-related programs are intended to create and sustain an informed and connected campus bicycling community. Bicycle-related campus programs address three areas:

- Education: focus on outreach efforts, communication and marketing materials
- Incentives: focus on ways to make it easier and less expensive to travel by bicycle
- Enforcement: focus on safety and security.

While the campus currently offers some programs, the UCB community is often not adequately informed about them. Emphasis should be given to promoting existing programs and further efforts should be undertaken so more individuals will use them. A fully-realized campus bicycle program that also supports the LRDP traffic mitigation goals, will require more commitment of staff time. A targeted budget that supports a half-time bicycle coordinator and production of appropriate educational materials is needed to sustain existing and proposed programs.

EDUCATION PROGRAMS

Education programs usually occur as outreach events using the materials described.

Outreach Efforts

Existing Outreach

Current outreach activities primarily involve information tables during Bike-to-Work Day, Staff Appreciation Day, Calapalooza Day during Student Welcome Week, weekly bicycle licensing in Sproul Plaza, and monthly New Employee Orientations. The UCB Police Department presents bicycle safety information at new student orientations. When P&T student interns have been available, more extensive outreach to new students has been conducted.

Proposed Outreach

The following actions will improve the outreach effort:

- Expand newcomer orientations and bicycle tours that educate the new UCB community members on bicycling safety and wayfinding
- Provide additional bicycling information tables at special events throughout the year, such as during Resident Assistant training and Tang Center's Healthcare Worker Training
- Promote the use of bicycle safety equipment: headlights, flashing rear lights, and helmets
- Provide bicycle repair classes
- Work with local bicycle advocacy groups, shops and clubs to help educate cyclists
- Develop a Bicycle Ambassador program to educate cyclists on the rules of the road and bicycle security issues.

Educational Materials

Existing Educational Materials

The purpose of bicycle-specific educational materials is to increase awareness of bicycling issues, bicycle theft prevention measures, and the campus bicycle programs. Materials are posted on-campus and within residential living communities such as dormitories, fraternity houses, and housing co-ops. The main materials include:

- Rolling Through Berkeley, UCB bicycle reference brochure
- Secure Bicycle Parking information panel cards
- City of Berkeley Bicycling Brochure
- Parking & Transportation website
- Periodic articles in campus news-papers.

Proposed Educational Materials

The following recommendations describe ways to enhance the materials related to bicycling:

- Update and increase the distribution of the Rolling Through Berkeley brochure
- Create additional printed infor-mation panel cards on bicycling
- Enhance the current Parking & Transportation website to include more bicycle education topics
- Ensure that other UCB web pages, such as Recreational Sports and Health Services, are linked to the bicycle-related P&T web pages
- Work with other groups and agencies to cross-link UCB bicycle-related web pages with their sites
- Build more cross-promotional materials with partners such as 511.org and bicycle advocacy groups
- Create a campus bike list-serve
- Promote bicycling to parking permit holders via e-mails
- Write articles and pitch stories to UCB and local newspapers on bicycling safety and services
- Find and distribute an existing "How to Ride Your Bike" film clip
- Advertise bicycling messages on campus shuttles and at transit stops.

INCENTIVE PROGRAMS

Existing Incentive Programs

The primary incentive programs are the Alameda County Guaranteed Ride Home Program (GRH), P&T's programs providing discounted occasional employee parking, free campus shuttle access, and subsidized transit passes. The GRH provides UCB employees up to six free rides home per year in the event of a personal emergency. The parking and transit incentives offer bicyclists alternatives on days when they do not ride.

Proposed Incentive Programs

Current incentive programs should be continued. The proposed incentive programs cover discounted equipment/service, free giveaways, parking policies, service bikes, shower/lockers, and an on-campus bicycle shop.

Discount Equipment/Service

A subsidy is recommended to provide UCB faculty, staff and students financial assistance in purchasing bicycles and bicycle safety and security equipment. This subsidy would support the purchase of high quality U-Locks, bicycle helmets, bicycle lights, and other devices. The subsidy also could support bicycle maintenance services. The bicycle subsidy programs should be coordinated, and possibly jointly sponsored, with nearby bicycle shops.

Bicycle purchase assistance could be in the form of a zero interest bike loan similar to the UC Santa Cruz program. A bicycle donation program could be established with help from the campus development and gifts unit with the intent to provide a bicycle to individuals who otherwise could not afford one.

Free Giveways

Free giveways should be limited to low cost, bicycle safety items that help attract people to information tables at events or to reward bicyclists who follow the rules of the road. The following two giveaway programs should be reinstated:

- Distribute custom flashing rear bicycle reflectors and/or reflective ankle straps
- Coupons for free soda or coffee to bicyclists that follow the rules of the road.

Parking Policies

It is recommended that vehicle parking policies be revised to provide a greater financial incentive to bicycle. Occasional-use permits should be attractively priced to benefit individuals who usually use alternative modes to campus.

Service Bikes

Several departments located off the central campus, such as Environment, Health and Safety (EH+S) and Capital Projects, require personnel to make frequent visits to campus. A program that assists procurement of bicycles for departmental use could reduce the operation of vehicles currently serving short trips and multiple stops. Funded by a grant from the Chancellor's Advisory Committee on Sustainability, EH+S recently instituted a 'Clean Fleet' of two service bicycles that has already proven useful. This model could be expanded to other campus departments.

Showers and Lockers

Bicyclists who commute longer distances or in warm weather desire showers and lockers. UCB affiliates who are members of one of the gyms on the central campus can use those showers and lockers for commute purposes. Some campus buildings currently have showers and lockers, although the locations, numbers, and utilization are unknown.

- Consider providing showers with lockers in new or renovated buildings
- Develop a program at Hearst Memorial Gym and the Recreational Sports Facility (RSF) allowing bicycle commuters to use showers and lockers in exchange for a nominal fee. The program should include marketing, information, outreach, and if possible, some subsidization of costs.

Bicycle Shop

A bicycle shop could be a mobile unit or a stationary location in an existing or new building on campus. The bicycle station could offer full or limited services, such as:

- Air pumps
- Bike café
- Attended or secure parking
- Showers and lockers
- Tools or tool loaning program
- Bicycle repairs (from quick fixes to total overhauls)
- Drop-in bicycle maintenance clinic
- Equipment to buy or rent such as bicycles, trailers and helmets
- Discounted bicycle locks, lights, and other equipment
- Bicycle licenses/renewals
- Outreach and education.

The bike shop would be most usefully located on the east side of campus, which does not have bike shops in close vicinity. The lack of space on campus makes it difficult to find a suitable bike shop location; a mobile unit may be a more feasible option.

UCB could partner with a local bike shop to provide services on campus. Another potential partner would be Cal Adventures or ASUC, similar to how UC Davis and UC Santa Cruz run their bike shops – as a student cooperative.

ENFORCEMENT PROGRAMS

Enforcement programs can be challenged or ignored in campus environments. Often, the rules of the road are not adhered to because the annual influx of new students arrives without adequate knowledge of or experience with standard bicycle rules and appropriate conduct for the shared-use environment. UCB campus enforcement programs are needed to promote safety and security. Enforcement programs are most successful when administered in conjunction with enhanced bikeways, bicycle parking, and education programs.

Existing Enforcement Programs

Parking & Transportation regulates campus bike parking and other requirements. UCPD shares this responsibility and also enforces bicycle moving violations, such as reckless riding and riding in the bicycle dismount zone. Additionally, the UCPD has responsibility for bike theft prevention, investigation, and recovery.

Citations

The number of citations issued by UCPD each year has steadily decreased, in part due to increased understanding of the bicycle dismount zone. UCPD statistics show that 212 citations were issued in 2001, 146 in 2002, 137 in 2003 and 111 in 2004.

Thefts and Recoveries

Although not all bicycle thefts are reported, UCPD recorded the following statistics:

Year	Thefts
2000	260
2001	254
2002	233
2003	Not available
2004	229

Previous years had recorded thefts in the 300 range. In general, less than one percent of stolen bicycles are recovered each year.

Licensing Program

Although State law does not require bicycle licensing, municipalities can. Both the City of Berkeley and UC Berkeley require bicyclists to have a valid California Bicycle License. UC Police and parking enforcement officers can issue a citation to bicyclists lacking a valid license. Currently, UCB affiliates are not charged for a license although they used to sell for six dollars and renewals for three dollars. About 750 licenses are issued annually.

Licensing can help to:

- Identify stolen bicycles
- Identify persons in a severe bicycle collision
- Contact bicycle owner if a bicycle is illegally parked or impounded
- Verify bicycle owner if UCPD needs to cut a bicycle lock due to misplaced keys or malfunctioning lock
- Comply with requirements for access to secure bike parking facilities on campus.

Currently, license information is not available in a shared electronic database. Many jurisdictions that might otherwise assist with the return of stolen bicycles, use different, often incompatible, database programs.

Impounding Program

UCPD impounds bicycles that are illegally parked or abandoned. If a bicycle license exists, UCPD staff tries to contact the owner of the bicycle before impounding it. If a bicycle is found, UCPD attempts to contact the owner. Unclaimed bicycles are sold at auction periodically.

Proposed Enforcement Programs

Current programs should be continued and enhanced with the following proposals.

Bicycle Education Safety Training (BEST) Program

UCPD established the Bicycle Education Safety Training (BEST) program as a traffic school option for cyclists who receive citations. Although no longer available due to low utilization, BEST classes were taken by violators in lieu of paying a fine. Classes cost $10 and had to be taken within 21 days of receiving a violation.

Many bicyclists, especially students, would appreciate an alternative to citations. Also, as UC Davis has experienced, lower fines appear to induce greater compliance with the payment of fines.

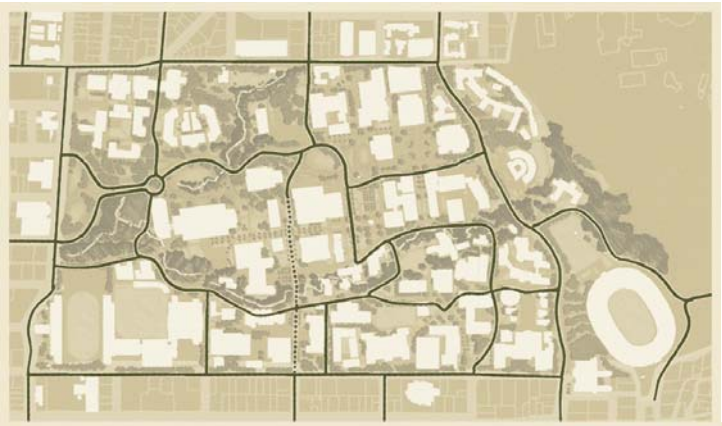
The BEST program could be re-established to have broader appeal. With consistent funding, different content, and promotional support, bicycle education services could be provided to more than traffic violators.

