



# COUNTYWIDE ACTIVE TRANSPORTATION PLAN



# 4

# TAKING ACTION

June 2019

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# 1 | Plans, Programs, and Policies

This chapter documents local jurisdiction plans, policies, and programs related to active transportation. This chapter also summarizes issues identified by local jurisdictions, national and county best practices, and areas of focus for the future. Chapter 2 discusses Plan costs and potential revenue sources for implementation of bicycle and pedestrian projects and programs. Chapter 2 also discusses the updated cost estimation tool developed as part of the Plan.

Through the different programs and adopted policies, Alameda CTC advances the goals of the Plan by encouraging and promoting the use of active transportation. Through the Plan, Alameda CTC aims to provide the adequate support and resources for its member agencies in regards to exchange of ideas about best practices in active transportation design and coordination. Details of the existing countywide programs and Alameda CTC adopted policies are presented below.

## 1.1 Countywide Policies and Programs

### **Safe Routes to Schools (SR2S) Program**

The Alameda County Safe Routes to Schools (SR2S) Program, administered by Alameda CTC, promotes and teaches walking, biking, carpooling and transit use as viable, safe modes of transportation for students and families to travel to/from school. Over 200 public elementary, middle, and high schools in the county are currently enrolled in the program. In 2016, Alameda CTC adopted a set of goals that refocused the program on activities that most affect behavior changes, increase mode shift, and reinforce the program's commitment to increased safety.

The program offers a menu of activities for schools enrolled in the program, which include educational/training activities, such as pedestrian or bicycle rodeos, bike mechanics training, mobile bike repair, on-the-bike safety education, school assemblies. In addition, the program offers support for creating Walking School Buses, and countywide encouragement events such as the Golden Sneaker Contest, International Walk and Roll to School Day and Bike to School Day.

Once enrolled in the program, schools are eligible to receive support from a school site coordinator who works with the school to assist in organizing and scheduling activities. Schools are also eligible to receive school safety assessments and technical assistance to identify and address safety concerns around the school. In addition, program staff works closely with local jurisdiction staff to coordinate and leverage local Safe Routes resources, and leadership from Alameda CTC has made implementation of SR2S easier for jurisdictions that would otherwise not be able to provide such programming.

The SR2S Program will continue to play an important role in meeting the goals of the Plan, encouraging students to walk and bike to school. Additionally, the safety assessment and technical assistance offered by the program help target infrastructure improvements that increase safety and multimodal connectivity near schools.

### **Student Transit Pass Program**

Alameda CTC is currently managing a three-year Affordable Student Transit Pass Pilot program which distributes free transit passes to students in Alameda County. Twenty-one middle and high schools throughout the county are participating during the third and final year of the pilot. Based on successful results from the evaluation of the pilot, the program has been approved to continue beyond the pilot



period; it will be expanding to over 50 schools in the 2019/20 school year. At most eligible schools, free bus passes will be available to all low-income students. The Student Transit Pass Program (STPP) will continue to play an important role in encouraging students to walk and bike to transit.

Efforts are currently being made to integrate the SR2S and the STPP into one comprehensive Student Travel Opportunities Program to offer a full suite of non-driving options to children throughout Alameda County.

### **Bicycle Safety, Outreach, and Encouragement Programs**

Alameda CTC encourages bicycling through promotional efforts and has collaborated on the county's annual Bike to Work Day and Bike to School Day events by contributing funding to and co-managing a visual promotion campaign that encourages bicycling in Alameda County. Alameda CTC also manages a Bicycle Safety Education Program described below.

- Bike to Work and School Day Promotions: Alameda CTC encourages bicycling through promotional efforts and has collaborated on the county's annual Bike to Work Day and Bike to School Day events, held in May of each year, by contributing funding to and co-managing a visual promotion that encourages bicycling in Alameda County.
  - IBike Visual Promotion: The IBike visual promotion promotes bicycling as a safe and healthy transportation and commute choice. It includes ads showing bicyclists riding for a variety of trip purposes—work, shopping, health, and quality of life, including access to transit. Since 2008, Alameda CTC has collaborated with Bike East Bay to develop and run ads from mid-April through May to correspond with the annual Bike to Work Day events.
- Bicycle Safety Education Program: Every year, the Alameda County Bicycle Safety Education Program educates approximately 4,000 adults, teenagers, and children in safe bicycle riding techniques. The program encourages bicycle riders to ride their bicycles with greater control and awareness to enhance their travel safety.

These programs support plan goals by teaching people safe behavior while biking and encouraging people to bike for a variety of purposes.

### **Complete Streets Policy**

Complete Streets are roadways planned, designed, operated, and maintained for safe and convenient access by all users—including bicyclists, pedestrians, people with disabilities, transit riders, and drivers—and in ways that are appropriate to the function and context of the facility. Since 2013, Alameda CTC has required that each jurisdiction adopt a Complete Streets policy to access project funding from local sales tax and vehicle registration fees.

The Complete Streets policy supports plan goals by improving safety and connectivity for all modes.

### **Safety Policy Support**

There is an increasing recognition of safety in the field of transportation planning, especially for vulnerable roadway users like pedestrians and bicyclists. In particular, there is a policy that is gaining momentum nationally called "Vision Zero." It fundamentally shifts transportation planning and design towards the goal of eliminating all traffic fatalities and serious injuries. Communities who adopt Vision Zero as a policy direction commit to working towards this safety goal by developing and adopting an action plan for this purpose. This is an emerging policy area in Alameda County and throughout the United States. Communities are beginning to identify streets that have a high incidence of collisions, injuries and fatalities

and prioritize projects to address these critical safety needs. Often a high proportion of severe and fatal collisions occur on a very small subset of streets.

To that end, the Plan has identified Alameda County's first countywide High-Injury Network and developed local HIN for use by jurisdictions (see Book 2, The State of Biking and Walking in the County). Although Alameda CTC is not considering adopting a Vision Zero policy at this time, the countywide and local high injury networks are a resource that local jurisdictions can use.

### **Interagency Communication**

Through staff interviews conducted as part of the Plan and Technical Advisory Committee (TAC) meetings, one theme that emerged was a desire to improve interagency communications. Alameda CTC currently uses the Alameda County Technical Advisory Committee to disseminate information on grant opportunities and Alameda CTC discretionary funding, and to share technical information and resources with local jurisdictions and agencies. At the local level, there is not a comprehensive formal communication structure between City and agency staff in Alameda County. In most cases, communication between the staff of local jurisdictions, transit agencies, and regional planners often hinges on ad-hoc communication structures.

From 2007 to 2016, Alameda CTC hosted regular meetings of a ped/bike working group. Members of that group presented and received updates on local projects and grant application resources to address issues faced by local jurisdictions related to active transportation planning. Alameda CTC could consider supporting a similar countywide bike/ped forum to facilitate information sharing for member agencies, to be convened on an as-needed basis. Such a forum could help enhance communication and coordination between jurisdictions especially regarding the implementation of local innovative projects.

## **1.2 Local Jurisdiction Plans**

Local bicycle and pedestrian plans, or combined active transportation plans, set the framework for developing infrastructure, programs, policies and practices that make communities better for walking and biking. Nearly all local jurisdictions in Alameda County have up-to-date plans, and others are in the process of updating them (as of May 2019). This Countywide Plan does not supersede local plans but supplements them by providing further analysis and resources for jurisdictions to use in implementation. Local jurisdictions are responsible for designing, constructing, and maintaining their facilities. The status of local jurisdictions' active transportation-related plans is documented below.

## List of Existing Active Transportation Plans

Document	Update in Progress	Year
BART Walk and Bicycle Network Gap Study	X	-
City of Alameda Pedestrian Plan		2009
City of Alameda Bicycle Master Plan	X	2010
Albany Active Transportation Plan		2012
Berkeley Pedestrian Master Plan	X	2010
Berkeley Bicycle Plan		2017
City of Dublin Bicycle and Pedestrian Master Plan		2014
City of Emeryville Pedestrian and Bicycle Plan		2017
City of Fremont Bicycle Master Plan		2018
City of Fremont Pedestrian Master Plan		2016
City of Hayward Bicycle Master Plan	X	2007
City of Livermore Active Transportation Plan		2018
City of Newark Bicycle and Pedestrian Master Plan		2017
City of Oakland, Oakland Walks! Pedestrian Plan Update		2017
City of Oakland Bicycle Master Plan	X	2007
Metropolitan Transportation Commission (MTC) Regional Bike Plan		
Piedmont Pedestrian and Bicycle Master Plan, 2015-2024		2014
Pleasanton Bicycle and Pedestrian Master Plan		2018
City of San Leandro Bicycle and Pedestrian Master Plan		2018
City of Union City Pedestrian and Bicycle Master Plan		2012
Alameda County Bicycle and Pedestrian Master Plans for Unincorporated Areas	X	2012
UC Berkeley Campus Bicycle Plan		2006
BART Bicycle Plan Modeling Access to Transit		2012
East Bay Regional Parks District Master Plan		2013
Caltrans District 4 Bicycle Plan		2018
Caltrans District 4 Pedestrian Plan	X	2019
City of Fremont Trails Master Plan	X	2019



### 1.3 Local Jurisdiction Policies and Programs

More people choose to walk and bike when communities have safe, convenient, and comfortable places to do so, when there is safe, convenient access to transit, and when there are policies and programs that encourage walking and biking. In order to understand how each jurisdiction plans and implements safe and attractive walking and biking environments, the project team conducted interviews with local agency staff.<sup>1</sup> These interviews included specific questions about local policies and programs related to encouraging active transportation commute, recreational, and personal trips. The results of these interviews are shown below.

#### Policies and Programs by Jurisdiction from Jurisdiction Staff Interviews

Jurisdiction	Vision Zero Policy	Complete Streets	Local Safe Routes to School*	Local Bicycle Safety Education	Safe Routes to Transit	Walkable Neighborhoods for Seniors	Transportation Impact Fee
ACPWA	Under consideration	X	X	X	X	X	X
Alameda (City of)	Planned	X		X			X
Albany		X	X	X			Small capital facilities fee
Berkeley	Action coming in 2019	X					X
Dublin		X	X				In select areas
Fremont	Policy (2015) Action Plan adopted (2016)	X	X	X			X
Hayward		X					Under consideration
Livermore		X	X	X			X
Newark		X					X
Oakland	Has taken steps to implement	X	X	X	X		X
San Leandro		X	X	X	X		Part of Development Fee

Source: Interviews with City staff, online resources, and Technical Advisory Committee input.

