

## CITY OF SACRAMENTO



# TRAFFIC ENGINEERING DIVISION

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SACRAMENTO, CALIF. 95814

CITY MANAGER'S OFFICE

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September 14, 1981

City Council Sacramento, California

Honorable Members in Session:

SUBJECT: Annual Bicycle. Project Report

APPROVED

ON-STREET PARKING

SEP 21 1982

OFFICE OF THE

#### SUMMARY

This report summarizes the City's progress during the last year in a number of areas relating to completed and proposed bikeway projects and the installation of bicycle parking facilities in the Central City area. It also presents trends in bicycle usage as an alternative mode of transportation and comparative statistics of accidents involving bicyclists.

## BACKGROUND

The Traffic Engineering division has been active in implementing various projects to improve safety, access and service to both recreational and commuter bicyclists in the City. This is being accomplished through the development of various classes of bikeways specified in the Bikeway Master Plan and through installation of bicycle parking facilities in the Central Area.

There are three classes of bikeways which are provided for bicycle travel. Briefly, these are as follows:

Class I - (Bike Trail or Bike Path). A completely separated facility designated for the use of bicycles, although pedestrians are normally allowed use of such facilities.

Class II - (Bike Lane). A lane within a street or roadway designed for the one-way use of bicycles. It is an on-street facility with signs, legends and striped lane markings. It is usually used on major arterial or collector streets. With older streets, it may require the removal of parking.

Class III - (Bike Route). A shared, on-street right-of-way designated by signs only. It shares its through traffic right-of-way with motor vehicles. It is normally used only on narrow, local streets where parking removal is neither possible nor desirable.

The City of Sacramento Bikeways Master Plan designates 181.5 miles of on-street bikeways and 46.9 miles of off-street bikeways. As of September 1, 1982, 66 miles (36.4%) of on-street bikeways and 14 miles (29.9%) of off-street bikeways are completed within the City.

#### MAJOR BIKEWAY PROJECTS

Sacramento Northern Bikeway. The segment from Grove Avenue to Ford Road was completed in January 1982. This 0.75 mile section of Class I, off-street bikeway includes actuated bicycle pre-emption controls for the signalized crossing at El Camino Avenue. The next segment is expected to go out to bid in September. Project limits are from Ford Road to "M" Street in Rio Linda (4.3 miles) which includes five bike bridges. State participation is \$200,000.

Sacramento River Bikeway. The segment from Discovery Park to Old Sacramento was completed in July 1982. A Class I, off-street bikeway, linking the American River Bike Trail with downtown Sacramento (1.25 mile). A segment from Miller Park to Zacharia addition, Seymour Park, is designed and had recently been funded with an additional grant of State SB-325 funds for \$95,600. Re-allocation of these funds by the Council for other purposes has left this project in an uncertain status. The staff has been requested by Caltrans to submit an application for a State Bicycle Lane Account Grant as a means of providing an alternative funding for this segment. State allocation of funds for such projects, however, is not automatic, as is the case with SB-325 funds.

24th Street Bikeway - completed in August 1982. Approximately 5 miles of Class II and III bikeway connecting Sutterville Road, at Sacramento City College, to the south end of 24th Street, at Laramore Way. State participation was \$23,600. City match was \$2,600. This facility serves as a major north-south bike route for bicycle commuters residing in the south area of the City, destined for commercial/business locations along this cooridor, or to City College and McClatchy High School to the north of Sutterville Road. As with most on-street bikeway development, where the City is implementing projects on streets not originally planned for such use, the removal of on-street parking along some sections became a highly controversial issue with residents directly effected. This matter is one which the City will continue to face in developing bikeways on the older streets, unless measures for street widening are undertaken to mitigate such problems.

