Chapter 5: Implementation Plan

Alameda Countywide Bicycle Plan

This chapter describes the priorities, cost estimates and funding availability to implement the Countywide Bicycle Network. First, the types of capital improvements that are needed to implement the entire countywide network are described. Second, the cost assumptions for the capital projects are presented, followed by the total cost of each element of the bicycle plan. Third, the potential available funding for the twenty- year horizon is presented. Finally, the prioritization criteria are presented along with a list of the high priority projects.

When completed, the proposed countywide bikeway network will total 500 miles; about 120 of these miles are existing facilities, and 380 miles are new or improved facilities. In addition, there will be 22 new traffic signals, improvements to 29 freeway interchanges, 9 new bike/pedestrian bridges and other needed improvements. The estimated cost of implementing the entire network is about $190 million (in addition to $17 million for the programs described in Chapter 4). The estimated available funding in the twenty year horizon is $80 to $100 million. Since the forecasted funds are less than the total costs, the projects were prioritized.

Although this plan identifies a system of bicycle improvements, these projects are on local streets, roads and trails (and in a few cases state highways). The projects identified in the plan, including bike lanes, routes, paths and bridges are in the purview of the local jurisdictions which would be the lead agency responsible for implementing the capital projects, including acquiring and applying for funds.

RECOMMENDED PROJECTS

CAPITAL PROJECTS

Description of Bikeway Improvements

Table 5-1 presents a summary of the types of improvements and the total lengths of each bikeway type by corridor to implement the entire countywide network. The capital improvements fall into two general categories - bikeways and spot improvements, as described in Chapter 3.

All the capital improvements needed to implement the countywide corridors were aggregated into 53 projects. The types of improvements that constitute each of the 53 projects are described in more detail in Appendix E-1.

Each project consists of all the individual improvements that are needed to implement an entire corridor (or portion of a corridor) such as providing bike lanes, installing needed traffic signals and improving freeway interchanges.

Table 5-1
SUMMARY OF RECOMMENDED BIKEWAYS BY CITY
BY CROSS-COUNTY BICYCLE CORRIDOR
(Existing bikeways not included in this summary)

Corridor 5	Bay Trail			
City	Bike Path	Bike Lanes	Shared Arterial or Collector	Residential or Local Street
Albany	1.4			
Emeryville	0.1			
Fremont	3.5			0.6
Newark	2.3			2.5
Oakland	1.3	5.5		3.0

Corridor 10	Fruitvale/Redwood Road Oakland			
City	Bike Path	Bike Lanes	Shared Arterial or Collector	Residential or Local Street
Alameda		0.2	0.3	
Oakland		5.0		0.9

Corridor 15	Alameda/Doolittle			
City	Bike Path	Bike Lanes	Shared Arterial or Collector	Residential or Local Street
Alameda	0.5	3.5		0.1
Oakland		1.6		
San Leandro		2.8	0.5	

Corridor 20	73rd Ave/Hegenberger			
City	Bike Path	Bike Lanes	Shared Arterial or Collector	Residential or Local Street
Oakland	0.8	4.3		

Corridor 25	Highway 880 Corridor			
City	Bike Path	Bike Lanes	Shared Arterial or Collector	Residential or Local Street
Albany		0.8		0.5
Berkeley	0.4			3.5
Emeryville	0.4	0.9		0.1
Fremont		3.0		
Hayward			3.9	
Newark		3.8	0.5	
Oakland	4.3	14.3	0.6	
San Leandro	2.6	2.5		
Union City		2.0		

Table 5-1
SUMMARY OF RECOMMENDED BIKEWAYS BY CITY
BY CROSS-COUNTY BICYCLE CORRIDOR
(Existing bikeways not included in this summary)

Corridor 30	Estudillo/Crow Canyon Rd			
City	Bike Path	Bike Lanes	Shared Arterial or Collector	Residential or Local Street
Castro Valley		2.2	0.2	0.8
San Leandro	0.5	1.0	0.1	0.8
unincorporated		0.4		

Corridor 35	Highway 580/Foothills			
City	Bike Path	Bike Lanes	Shared Arterial or Collector	Residential or Local Street
Albany	1.3			
Berkeley	0.7	0.4		3.9
Castro Valley		3.2		
Cherryland		0.4		
Fremont		3.3	0.6	
Hayward			3.4	
Oakland		10.8	1.0	2.4
Piedmont				1.3
San Lorenzo		0.7		
Union City		1.6		

