

6. PROJECT INFORMATION SHEETS

Many of the projects below contain items that can be fully or partially implemented using paint and signs. Painting street markings and erecting signs are low cost items that can be realized quickly. The Plan recommends that these paint and sign features receive priority, in an attempt to implement them quickly in advance of the overall projects. The following contains project fact sheets for the proposed projects identified in Chapter Five and Chapter Seven. Projects involving hardscape and changes in street operations (e.g., directional traffic flow) will be subject to further neighborhood review prior to implementation.

TABLE 6.1 – PRIORITIZED PROJECT LIST

Project		Project / Relative Priority (Tier)	
Tier 0 / Partially Funded and Planned		Tier 2	
1	Buchanan Street Bikeway and Buchanan/Marin Merge Realignment	14	Marin Avenue Walking and Bicycling Enhancements
2	Bay Trail (by East Bay Regional Parks District)	15	Dartmouth Bicycle Boulevard
3	Pierce Street Path Segment I Path/Segment II Path	16	Cerrito Creek Path
4	Codornices Creek Path	17	Santa Fe Bicycling Route
Tier 1		18	Washington Avenue Bicycling Boulevard/Route
5	Jackson Street Safe Routes to School	Tier 3	
6	Adams Street Bicycling Route	19	Key Route Boulevard Median Walking Path and Bicycling Route
7	Masonic Avenue Bicycling Route	20	Polk Street / UC Village Connection
8	Talbot Bicycling Boulevard	21	Peralta Bicycling Route
9	Solano Avenue Streetscape, Greening & Walking Safety Project	22	Portland Avenue Safe Routes to School
10	Kains Avenue Bicycling Route	23	Francis Street Bicycling Route
11	Ohlone Greenway Crossing Enhancements	Other	
12	San Pablo Streetscape and Walking Safety Project	24	University Village / Eastshore Crossing
13	Eastshore Frontage Road Path	25	Sonoma Avenue Bicycling Route
		26	Posen Avenue Bicycling Facility
		27	Waterfront Trail



Tier 4	1.	Buchanan Bikeway and Buchanan/Marin Merge Improvements	
Tier 3		<p>The Buchanan Street/ Marin Avenue corridor is Albany's only continuous east-west link from the Bay to the Berkeley hills. It consists of the Buchanan Street Extension west of I-80 along the north edge of Golden Gate Fields, the I-80 interchange and Overpass, a four-lane arterial segment between Pierce Street and San Pablo Avenue, and Marin Avenue to the east. Important connections and destinations along the corridor include Eastshore Frontage Road, USDA Research Center, Ocean View Park and Albany Friendship Club, Ocean View Elementary, and City Hall.</p>	
Tier 2		Background	<p>There currently exists a heavily used informal off-street path/wide sidewalk on the south side of Buchanan Street between San Pablo Avenue and Ocean View Park. This project would improve and extend the subject trail and provide safer crossing opportunities that would link the trail to neighborhoods on the north side of Buchanan Street and to the Bay Trail. At the eastern end of the current trail there is a bikeway gap between San Pablo Avenue and Cornell Street, where bike lanes installed as part of the Marin Avenue road diet project begin.</p>
Tier 1		Issues and Opportunities	<ul style="list-style-type: none"> ○ Between Pierce Street and Jackson Street, walking crossing demand exists between north-side residences and south-side destinations; however, no controlled walking crossings other than the Jackson signal are present. ○ Children and parents cross Buchanan Street at Jackson Street; however, the eastern crosswalk is currently closed. ○ The Buchanan Street/Jackson Street signal operates with permitted left-turn phasing for turns onto Jackson. ○ No sidewalk is present along the south side of Buchanan Street west of the Ocean View Park driveway. ○ No sidewalk is present along the north side of Marin Avenue/Buchanan Street between the Fire Station and Madison Street. ○ The primary westbound bicycling route on Marin Avenue ends at Cornell Avenue. ○ Other than a locked gate (University Village resident access only) just north of the Ohlone Avenue/Kinkead Way intersection, no walking or bicycling connections are present between Buchanan Street and University Village other than Jackson Street.
Tier 0	Relative Project Priority:	Detail of Proposed Improvements	<ul style="list-style-type: none"> ○ Between Pierce Street and San Pablo Avenue <ul style="list-style-type: none"> ▪ Along the south side, add a shared use path and on-street Shared Lane Markings (sharrows); ▪ Along the north side, add a westbound bicycling lane; ▪ Explore the possible relocation of the bus stop from under Buchanan overpass to a more pedestrian accessible location, and/or make sidewalk on south side of Buchanan Street continuous to Cleveland Avenue.



From top: Existing Buchanan Overpass, looking west; Existing Marin Class II bicycling lanes

Detail of Proposed Improvements (con't)

- At Pierce Street;
 - Install a new traffic signal, with a marked crosswalk on the west leg;
 - Close Buchanan Avenue west of Pierce Street to motor traffic and extend the existing shared use path on the Buchanan Street overpass from its current terminus to Pierce.
- At Taylor Street;
 - Narrow the USDA driveway and eliminate inbound and outbound slip lanes;
 - Mark a crosswalk across the USDA driveway;
 - Add a flashing beacon at the realigned USDA driveway stop sign that is interconnected with the new signal at the intersection of Pierce and Buchanan;
- At Jackson Street;
 - Paint a bicycle box on northbound approach.
- At San Pablo Avenue;
 - Add an eastbound right turn only lane;
 - Provide a protected eastbound right turn phase for path users to access the south crosswalk;
 - Restrict Right Turn on Red
- Extend Marin Avenue bike lanes from Cornell Avenue to San Pablo Avenue

Timeline

- Stage 1 – Buchanan bikeway, signals, and pavement markings
- Add Pierce Street signal and west crosswalk
 - Modify south curb line and drainage. Construct shared use path, Pierce Street to San Pablo.
 - Reconfigure Buchanan-Marin median and curbs
 - Add westbound bike lane and eastbound Shared Lane Markings
- Stage 2 – San Pablo Avenue to Cornell Avenue and Utility Undergrounding;
- Extend bicycle lanes from Cornell Avenue to San Pablo Avenue;
 - Underground utilities along both sides of Marin Avenue between San Pablo Avenue and Masonic Avenue and along the north side of Buchanan Street from San Pablo Avenue to Cleveland Avenue.

Cost

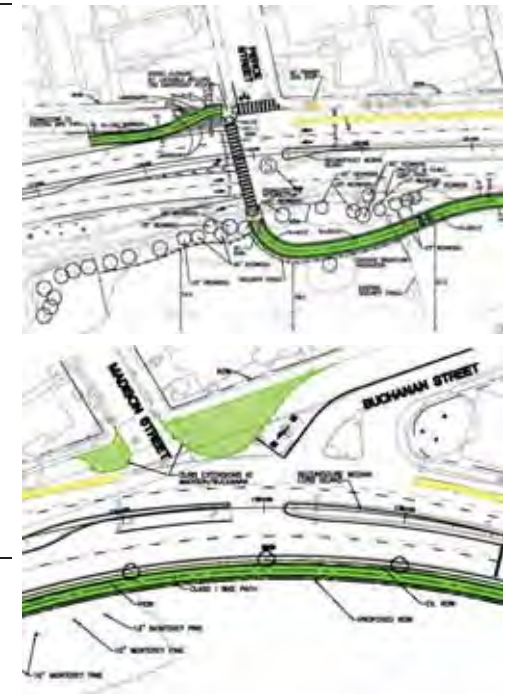
\$ 2.5 million

Other Related Projects

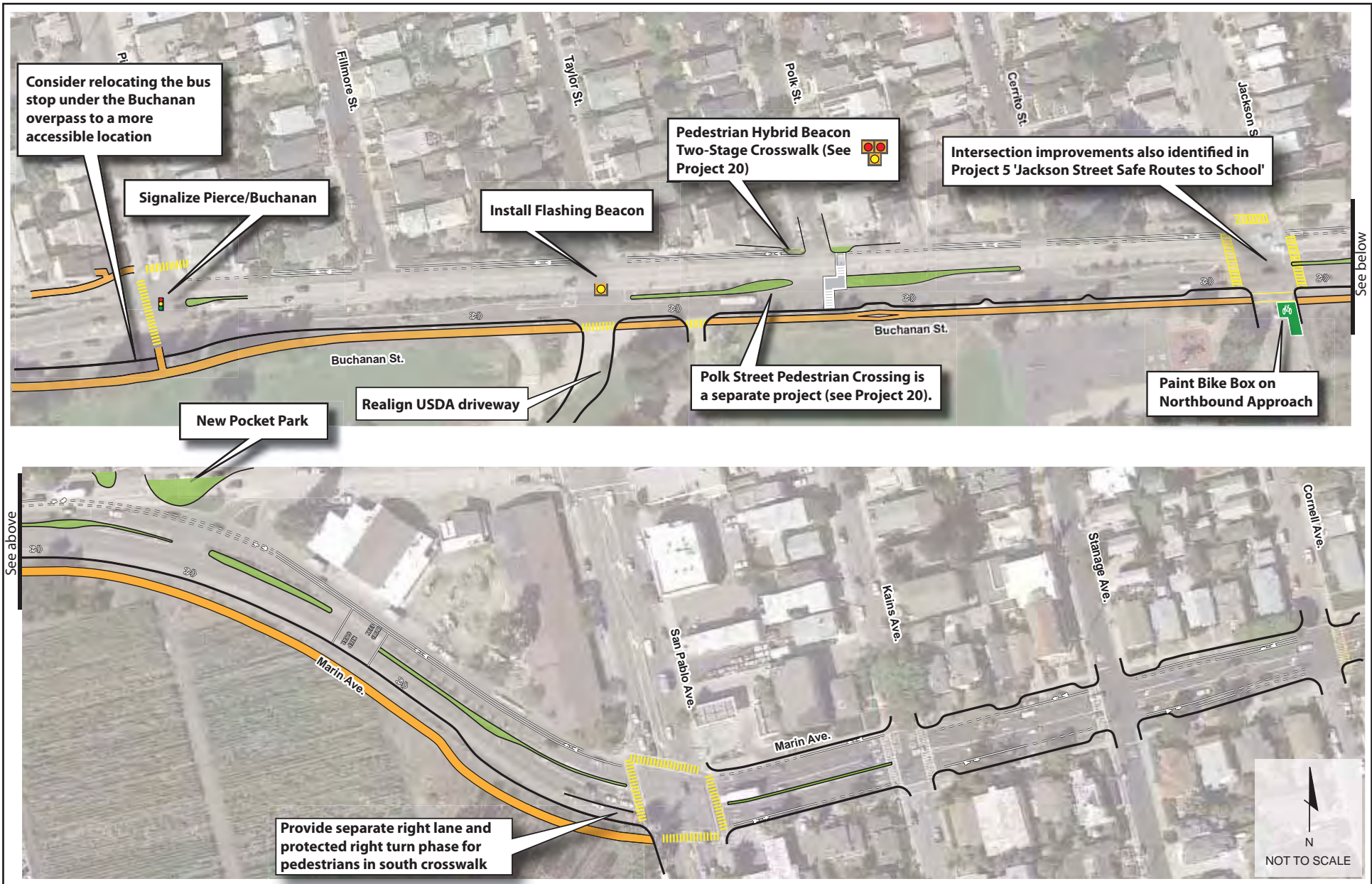
Eastshore Frontage Road Path (Project 13): This project would include a sidewalk extension along the southern side of the Buchanan overpass, connecting to the Buchanan bikeway.

Polk Street / UC Village Connection (Project 20): This project would add a new pedestrian hybrid beacon and crosswalk across Buchanan Avenue at Polk Street and Ocean View Park.

Buchanan/Jackson Safe Routes to School: This project, funded through a Caltrans Safe Routes to School grant, would reconfigure the Buchanan/Jackson intersection. Protected left-turn signal phasing, pedestrian countdown heads, ladder-style crosswalks and advance stop bars, and directional curb ramps. Construct of these improvements is expected Summer 2011. This project is separate from the Jackson Street Safe Routes to School (Project 5) project identified in this Plan.



From top: Proposed Pierce Street intersection improvements; Proposed Buchanan Street realignment and Madison Pocket Park (Source: AF.COM).



Tier 4	2.	Bay Trail Connection	
Tier 3		<p>The San Francisco Bay Trail provides easily accessible recreational opportunities for outdoor enthusiasts, including hikers, joggers, bicyclists, and skaters. It also offers a setting for wildlife viewing and environmental education, and it increases public respect and appreciation for the Bay. The Bay Trail has important transportation benefits, providing a commute alternative for cyclists, and connecting to numerous public transportation facilities (including ferry terminals, light-rail lines, bus stops and Caltrain, Amtrak, and BART stations). In 2010, the EBRPD obtained Tiger II grant funds to complete the trail between Gilman in Berkeley and Buchanan Street in Albany.</p>	
Tier 2		Background	<p>In 2005, the San Francisco Bay Trail Project prepared a report cataloguing the current status of all Bay Trail segments. Within Alameda County, the proposed segment of the Bay Trail at Golden Gate Fields was identified as a gap between existing trail segments in Berkeley and on the Albany Waterfront.</p>
Tier 1		Issues and Opportunities	<p>Golden Gate Fields is a private land owner, and any trail segment that requires an easement on their property would require their approval.</p>
Tier 0		Detail of Proposed Improvements	<p>The current planned alignment is shown on Bay Trail maps and would be located between the Bay shore and Golden Gate Fields. An addition trail serving utilitarian/commute cyclists is under consideration along the freeway.</p>
Relative Project Priority:		Cost	\$ 1.8 million



Graphic: Portions of the San Francisco Bay Trail Map
 (Source: ABAG)



Tier 6	3.	<p>Pierce Street Path Segment I/Segment II</p> <p>This project would create a new north-south shared-use path along the eastern side of I-80 between Buchanan Street and Cerrito Creek. This path would serve as an off-road alternative route from the Bay Trail to the Ohlone Greenway.</p>
Tier 3		<p>Background</p> <p>Currently, all bicyclists and pedestrians wishing to travel east-west through Albany are required to use the existing on-street facilities. The most direct route involves Buchanan Street and Marin Avenue (which has Class II bicycling lanes east of San Pablo Avenue). This project would connect the existing Buchanan Interchange Path to the Cerrito Creek Path.</p>
Tier 2	<p>Issues and Opportunities</p> <p>Pierce Street, from Buchanan Avenue to the 500 block, is a signed Class III bicycle route. This path would provide a continuous off-street bicycling route from the Albany waterfront (via the Bay Trail) to Albany Hill and the northern residential areas of Albany after completion of this project and the Cerrito Creek Path (Project 16).</p>	
Tier 1	Tier 0	<p>Detail of Proposed Improvements</p> <p>The project is divided into two “segments.” Segment I includes pavement rehabilitation of Pierce Street along the 500 block and from Calhoun to Buchanan. This segment also includes the development of a bicycling and walking path along the west side of the 500 block of Pierce adjacent to the sound wall. The project also includes lane re-striping, three raised crosswalks, dedicated bus turnouts, and new (or improved) access ramps, for the portion along the 500 block of Pierce. A two-foot wide buffer area would be located on both sides of the path and could include landscaping or decorative hardscape. In order to construct this improvement, the existing curb face on the west side of Pierce Street would be moved approximately 10 feet towards the centerline of the roadway. The existing parking spaces in this location would also be shifted towards the centerline.</p>
Relative Project Priority:		<p>Segment II begins where Pierce Street meets Albany Hill, just south of the Gateview complex. At this point, the path would continue slightly west, leaving Pierce Street and continuing down the slope to run parallel to the I-80 freeway and through the Caltrans property. The City of Albany would secure an easement, or purchase the property, from Caltrans prior to development of this segment of the path. This Class I (separated path) facility would accommodate both bicyclists and pedestrians and would be approximately 1,600 linear feet in length and 12 feet in width. A 2-foot buffer area would be located along both sides of the path, similar to the Pierce Street segment. The maximum longitudinal slope of the trails would be 5 percent, with a maximum cross slope of 2 percent. The path would continue through the Caltrans property, south to Washington Avenue. At this point, the path would cross Cleveland Avenue and continue south to Buchanan Street.</p>
	<p>Cost</p> <p>\$2.0 million</p>	



Graphic: Aerial of Pierce Street (Source: Google Earth, 2009)