Folsom Boulevard Bikeway - completed in November, 1981. Approximately 3 miles of Class II and III bikeway from Alhambra Boulevard to Hornet Drive. Primarily an east-west commuter bike route connecting with other bikeways serving access to the Central City and Sacramento State University. State participation was \$15,307; City match was \$1,700;

#### ANNUAL BICYCLE COUNTS

The results of the City's annual bicycle counts at 21st Street and K Street, together with counts taken at other locations are provided in attachment "A". The 21st and K Street counts indicate that there was a gradual decline in bicycle commuter usage during weekdays from 1979 to 1981. Counts taken this year, however, indicate a slight increase over the previous level of bicycle usage experienced in 1981 from 3.2% to 4.1% of all vehicles counted at this intersection.

# COMPLETED ON-STREET BIKEWAY PROJECTS

In addition to those major bikeway projects cited above the following 10.5 miles of on-street bikeways have been implemented:

PROJECT	LIMITS		<u>TYPE</u>	MILEAGE /
Land Park Drive	2nd Avenue to 11th Ave	nue	Class II	0.85
2nd Avenue	Land Park Dr. to River	side Blvd	Class III	0.25
Vallejo Way	Land Park Dr. to River	side Blvd	Class III	0-35
Greenhaven Drive	Riverside Blvd. to Flo	riń Road	Class II	1.35
Gloria Drive	Greenhaven Dr. to Spir	naker Way	Class II	1.75
Park Rivera Way	Gloria Dr. to Riversic	le Blvd	Class II	0.25
"T" Street	3rd Street to 17th Str	eet	Class II	1.0
Mack Road	Franklin Blvd to Valle	y Hi Drive	Class II	1.7
Valley Hi Drive	Charmette to La Mancha	, , , , , , , , , , , , , , , , , , ,	Class II	1.6
Tangerine	Mack Road to La Mancha	l	Class III	1.2
La Mancha	.Tangerine to Valley Hi	Drive	Class III	0.2
	*			•

# PROPOSED ON-STREET BIKEWAY PROJECTS

The 1982-83 Bicycle Improvement Project recommendations include the following 9.6% miles of on-street bikeways:

PROJECT	LIMITS		<u>TYPE</u>	MILEAGE
Northgate Boulevard	Garden Hwy to Potomac Avenue		Class II	1.1
W. El Camino Ave.	Northgate Blvd. to Reimer Way	• •	Class II	0.8
El Camino Ave.	Northgate Blvd to SNRR Bikeway	•	Class III	0.9
"E" Street	17th Street to 20th Street		Class III	0.25
"E" Street	20th Street to Alhambra Blvd		Class II	0.75
Mckinley Blvd.	Alhambra Blvd to 32nd Street		Class II	0.1
13th Avenue	Freeport Blvd to Land Park Drive		Class III	0.9
Land Park Drive	11th Avenue to 13th Avenue		Class III	0.1
34th Avenue*	24th St. to end of 34th Avenue		Class III	0.7
Freeport Blvd*	Claudia Drive to 35th Avenue	:	Class II	0.2
35th Avenue	Freeport Blvd to Riverside Blvd		Class II	1.4
47th Avenue	24th Street to WPRR (City Limit)		Class II	0.4
Florin Road	Greenhaven Dr. to Riverside Blvd		Class II	1.5
Wyndham Drive	Valley Hi Dr. to Bruceville Road	•	Class II	0.5

<sup>\*</sup>Requires an Amendment to the Bikeway Master Plan

## BICYCLE PARKING FACILITIES

Last fall this division began the installation of 175 secure bicycle racks in various City operated garages and parking lots in the Central Area. It was recently complete with installation of 10 racks in Parking Lot P-1. State participation was \$10,700. and City match was \$4,900. These racks, added to those already installed in or about City facilities, brings the number of bicycle parking spaces to 301, including 20 coin-operated bike lockers. Twenty-four additional (non-coin operated) bike lockers are soon to be in service at the new I-5 garage (Lot P-2) adjacent to 01d Sacramento. Utilization of these facilities by the bicycling public has, so far, been less than expected. Surveys made since their installation show that on a typical weekday, only an average of 33 bicycles (11%) are parking in these racks and locker spaces. Most bicyclists evidently prefer to take their bikes into their offices or else choose to secure them as close to their work location/destination as possible.