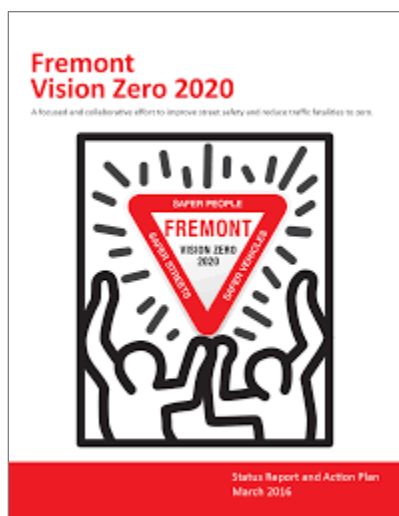
<sup>1</sup> Interviews were not conducted with Emeryville, Piedmont, Pleasanton, or Union City due to agency staff availability.

Policies for Safe Routes to School and Complete Streets are most common and well-established among the jurisdictions in Alameda County. Other programs focus on providing specific audiences (seniors) or destinations (transit) with safe walking and bicycling access or Vision Zero. Two of these programs and policies are described in further detail below.

### Complete Streets

All jurisdictions in Alameda County have an adopted complete streets policy, though each has integrated the policy into their project development process in different ways.

For example, the City of Alameda does not have an official procedure to identify complete streets projects, but staff and advocacy groups work together to move multimodal projects forward. In the City of Dublin, the policy has been an effective way to include pedestrian crossings on all intersection approaches for projects and helps leverage projects with development.



### Vision Zero

Within Alameda County, Fremont is the only city with a formally adopted Vision Zero policy (2015) and Action Plan (2016). Oakland's goal is to adopt a Vision Zero policy, and its Department of Transportation has taken steps towards this by creating a multimodal High Injury Network, hiring a Vision Zero Program Manager, and creating a Vision Zero Taskforce. The City of Berkeley is currently working towards a Vision Zero initiative.

## 1.4 Issues Identified by Local Jurisdictions

During interviews conducted with local agency staff and transit agencies, four topics were discussed to identify issues commonly faced by local jurisdictions:

1. Uses of the countywide plan for local jurisdictions
2. Addressing gaps in network connectivity and funding
3. Best practices and training
4. Coordination and staff capacity

Local staff also suggested actions that Alameda CTC could take to address issues commonly experienced across Alameda County. These suggestions are listed under the following sections.

### Uses of the Countywide Plan for Local Jurisdictions

Resources provided in the 2012 Countywide and Bicycle and Pedestrian Plans were structured around furthering countywide priorities. These priorities were related to network buildout; improved access to transit, central business districts, and trails; and countywide programming. For most jurisdictions, the previous plan was primarily used for grant applications to show consistency with countywide documents.

Local jurisdictions recommended the following actions to increase the utility of the Countywide Plan for local jurisdictions:

- Create a forum to enhance communication and coordination between jurisdictions especially regarding the implementation of local innovative projects
- Develop a framework for evaluating equity considerations
- Identify larger projects across jurisdictional boundaries that Alameda CTC can lead in collaboration with local jurisdictions
- Develop public-facing communication tools to explain new types of designs, treatments, and facilities
- Update the Alameda CTC Bicycle and Pedestrian Demand tool to include new facilities and recent research to assist with grant applications for planned projects

### Addressing Gaps in Network Connectivity and Funding

Local jurisdiction staff were asked about bicycle and pedestrian network gaps and barriers in and near their jurisdictions. The primary physical barriers to bicycle and pedestrian planning include freeways, bridges, waterways, gaps in the major trails, railroads, parking lots, on street parking, lighting, and personal security. Additionally, multiple jurisdictional staff indicated that they have been unable to implement some new trails because there is no available budget for operations and maintenance. The cost of maintenance of local roadways and bikeways was also cited as a barrier to bicycling in many communities. Some staff specified that maintaining the system in a state of good repair is difficult because maintenance projects do not often compete well against funding for new capital projects.

Local agency staff recommended the following actions to address issues with network connectivity:

- Identify projects or feasibility studies that focus on freeway crossings, regional routes that connect jurisdictions, a complete East Bay Greenway and Bay Trail, and connections that enhance access to regional trails

- Consider conducting studies to address storing more than three bicycles on transit buses, and the possibility of a water shuttle between Oakland and Alameda
- Provide funding for operations and maintenance of regional trails
- Provide guidance and funding for maintenance of on-street bicycle facilities

### Best Practices and Training

Currently, local jurisdictions rely largely on a select number of design guidelines including the *California Manual of Uniform Traffic Control Devices* (CA MUTCD), *Caltrans Highway Design Manual*, and adopted local standards as part of existing active transportation-related plans. Many jurisdictions indicated that they also use national best practice design guidance from the National Association of City Transportation Officials (NACTO) and the American Association of State Highway and Transportation Officials (AASHTO). While staff do reference design guidance for complete streets and bikeways, many jurisdictions stated that issues often arise when designing facilities for interactions with transit operations (see list below for more information about design guidelines for interaction with transit).

Local staff recommended the following actions to address issues with state of the practice:

- Provide resources and education/trainings on best practice treatments. This could include sample designs, new types of emerging infrastructure such as protected intersections, bus stop islands, road diets, and protected bike lanes. Additionally, resources on maintenance practices for resurfacing, repaving, and Class IV bikeways were requested.
- Ensure trainings are not just focused on technical designs but also include topics such as best practices in public outreach and engagement
- Identify best practices for working with fire departments and addressing their needs through design
- Coordinate trainings related to the design of bicycle and pedestrian treatments along transit corridors. This may include facilitating a joint meeting with AC Transit on their recently adopted *AC Transit Multimodal Corridor Guidelines* (2018).
- Provide guidance on bicycle parking standards to improve end-of-trip facilities consistently across the county
- Encourage the use of new and innovative design guidance including, but not limited to:
  - *Alameda CTC Central County Complete Streets Design Guide*
  - *AC Transit Multimodal Corridor Guidelines*
  - *AASHTO Guide for the Development of Bicycle Facilities*
  - *NACTO Urban Street Design Guide*
  - *NACTO Transit Street Design Guide*
  - *NACTO Urban Bikeway Design Guide*
  - *Caltrans Highway Design Manual*
  - *California Manual on Uniform Traffic Control Devices (CA MUTCD)*
  - *Caltrans Design Information Bulletin, Separated Bikeways*
  - *Caltrans Design Information Bulletin, Caltrans ADA Standards*

## Coordination and Staff Capacity

Local jurisdiction staff were asked how their jurisdiction collaborates in planning and implementation of active transportation projects with adjacent communities and local agencies, such as transit providers and East Bay Regional Park District. Responses varied widely from cross-jurisdictional membership on Technical Advisory Committees, to ad-hoc conversations for projects that are located at jurisdictional boundaries. While these means can be generally effective, many interviewees expressed interest in developing better, more formalized avenues for communication. This was especially the case for transit agencies and for jurisdictions that border other counties. In particular, coordination with transit agencies at an earlier stage in the design process may enable better collaboration and result in designs that support more effective transit operations on street reconfiguration projects.

Most of those interviewed also mentioned limited staffing as an implementation challenge. This challenge is due to lack of adequate staff hours to devote to active transportation planning and projects and due to keeping staff up-to-date with best practice knowledge in this rapidly evolving field.

Local jurisdictions recommended the following actions to address staffing and capacity:

- Provide technical assistance programs and consultant support to encourage better complete streets implementation, assist with the establishment of multimodal transportation impact fees, and assist with grant applications including concept designs
- Alameda CTC could host webinars, such as Association of Pedestrian and Bicycle Professionals (APBP) webinars, as continuing education and networking opportunities. Follow-up discussions could be incorporated on lessons learned and applications in Alameda County.

## 1.5 Best Practices and Industry Trends

Alameda County jurisdictions are leaders in forward-thinking transportation programs and policies, as was evident from their stakeholder interviews. However, there are always new policies and programs to help implement and support the region's active transportation network. This section identifies new national best practice trends and strategies that Alameda CTC and local jurisdictions can pursue. Additionally, innovative local jurisdiction best practices are included to celebrate what Alameda County is already doing well.

### 1.5.1 National Best Practices

State of the practice strategies are presented below to identify ways in which Alameda CTC can continue to support local jurisdictions and the region. While Alameda CTC currently provides many resources to local agencies, Alameda CTC can continue to be a leader in active transportation by evaluating the potential to address the following national best practice topic areas:

- Health
- Shared and Micro-Mobility
- Access to Transit
- Transportation Demand Management
- Integration with Transit on Multimodal Corridors
- Equity

## Health

Incorporating health into active transportation planning can be accomplished by focusing more on short trip opportunities that allow people to choose to walk or bicycle safely and conveniently. The American Public Health Association recognizes that obesity, asthma, and heart disease are all on the rise, and the way in which we travel can play a large part in shaping how we address lifestyle-related diseases such as these. Several tools exist, described here.

- Health Impact Assessments:** Health Impact Assessments (HIA) are a process that was developed by the Center for Disease Control as part of the Healthy Community Design Initiative. While the program is no longer funded, many of the resources to complete a HIA are still available. The Atlanta Regional Plan 2040 and MetroPlan Orlando both represent a small number of Metropolitan Planning Organizations (MPOs) that have participated in the program. Example projects identified as part of the initiative include Bus Rapid Transit project in Orlando and recommendations to increase funding for pedestrian, bicycle, and transit projects relative to road capacity projects.  
Resource Link: <https://www.cdc.gov/healthyplaces/hia.htm>
- Integrated Transportation and Health Impact Model (ITHIM):** These types of models integrate health into planning activities by predicting the impacts of transportation system changes on the physical activity, air pollution, crashes and injuries, and carbon emissions. The Nashville Area MPO used the ITHIM outputs to show the health impacts of adding walking and/or bicycling elements in 77% of funded roadway projects. This helped to convince local stakeholders and government officials to invest in active transportation projects that support healthier communities.  
Resource Link: <https://www.ncbi.nlm.nih.gov/pubmed/27595067>
- Livable Communities:** AARP's Livable Communities Initiative provides resources to promote active, healthy living for seniors and all age groups. Their goal is to create a network of age-friendly states and communities across the United States. Berkeley and Emeryville have both participated in evaluations from the program. The Age-Friendly Sarasota County Action Plan 2017-2020 in Florida included recommendations to increase bike-sharing services near a popular trail and to improve public bus stops by incorporating seating and shelters.  
Resource Link: <https://www.aarp.org/livable-communities/>

## Shared and Micro-Mobility

Emerging transportation options are beginnings to proliferate across Alameda County. These include the use of dockless and docked bike share systems, electric scooter shares, car-sharing (traditional, one-way, and peer-to-peer), and other integrated on-demand mobility services. While most regional agencies are not actively engaged in planning for shared- or micro-mobility options, some have begun to put policies in place to help create a process to evaluate safety and usage in their jurisdictions. Alameda CTC could play a role in helping provide resources for jurisdictions to consistently address shared and micro-mobility issues throughout the county.