Licensing Database

Establishment of a shared licensing database with other local jurisdictions would increase the value and utility of bicycle licenses.

Targeted Warnings and Citations

The extensive enforcement program, including warnings, citations, and rewards for good behavior, that was put in place with the dismount zone proved effective in educating cyclists and establishing on-going compliance. Areas on campus that are of concern specifically related to safety could be enforced in a similar fashion to change behavior and achieve compliance.



IX. DESIGN GUIDELINES

INTRODUCTION

The design guidelines will assist campus planners and designers in addressing bicycle facilities. These guidelines recognize and seek to protect the unique context of the campus, characterized primarily by: 1) an informal, well-established multi-modal circulation pattern that is pedestrian-friendly and 2) a physical environment that includes over 200 buildings co-existing with mature trees, undulating hillside topography, and two forks of Strawberry Creek.

The design guidelines address the physical treatments recommended for bikeways on the UC Berkeley campus, including: lighting, signage, pavement markings, wayfinding, bicycle stair ramps, and traffic calming measures.

Each section lists the design guidelines, and includes photographs or diagrams for illustration. Appendix E provides a Capital Projects Checklist for use in planning initiatives and large building projects.

The following sources were referenced in the preparation of the guidelines:

- California Building Code, Title 24, Part 2, 2001
- California Department of Transportation, Bikeway Planning and Design, July 1990
- California Department of Transportation, Highway Design Manual, Chapter 1000
- California Manual on Uniform Traffic Control Devices, Part 9 – Traffic Control for Bicycle Facilities, April 2006
- City of Berkeley Bicycle Plan, 2000/2005
- City of Berkeley Bike Rack Specifications and Installation Standards, 2005
- Guide for the Development of Bicycle Facilities, AASHTO, 1999
- Design Guidelines: Alameda County-wide Bicycle Plan, July 2001
- UCB Campus Sign Program, Signage Guidelines, 1995
- UC Berkeley Landscape Heritage Plan, 2004
- UC Berkeley Landscape Master Plan, 2003
- UC Davis Bicycle Plan, May 2002

CAMPUS BIKEWAYS

Common Features

The following features are common to all types of bikeways:

Grades

The grade of a bikeway should be no greater than five percent, especially on long inclines. It is desirable that sustained grades be limited to two percent to accommodate a wider range of users. Steeper grades can be tolerated for short segments, and are unavoidable in some

areas due to hilly terrain. Where steeper grades are necessary, additional width should be provided for maneuverability. A cross slope is needed to provide adequate drainage and should be no more than 2%.

Operations and Maintenance Friendly

All bikeways should use materials that minimize the potential for debris, potholes, and pooling of water, such as concrete or asphalt. Pervious surfaces are preferred because the porosity reduces stormwater runoff and assists groundwater recharge. Pavement edges should be uniform and should not have abrupt drop-offs.

Signage

Bicycle signage should follow the guidelines proposed in the 1995 Campus Sign Program Signage Guidelines. The guidelines include color palette, materials, and layout. Signs should "fit in the overall family of signs" for the campus.

Small regulatory signs that announce 'Bicycles Allowed' and are associated with standard traffic signage (such as 'Do Not Enter' or 'One Way') should use similar materials and fit the style of traffic signage.

Pavement Surface Quality

Pavement surfaces should be smooth, firm, slip resistant and where possible, uniform in width. Any drainage grates within the bicyclists' path of travel should be bicycle safe, and utility covers should be flush with the surface.

Safety

A safe bicycling environment will minimize conflicts with motorists and pedestrians, and should follow the common design guideline features described above. Bikeways should avoid stairs and heavily-used pedestrian plazas.

Multi-use Paths

Description

All multi-use paths on campus serve pedestrians and bicyclists (and often service vehicles, too). Bounded by landscaped and built spaces, multi-use paths provide valuable connections across campus. UCB guidelines meet Caltrans standards unless otherwise noted.

Pavement Markings: In several places on campus where roadways are not available, primary bikeways use campus paths to complete the bikeway network. In these cases, use the pavement marking described for Shared Roadways and place them only in the few locations where a multi-use campus path is designated part of a primary bikeway.

Pavement markings should be used judiciously for wayfinding at decision points in the network (see Figure 7). Place markings in the center of the path and avoid placement in a plaza or court.

Vertical Clearance: a minimum of 7.6 feet (See Figure 9). UCB should address pruning priorities when considering vertical clearance.

Horizontal Clearance: a minimum of 1.8 feet and a recommended 3 feet to an adjacent building, light pole, or planting.

Width: a minimum of eight feet and a recommended ten feet. Maintenance tends to increase when the path is less than ten feet due to service vehicle wear and tear.

Intersections: a 90-degree crossing recommended to ensure safety (See Figure 11). A minimum 45-degree crossing may be acceptable in some circumstances (AASHTO). In compliance with California's ADA standards, a three-foot deep detectable warning strip should be installed where paths meet roadways.

Figure 10: Multi-use Path Dimensions

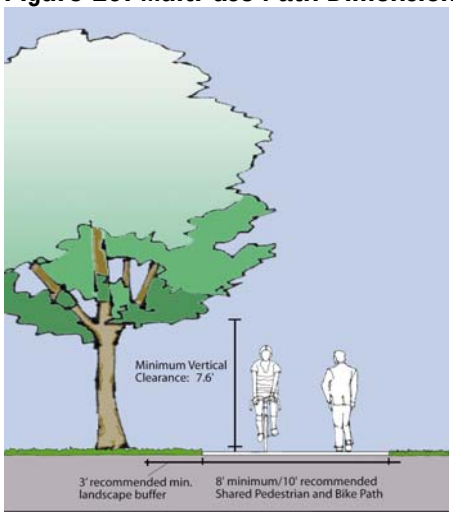
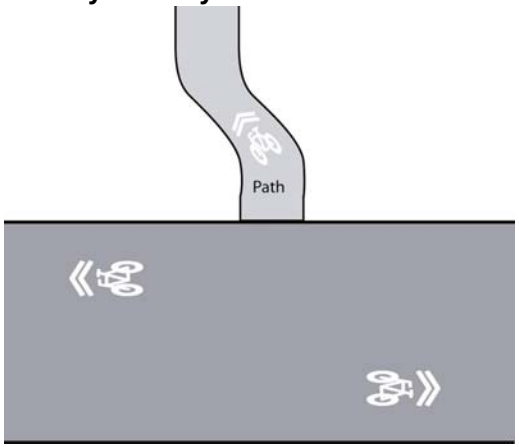


Figure 11: Primary Bikeway Path Meets Primary Bikeway Road



Shared Roadways

Description

Wherever possible, primary bikeways are located on vehicular roads within the campus. The internal campus roads have low volumes of traffic moving at low speeds, allowing bicyclists and motorists to share the road. Bounded by landscaped and built spaces, bikeways on campus roads provide valuable connections and form the backbone of the campus bikeway system.

Other Campus Roadways: At a minimum, Gayley Road and Stadium Rim Way should be made Class 2.5 bikeways and, preferably Class 2. These two shared roadways should meet Caltrans and/or City of Berkeley design standards.

Pavement Markings: A white, non-slip, reflectorized Shared Roadway bicycle marking (Caltrans) painted onto the road. In some instances, such as the small intersection at Eshleman Road and Barrow Lane, a single marking with chevrons at both ends may be used.

Place markings in the middle of the travel lane at the far side of intersections (See Figure 11). The symbols should be approximately 9 feet long by 3 feet wide (see the California Manual on Uniform Traffic Control Devices – Part 9, Figure 9C-104). The Shared Roadway Bicycle Marking is intended to:

- Reduce the chance of bicyclists impacting open doors of parked vehicles on a shared roadway with on-street parallel parking (Caltrans)
- Alert road users within a narrow traveled way of the lateral location where bicyclists ride (Caltrans)
- Be used only on roadways without marked bicycle lanes or shoulders (Caltrans)
- Be used for wayfinding on the campus primary bikeways.