Corridor 40	Highway 92/Dublin Blvd			
City	Bike Path	Bike Lanes	Shared Arterial or Collector	Residential or Local Street
Castro Valley		2.2		
Dublin	1.2	3.6		
Hayward		3.2	2.1	0.1
Livermore	7.1	2.3		
Pleasanton		1.7		
Unincorporated	3.3	0.6	3.5	

Corridor 45	Highway 13 Corridor			
City	Bike Path	Bike Lanes	Shared Arterial or Collector	Residential or Local Street
Berkeley		0.6		1.5
Emeryville		1.2		
Oakland		5.9	1.1	0.6

Table 5-1
SUMMARY OF RECOMMENDED BIKEWAYS BY CITY
BY CROSS-COUNTY BICYCLE CORRIDOR
(Existing bikeways not included in this summary)

Corridor 50	Stoneridge/Las Positas Blvd			
City	Bike Path	Bike Lanes	Shared Arterial or Collector	Residential or Local Street
Livermore	4.3	2.0		
Pleasanton	3.7	2.1	0.6	
Unincorporated	4.5			
Corridor 55	**Skyline Blvd/Palomares Ave**			
City	Bike Path	Bike Lanes	Shared Arterial or Collector	Residential or Local Street
Berkeley				2.5
Castro Valley		0.2	2.3	
Oakland			0.7	
Corridor 60	**Stanley Ave/East Ave**			
City	Bike Path	Bike Lanes	Shared Arterial or Collector	Residential or Local Street
Livermore	4.0			0.2
Pleasanton	3.3	3.5		
Unincorporated		0.8		
Corridor 65	**Highway 680 Corridor**			
City	Bike Path	Bike Lanes	Shared Arterial or Collector	Residential or Local Street
Dublin	1.0	1.6		
Pleasanton	11.0	3.9		
Unincorporated	4.6			
Corridor 70	**Vineyard Rd**			
City	Bike Path	Bike Lanes	Shared Arterial or Collector	Residential or Local Street
Livermore	5.0	0.6		
Pleasanton	3.0	3.0		
unincorporated	9.0			
Corridor 75	**Dougherty Rd**			
City	Bike Path	Bike Lanes	Shared Arterial or Collector	Residential or Local Street
Dublin	1.0	1.2	0.1	
Livermore	6.0			
Pleasanton	4.5	2.7	0.5	
Unincorporated	11.5			

Table 5-1
SUMMARY OF RECOMMENDED BIKEWAYS BY CITY
BY CROSS-COUNTY BICYCLE CORRIDOR
(Existing bikeways not included in this summary)

Corridor 80 State Route 84/Niles Canyon				
City	**Bike Path**	**Bike Lanes**	**Shared Arterial or Collector**	**Residential or Local Street**
Fremont		1.6	0.9	
Livermore	1.5	1.0		
Newark		0.8		
Union City		0.3		
Corridor 85 Tassajara Rd				
City	**Bike Path**	**Bike Lanes**	**Shared Arterial or Collector**	**Residential or Local Street**
Dublin	2.0	1.8		
Pleasanton		3.0		0.7
Corridor 95 Vasco Rd				
City	**Bike Path**	**Bike Lanes**	**Shared Arterial or Collector**	**Residential or Local Street**
Livermore	7.0	1.5		
Unincorporated		6.9		

The projects are defined in such a way that individual segments will stand alone and be eligible for funding. Due to the special implementation issues associated with trails and bridges, each pedestrian/bicycle bridge and each parallel trail is a separate project.

Description of Spot Improvements

Spot and intersection improvements include the many different types of actions that significantly improve the safety, convenience, travel time, ambiance and/or overall utility of a bicycle route. These are generally limited to a specific location or intersection, as opposed to the bikeway type described previously, which is applied to the entire segment.