- Scooter Share Evaluation and Programming:** The San Francisco Metropolitan Transportation Authority (SFMTA) created the Powered Scooter Share Permit and Pilot Program which evaluated 12 different applications from scooter share companies. As part of the pilot program, SFMTA requires powered scooter operators to obtain a permit to be able to park scooters on sidewalks and in public spaces. The Cities of Fremont and Oakland have also developed bike and scooter sharing permit programs. Fremont's program is beginning with a pilot year in 2020, and Oakland's program is currently operating.  
Resource Link: <https://www.sfmta.com/projects/powered-scooter-share-permit-and-pilot-program>



- **Bike Share Programmatic Recommendations:** The Contra Costa Transportation Authority's Countywide Bicycle and Pedestrian Plan laid the countywide programmatic foundation for encouraging docked and dockless bike share opportunities at the local level in Contra Costa. Guidance was provided on bike station development and describes some of the benefits and concerns for local jurisdictions to consider. The plan also includes a directive to help develop a coordinated approach to bike share across Contra Costa County.

Resource Link: <http://keepcontracostamoving.net/>

## Access to Transit

As growth increases and traffic congestion worsens, it is becoming more important than ever to provide walking and biking options to regional transit to provide viable alternatives to driving. In Alameda County, transit service is provided by several agencies including major regional operators like the Bay Area Rapid Transit (BART) District and bus operators such as Alameda-Contra Costa Transit District (AC Transit). These agencies generally do not have implementing authority within local jurisdictions and could greatly benefit from county or regional projects to improve transit station/stop access. Alameda CTC could lead or partner with operators on a study to consistently evaluate station and transit stop access across the county, supplementing past and current efforts conducted by agencies or local jurisdictions themselves.

- **First and Last Mile Station Access Planning and Evaluation:** The Los Angeles County Metropolitan Transportation Authority's (LA Metro) Active Transportation Strategic Plan evaluated first and last mile access to transit for 661 transit stations areas across the region. As part of the plan, an online map detailed station area existing conditions metrics and highlighted proposed active transportation-related infrastructure and programmatic recommendations.

Resource Link: <https://www.metro.net/projects/active-transportation-strategic-plan/>

- **Regional Rail System Access:** Sound Transit plans and operates Light Rail and buses throughout the greater Seattle-Tacoma region in Washington State. Sound Transit is evaluating street curb space, pedestrian facilities, off-street parking, and other transit facilities within one mile of 75 stations to provide recommendations specifically focused on station access for regional transit.

Resource Link:

[https://www.soundtransit.org/st\\_sharepoint/download/sites/PRDA/FinalRecords/180712%20System%20Access%20Strategic%20Plan.pdf](https://www.soundtransit.org/st_sharepoint/download/sites/PRDA/FinalRecords/180712%20System%20Access%20Strategic%20Plan.pdf)

## Transportation Demand Management

Transportation demand management (TDM) encompasses a suite of strategies intended to reduce vehicle miles traveled. TDM policies are often implemented at the project level, as local conditions of approval for a development. Common TDM measures include a reduction in parking spaces, provision of additional bicycle parking and amenities, subsidized transit passes, improvements to local walking conditions, TDM measures encourage active transportation typically both by increasing the marginal costs for driving and by enhancing the conditions for walking or biking directly.

## Integration with Transit on Multimodal Corridors

Coordination projects such as the San Pablo Avenue Multimodal Corridor Project and the East 14<sup>th</sup> Street Mission and Fremont Boulevard Multimodal Corridor Project illustrate how corridors can be designed to take competing demands into consideration. Engagement with all stakeholders throughout the planning process is key to ensure that needs for all users are met. Key design elements like transit boarding islands with bike ramps and appropriately sized stops with accessible features can integrate transit operations with the needs of active transportation users and support transit ridership with walking or biking connections.

## Equity

Incorporating equity into transportation projects involves making concerted efforts to include communities and community-based organizations that may not normally participate in transportation projects. As part of the 2016 Alameda CTC Countywide Transportation Plan (CTP), equity was analyzed using a variety of metrics to understand the impacts of the transportation system on historically disadvantaged or underrepresented groups. While evaluating equity impacts is a critical component of equitable decision making, additional methods for addressing outreach can be incorporated into projects led by Alameda CTC and jurisdictions or guidance can be prepared to include additional criteria when evaluating which active transportation projects to fund in Alameda County.

- Community-based Organization Partnerships:** As part of the California Department of Transportation's (Caltrans) District 4 Bike Plan, Caltrans partnered with multiple community-based organizations from across the region to help lead events and take ownership of the planning process. The community-based organizations included groups such as Rich City Rides (Richmond), Cycles for Change (Oakland), and First Community Housing (San Jose). These groups were responsible for leading focus groups that addressed barriers to bicycling and identifying priority improvements. Community based organizations can be project partnerships through the development of outreach toolkits so that they can lead meetings, be included on technical advisory committees, join or lead workshops, and can even be given stipends to participate in projects.  
Resource Link: <http://www.dot.ca.gov/d4/bikeplan/>
- Disadvantaged Communities Planning Initiative:** The Southern California Association of Governments (SCAG) is leading an effort to develop six active transportation plans in disadvantaged communities. The project is also creating a pilot program to develop an innovative planning methodology to help deliver low-cost, local plans throughout the region. This initiative will develop needs assessments that will drive localized recommendations.  
Resource Link: [http://scag.granicus.com/MetaViewer.php?view\\_id=&event\\_id=418&meta\\_id=24463](http://scag.granicus.com/MetaViewer.php?view_id=&event_id=418&meta_id=24463)
- Community-Based Organizations as Partners:** Oakland DOT's work partnering with local community-based organizations (CBOs) in development of its bike plan is already being hailed as a national best practice. This effort is explained further below in the local best practices section.

### 1.5.2 Alameda County Best Practices

Local jurisdictions across the County have been actively advancing the practice of active transportation planning and implementation using new facility design treatments and refocusing on planning projects to address safety. Alameda CTC helps to assist these local efforts by also providing tools and programs to help move projects forward or compete for grant funding. The jurisdictions below represent a small sample of best practices that were identified by peer staff during the local jurisdiction interviews. Cities throughout Alameda County are advancing the state of the practice; those programs and policies highlighted below are a selection of the work being carried out by local jurisdictions and agencies.

#### 1.5.2.1 Alameda CTC


##### Alameda CTC Bicycle and Pedestrian Demand Tools

To assist local jurisdictions with applying for grant applications, Alameda CTC developed a Bicycle and Pedestrian Demand Forecast Tool in 2015. This excel-based tool has been used to estimate demand on facilities across Alameda County. Elasticities used in the tool are based on the relationship between the level of bicycle infrastructure present and the level of bicycle commute mode share. Pedestrian elasticities are based on walk commute mode share compared with land-use and demographic variables.

Resource Link: <https://www.alamedactc.org/wp-content/uploads/2018/11/DemandForecastTool.zip?x33781>

## Alameda CTC Bicycle and Pedestrian Cost Estimating Tool

A Network Cost Estimating Tool was developed in 2015 to provide countywide consistency in how costs for bicycle and pedestrian are estimated at the planning level. The tool was updated as part of the Plan and is recommended for use during the development and review of active transportation plans, bicycle master plans, pedestrian master plans, and specific plans. It can also be used in a sketch-planning fashion for conceptual project estimates. Alameda CTC should update the tool with recent bid prices to make it as user-friendly as possible for jurisdictions.

 ATP Network Cost Estimating Tool

<b>Project:</b> [insert project name]						
<b>Project Description:</b> [insert brief project description]						
<b>Prepared by:</b> [insert name of preparer]						
<b>Date:</b> 5/29/2019						
Item #	Description	Units	Quantity	Unit Cost	Cost	
<b>Facilities</b>						
1	Class I Shared Use Path – Extension	per mile	2.5	\$ 2,169,169	\$	5,422,923
2	Class II Bike Lane	per mile	4.2	\$ 86,082	\$	361,546
3	Class II Buffered Bike Lane	per mile	5	\$ 182,453	\$	912,265
4	Class III Bike Boulevard	per mile	10	\$ 264,051	\$	2,640,513
5	Class IV Separated Bikeway - Soft Hill Posts	per mile	8.1	\$ 237,273	\$	1,921,912
6	Class IV Separated Bikeway - Parking Protected Bike Lane	per mile	0.7	\$ 215,910	\$	151,137
7	Sidewalk - 5-foot	per mile	4.2	\$ 1,204,632	\$	5,059,454
8	Pedestrian Scale Lighting	per mile	2.5	\$ 704,246	\$	1,760,616
<b>Project Elements</b>						
9	Standard Sign	Each	24	\$ 948	\$	22,745
10	ADA Curb Ramp	Each	4	\$ 4,739	\$	18,954
11	Raised Intersection	Per Intersection	1	\$ 157,950	\$	157,950
12	Bicycle Detection - Loops	Per Approach	16	\$ 2,106	\$	33,696
<b>Project Cost Summary</b>						<b>\$ 18,463,712</b>

Resource Link: [https://www.alamedactc.org/wp-content/uploads/2019/05/CATP\\_Cost\\_Estimating\\_Tool\\_Final\\_20190531.xlsx](https://www.alamedactc.org/wp-content/uploads/2019/05/CATP_Cost_Estimating_Tool_Final_20190531.xlsx)

### 1.5.2.2 Pleasanton

#### Rapid Response Projects

To close a gap in the Iron Horse Trail, the City of Pleasanton implemented a rapid response design as a result of a fatal collision between a vehicle and local cyclist Gail Turner. The project connects the shared use path through the intersection at Stanley Boulevard and Valley Avenue/Bernal Avenue. Other cities in Alameda County have also implemented similar rapid response “quick build” projects including Albany and Berkeley. These rapid response projects address issues quickly through the use of paint and less permanent materials such as flexposts, rather than delaying changes by waiting to implement more permanent changes such as curb construction.