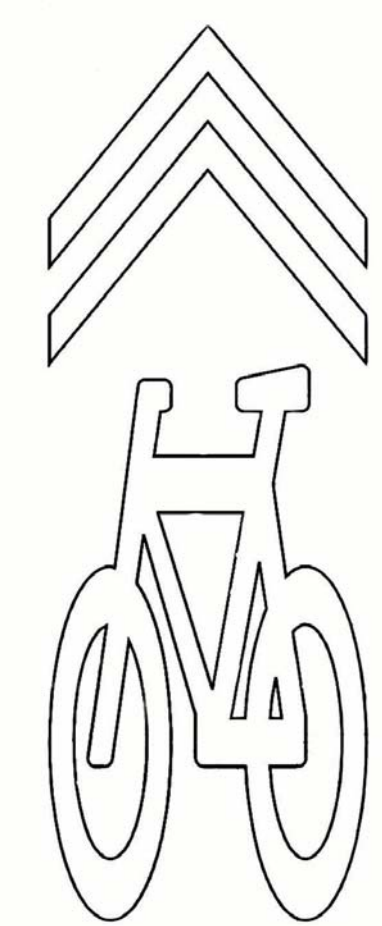
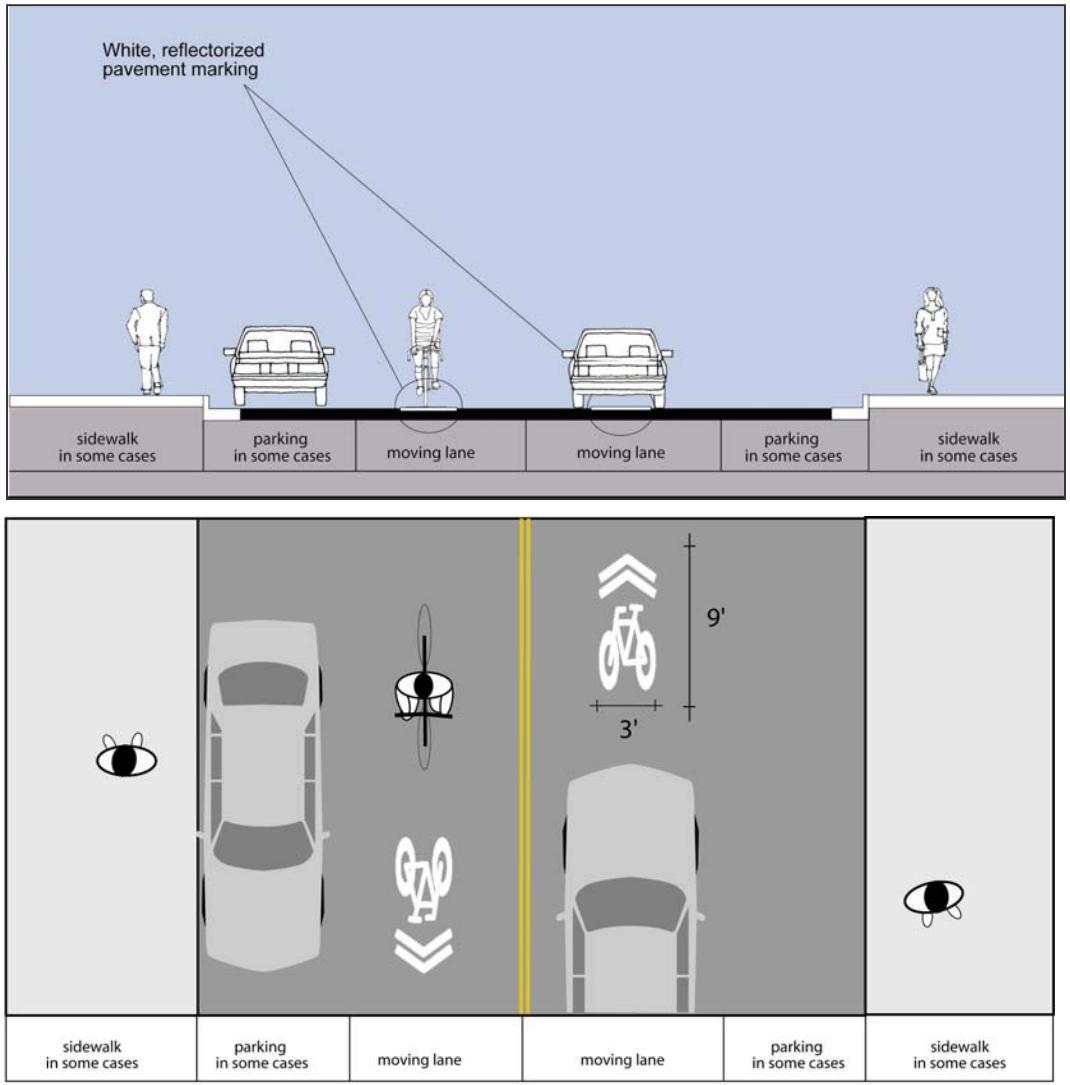


Figure 12: Shared Roadway Prototypical Section

The following figure is meant to give a general idea of the elements in a bikeway on a shared campus road. Edge conditions change along the roadway as the diagram notes.



BICYCLE PARKING

Bicycle parking should be accessible and convenient. Because of visual, spatial and maintenance concerns, bicycle lockers are not appropriate for the campus. All new campus buildings and parking garages should provide bicycle parking as described below:

- **Bicycle Racks:** a minimum of eight feet clear from the rack for pedestrian passage past the bike rack and a minimum of nine feet in areas of heavy pedestrian traffic. A visible location will help minimize the theft and vandalism of bicycles. Special attention should be taken to place racks discreetly in the vicinity of historic campus buildings and not at formal front entrances. In exterior locations, the parking surface should be pervious and, where possible, cover should be provided.
- **Secure Bicycle Parking Areas:** should be located in a parking garage or building, near an entrance to facilitate usage, and signs should alert bicyclists to the parking location.

Rack Type

The campus has two bike rack standards: the wave or ribbon rack and the newer inverted U. The preferred bicycle rack is the inverted U (see photo), which accommodates locks that secure the frame and wheels in two places, and provides support for bicycles.

Rail-mounted inverted U racks, including an angled model, are available for simpler installation of multiple racks. Each inverted U rack holds two bicycles locked parallel to the rack.

Rack type specifications include:

- Material: 2 3/8-inch O.D. Schedule 40 round pipe with a galvanized finish
- Height: 32 - 36 inches
- Width of hoop: 18 - 24 inches
- Install with flange mounting or embedded footing

Rack Spacing

Multiple inverted U racks should be placed:

- 30 – 36 inches apart placed side by side
- 48 – 60 inches apart placed end to end
- 30 inches minimum from walls, plantings, or other obstructions.

Secure Bicycle Parking Design

Fencing for caged bicycle parking areas should be a minimum of eight feet high, preferably reaching to the ceiling, and the upright members should be sturdy enough to resist prying apart. The entrance/exit should have a lever handle and durable grating a minimum of three feet around the lock to prevent unauthorized access to the interior handle.

Cover

As the campus enjoys temperate weather for most of the year, no built shelter is specified for bike parking areas located outside. However, rain shelter and shade are always appreciated and contribute to rider comfort and bicycle longevity. Existing building canopies/overhangs can be used to provide rain shelter and shade. Opportunities for integrally-designed covers can be explored with new buildings. Parking structures provide the same opportunity for covered bicycle parking. Screen exterior bicycle parking with 36" high hedges or walls where feasible while maintaining visibility and security.

Signage

Directional signage may be needed to guide bicyclists to parking located in less visible locations. Signage should follow campus standards and should respect the overall character of the campus. Unnecessary and excessive use of signs is discouraged.

Security

Lighting and visibility are effective deterrents to theft (see lighting guidelines). Police security cameras with digital recording devices have achieved varying degrees of success on campus as a security measure. The security devices should be unobtrusive, difficult to reach, have sufficient lighting, and be placed at a useful angle.

Wayfinding

Campus directory maps and the smaller campus locator map should show primary bikeways and bicycle parking locations that accommodate ten or more parked bicycles.

LIGHTING

The bikeway network encompasses the designated campus Nighttime Walking Routes and extends beyond to areas where additional lighting is recommended. Lighting priorities for campus bicycling are the primary bikeways, key intersections, and bicycle parking.

Luminosity

Use the campus standard for luminaire and pole, which is at a scale appropriate for pedestrians, bicyclists, and motorists. Current campus standards are based on Illuminating Engineering Society (IES) light levels, and specify 0.5-foot candles on walks and paths and 1.0-foot candle for parking lots. Refer to the Landscape Heritage Plan (p.83) for further particulars.

BICYCLE STAIR RAMPS

Bicycle stair ramps allow bicyclists to easily push their bikes up or down stairs. Creating or retrofitting stairs to better serve bicyclists can be done either by infilling the steps with a narrow ramp or by installing a channel or gutter. A bicycle stair ramp should not interfere with accessible handrail require-ments.

Maximum protrusion from wall for bicycle ramp: 4 inches

Location

Provide bicycle stair ramps along existing staircases on secondary bikeways. New staircases should be designed with bicycle stair ramps as part of a whole, aesthetic design.

Material

Surface materials should be non-skid.

Dimensions

By code, objects are not allowed to protrude more than four inches into the pedestrian path of travel. (Title 24, California Building Code) In the case of a bicycle stair channel or gutter, the tire channel should be shallow enough for the bicycle tire to achieve sufficient clearance.

Character

Attention should be given to selecting a bicycle stair ramp design that fits with the character of adjacent buildings and landscape. Where suitable to staircase design, a single stair ramp could be placed in the middle to accommodate both movement directions.

Specific Projects

The Moses-Stephens courtyard presents the most direct route between Barrow Lane/Eshleman Road and the Campanile area except for the obstacle of stairs. The historic double-curved staircase centered on the courtyard should not be touched, but the wide brick steps in the northwest corner of the courtyard next to Moses Hall present an opportunity to improve bicycle access. The existing brick cheekwall at each side of the steps might function as a bike stair ramp if adjustments are made to extend the low wall to ground level at each end.

Plans for Davis Hall North (construction estimated to finish in 2009) include bicycle stair ramps on the staircase planned from Hearst Avenue along the east side of the new building. This bike access will terminate at an upper level adjacent to the Bechtel Engineering Center terrace where a double staircase leads down to ground level. Adding bicycle stair ramps to the existing Bechtel terrace stairs will extend bike access to the ground, avoiding a clumsy route via interior elevators.

TRAFFIC CALMING MEASURES

Traffic Circles

Existing traffic circles along certain routes (such as at West Circle) are useful in calming bicycle and vehicle movements. Traffic circles simplify intersections since traffic only comes from one direction rather than several. Similar measures are recommended on multi-use paths where traffic calming is needed to reduce bicycle speeds, such as in Faculty Glade.

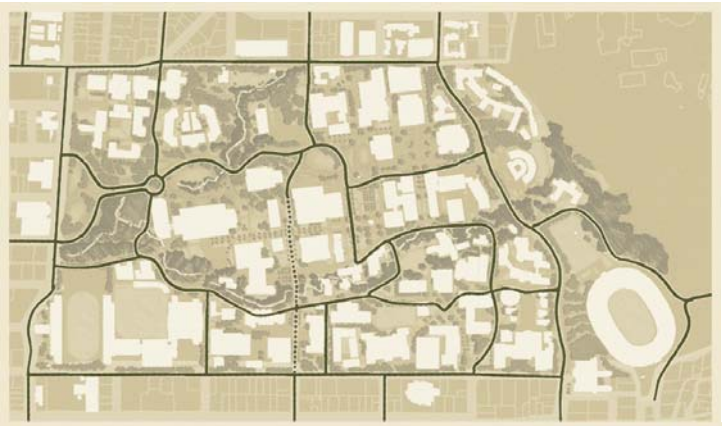
Traffic calming features cannot interfere with emergency vehicle access or designated accessible path-of-travel routes. For multi-use paths on campus, traffic calming measures can take a variety of forms:

- Planting circle with strategically placed boulders or other edge barriers
- Fountain with raised edge
- Stone plinth at seating height
- A combination of these or other ideas.

Bollards

UCB uses bollards throughout campus to control vehicle access. Bollards also can be used to signify a bicycle dismount zone or to slow bicyclists. Where bollards may present a hazard to bicyclists, reflectorized material should be applied as a warning device.

The minimum distance between bollards should be 3 feet to meet ADA standards. Preferably, bollards will display some design character reflective of the campus context.



X. IMPLEMENTATION

Implementation is crucial to the success of any plan and funding is crucial to implementation. The goal of the Plan is to implement all of the recommended projects and programs within ten years, which would require an average annual expenditure of about $120,000. This spending level assumes that UCB will increase its funding for bicycle projects and programs after the completion of the Campus Bicycle Plan. Additional implementation support may come from competitive grants, new development, and other campus programs.