The staff is hopeful that as more bicyclists are made aware of these secure parking facilities, their utilization will increase. To this extent, a map has been prepared by City and State staff which denotes the location of both our "public" parking facilities and those provided by the State. These are indicated in Attachment "B": Sacramento Bicycle Commuter Guide. It is available, free to public, at most Community Park and Recreation locations as well as at the City Manager and Traffic Engineering Offices.

#### BICYCLE ACCIDENT SUMMARY

The following bicycle accident data reflects the City's experience over the last seven years. It should be noted that reports of accidents <u>not</u> involving bodily injury declined in 1978 due to a change in the Police Department policy of reporting such accidents that took effect in July 1978.

<u>Year</u>	Total Accidents	<u>Fatal</u>	Non-Fatal Injury	Property Damage Only
1981	174	0	148.:	26
1980	164	0	122	42
1979	161	2	139	20
1978	. 175	. 0	138	37
1977	198	. 1	138	59
1976	236	1	171	64
1975	238	0	183	55

For the year 1981, bicycles represented 1.6% of the total vehicles reported involved in accidents. Non-fatal injury accidents involving bicyclists, however, accounted for 3.1% of all reported injury accidents. These results indicate that 85% of all bicycle accidents in the City resulted in injurys.

# FINANCIAL DATA

Not Applicable.

## RECOMMENDATION

This report is submitted to the City Council for informational purposes only. Bicycle commuter guide may be reviewed or picked up in the City Clerk's office.

Respectfully submitted,

L. M. Frink Traffic Engineer

For information only:

LMF:FB/ead

Attachments: 525

September 21, 1982 All Districts

#### ATTACHMENT A

#### 21ST STREET AND K STREET BICYCLE COUNT REPORT

Since 1973, bicycle and motor vehicle counts have been conducted at the intersection of K and 21st Streets. The bicycle counts are ordinarily conducted in May on Sundays from 7:00 AM to 7:00 PM and Wednesdays from 8:00 AM to 8:00 PM. Since 1980, however, the Wednesday count was done during the peak commute times of 7:00 AM to 9:00 AM, 11:00 AM to 1:00 PM and 3:00 PM to 7:00 PM. Therefore, the Wednesday bicycle counts for the last three years have been factored counts. The Sunday counts comprise recreational bicyclists and the Wednesday counts represent predominantly commuter bicyclists.

The following table summarizes the count data:

		<u> </u>								
WEDNESDAY	1973	1974	1975	<u>1976</u> *	1977	1978	1979*	1980	1981	1982
K St, Bicycles	287	281	329	454	277	371	545	450	464	576
K St, Motor Veh.	5930	6010	5550	5446	5510	5692	4900	5602	6121	6876
21st St, Bicycles	88	66	75	88	42	73	103	80	48	107
21st St, Motor Veh.	8710	8550	7760	6729	7200	7594	7075	8459	9429	9201
Intersection Totals										
Bicycles	375	347	404	542	319	444	648	530	512	683
Motor Veh.	14640	14560	13310	12175	12710	13286	11975	14061	15550	16077
SUNDAY	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
K St, Bicycles	298	319	267	203	192	191	283	277	355	298
K St, Motor Veh.	2430	2250	2200	1547	2370	1750	1960	2390	2613	2831
21st St, Bicycles	63	86	64	47	<b>54</b>	49	-	45	21	88
21st St, Motor Veh.	3840	3758	3600	2313	2720	2431	2410	3231	3600	4101
Intersection Totals								•	. •	
Bicycles	361	40,5	331	250	246	240	283	322	376	386
Motor Veh.	6270	6008	5800	3860	5090	4181	4370	5621	6213**	6932

Note: \*In 1976 and 1979, the bicycle counts were taken in May, during Bus Strikes, and also following the strikes. The data presented here represents the data reported after the strikes. For these years, the vehicle counts were consequently slightly lower and the bicycle counts were somewhat higher than may otherwise have been experienced.