Pleasanton Protected Intersection  
Source: Pleasanton Patch

#### Signal Detection

The City of Pleasanton was nationally recognized by the Intelligent Transportation Society of America (ITS America) for its rollout of radar-based bicycle detection. The devices, known as *Intersector*, can differentiate between vehicle types and even identify when cyclists are present. When cyclists are detected, the system can adjust traffic signal timing to allow for sufficient time for cyclists to clear the intersections.

#### Complete Streets Corridor Studies

As an outcropping of the 2018 Bicycle and Pedestrian Master Plan, the City of Pleasanton has released two bikeway feasibility corridor studies that aim to identify how to implement bikeways on priority corridors that are useful to cyclists of all ages and abilities. The Foothill Road corridor and the West Las Positas Boulevard corridor were both selected to develop complete streets recommendations and concept designs to assist with grant-funding and rapid implementation.

### 1.5.2.3 Oakland

#### Equity Framework and Evaluation

The Downtown Oakland Specific Plan process was rebranded as Equity in Downtown Oakland to include an equity framework and add local community-based organizations to the project team. The framework provided a platform for these groups to not only be involved with the outreach components of the projects, but also to review project deliverables through an equity lens. This helped to reinforce equity in all components of the plan process.



#### Partnerships with Community-based Organizations

The Oakland Bicycle Master Plan provided an opportunity for the newly formed Oakland Department of Transportation to begin building relationships with local Oakland-based community organizations. These community-based organizations (CBOs) included the East Oakland Collective, Outdoor Afro, Bikes4Life, Cycles of Change, and The Scraper Bike Team. The groups were responsible for hosting community workshops and listening sessions to help inform the bike plan update. CBOs' input drove the structure and format of the overall project outreach, ensuring that all messaging to and asks of the community were made in ways that would receive productive responses.

#### High Injury Network Analysis

As part of the Oakland Walks! 2017 Pedestrian Master Plan Update, the City's top outcome was to increase pedestrian safety and included a recommendation to adopt a Vision Zero strategy. In order to find out the factors contributing to the finding that 36% of fatal and serious injury pedestrian collisions took place on only 2% of Oakland streets, the study team conducted a High-Injury Network (HIN) analysis. The HIN analysis identified crash patterns and collision factors to identify priority safety corridors in Oakland. By addressing corridors, rather than just these spot locations, the analysis can help City staff recognize safety risks from a systemic and proactive approach instead of a reactive approach. The City has since updated the HIN analysis with more recent data.

#### Coordinated Repaving Program

Oakland was recognized by the Federal Highway Administration as a national leader for coordinating bikeway implementation with routine resurfacing projects. The City has leveraged the schedule of resurfacing projects to implement roadway reconfiguration changes at the same time.

### 1.5.2.4 Unincorporated Alameda County

#### Safe Routes to School Program

While the Alameda CTC Safe Routes to School Program covers the unincorporated areas of Alameda County, Alameda County Public Works Agency (ACPWA) successfully won a grant to augment the program. ACPWA's program evaluated 35 school sites throughout the unincorporated areas and is providing additional educational trainings for each school over two years. Each school received a project recommendations fact sheet that



customized infrastructure and programmatic recommendations for issues currently experienced at each location.

### **ADA Transition Plan**

As part of the Unincorporated Areas Bicycle and Pedestrian Plan Update, ACPWA completed a self-evaluation to guide recommendations in an ADA Transition Plan. Concurrently, a staff training was conducted on ADA standards so that ACPWA staff could consistently review projects for ADA needs and make sure recommendations are implemented appropriately.

#### **1.5.2.5 Fremont**

### **Citywide Low-Stress Bikeway Network**

With the adoption of its Bike Master Plan in July 2018, the City of Fremont created an ambitious goal to create a safe, convenient, connected, and comfortable citywide bicycling network for people of all ages and abilities. Through the creation of a near-term All Ages and Abilities Backbone Network, the City was able to generate blueprint for prioritizing, securing funding, and rapidly implement projects to work toward this goal. The Backbone Vision Network consists largely of shared use paths and Complete Streets retrofit projects. The city has implemented one protected intersection with nine others in design or construction, and is planning for more than 50 protected intersections in total. As of Spring 2019, Fremont has initiated development of a Trails Master Plan.

#### **Retrofits of Arterial Streets**

To implement much of the low-stress bikeway network, the City of Fremont focused on how to reallocate existing roadway space to rapidly implement all ages and abilities separated or buffered bike lanes. Lower cost soft-tipped posts and striping help to separate vehicular and cycling traffic along key arterials in the city. Examples can be found on Stevenson Boulevard and Walnut Avenue. The City is focused on rolling out more of these types of facilities citywide.



*Stevenson Boulevard Separated Bikeway  
Source: City of Fremont*

#### **Vision Zero**

Fremont was the first city in Alameda County to adopt a Vision Zero strategy known as Fremont Vision Zero 2020. The overarching goal of this strategy is to significantly reduce fatalities and severe injuries throughout Fremont by 2020. Infrastructure-related improvements from this strategy include the installation of pedestrian countdown signals, LED street lighting, increased enforcement of speeding violations by the Fremont Police Department, and lowering speed limits on more than a dozen streets. Traffic safety videos and “How-To” brochures help to communicate how to use newly installed traffic control devices.

#### **School Safety Assessments**

In partnership with Fremont Unified School District, the City conducted safety assessments at all 42 schools in Fremont over two years. Based on the assessments, the City is now implementing short-term recommendations (improved signage, striping, paint and plastic bulbouts) at all schools over a two-year period.

#### **Coordinated Repaving Program**

Since 2013, the City has timed bicycle lane projects to be implemented simultaneously with pavement maintenance projects. This coordination and efficiency of practice has yielded more than 42 miles of buffered



bike lanes since 2013. Beginning in 2019, the City is targeting corridors that have no pavement maintenance needs but are high priority bikeway/safety corridors by implementing striping only projects. These projects will remove some existing striping and implement narrower travel lanes and buffered bikeways. Fremont has also moved to a 10 foot lane width standard on all arterial streets, based on research that 10 foot lanes reduce excessive speeding. Large vehicles can be accommodated by overhanging bike buffers or striped left edge lines (when next to a median).

#### 1.5.2.6 Berkeley

##### **Bike Boulevards 2.0**

Berkeley has an extensive network of local bicycle boulevards that connect across the city and was one of the first cities to pioneer bike boulevards. To increase usage along these routes, the City has undertaken multiple projects to specifically address major street crossings at nearly 30 locations. For example, the bicycle boulevard crossing at Ashby Avenue and Hillegass Avenue received a Pedestrian Hybrid Beacon (PHB) to assist cyclists and pedestrians at a location that was previously only controlled with side street stop signs. This spot improvement was important to increasing crossing safety for both cyclists and pedestrians.

##### **BART Station Access Improvements**

In conjunction with BART, the City of Berkeley completed pedestrian and public realm improvements at the Downtown Berkeley station. New features include LED lighting, granite aggregate pavers, public art, and landscaping with bio-retention areas for stormwater management. Additionally, both agencies are partnering on bicycle and pedestrian access improvements at the North Berkeley BART station. The project will also help to improve connectivity along the Ohlone Greenway near the station.



*Downtown Berkeley Station Improvements*  
Source: BART



## 1.6 Areas of Focus for the Future

Alameda CTC can assist local jurisdictions through two primary areas of focus by leading regional projects or programs and providing resources or guidance for local jurisdictions to implement their own projects. Potential strategies for areas of focus for the future are summarized below. These action items could be done at the countywide level to enable further advancement toward industry best practices while also overcoming many of the issues identified by local jurisdictions.

### Summary of Program and Policy Areas of Focus for the Future

- **Program Expansion:** Continue to expand the Safe Routes to Schools and Student Transit Pass programs.
- **Safety:** Explore Vision Zero policy support and local jurisdiction frameworks.
- **Countywide Projects:** Identify projects or feasibility studies that focus on barriers of countywide significance, e.g. freeway crossings, regional routes that connect jurisdictions, and work towards a complete East Bay Greenway and Bay Trail, along with connections that enhance access to regional trails.
- **Integration with Transit:**
  - Consider conducting studies to address storage of more than three bicycles on transit buses.
  - Consider conducting a study to address regional transit station and bus stop access
  - Coordinating trainings related to the design of bicycle and pedestrian treatments along transit corridors.
- **Funding:**
  - Explore funding options for the operation and maintenance of regional trails.
  - Provide guidance and explore funding options for maintenance of on-street bicycle facilities.
- **Health/equity:** Provide resources for evaluating health and equity.
- **Communication:** Create a forum to enhance communication and coordination between jurisdictions, especially regarding the implementation of local innovative projects.
- **Best Practices:** Provide resources and education/training on best practice facility design and public engagement, including identifying best practices for working with fire departments and addressing their needs through design, and encouraging the use of new and innovative design guidance from national best practice sources. Consider hosting webinars, such as APBP webinars, as continuing education and networking opportunities, as appropriate.
- **Emerging mobility:** Provide resources related to shared- and micro-mobility
- **Bike Parking:** Provide guidance on bicycle parking standards to improve end-of-trip facilities consistently across the County.

## 2 | Cost and Revenue

To understand how the Plan's recommendations can be funded and implemented, conceptual planning level cost ranges have been developed for construction and maintenance of bicycle and pedestrian facilities. The rough order of magnitude costs presented in local jurisdictions' plans and existing potential funding sources are also described in this chapter. For implementation of the countywide plans, programs and policy recommendations, Alameda CTC would need to budget for staff and consultant support as needed. Local jurisdictions would also need to budget for additional staff or consultant support and for maintenance costs for the improvements being implemented under their local plans.

This chapter is organized as follows:

- **Costs: Construction and Maintenance of Capital Projects** – This section presents estimated planning level costs for construction and maintenance of various pedestrian and bicycle facilities and treatments.
- **Costs: Plans** – This section presents a summary of the project cost for buildout of the recommended bicycle and pedestrian networks and is based on the estimated conceptual planning level costs presented in local jurisdictions' current plans.
- **Revenue** – This section presents a summary of possible federal, state, regional, and local funding sources available for bicycle and pedestrian projects, policies, and programs over the life of the Plan.