Tier 4	<h1>4.</h1>	<h3>Codornices Creek Path</h3> <p>The Codornices Creek corridor is Albany's southernmost continuous east-west link from the Bay to the Berkeley hills. The path provides an important connection and alternative for bicyclists and pedestrians traveling from residential neighborhoods in southern Albany and northern Berkeley to University Village (and eventually the shopping destinations west of the railroad).</p>
Tier 3		<p>Background</p> <p>The Codornices Creek Path is partially constructed as a walking path between Kains Avenue and the railroad right-of-way. Providing a continuous, multi-use path along the creek would improve connectivity between the residential neighborhoods east of San Pablo Avenue and the UC Village and provide the most direct connection to the existing soccer fields, skate park, and baseball diamonds along the right-of-way. Between San Pablo Avenue and Kains Avenue, the existing walking path is closed.</p>
Tier 2		<p>Issues and Opportunities</p> <ul style="list-style-type: none"> ○ This path is the most direct east-west connection for neighborhoods in both southern Albany and northern Berkeley. ○ The Path alignment depends on available right-of-way on either side of the creek; therefore, it requires coordination between Albany, the City of Berkeley, and private property owners, including the University of California.
Tier 1		<p>Detail of Proposed Improvements</p> <p>To facilitate seamless east-west bicycling and walking access, the Codornices Creek Project will add a shared use path along the Creek between San Pablo Avenue and the railroad. This path will connect to a proposed Walking Hybrid Beacon at Dartmouth Street to facilitate connections to the east. Although a bridge over the railroad and I-80 was identified as a long-term project, this project only includes the shared use path east of the railroad.</p>
Tier 0		<p>Cost</p> <p>\$ 240,000</p>
Relative Project Priority:	<p>Other Related Projects</p> <p><u>Dartmouth Street Bicycle Boulevard (Project 15)</u>: The Dartmouth Street project would include a pedestrian hybrid beacon and crosswalk across San Pablo Avenue at Dartmouth Street. The Codornices Creek Path would use this crossing to cross San Pablo Avenue.</p>	

Aerial of Codornices Creek (Source: GoogleEarth)

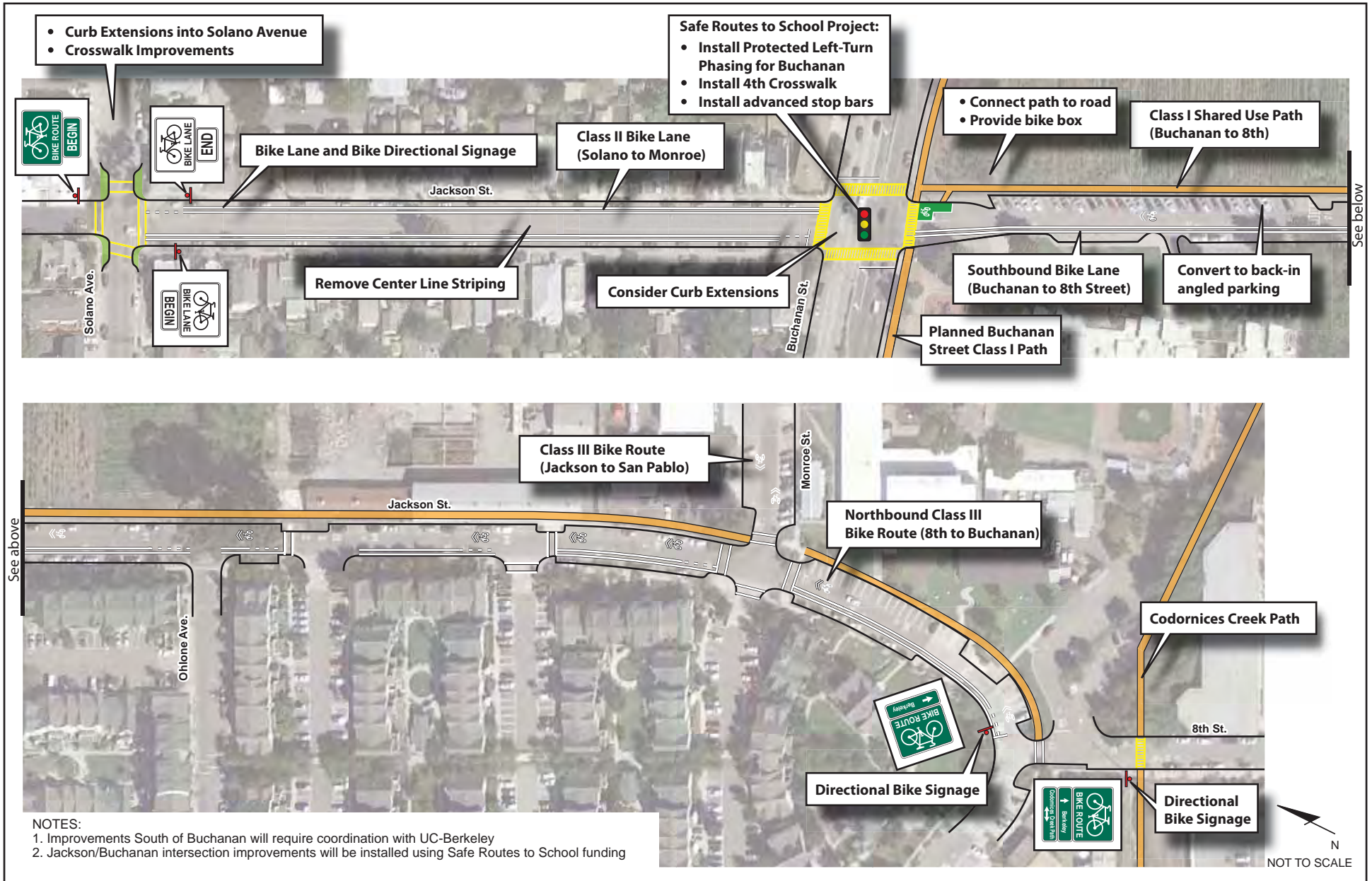




Tier 4	5.	<p>Jackson Street Safe Routes to School (SR2S)</p> <p>Jackson Street is the primary north-south route between the Albany Hill residential area, University Village, and the City of Berkeley. The section between Solano Avenue and University Village, including the intersection of Jackson Street/Buchanan Street, is a critical segment for students at Ocean View Elementary School. Jackson Street provides connections to future bicycling routes along Codornices Creek, Monroe Street, Buchanan Street, and Washington Avenue.</p>
Tier 3		
Tier 2	<p>Background</p> <p>Jackson Street is a residential street with one travel lane and parking in each direction and is signalized at Buchanan Street. Intersection improvements, including adding a crosswalk across the eastern leg, at Jackson Street/Buchanan Street are being planned as part of the Buchanan Street Project (See Project 1). This project would incorporate bicycling facilities and improve walking amenities along Jackson Street between Washington Avenue and 8th Street (in Berkeley). In conjunction with the Adams Street Bicycling Boulevard Project (see Project 6), the Jackson Street SR2S Project improvements would create a continuous north-south bicycling route through Albany west of San Pablo Avenue between El Cerrito and Berkeley. Most importantly, they would enhance safety for students walking and bicycling to Ocean View Elementary School.</p>	
Tier 1		
Tier 0	<p>Issues and Opportunities</p> <ul style="list-style-type: none"> ○ The signal at Jackson Street/Buchanan Street operates with permitted left-turn phasing. ○ The eastern crosswalk on the Jackson Street/Buchanan Street intersection is currently closed. ○ Walking crossings at Buchanan Street include children and parents. ○ South of Buchanan Street and north of University Village, on-street parking spaces along the east side of the roadway are angled and create conflicts between motorists and cyclists. ○ No sidewalk is present on the eastern side of Jackson Street along the Gill Tract (south of Buchanan Street to approximately 500 feet north of Monroe Street). ○ No truncated domes are provided on curb ramps. ○ Portions of the project will be completed using funding for the Buchanan Street Project (Project 1). 	
Relative Project Priority:		
	<p>Detail of Proposed Improvements</p> <ul style="list-style-type: none"> ○ At Jackson Street/Buchanan Street intersection <ul style="list-style-type: none"> ▪ Provide bicycle ramp connection between proposed Class I shared-use path along the Gill Tract and the northbound bike box. ○ At Jackson Street/Solano Avenue intersection <ul style="list-style-type: none"> ▪ Install directional curb ramps with truncated domes on all corners; ▪ Install curb extensions into Solano Avenue on northeast, northwest, and southwest corners; 	



Detail of Proposed Improvements (con't)	<ul style="list-style-type: none"> ▪ Maintain parallel striped school crosswalk. ○ Jackson Street between Washington Avenue and Solano Avenue <ul style="list-style-type: none"> ▪ Stripe sharrow markings; ▪ Provide standard “bicycling route” signage, including wayfinding signage. ○ Jackson Street between Solano Avenue and Buchanan Street <ul style="list-style-type: none"> ▪ Stripe northbound and southbound Class II bicycling lanes; ▪ Remove center lane stripe; ▪ Provide standard “bicycling route/lane” signage, including wayfinding signage. ▪ Explore adding curb extensions on Jackson Street at the intersection of Buchanan and Jackson; ○ Jackson Street between Buchanan Street and 8th Street (to be coordinated with UC Berkeley) <ul style="list-style-type: none"> ▪ Stripe southbound Class II bicycling lane; ▪ Stripe northbound Class III bicycle sharrow markings; ▪ Construct Class I shared-use path along eastern side of Jackson Street (through Gill Tract); ▪ Convert existing front-in angled parking to back-in angled parking; ▪ Provide standard “bike route/lane” signage, including wayfinding signage; ▪ Consider removing northbound and southbound stop signs as a bicycling treatment; ▪ Provide truncated domes on all curb ramps.
Timeline	<p>Stage 1 – Buchanan/Jackson intersection improvements; Curb Ramp Improvements</p> <p>Stage 2 – Signing and striping bicycling lane and route</p> <p>Stage 3 – Gill Tract Class I shared-use path</p>
Cost	\$ 800,000
Other Related Projects	<p><u>Buchanan/Jackson Safe Routes to School</u>: This project, funded through a Caltrans Safe Routes to School grant, would reconfigure the Buchanan/Jackson intersection. Protected left-turn signal phasing, pedestrian countdown heads, ladder-style crosswalks and advance stop bars, and directional curb ramps. Construct of these improvements is expected Summer 2011. This project is separate from the Jackson Street Safe Routes to School (Project 5) project identified in this Plan.</p> <p><u>Buchanan Bikeway and Buchanan/Marin Merge Improvements (Project 1)</u>: This project would include a bicycle box on the northbound approach to the Buchanan/Jackson intersection.</p>



Although this project would provide an alternative north-south bicycling route to San Pablo, the Traffic and Safety Commission did not recommend this project without further study, including the study of alternative designs, to allow for additional public outreach targeted at residents along Adams Street. City Council approved this recommendation on 4/16/2012.

Tier 1	6.	<p>Adams Street Bicycling Route</p> <p>The City recognizes the importance of regional north-south bike routes paralleling San Pablo Avenue. Adams Street parallels San Pablo Avenue one block to the west, offering a potential alternative to bicycling on San Pablo Avenue while providing access to all destinations along the west side of San Pablo Avenue. With the addition of a bridge over Cerrito Creek, Adams would link to Carlson Boulevard, a signalized access to the El Cerrito Plaza shopping center and a route to El Cerrito and Richmond. A path along the north side of Cerrito Creek extends west from Adams to El Cerrito's Creekside Park, and the Ranch 99 Shopping Center, which is located in Richmond. However, the street's current one-way-northbound configuration prevents its use as a two-way bikeway.</p>
Tier 0	Background	<p>Adams Street is a low-volume residential street between Buchanan Street and Cerrito Creek. The block north of Clay Street dead-ends at the Orientation Center for the Blind. No bridge is currently provided over Cerrito Creek. A one-block stub of Adams Street north of the Creek ends at Carlson Boulevard, which connects across San Pablo Avenue to the El Cerrito Plaza shopping center at a signal, and is a bicycling route through El Cerrito to Richmond. A narrow path on the north side of the Creek connects to the Ranch 99 Shopping Center parking lot. To block southbound cut-through vehicle traffic from San Pablo Avenue, Adams Street is one-way northbound south of Clay Street.</p> <p>This project would convert all blocks to two-way but add southbound half-closures at the north ends of each block, creating a two-way street that continues to prevent multi-block southbound motor vehicle trips. It would add a walking-bicycling bridge across Cerrito Creek to access the El Cerrito and Richmond destinations. It would substitute YIELD-controlled traffic circles for existing STOPs at several intersections, or shift STOPs to cross streets, to enable continuous bicycle travel.</p> <p>The resulting convenient and comfortable route would enable a wide range of bicyclists with origins west of San Pablo Avenue to access every block of San Pablo Avenue, in addition to reaching El Cerrito west of San Pablo Avenue, the Ranch 99 Shopping Center, and northeastern Albany via Brighton Avenue.</p>
Relative Project Priority:	Issues and Opportunities	<ul style="list-style-type: none"> ○ Two-way bicycle travel is needed to make Adams Street an alternative to San Pablo Avenue. ○ Southbound motorists on San Pablo Avenue must continue to be prohibited from using Adams Street as a reliever route. ○ Stop signs at every cross street slow bicyclists. ○ A walking-bicycling bridge over Cerrito Creek is needed to connect to Carlson Boulevard and to the path along the north side of Cerrito Creek to the Ranch 99 Shopping Center.
	Detail of Proposed Improvements	<ul style="list-style-type: none"> ○ Enable two-way bicycle travel while continuing to block southbound cut-through traffic [1] <ul style="list-style-type: none"> ▪ Add bicycling-permeable half-closures on the southbound entries at Washington Street, Castro Street, and Clay Street; sign them "DO NOT ENTER – EXCEPT BICYCLES"



From top: Existing Adams Street Cross Section; Sample DO NOT ENTER – BIKES EXCEPTED signage



- For bicyclist safety, prohibit parking immediately downstream (south) on the side of the half-closures;
 - Remove One-Way signs
 - Implement a right in/right out only at the intersection of Adams and Buchanan streets.
 - Enable continuous bicycle travel at the Washington Avenue, Castro Street, and Clay Street intersections [Stage 1]
 - Replace two-way stops at these intersections with neighborhood traffic circles and all-way Yield control, or
 - Replace two-way stops at these intersections with two-way stops on the cross streets;
 - Connect through the Orientation Center and across Cerrito Creek into El Cerrito [Stage 2]
 - Construct a walking-bicycling bridge across the creek, ideally with walking separation to aid blind users;
 - Optionally, create a bypass path along the east edge of the Orientation Center parking lot;
 - Create access between Adams Street and Brighton Avenue [Stage 3]
 - Negotiate access through private parking lot to Brighton Avenue/ San Pablo Avenue signal;
 - Construct a publicly accessible fence opening and walking route through parking lot to Brighton Avenue signal;
 - Replace speed bumps in parking lot with speed humps, to enable comfortable bicycling and bicycle trailer use;
 - Modify Brighton Avenue’s east leg to create a right turn only lane, a through bicycling lane, and a through-and-left lane.
 - Improve connections to Carlson Boulevard and along the creek to Pierce Street (working with El Cerrito and Richmond)
 - Work with El Cerrito to improve the safety of bicycling left turns at the Adams Street/ Carlson Boulevard intersection. A median refuge on Carlson Boulevard would enable left turns from Adams Street or Carlson Boulevard to be made in two steps. (A median refuge at Adams Street would also enable pedestrians to cross more easily there, but Lassen Street and San Pablo Avenue are close enough that this should not be necessary.)
 - Work with El Cerrito to widen the Cerrito Creek path west of Adams Street for use by bicyclists and pedestrians.
 - Work with El Cerrito, Richmond, and the Ranch 99 Shopping Center to extend the path to Pierce Street along the south edge of the shopping center parking lot.



Partial closure on 15th Avenue, north of Lake Street, San Francisco, California



Detail of proposed partial closures on Adams.

Cost	Without Bridge: \$ 190,000
	With Bridge: \$ 360,000





Tier 4	<h1>7.</h1>	<p>Masonic Avenue Bicycling Route and Pedestrian Improvements</p> <p>Masonic Avenue parallels the BART corridor and Ohlone Greenway from just north of Gilman Street in Berkeley to Brighton Avenue near Albany's northern city limit. The street is a straighter and faster alternative to the Ohlone Greenway for bicyclists comfortable with sharing a moderate-volume street and traversing simple signalized intersections.</p>
Tier 3	Background	<p>Masonic Avenue is a residential street, except near Solano Avenue and Marin Avenue, and is 30 feet wide between Santa Fe Avenue and Dartmouth Street, and 40 feet wide north of Dartmouth Street. Its east side is open space containing the elevated BART line and the Ohlone Greenway. Masonic has STOP signs at Brighton Avenue, Portland Avenue, Washington Avenue, Dartmouth Street, and Santa Fe Avenue. Signals are provided at Solano and Marin Avenues. Parallel parking is allowed on both sides and is well used along the residential and Solano Avenue/Marin Avenue commercial frontage.</p>
Tier 2	Issues and Opportunities	<ul style="list-style-type: none"> ○ Masonic Avenue carries low traffic volume and has fewer STOP signs than most north-south streets in Albany. It is already conducive to bicycling. ○ Low oncoming volume means motorists can pass bicyclists using the full remaining width of the street. This means that bicycling lanes are not necessarily needed, and parking could be retained on the BART/Ohlone Greenway side if they are not striped. ○ Shared lane markings would encourage bicyclists to ride clear of the door zone along parked cars. ○ A through bicycling lane for bicyclists approaching the Solano Avenue and Marin Avenue signals could be considered; however, the approach width is currently constrained by the width of parked cars along the east side of the street. ○ Across from the Albany Senior Center, the lack of a sidewalk along the east side of Masonic makes it difficult for passengers to get in and out of cars due to the sloped grade and vegetation. The current crosswalk connects on the east curb to a stairway, a further barrier to access for seniors.
Tier 1	Relative Project Priority:	<ul style="list-style-type: none"> ○ Add Shared Lane Markings (sharrows) in both directions ○ If the signals at Solano Avenue and Marin Avenue are traffic-actuated on the Masonic legs, ensure that bicycles approaching on Masonic Avenue can be detected, and mark the detection loops. ○ On the approaches to Marin and Solano Avenues, consider prohibiting parking for two to three car lengths to provide width for striping a through-and left lane next to a "combination" right turn only / bike through lane (i.e. a right turn only lane whose left-most four feet are dashed and marked for a bicycling through movement). ○ Monitor motor vehicle speeds and volumes periodically. Add traffic calming (speed humps or
Tier 0	Detail of Proposed Improvements	



From top: Existing Masonic Cross Section, looking north from the Community Center; Sample sharrow treatment; Existing Masonic Cross Section looking south.

