



Trail Around

The San Francisco Bay Trail

500 Miles ~ 47 Cities ~ 9 Counties ~ 1 Trail

League of Women Voters Highway 37 Presentation October 21, 2017





FRANCISCO BAY TRAIL

A 500-Mile Trail Around the Bay

Bay Trail Vision

A 500-mile continuous walking and bicycling trail around the shoreline of San Francisco Bay, connecting 9 counties and 47 cities, and crossing 7 toll bridges

- 354 miles (70%) complete
- 4½ toll bridges
- public access to the bay
- Bike/ped separated path
- healthy communities, environmental stewardship/education
- commute alternative, active transportation, links to transit





Bay Trail Board of Directors and staff, 2016

Regional Vision, Local Implementation

- responsibility of cities/ counties/state/ federal/special districts to plan and build trail
- Bay Trail staff role: technical assistance, promotion, advocate for gap closures, seek funding, administer grant contracts

San Francisco Bay Trail Project

- non-profit, 501(c)(3)
- administered by ABAG, staffed by 3.5ABAG employees
- Bay Trail Board of Directors with broad representation
- administrative costs funded through Metropolitan Transportation Commission (MTC) regional bridge toll funds



METROPOLITAN
TRANSPORTATION
COMMISSION

Bay Trail

FRANCISCO BAY TRAIL

Trail Around the Bay

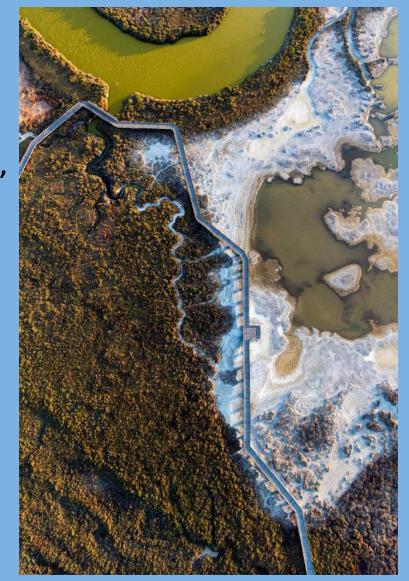


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Key Mission and Goals of the Bay Trail:

- Path for cyclists & pedestrians, fully separated from traffic
- Located adjacent to the shoreline
- A safe and inviting recreation and alternative commute corridor
- Compatible with wildlife and sensitive habitats







In the 21 mile SR 37 corridor, 15 miles of Bay Trail gaps, 13.5 miles existing (math is hard.....).



Key Considerations for the Bay Trail in the Highway 37 Corridor:

- Safety—all options need full barrier protection and adequate buffer distance for bicycles and pedestrians
- Connections to existing Bay Trail and other open space assets in the corridor are maintained
- That a complete, continuous, and free multi-use pathway is a baseline element of all alternatives and moves through planning, environmental review, design, permitting and construction in tandem.

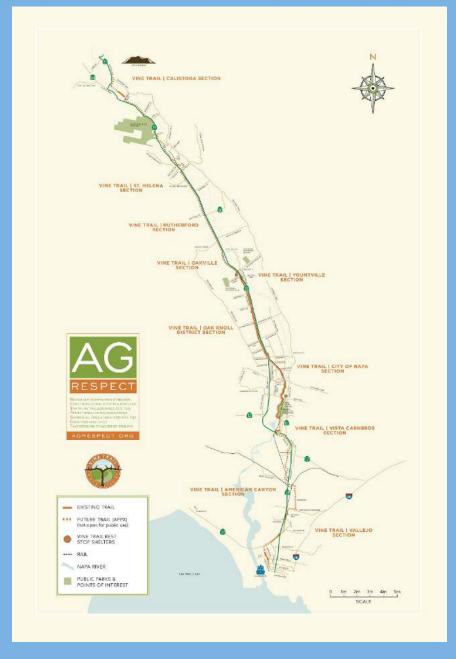




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Highway 37 connects directly to another regional trail in Solano and Napa Counties—The **Napa Valley Vine** Trail—a 47-mile fully separated pathway from the Vallejo Ferry to Calistoga.





A 500-Mile Trail Around the Bay ...And on this side, to the proposed SMART path running 70 miles from Larkspur to Cloverdale.



Wetland restoration projects around the region are golden opportunities to implement the Bay Trail...



FRANCISCO BAY TRAIL



Sears Point Bay Trail





Napa Plant Site Wetland Restoration—American Canyon





Bay Trail at Hamilton Wetlands

When planned and designed holistically, safe and inviting trails can be seamlessly incorporated into transportation infrastructure projects...



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Bike/ped path on the Carquinez Bridge

Transportation Facilities: The Bay Bridge Trail



15' wide multi-use path striped with 5' for peds, 5' each direction for bicycles. The breakdown lane separating traffic from the pathway barrier serves as an important buffer from noise, pollution, etc.