CAMPUS COMMITMENT

This Plan's comprehensive approach to campus bicycling issues will facilitate the implementation of co-productive improvements with the City of Berkeley and other bicycle-related organizations and businesses. Campus units will work with each other, as well as with various agencies, to implement bicycle-related improvements on the UCB campus.

Campus Administration:

Public Safety and Transportation (PS&T) includes the Parking & Transportation Department and the UC Police Department. PS&T will contribute bicycle-related support as follows:

- Campus/community outreach
- Programmatic marketing
- Education and enforcement
- Crime prevention
- Pursue grant funding sources.

Facilities Services:

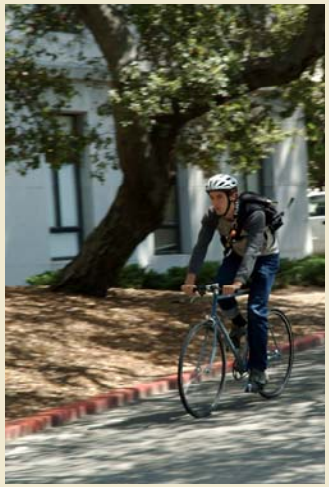
The Facilities Services unit includes Physical and Environmental Services (PEP), Capital Projects (CP), and Physical Plant-Campus Services (PP-CS). Altogether, the unit provides the campus planning, design, construction, and maintenance services. Facilities Services bicycle-related support includes a commitment to:

- Utilize the Capital Projects Checklist (Appendix E)
- Incorporate bicycle facilities in major new development and substantial renovations
- Infuse bicycle-related elements into overall campus circulation improvements
- Provide on-going maintenance of bicycle facilities.

PROJECT AND PROGRAM SELECTION CRITERIA

The following evaluation criteria were used to select and prioritize bicycle improvement projects:

- Campus significance
- Closure of bikeway gaps
- Adequacy of existing facilities
- Conflict reduction between pedestrians, motorists, and bicyclists
- Campus need and input



- Environmental issues
- Project readiness
- Order-of-magnitude cost estimates.

PROJECT AND PROGRAM PRIORITIES

In 2006 dollars, the entire set of recommended bicycle projects and programs is estimated to cost $1.34 million (Table 4). The high priority bicycle projects are estimated at $440,000 and remaining projects total $900,000 including contingency. The annual estimated cost of programs is $50,000, including costs for a half-time staff position. Projects are described in Section V – Bikeway Network and in Appendix A. Section VIII explains the recommended programs.

Table 4: Prioritized Projects and Programs

Project	Qty	Cost Estimate
HIGH-PRIORITY PROJECTS (first five years, 1x cost)		
Pavement markings	70	$35,000
Signage	28	$42,000
Roadway hazards	16	$9,000
Bikeway 2 upgrades	1	$115,000
Pavement improvements	5	$38,000
Bicycle stair ramps	2	$21,000
Bicycle parking - regular	350	$70,000
Bicycle parking - secure	50	$20,000
Traffic calming - Faculty Gl.	1	$50,000
10% contingency		*$40,000*
High-Priority Subtotal		*$440,000*
LOWER-PRIORITY PROJECTS (1x cost)		
BearTransit bike racks	3	$3,000
Bicycle parking - regular	540	$108,000
Bicycle parking – secure	60	$24,000
Bikeway 5 upgrades	1	$1,000
Bikeway Segment L upgrade	1	$180,000
Bicycle shop (start-up)	1	$25,000
Lighting	55	$412,000
Signage – campus loc. maps	7	$15,000
Traffic calming – Arts Quad	1	$50,000
10% contingency		*$82,000*
Lower-Priority Subtotal		*$900,000*
*PROJECTS TOTAL**		*$1,340,000*

Programs	Qty	Cost Estimate
PROGRAMS (annual cost)		
Half-time staff	1	$25,000
Education + Outreach		$8,000
Incentives		$12,000
Enforcement		$5,000
*PROGRAMS TOTAL**		*$50,000*

*2006 dollars

COST ESTIMATES

Table 5 shows order-of-magnitude unit cost estimates in 2006 dollars for each major component of a bikeway project. The unit cost estimates include project costs for design, engineering, project management, construction, inspection, contract administration, and accounting.

Table 5: Unit Cost Estimates, 2006

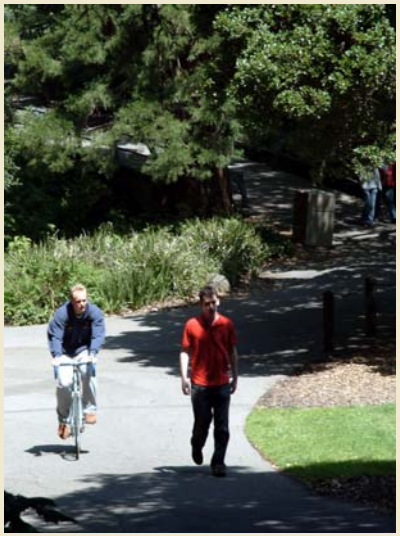
Project Type	Unit Cost Estimate	Unit
Pavement improvement	$30	square foot
Bike racks	$200	per space
Bike parking – regular	$200	per space
Bike parking - secure	$400	per space
Bollards	$500	bollard
Drainage grate	$500	grate
Planting and irrigation	$20	square foot
Lighting	$7,500	light
Pavement markings	$500	marking
Sign removal/addition	$170	sign
Sign - new	$1500	sign
Bicycle stair ramp	$175	linear foot
Traffic calming (no water feature)	$50,000	allowance

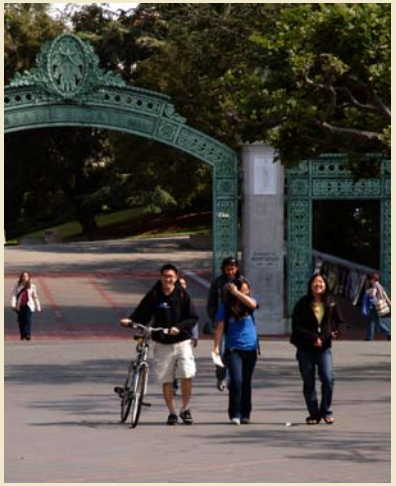
FUNDING

Since 1990, expenditures for bicycle facilities and programs have averaged $50-$55,000 annually, based on bicyclist needs and competing interests for the funding. About two-thirds of these funds have been spent on bicycle parking projects. The remaining amount was spent on bikeway improvements (22 percent) and marketing, education and outreach programs (11 percent).

P&T's New Direction Fund is the primary source of bicycle project and program funds. The New Direction funds originate primarily through an assessment on parking fees. A Bay Area Air Quality Management District grant of about $55,000 funded the secure bicycle parking installed in 2004. The same source granted about $120,000 for the north-south bikeway between Arch Street and Bancroft Way. The Alameda County Transportation Improvement Authority (ACTIA), through Measure B, funded $61,250 for development of the Campus Bicycle Plan.

The UCB Campus Bicycle Plan will enable the campus to qualify for more grants because agencies increasingly prefer a bicycle master plan as a condition of grant consideration. UCB staff will work with all possible local and regional agencies to include UCB bicycle improvement projects and programs in their planning efforts.





The main agency grant funding sources are:

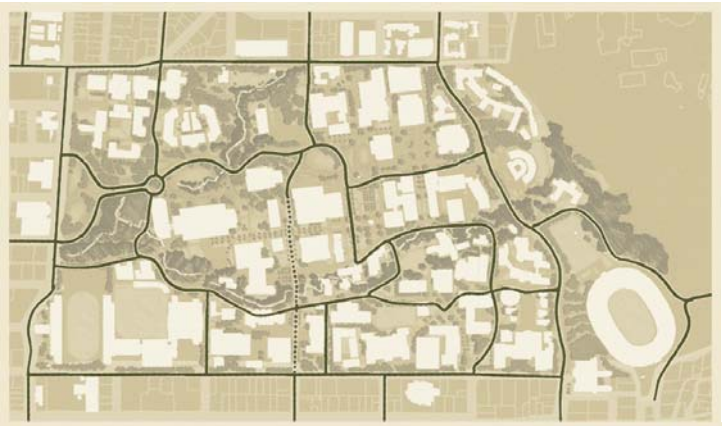
- Alameda County Transportation Improvement Authority
- Bay Area Air Quality Management District
- Caltrans' Bicycle Transportation Account
- Regional Measure 2 (Safe Routes to Transit, administered through the Metropolitan Transportation Commission)
- Safe Routes to School, administered through Caltrans
- Joint funding opportunities with the City of Berkeley and other agencies when UC or the City is not eligible to apply independently.

Other internal campus funding sources should be explored. Some potential sources that present opportunities for implementation assistance are:

- 2020 LRDP Settlement Annual Transportation Funding
- Campus Path of Travel funding (working to implement projects together)
- P&T New Directions Fund (focuses on transportation programs)
- Requests to the Vice Chancellors Advisory Committee (VCAC)
- UCB student fees through referendum process
- New Capital Projects.

CAMPUS APPROVAL PROCESS

The campus project approval process varies depending on the funding source, the amount of funds and the nature of the project. The process can be fairly simple, as is the case with small bicycle rack installations where P&T works with the Campus Landscape Architect and Building Coordinators to approve and install the bicycle racks. A larger project or construction planning document requires a more extensive approval process involving the Executive Campus Planning Committee, the Design Review Committee, and several Vice Chancellors. This plan presents nothing large enough in scope to require UC Regent approval.



APPENDICES

APPENDIX A: ON-CAMPUS BIKEWAYS AND CITY-CAMPUS INTERFACE

The campus bikeways are numbered arbitrarily for ease of reference (see Figure 7). There is no order of priority implied or intended. See Figure 7 for proposed locations of pavement markings and the Design Guidelines in Chapter IX for graphic information.

Bikeway 1 - West Gate to East Gate (E-W Primary)

Bikeway 1 travels along The Crescent from Oxford Street to West Circle and continues along Wickson Road and University Drive to East Gate.