Detail of Proposed Improvements (con't)	speed cushions) on a targeted basis if speeds become excessive. ○ Add sidewalk, where possible to the east side of the street along the 800 block. Enhance the existing crosswalks with in-pavement flashing lights, high visibility striping, and/or pedestrian curb extensions.
Cost	Class III Bicycling Route: \$ 17,000 Sidewalk along 800 block: Approximately \$200 per linear foot



Tier 3	8.	Talbot Avenue Bicycling and Pedestrian Route	
Talbot Avenue runs north-south through Albany, from Santa Fe Avenue in Berkeley to El Cerrito Plaza's south parking lot.			
Tier 2	Background	Talbot Avenue is 30 feet wide, with small-lot single-family homes and well-used parallel parking on both sides for its entire length. It is two-way except for its northernmost block (north of Brighton Avenue), which is one-way southbound.	
Tier 1	Issues and Opportunities	<ul style="list-style-type: none"> ○ Talbot is a good candidate for a bicycling route because it is a low-volume residential street aligned midway between two streets favored by through motor traffic (San Pablo Avenue and Masonic Avenue) and because it runs across the entire City and serves a school and El Cerrito Plaza. ○ Talbot has STOP signs at every cross street; no cross street stops for Talbot. By reducing the number of STOPS in the Talbot direction, such intersection control changes might attract some through motor traffic. Traffic calming might be needed to compensate. ○ Crossing Marin Avenue on Talbot Avenue is challenging because no median refuge for the northbound bicycling movement is provided, and the lane reduction to one travel lane in each direction has reduced the frequency of two-way gaps, especially during peak hours. 	
Tier 0	Detail of Proposed Improvements	<ul style="list-style-type: none"> ○ Preserve protection from El Cerrito Plaza motor traffic while enabling bicycling access to the Plaza <ul style="list-style-type: none"> ▪ Remove one-way southbound restriction for motor traffic on the El Cerrito Plaza to Brighton Avenue block ▪ Add a bicycling-permeable half-closure on the north leg (northbound) entry at Brighton Avenue, similar to the half-closures proposed for Adams Street and Kains Avenue; ○ Facilitate crossing Marin Avenue <ul style="list-style-type: none"> ▪ Add curb extensions out to the parking lines on Marin Avenue; ▪ Consider adding a landscaped median on Marin Avenue between Cornell and Talbot Avenues, prohibiting left turns into Talbot Avenue from eastbound Marin Avenue and enabling the addition of a median refuge at the west leg crosswalk. Provide a center median opening to enable bicycling through movements on Talbot Avenue and bicycling left turns from Marin Avenue; 	
Relative Project Priority:	Cost	Class III Bicycling Route: \$ 15,000; Marin Crossing: \$ 75,000	



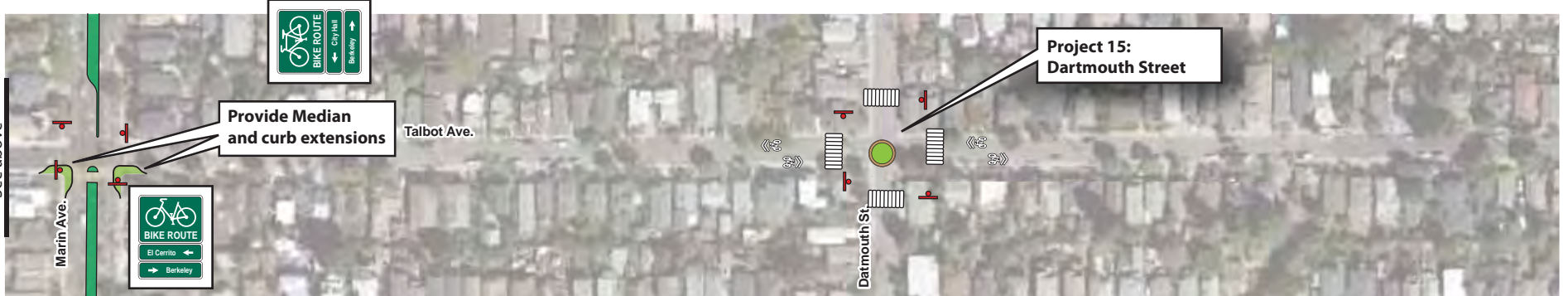


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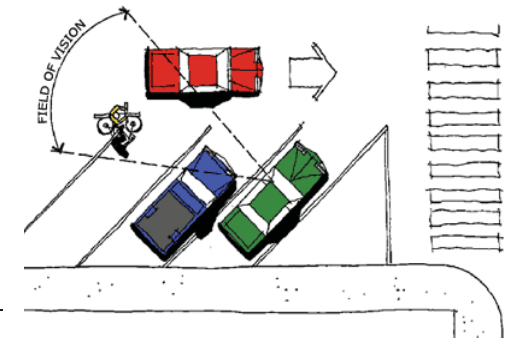


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Legend:
 = Bicycle Directional Signage



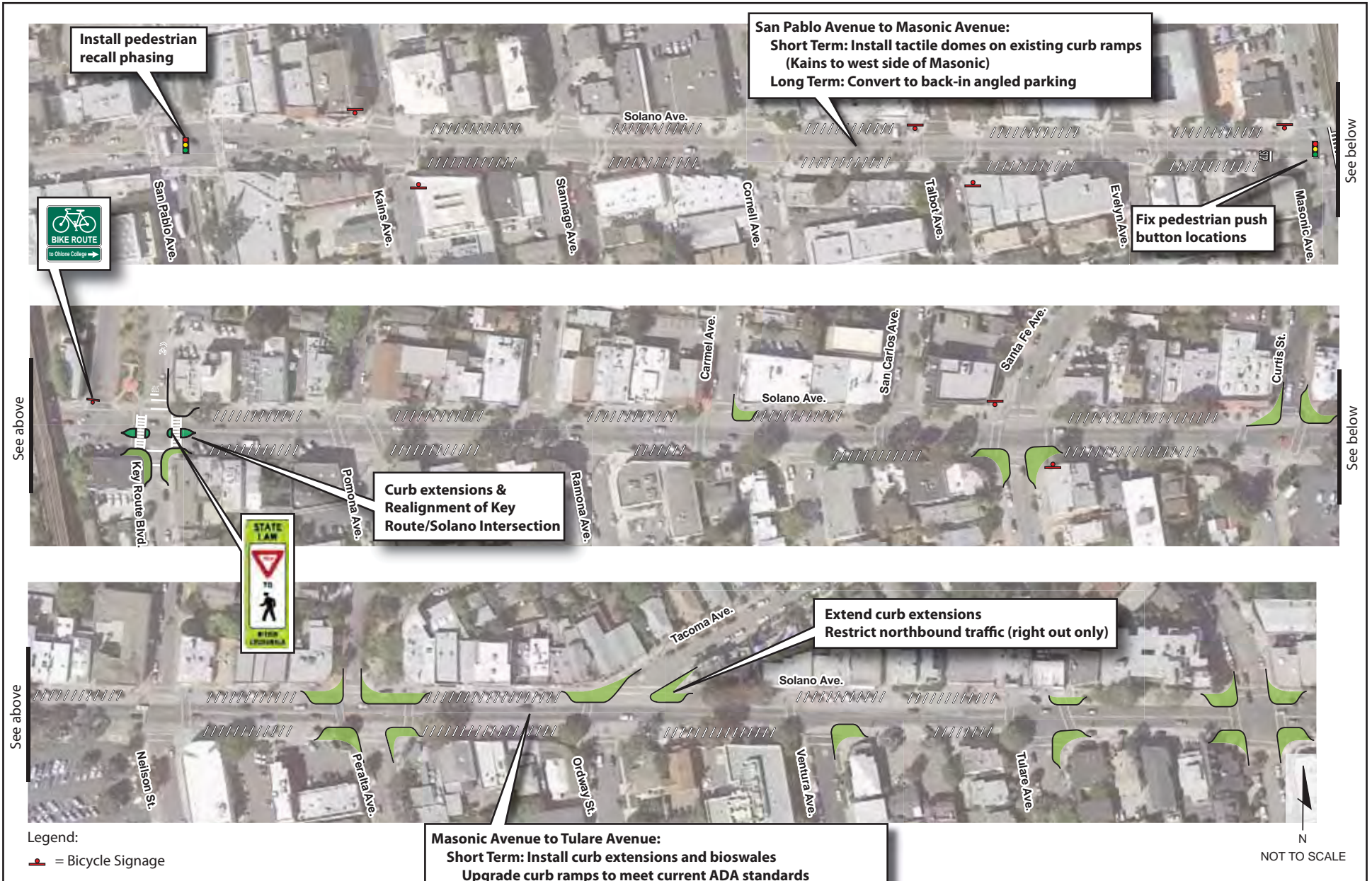
Tier 1	9.	<h3>Solano Avenue Streetscape, Greening, and Pedestrian Safety Project</h3> <p>Solano Avenue is the City of Albany's primary neighborhood commercial district. The City envisions the street as a walking-oriented "Main Street" that is safe for cyclists, pedestrians, and motorists, builds foot traffic for local businesses, encourages interaction in public spaces, and adds vibrancy to the community. This project would extend the existing walking-oriented streetscape design features located west of Masonic Avenue easterly towards the City's border with Berkeley at Peralta Avenue. The project would enhance the streetscape design to include green urban design features, such as natural bio-swales and natural landscaping, and walking and bicycling safety improvements, such as enhanced crosswalks and back-in angled parking.</p>
Tier 1	Background	<p>Solano Avenue, which connects the Albany Hill residential area in the west to the Berkeley foothills in the east, bisects Albany into two roughly equal halves. Due to the small size of the City and the length of the street, the Solano Avenue commercial corridor is located within ½ mile of nearly all of Albany's residents, making it well-positioned to serve as a walkable and vibrant "downtown" commercial district.</p> <p>Currently, the street has one travel lane and front-in angled parking in each direction between San Pablo Avenue and the City of Berkeley. West of San Pablo Avenue, Solano Avenue is primarily a residential street with one travel lane and parallel parking in each direction. In general, the only traffic control for vehicle traffic on Solano Avenue is at the traffic signals at San Pablo, Masonic and Santa Fe Avenues; the remaining intersections are side-street stop controlled. Solano Avenue also serves as a bus route, and is a truck route.</p> <p>In 1998, the City constructed streetscape enhancements along Solano Avenue between San Pablo Avenue and Masonic Avenue (Solano Avenue Streetscape Improvement Project Phase I). The proposed project in this Plan would extend the existing streetscape design elements along the western portion of Solano Avenue easterly towards the Berkeley border. Additionally, this project would address walking safety and accessibility issues along the entire corridor, including upgrading curb ramps, improving sight distance at intersections, and enhancing the visibility of crosswalks. To improve bicycling safety, the existing angled parking would be converted to back-in angled parking.</p>
Tier 1	Issues and Opportunities	<ul style="list-style-type: none"> ○ Heavy traffic volumes at the intersection of San Pablo Avenue/Solano Avenue limit the breadth of future walking enhancements. ○ Unsignalized crosswalks across Solano Avenue are difficult crossing points for the visually-impaired. ○ Vehicle yielding rates to pedestrians at unsignalized crosswalks was observed to be high. ○ The configuration of existing curb extensions make conversion to back-in angled parking more challenging. Additionally, this is the second location in the Active Transportation Plan where



From top: Back-in Angled Parking Diagram; Back-in Angled Parking in Tucson, Arizona.



Issues and Opportunities (con't)	back-in angled parking is proposed, and both locations would be the first installation of the treatment in the City (aside from the Police parking area).
Detail of Proposed Improvements	<ul style="list-style-type: none"> ○ Install back-in angled parking between San Pablo Avenue and Masonic Avenue, subject to results of pilot project on Portland Avenue adjacent to Memorial Park. ○ At San Pablo Avenue/Solano Avenue intersection <ul style="list-style-type: none"> ▪ Install walking recall phasing. ○ At Adams Street/Solano Avenue and Madison Street/Solano Avenue intersections <ul style="list-style-type: none"> ▪ Install curb extensions on Madison Street at all four corners; ▪ At Adams Street, install curb extensions on Solano Avenue at northeast, southwest, and southeast corners. ○ Solano Avenue between Masonic Avenue and Peralta Avenue (City of Berkeley) <ul style="list-style-type: none"> ▪ Install corner curb extensions with natural bio-swales where feasible; ▪ Install directional curb ramps on all corners; ▪ Install bicycling route directional signage at streets with designated bicycling routes or lanes; ▪ Install bicycle parking in areas where none currently exists. ○ At the intersection of Key Route Boulevard/Solano Avenue <ul style="list-style-type: none"> ▪ Install median splitter islands on east and west approaches; ▪ Install walking in-street yield signage; ▪ Coordinate improvements with future improvements proposed to Key Route Boulevard and the Ohlone Greenway crossing at Masonic Avenue signal ▪ Explore widening sidewalk on south side of Solano east of Key Route Boulevard ○ Reconstruct sidewalks to provide an unobstructed seven-foot walking way width. ○ At Solano/Masonic, the existing walking push button for crossing Masonic on the southeast corner is on the wrong (north) side of the pole. Relocate to south side, adjacent to the Masonic ramp.
Timeline	<p>Stage 1 – Install intersection improvements at Jackson Street, Madison Street, and Adams Street. Prepare streetscape design plan for Solano Avenue east of Masonic Avenue. Conduct back-in angled parking trial.</p> <p>Stage 2 – Construct streetscape design elements, including curb extensions and back-in angled parking</p>
Cost	\$ 1.1 million (excludes sidewalk widening)





Although this project would provide an alternative north-south bicycling route to San Pablo, the Traffic and Safety Commission did not recommend this project without further study, including the study of alternative designs, to allow for additional public outreach targeted at residents along Kains Street. City Council approved this recommendation on 4/16/2012.

Relative Project Priority:	Tier 4	10.	Tier 3	<p>Kains Avenue Bicycle Boulevard</p> <p>The City recognizes the importance of regional north-south bike routes paralleling San Pablo Avenue. Kains Avenue parallels San Pablo Avenue one block to the east, offering a potential alternative to bicycling on San Pablo Avenue that provides access to all destinations along the east side of San Pablo. The street's current one-way-northbound configuration north of Marin Avenue prevents its use as a two-way bikeway. At its north end, Kains Avenue connects into the El Cerrito Plaza shopping center before turning west to intersect San Pablo Avenue one block south of the Carlson Boulevard signal. Kains Avenue continues south of the Berkeley city limit, ending at Virginia Street, which serves BART's North Berkeley station.</p>
	Tier 2		<p>Background</p> <p>Kains Avenue is a 30' wide low-volume residential street and well-used parallel parking on both sides. To block northbound cut-through traffic from San Pablo Avenue, Kains Avenue is one-way southbound north of Marin Avenue. Kains Avenue has STOP signs at all cross streets.</p> <p>The project would transform the one-way blocks to two-way internally by adding bicycling-permeable half-closures at the south ends to continue blocking entry by northbound cars. This would create a two-way street for bicycling that is one-way for cars, while allowing motorists to exit either end of the restricted blocks. The resulting convenient and comfortable route would give a wide range of bicyclists access to every block of San Pablo Avenue. Substituting YIELD-controlled traffic circles for STOPS at unsignalized intersections, or shifting STOPS to cross streets, would enable continuous bicycle travel.</p>	
	Tier 1		<p>Detail of Proposed Improvements</p> <ul style="list-style-type: none"> o Enable two-way bicycle travel while continuing to block northbound cut-through traffic <ul style="list-style-type: none"> ▪ Add bicycling-permeable half-closures on the northbound entries at Marin Avenue and all streets to the north; sign them "DO NOT ENTER – EXCEPT BICYCLES"; ▪ For bicyclist safety, prohibit parking immediately downstream (north) of the half-closures; ▪ Remove One-Way signs o Enable continuous bicycle travel at all intersections except Solano and Marin <ul style="list-style-type: none"> ▪ Replace two-way stops at Brighton Avenue, Washington Avenue, and Dartmouth Street with neighborhood traffic circles and all-way Yield control; ▪ Replace two-way stops at Garfield and Portland Avenues with two-way stops on the cross streets o Kains Avenue/Marin Avenue Intersection <ul style="list-style-type: none"> ▪ Install a rectangular rapid flashing beacon (RRFB) to alert motorists to pedestrians and bicyclists crossing the street; ▪ A full signal at this intersection may be considered, but would require a full traffic study because it is located less than 300 feet from an existing signal (at San Pablo Avenue) and would impact vehicle travel on Marin Avenue. ▪ Provide curb extensions into Marin Avenue (Included in Project 1). 	
	Tier 0		<p>Cost</p> <p style="text-align: right;">\$ 475,000</p>	
	Tier 0			



