
ALAMEDA COUNTYWIDE BICYCLE PLAN VOLUME II TECHNICAL APPENDICES

Prepared for
Alameda County Congestion Management Agency



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in association with

BICYCLE SOLUTIONS
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July, 2001

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Appendix A-1

BICYCLE TRANSPORTATION ACCOUNT

REQUIREMENTS

(a) The estimated number of existing bicycle commuters in the plan area and the estimated increase in the number of bicycle commuters resulting from implementation of the plan. See Page 2-2 for a discussion of existing bicycle commuters in the plan area. Countywide 1.2 percent of residents bike to work. It is estimated that with the implementation of this plan, the bicycle mode split could increase to over 5 percent. This would be a 400 percent increase in the number of bicycle commuters. This is derived from the calculation presented in Table A-1. This calculation is based on the fact that in bicycle friendly communities such as Davis and Palo Alto, existing bicycle modes splits are 25 to 30 percent. It is assumed that with the full provision of bicycle accommodations in Alameda County, the mode split for those who live within easy bicycling distance is 25 percent. In addition, it is assumed that some of those who live further would also bike to work, for the purposes of this estimate, this latter mode split was assumed to be seven percent.

Table A1 Potential Increase in the Number of Bicycle Commuters in Alameda County					
A	B	C	D	E	F
% Bike to Work	% Live within 9 Minutes	% Biking / % Living within Easy Biking Distance (9 min. or less)	% Live within 10-29 Minutes	Potential % of Bicycle Commuters	% Increase
1.2	10.3	12.1	28.7	5.3	441.7
A – Percent of Alameda County residents who biked to work in 1990. Source: 1990 US Census – "Means of Transportation to Work"					
B – Percent of Alameda County residents who live within 9 minutes of their place of employment. Source: 1990 US Census – "Travel Time to Work"					
C = A/B					
D – Percent of Alameda County residents who live within 29 minutes of their place of employment. Source: 1990 US Census – "Travel Time to Work"					
E = (25% * B) + (7%*D)					
F = E/A * 100					

(b) A map and description of existing and proposed land use and settlement patterns which shall include, but not be limited to, locations of residential neighborhoods, schools, shopping centers, public buildings and major employment centers.

See Figure 2-3 Regional Attractors and Generators.

(c) A map and description of existing and proposed bikeways by class number (I, II, III).

See Figure 3-1 and Appendix C-3.

(d) A map and description of existing and proposed end of trip bicycle parking facilities. These shall include, but not be limited to, parking at schools, shopping centers, public buildings, and major employment centers.

See Figure 2-8 and Appendix B6 and B7.

(e) A map and description of existing and proposed bicycle transport and parking facilities for connections with and use of other transportation modes. These shall include, but not be limited to, parking facilities at transit stops, rail and transit terminals, ferry docks and landings, park-and-ride lots, and provisions for transporting bicyclists and bicycles on transit or rail vehicles or ferry vessels.

See Figure 2-8 and the Bicycle and Transit Access section in Chapter 2 and pages 3-10 to 3-13.

(f) A map and description of existing and proposed facilities for changing and storing clothes and equipment. These shall include, but not be limited to, locker, restroom, and shower facilities near bicycle parking facilities.

There are no public facilities for changing and storing clothes or showers, therefore a map is not required.

(g) A description of bicycle safety and education programs conducted in the area included within the plan, efforts by the law enforcement agency having primary traffic law enforcement responsibility in the area to enforce provisions of the Vehicle Code pertaining to bicycle operation, and the resulting effect on accidents involving bicyclists.

See Chapter 2 and Appendix B-8 and Appendix D-2.

(h) A description of the extent of citizen and community involvement in development of the plan, including, but not limited to, letters of support.

See discussion in Chapter 1

(i) A description of how the bicycle transportation plan has been coordinated and is consistent with other local or regional transportation, air quality, or energy conservation plans, including, but not limited to, programs that provide incentives for bicycle commuting.

See discussion in Chapter 1.

(j) A description of the projects proposed in the plan and a listing of their priorities for implementation.

See discussion in Chapter 5.

(k) A description of past expenditures for bicycle facilities and future financial needs for projects that improve safety and convenience for bicycle commuters in the plan area.

See discussion in Chapter 5.

Table A1

Potential Increase in the Number of Bicycle Commuters in Alameda County

A	B	C	D	E	F
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D - Percent of Alameda County residents who live within 29 minutes of their place of employment. Source: 1990 *US Census* - "Travel Time to Work"

E = (25% * B) + (7%*D)

F = E/A * 100

Appendix A-2

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

TRANSPORTATION CONTROL MEASURES –

Directly Related to Bicycling and Walking

TCM #5 - Improve Access to Rail and Ferries

- Improve bicycle and pedestrian facilities at stations and improve access to rail/ferry stations

TCM #9 - Improve Bicycle Access and Facilities

- Improve and expand bicycle lane system by providing bicycle access in plans for all new road construction or modifications
- Establish and maintain bicycle advisory committees in all nine Bay Area counties
- Designate a staff person as a Bicycle Program Manager
- Develop and implement comprehensive bicycle plans
- Encourage transit operators to accommodate bicycles on transit vehicles, including removal of peak-hour restrictions
- Encourage Caltrans to accommodate bicycles on all bridges, including the San Francisco - Oakland Bay Bridge
- Encourage employers and developers to provide bicycle access and facilities (see also TCM 15)
- Provide bicycle safety education

TCM #12 - Improve Arterial Traffic Management

- Improve arterials for bus operations and to encourage bicycling and walking

TCM #19 - Pedestrian Travel (new measure added to 1997 CAP)

- Review/revise general/specific plan policies to promote development patterns that encourage walking and circulation policies that emphasize pedestrian travel, and modify zoning ordinances to include pedestrian-friendly design standards
- Include pedestrian improvements in capital improvements program
- Designate a staff person as a Pedestrian Program Manager

Indirectly-Related to Bicycling and Walking

TCM #1 - Support Voluntary Employer-Based Trip Reduction Programs

- Provide assistance to regional and local ridesharing organizations; advocate legislation to maintain and expand incentives (e.g., tax deductions/credits)
- Provide assistance to employers, cities, counties:
 - Assistance in developing/enhancing employer programs; recognition of outstanding programs
 - Information and referral

- Employer networks

TCM #16 – Intermittent Control Measures/ Public Education

- Encourage public to reduce motor vehicle use and other polluting activities on predicted ozone exceedance days through “Spare the Air” program
- Continue public education program to inform Bay Area residents about status of regional air quality, health effects of air pollution, sources of pollution and measures that individuals and communities can take to help improve air quality

TCM #18 - Transportation Pricing Reform

- Use revenues to fund transportation alternatives, user incentives and equity programs

TCM #20 - Promote Traffic Calming Measures (new measure added to 1997 CAP)

- Include traffic calming strategies in the transportation and land use elements of general and specific plans
- Include traffic calming strategies in capital improvements programs