Location	Limits (To / From)	Issue	Proposed Project Description	Quantity	Unit
The Crescent					
	Oxford Street/University Ave. to Oxford Street/Center St.	Lacks sufficient lighting	Install additional lighting	8	light poles
		Lack of pavement markings	Add a pavement marking in-bound at each end of The Crescent	2	pavement markings
	sidewalk at intersection south of gatehouse	Campus locator sign does not include bikeway or bicycle parking information	Include bicycling information	1	sign
Warren and Mulford Halls					
	paths between Warren and Mulford Halls and The Crescent	"No bike riding" pavement markings	Remove pavement markings	6	pavement markings
West Gate Drive					
	gatehouse to West Circle	Lack of pavement markings	Add a pavement marking at each end	2	pavement markings
West Circle					
	path adjacent to Eucalyptus Grove	Sign reads "Bicycle Crossing - Pedestrians Yield to Bicycles"	Remove sign because pedestrians have the right-of-way by California State law, and replace with a sign alerting pedestrians to the bike crossing	1	sign
	path leading to the Life Sciences Building	Sign reads "Pedestrians and Emergency Vehicles Only - Violators will be Cited - CVC 21113a"	Add a sign confirming "Bicycles Allowed" or replace existing sign with one including and allowing bicycle riding	1	sign
Wickson Road					
	West Circle to University House Way	Lacks sufficient lighting	Install additional lighting	6	light poles

Location	Limits (To / From)	Issue	Proposed Project Description	Quantity	Unit
		Lack of pavement markings	Add a pavement marking eastbound at West Circle	1	pavement marking
University Drive					
	east of Wickson Bridge on south side of street	Sign reads "Pedestrians and Emergency Vehicles Only - Violators will be Cited - CVC 2113a"	Add a sign confirming "Bicycles Allowed" or replace existing sign with one including bicycle riding	1	sign
	south of Haviland Hall on north side of street	Sign reads "Pedestrians and Emergency Vehicles Only - Violators will be Cited - CVC 21113a"	Add a sign confirming "Bicycles Allowed" or replace existing sign with one including bicycle riding	1	sign
	guard gate south of Haviland Hall	Guard gate arms hinder passage of bicyclists	Shorten arms of gate to allow for minimum three feet of space to pass, especially important on the westbound (downhill) arm	2	gate arms
	University House Way to East Gate	Lack of pavement markings	Add pavement markings: E+W at intersection w/'Cardiac Hill', N+E at intersection w/South Hall Dr., and W at East Gate below entry median	5	pavement markings
	University House Way to East Gate	Lacks sufficient lighting	Install lighting at key intersections such as east of Wickson Bridge and at University Drive/South Hall Dr.	3	light poles

Bikeway 2 - Oxford Street to Piedmont Avenue (E-W Primary)

Bikeway 2 travels along Frank Schlessinger Way and the south side of Strawberry Creek to Sproul Plaza, then along Eshleman Road and Pepper Tree Way to the Arts Quad, where it passes between Wurster and Minor Halls continuing east to Piedmont Avenue.

Location	Limits (To / From)	Issue	Proposed Project Description	Quantity	Unit
Frank Schlessinger Way					
	at Oxford Street	Lack of pavement markings	Add a pavement marking eastbound	1	pavement marking

Location	Limits (To / From)	Issue	Proposed Project Description	Quantity	Unit
	entire length	"Bike Path" pavement markings	Replace "Bike Path" markings with the Shared Roadway marking shown in the guidelines. Angle the chevrons on the easternmost marking to indicate the upcoming change of bikeway direction from road to path	4	pavement markings
		"Bike Path" pavement markings	Remove extra, unnecessary, obsolete pavement markings	3	pavement markings
	westbound sidewalk on north side of street at bike crossing	Sign reads "Bicycle Crossing - Pedestrians Yield to Bicycles"	Remove sign because pedestrians have the right-of-way by California State law	1	sign
	at Strawberry Creek and Spieker Plaza	Lacks sufficient lighting	Install additional lighting	1	light pole
Path along creek between Spieker Plaza and Sproul Plaza					
	entire length	Lack of pavement markings	Add a pavement marking at each end	2	pavement markings
	north of Alumni House	Sign reads "Pedestrians and Emergency Vehicles Only - Violators will be Cited - CVC 21113a"	Add a sign confirming "Bicycles Allowed" or replace existing sign with one including bicycle riding	1	sign

Location	Limits (To / From)	Issue	Proposed Project Description	Quantity	Unit
	northwest of Cesar Chavez Student Center	Sign reads "Pedestrians and Emergency Vehicles Only - Violators will be Cited - CVC 21113a"	Add a sign confirming "Bicycles Allowed" or replace existing sign with one including bicycle riding	1	sign
	North of Cesar Chavez Student Center	uneven pavement and narrow width for often crowded travelway	Replace asphalt and widen travelway	1	bikeway upgrade
	west of Sproul Plaza dismount zone	Lacks dismount and end-of-dismount signs	Install dismount and end-of-dismount sign conforming to campus sign standards	1	sign
Sproul Parking Lot					
	east of Sproul Plaza dismount zone	Lacks dismount and end-of-dismount signs	Install dismount and end-of-dismount sign conforming to campus sign standards	1	sign
		Lack of pavement markings	Add a pavement marking eastbound from Sproul Plaza	2	pavement markings
		Sign reads "Pedestrians and Emergency Vehicles Only - Violators will be Cited - CVC 21113a"	Add a sign confirming "Bicycles Allowed" or replace existing sign with one including bicycle riding	1	sign
Eshleman Road					
	roadway	Lack of pavement markings	Add a pavement marking with chevrons in both directions at the intersection with Barrow Lane	2	pavement markings
	turnaround	Sign reads "Pedestrians and Emergency Vehicles Only - Violators will be Cited - CVC 21113a"	Add a sign confirming "Bicycles Allowed" or replace existing sign with one including bicycle riding	1	sign
		Campus locator map does not include bikeway or bicycle parking information	Include bicycling information	1	sign
Pepper Tree Way					
	entire length	Lack of pavement markings	Add a pavement marking eastbound at the intersection with Eshleman Road	1	pavement markings
	south of Morrison Hall	uneven pavement	Replace asphalt	1	pavement

Location	Limits (To / From)	Issue	Proposed Project Description	Quantity	Unit
Arts Quad					
	southeast of Hertz Hall	Sign reads "Pedestrians and Emergency Vehicles Only - Violators will be Cited - CVC 21113a"	Add a sign confirming "Bicycles Allowed" or replace existing sign with one including bicycle riding	1	sign
	northeast and northwest paths	Lack of pavement markings	Add a pavement marking in each direction	2	pavement markings
Arts Quad to Piedmont Avenue					
	roadway	Lack of pavement markings	Add a pavement marking eastbound and westbound (or a single marking with double chevrons) at the intersection below the Cheit Hall steps; add a westbound marking at the entry from Piedmont Ave.	3	pavement markings

Bikeway 3 - Arch Street to Dana Street (N-S Primary)

Bikeway 3 runs from Hearst Avenue at Arch Street to West Circle, continues along the Eucalyptus Grove path and Frank Schlessinger Way to Spieker Plaza, ending at the Bancroft Way / Dana Street intersection.

Location	Limits (To / From)	Issue	Proposed Project Description	Quantity	Unit
Bikeway between Arch Street and West Circle					
	entire length	"Bike Path" pavement markings are not consistent with the Design Guidelines	Replace with the standard symbol shown in the guidelines; locate per Figure 9	4	pavement markings
		Lacks sufficient lighting	Install additional lighting	4	light poles
	Tolman Hall	Campus Access Info sign does not include bikeway or bicycle parking information	Include bicycling information	1	sign
	south of Tolman Hall	Drainage grating that parallels path of travel is hazardous to cyclists	Replace drainage grate	1	drainage grate
	Intersection of path with roadway between Hilgard and Mulford Halls	Drainage gratings that parallel path of travel are hazardous to cyclists	Replace drainage grates	2	drainage grates
Eucalyptus Grove Bike Path					
	entire length	Lack of pavement markings or markings are inconsistent with Design Guidelines	Replace with the standard pavement marking shown in the guidelines	4	pavement markings
	south of Strawberry Creek crossing	Sign reads "Yield to Bicycles"	Remove sign because pedestrians have the right-of-way by California State law	1	sign
Frank Schlessinger Way					
	see Bikeway 2 for projects along this road				
Spieker Plaza					
	north of Spieker Plaza	Lack of pavement markings or markings are inconsistent with Design Guidelines	Replace with the standard pavement marking shown in the guidelines	3	pavement markings

Location	Limits (To / From)	Issue	Proposed Project Description	Quantity	Unit
	intersection of paths on north side	Campus locator map does not include bikeway or bicycle parking information	Include bicycling information	1	sign

Bikeway 4, Peak - North Gate to Bancroft Way (N-S Primary)

Bikeway 4-Peak travels from North Gate to University Drive, along South Hall Drive, east for a short way on South Drive, through Faculty Glade, west to Eshleman Road and along Barrow Lane to Bancroft Way.

Location	Limits (To / From)	Issue	Proposed Project Description	Quantity	Unit
North Gate					
	south and southwest of entry plaza	Sign reads "Pedestrians and Emergency Vehicles Only - Violators will be Cited - CVC 21113a"	Add a sign confirming "Bicycles Allowed" or replace existing sign with one including bicycle riding	2	signs
North Gate to University Drive					
	southeast corner by McCone Hall	Campus locator map does not include bikeway or bicycle parking information	Include bicycling information	1	sign
	entire length	No pavement markings. Need to slow bicyclists	Add pavement markings at each end and "SLOW" (2)	4	pavement markings
South Hall Drive					
	entire length	Lacks sufficient lighting	Install additional lighting	10	light poles
		Lack of pavement markings	Add a pavement marking at each end	2	pavement markings
	east of South Hall	Campus locator map does not include bikeway or bicycle parking information	Include bicycling information	1	sign
		Drainage grating that parallels path of travel is hazardous to cyclists	Replace drainage grate	1	drainage grate
South Drive					
	east of Esplanade Drive	Sign reads "Pedestrians and Emergency Vehicles Only - Violators will be Cited - CVC 21113a"	Add a sign confirming "Bicycles Allowed" or replace existing sign with one including bicycle riding	1	sign
		Lack of pavement markings where bikeways meet	Add a double-ended pavement marking in the roadway at the curb cut serving the Faculty Glade path	1	pavement marking

Location	Limits (To / From)	Issue	Proposed Project Description	Quantity	Unit
Path from South Drive into Faculty Glade					
	entire length	Lack of pavement markings	Add a pavement marking southbound on the path, near the sidewalk	1	pavement marking
	south of Strawberry Creek bridge	uneven pavement	Replace asphalt	1	pavement
Faculty Glade					
	steep path NW of Morrison Hall	cyclists speeding downhill	Install traffic calming feature to slow bicyclists	1	traffic calming
Faculty Glade to Eshleman Road					
	entire length	Lacks lighting and one light post needs tree trimming around it	Install lighting and trim tree	1	light pole
		Uneven pavement	Replace asphalt	1	pavement
		Lack of pavement markings	Add pavement markings eastbound and westbound where path meets Eshleman Road, southbound at south end of bridge, and westbound where path leaves faculty glade	4	pavement markings
Eshleman Road					
	turnaround	Sign reads "Pedestrians and Emergency Vehicles Only - Violators will be Cited - CVC 21113a"	Add a sign confirming "Bicycles Allowed" or replace existing sign with one including bicycle riding	1	sign
		Campus locator map does not include bikeway or bicycle parking information	Include bicycling information	1	sign
Barrow Lane					
	entire length	Lack of pavement markings	Add pavement markings at each end	2	pavement markings
	at top of stairway south of A+E Building	Lacks lighting	Install lighting	1	light pole

Bikeway 4, Off-Peak - North Gate to Bancroft Way (N-S Primary)

Bikeway 4, Off-Peak runs from North Gate across University Drive to the northwest corner of Doe Memorial Library where, during peak hours Monday through Friday, the Dismount Zone is engaged. The route and Dismount Zone extend along Sather Road through Sproul Plaza to Bancroft Way at Telegraph Avenue.