Tier 1	11.	<h3>Ohlone Greenway Crossing Enhancements</h3> <p>The Ohlone Greenway is a path corridor that runs below the elevated BART line from Berkeley through Albany and El Cerrito before continuing west as the Richmond Greenway Trail. The Ohlone Greenway is a well-used, off-street bicycling route spanning Albany in the north-south direction. For much of the Greenway's length within Albany, the corridor has separate paved bikeway and walkway surfaces. These typically run just east and west of the BART structure, respectively.</p>
Tier 1	Background	<p>The original Greenway alignment through Albany intersected with cross streets in line with the east edge of the BART line, 50' to 75' east of Masonic Avenue. Such mid-block crossings still exist in El Cerrito. This produced awkward interactions with cross street motorists, and in 2004-05 Albany's Greenway crossings were realigned to use the east crosswalk of Masonic Avenue's intersections. Conflicts remain, especially with motorists turning left from southbound Masonic or right from northbound Masonic. The package of improvements in this Plan would enhance crossings beyond those in place today and those proposed by the BART retrofit project. A related project is the BART Seismic Retrofit work that will commence in 2011. This project will temporarily close the Greenway, but when it is reopened, the bikeway will be widened from 10 to 14 feet.</p>
Tier 1	Issues and Opportunities	<ul style="list-style-type: none"> o Motorists unfamiliar with the Greenway may not realize that it traverses the east crosswalk at intersections. o Some path users ignore STOP signs and signals at cross streets, possibly to avoid delays. o At the Solano and Marin Avenue signals, the walking signal heads currently have no countdown indications, and some push buttons are placed such that bicyclists must either dismount or move their bicycle into an awkward position. o Adding curb extensions to the east crosswalks at the Greenway crossings would shorten the crossing and enable two straight curb ramps on the corners. o Issues involving northbound right turning motorists <ul style="list-style-type: none"> ▪ Northbound motorists turning right from Masonic Avenue may not see northbound path users, especially bicyclists, approaching from behind. Doing so requires an unusually wide-angle scan, and visibility may be limited by mirror blind spots and the vehicle's rear roof pillar. <i>This is an inherent issue with parallel paths at street-street intersections.</i> ▪ Northbound bicyclists may not scan for or yield to northbound right-turning motorists. o Issues involving southbound left turning motorists <ul style="list-style-type: none"> ▪ Southbound motorists turning left from Masonic Avenue may not see southbound path users, especially bicyclists, approaching from behind. This requires an unusually wide-angle scan, and visibility may be limited by mirror blind spots and the vehicle's rear roof pillar. <i>This is an inherent issue with parallel paths at street-street intersections.</i> ▪ Northbound bicyclists may not scan for or yield to northbound right-turning motorists
Tier 1	Relative Project Priority:	



From top: Ohlone Greenway Crossing at Library; Ohlone Greenway Crossing at Marin



Detail of Proposed Improvements

- At all intersections where the Greenway crosses
 - Add high visibility markings to the east crosswalk;
 - Add signage on streets that cross the Ohlone Greenway alerting motorists of pathway crossing;
- At the Solano Avenue and Marin Avenue signals
 - Provide countdown walking heads on the east crosswalk;
 - Implement Leading Walking Interval on the east crosswalk;
 - Add Extinguishable Message Signs (a.k.a. blank-out signs) prohibiting northbound right turns and southbound left turns during the Leading Walking Interval.
 - Provide crossing buttons that bicyclists can operate without dismounting or repositioning the bicycle from the normal approach. In some cases this may involve adding a button;
- At Marin Avenue's east crosswalk (NE and SE corners)
 - Install curb extensions on the north and south curbs, add two curb ramps per corner;
 - At Ohlone Greenway and Garfield Avenue
- Continue pedestrian access across Masonic from Garfield to the Ohlone Greenway Path;

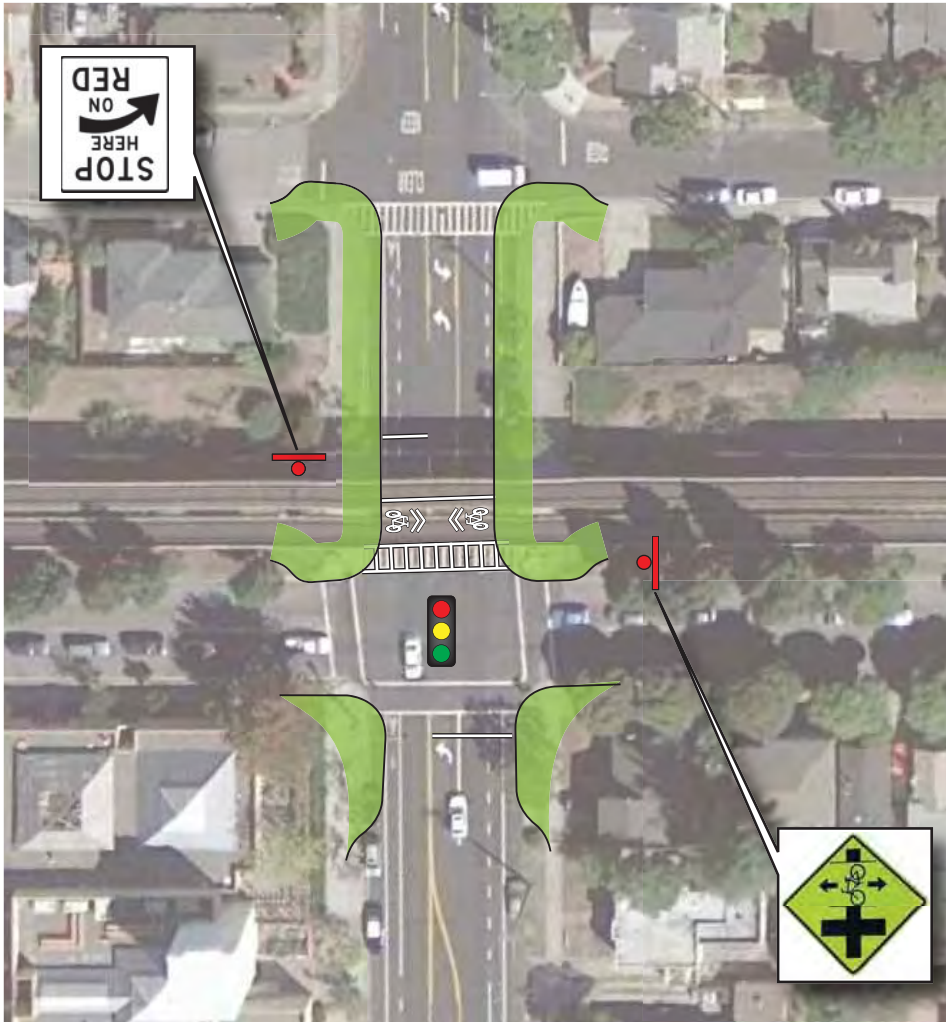
Cost \$ 540,000

Other Related Projects

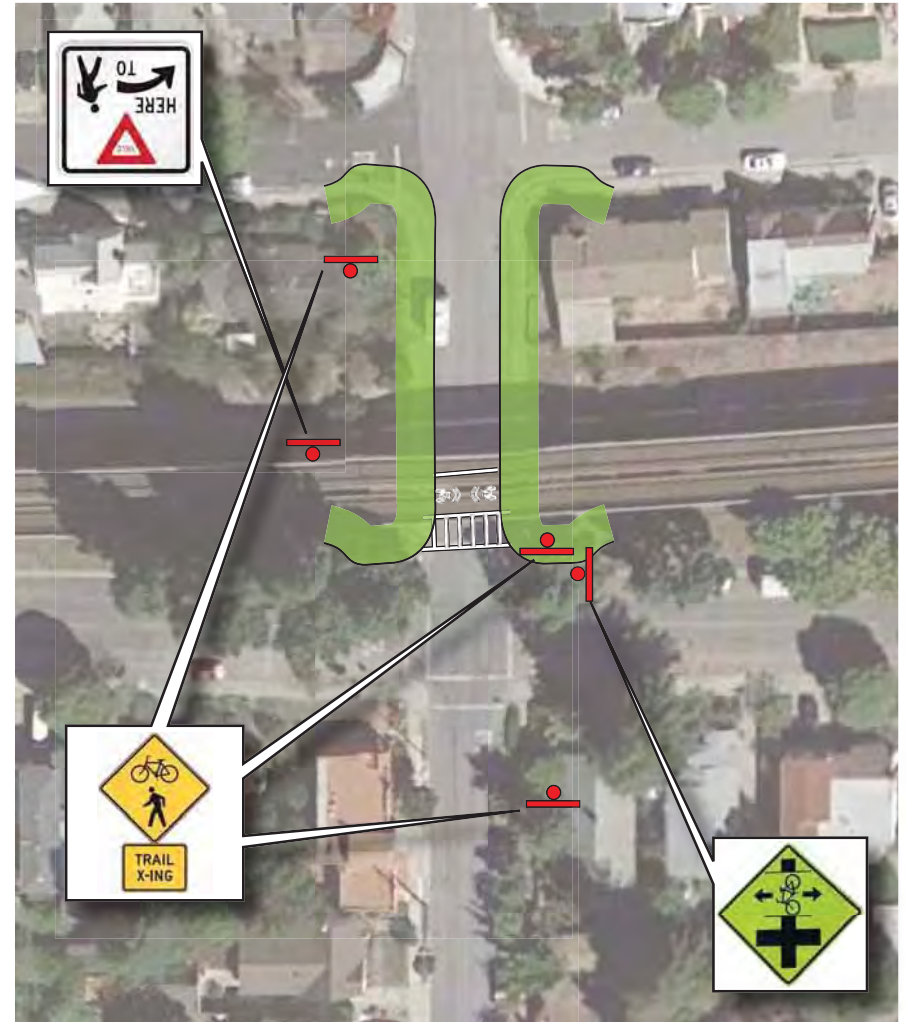
Masonic Avenue Bicycling and Pedestrian Improvements (Project 7): This project would include a new sidewalk along the east side of Masonic Avenue, near the Senior Center, to provide additional access to the Greenway.



From top: Separated Bike and Walking Crosswalks in Japan; Path Crossing Warning Sign

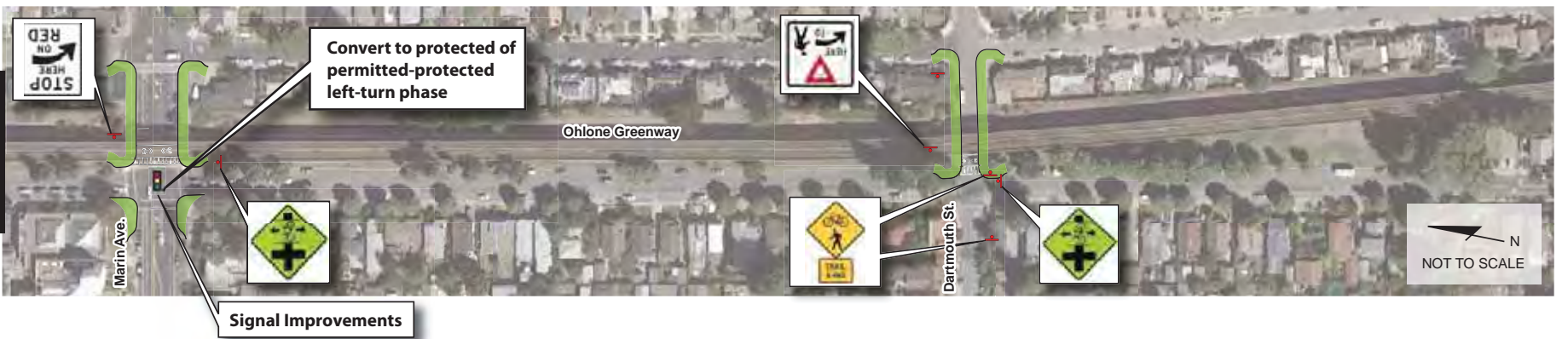


Prototypical Signaled Crossing of Ohlone Greenway



Prototypical Unsignaled Crossing of Ohlone Greenway

N
NOT TO SCALE



Tier 1	<h1>12.</h1>	<h3>San Pablo Avenue Streetscape and Pedestrian Safety Project</h3> <p>San Pablo Avenue is the major north-south arterial connecting Albany to the neighboring cities of Berkeley and El Cerrito. The roadway is challenging to cross as a walking or cyclist and is a substantial barrier separating the eastern residential areas from the Albany Hill neighborhood and Albany Bulb coastal areas. Additionally, San Pablo Avenue is a major automobile-focused commercial area. The proposed median, sidewalk, and crosswalk improvements in this Plan would make San Pablo Avenue easier and safer to cross as a walking or cyclist; create a distinctive roadway that identifies the City to drivers passing through; and shift the commercial focus from auto-centric to one that is attractive to pedestrians and cyclists.</p>
Tier 1	Background	<p>At one time, San Pablo Avenue was the major north-south circulator serving inner East Bay cities. When I-80/I-580 was built, its auto-carrying functions diminished, but it is still a major automobile street and is controlled by Caltrans. In addition to its auto function it is a very heavy transit street carrying AC Transit's first "rapid," the 72R, as well as numerous local bus routes and one TransBay bus route.</p>
Tier 1	Issues and Opportunities	<ul style="list-style-type: none"> ○ San Pablo Avenue is a Caltrans facility and a regionally significant vehicle route. ○ Several businesses along San Pablo Avenue have parking lots and driveways that currently have full access. ○ Due to higher vehicle volumes and speeds, crosswalks on San Pablo Avenue would need enhanced treatments.
Tier 1	Detail of Proposed Improvements	<ul style="list-style-type: none"> ○ Basic Improvements <ul style="list-style-type: none"> ▪ Install high-visibility crosswalk striping, advanced yield lines ("sharks teeth"), and "YIELD HERE TO PEDESTRIANS" signage at un-signalized crosswalks. ▪ Add crosswalk to the northern side of Brighton and San Pablo intersection and other T intersections on San Pablo Avenue, subject to Caltrans approval; ○ Mid-term Improvements <ul style="list-style-type: none"> ▪ Install a landscaped median where feasible. This would require further study and public outreach to identify the location of existing driveway curb cuts and needs of business owners; however, opportunities exist to consolidate turn pockets and provide a median in several areas along the roadway. ▪ Explore using the median as part of a storm water Best Management Practices (BMP); ○ At San Pablo Avenue/Washington Avenue <ul style="list-style-type: none"> ▪ Install a new signal at the southern Washington Avenue intersection;
Relative Project Priority:		



From top: Existing Washington Avenue Crossing; Proposed Streetscape Improvements, 14th Street, San Leandro; Mid-block crosswalk, Boulder, Colorado



Detail of Proposed Improvements (con't)

- Relocate the existing northern crosswalk to the south side of the northern intersection of Washington Avenue;
- Install median walking refuge islands on both north and south intersections;
- Remove parking on the eastern side of San Pablo Avenue between the two intersections and install a two-way, on-street separated bicycling path
- Restrict right-turns-on-red at the westbound approach of Washington Avenue and southbound approach of San Pablo Avenue to manage conflicts between vehicles and bicycles using the new two-way bicycling path.
- At San Pablo Avenue/Dartmouth Street
 - Convert Dartmouth Street to a right-in/right-out only street by constructing a median within the center turn lane on San Pablo Avenue;
 - Install a marked crosswalk and walking hybrid beacon on the south side of the intersection.

Timeline

Stage 1 – Enhanced Crosswalk Treatments

Stage 2 – Landscaped Median

Cost

\$ 1.7 million

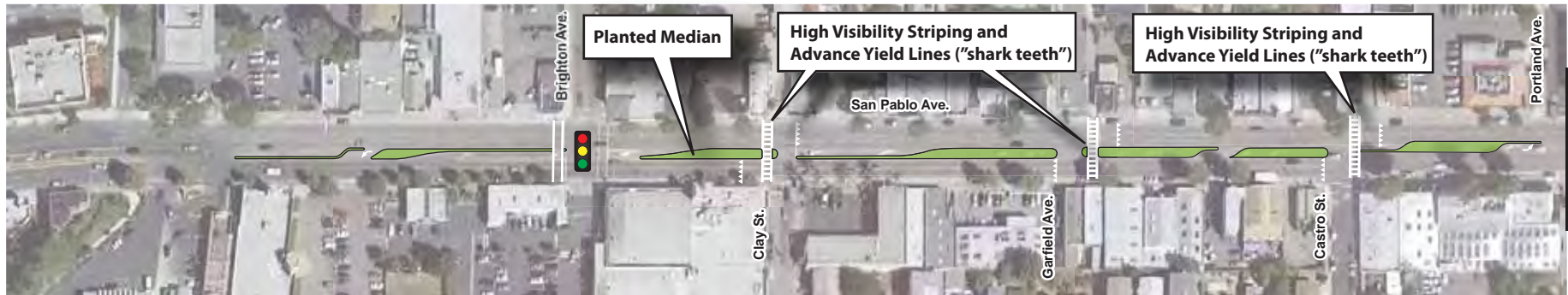
Other Related Projects

Dartmouth Bicycling Boulevard (Project 15): This project would include a new walking hybrid beacon at Dartmouth Street.