The spot improvements recommended for the Alameda County Bicycle Corridors are:

- Building pedestrian/bicycle bridges over freeways, creeks, sloughs or other barriers.
- Installing traffic signals to help bicyclists cross major arterials. (In the future, it could be determined that a strategy other than a traffic signal is preferred to solve the arterial crossing. This could include a median pedestrian refuge, flashing yellow beacon or a roundabout. Cost estimates assume a traffic signal.)
- Eliminating obstacles, such as repaving railroad tracks or replacement of unsafe drainage grates.
- Improving difficult freeway interchanges. (The design of freeway ramps can be extremely intimidating to the average cyclist. Ameliorating these conditions would dramatically improve the utility of an arterial to the commuting cyclist. The exact improvements will vary site by site, but can include such measures as rechannelization, restriping or widening at right-turn lanes, modification of curb radii, additional signing, signal phases, etc.). We have included $300,000 per site as a placeholder for funding purposes, but the exact amount needed to modify each interchange to be more bicycle friendly would require a more detailed engineering analysis than is possible in this study. The cost of interchange improvements could be significant, therefore number of and benefits to cyclists will need to be weighed carefully in the prioritizing of future projects.
- Improving arterials for bicyclists. All arterials, whether they have existing bike facilities or not, have bicycle unfriendly features. The needed improvements will vary street by street but can include such issues as signal timing improvements, bicycle detection improvements, smoothing longitudinal joints, fixing potholes, or other repaving of sections with rough pavement. Similar to all transportation improvements, consideration must be given to balancing the needs of bicycles, autos, transit and pedestrian users.

COST ESTIMATES

Cost estimates for capital improvements were prepared based on cost data provided by Alameda County Public Works Agency and data compiled from other studies. Based on these unit cost estimates, presented in Appendix E-2, the costs of individual improvement types were developed as shown below in Table 5-2. These costs and those in Appendix E-2 are the straight construction costs in Year 2000 dollars, and do not include any contingencies. Typically, 15 percent is added for contingencies, and another 10 to 20 percent is added for design and administration (D/A). We have assumed an additional 30 percent to cover these costs.

Table 5-2
UNIT CONSTRUCTION COST ASSUMPTIONS
FOR BIKEWAY IMPROVEMENTS

Capital project	Unit	Cost*
Class 1 - Construct bike path	Mile	$500,000**
Class 1 - Improve existing bike path	Mile	$100,000
Class 2 Bike Lanes - Bike lane treatment only –stripe bike lanes, add signs and pavement legends - restripe lanes and bike lane treatment - remove lane and bike lane treatment (for cost estimating purposes we have assumed that there would be a two-way left turn lane)	Mile	$20,000 $40,000 $75,000
Class 3 - Wide curb lanes	Mile	$50,000-$100,000
Class 3 - Wide shoulder	Mile	$180,000
Class 3 - Residential Street, Local Street or Bicycle Boulevard	Mile	$100,000
Arterial Improvements (see Chapter 6)	Mile (can vary)	$200,000
Traffic signal	Each	$155,000
Construct Ped/Bike overpass	Square foot	$200
Improve freeway interchange to accommodate bicycles	Each (can vary)	$300,000

Note: These unit costs are straight construction costs and do not include contingencies, design and administrative costs, right-of-way acquisition, or inflation factors.
* See Appendix E-2 - Unit Cost Assumptions
** Cost can vary tremendously depending on terrain, drainage needs, right-of-way and design of the facility.

Source: Wilbur Smith Associates, July 2001

The EBRPD estimates trail bed construction at $100,000 to $200,000 per mile, but the actual costs experienced by local agencies can be and have been much higher. This is because the cost to construct trails can vary significantly due to such factors as landscaping, lighting, culvert crossings, drainage design, and amenities such as benches and water fountains (not to mention right-of-way acquisition). This study assumes $500,000 per mile for new trail construction.

The total cost of constructing the entire network is about $145 million. With the contingency and D/A costs, the total cost of implementing the entire network would be $190 million. Table 5-3 depicts the quantities and the cost of each improvement type (e.g. miles of bike path and numbers of traffic signals) to implement the 500 mile network.