Location	Limits (To / From)	Issue	Proposed Project Description	Quantity	Unit
North Gate to University Drive					
	see Bikeway 4, Peak for project list				
University Drive to California Hall					
	Intersection of University Drive with path east of Moffitt Library	Sign reads "Pedestrians and Emergency Vehicles Only - Violators will be Cited - CVC 21113a"	Add a sign confirming "Bicycles Allowed" or replace existing sign with one including bicycle riding	1	sign
	entire length	Lack of pavement markings	Add a pavement marking at each end	2	pavement markings
	northeast of California Hall	Dismount sign is old	Replace with a newer sign that conforms to campus sign standards	1	sign
Sather Road					
	north and south of Campanile Way	Dismount signs are old	Replace with newer signs that conform to campus sign standards	2	signs
Sather Gate					
	bridge	Drainage grating that parallels path of travel is hazardous to cyclists	Replace drainage grate	2	drainage grates
Sproul Plaza					
	plaza entrance at Bancroft Way	Dismount sign is old	Replace with a newer sign that conforms to campus sign standards	1	sign

Bikeway 5 - North Gate to College Avenue (N-S Primary)

Bikeway 5 travels from North Gate to South Drive on the same route as the off-peak Bikeway 4, continues east on South Drive, turning south at Lewis Hall to pass east of Minor and Wurster Halls and end at College Avenue.

Location	Limits (To / From)	Issue	Proposed Project Description	Quantity	Unit
North Gate to South Drive	see Bikeway 4-Peak for project list				
South Drive	at SW corner of Gilman Hall	"Do Not Enter" sign for eastbound traffic	Add a sign confirming "Bicyclists Allowed"	1	sign
	at entrance to Hildebrand Hall	bot dots (raised reflective dots) in pavement are hazardous for bicyclists	Remove bot dots	all (+/- 50)	bikeway upgrade
Road between Lewis Hall and Wurster Hall	opposite driveway to Faculty Clubs	"One-way" sign appears to prohibit southbound bicyclists	Add a sign confirming "Bicycles Allowed"	1	sign
	at intersection near Minor Hall	Lack of pavement markings	Add pavement markings at N+S sides of intersection	2	pavement markings
Calvin Lab / Wurster Hall	roadway entrance between the two buildings	Signs read "Do Not Enter" and "Pedestrians and Emergency Vehicles Only - Violators will be Cited - CVC 21113a"	Add signs confirming "Bicycles Allowed" or replace existing sign with one including bicycle riding	1	sign
Path between Calvin Lab and Bancroft Way	Calvin Lab and Bancroft Way	Lacks sufficient lighting	Install additional lighting	4	light poles
		Lack of pavement markings	Add a pavement marking northbound where the path begins near Bancroft Way	2	pavement markings

Location	Limits (To / From)	Issue	Proposed Project Description	Quantity	Unit
	Archaeology Building (aka 2251 College)	Drainage grating that parallels path of travel is hazardous to cyclists	Replace drainage grates	2	drainage grates
	Boalt Hall and Wurster Hall	Drainage grating that parallels path of travel is hazardous to cyclists	Replace drainage grate	1	drainage grate

Segment A: Hearst Avenue at LeRoy Avenue to University Drive (N-S)

Location	Limits (To / From)	Issue	Proposed Project Description	Quantity	Unit
Bechtel Engineering Center					
	Café terrace level to ground level	2 stairways without bike stair ramps	Add bike stair ramps	2 sets	bike stair ramps
Hearst Mining Circle					
	southwest corner	Campus locator map does not include bikeway or bicycle parking information	Include bicycling information	1	sign

Segment B: North Gate to South Drive (N-S)

Location	Limits (To / From)	Issue	Proposed Project Description	Quantity	Unit
North Gate to South Drive					
	Soule Road at North Gate and McCone Hall	Sign reads "Road Closed Pedestrians and Authorized Vehicles Only"	Add a sign confirming "Bicycles Allowed" or replace existing sign with one including bicycle riding	1	sign
	path west of Bechtel Engineering Center	path narrows (choke point) and turns awkwardly before sloping	The Landscape Master Plan proposes a plaza at the top of a broad staircase with on-grade access along the east side in Priority Initiative #22	1	plaza / path (not included in cost estimates or priorities)

Segment C: Faculty Glade to College Avenue (N-S)

Location	Limits (To / From)	Issue	Proposed Project Description	Quantity	Unit
Arts Quad					
	center of Quad	busy paths intersection without traffic controls	Install traffic calming feature to slow bicyclists moving through Arts Quad	1	traffic calming
	west of Wurster Hall	bicycle parking blocks seating area around tree	Remove/relocate bicycle parking	1	bike parking

Location	Limits (To / From)	Issue	Proposed Project Description	Quantity	Unit
Arts Quad to Bancroft Way at College Avenue					
	east of Kroeber Hall	Drainage grating that parallels path of travel is hazardous to cyclists	Replace drainage grates	3	drainage grates
	Hertz Hall to Bancroft Way	Lacks sufficient lighting	Install additional lighting	7	light poles
Kroeber Hall					
	southeast corner	Campus locator map does not include bikeway or bicycle parking information	Include bicycling information	1	sign

Segment D: Arts Quad to Bancroft Way (N-S)

Location	Limits (To / From)	Issue	Proposed Project Description	Quantity	Unit
Music Library to Bancroft Parking Structure					
	entire length	Lacks sufficient lighting	Install additional lighting	3	light poles
	at Bancroft Way	Sign reads "Pedestrians and Emergency Vehicles Only - Violators will be Cited - CVC 21113a"	Add a sign confirming "Bicycles Allowed" or replace existing sign with one including bicycle riding	1	sign
	path between Hearst Gym and Bancroft Parking Structure	uneven pavement	Replace asphalt	1	pavement

Segment E: South Drive to Eshleman Road (N-S)

Location	Limits (To / From)	Issue	Proposed Project Description	Quantity	Unit
South Drive					
	west of South Hall Drive	No pavement markings	Add pavement marking westbound w/angled chevrons to indicate southward turn to stairway - Install marking only after bike stair ramp is completed	1	pavement marking

Location	Limits (To / From)	Issue	Proposed Project Description	Quantity	Unit
Moses Hall					
	stairway on northeast side	stair cheekwall acts as informal bike stair rail but lacks transition to ground at each end	Add bike stair ramp or transition connections	1	bike stair ramp
		Lacks lighting at top of stairway	Install lighting	1	light pole
Moses Hall / Stephens Hall					
	courtyard	Drainage grating that parallels path of travel is hazardous to cyclists	Replace drainage grate	1	drainage grate
Roadway					
	Strawberry Creek Bridge	Lacks sufficient lighting	Install additional lighting	2	light poles

Segment F: North Gate to Campanile Way via Haviland Hall (N-S)

No projects found

Segment G - Lower Campanile Way to Spieker Plaza (N-S)

Location	Limits (To / From)	Issue	Proposed Project Description	Quantity	Unit
Path West of Dwinelle Lot					
		Lacks sufficient lighting	Install additional lighting	4	light poles

Segment H - Campanile Way (E-W)

Location	Limits (To / From)	Issue	Proposed Project Description	Quantity	Unit
Campanile Way					
	entire length	Speeding issues - downhill	as improvements are considered for this important travelway, address bicycle access, speed, and safety		traffic calming (not included in cost estimates or priorities)

Segment I: Campanile Way via Grinnell Natural Area to Center Street (E-W)

Location	Limits (To / From)	Issue	Proposed Project Description	Quantity	Unit
No projects found					

Segment J: Sather Road at Moffitt Library to West Circle (E-W)

Location	Limits (To / From)	Issue	Proposed Project Description	Quantity	Unit
California Hall					
	north of California Hall	Dismount sign is old	Replace with a newer sign that conforms to campus sign standards	1	sign

Segment K: South Hall Road to Sather Road - Off-Peak (E-W)

During peak hours (M-F 8 am - 6 pm) this roadway is part of the Dismount Zone.

Location	Limits (To / From)	Issue	Proposed Project Description	Quantity	Unit
South Drive					
	south of South Hall	Dismount sign is old	Remove sign and replace with a newer one conforming to campus sign standards. Relocate sign farther west to revised edge of dismount zone in front of Wheeler Hall	1	sign

Segment L: Roadway between South Drive and Gayley Road (E-W)

Location	Limits (To / From)	Issue	Proposed Project Description	Quantity	Unit
South Drive at Girton Hall					
	roadway north of Girton Hall	narrow road, uneven pavement	Repair roadway and accommodate two-way bicycle traffic with the one-way vehicle traffic	+/- 300 linear feet	bikeway upgrade
	at roadway intersection with Gayley Road	"Do Not Enter" sign for westbound traffic	Add a sign confirming "Bicyclists Allowed"	1	sign

Segment M: Gayley Road

Segment M runs on Gayley Road from Hearst Avenue to Piedmont Avenue where the City of Berkeley right-of-way commences (at Memorial Stadium).

Location	Limits (To / From)	Issue	Proposed Project Description	Quantity	Unit
Gayley Road					
	Hearst Avenue to Piedmont Avenue	Lack of pavement markings for bicycles	provide pavement markings to meet Class 2.5 or Class 2 bikeway standards	4	pavement markings

Segment N: Stadium Rim Way (E-W)

Location	Limits (To / From)	Issue	Proposed Project Description	Quantity	Unit
Gayley Road / Centennial Drive					
	Gayley Road to Strawberry Recreational Center on Centennial Drive	No designated space for bicyclists	Add improvements to create a Class 2.5 or Class 2 bikeway (SCIP area)	0.25	mile (not included in cost estimate or priorities)

City of Berkeley - Campus Perimeter

Key campus bikeway connections with the City of Berkeley are shown below along with potential bikeway improvements that will be discussed with the City of Berkeley. UCB will support and work with the City of Berkeley to create a seamless bikeway system between the two jurisdictions.