Washington Avenue Bicycling Boulevard (Project 18): This project would include a new traffic signal at Washington Avenue and a Class I path along the east side of San Pablo Avenue to facilitate crossings.



San Pablo Avenue Streetscape Elements in El Cerrito



See below



See above

See below



See above





Tier 4	13.	Eastshore Frontage Road Path and Sidewalk Enhancements
Tier 3		Currently, the only practical bicycling and walking route between Pierce Street and the Target and PetSmart superstores west of the Amtrak/Union Pacific rail corridor consists of the Buchanan Street path west of Pierce Street, a service road (and its asphalt sidewalk) beneath the Buchanan Street overpass that connects to Eastshore Frontage Road, a short west-side path, a mid-block crosswalk, east-side sidewalk, bicycling lanes on the Eastshore Frontage Road south of the service road, and the Target's parking lot's west edge sidewalk.
Tier 2	Background	Prior to the construction of the Target and PetSmart shopping center on Eastshore Frontage Road in 2004, this roadway served primarily as an alternative local serving roadway between University Avenue in Berkeley and Buchanan Street in Albany. After the retail uses were constructed, the walking and bicycling demand from the development were not fully addressed in the access designs to the site. In 2009, the City constructed a shared use path at the Buchanan Interchange to improve access; however, this route continues to be problematic for pedestrians and bicyclists. Improvements to this route, and a shorter alternative for pedestrians, would increase the safety and comfort of non-motorized trips to these popular stores.
Tier 1	Issues and Opportunities	<ul style="list-style-type: none"> ○ The west-side path segment south of the service road's intersection with Eastshore terminates at a mid-block crosswalk midway to the Target driveway signal; only bicycling lanes and the east sidewalk extend to the signal's north crosswalk. Southbound bicyclists must either cross at the midblock crosswalk and ride on the east sidewalk, or make an awkward left turn using the signal's north crosswalk. Target's parking lot has a sidewalk along its west edge from the signal to a parking lot aisle crosswalk that leads to a protected walkway to the store entrance. ○ The route from Pierce Street to Target is very long for walkers. ○ The isolated area beneath the Buchanan Street overpass deters pedestrians and bicyclists due to security concerns. ○ An inappropriate regulatory "Bicyclists Dismount" sign is posted near the terminus of the Buchanan Path loop at the north end of the service road beneath Buchanan Street. ○ The service road's asphalt sidewalk has no crosswalk markings at the foot of the road or where the road intersects Eastshore. ○ The service road has no pavement markings or guide signage indicating the bicycling route between the Buchanan Path terminus beneath the Buchanan Street overpass, and its intersection with Eastshore.
Tier 0	Relative Project Priority:	



From top: Eastshore Frontage Road, Looking North; Eastshore Frontage Road, Looking South

Detail of Proposed Improvements

[1], [2], [3] refer to Stages below

- Improve the service road connection and guidance between Eastshore and the Buchanan Path [1]
 - Mark the service road’s crosswalks under the Eastshore structure and at its intersection with Eastshore, using high-visibility markings to highlight the route;
 - Add Shared Lane Markings in both directions connecting Eastshore to the Buchanan Path at the bollard line;
 - Add an Advance Yield Line (“Shark’s Teeth”) and a curbside “Yield Here To Pedestrians” sign on the service road just before the lower crosswalk;
 - Add guide signs in both directions between the Target signal and the Pierce Street/ Buchanan Street intersection, including at the top and bottom of the service road and at the Buchanan Path intersection next to the I-80 ramp signal;
- Extend the Eastshore’s west-side path to the Target signal’s south crosswalk [2]
 - Remove the southbound bicycling lane and reconstruct the west curb to narrow the roadway by its width;
 - Realign the freeway fence to provide continuous width to the Target signal’s south crosswalk;
 - Using a combination of the area outside the existing west curb and the added width from narrowing the roadway, extend the west-side path to the Target signal’s south crosswalk.
 - Mark the south crosswalk and add walking countdown signal heads.
- When the Buchanan Path is built east of Pierce, connect Eastshore’s east sidewalk to it via the overpass [3]
 - Extend Eastshore’s east sidewalk to the Buchanan Street overpass, reusing vacant width on the Eastshore structure;
 - Narrow the lanes on the Buchanan Street overpass to free up at least 3’, preferably 4’;
 - Using the available width, widen the Buchanan Street overpass south walkway from 2’ to at least 5’, preferably 6’;
 - At the east end of the Buchanan Street overpass, engineer a sidewalk connection along the embankment to the end of the merging ramp from Cleveland Avenue, subject to property owner approval
 - Mark a crosswalk across the end of the Cleveland Avenue ramp.
 - Add guide signs for pedestrians and “Bicycles Prohibited” (on sidewalk) signs where this new sidewalk meets the west end of the new Buchanan Path (at Pierce) and just north of the PetSmart driveway.

Timeline	Stage 1:	Service road markings and signage
	Stage 2:	Extend Eastshore Frontage Road’s west-side path to the Target signal
	Stage 3:	Extend Eastshore Frontage Road’s east sidewalk to Pierce Street
Cost	\$ 160,000	



LEGEND:

- = Existing Sidewalk
- = Existing Path
- - - = Proposed Sidewalk
- = Proposed Path

Class I Path:

Short Term: Work with Target to widen the existing sidewalk along the west edge of the parking lot.

Long Term Vision: Extend path from the parking lot's west edge south to Codornices Creek, bridge the creek, and connect to the north end of 2nd Street in Berkeley



Tier 1	14.	<p>Marin Avenue Pedestrian and Bicycle Enhancements</p> <p>Marin Avenue is the primary east/west arterial serving residential and civic areas through the City of Albany and connecting to I-80/I-580 via Buchanan Street in the west and the City of Berkeley in the East. Although the street underwent a road diet (four lanes to three lanes plus bicycling lanes) in 2006, the street remains a barrier to north/south bicycling and walking travel. The proposed project would focus on improving walking and bicycling crossings along Marin Avenue.</p>
Tier 2	Background	<p>Although the Marin Avenue road diet has generally reduced vehicle speeds and enhanced east/west bicycling access, the street remains an obstacle for north/south walking and bicycling travel. Most intersections along Marin Avenue are unsignalized side-street stop controlled. The proposed walking and bicycling enhancements would reduce walking crossing distances and enhance unsignalized crosswalks and bicycling route crossings along Marin Avenue.</p>
Tier 2	Issues and Opportunities	<p>The City currently has "Phase II" improvement plans for the corridor that would be implemented separated from this Plan; although, those plans have been referenced for this project.</p>
Tier 2	Detail of Proposed Improvements	<ul style="list-style-type: none"> ○ At the intersection of Masonic Avenue/Marin Avenue <ul style="list-style-type: none"> ▪ Install separate high-visibility crosswalks for both walking and bicycling crossings at Ohlone Greenway; ▪ Relocate westbound signal mast pole to the eastern side of BART tracks ahead of Ohlone Greenway; ▪ Remove parking and install curb extensions on north and south sides of Marin Avenue between Masonic Avenue and Key Route Boulevard; ▪ Install protected or protected-permitted left-turn phasing eastbound and westbound; ▪ Install "STOP HERE ON RED" signage on westbound approach ahead of crosswalks. ○ Between Cornell Avenue and Talbot Avenue <ul style="list-style-type: none"> ▪ Remove center left-turn lane and replace with a planted median; ▪ Install walking refuge areas at crosswalks by installing walking "thumbnail" islands ahead of crosswalks; ▪ Install curb extensions on Marin Avenue at both Cornell Avenue and Talbot Avenue; ▪ Provide bicycling directional signage at intersections to indicate bicycling route on Talbot. ○ Along Marin Avenue ○ Reduce corner radii wherever feasible; and install curb extensions where feasible. ○ Investigate the feasibility of a modern roundabout or mini-roundabout at Ramona. ○ Safe Routes to School Project at Santa Fe Avenue/Marin Avenue (funded and under design) <ul style="list-style-type: none"> ▪ Install high-visibility school crosswalks and corner curb extensions; ▪ Eliminate eastbound right-turn slip lane.
Tier 2	Relative Project Priority:	
Tier 2	Cost	\$ 1.5 million





See below



See above

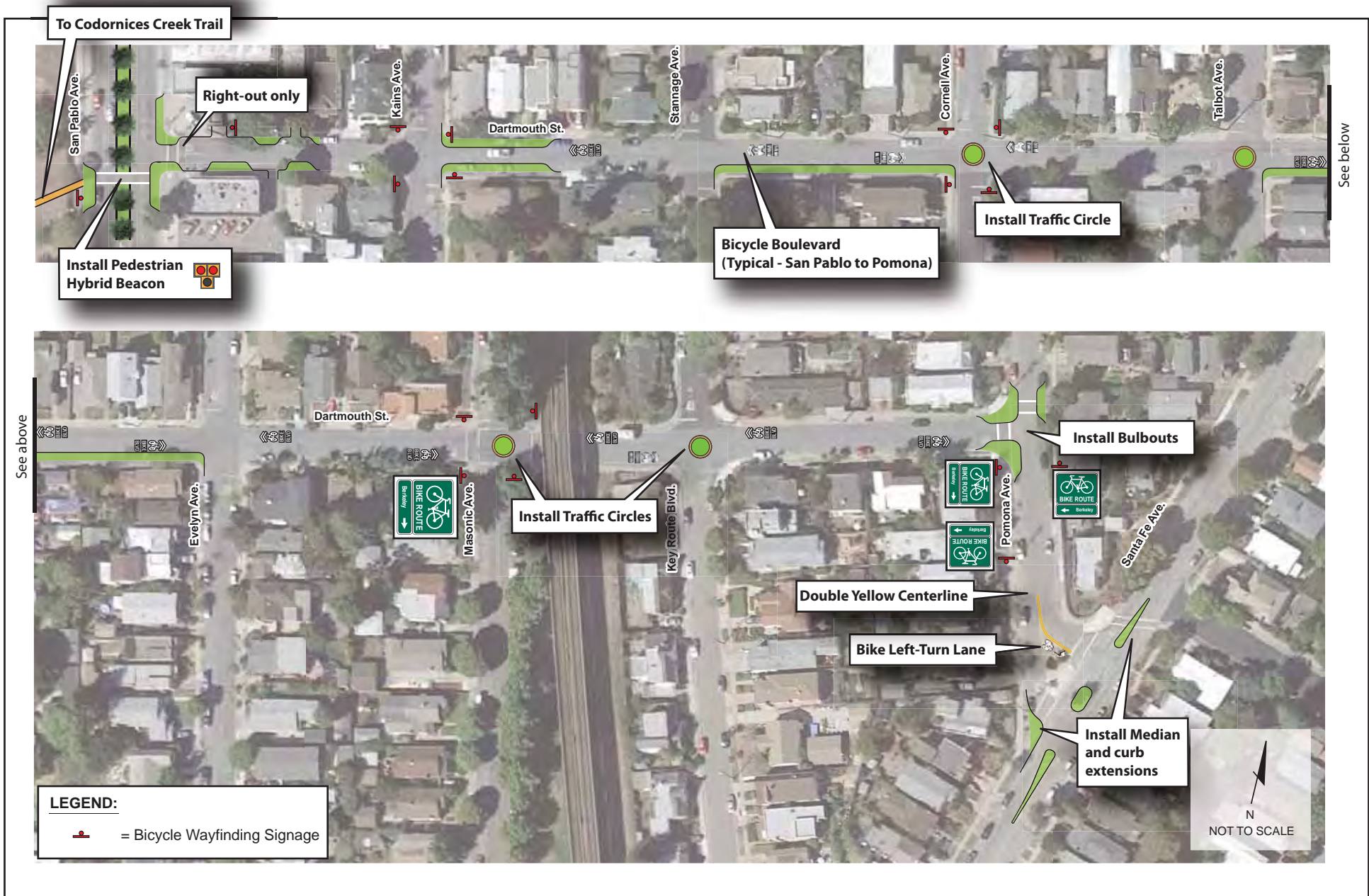
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Tier 1	15.	<p>Dartmouth Shared Street Concept</p> <p>Dartmouth Street is a residential street and the southernmost east/west street in Albany. The purpose of this project is to address traffic calming concerns and to create a walking-priority space for residents and neighbors to congregate and socialize.</p>
Tier 2		<p>Background</p> <p>Dartmouth Street is a typical two-lane, two-way residential street between San Pablo Avenue and Pomona Avenue. As the only east to west streets south of Marin Avenue, the street serves all as a collector roadway for the neighborhoods in southern Albany. To address walking and bicycling safety concerns and to refocus the street as a residential street, the roadway would become as a shared space, with traffic calming elements that prioritize walking and bicycling over automobile travel.</p>
Tier 2		<p>Issues and Opportunities</p> <ul style="list-style-type: none"> ○ Talbot, Masonic, and Pomona are currently the only all-way stop controlled intersections. ○ The San Pablo Avenue/Dartmouth Street intersection is unsignalized, but it allows full access into and out of Dartmouth Street. ○ Future development west of San Pablo Avenue near Dartmouth Street may increase the number of vehicles that use Dartmouth to access San Pablo Avenue.
Tier 2		<p>Detail of Proposed Improvements</p> <ul style="list-style-type: none"> ○ At San Pablo Avenue/Dartmouth Street <ul style="list-style-type: none"> ▪ Convert Dartmouth to a right-in/right-out only street by constructing a median within the center turn lane on San Pablo Avenue; ▪ Install a marked crosswalk and pedestrian hybrid beacon on the south side of the intersection; ▪ Install curb extensions into both San Pablo Avenue and Dartmouth Street. ○ At Cornell Avenue, Masonic Avenue, and Key Route Boulevard <ul style="list-style-type: none"> ▪ Install neighborhood traffic circles and yield control; the traffic circles shall be designed to accommodate the operations of fire trucks. ○ At Pomona Avenue/Dartmouth Street <ul style="list-style-type: none"> ▪ Install an all-way stop with curb extensions at both Dartmouth and Pomona on the northwest and southwest corners and install a curb extension on the east side of Pomona; ○ At Pomona Avenue/Santa Fe Avenue (See Project 17) <ul style="list-style-type: none"> ▪ Install a southbound bicyclist-only left-turn lane and yellow center line; ▪ Consider additional curb extensions and medians to reduce turning radii. ○ Other improvements <ul style="list-style-type: none"> ▪ Install bicycling boulevard pavement stencil striping and bicycling route signage;
Tier 2		<p>Timeline</p> <p>Stage 1 – Signing and striping of bicycling lane and route; Traffic Circles at Cornell, Talbot, Masonic, Key Route</p> <p>Stage 2 – Intersection improvements at Dartmouth Street; Intersection improvements at Pomona Avenue</p>
Tier 2		<p>Cost</p> <p>\$ 1.1 million</p>
Tier 2		<p>Relative Project Priority:</p>



Dartmouth Saturday Streets Block Party



See below

See above



	<h1>16.</h1>	<p>Cerrito Creek Path</p> <p>Cerrito Creek forms Albany's northern city limit. It is daylighted west of San Pablo Avenue and between Kains Avenue and Talbot Avenue (four of the seven blocks along the El Cerrito Plaza south parking lot). Path segments exist along the north (El Cerrito) side west of San Pablo Avenue (between the Ranch 99 Shopping Center parking lot's east edge and Adams Street) and east of San Pablo (Kains Avenue to Talbot Avenue). The west-side path is narrow between Yosemite Avenue and Adams Street. The east-side path (Richmond) is unpaved and follows the bank, several feet below the shopping center parking lot to Pierce Street. Path located on north side of Cerrito Creek to be developed by El Cerrito and Richmond in cooperation with Albany</p>
Tier 2	Background	<p>Potential Cerrito Creek Trail improvements comprise eight segments in three jurisdictions: SP= San Pablo, W= West of SP, E= East of SP, N= North (El Cerrito / Richmond) side, S= South (Albany) side</p> <ul style="list-style-type: none"> ○ W1N: North (Richmond) side from Pierce Street, along the south edge of the Ranch 99 Shopping Center parking lot, to the current western terminus near Belmont Avenue [segment does not exist]; ○ W1S: South (Albany) side between Pierce and the small dam near Belmont Avenue [segment does not exist but there is adequate width north of the condominium driveway. Would cross the creek to El Cerrito at the dam] ○ W2: North (El Cerrito) side, between Ranch 99 parking lot's east edge and Adams Street [narrow in places]; ○ W3: South (Albany) side between Adams Street and San Pablo Avenue [sidewalk width]; ○ SP: Across San Pablo Avenue; ○ E1: San Pablo Avenue to Kains Avenue, along the Wells Fargo parcel [sidewalk on north side]; ○ E2: Kains Avenue to Talbot Avenue [unpaved informal trail along the north bank]; ○ E3: Talbot Avenue to Ohlone Greenway
Relative Project Priority:	Issues and Opportunities	<ul style="list-style-type: none"> ○ A paved surface exists on the north (in Richmond / El Cerrito) side between Pierce Street and Adams Street, but portions are in the parking lot [W1N] or too narrow for shared use [W2]. A segment between Pierce Street and the existing El Cerrito segment [W2] would be useful, on the north side (Ranch 99 lot edge) [W1N], the south side [W1S], or both. ○ The existing El Cerrito segment west of Adams Street [W2] would need to be widened for shared use; ○ The daylighted segment east of San Pablo Avenue [E2] has a walking trail along the creek but no bicycling path. ○ A bikeable path between Kains Avenue and the Ohlone Greenway could be added along the south



From top: Friends of Five Creeks Walking Group; Adams Street Dead-End at Cerrito Creek; Existing Portion of Cerrito Creek Path through Brookwood Park
 6-125



edge of the Plaza lot.