Table 5-3
TOTAL NETWORK COSTS BY IMPROVEMENT TYPE

Improvement Type	Unit	Unit Cost	Total Length	Total Units	Construction Cost	Total Cost
Countywide route signage	mile	$2,000	502.9		$1,005,719	$1,307,434
Provide 10 foot bike path	mile	$500,000	108.6		$54,309,848	$70,602,803
Improve existing path	mile	$100,000	9.9		$986,515	$1,282,470
Bike lanes-retain existing striping	mile	$18,440	25.0		$460,285	$598,370
Bike lanes-restripe lanes	mile	$42,200	90.9		$3,834,383	$4,984,698
Bike lanes-widen roadway	mile	$197,960	15.5		$3,077,026	$4,000,133
Bike lanes-remove lane	mile	$75,000	13.9		$1,046,136	$1,359,977
Bike lanes-include bike lane with new road	mile	$18,440	1.2		$22,491	$29,239
Wide curb lanes-restripe lanes	mile	$47,520	15.5		$735,034	$955,544
Wide curb lanes-restripe lanes	mile	$95,040	0.4		$38,016	$49,421
Arterial improvements	mile	$200,000	117.1		$23,425,807	$30,453,549
4 foot wide shoulder	mile	$179,520	77.5		$13,917,900	$18,093,270
2 foot wide shoulder	mile	$116,160	1.4		$168,366	$218,876
Bike route on residential or local street	mile	$100,000	26.0		$2,600,933	$3,381,212
New bike/ped bridge	each	$1,000,000		4	$4,000,000	$5,200,000
New overpass	each	$5,000,000		3	$15,000,000	$19,500,000
New underpass	each	$2,000,000		2	$4,000,000	$5,200,000
Improve existing bike/ped bridge/over/undercrossing	each	$1,000,000		7	$7,000,000	$9,100,000
Improve difficult interchange	each	$300,000		29	$8,700,000	$11,310,000
Add traffic signal	each	$155,000		22	$3,410,000	$4,433,000
Replace drainage grates	each	$2,000		5	$10,000	$13,000
Improve railroad tracks	each	$30,000		8	$240,000	$312,000
				TOTALS	$147,988,459	$192,384,996

NOTES:
1. See Appendix E-2 for Unit Cost Assumptions.
2. Total Length in Miles.
3. Total Cost includes 30% for design and administration and contingencies. Does not include right-of-way acquisition or factors for inflation.

FUNDING AVAILABILITY

The approximate amount available to fund the bicycle program over the next twenty years is between $80 and $105 million. The primary sources of future funds are state and federal sources (e.g. subsequent reauthorizations of TEA-21), extension of Measure B, and Transportation Funds for Clear Air (TFCA) managed by the Bay Area Air Quality District and the Alameda County Congestion Management Agency. In addition, the county may be successful at securing some competitive grants such as Transportation for Livable Communities, Safe Routes to School, or Office of Traffic Safety. A summary of funding sources and the estimated funds available are described below.

The Expenditure Plan specifies that of 25% of the Bike and Pedestrian funds will be reserved for regional planning and regional projects, including the preparation of local master plans, design support services to local agencies, funding for a Countywide Bicycle and Pedestrian Coordinator position, and funding for high priority regional capital projects identified in the Countywide Bicycle Plan. High priority will be given to East Bay Regional Park District projects included in the Countywide Bicycle Plan. Priority will also be given to projects which significantly leverage other outside funding sources.

FUNDING SOURCES

Guaranteed State And Federal Sources

There are a wide variety of potential funding sources available to implement the Alameda County Bicycle Plan. The Alameda County Congestion Management Agency (ACCMA) has programming authority over five potential sources of bicycle funding:

1. Transportation Funds for Clean Air (TFCA) Program Manager's Fund
2. State Transportation Improvement Program
3. Congestion Mitigation and Air Quality
4. Surface Transportation Program
5. Transportation Enhancement Activities (Regional Funds)

The county will receive approximately $1.2 billion over the next twenty years in state and federal transportation funding. Almost two-thirds of these funds are set asides for maintenance and operation of the existing transportation system. This includes funds from:

Total Estimated Funding Available During the Next 20 Years is $80-105 million.

- State Transportation Improvement Program (which programs both state and federal funds and constitutes the single largest transportation funding source)
- Surface Transportation Program and Congestion Mitigation and Air Quality
- Transportation Development Act (Article 3)
- Transportation Enhancement Activities (Regional Funds)

Based on programs specified in the Countywide Transportation Plan and the Regional Transportation Plan, the ACCMA estimates that approximately five percent of these funds could be spent on bicycle plan implementation, for $3 million annually or $60 million total over 20 years.

Transportation Funds for Clean Air (TFCA)

TFCA, a program of the Bay Area Air Quality Management District, consists of two parts: Program Manager Funds, which guarantee a certain share to each county, and Regional Funds, which are allocated on the basis of regional competition. In the past, Alameda County has received $1.5 million in Program Manager Funds and $1.2 million in Regional Funds annually. The county has programmed approximately $200,000 annually to bicycle projects. This could mean roughly $4 million during the period for bicycle improvements.