<sup>\*\*</sup>The 1981 motor vehicle counts for Sunday are based upon the percent increase which occurred on Wednesday from 1980 to 1981.

# 21ST STREET AND KSTREET BICYCLE COUNT REPORT

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## ATTACHMENT A

The following table compares the 1980, 1981 and 1982 Wednesday bicycle counts for the times surveyed:

TABLE 2

	7:00 - 9:00 AM	11:00 - 1:00 PM	3:00 - 7:00 PM	<u>Total</u>		
K Street:						
1980	173	47	236	457		
1981	136	58	246	440		
1982	155	44	264	463		
21st Street:				1 s,		
1980	19	5	36	60		
1981	12	9	24 .	45		
1982	18	12	50	80		
1980 1981	12	9	24	45		

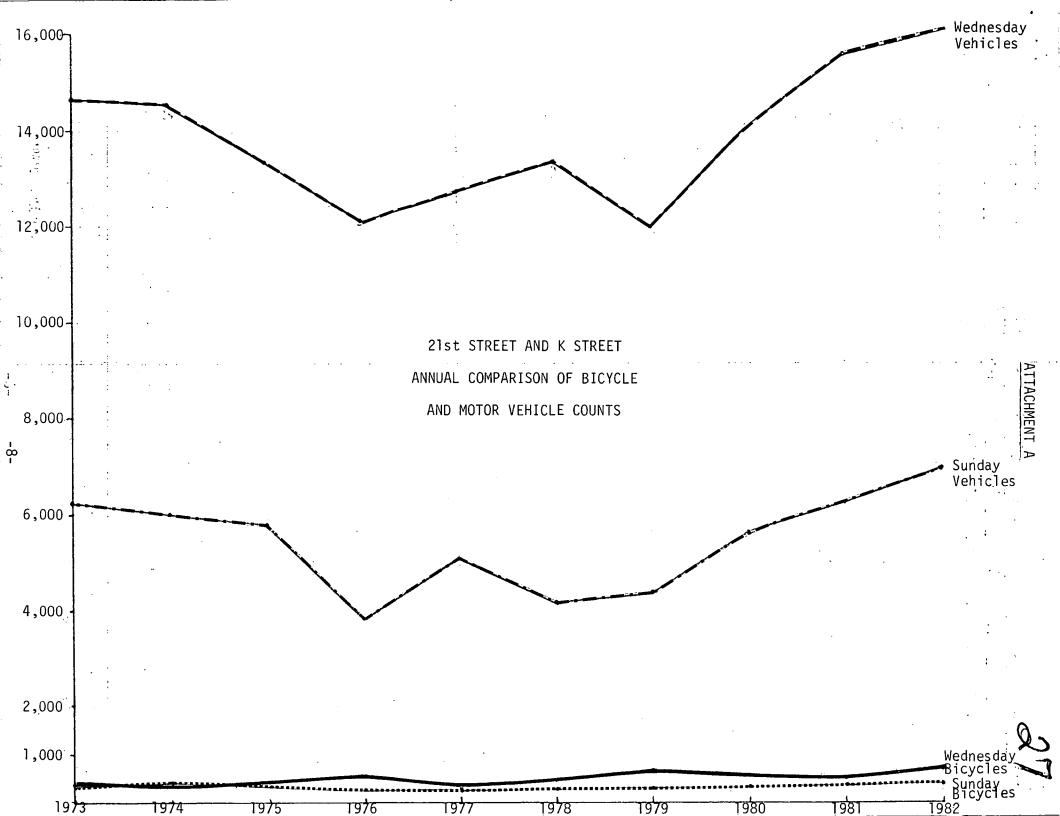
1980 total = 516 (8 hours)

1981 total = 485 (8 hours)

1982 total = 543 (8 hours)

The total number of Wednesday bicycle riders on K Street and 21st Street, counted during these periods, increased approximately 12% in 1982 over 1981.