### 2.1 Costs: Construction and Maintenance of Capital Projects

Estimated planning level costs for the construction and maintenance of various types of bicycle and pedestrian facilities or treatments are presented in this section. Assumptions for soft costs and contingencies are shown below. Soft costs include environmental support, plans, specifications & estimates, preliminary engineering, utilities, drainage, construction management, mobilization, traffic control, and general contingency. Soft costs are calculated as a percent of construction costs and are expected to vary depending on the type, size, and complexity of the project.

#### Soft Costs

Environmental Support	10%
Plans, Specifications & Estimates (PS&E)	15%
Preliminary Engineering	10%
Utilities	10%
Drainage	30%
Construction Management	10%
Mobilization	5%
Traffic Control	5%
Contingency	30%

The following page provides a unit cost summary for the construction of facilities and treatments in the Bay Area based on recent bid data from Alameda County<sup>2</sup> and Caltrans<sup>3</sup>. For purposes of this plan, conceptual construction costs for the facilities and treatments were based on the following assumptions:

- New Class I facilities would be constructed on generally flat right-of-way with no grade separation and minimal grading needed. Clearing, grubbing, pedestrian-scale lighting, and some landscaping is included.
- Costs of right-of-way acquisition and utility relocation are not included.
- New Class II facilities would not require roadway improvements or modifications beyond restriping.
- New Class III facilities would require signing and pavement markings, and bike boulevards would also include low-cost traffic calming improvements.
- New Class IV facilities vary in cost due to the variety of treatment types and materials. For example, raised bike lanes with dedicated bicycle signals would require more labor and material costs than bikeways separated with flexible posts.

Maintenance costs for the facilities and treatments were based on the following assumptions:

- Maintenance costs for Class I facilities generally include trash removal, street sweeping (with a mechanized sweeper), resurfacing, sealing, restriping, replacing/repairing signs, repairing bridges and other structures, cleaning and inspecting drainage, and maintaining landscaping.
- Maintenance of Class II and Class III facilities can generally be provided as part of the regular roadway maintenance. Maintenance costs for Class II facilities include sweeping, and maintenance of signs, striping and pavement markings. Buffered bike lanes may require additional maintenance costs as a result of the additional striping.
- Maintenance for Class III facilities includes sweeping and sign maintenance and replacement (usually, every five years) as well as minor surface repairs. Bike boulevards may require additional maintenance dependent on the specific treatments.
- Maintenance costs for Class IV facilities would be similar to Class II facilities but may require specialty (micro) street sweepers or other cleaning/maintenance methods to accommodate the design of the bikeway. Additional staff and time may be required if the bikeway needs to be swept separately from the main roadway, requiring an additional pass with the street sweeper that is likely not built into existing street sweeping schedules.

These are planning level costs intended to provide a rough order of magnitude estimate of project costs and do not imply any commitment of funding sources. More detailed estimates should be developed following the preliminary engineering stage as individual projects advance towards implementation. Maintenance costs shown on the following page include expenses such as labor, supplies, and amortized equipment costs. A cost estimating spreadsheet is available electronically and will be posted on the Alameda CTC website.

<sup>2</sup> [https://www.acgov.org/gsa\\_app/gsa/purchasing/bid\\_content/closedbids.jsp#closed\\_arch](https://www.acgov.org/gsa_app/gsa/purchasing/bid_content/closedbids.jsp#closed_arch)

<sup>3</sup> <http://www.dot.ca.gov/dpac/bid-results/viewbidresults.html>

## Conceptual Cost Estimates

Facility / Description	Cost Range 2019 \$ (per mile or installation)	Maintenance Cost (Annual)
<b>Class I Bikeway</b>		
Shared Use Path – 12-foot-wide asphalt path with lighting, landscaping, high visibility crosswalks, and curb ramps	\$1,000,000-\$2,200,000	\$8,500-\$13,500
Shared Use Path – four-foot widening and centerline striping with landscaping, high visibility crosswalks, and curb ramps	\$260,000-\$560,000	\$8,500-\$13,500
<b>Class II Bikeway</b>		
Bike Lane – signing and striping	\$40,000-\$85,000	\$2,000-\$3,000
Buffered Bike Lane – three-foot buffer, bike boxes, and signal detection	\$85,000-\$180,000	\$2,500-\$3,500
Green Bike Lane – conflict striping and greenback sharrow intersection markings	\$150,000-\$320,000	\$3,000-\$4,000
<b>Class III Bikeway</b>		
Bike Route – signing and markings	\$15,000-\$30,000	\$1,000-\$2,000
Bike Boulevard – markings, wayfinding, and some traffic calming	\$125,000-\$265,000	\$1,500-\$4,000
<b>Class IV Separated Bikeway</b>		
Barrier separation – buffer and flex-hit posts or planter boxes	\$115,000-\$235,000	\$6,000-\$8,500
Median separation – four-foot planted median	\$360,000-\$760,000	\$8,500-\$13,500
Grade separation – raised bikeway	\$305,000-\$640,000	\$8,500-\$13,500
Parking separation – planters and bollards	\$105,000-\$215,000	\$6,000-\$8,500
<b>Intersection Treatments</b>		
Rectangular Rapid Flashing Beacon	\$25,000-\$55,000	N/A
Pedestrian Hybrid Beacon	\$80,000-\$170,000	N/A
Directional ADA Curb Ramps (full intersection)	\$18,000-\$38,000	N/A
High Visibility Ladder Crosswalk (per crosswalk)	\$2,000-\$4,200	N/A
Raised Crosswalk (per crosswalk)	\$10,000-\$21,000	N/A
Raised Intersection (per intersection)	\$75,000-\$160,000	N/A
Traffic Circle	\$15,000-\$32,000	N/A
Bicycle Signal Head	\$12,000-\$24,000	N/A

**SOURCES:** Alameda County and Caltrans bid data, Alameda County Transportation Commission ATP Network Cost Estimating Tool, Alameda County Transportation Commission Cost Estimating Guide. **NOTE:** Costs are in 2019 dollars, excluding right-of-way costs. Unit costs are assumed to include soft costs and contingencies. Maintaining separated bike lanes may be costly: If separated bikeways need to be swept separate from the main roadway, this is an additional pass with the sweeper that is likely not built into existing sweeping schedules.

## 2.2 Costs: Implement Local Plans

The construction costs for the proposed pedestrian and bicycle networks were obtained from current plans. Based on information included in these plans, the cost to build out the countywide vision pedestrian and bicycle networks would be \$928.4 million. Cost estimates for each jurisdiction's plan are shown on the following page. Costs shown reflect the information included in the respective plans and reflect estimates based on the baseline year. Costs have not been adjusted to account for projects that have been completed to date.

## Bicycle and Pedestrian Plan Conceptual Planning Level Cost Estimates by Jurisdiction

Document	Mode	Year	Vision Network Cost
City of Alameda Pedestrian Plan	Pedestrian	2009	\$ 28,275,755
City of Alameda Bicycle Master Plan	Bicycle	2010	\$ 6,472,000
Albany Active Transportation Plan	Pedestrian & Bicycle	2012	\$ 43,072,500
Berkeley Pedestrian Master Plan	Pedestrian	2010	\$ 13,457,105
Berkeley Bicycle Plan	Bicycle	2017	\$ 34,471,100
City of Dublin Bicycle and Pedestrian Master Plan	Pedestrian & Bicycle	2014	\$ 15,675,800
City of Emeryville Pedestrian and Bicycle Plan	Pedestrian & Bicycle	2017	\$ 59,095,600
City of Fremont Bicycle Master Plan	Bicycle	2018	\$ 165,000,000
City of Fremont Pedestrian Master Plan	Pedestrian	2016	\$ 158,000,000
City of Hayward Bicycle Master Plan	Bicycle	2007	\$ 1,644,200
City of Livermore Bikeways and Trails Master Plan	Bicycle & Trails	2002	\$ 103,914,250
City of Newark Bicycle and Pedestrian Master Plan	Pedestrian & Bicycle	2017	\$ 75,446,000
City of Oakland, Oakland Walks! Pedestrian Plan Update	Pedestrian	2017	\$ 109,000,000
City of Oakland Bicycle Master Plan	Bicycle	2007	n\
Piedmont Pedestrian and Bicycle Master Plan, 2015-2024	Pedestrian & Bicycle	2014	n\
Pleasanton Bicycle and Pedestrian Master Plan (Draft)	Pedestrian & Bicycle	2017	\$ 35,975,741
City of San Leandro Bicycle and Pedestrian Master Plan	Pedestrian & Bicycle	2018	\$ 9,638,500
City of Union City Pedestrian and Bicycle Master Plan	Pedestrian & Bicycle	2012	\$ 69,304,000
Alameda County Bicycle and Pedestrian Master Plans for Unincorporated Areas	Pedestrian & Bicycle	2012	n\
Alameda Countywide Bicycle Plan	Bicycle	2012	n\
Alameda Countywide Pedestrian Plan	Pedestrian	2012	n\
UC Berkeley Campus Bicycle Plan	Bicycle	2006	n\
BART Bicycle Plan Modeling Access to Transit	Access to Transit	2012	n\
East Bay Regional Parks District Master Plan	Trails	2013	n\
Caltrans District 4 Bicycle Plan	Bicycle	2018	n\
California Statewide Bicycle and Pedestrian Plan – Toward an Active California	Pedestrian & Bicycle	2017	n\

Sources: Compiled data from local jurisdictions' plans.

Notes: n\ indicates that information was not available. Combined costs include estimates for all tiers and high, medium, and low priority projects. When cost ranges were provided, the high cost option was selected.



## 2.3 Revenue

Below is a summary of possible funding sources available for bicycle and pedestrian projects, policies, and programs over the life of the Plan. Sources include federal, State, regional, and local programs. A description of each funding source from the managing agency is provided, as well as potential project applicability by funding source.

### 2.3.1 Federal Programs

#### 2.3.1.1 *Fixing America's Surface Transportation (FAST) Act*

The FAST Act is the current federal act governing and allocating transportation funding. It was signed into law in December 2015 and provides funding for surface transportation infrastructure planning and investment. The act allocates funding through Fiscal Year 2020 to various federal funding programs, including CMAQ and STBG (detailed below).