Location	Limits (To / From)	Issue	Potential Improvements	Quantity	Unit
Piedmont Avenue	Gayley Road to Bancroft Way	Need improved space for bicyclists	City of Berkeley Bicycle Plan: Class 2.5 with Share the Road signs, pavement markings, and a smooth surface	0.25	mile
Bancroft Way	Piedmont Avenue to Fulton Street	Lack of a designated bikeway causes conflicts between motorists and bicyclists	City of Berkeley Bike Plan: Class 2.5 bikeway. The City is considering converting portions of Bancroft Way to two-way with bike lanes, which could reduce bicyclist-vehicular conflicts	0.75	mile
Bancroft Way / College Avenue Intersection	north side of sidewalk	Bicyclists share curb cuts with pedestrians at congested pedestrian crosswalks	Rolled curb to allow easier and more direct bike passage with fewer pedestrian conflicts	1 (+/- 20 linear feet)	rolled curb
College Avenue	Bancroft Way to Channing Way	No City bike connection to primary UCB bikeway	Bike blvd or other bikeway upgrades to connect to bike blvd on Channing Way	0.25	mile
Bancroft Way / Dana Street Intersection	Dana Street: Bancroft Way to Dwight Way	One-way street southbound causes wrong way bicycling	City of Berkeley Bicycle Plan shows a proposed two-way street or add a contraflow Class 2 bike lane; signal or stop sign at Bancroft and Dana	0.25	mile
Bancroft Way / Ellsworth Street Intersection	intersection	Lack of signalization	A signal at this intersection is a potential mitigation in the UC Berkeley 2020 LRDP. Bicycle loop detectors and left-turn bike pocket on Ellsworth are recommended to improve bicycling safety	1	signal

Location	Limits (To / From)	Issue	Potential Improvements	Quantity	Unit
Oxford Street / Center Street Intersection					
	Frank Schlessinger Way to Center Street	No bike lane in northbound direction	City of Berkeley Bicycle Plan shows a proposed Class 2 bike lane	0.25	block
	with a possible Center Street closure to motor vehicles (Center/Oxford intersection)	Lack of space for bicyclists and pedestrians	Include bike safety elements with any intersection redesign	1	coordination
Oxford Street Intersections					
	at Kittredge, Allston and Addison Streets	Lack of signalization	Signals at these intersections are a potential mitigation in the UC Berkeley 2020 LRDP. Bicycle loop detectors and left-turn bike pockets are recommended to improve bicycling safety	3	signals
	University Ave./ Oxford intersection	2 lanes of left-turning traffic take little notice of westbound bicycles and are hazardous to bicyclists	signalization changes to provide safe westbound exiting from campus	1	signal
Hearst Avenue					
	Oxford Street to Gayley Road	No designated space for bicyclists	City of Berkeley Bicycle Plan: Class 2 bike lane between Oxford and Arch Streets and a Class 2.5 between Arch and Gayley	0.5	mile

APPENDIX B: CENTRAL CAMPUS BICYCLE PARKING INVENTORY – 2006

The targeted goal for bicycle parking on campus is ten percent of the campus population. The Average Peak Occupancy by building indicates how bicycle parking demand is distributed across campus and the ten percent target provides a guide to how much bicycle parking is needed. Utilization surveys will determine more precisely where additional bicycle parking is needed and will assist in setting priorities for parking installations. Although the inventory is tabulated by building, bicycle parking may be provided in a zone or area on campus serving a group of structures, not necessarily at each building.

Building Name*	Location	# of Racks	Rack Type	Capacity	Average Peak Occupancy**	Target Bike Parking (10%)	Notes
2222 Piedmont Avenue	East	4	concrete block	4	2	0	
2223 Fulton Street		0	NA	NA	200	20	Candidate for potential replacement (LRDP).
2224 Piedmont Avenue	East	1	concrete block	NA	37	4	
2232 Piedmont Avenue	East	3	concrete block	NA	32	3	
2234 Piedmont Avenue	East	2	concrete block	NA	40	4	
2240 Piedmont Avenue		0	NA	NA	31	3	Candidate for potential replacement (LRDP).
2241 Piedmont/College		0	NA	NA	22	2	
2243 Piedmont/College		0	NA	NA	11	1	
2251 Piedmont/College (Archaeology Building)		0	NA	NA	133	13	
2401 Bancroft Way		0	NA	NA	30	3	
Alumni House		0	NA	NA	125	13	

Building Name*	Location	# of Racks	Rack Type	Capacity	Average Peak Occupancy**	Target Bike Parking (10%)	Notes
Anthony Hall		0	NA	NA	5	1	
Architecture & Engineering Building	West of Parking	5 2	7-bend 9-bend	67	36	4	Candidate for potential replacement (LRDP)
Bancroft Parking Structure	secure bicycle parking	1	13-bend	15	-	-	Candidate for potential replacement (LRDP)
Barker Hall	South	3 3	3-bend 5-bend	36	443	44	
Barrows Hall	West Northeast	4 9 6 4	9-bend 1-bend 5-bend 3-bend	124	1620	162	
Bechtel Engineering Center	East	0	NA	NA	230	23	
Birge Hall	Breezeway	15	5 bend	105	676	68	
Boalt Hall	Southeast West Darling Court-yard	1 9 1	9-bend 5-bend 5-bend	81	1193	119	
Boalt Hall Garage	secure bicycle parking	3	7-bend	27	-	-	
California Hall		0	NA	NA	122	12	
Calvin Lab	East	15	concrete block	15	177	18	Candidate for potential replacement (LRDP)

Building Name*	Location	# of Racks	Rack Type	Capacity	Average Peak Occupancy**	Target Bike Parking (10%)	Notes
Campbell Hall	East side	5	5 bend	35	368	37	Candidate for potential replacement (LRDP)
Cesar Chavez Student Center	West	18	3 bend	90	472	47	
Cheit Hall	West	10 2	5-bend 7-bend	88	570	57	
Cory Hall	South	0	NA	NA	1425	143	
Davis Hall	East	32	1-bend	64	616	62	
Davis Hall North	East West	3 2 2	9-bend 11-bend 15-bend	108	654	65	Under construction: estimated completion 2009
Doe Memorial Library Annex	East	5	9-bend	55	288	29	Major renovation under construction; est. completion 2008
Doe Memorial Library	Southeast	5	7-bend	45	428	43	
Donner Lab	Northwest	1	picket (temporary)	6	341	34	Candidate for potential replacement (LRDP)
Durant Hall	South	0	NA	NA	50	5	Consolidated bike parking proposed in Landscape Master Plan, Priority Initiative #19

Building Name*	Location	# of Racks	Rack Type	Capacity	Average Peak Occupancy**	Target Bike Parking (10%)	Notes
Dwinelle Hall	West East East North Northeast	10 8 1 3 4	11-bend 7-bend 9-bend 7-bend 9-bend	258	3118	312	Would relocate to consolidated parking on the south side of Durant Hall per Landscape Master Plan Initiative #19
Dwinelle Annex		0	NA	NA	61	6	
East Asian Library		0	NA	NA	60	6	Under construction, estimated completion 2008
Edwards Stadium/ Goldman Field	Northeast	1	5-bend	7	340	34	
EH&S Facility	East driveway	1	9-bend	11	NA		
Eshleman Hall	North side	4	7-bend	36	244	24	Candidate for potential replacement (LRDP)
Evans Hall	terrace level West, lower level	6 1 6 12 9	9-bend 5-bend 3-bend 1-bend 5-bend	190 (73 secure)	2441	244	Candidate for potential replacement (LRDP)
Faculty Club - Men's		0	NA	NA	100	10	
Faculty Club - Women's	Northeast	3	5-bend	21	80	8	

Building Name*	Location	# of Racks	Rack Type	Capacity	Average Peak Occupancy**	Target Bike Parking (10%)	Notes
Giannini Hall		0	NA	NA	287	29	Candidate for potential replacement (LRDP)
Giauque Lab		0	NA	NA	138	14	
Gilman Hall		0	NA	NA	237	24	
Girton Hall		0	NA	NA	23	2	
Genetics and Plant Biology	Northeast corner	31	1-bend	62	375	38	
Genetics Garage	secure bicycle parking	1 3 11	11-bend 3-bend 13-bend	208	-	-	
Haas School of Business - Faculty Building	East entrance	5 6	7-bend 9-bend	111	825	83	
Haas School of Business - Student Building		0	NA	NA	299	30	
Haas Pavillion	East	13	7-bend	117	500	50	
Haviland Hall	North	1	13-bend	15	407	41	
Hearst Field Annex	East	7	7-bend	63	NA	-	Candidate for potential replacement (LRDP)
Hearst Gym	North	3	7-bend	9 (2 racks blocked)	221	22	Candidate for potential replacement (LRDP)

Building Name*	Location	# of Racks	Rack Type	Capacity	Average Peak Occupancy**	Target Bike Parking (10%)	Notes
Hearst Memorial Mining	South	2	9-bend	22	678	68	
Hellman Tennis		0	NA	NA	12	1	
Henry Wheeler Jr. Brain Imaging Center	North East	4 1	9-bend 9-bend	41	3	0	Fence blocks 14 spaces
Hertz Hall		0	NA	NA	144	14	
Hesse Hall		0	NA	NA	102	10	Candidate for potential replacement (LRDP)
Hildebrand Hall	South Courtyard	1 1 9	7-bend 5-bend 5-bend	79	554	55	
Hilgard Hall		8	concrete block	8	244	24	
Koshland Hall		0	NA	NA	534	53	
Kroeber Hall	South	4	9-bend	44	457	46	
Latimer Hall	South North	3 4	7-bend 9-bend	71	1025	103	
Le Conte Hall	East	5	5-bend	35	1053	105	Candidate for potential replacement (LRDP)
Lewis Hall	northwest corner by Latimer Hall	12	concrete block	12	593	59	Candidate for potential replacement (LRDP)