- A link across San Pablo Avenue would require a signal or Walking Hybrid Beacon and changes to the northbound left turn storage [SP], and changes to the westernmost block of Kains Avenue (along the Wells Fargo parcel) [E1].

Detail of Proposed Improvements

- Work with El Cerrito to widen the path along Cerrito Creek west of Adams Street [W2] for shared use;
- Work with El Cerrito, Richmond, and the Ranch 99 owner to extend the path to Pierce Street [W1N];
- Add a path along the south (Albany) side of the creek from Pierce Street to the dam, and a crossing at the dam [W1S];
- Discuss with El Cerrito the usefulness of a shared use path east of San Pablo Avenue [E2, E3]. If deemed useful, create it along the south edge of the Plaza parking lot.
- If a link across San Pablo Avenue [SP] is deemed useful,
 - Work with Caltrans and El Cerrito to analyze northbound left turn queuing, possibly modify the Carlson Boulevard signal, and add a Walking Hybrid Beacon or signal at the Kains Avenue/ San Pablo Avenue intersection [SP];
 - Widen the existing path between Adams Street and San Pablo Avenue [W3] owned by State of California Orientation Center for the Blind;
 - Widen the north-side sidewalk around the Wells Fargo parcel for shared use [E1].



Existing portion of Cerrito Creek path

Cost

Without bridges: \$ 360,000

With Bridges: \$ 720,000

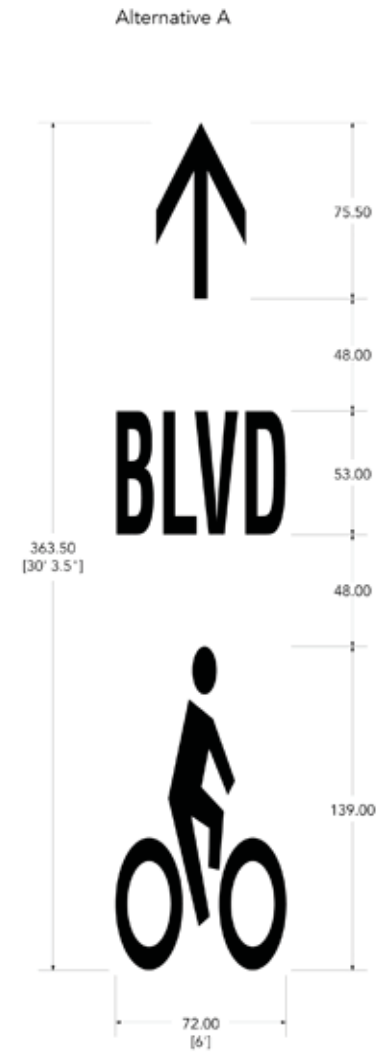
17.	<p>Santa Fe Avenue Bicycling Route</p> <p>Santa Fe Avenue is a low-volume residential street with ample width for use as a bicycling route. It is located roughly midway between Key Route Boulevard and Peralta Avenue, the other north/south bicycling routes that span Albany east of the Ohlone Greenway. Santa Fe Avenue intersects Masonic Avenue and the Ohlone Greenway near the Berkeley city limit.</p>
Background	<p>This project would add guide signs along Santa Fe Avenue between the Ohlone Greenway and Portland Avenue. If needed, it would add traffic calming to address speeding in order to keep the street comfortable for bicycling.</p>
Tier 2 Issues and Opportunities	<ul style="list-style-type: none"> ○ Santa Fe Avenue south of Marin Avenue is an existing Class III facility (signage only) ○ The Santa Fe Avenue/Marin Street intersection is being redesigned and would facilitate safe crossing for bicyclists.
Detail of Proposed Improvements	<ul style="list-style-type: none"> ○ Install shared-lane markings (sharrows) along Santa Fe Avenue between the City of Berkeley border and Portland Avenue. Install bicycle boxes on the northbound and southbound approaches at the Marin Avenue and Solano Avenue signalized intersections. ○ Install directional signage at the Ohlone Greenway, Pomona Street, Francis Street, Marin Avenue, Solano Avenue, Washington Avenue, and Portland Avenue intersections. ○ At Santa Fe Avenue/Pomona Avenue intersection <ul style="list-style-type: none"> ▪ Install a left-turn lane for bicyclists on the Pomona Street approach. This bicyclist-only turn lane would replace the existing yellow hatched area on the north side of the existing island; ▪ Consider installing solid (preferably planted) medians within the existing painted medians on Santa Fe Avenue; ▪ Reduce the corner radius on the southwest corner of the intersection by making the Pomona Street approach meet Santa Fe Avenue at as close to a 90-degree angle as feasible; ○ Install a parallel Class III bicycling facility and pedestrian route on Carmel Avenue between Portland Avenue and the El Cerrito City Limit.
Relative Project Priority:	<p>Cost \$ 3,000</p>



From top: Existing Santa Fe Cross Section at Solano; Sample sharrow treatment; Pomona/Santa Fe Intersection (Proposed Bicycle Turn Lane Location)



Tier 4	18.	<p>Washington Avenue Bicycle Boulevard</p> <p>Washington Avenue is a residential street running from the Albany Hill residential area through eastern Albany and into Berkeley. As a cross-town residential street one block north of Solano Avenue, Washington Avenue is well located to serve as a bicycling route and alternative to the busier and more commercial Solano Avenue. This project includes bicycling boulevard treatments to prioritize bicycle travel on the street, facilitate bicycling crossings at San Pablo Avenue, and addresses other walking and bicycling deficiencies along the corridor, including deficient curb ramps and sidewalk parking.</p>
Tier 3	Background	<p>Washington Avenue is a typical two-lane, two-way residential street between Cleveland Avenue and Peralta Avenue (City of Berkeley border). One block north of Solano Avenue and serving as an east/west route for most residences in northern Albany, Washington Avenue provides not only a good cross-town bicycling route, but also a good connection to all existing and planned north/south bicycling routes, including the Ohlone Greenway, Talbot Avenue Bicycling Route, Kains Street Bicycling Boulevard, Adams Street Bicycling Boulevard, and Santa Fe Avenue Bicycling route.</p>
Tier 2	Issues and Opportunities	<ul style="list-style-type: none"> ○ East of Pomona Avenue, Washington Avenue is wide enough to accommodate Class II bicycling lanes, and the only stops on Washington Avenue occur at Santa Fe Avenue and Neilson Street (City of Berkeley border). ○ Between San Pablo Avenue and Pomona Avenue, Washington Avenue can accommodate a shared Class III bicycling route. ○ The San Pablo Avenue/Washington Avenue crossing is a challenging barrier along the route since Washington Avenue is offset on either side of San Pablo Avenue. ○ West of San Pablo Avenue, Washington Avenue is a residential street with lower traffic volumes. ○ Between Cerrito Street and Pierce Street, the street narrows and residents often park cars on the sidewalk.
Tier 1	Detail of Proposed Improvements	<ul style="list-style-type: none"> ○ At San Pablo Avenue/Washington Avenue <ul style="list-style-type: none"> ▪ Install a new signal at the southern Washington Avenue intersection; ▪ Relocate the existing northern marked crosswalk to the south side of the northern intersection of Washington Avenue; ▪ Install median walking refuge islands on both north and south intersections; ▪ Remove parking on the eastern side of San Pablo Avenue between the two intersections and install a two-way, on-street separated bicycling path ▪ Restrict right-turns-on-red at westbound approach of Washington Avenue and southbound approach of San Pablo Avenue to manage conflicts between vehicles and bicycles using the new two-way bicycling path. ○ Between Jackson Street and Pomona Avenue, stripe bicycling boulevard pavement stencils and bicycling signage. ○ East of Pomona Avenue, install Class II bicycling lanes and bicycling route signage. ○ Extend the Jackson Street Bicycling route between Solano Avenue and Washington Avenue using
Tier 0	Relative Project Priority:	



Detail of Proposed Improvements (con't)	<p>signage and sharrows.</p> <ul style="list-style-type: none"> ○ Consider yield-controlled neighborhood traffic circles at intersections with two intersecting bicycling routes or existing or planned all-way stops. Traffic circles shall be designed to accommodate fire trucks. ○ West of Cerrito Street, use education, enforcement, and engineering solutions to manage sidewalk parking issues. <ul style="list-style-type: none"> ▪ Use friendly warning letters within the first six months to alert drivers that sidewalk parking is prohibited. ▪ If problem persists, stripe a curb line to indicate that parking on the street is feasible without blocking sidewalk. This may require the City to identify areas where parking would alternate sides of the street since on-street parking on both sides of the street may hinder emergency access. ▪ After installing parking lines, increase enforcement of parking regulations. ○ Upgrade any curb ramps that do not conform to current ADA standards.
Timeline	<p>Stage 1 – Signage and striping of bicycling boulevard and bicycling lanes; installation of traffic circles and other traffic calming devices; installation of new curb ramps; San Pablo Avenue/Washington Avenue Crossing Improvements</p> <p>Stage 2 – Albany Hill Sidewalk Parking issues.</p>
Cost	\$ 500,000





This project description includes the redesign the Key Route Blvd./Solano Ave. intersection. The Traffic and Safety Commission did not recommend this element of the project without further study, including the study of alternative designs, to allow for additional public outreach. Council approved this recommendation on 4/16/2012.

Relative Project Priority:	Tier 1	19.	Key Route Boulevard Median Path	
	Tier 2		Key Route Boulevard was originally constructed as a right-of-way for an unbuilt portion of the East Bay Key System trains. The roadway, which connects the Solano Avenue commercial district with Albany High School and the City of El Cerrito, currently has a wide and unused planted center median. This project would have two phases. During the first, the center median would be converted to a linear walking promenade along the existing memorial trees and the roadway would be designated as a bicycling route. During the second phase, a pocket park will be built at the intersection of Key Route Boulevard and Solano Avenue.	
	Tier 3		Background	North of Solano Avenue, Key Route Boulevard is a two-way boulevard with one travel lane in each direction, a 40-foot planted center median, and four lanes of parking (two in each direction). The proposed project creates a new north-south bicycling and walking facility that connects the Solano Avenue commercial corridor to Albany High School, El Cerrito, and the northeastern residential neighborhoods. The project also creates a new recreation space in the center of a residential area.
	Tier 4		Issues and Opportunities	<ul style="list-style-type: none"> ○ A new center median walking path will require special crosswalk treatments at intersections. ○ Conflicts between pedestrians, bicyclists, and vehicles at the intersections of Key Route and, Masonic, with Solano Avenue, are a concern. ○ There is an opportunity to simplify the intersections and reduce the number of conflicts.
	Tier 5		Detail of Proposed Improvements	<ul style="list-style-type: none"> ○ Between Solano Avenue and Brighton Avenue/City of El Cerrito <ul style="list-style-type: none"> ▪ Install walking-only path within the existing median; ▪ Stripe and sign Key Route Boulevard as a Class III bicycling route with sharrows and signage. ○ At intersections <ul style="list-style-type: none"> ▪ Install high-visibility, continental striped crosswalks for pedestrians; ▪ Install signage alerting drivers to the new mid-intersection crossings and alerting pedestrians of on-coming traffic. ○ At Key Route Boulevard/Solano Avenue <ul style="list-style-type: none"> ▪ Explore design alternatives to intersection. Explore creating a new pocket park. Design of the park should not impinge upon the existing Veterans memorial and should not impact parking for the businesses and the child care center; ▪ Install walking median refuge islands within Solano Avenue crosswalks at realigned intersection.
	Tier 6		Timeline	Stage 1 – Walking Path, Bicycling route Signage and Striping; Stage 2 – Key Route/Solano Intersection Improvements
	Tier 7		Cost	\$ 800,000, excluding intersection realignment and pocket park.



Top: Panhandle Path, San Francisco; Lower: Camp Street Pedestrian Path, New Orleans





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 NOT TO SCALE



FEHR & PEERS
 TRANSPORTATION CONSULTANTS

July 2011
 SF10-0482\graphics\Recom Projects\Key Route

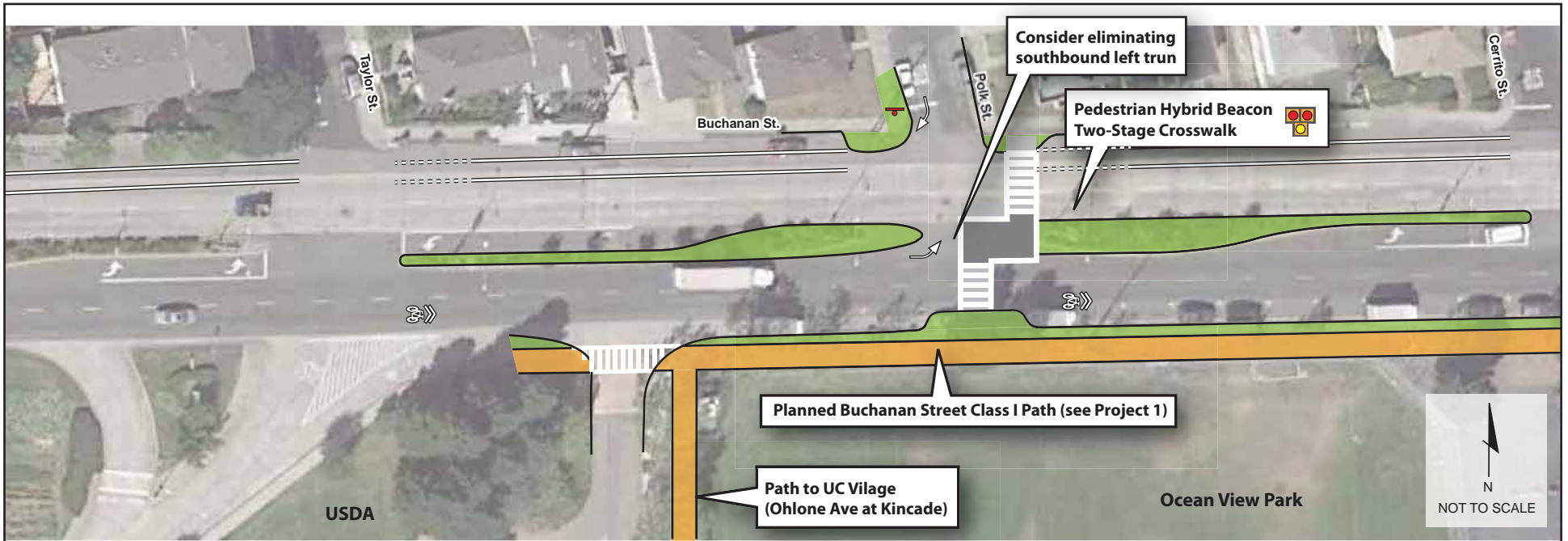
Albany Active Transportation Plan

KEY ROUTE BOULEVARD

Project 19 - Near Term Improvements

Tier 1	20.	Polk Street / UC Village Connection	
Tier 3		<p>This project would create a new signalized crossing across Buchanan Street approximately halfway between the existing Jackson Street signal and the planned Pierce Street signal. This new crossing would facilitate walking access from the Albany Hill neighborhood on the north side of Buchanan Street to Ocean View Elementary School, Ocean View Park, and the planned shared-use path on the south side of Buchanan Street. The project would also provide a direct walking connection between Albany Hill and University Village and Berkeley to the south.</p>	
Tier 2		Background	<p>After completion of the Buchanan Street shared-use path, residents of the Albany Hill area would be required to cross Buchanan Street at either Pierce Street or Jackson Street, which are located approximately ¼ mile apart. The proposed walking hybrid beacon crossing at Polk Street would create a safe “mid-block” crossing between these two signalized intersections. The new marked crosswalk would also connect to a future shared-use path running through Ocean View Park and into University Village. This project would facilitate north-south walking and bicycling access between the currently disconnected northwestern and southwestern quadrants of Albany.</p>
Tier 1		Issues and Opportunities	<ul style="list-style-type: none"> ○ The Class I path along Ocean View Park would require some right-of-way acquisition. ○ This connection would improve walking access between the Albany Hill neighborhood, the proposed Buchanan Path, Ocean View Park, UC Village, and Berkeley. ○ Explore the possibility of eliminating the left turn from eastbound Buchanan onto northbound Polk by allowing right-in/right-out movements from southbound Polk at Buchanan.
Tier 0		Detail of Proposed Improvements	<ul style="list-style-type: none"> ○ Install a walking hybrid beacon, with a staggered crosswalk, across Buchanan Street on the eastern side of the Polk Street/Buchanan Street intersection. ○ Install a planted median on both side of the new crosswalk, leaving an opening that maintains eastbound left-turn access to Polk Street. ○ Install pedestrian path through Ocean View property between the new marked crosswalk and Kinkead Way. ○ Install a Class III bicycling route (signage/sharrows) on Kinkead Way to 6th Avenue in Berkeley. ○ Install directional bicycling signage for path users.
Relative Project Priority:		Cost	\$ 350,000
Other Related Projects		<p><u>Buchanan Bikeway and Buchanan/Marin Merge Improvements (Project 1)</u>: This project would create a new three-facility type bikeway along Buchanan Avenue, including a Class I path along the south side of the road, an eastbound Class III bicycling route, and a westbound Class II bicycling lane.</p>	