Website: <https://www.fhwa.dot.gov/fastact/>

##### 2.3.1.1.1 **Congestion Management & Air Quality (CMAQ)**

**Managing Agency: Federal Highway Administration**

The Congestion Mitigation and Air Quality Improvement (CMAQ) program provides a flexible funding source for State and local governments to fund transportation projects and programs to help meet the requirements of the Clean Air Act (CAA) and its amendments. CMAQ money supports transportation projects that reduce mobile source emissions in areas designated by the U.S. Environmental Protection Agency (EPA) to be in nonattainment or maintenance of the national ambient air quality standards. See MTC's One Bay Area Grant (OBAG) program for how CMAQ funding is distributed within the nine-county Bay Area. OBAG disburses federal funds in accordance with MTC's regional transportation priorities and associated land-use and housing goals.

Website: [https://www.fhwa.dot.gov/environment/air\\_quality/cmaq/](https://www.fhwa.dot.gov/environment/air_quality/cmaq/)

##### 2.3.1.1.2 **Surface Transportation Block Grant (STBG) Program**

**Managing Agency: Federal Highway Administration**

The Fixing America's Surface Transportation (FAST) Act converts the long-standing Surface Transportation Program (STP) into the Surface Transportation Block Grant Program (STBG) acknowledging that this program has the most flexible eligibilities among all Federal-aid highway programs and aligning the program's name with how the Federal Highway Administration (FHWA) has historically administered it. The STBG promotes flexibility in State and local transportation decisions and provides flexible funding to best address State and local transportation needs. STBG funding may be used for projects to preserve and improve the conditions and performance on any Federal-aid highway, bridge and tunnel projects on qualifying public roads, pedestrian and bicycle infrastructure, and transit capital projects, including intercity bus terminals. OBAG disburses federal funds in accordance with MTC's regional transportation priorities and associated land-use and housing goals.

Website: <https://www.fhwa.dot.gov/specialfunding/stp/>

##### 2.3.1.2 **Land and Water Conservation Fund (LWCF)**

**Managing Agency: National Park Service**

The LWCF provides matching grants to States and local governments for the acquisition and development of public outdoor recreation areas and facilities. The LWCF has provided more than \$16.7 billion to acquire new Federal recreation lands as grants to State and local governments. Projects can include acquisition of open space, development of small city and neighborhood parks, and construction of trails or greenways.

Website: <https://www.nps.gov/subjects/lwcf/stateside.htm>

#### **2.3.1.3 Rivers, Trails, and Conservation Assistance Program**

##### **Managing Agency: National Park Service**

The National Park Service Rivers, Trails, and Conservation Assistance program supports community-led natural resource conservation and outdoor recreation projects across the nation. The National Park Service helps community groups, nonprofits, tribes, and state and local governments to design trails and parks, conserve and improve access to rivers, protect special places, and create recreation opportunities.

Website: <https://www.nps.gov/orgs/rtca/index.htm>

#### **2.3.1.4 Other Federal Grants**

Note that existence of these grant programs is at the discretion of Congress. Potential applicants should research the current state of funding before considering these sources.

##### **2.3.1.4.1 Better Utilizing Investments to Leverage Development (BUILD) Grant**

###### **Managing Agency: United States Department of Transportation**

The Better Utilizing Investments to Leverage Development, or BUILD Transportation Discretionary Grant program, provides a unique opportunity for the United States Department of Transportation to invest in road, rail, transit and port projects that promise to achieve national objectives. Previously known as Transportation Investment Generating Economic Recovery, or TIGER Discretionary Grants, Congress has dedicated nearly \$5.6 billion for nine rounds of National Infrastructure Investments to fund projects that have a significant local or regional impact. The eligibility requirements of BUILD allow project sponsors at the State and local levels to obtain funding for multi-modal, multi-jurisdictional projects that are more difficult to support through traditional DOT programs. BUILD can fund port and freight rail projects, for example, which play a critical role in our ability to move freight but have limited sources of Federal funds.

Website: <https://www.transportation.gov/BUILDgrants>

##### **2.3.1.4.2 Infrastructure For Rebuilding America (INFRA) Grant**

###### **Managing Agency: United States Department of Transportation**

The INFRA Grants program funds transportation projects with a focus on rebuilding existing infrastructure. To be eligible, projects must be on the National Highway System, a railway/highway grade separation project, or a freight project that is rail or intermodal, or improves freight movement within an intermodal facility. Most governmental bodies are eligible applicants (e.g., unit of local government, port authority, groups of jurisdictions). Minimum awards for large projects are \$25 million and \$5 million for small projects.

Website: <https://www.transportation.gov/buildamerica/infragrants>

### **2.3.2 State Programs**

#### **2.3.2.1 Senate Bill 1**

Senate Bill 1 (SB 1) was passed in 2017 as a long-term transportation reform and funding package. The bill includes new revenues that address a wide variety of transportation projects such as road safety improvements, street repair, transit, and roadway and bridge construction. SB 1 provides \$5.2 billion per year to fund transportation projects throughout California. The programs listed below are funded through SB 1.

### **2.3.2.1.1 Active Transportation Program (ATP) Grants**

#### **Managing Agency: California Transportation Commission (CTC)**

The Active Transportation Program (ATP) consolidates existing federal and State transportation programs, including the Transportation Alternatives Program (TAP), Bicycle Transportation Account (BTA), and State Safe Routes to School (SR2S), into a single discretionary grant program with a focus to make California a national leader in active transportation. The purpose of the ATP is to encourage increased use of active modes of transportation by increasing the proportion of trips accomplished by biking and walking, increasing safety of non-motorized users, reduce greenhouse gases, enhance public health, and ensure that disadvantaged communities fully share in the benefits of the program. The ATP includes a regionally-administered component which is listed separately under the section for Regional and County Programs.

Website: <http://www.dot.ca.gov/hq/LocalPrograms/atp/>

### **2.3.2.1.2 State-Local Partnership Program (LPP)**

#### **Managing Agency: California Transportation Commission (CTC)**

The Road Repair and Accountability Act of 2017 (Senate Bill 1) created the Local Partnership Program (LPP), which is modeled closely after the Proposition 1B State Local Partnership Program. The purpose of the Senate Bill 1 LPP program is to provide local and regional transportation agencies that have passed sales tax measures, developer fees, or other imposed transportation fees with a continuous appropriation of \$200 million annually from the Road Maintenance and Rehabilitation Account to fund road maintenance and rehabilitation, sound walls, and other transportation improvement projects. Consistent with the intent behind Senate Bill 1, the CTC intends this program to balance the need to direct increased revenue to the State's highest transportation needs while fairly distributing the economic impact of increased funding. LPP provides funding to local and regional agencies to improve aging Infrastructure, road conditions, active transportation, and health and safety benefits.

Website: <http://www.catc.ca.gov/programs/sb1/lpp/>

### **2.3.2.1.3 Sustainable Communities Grants**

#### **Managing Agency: California Department of Transportation (Caltrans)**

The Sustainable Transportation Planning Grant Program was created to support the Caltrans Mission: Provide a safe, sustainable, integrated and efficient transportation system to enhance California's economy and livability. Eligible planning projects must have a transportation nexus ideally demonstrating that planning projects directly benefit the multi-modal transportation system. Sustainable Communities Grants will also improve public health, social equity, environmental justice, the environment, and provide other important community benefits.

Website: <http://www.dot.ca.gov/hq/tpp/offices/orip/Grants/grants.html>

### **2.3.2.1.4 Adaptation Planning Grants**

#### **Managing Agency: Caltrans**

Climate change adaptation aims to anticipate and prepare for climate change impacts to reduce the damage from climate change and extreme weather events. Adaptation is distinct from, but complements, climate change mitigation, which aims to reduce GHG emissions. This funding is intended to advance adaptation planning on California's transportation infrastructure, including but not limited to roads, railways, bikeways, trails, bridges, ports, and airports. Adaptation efforts will enhance the resiliency of the transportation system to help protect against climate impacts. The overarching goal of this grant program is to support planning actions at local and regional levels that advance climate change adaptation efforts on the

transportation system, especially efforts that serve the communities most vulnerable to climate change impacts. Adaptation Planning Grants are funded through California Senate Bill (SB) 1 under the Public Transportation Account (PTA).

Website: <http://www.dot.ca.gov/hq/tpp/grants.html>

#### **2.3.2.1.5 State Highway Operation and Protection Program (SHOPP)**

##### **Managing Agency: Caltrans**

The State Highway Operation and Protection Program (SHOPP) is the State Highway System's (SHS) "fix-it-first" program that funds the repair and preservation, emergency repairs, safety improvements, and some highway operational improvements on the SHS. Although SHOPP is intended for projects on statutorily designated State-owned roads, highways (including the Interstate system) and bridges, it can be used for associated bicycle and pedestrian facilities. Revenues for the SHOPP are generated by federal and State gas taxes and are fiscally constrained by the State Transportation Improvement Program Fund Estimate that is produced by Caltrans and adopted by the California Transportation Commission.

Website: <http://www.dot.ca.gov/hq/transprog/shopp.htm>

#### **2.3.2.1.6 State Transportation Improvement Program (STIP)**

##### **Managing Agency: California Transportation Commission (CTC)**

The State Transportation Improvement Program (STIP) is a biennial five-year plan adopted by the CTC for future allocations of certain state transportation funds for state highway improvements, intercity rail, and regional highway and transit improvements. State law requires the CTC to update the STIP biennially, in even-numbered years, with each new STIP adding two new years to prior programming commitments. CTC staff recommendations are based on the combined programming capacity for the Public Transportation Account (PTA) and State Highway Account (SHA) as identified in the Fund Estimate adopted by the CTC. Projects must first be nominated by the Metropolitan Transportation Commission in its Regional Transportation Improvement Program (RTIP), or by Caltrans in its Interregional Transportation Improvement Program (ITIP) to be included in the STIP that is adopted by the CTC.

Website: <http://www.catc.ca.gov/programs/stip/>

### **2.3.2.2 Highway Safety Improvement Program (HSIP) Grant**

#### **Managing Agency: Caltrans**

The Highway Safety Improvement Program (HSIP) is one of the core federal-aid programs in the federal surface transportation act, Fixing America's Surface Transportation Act (FAST). The purpose of the HSIP program is to achieve a significant reduction in traffic fatalities and serious injuries on all public roads, including non-State-owned public roads and roads on tribal land. Example safety projects include but are not limited to crosswalk markings, rapid flashing beacons, curb extensions, speed feedback signs, guard rails, pedestrian refuge islands, slurry seal, and other pavement markings.