Measure B Reauthorization

The Expenditure Plan allocates $71 million to general non-motorized transportation, in addition to $5 million for downtown Oakland pedestrian improvements and $4.5 million for the Iron Horse Trail. Of the $71 million, 24 percent ($17.5 million) will be available to the county for regional bike plan implementation. The remaining 75 percent will be available to local jurisdictions. To the extent that proposed countywide and citywide facilities overlap, a portion of these funds could be used to construct countywide facilities. It is assumed that approximately $875,000 per year would be available from Measure B. This would mean $17 million over the life of this plan.

Competitive Funds

Alameda County can also compete against other jurisdictions for regionwide or statewide funds, including the following:

- Bicycle Transportation Account
- Recreational Trails Program
- Safe Routes to School
- Transportation for Livable Communities
- Office of Traffic Safety Grants

- ABAG Bay Trail Project - As funds become available, the Bay Trail Project periodically administers grant programs to fund planning and construction of the Bay Trail in the nine county Bay Area. Eligible projects must be segments of the Bay Trail Alignment. In 2000, 7.5 million was allocated to the Coastal Conservancy from the parks and open space bond earmarked for the Bay Trail with a three-year allocation timeline. Planning projects can include alignment feasibility studies, design, and other technical studies necessary to overcome long-standing obstacles to Bay trail implementation. Construction projects can include new trail construction - ranging from separated pathways, bike lane striping, sidewalk construction and improvements to roadway bicycle routes. Funds may also be used for trail amenities such as signage, staging areas, landscaping and other costs directly related to trail construction

Alameda County and Alameda County cities have been successful in the past in obtaining grants from these programs. The estimated funds from these sources are presented in Table 5-4. This estimate assumes continued funding from these sources at similar levels to grants obtained in the past.

Table 5-4

SUMMARY OF AVAILABLE FUNDING SOURCES FOR IMPLEMENTATION, FY 2001-2020

Funding Source	Total Funds to County	Estimated Percentage to Bicycle Projects	Total Funding to Bicycle Projects	Percentage to County	Total Bicycle Funding to County for Regional Projects	Annual Bicycle Funding to County for Plan Implementation
State and Federal Sources	$1,200,000,000	5%	$60,000,000	100%	$60,000,000	$3,000,000
Measure B Reauthorization	$1,400,000,000	5%	$70,000,000	25%	$17,500,000	$875,500
TFCA (Program Manager Funds)	$30,000,000	5%	$1,500,000	75%	$1,125,000	$56,250
TFCA (Regional Funds)	$24,000,000	30%	$7,200,000	40%	$2,880,000	$144,000
Competitive Funds (BTA, etc)	N/A	N/A	N/A	N/A	$0 to $20,650,000	Up to $1,032,500
Total (rounded)					$80-105 million	$5,000,000
Discussion of funding total:	This total is an estimate, based on the following assumptions: 1) Funding sources will remain constant throughout the 20-year period. It should be noted that the next federal reauthorization bill may provide greater or lesser amounts of funding, and state sources may vary with the state's economic health and policies. 2) These programs will remain constant throughout the 20-year period. Funding programs are subject to changing political climates, and programs discussed above may not exist in their current forms throughout this period. 3) The reauthorization of Measure B passed in November, 2000. In addition, sales tax revenues may vary based on the economic health of the county. 4) These figures are in FY 2000 constant dollars and are not adjusted for inflation. 5) Alameda County will continue to be successful in obtaining grants from local, state, and federal sources.					
Source: Alameda County Congestion Management Agency, Pittman & Hames Associates						

PRIORITIZATION OF PROJECTS

Because the total cost to implement the capital projects is $190 million and only $80-105 million is estimated to be available over the next 20 years, the projects were prioritized. Three key aspects of each project were considered in the prioritization process, as follows:

1. Benefit to bicyclists- this includes projects that improve mobility, connectivity and/or safety issues;
2. Project cost- this includes net construction cost after considering other committed funds, if any, and the potential for special funding partnering opportunities, etc.; and
3. Project readiness- this includes whether or not it is included on other plans, has demonstrated public support, has completed design plans, has completed environmental documentation, or is in an environmentally sensitive area.