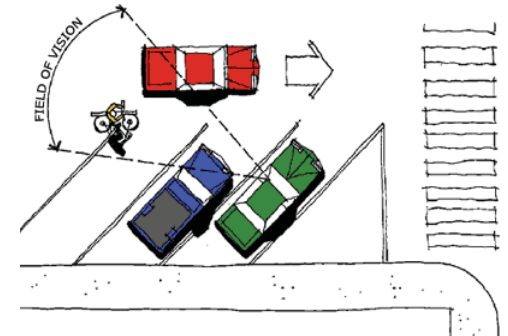


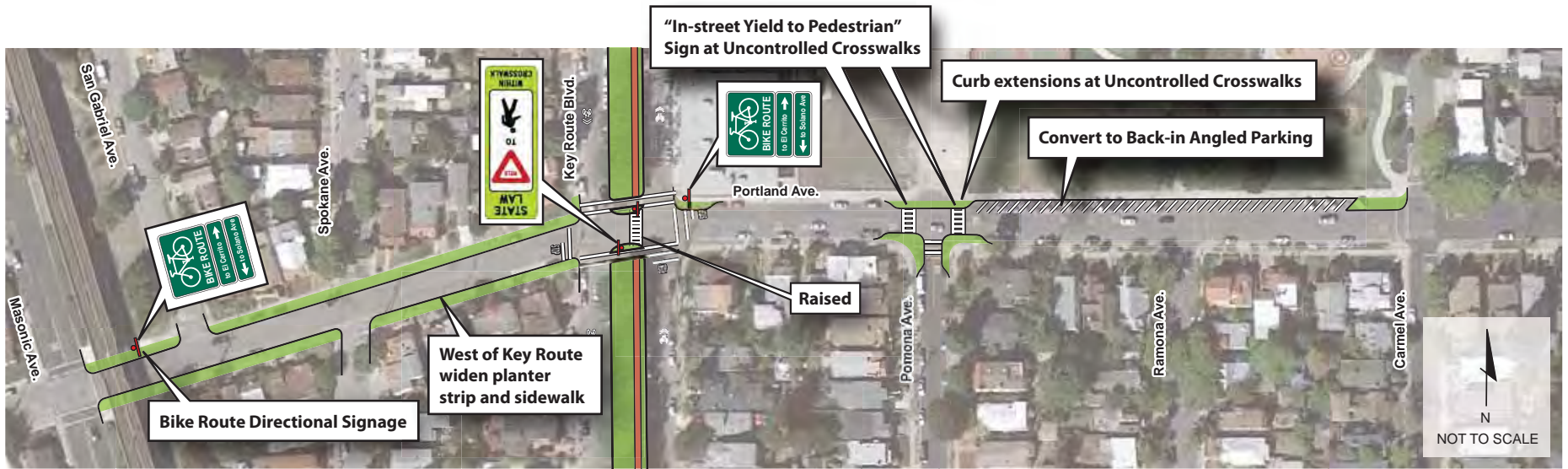
Relative Project Priority:	Tier 1	21.	Peralta Avenue Bicycling Route		
	Tier 3		Peralta Avenue is the easternmost north/south bicycling route candidate within Albany. It is a low volume residential street with parking on both sides.		
	Tier 2		Background	This project would add guide signs along the full length of Peralta Avenue within Albany, from the Berkeley city limit near Posen Avenue to the northern city limit near Colusa Avenue. It would also add Shared Lane Markings where deemed necessary to enhance bicyclist safety and visibility, for example on the hilly segment between Posen Avenue and Marin Avenue.	
	Tier 1		Issues and Opportunities	When traversing the two substantial hills between Posen Avenue and Marin Avenue, most ascending bicyclists will travel slowly and many descending bicyclists will travel at or near the 15 mph speed limit on the hill. Motorists should be encouraged to pass bicyclists where it is safe to do so (i.e., where sightlines and other conditions permit), and discouraged where it is not (i.e., in areas of poor sightlines, or where most bicyclists will descend at speed). The street currently has a double yellow (“no passing”) centerline between Posen Avenue and Marin Avenue.	
	Tier 0		Detail of Proposed Improvements	<ul style="list-style-type: none"> ○ Markings <ul style="list-style-type: none"> ▪ Between Posen and Marin Avenues, add sharrows in both directions; ▪ Between Posen and Marin Avenues, change the centerline from double-yellow (no passing) to solid+dashed (passing permitted one direction) <u>where engineering judgment deems it safe for motorists to pass motorists and bicyclists</u>. Where feasible, it would be advantageous to permit passing in the uphill direction because most bicyclists will travel slowly on the significant uphill grades; ○ Signs <ul style="list-style-type: none"> ▪ Add bicycling network guide signs at Francis Street (to San Pablo Avenue and Codornices Creek), Sonoma Avenue, Marin Avenue (public library), Solano Avenue, Washington Avenue and Portland Avenue (High School, pool) 	
		Cost	\$ 7,500		





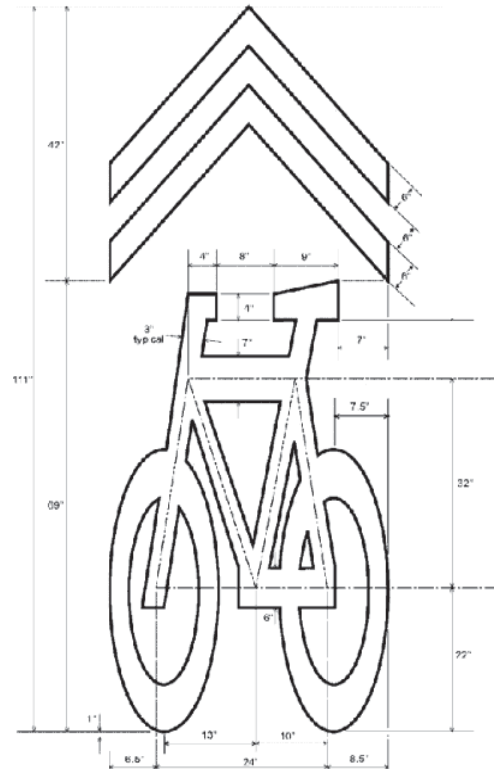
Tier 4	22.	<p>Portland Avenue Safe Routes to School</p> <p>Portland Avenue is a continuous east/west route between Berkeley and San Pablo Avenue through northern Albany. The route connects several proposed north/south bicycling routes, including Curtis Street (Class III), Santa Fe (Class III), Key Route Boulevard (Class III), the Ohlone Greenway (Class I), and Masonic Avenue (Class III). Albany High School is located on the corner of Key Route Boulevard and Portland Avenue.</p>
Tier 3	Background	<p>This project would designate Portland Avenue as a Class III bicycling route between Curtis Street and Masonic Avenue and improve walking crosswalks at Key Route Boulevard and Pomona Avenue. The existing on-street angled parking would be reconfigured as back-in angled parking to improve bicyclist visibility. Combined, the improvements to Portland Avenue would facilitate bicycle travel to and from Albany High School by connecting to other citywide bicycling routes and would improve walking safety near the school, which experiences substantial walking activity at drop-off and pick-up times.</p>
Tier 2	Issues and Opportunities	<ul style="list-style-type: none"> o Portland Avenue would be a secondary east/west bicycling route after Washington Avenue. o Students who walk and bicycle to school would benefit substantially from improved bicycling connectivity and walking safety improvements on the street. o The short segment along Memorial Park is a good candidate to pilot back-in angled parking in the City.
Tier 1	Detail of Proposed Improvements	<ul style="list-style-type: none"> o Portland Avenue (Curtis Street to Masonic Avenue) <ul style="list-style-type: none"> ▪ Add signage and sharrows to designate a Class III bicycling route ▪ Add bicycling directional signage at Masonic Avenue, Ohlone Greenway, Key Route Boulevard, Santa Fe Avenue, and Curtis Street o Between Carmel and Pomona Avenues, convert existing angled parking to back-in angled parking o Install curb extensions, medians, and in-street walking warning signs in crosswalks at Pomona and Carmel Avenues. o West of Key Route, narrow the width of Portland Avenue (curb to curb), widen the planter strip, and provide at minimum 4' of sidewalk that complies with ADA regulations
Tier 0	Relative Project Priority:	
	Cost	\$ 310,000







Tier 4	<h1>23.</h1>	<p>Francis Street Bicycling Route</p> <p>The Francis Street Bicycling route extends Albany’s southernmost east/west bicycling route (Codornices Creek Trail and Dartmouth Street) to the eastern city limit. It consists of the southernmost block of Pomona Avenue (Dartmouth Street to Santa Fe Avenue), one block of Santa Fe Avenue (Pomona Avenue to Francis Street), and the full length of Francis Street (Santa Fe Avenue to Peralta Avenue). Francis Street is a low volume local street with parking on both sides.</p>
Tier 3	<p>Background</p>	<p>This project would add guide signs and sharrows along the route, and would restripe the north half of Pomona Avenue at Santa Fe Avenue to create an eastbound bicycling left turn lane at Santa Fe Avenue.</p>
Tier 2	<p>Issues and Opportunities</p>	<ul style="list-style-type: none"> ○ The wide gore north of the median island on Pomona Avenue at Santa Fe Avenue can become an eastbound bicycling left turn lane. ○ Guide signs would help bicyclists to make the three consecutive turns required to follow the route between Dartmouth Street and Peralta Avenue (Dartmouth Street to Pomona Avenue to Santa Fe Avenue to Francis Street, and the reverse).
Tier 1	<p>Detail of Proposed Improvements</p>	<ul style="list-style-type: none"> ○ Bicycling left turn lane at Pomona Avenue/ Santa Fe Avenue <ul style="list-style-type: none"> ▪ Remove existing yellow gore markings on the north side of the median island, except the north centerline; ▪ Mark an eastbound bicycling lane between the north (double yellow) centerline and the north side of the island, with a left turn arrow pavement marking and a STOP legend; ▪ Add a STOP sign and a NO RIGHT TURN sign, facing eastbound bicyclists in this bicycling turn lane. ○ Guide signs <ul style="list-style-type: none"> ▪ Add guide signs along the route, at each turn and as needed along Francis Street.
Tier 0	<p>Cost</p>	<p>\$ 3,000</p>
Relative Project Priority:		



24.

University Village / Eastshore Crossing

University Village, Albany (“UVA”), is a 58-acre complex owned and operated by UC Berkeley that is home to many students and their families. It has 969 apartments and townhouses, a recreational/community center, café, and child care center. The Village is adjacent to the Target superstore, but is separated from it by the Amtrak/ Union Pacific rail corridor. The only current bicycling and walking route to the Eastshore shopping area is via Jackson Street, Buchanan Street, the Buchanan Path, and Eastshore Frontage Road [Project 13] – a two-mile round-trip (45-minute walk) from most Village residences. A walking-bicycling link over or under the railroad line could reduce this to as little as 500’ (4-minute round-trip walk).

The Golden Gate Fields racetrack occupies the west side of I-80 between Buchanan Street and Gilman Avenue. If and when it is redeveloped, a walking-bicycling bridge over I-80, connecting to (and possibly in line with) the Village-to-Target rail crossing, would link southern Albany and northern Berkeley to the Bay north of the Gilman interchange.

Background

This project consists of two walking-bicycling over- or undercrossings, one each at the railway and I-80, and associated ramps and stairways. East of the railway the likely University Village access points would be Red Oak Avenue and/or West End Way, and possibly the Codornices Creek Path. Between the railway and I-80, the access points would be Target’s parking lot, Eastshore Frontage Road, and possibly the north end of 2nd Street in Berkeley (via a short creek bridge). West of I-80 is the Bay Trail, plus other points dependent on redevelopment.

Issues and Opportunities

- Crossing the railroad corridor
 - Depending on the water table and buried utilities, either a bridge or tunnel may be feasible. Bridges over railroads require over 25’ of clearance, so long and massive ramps are required. Tunnels need as little as 14’ of grade change (4’ structure, 10’ headroom), so their ramps are half as long and construction may be substantially easier and less expensive. The Bay Area has many examples of open, bright tunnels.
 - The entrances of the Target store and pharmacy are at the north end of the building. University Village’s central walkway, midway between Ohlone Avenue and Red Oak Avenue, roughly aligns with this point.
- Crossing Eastshore Frontage Road and I-80
 - Because of the distance involved, a likely crossing of I-80 would be a bridge rather than a tunnel. That bridge would presumably also cross Eastshore Frontage Road.
 - Potential alignments include the Codornices Creek axis, and the “University Village central walkway” alignment across the Target parking lot. Selection will depend on details of the potential future redevelopment of Golden Gate Fields.
- A bridge near Codornices Creek may be valuable if crossing the railway and I-80 is desired.



Issues and Opportunities (con't)

- Connecting to 2nd Street and Gilman Street in Berkeley
 - The I-80/Gilman interchange is slated to be replaced with a design that improves safety and convenience for pedestrians and bicyclists. Two soccer fields on the southwest quadrant of the I-80/Gilman interchange are used by residents of Albany as well as Berkeley. An Albany project to study feasibility of, and/or design a railway crossing between University Village and Target should coordinate with the I-80/Gilman interchange project because of the walking-bicycling “desire line” that extends to the interchange (possibly along 2nd Street), and through the interchange to the soccer fields and Bay Trail. Existing land uses along the two blocks of 2nd Street north of Gilman Street are self-storage and industrial (City of Berkeley Recycling).

Detail of Proposed Improvements

- Railway crossing
 - Construct a bridge or tunnel
 - Provide ramps and staircases to University Village streets, Target parking lot and store entrance, possibly to a bridge over Codornices Creek to 2nd Street
- I-80 crossing
 - Construct a bridge, possibly with a center support
 - Provide ramps and staircases to the Target parking lot (either the south end near Codornices Creek or on the north side of the store), Eastshore Frontage Road east sidewalk, and future Bay-side redevelopment.

Timeline

Long-Term

Relative Priority

Railway crossing:	Long-Term (need is current)
I-80 crossing: Gate Fields)	Long-Term (no current need - dependent on redevelopment of Golden

Cost

\$8.0 million

25.

Posen Avenue Bicycling Facility

Both Posen Avenue and Sonoma Avenue offer low traffic volume and an alternate route for bicyclists to take when heading to destinations in North Berkeley. Both routes provide access to Monterey Avenue, which is a class II bicycle facility in Berkeley and is the location of Monterey market and the Northbrae commercial district.

Background	Posen Avenue is a 48' roadway that runs in the northeast direction between Tevlin Street and Monterey Avenue and runs adjacent to Saint Mary's High School.
Issues and Opportunities	<ul style="list-style-type: none"> ○ Sonoma and Posen are two bicycle facility alternatives to Marin Avenue because they carry low traffic volumes. ○ Posen is wide enough to accommodate bicycle lanes on one side of the street. ○ Posen Avenue could be an incentive for Saint Mary's School students to bike to school.
Detail of Proposed Improvements	<ul style="list-style-type: none"> ○ Class III signage and sharrows on the downhill (southwestbound) side. ○ Class II bicycling lane on the uphill (northeastbound) side.
Timeline	Long-Term
Relative Priority	This project requires signage and striping only; therefore, it could be implemented when funds are available.
Cost	\$6,000



26.

Sonoma Avenue Class III Bicycling Route

Both Posen Avenue and Sonoma Avenue offer low traffic volume and an alternate route for bicyclists to take when heading to destinations in North Berkeley. Both routes provide access to Monterey Avenue, which is a class ii bicycle facility in Berkeley and is the location of Monterey market and the Northbrae commercial district.

Background

Sonoma Avenue is a 36' east-west roadway that extends from Curtis Street in the vicinity of Marin Elementary School to Berkeley. Sonoma is an alternative to Marin Avenue and is heavily used by cyclists because it crosses Monterey Avenue and provides a pleasant shortcut to North Berkeley.

Issues and Opportunities

- Marin Elementary School is located at end of Sonoma Avenue.
- Sonoma Avenue provides direct and convenient east-west route in the residential areas in southeastern Albany and is an alternative to Marin Avenue.

Detail of Proposed Improvements

- Class III signage and sharrows between the City of Berkeley and Curtis Street.

Timeline

Long-Term

Relative Priority

This project requires signage and striping only; therefore, it could be implemented when funds are available.

Cost

\$6,000

27.

Waterfront Trail

This envisioned “inboard” trail would run parallel and close to the west side of I-80 from near the Buchanan interchange to the Gilman interchange through Golden Gate Fields (subject to property owner approval). This trail would serve people cycling for both transportation and recreation. For people cycling for transportation it would cut off some of the distance and elevation gain required to follow the Bay Trail along the shoreline. For people cycling for recreation, it would provide a path along a restored Codornices Creek, which would be a component of any redevelopment project for the area.