Website: <http://dot.ca.gov/hq/LocalPrograms/hsip.html>

### **2.3.2.3 Systemic Safety Analysis Report Program (SSARP)**

#### **Managing Agency: Caltrans**

The state-funded Systemic Safety Analysis Report Program (SSARP) was established in 2016. The state funding for the SSARP program is made available by exchanging the local Highway Safety Improvement Program (HSIP) federal funds for State Highway Account (SHA) funds. The intent of this program is to assist local agencies in performing a collision analysis, identifying safety issues on their roadway networks, and developing a list of systemic low-cost countermeasures that can be used to prepare future HSIP and other safety program applications.

Website: <http://www.dot.ca.gov/hq/LocalPrograms/HSIP/LRSPnSSARP.htm>

### **2.3.2.4 Office of Traffic Safety (OTS) Grants**

#### **Managing Agency: Office of Traffic Safety**

The California Office of Traffic Safety (OTS) strives to eliminate traffic deaths and injuries. It does this by making available grants to local and state public agencies for programs that help them enforce traffic laws, educate the public in traffic safety, and provide varied and effective means of reducing fatalities, injuries and economic losses from collisions.

Website: <https://www.ots.ca.gov/>

### **2.3.2.5 Recreational Trails Program (RTP)**

#### **Managing Agency: California Department of Parks and Recreation**

The Recreational Trails Program (RTP) provides federal funds annually for recreational trails and trails-related projects. The RTP is administered at the federal level by the Federal Highway Administration (FHWA) and at the State level by the California Department of Parks and Recreation (DPR) and the Department of Transportation (Caltrans) Active Transportation Program (ATP). Eligible non-motorized projects include acquisition of easements and fee simple title to property for recreational trails and recreational trail corridors; and, development, or rehabilitation of trails, trailside, and trailhead facilities.

Website: [https://www.parks.ca.gov/?page\\_id=24324](https://www.parks.ca.gov/?page_id=24324)

### **2.3.2.6 Affordable Housing and Sustainable Communities (AHSC) Program**

#### **Managing Agency: California Strategic Growth Council**

The purpose of the AHSC Program is to reduce greenhouse gas (GHG) emissions through projects that implement land-use, housing, transportation, and agricultural land preservation practices to support infill and compact development, and that support related and coordinated public policy objectives. The AHSC

program includes transportation focuses related to reducing air pollution, improving conditions in disadvantaged communities, supporting or improving public health, improving connectivity and accessibility to jobs, increasing options for mobility, and increasing transit ridership. Funding for the AHSC Program is provided from the Greenhouse Gas Reduction Fund (GGRF), an account established to receive Cap-and-Trade auction proceeds.

Website: <http://www.sgc.ca.gov/programs/ahsc/>

#### **2.3.2.7 Transformative Climate Communities (TCC) Program**

##### **Managing Agency: California Strategic Growth Council**

The Transformative Climate Communities Program was established by Assembly Bill (AB) 2722 to fund the development and implementation of neighborhood-level transformative climate community plans that include multiple, coordinated greenhouse gas emissions reduction projects that provide local economic, environmental, and health benefits to disadvantaged communities. The TCC Program is also an opportunity to realize the State's vision of Vibrant Communities and Landscapes, demonstrating how meaningful community engagement coupled with strategic investments in transportation, housing, food, energy, natural resources, and waste can reduce GHG emissions and other pollution, while also advancing social and health equity and enhancing economic opportunity and community resilience. The TCC Program funds both implementation and planning grants. While the program can fund a variety of projects, transportation-related projects can include, but are not limited to: developing active transportation and public transit projects; support transit ridership programs and transit passes for low-income riders; expand first/last mile connections, build safe and accessible biking and walking routes, and encourage education and planning activities to promote increased use of active modes of transportation.

Website: <http://www.sgc.ca.gov/programs/tcc/>

#### **2.3.2.8 Environmental Enhancement and Mitigation (EEM) Grant Program**

##### **Managing Agency: California Natural Resources Agency**

This program authorizes the California state legislature to allocate up to \$7 million each fiscal year from the Highway Users Tax Account. EEM projects must contribute to mitigation of the environmental effects of transportation facilities. The EEM Program does not generally fund commute-related trails or similar bicycle/pedestrian infrastructure. However, it does fund recreational and nature trails as part of storm water management or green infrastructure projects.

Website: <http://resources.ca.gov/grants/environmental-enhancement-and-mitigation-eem/>

#### **2.3.2.9 Urban Greening Grant Program**

##### **Managing Agency: California Natural Resources Agency**

As part of the California State Senate Bill (SB) 859, the California Natural Resources Agency's Urban Greening Program was created and is funded by the Greenhouse Gas Reduction Fund (GGRF) to support the development of green infrastructure projects that reduce GHG emissions and provide multiple benefits. Projects should be focused in disadvantaged communities to maximize economic, environmental, and public benefits. The Urban Greening Program will fund projects that reduce greenhouse gases by sequestering carbon, decreasing energy consumption and reducing vehicle miles traveled, while also transforming the built environment into places that are more sustainable, enjoyable, and effective in creating healthy and vibrant communities. These projects will establish and enhance parks and open space, using natural solutions to improve air and water quality and reducing energy consumption, and creating more walkable and bike-able trails.



Website: <http://resources.ca.gov/grants/urban-greening/>

#### **2.3.2.10 Environmental Justice (EJ) Small Grants Program**

##### **Managing Agency: California Environmental Protection Agency**

The Environmental Justice (EJ) Small Grants Program offers funding opportunities to assist eligible non-profit community organizations and federally-recognized Tribal governments to address environmental justice issues in areas disproportionately affected by environmental pollution and hazards. The EJ Small Grants are awarded on a competitive basis with a maximum amount \$50,000 per grant. EJ Small Grants can be used for a variety of environmental purposes but can also be used to augment community engagement, health, trainings, and programmatic opportunities in underserved communities.

Website: [https://calepa.ca.gov/EnvJustice/Funding/?mc\\_cid=b68bc95390&mc\\_eid=b4c201d657](https://calepa.ca.gov/EnvJustice/Funding/?mc_cid=b68bc95390&mc_eid=b4c201d657)

#### **2.3.2.11 Storm Water Management Program**

##### **Managing Agency: State Water Resources Control Board**

The Storm Water Grant Program (SWGP) is intended to promote the beneficial use of storm water and dry weather runoff in California by providing financial assistance to eligible applicants for projects that provide multiple benefits while improving water quality. Under California Prop 1, the state authorized \$7.545 billion in general obligation bonds for water projects including surface and groundwater storage, ecosystem and watershed protection and restoration, and drinking water protection. Funds can be made available for multi-benefit storm water management projects, which may include, but shall not be limited to green infrastructure, rainwater and storm water capture projects and storm water treatment facilities. The program can also fund Storm Water Resource Plans and project-specific planning projects. Transportation-related projects funded by the program include green streets, urban runoff enhancements, greenbelts, storm water capture systems, and permeable pavement projects.

Website: [https://www.waterboards.ca.gov/water\\_issues/programs/grants\\_loans/swgp/](https://www.waterboards.ca.gov/water_issues/programs/grants_loans/swgp/)

### **2.3.3 County and Regional Programs**

#### **2.3.3.1 Measure B**

##### **Managing Agency: Alameda County Transportation Commission**

In 2000, Alameda County voters approved Measure B, the extension of the half-cent transportation sales tax for transportation infrastructure and programs in the county, originally passed in 1986. A voter-adopted 20-year Transportation Expenditure Plan guides the expenditures of the revenues. The expenditure plan was developed to serve major regional transportation needs in Alameda County and to address congestion in every major commute corridor in Alameda County. Funds are allocated through direct local distributions, discretionary programs, and to individual capital projects.

Website: <https://www.alamedactc.org/funding/fund-sources/measure-b/>

#### **2.3.3.2 Measure BB**

##### **Managing Agency: Alameda County Transportation Commission**

In November 2014, Alameda County voters approved Measure BB, authorizing the augmentation and continuation of the voter-approved 2000 Measure B sales tax with a second half-cent sales tax through the end of the 2000 Measure B collection period, on March 31, 2022, followed by a one-cent sales tax starting from April 1, 2022 through March 31, 2045. The 2014 Transportation Expenditure Plan (2014 TEP) guides the investments of Measure BB revenues toward capital projects and programs that improve the multimodal countywide

transportation system. Measure BB dedicates approximately 8% of the total revenues for Bicycle and Pedestrian Projects and Programs, including funding for the three major trails in Alameda County.

Website: <https://www.alamedactc.org/funding/fund-sources/measure-bb/>

#### **2.3.3.3 Measure F - Vehicle Registration Fee**

##### **Managing Agency: Alameda County Transportation Commission**

In November 2010, Alameda County voters approved Measure F, a \$10 per year vehicle registration fee, which generates approximately \$11 million annually. Five percent of the revenue is reserved for bicycle and pedestrian projects. The goal of the VRF program is to sustain Alameda County's transportation network and reduce traffic congestion and vehicle-related pollution.

Website: <https://www.alamedactc.org/funding/fund-sources/vehicle-registration-fee/>

#### **2.3.3.4 One Bay Area Grant (OBAG) Program**

##### **Managing Agency: Metropolitan Transportation Commission (MTC)**

Established in 2012, MTC's One Bay Area Grant (OBAG) Program uses a combination of federal Surface Transportation Block Grant (STBG) and Congestion Mitigation and Air Quality (CMAQ) funding to maintain MTC's commitments to regional transportation priorities while also advancing the Bay Area's land use and housing goals. OBAG includes both a regional program and a county program that both targets project investments in Priority Development Areas (PDAs) and rewards cities and counties that approve new housing construction and accept allocations through the Regional Housing Need Allocation (RHNA) process. Cities and counties can use these OBAG funds to invest in local street and road maintenance, streetscape enhancements, bicycle and pedestrian improvements, transportation planning, and Safe Routes to School projects.

Website: <https://mtc.ca.gov/our-work/fund-invest/investment-strategies-commitments/focused-growth/one-bay-area-grants>

#### **2.3.3.5 Regional Measures**

##### **Managing Agency: Metropolitan Transportation Commission (MTC)**

To help solve the Bay Area's growing congestion problems, MTC worked with the State Legislature to authorize a series of ballot measures that would finance a comprehensive suite of highway and transit improvements through an increase in tolls on the region's seven State-owned toll bridges. In the most recent Regional Measure (RM 3), toll revenues will be used to finance a \$4.45 billion slate of highway and transit improvements in the toll bridge corridors and their approach routes. Active transportation projects may be included as accessory parts to larger infrastructure projects.