Prioritization Criteria

A project's benefit in improving bicycle transportation was then assessed using the following prioritization criteria:

1. The number of bicyclists served

Improves routes with high existing or potential demand.

2. The potential to reduce auto dependency

Improves routes that serve areas or activity centers where a large proportion of the population does not have access to automobiles, e.g. low income persons, the elderly and junior high and/or high school students.

3. Accident reduction potential/safety improvements

Improves a safety problem or obstacle, improves a route with narrow lanes or shoulders, improves a route with high vehicle volumes or high speeds.

4. Gap closure

Closes gap in a route or otherwise eliminates circuitous travel; e.g. bike bridge or connecting path, such as through a park, or provides missing link or an extension of an on-street bikeway, e.g. bike lanes on last section of arterial with otherwise continuous bike lanes.

5. Intermodal connectivity

Improves routes that serve multi-modal or transit stations including BART, Amtrak, Ferry Terminals, major bus hubs.

Description Of High Priority Capital Projects

Each of the projects was rated high, medium or low against these five criteria. Based on the above criteria, 27 high priority projects were identified. These are summarized in Table 5-5 and are illustrated in Figure 5-1. The priority screening of all projects is presented in Appendix E-3 and a brief description of each project is included in Appendix E-4.

The cost to implement the 27 high priority projects is estimated to be $105 million, including construction, design, administration and contingencies. This includes 7 new pedestrian bicycle overcrossings or bridges, the completion of the Bay Trail in northern Alameda County, the Iron Horse and Alamo Canal Trails in the Tri-Valley and numerous on-road segments of bikeways and arterial improvements.

The high priority projects will be evaluated individually at the time the funding application is submitted, to determine which projects to implement first, depending on the specifics of the funding availability, project cost and project readiness. Project cost will be ranked high, medium or low after considering other committed funds, if any, and the potential for special funding partnering opportunities. Project readiness includes such

Table 5-5
HIGH PRIORITY PROJECTS

Project #	Name	Corridor #	Total Cost
1	Bay Trail - Northern Alameda County	5	$2,806,515
3	Fruitvale-Broadway	10	$3,067,741
5	73rd Avenue-Hegenberger	20	$3,765,353
6	Berkeley-Emeryville I-880 corridor	25	$2,332,721
7	Oakland I-880 Corridor	25	$2,178,235
8	BART Trail/San Leandro St	25	$5,653,700
9	Southern Alameda County I-880 Corridor	25	$6,610,743
10	Davis -Estudillo-Crow Canyon Road	30	$7,293,554
11	Northern Alameda County-I-580-Foothills-	35	$4,626,152
13	Southern Alameda County-I-580-Foothills-	35	$7,048,378
14	Highway 92 Corridor	40	$2,135,234
15	E. Castro Valley Blvd- Dublin Canyon	40	$2,845,427
20	Las Positas Creek Trail	40	$2,952,326
22	Highway 13 Corridor	45	$3,543,072
23	Stoneridge Blvd	50	$1,723,972
24	Stoneridge Blvd-Jack London Connection	50	$3,979,232
28	San Ramon-Foothill Rd-I-680 Corridor	65	$5,735,928
29	Iron Horse to Shadow Cliffs Trail	65	$4,568,200
33	Dougherty - Hopyard Roads	75	$3,006,838
34	Iron Horse Trail	75	$5,220,800
41	Damon Slough Bridge	5	$1,300,156
42	San Leandro Slough Bridge	5	$1,300,156
44	42nd Avenue Bridge	25	$1,300,156
45	Hegenberger Undercrossing	25	$1,300,156
46	Emeryville Ped/bike Overcrossing	45	$6,500,780
47	Highway 24 Ped/bike Overcrossing	45	$6,500,780
51	Oakland-Alameda Connection	15	$6,500,650
		Total Cost	**$105,796,954**

NOTES:
1. See Appendix E-2 for Unit Cost Assumptions.
2. Total Cost includes 30% for design and administration and contingencies. Does not include right-of-way acquisition or factors for inflation.

issues as whether or not it is included on other plans, has demonstrated public support, has completed design plans, has completed environmental documentation or is in an environmentally sensitive area, and has commitments for full funding.