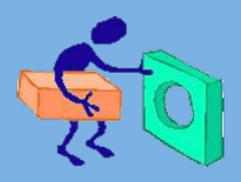


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- Meshing with a transportation facility
- Adapting to sea level rise
- Compatibility with Habitat Restoration
- Designing a safe an inviting trail in the context of all of the above

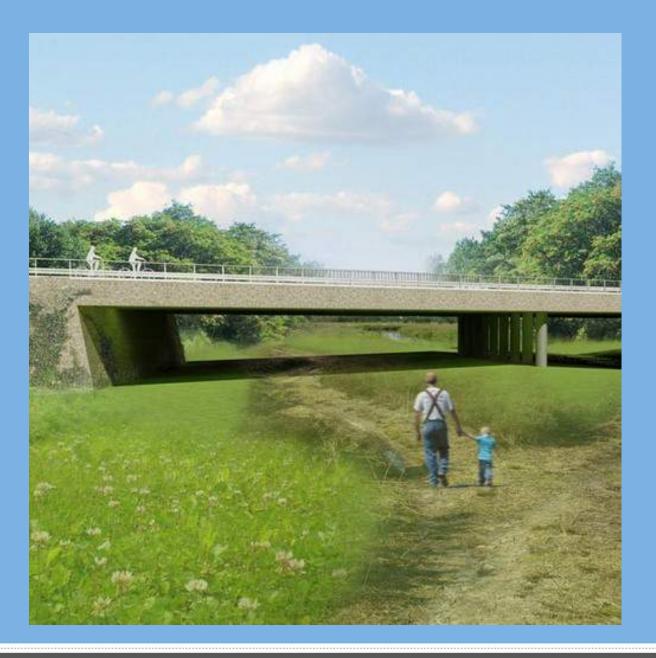


For Inspiration...



Integrated environmental, highway, bicycle, and pedestrian infrastructure with ground-level opportunities for engagement.













DESIGN PRINCIPLES

In designing the Bay Trail, there are seven essential principles that should be considered and addressed for any trail segment. These principles include:



User Experience and Safety



Continuity and Connectivity



Universal Access



Proximity to the Bay



Expected Levels of Use



Compatibility with Wildlife



357 Sea Level Rise

The following sections elaborate on the above principles and provide design objectives for each.

DESIGN PRINCIPLES AND OBJECTIVES
BAYTRAIL DESIGN GUIDELINES AND TOOLKIT

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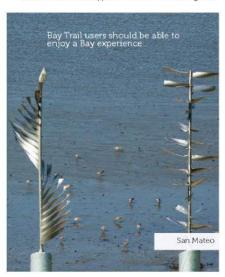


A 500-Mile Trail Around the Bay



Trail Geometrics

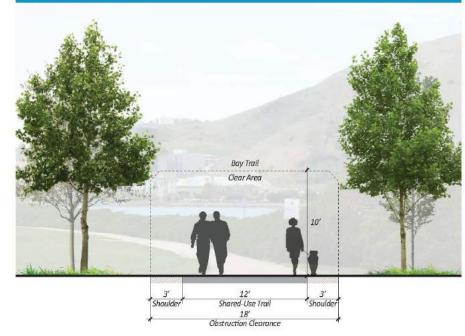
Trail Width: The standard width of the Bay Trail should accommodate the user's primary travel space and the use of shoulders when present. The Bay Trail and its clear space should consist of a minimum 18-foot width. The trail and shoulder widths are considered minimum standards necessary to accommodate a typical level of use along the



Bay Trail when completed. In many instances, projected use levels may be high, and therefore the Bay Trail width should be wider, such as along urban waterfront promenades. If use levels are anticipated to be extremely high, consideration should be given to separating fast-moving users (e.g., bicyclists, rollerbladers, or skateboarders) from slower-

moving pedestrians. There are a variety of methods to do so, such as pavement striping or inclusion of physical barriers (see Section 5.2. Bay Trail in Special Circumstances). In any case, all Bay Trail users should be able to enjoy a Bay experience, including Bay views.

FIGURE 5-1: BAY TRAIL WIDTH



TOOLKITBAYTRAIL DESIGN GUIDELINES AND TOOLKIT

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A 500-Mile Trail Around the Bay

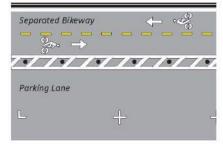
Bay Trail in a Limited Right-of-Way

In some locations, it is not feasible to fit the Bay Trail into the available right-of-way as an off-street Class I bike path. Alternatives to consider that would assure continuity of the Bay Trail include:

- Class IV Separated Bikeways: In some areas, Bay Trail bicyclists may need to ride on city streets. In these instances, it may be necessary to redesign an adjacent street right-of-way to create a dedicated bikeway with pedestrians using the sidewalk. This is particularly relevant where there is a limited number of driveway crossings that would conflict with bicycle use. Bay Trail separated bikeways should include:
 - ► A 12-foot-wide two-way bicycle facility.
 - A parallel physical barrier (guardrails, raised medians, large planters, or permanent bollards) to protect Bay Trail cyclists from adjacent motor vehicle traffic. Permanent physical barriers are preferred to parked cars.
 - A yellow dashed center line stripe and white edge striping.
 - Where the separated bikeway is at the same grade as either parking or a pedestrian sidewalk, different pavement color/texture could be used to visually separate the bikeway.
 - While two-way separated bikeways are recommended, in some instances one-way protected bikeways on each side of the street could be considered. An example would be updating existing Class II bike lanes to one-way protected bikeways to avoid reconfiguring intersections.

FIGURE 5-7: SEPARATED BIKEWAY BUFFERED BY PERMANENT BOLLARDS AND PARKING

Sidewalk









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BAYTRAIL DESIGN GUIDELINES AND TOOLKIT

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The End.



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