6/82 FGB/mf

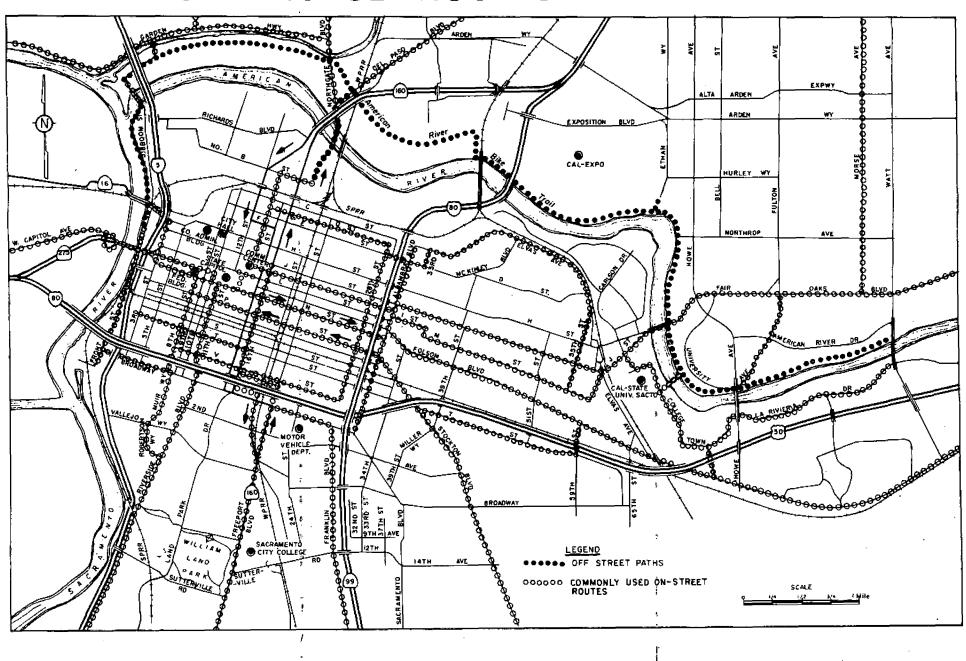


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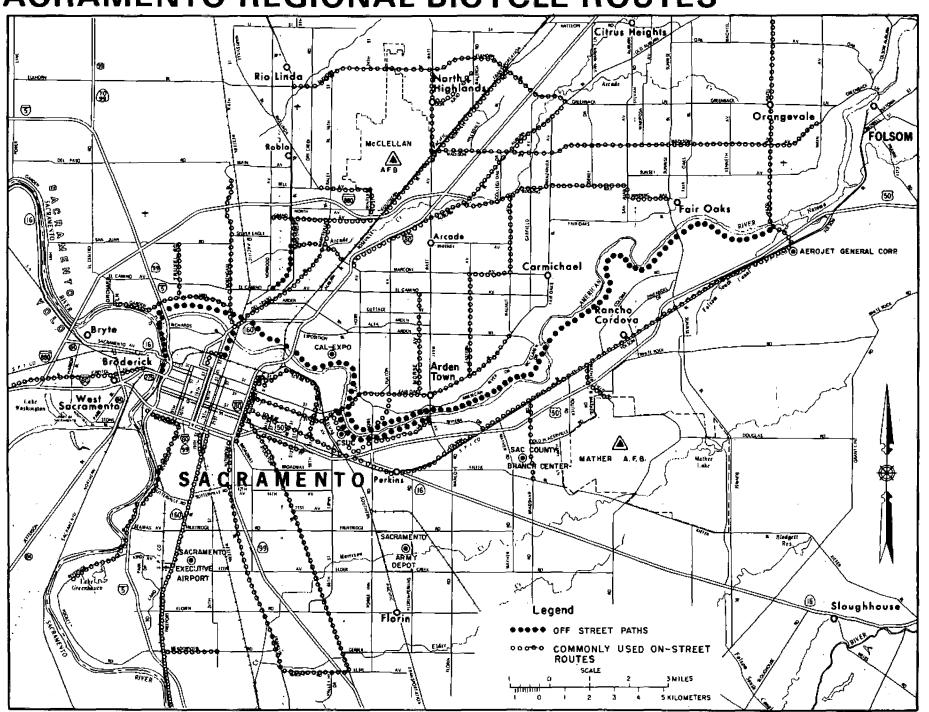
# 1982 BICYCLE COUNTS