Website: <https://mtc.ca.gov/our-work/fund-invest>

### 2.3.3.6 *Regional Active Transportation Program*

#### **Managing Agency: Metropolitan Transportation Commission (MTC)**

While the California Department of Transportation (Caltrans) administers a Statewide Active Transportation Program, MTC and other Metropolitan Transportation Organizations (MPOs) within the State are allocated a portion of the funds to administer a regional component. The State and Regional ATP Programs are both competitive programs with similar goals. MTC requires a regional supplemental application in addition to the Statewide ATP application.

Website: <https://mtc.ca.gov/our-work/invest-protect/investment-strategies-commitments/protect-our-climate/active-transportation>

### 2.3.3.7 *Transportation Fund for Clean Air (TFCA)*

#### **Managing Agency: Bay Area Air Quality Management District**

In 1991, the California State Legislature authorized the Air District to impose a \$4 surcharge on cars and trucks registered within its jurisdiction to be used to provide grant funding to eligible projects that reduce on-road motor vehicle emissions. The Air District allocates these funds to its Transportation Fund for Clean Air Program, which in turn provides funding to qualifying trip-reduction and alternative-fuel vehicle-based projects. Sixty percent (60%) of TFCA funds are awarded by the Air District to eligible programs and projects through a grant program known as the TFCA Regional Fund, which includes a sub-program for bicycle facilities. The remaining 40% of TFCA funds are passed through to the County Program Manager (CPM) Fund and in Alameda County, the TFCA CPM funding is administered by the Alameda CTC. Qualifying active transportation projects generally include the construction of new bicycle ways, bike share and the installation of new bike parking facilities, e.g., lockers and racks.

Website: <http://www.baaqmd.gov/funding-and-incentives/public-agencies/regional-fund>

### 2.3.3.8 *Bicycle Rack Voucher Program (BRVP)*

#### **Managing Agency: Bay Area Air Quality Management District**

This program aims to reduce air pollution in the Bay Area by supporting clean, alternative modes of transportation. As of 2016, Bicycle Rack Vouchers may be awarded in the amount of up to \$60 per bicycle parking space created. Funding is normally limited to a maximum of \$15,000 per applicant per year in Voucher awards. Only new bicycle rack(s) that are deployed in locations that have not previously been funded by and are not currently under consideration for funding by the Air District are eligible for funding through the BRVP.

Matching Funds: Evidence of matching funds from a non-Air District/non-TFCA source to cover any costs (e.g., for equipment and/or labor) that are above the amount provided by the BRVP that are required to implement a project.

Website: <http://www.baaqmd.gov/funding-and-incentives/public-agencies/brvp>

### 2.3.3.9 *Transportation Development Act (TDA) Article 3*

#### **Managing Agency: Alameda County Public Works**

The Transportation Development Act Article 3, or TDA 3, provides funding annually for bicycle and pedestrian projects. Two percent (2%) of TDA funds collected in Alameda County are designated for TDA 3. MTC allows each county to determine how to use funds in their county. Some counties select projects competitively while other counties distribute the funds to jurisdictions based on population. In Alameda County, these funds are allocated annually to each jurisdiction based on population and must be used for bicycle and pedestrian projects or programs that have completed environmental impacts assessments. It requires having the projects

recommended by the jurisdiction bicycle and pedestrian advisory committee (BPAC), which in turn must be approved by MTC. In the absence of a local BPAC, the Alameda CTC BPAC acts as the recommending body.

Website: <https://mtc.ca.gov/our-work/fund-invest/investment-strategies-commitments/transit-21st-century/funding-sales-tax-and-0>

#### **2.3.3.10 Measure WW Urban Creek Grant**

##### **Managing Agency: East Bay Regional Park District**

Measure WW was approved by voters in Alameda and Contra Costa counties in November 2008. The measure extended Measure AA, approved in 1988, to help the Park District meet the increasing demand to preserve open space for recreation and wildlife habitat. The program seeks to fund projects that provide multiple benefits including improving environmental quality, addressing climate change through a reduction of greenhouse gas emissions and adaptation, conserving natural resources, and improving public health and public access. Ideally, capital projects will provide lands and projects that benefit urban streams within the East Bay Regional Park District jurisdiction (Alameda and Contra Costa counties). Types of capital projects that are eligible include both acquisition of land (fee title or permanent easements) and development of specific projects (including habitat restoration, erosion repair and public access).

Website: <https://www.ebparks.org/about/planning/ww/#Urban-Creek-Grant-Program>

#### **2.3.3.11 Measure FF**

##### **Managing Agency: East Bay Regional Park District**

On June 5, 2018, the East Bay Regional Park District Board of Directors voted unanimously to place Measure FF on the November 2018 ballot. Measure FF will continue existing, voter-approved funding for Regional Parks in western Alameda and Contra Costa counties – without increasing taxes. Measure FF will continue funding for regional park services including wildfire prevention, public safety, maintaining or improving visitor use facilities, public access, and trails (including closing gaps in the Bay Trail), and restoring and enhancing natural areas/habitat, including sensitive redwoods, urban creeks, marshlands, grasslands, and hillsides.

Website: [https://www.ebparks.org/about/park\\_bonds\\_\\_\\_measures/measure\\_ff.htm](https://www.ebparks.org/about/park_bonds___measures/measure_ff.htm)

### **2.3.4 Local Programs**

#### **2.3.4.1 Developer Fees and/or Transportation Impact Fees**

##### **Managing Agency: Alameda County Cities and County, if available**

Local or area-wide transportation impact fees can be developed so that a developer would pay into a fund that would be used to plan and implement transportation mitigation measures. Multimodal projects can be included for funding under these fee programs to enhance bicycle and pedestrian safety and connectivity. The nexus is often made that vehicle trip reductions can be supported through multimodal projects. For example, the Downtown Dublin Traffic Impact Fee includes multimodal projects.

## Summary of Potential Active Transportation Funding Sources

	ATP Projects Primary (P) or Accessory (A) Focus	Off-street Bicycle Facilities (Class I)	On-street Bicycle Facilities (Class II, III, IV)	Bike Parking	Transit-supportive and Access Improvements	Traffic Calming	Roundabouts	Pedestrian Crossing Enhancements (PHBs, RRFBs,	Low Impact Design and Stormwater Infrastructure	Complete Streets and Corridor Planning Studies	Programs Implementation	Maintenance and Operations	Agency
Federal Programs													
Better Utilizing Investments to Leverage Development (BUILD) Grant (Formerly TIGER)	A	X	X		X		X	X	X				US DOT
Congestion Management & Air Quality (CMAQ)	P	X	X	X	X	X	X	X	X		X		FHWA
Surface Transportation Block Grant (STBG) Program	P	X	X		X		X	X				X	FHWA
Land and Water Conservation Fund (LWCF)	P	X							X				NPS
Rivers, Trails, and Conservation Assistance Program	P	X							X		X		NPS
State Programs													
Active Transportation Program (ATP) Grant	P	X	X	X	X	X	X	X	X	X	X		Caltrans
Sustainable Communities Grant	P									X			Caltrans
Strategic Partnerships Grant	P									X			Caltrans
Adaptation Planning Grant	P									X			Caltrans
State Highway Operation and Protection Program (SHOPP)	A		X									X	Caltrans
Highways Safety Improvement	P		X					X				X	Caltrans

	ATP Projects Primary (P) or Accessory (A) Focus	Off-street Bicycle Facilities (Class I)	On-street Bicycle Facilities (Class II, III, IV)	Bike Parking	Transit-supportive and Access Improvements	Traffic Calming	Roundabouts	Pedestrian Crossing Enhancements (PHBs, RREBs,)	Low Impact Design and Stormwater Infrastructure	Complete Streets and Corridor Planning Studies	Programs Implementation	Maintenance and Operations	Agency
Program (HSIP) Grant													
Systemic Safety Analysis Report Program (SSARP)	P									X			Caltrans
Transit and Intercity Rail Capital Program (TIRCP)	A			X	X								CTC
State Transportation Improvement Program (STIP)	A		X		X		X						CTC
Trade Corridor Enhancement Program (TCEP)	A	X	X		X			X					CTC
State-Local Partnership Program (LPP)	P		X		X			X				X	CTC
Office of Traffic Safety Grants	P										X		OTS
Recreational Trails Program (RTP)	P	X											CA Department of Parks and Recreation
Affordable Housing and Sustainable Communities (AHSC) Program	P	X	X	X	X	X	X	X	X		X		CA Strategic Growth Council
Transformative Climate Communities (TCC) Program	P	X	X	X	X	X	X	X	X	X			CA Strategic Growth Council
Environmental Enhancement and Mitigation (EEM) Grant Program	A	X							X				CA Natural Resources Agency
Urban Greening Grant Program	P	X	X			X			X				CA Natural Resources Agency
Environmental Justice (EJ) Small Grants Program	A										X		CA Environmental Protection Agency

	ATP Projects Primary (P) or Accessory (A) Focus	Off-street Bicycle Facilities (Class I)	On-street Bicycle Facilities (Class II, III, IV)	Bike Parking	Transit-supportive and Access Improvements	Traffic Calming	Roundabouts	Pedestrian Crossing Enhancements (PHBs, RREBs,	Low Impact Design and Stormwater Infrastructure	Complete Streets and Corridor Planning Studies	Programs Implementation	Maintenance and Operations	Agency
Stormwater Management Program	A	X	X						X				State Water Resources Control Board
Regional Programs													
OBAG	P	X	X	X	X	X	X	X	X	X	X	X	MTC
TDA Article 3	P	X	X	X	X	X	X	X	X	X	X		MTC
Regional Measure 1, 2, 3, and Future Regional Measures	A	X	X	X	X		X						MTC
Regional Active Transportation Program	P	X	X	X	X	X	X	X	X	X	X		MTC
Transportation Fund for Clean Air (TFCA)	P	X	X	X	X						X		BAAQMD
Bicycle Rack Voucher Program	P			X									BAAQMD
Measure WW Urban Creek Grant	P	X							X				EBRPD
Measure FF	P	X							X				EBRPD
Local BART Sales Tax	A				X								BART
Measure RR	P	X	X	X	X								BART
Alameda CTC													
Measure B	P	X	X	X	X	X	X	X	X	X	X	X	ACTC
Measure BB	P	X	X	X	X	X	X	X	X	X	X	X	ACTC
Lifeline Transportation Program (LTP)	P				X					X			ACTC
Vehicle Registration Fees	P	X	X	X	X	X	X	X				X	ACTC