NEXT STEPS AND ISSUES TO BE RESOLVED

While this document represents the final product of this study, this plan is not the end. It is the beginning of providing improved conditions for bicyclists in Alameda County. The numerous capital projects recommended in this plan will take many years to implement even considering the funding scenario outlined in this chapter. The future will entail implementing the specific recommendations of this plan and also addressing other issues to help bicycling to reach its full potential as a transportation mode. The following discussion identifies an implementation process, other issues that need to be addressed and in some cases recommends actions and next steps that will help in plan implementation and coordination. The Countywide Bicycle Plan is dynamic will be updated on the same schedule as the Countywide Transportation Plan (every two years) in the event that project status changes or new projects need to be added.

Establishment of a Countywide Bicycle Coordinator

One of the most significant steps that can be taken to implement this plan is to create a County Bicycle Coordinator position whose primary responsibility would be to coordinate the implementation of the capital projects and to be responsible for the recommended programs. The Bicycle Coordinator would also be responsible for participating in countywide bicycle promotional activities such as Bike to Work day, working with employers to encourage bike commuting, and working with transit agencies to maximize bicycle access. The Year 2000 Measure B Expenditure Plan provides funding for a countywide bicycle coordinator but it does not specify where such a position would be in the County.

Establishment of a Countywide Bicycle Advisory Committee

An ongoing countywide Bicycle Advisory Committee (BAC) is recommended to assist and advise the Bicycle Coordinator on project implementation and other issues that arise at the county level affecting bicycle circulation and safety. This BAC will also be able to fulfill the role required by MTC to “review plans and prioritize” projects that receive TDA funding. Existing established countywide BAC’s exist in Santa Clara County, San Francisco County and Contra Costa County. It will be necessary to determine exactly how the BAC could serve the latter broader function given the three countywide agencies that are responsible for countywide issues: the ACCMA, ACTA and the County Public Works Agency.

Responsible Agencies - Capital Projects

The projects in the Bicycle Plan will require a local agency to be the lead agency in designing and constructing the recommended improvements. Some of these projects may require further study, more public input, and/or the local City Council (or Board of Supervisors) approval before being constructed. As further evaluations are made of the projects in this Plan, the recommendation outline in the plan may need to be modified. In turn, the local agencies will need to be officially notified that funds are available to implement the countywide network.

Responsible Agency - Programs

The signage program will probably involve the retention of a consultant specializing in sign design. This could be managed either by the new Countywide Bicycle-Coordinator, the County, the CMA or possibly even a local agency acting on behalf of the County.

The Parking program involves providing funds to member agencies to use for their own parking projects. It could also be managed by the Bicycle Coordinator. The maintenance program is similar but is oriented toward maintaining the countywide bicycle network that traverses through the local agencies. The Education Program is more involved and may require the acquisition of grant funding to hire a specific staff person to run the program, as was done in Contra Costa and San Francisco Counties.

Other Bicycle Issues

Several issues were identified during the course of this study that need to be addressed to help to bicycling reach its full potential as a transportation mode. These issues include:

- Transportation studies vary considerably in considering bicycling and developments' impacts on bicycling conditions; a regionwide or countywide guideline for addressing such impacts could be developed.
- Bicycle counts on roadways and paths could be conducted on a regular basis to monitor bicycle conditions.
- Surveys of bicyclists should be conducted to determine characteristics regarding bicycle use:
  - Accurate mode split data is only available from census data every ten years; RIDES annual surveys could be augmented to address the walk and bike split.
  - Access mode to transit is excluded from census data and other mode split data.

- Bicycle and pedestrian collision data is inconsistent from city to city in terms of:
  - reporting non-injury collisions
  - determining cause of collision
  - determining party-at-fault
- Oftentimes bike access to transit is inhibited because BART or other transit providers restrict access or the system is at or near capacity.
- It is acknowledged that there is divided opinion among bicyclists on the merits of share the road signs, and on the roads chosen to use it. There is also no consensus on the design of the sign itself. This is an outstanding issue and should be addressed as part of the Countywide Signing Program.
- Safe and convenient bicycle routes should be provided to all regional transit stations in order to maximize bicycling's contribution to reducing congestion and to serve those without access to motor vehicles. If such routes have not been addressed in local city plans, a "Non-Motorized Access to Transit" study should be conducted to ensure that all BART, ACE, AMTRAK and other regional transit stations in the County can be safely accessed by bicyclists of all ages and abilities.