1981 Inter- 1980 Inter- Section Total Section Total	1982 Inter- Section Total	Total	3:00 7:00 pm	11:00 am 1:00 pm	6:30- 9:00 am	Date	<u>On</u>	<u>Location</u>
512 530	596	510 86	264 - 50	44 12	202 24	5/12	K Street 21st St.	21st & K Street
	149	131 18	69 12	9 3	53 3	5/19	Riverside 35th Ave.	Riverside Blvd & 35th Avenue
	147	49 98	31 61 ·	8 6	10 31	5/26	Fruitridge 24th Street	Fruitridge Róad 24th Street
•	188	105 83	63 51	11 12	31 20	5/26	Center Pk'way Valley Hi Dr	Center Parkway & Valley Hi Drive
214	159	115 44	89 16	13 2	13 26	6/2	Folsom Blvd. Hornet Dr.	Folsom Blvd & Hornet Dr.
194 154	214	214	127	29	58	7/7	H Street	H St & American River Bridge
	119	119	. 71	20	28	7/28	Northgate	Northgate Blvd & Am. River Bikeway
151	206	206	106	32	68	7/28	SNRR Bikeway	SNRR Bikeway & Drehr
	221	221	77 29	33 21	21 40	8/4	Alhambra E - Mckinley	Alhambra Blvd & E St - Mckinley
202 100	182	182	73 18	28 11	32 20	8/11	Alhambra S Street	Alhambra Blvd & S Street
	171	171	54 45	25 5	33 9.	8/11	Alhambra T Street	Alhambra Blvd & T Street
194 154 151	188 159 214 119 206 221	98 105 83 115 44 214 119 206 221 182	61 63 51 89 16 127 71 106 77 29 73 18	6 11 12 13 2 29 20 32 33 21 28 11	31 31 20 13 26 58 28 68 21 40 32 20	5/26 6/2 7/7 7/28 7/28 8/4 8/11	24th Street  Center Pk'way Valley Hi Dr  Folsom Blvd. Hornet Dr.  H Street  Northgate  SNRR Bikeway  Alhambra E - Mckinley  Alhambra S Street  Alhambra	24th Street  Center Parkway & Valley Hi Drive  Folsom Blvd & Hornet Dr.  H St & American River Bridge  Northgate Blvd & Am. River Bikeway  SNRR Bikeway & Drehr  Alhambra Blvd & E St - Mckinley  Alhambra Blvd & S Street  Alhambra Blvd &

# **CENTRAL CITY BICYCLE ROUTES**



# SACRAMENTO REGIONAL BICYCLE ROUTES



Cycling is Fun Bicycle commuting is more relaxing and enjoyable than driving to work roundings, not closed off from the world by a wall of metal and glass. Moving under your own power, you feel a real sense of independence and accomplishment.

Cycling Improves the Environment Bicycle commuting reduces noise, improves air quality, conserves energy and cuts down traffic congestion. By riding a bike, you make a positive contribution to a better environment.

Cycling Promotes Health and Fitness Bicycling is excellent exercise. It stimulates the body and refreshes the mind. With continued use, it will benefit a person's cardiovascular system, muscle tone, and aids in weight control.

Cycling Saves Money on gas, maintenance, parking and busfare. You can save at least 15 cents for each mile you substitute a bicycle for an auto. Every 100 miles = \$15.00! You'll save on parking costs, too. In addition, many insurance companies will offer lower rates to those who do not use a car for commuting.

# Why Bike To Work?

Happy cycling!

Use this guide to select a route and find a place to park your bike. The guide also includes tips on safety, riding techniques, clothing and equipment. If you need more information, contact any of the agencies listed in the contact any of the agencies section.