Building Name*	Location	# of Racks	Rack Type	Capacity	Average Peak Occupancy**	Target Bike Parking (10%)	Notes
Life Sciences Addition	East East - secure South	10 6 18	9-bend 9-bend T-rack	194	624	62	
McCone Hall	South Northwest	6 1 1	3-bend concrete block 9-bend	42	442	44	
McLaughlin Hall	West	2	3-bend	10	233	23	
Minor Hall	North East	1 1	5-bend 7-bend	31	219	22	
Minor Hall Addition		0	NA	NA	179	18	
MLK Union	South North	2 17	9-bend crank case	39	488	49	
MLK Union Parking Garage	secure bicycle parking	1	9-bend	11	-	-	
Moffitt Library	South	3 2 6	7-bend 9-bend 7-bend	103	901	90	
Morgan Hall	Southeast corner	1	7-bend	9	431	43	
Morrison Hall	Breezeway	2	9-bend	22	345	35	
Moses Hall	North East Courtyard Southeast	1 1 2	11-bend 11-bend 11-bend	52	230	23	

Building Name*	Location	# of Racks	Rack Type	Capacity	Average Peak Occupancy**	Target Bike Parking (10%)	Notes
Mulford Hall	East	10	concrete block	10	730	73	Candidate for potential replacement (LRDP)
Naval Architecture Building	West side	3	5-bend	21	89	9	
North Gate Hall	South	2	5-bend	14	238	24	
NW Animal Facility		0	NA	NA	10	1	
O'Brien Hall	East	4	9-bend	44	189	19	Candidate for potential replacement (LRDP)
Old Art Gallery		0	NA	NA	3	0	Candidate for potential replacement (LRDP)
Pacific Film Archive Theatre		0	NA	NA	NA	-	Candidate for potential replacement (LRDP)
Pimentel Hall	South	20	T-rack	20	500	50	
Recreational Sports Facility	South Garage - secure parking	43 1 3 1	crank case 1-bend 7-bend 11-bend	85	2388	239	
Sather Tower	Southeast	1 1	7-bend 5-bend	14	29	3	
Senior Hall		0	NA	NA	13	1	

Building Name*	Location	# of Racks	Rack Type	Capacity	Average Peak Occupancy**	Target Bike Parking (10%)	Notes
Simon Hall		0	NA	NA	205	21	
South Hall		0	NA	NA	169	17	
South Hall Annex		0	NA	NA	29	3	Candidate for potential replacement (LRDP)
Sproul Hall		0	NA	NA	520	52	
Stanley Hall	West interior locked room	10 TBD	inverted U TBD	20 40 (est.)	600	60	Under construction; estimated completion Fall 2006
Stephens Hall		0	NA	NA	280	28	
Tan Hall	North side	2	5-bend	12	596	60	
Tolman Hall	Breezeway East	2 6 11 4	7-bend 9-bend T-rack 5-bend	123	2050	205	Candidate for potential replacement (LRDP)
University House		0	NA	NA	9	1	
Valley Life Sciences	Southeast Northeast	18 1	3-bend 13-bend	105	1828	183	
Warren Hall	East West	9 2	3-bend 9-bend	67	615	62	Candidate for potential replacement (LRDP)
Wellman Hall		0	NA	NA	188	19	

Building Name*	Location	# of Racks	Rack Type	Capacity	Average Peak Occupancy**	Target Bike Parking (10%)	Notes
Wheeler Hall	South North	8 1	9-bend 9-bend	99	1880	188	
Wurster Hall	South West	8 6 3 4	3-bend 3-bend 9-bend picket (temp)	127	1241	124	
Zellerbach Hall/ Playhouse	North	1	9-bend	10	41	4	

* This inventory covers only buildings located on the central campus bounded by Hearst Ave., Gayley Road, Piedmont Way, Bancroft Way, and Oxford St.

** Average Peak Occupancy (APO) refers to the peak period between 8 am and 5 pm. The APO figures derive from occupancy estimates developed for the Disaster Resistant University study in 1998-99. The occupancy estimates were calculated according to the campus planning "ECO" model of counting numbers of people in registered classes and looking at departmental use. In the study the number for each building is an annualized occupancy number of people over the number of hours in a year. Although now out of date, it is a useful guide. In some buildings the data was not available and estimates were used; estimates were also used for buildings currently under construction.

NA = Not Applicable or Not Available
TBD = To be Determined

APPENDIX C: CAMPUS OUTREACH

The Bicycle Subcommittee is the primary way that campus outreach occurs regarding bicycling issues. The Bicycle Subcommittee was created in 1992 as an advisory committee to the campus Transportation Committee to provide guidance on enhancing bicycle transportation programs and policies. Since 2001, the Bicycle Subcommittee advises the Director of Transportation.

BICYCLE SUBCOMMITTEE BACKGROUND

Since its establishment, the Bicycle Subcommittee has provided the campus with recommendations on bicycle parking rack placement, circulation, enforcement, security, safety and outreach. The Bicycle Subcommittee met six times in FY 2001-02. Thereafter, the Bicycle Subcommittee has met on average four times per year. In April 2005, the Bicycle Subcommittee took part in a brainstorming session on the UCB Campus Bicycle Plan. The Bicycle Subcommittee provided feedback during key milestones of the Plan development.

BICYCLE SUBCOMMITTEE MAKE-UP

The Bicycle Subcommittee consists of students, faculty and staff. Meetings are open and are regularly attended by representatives of the City of Berkeley Transportation Commission and Planning Department and the bicycling community. Campus representatives in the Subcommittee include staff from Physical and Environmental Planning, Campus Landscape Architect, Parking & Transportation, Environment Health & Safety and UC Police. Subcommittee meetings include undergraduate and graduate student representatives appointed by the student governing bodies and faculty appointed by the Academic Senate.

BICYCLE SUBCOMMITTEE MISSION

- Evaluate and recommend strategies for improving the campus environment through the use of bicycles
- Review and evaluate policies and procedures regarding safe and authorized use of bicycles on the campus
- Comment on campus construction project design where bicycle travel or storage may be impacted
- Develop and recommend outreach and public education materials on bicycle use, safety and security
- Assist in enhancement of the campus environment through promotion of bicycles
- Review and evaluate environmental and transportation studies related to the use of bicycles on campus
- Provide campus departments (Parking & Transportation, Facilities Services and EH&S) technical guidance and direction to maximize the use of bicycles and minimize conflicts with pedestrians and motorized vehicles.

CAMPUS BICYCLE PLAN OUTREACH AND REVIEW

In addition to the Bicycle Subcommittee's feedback on the Plan throughout the Plan development, a 40-day public review of the Administrative Draft of the Campus Bicycle Plan was provided. During the review period, the following measures were taken to ensure comprehensive input and response to the Plan before finalization:

- The draft Plan was available on the web and in hard-copy. The availability of the draft Plan and the two public information sessions were announced through listserves, the P&T newsletter, campus newspapers, the on-line campus calendar, bicycle organizations, and targeted emails to other agencies and individuals
- Two public information sessions were held
- Administrative Draft of the Plan was distributed for review to 15 campus administrators, the UC Office of the President, and academic and student leaders
- Administrative Draft of the Plan was distributed and presentations provided to Public Safety and Transportation managers/directors and Facilities Services managers/directors
- Administrative Draft of the Plan was distributed to six campus committees most of which include faculty, staff, and student representation. The committees included the Executive Campus Planning Committee, the Design Review Committee, the Committee on Academic Planning and Resource Allocation, The Chancellor's Parking & Transportation Oversight Committee, the Chancellor's Advisory Committee on Sustainability, and the Coordinating Committee for Removal of Architectural Barriers. Presentations with question and answer sessions were provided to four of the six committees.

Comments from the public information session, the management meetings, and the committee meetings were documented. Additionally, approximately 35 written comments were received; these included comments from individual faculty, staff, students, and community members, as well as from the City of Berkeley, UC Office of the President, and Bicycle-Friendly Berkeley Coalition.

Responses from individuals focused most commonly on bicycle security/theft prevention, bicycle parking issues, bicycle programs, and the dismount zone. Where possible, comments have been addressed in this document; those of merit that could not be fully addressed have been called out as future bicycle planning objectives.

APPENDIX D: BICYCLE TRANSPORTATION ACCOUNT CORRESPONDENCE TABLE

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. This appendix describes where in the Campus Bicycle Plan the requirements of the California Bicycle Transportation Act are located.

Requirement	Corresponding Section
Number of existing and proposed bicycle commuters	Section IV – Study Area
Land use and population	Section IV – Study Area
Existing and proposed bikeways	Section V – Bicycle Network
Existing and proposed end-of-trip bicycle parking facilities	Section VII – Bicycle Parking
Existing and proposed bicycle transport and parking facilities for transportation connections	Section VI – Bicycles and Transit
Existing and proposed shower facilities	Section VIII – Bicycle Programs
Bicycle safety and education programs	Section VIII – Bicycle Programs
Community participation	Appendix C – Campus Outreach
Consistency with long-range transportation, air quality and energy plans.	Section I - Introduction
Project descriptions and priority listings.	Project Descriptions (Sections V, and VIII); Priorities (Section X – Implementation Plan)
Past expenditures and future financial needs description.	Section X – Implementation Plan

APPENDIX E: CAPITAL PROJECT CHECKLIST

This checklist should be a part of every campus planning initiative and all new building projects. At each project milestone, planners and project managers should fill out the Checklist and send the completed form to the Campus Landscape Architect for tracking.

PLANNING AND DESIGN

Minimum bicycle parking spaces needed: 10% of Average Peak Occupancy (APO), including meeting spaces and lecture halls

Preferred rack type: single, galvanized steel inverted U

Lighting: minimum .5 foot-candle

Exterior Bike Parking:

Total spaces needed to meet 10% APO ___

Located in/at building ___ or

centralized nearby ___

Lighting provided ___

needed ___

Interior Facilities to Consider:

Locked storage room ___

Secure cage ___

Shower ___

Lockers ___

BICYCLE ACCESS

Project maintains or improves access by providing pathway widths that accommodate pedestrians and bicycles (min 8'; 10' preferred) ___

Access route turns are negotiable by pedestrians with bicycles ___

Sightlines at turns are safe for bicyclists and pedestrians ___

Signage / lighting is provided to address bicycling movement / safety ___

Construction – Temporary Bike Parking

Number of spaces displaced ___

Replaced: temporary ___

permanent ___

Location:

Sufficient lighting provided ___

Additional lighting needed ___

BICYCLE ACCESS AROUND CONSTRUCTION

Temporary access route is wide enough for pedestrians with bicycles ___

Access route turns are negotiable by pedestrians with bicycles ___

Sightlines at turns are safe for bicyclists and pedestrians ___

Signage is provided to address bicycling movement / safety ___