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# GETTING STARTED:

# Tips For The New Commuter

Selecting a Route — Use the maps to find a commonly-used route from home to work. It's a good idea to drive the route first (if it's on a street) or ride it some weekend so you know what to expect.

Equipment and Clothing — Be sure your bicycle is properly adjusted and in good working order. Helmets and riding gloves are recommended.

- Wear loose fitting clothing of cotton or wool blends; layer clothes in cold weather and do not overdress. Tight collars make you overheat.
- Women may prefer a "mixte" style frame for cycling in a dress.
- Do not carry heavy packs on your back. Use a carrier or handlebar bag; many products and styles are available for the bicycle commuter.
- Don't hesitate to invest in a high security lock.
   Lock both wheels and the frame.
- A good headlight and reflectors are a legal requirement when traveling during darkness.
- Head injuries are the most common serious injury cyclists suffer. A helmet is a good investment in your future.

For your Safety — Keep in mind that you are a vehicle operator, When using public rights of way, your safety is dependent on your skill, courtesy, judgment and obedience to traffic laws.

- Most bike-car collisions are initiated by cyclists who disobey traffic laws, ignore simple safety practices and treat on-street operations without regard to the rights of the motorist.
- Always drive your bicycle defensively. Be predictable (signal turns, ride in a straight line, ride with traffic). Be visible (use lights, reflectors, light colored clothing). Never daydream on a city street. Maintain eye contact with motorists at intersections.
- Never ride against the flow of traffic. Be alert when passing parked cars — occupants may not see you when opening car doors or pulling out of parking spaces. Be extra careful riding when roads are wet — most bicycle brakes work poorly when wet and pavement markings can be slippery.

When you Arrive — There are many secure bicycle parking facilities downtown which will protect your bike against tampering, theft and the weather. A limited number of showers are also available for State employees who bicycle to work. Locations appear on the downtown bicycle facilities map.

# BICYCLE COMMUTER RESOURCES

# ORGANIZATION

Bicycle Routes and Facilities in Downtown Sacramento

**PHONE** 

BICYCLE ROUTE

Caltrans Office of Bicycle Facilities. . . . . 322-4314 1120 N Street, Sacramento 95814

Information on routes, statewide programs, bicycle parking, and showers for cyclists.

Caltrans Dist. 03 Bicycle Coordinator . . . . 674-4337 703 B Street, P. O. Box 911, Marysville 95901

Information and maps on routes in the Sacramento area.

General Services Fleet Admin. Div. . . . . . 445-7529 1416 Tenth Street, Sacramento 95814 Bicycle parking for State employees.

915 Capitol Mall, Room 106, Sacramento 95814

Showers and lockers for State employees.

Sacramento City Bicycle Coordinator . . . 449-5307 Traffic Engineering Division 1023 | Street, Suite 200,

Sacramento 95814

Bicycle route maps, bicycle parking; responsible for developing, maintaining and improving City bikeways.

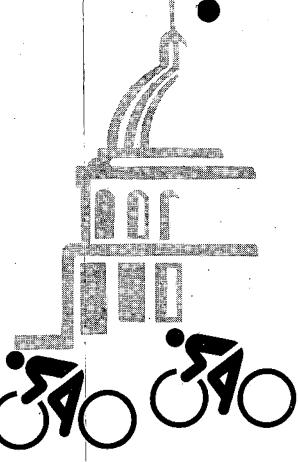
# Capitol Bicycle Commuters Association P. O. Box 1541, Sacramento 95807

Cyclist Information and education; safety and maintenance clinics; lobbies for better bicycle routes and facilities. Members receive a 10 percent discount from many bike shops.

# Local bike shops

Bike shops are a great place to find out all about what is happening on the Sacramento cycling scene. Shops know about bike clubs, special events, clinics, commuter products and often have publications about cycling, safety and bicycle commuting.

The Sponsors of this map assume no responsibility for travel on these routes. Travel at your own risk.



# Sacramento Bicycle Commuter Guide

Prepared by the California
Department of General Services
in cooperation with
Caltrans, the City of Sacramento, and
the Capitol Bicycle Commuters Association