Background	This path would connect with the shoreline Bay Trail, creating a recreational waterfront loop almost entirely along various water features. It also would provide an interim Bay Trail gap closure.
Issues and Opportunities	<ul style="list-style-type: none"> ○ The location offers a great alternative for an interim trail that will close the existing gap in the Bay Trail between Buchanan Street in Albany and Gilman Avenue in Berkeley. ○ Alignment for the proposed path is not defined yet as it will depend on future development on this property. ○ Explore the opportunity to create an interpretative trail with informational signs about local wildlife and history about the site along Codornices Creek. ○ Explore coordination with the City of Berkeley for grant opportunities and project implementation.
Detail of Proposed Improvements	<ul style="list-style-type: none"> ○ Install a bicycle/pedestrian trail running parallel to I-80 and along Codornices Creek on the site where the Golden Gate Field is located. ○ At the intersection of Buchanan Street and Gilman Avenue, coordinate with the City of Berkeley to implement an adequate crossing for the Waterfront trail users to the existing Bay Trail.
Timeline	Long-Term
Cost	Cost should be prepared when project is designed.



7. SUPPORT PROGRAMS

While Chapters 5 and 6 focused on specific engineering/infrastructure enhancements to improve safety and encourage walking and bicycling in Albany, this chapter presents recommendations for complementary, and essential, education and enforcement strategies in support of active transportation. This section also addresses BTA requirement (g): “A description of bicycling safety and education programs conducted in the area included within the plan, efforts by the law enforcement agency having primary traffic law enforcement responsibility in the area to enforce provisions of the Vehicle Code pertaining to bicycle operation, and the resulting effect on accidents involving bicyclists.”

Education is a critical element for a complete and balanced approach to improving both bicycling and walking safety in Albany. Education campaigns could include residents of all ages, especially emphasizing education of school children where safe walking and bicycling habits may be instilled as lifelong lessons. The following organizations and projects are involved in active transportation education initiatives in Albany.

Safe Routes to School

Albany has applied for multiple state and federal Safe Routes to Schools grants in recent years and has been awarded more than five grants, primarily for infrastructure improvements. Albany has used Safe Routes to School funds for walking infrastructure. In addition, walking and bicycling safety education and Safe Routes to School activities occur in the Albany middle and the three elementary schools. At the elementary level, activities include classroom presentations and the use of educational incentive items as well as a bicycle program during Physical Education period.

Albany Strollers and Rollers

Albany Strollers and Rollers (AS&R) was founded in 2004. The original impetus was the dangerous freeway onramp crossing on westbound Buchanan Street to reach the Bay Trail, and the need to create a safe alternative to both the freeway onramp crossings and the available but undeveloped pathway under the freeway accessed by crossing the railroad tracks. The group’s mission, as a part of the community, is to increase bicycling access, bicycling-safety, awareness, and safe routes for bicyclists and pedestrians within Albany, especially those routes that funnel into the Bay Trail and into neighboring communities. AS&R aims to improve facilities in Albany, and provides support and guidance to the City of Albany with a focus on maintaining Albany as a bicycling friendly and Green community. The group is extremely active with organizing walking school buses, biking school buses, bike rodeos, bike valet parking at special events, moderating a healthy advocacy-based listserv, and strongly supporting Bike to Work Day activities.



RECOMMENDATIONS

Support programs are important because they increase the safety, utility, and viability of infrastructure projects. They may also be more cost effective, longer lasting, or reach a broader audience for more meaningful impact. Municipalities provide support to, and even administer, a broad range of programs and activities related to bicycling and walking safety, education, promotion, and law enforcement as a way to complement their project-building efforts. Below is a list of programs and activities that have proven effective in other jurisdictions and which the City of Albany could choose to offer its residents. The toolbox of education, encouragement, and enforcement programs is both adaptable to the unique needs of each municipality and flexible to budget opportunities and constraints. Many education efforts involve an element of community participation as they are volunteer-based. As a result, education programs are among the most inexpensive tools to improve the walking and bicycling environment. Education programs can also be a collaborative effort between the City and local public health organizations.

EDUCATION AND ENCOURAGEMENT PROGRAMS

Billboards and Electronic Message Boards

Billboards and electronic message boards promote safety in the community, inform the public about bicycling and walking safety programs, and provide feedback on the program's effects. Street Smarts is one example of a public education campaign targeted toward changing driver, pedestrian, and bicyclist behavior to improve safety on city streets.

Street Smarts Program

Street Smarts (<http://www.getstreetsmarts.org/>) is a safety program initiated by the city of San Jose, California. Electronic message boards were used to display safety messages. Messages were changed regularly and the boards were moved repeatedly to maximize their impact. The Street Smarts campaign launched in November 2002 and has received positive feedback from the public.

Street Smarts was designed as both a media and a community relations campaign. It uses education to raise awareness of certain problem behaviors that contribute to traffic crashes and aims to change those behaviors over time. Behaviors addressed by the campaign are: red-light running, speeding, stop sign violations, school zone violations, and crosswalk violations. In addition to a media campaign, a community relations campaign should be conducted, working with schools, neighborhood associations, businesses, and community organizations to create a public forum to address this community issue.



Message boards can be used at various safety hot spots. The Street Smarts campaign materials are designed for use by any public agency for any community and are available from the City of San Jose. Materials are available in English, Spanish and Vietnamese.

The Street Smarts program has the following advantages:

- The program provides multiple messages using a single tool
- The high-quality campaign materials were designed to be used regionally by any public agency
- The artwork is available from the City of San José for \$3,500
- Media campaigns use a wide variety of communication tools

Although the Street Smarts campaign requires staff resources, the overall cost is low to implement.

Brochures and Pamphlets

Brochures and pamphlets are helpful to educate residents and visitors on topics such as (1) how traffic signals work for pedestrians and bicyclists and the best way to be detected at signalized intersections, (2) pedestrian and bicyclists' rights and responsibilities when sharing the road, (3) motorists' rights and responsibilities when sharing the road. They can be distributed at locations with high volumes of pedestrians and bicyclists and on the City's website, as part of a general education campaign.

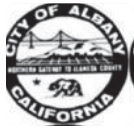
One limitation to this approach is that the materials may not reach a wide audience. Brochures are available from the Federal Highway Administration at http://safety.fhwa.dot.gov/ped_bike/ped_bike_order/, from AAA at <http://www.aaafoundation.org/products>, and from the National Highway Traffic Safety Administration at <http://www.nhtsa.gov/Pedestrians>.

Public Service Announcements

Public service announcements (PSAs) can provide accurate and current information to the public. PSAs are valuable as they are versatile and can reach a large audience on walking and bicycling issues, education, and announcements. One challenge is that PSAs can be costly and may not reach the intended audience. This low-cost approach may not be as effective as using a public relations firm and purchasing advertising time targeted to a specific audience.

Figure 8C-7. Example of Bicycle Detector Pavement Marking





Educational Signs for Bicycle Detectors

Educational signs can be installed along bicycling routes approaching signalized intersections. They instruct bicyclists to look for the bicycle detector symbol and stop their bicycle on it. Signs can improve the understanding of bicycle detections and encourage bicyclist compliance at signals. This could supplement brochures available on the City's website and at City Hall. Signs can be posted along bicycling lanes, routes, and boulevards at actuated signals. Albany is using video detection technology on new signals, which eliminates the need for indicating where bicyclists should stop.

The cost of a sign is approximately \$200 plus installation. Costs can become high if large numbers of intersections are signed. Additionally, the use of word-intensive signs poses difficulties in areas with multilingual populations.

Educational Signs for Pedestrian Signal Indications

Educational signs can be installed above pedestrian push buttons or integrated into the push button housing to improve understanding of pedestrian signal indications. Signs improve public understanding of pedestrian signal indications, and thus encourage pedestrian compliance at the signals. Signs should be considered where ten or more pedestrian crossings per hour are anticipated.

The cost of a sign is approximately \$200 plus installation. Costs can be high if large numbers of push buttons are signed. Additionally, this treatment is not accessible to pedestrians with visual impairments, and the use of word-intensive signs poses difficulties in areas with multilingual populations.

Bicycle Training/Repair

Bicycling training and bicycle repair classes, as currently offered by the Albany Strollers and Rollers, are an excellent tool to increase community knowledge of bicycle maintenance issues and street riding skills. Youth training classes can include a "build-a-bike" program, in which youth learn how to rebuild a used bicycle that they may keep at the end of the program. Such classes are most helpful for beginner to intermediate bicyclists who would like to improve their understanding of bicycle maintenance and street riding skills.

Perils for Pedestrians

A great way to educate the public on walking and bicycling issues is through media. Perils for Pedestrians (<http://www.pedestrians.org/>), a monthly television series, promotes awareness of issues affecting the safety of people who walk and bicycle. Many cities in California, including Berkeley and Davis, are already taking part through cable stations and webcasts. A typical series consists of interviews with walking and bicycling advocates, planners, engineers, and local and international public officials. They talk about important issues affecting active transportation, such as: walking hazards,

infrastructure, bicycles, transit, and more. This program helps raise awareness of local and international issues through a common form of interface.

Walking Mascot

Bellevue, Washington, launched a walking mascot campaign at their elementary school in conjunction with roadway improvements. The mascot, called PedBee, is on school safety signs and makes personal appearances at school safety days. Safety days include local staff from the City's Transportation and Police Departments. Children are taught bicycling, walking, and traffic safety basics, such as crossing the street safely. Children are also given traffic safety workbooks that provide guidance with hands-on activities such as coloring and safety procedure quizzes.

Walk Wise, Drive Smart

Nationally and regionally, the number of senior citizen pedestrians is growing. Walk Wise, Drive Smart is a program aimed to improve the walking environment not only for senior adults, but for all residents and visitors. It is a community program that holds educational workshops, walking audits, and feedback surveys. Activities are aimed at senior citizens providing exercise at a pace and location comfortable to the participants, but are open to all. More information is available at <http://www.walk-wise.org/>.

SmartTrips Program

Albany, like many cities, has single occupancy vehicle trips as the primary mode of transportation. SmartTrips, developed in Portland, Oregon, is a program to encourage walking, bicycling, carpooling and transit through hand-delivered information packets. Key components of the packet include: bicycling and walking maps (with personalized route selections) and organized activities that get people out in their neighborhoods or places of employment to shop, work, and discover how many trips they can easily, conveniently, and safely make without using a car. The success of this program is measured by surveys and other measures. TransForm has a similar pilot program in the Bay Area, known as TravelChoice (more information at <http://transformca.org/campaign/travelchoice>).

Bicycling Guide for Kids Brochure

Children should learn the correct bicycling rules at an early age. For example, riding on a sidewalk is one of the most dangerous places for a child to ride, particularly in a residential neighborhood, because of the amount of driveways and cars backing out, curb cuts, parking lots, trees, bushes, garbage cans, etc.

A bicycling guide targeting children and similar resources are available from the International Bicycle Fund's website at <http://www.ibike.org/education/>.



Pedestrian Flag Program

The purpose of a pedestrian flag program is to make pedestrians more visible as they cross the street. Hand-held flags are located in containers at both sides of the crosswalk and can be carried by pedestrians as they cross the street. The brightly colored flags can make pedestrians more visible to drivers and alert drivers to the presence of pedestrians. Depending on the number of intersections involved, start-up costs for this type of program are relatively low. This program has been implemented at other cities in the U.S., including Kirkland, Washington, Berkeley, California, and Salt Lake City, Utah.

ENFORCEMENT PROGRAMS

Enforcement tools have been demonstrated to be very effective in improving safety for road users. However, some programs can require a significant investment from local agencies. Newer enforcement tools like red-light running cameras and radar “wagons” can minimize the amount of time required for local law enforcement agencies.

Increased Fines

An increase in traffic fines has been shown to discourage driver violations against pedestrians in crosswalks. For example, in Salt Lake City, Utah, fines were increased from \$34 to \$70 for driver violations against pedestrians in crosswalks. A lowering of fines for jaywalking from \$70 to \$10 was also implemented. Variations on this include double fines in school zones and construction zones.

Pedestrian Sting Operations

Pedestrian sting operations target motorists who violate the right-of-way of pedestrians crossing the street, and especially motorists who do not stop for the pedestrian when the cars in the adjacent (same direction of travel) lane have stopped on multi-lane roads. Such operations can also target pedestrians who make unsafe crossings. Stings are most effective on roadways and intersections with high walking volumes, such as on Solano Avenue or San Pablo Avenue in Albany.

Pedestrian stings increase drivers’ awareness of pedestrians at intersections; however, as the program is not an ongoing operation, changes in motorist behavior can be short-term. The cost of the program could range between \$3,000 to \$5,000 for a six-week operation and includes the cost of police officer staffing time.

Photo Red Light Enforcement Programs

Activated by loops in the pavement, red light cameras photograph the license plate and sometimes the driver of any vehicle entering an intersection after the signal has turned red. Warnings or citations can be sent to offenders. Speeding and double-parking can be discouraged with similar measures.

Red light cameras are appropriate for locations with speeding or red-light-running issues. Fines from citations help pay for the red-light camera system. While the threat of a ticket prevents deliberate traffic violations, the program is repeatedly tested in court.

Tattletale Lights

To help law enforcement officers catch red-light runners safely and more effectively, a “rat box” is wired into the backside of a traffic signal controller and allows enforcement officers stationed downstream to identify, pursue, and cite red-light runners. Warning signs may be set up along with the box to warn drivers about the fine for red-light violations. Rat boxes are a low-cost initiative (approximately \$100 to install the box), but do require police officers for enforcement.

Table 7.1 on the following pages summarizes the recommended education, enforcement, and encouragement programs in Albany. This list is not extensive – new education and support programs are being created as awareness for Active transportation options increase.



TABLE 7.1 – RECOMMENDED EDUCATION, ENCOURAGEMENT AND ENFORCEMENT PROGRAMS

Program	Target Population					Crash Type							Responsible Agency				Cost	Cities Using Program	Studies	
	Motorists	All Bicyclists	All Pedestrians	Young Pedestrians	Elderly Pedestrians	Pedestrian Violation-Intersection	Pedestrian R/W Violation-Intersection	Pedestrian Violation Mid-Block	Traffic Signals & Signs	Excessive Speeds	Improper Turning	Improper Passing	Police Department	Public Works	Planning Department	Parks & Recreation				
Safe Routes to School				X		X	X	X	X	X			X		X			Varies. Educational programs can be less expensive than capital projects.	Oakland, Berkeley, Alameda and some unincorporated areas of Alameda County.	
Albany Strollers and Rollers		X	X															Organization is separate from the City.	San Francisco, the East Bay, and Silicon Valley regions have active bicycling advocacy organizations.	
Street Smarts	X	X	X			X		X	X	X	X	X	X	X				Low: costs \$3,500 to insert a new agency name on campaign artwork. Program set-up is an additional cost.	City of St. Petersburg, FL; City of San Jose, CA. Over 20 other cities in California have adopted the San Jose program	Center for Urban Transportation Research, University of South Florida
Additional Brochures and Pamphlets		X	X	X	X			X						X		X		Low	City of Santa Cruz, CA; Salt Lake City, UT	
Public Service Announcements	X	X	X			X		X	X	X	X	X	X	X	X			Low to high		

TABLE 7.1 – RECOMMENDED EDUCATION, ENCOURAGEMENT AND ENFORCEMENT PROGRAMS

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Educational Signs for Bicycle Detectors		X							X					X			Low: \$50 per installation, including labor			
Educational Signs for Pedestrian Signals			X	X	X	X	X							X			Low: \$50 per installation, including labor	City of Boston, MA; City of Philadelphia, PA	Lalani, N., and W. Baranowski. "Reducing Public Confusion about the Use of Pedestrian Signals." <i>ITE Journal</i> , January 1993; ITE, <i>Pedestrian Information Plaques: An Informational Report, Prepared by Traffic Engineering Council Committee TENC-4S-02</i> , October 1997.	
Bicycling Training/Repair Classes		X															Low to medium: grant funding can be provided to organize & administer program			
Perils for Pedestrians																	Free	Contact: John Z Wetmore (301) 654-5305 john@pedestrians.org www.pedestrians.org		
Walking/Bicycling mascot				X		X	X	X						X	X		Low	Bellevue, WA		



TABLE 7.1 – RECOMMENDED EDUCATION, ENCOURAGEMENT AND ENFORCEMENT PROGRAMS

Program	Target Population					Crash Type								Responsible Agency				Cost	Cities Using Program	Studies
	Motorists	All Bicyclists	All Pedestrians	Young Pedestrians	Elderly Pedestrians	Pedestrian Violation-Intersection	Pedestrian R/W Violation-Intersection	Pedestrian Violation Mid-Block	Traffic Signals & Signs	Excessive Speeds	Improper Turning	Improper Passing	Police Department	Public Works	Planning Department	Parks & Recreation				
Walk Wise, Drive Wise	X	X	X			X		X	X	X	X	X	X	X	X			Low to high		
SmartTrips	X	X	X			X		X		X	X	X	X	X						
Bicycling Guide for Kids		X	X	X	X				X					X		X	Low			
Pedestrian Flags			X	X	X	X	X							X			Low	Berkeley, CA		
Increased Fines	X					X			X		X		X				Low	Salt Lake City, UT		
Pedestrian Stings	X					X			X		X		X				Low	Bend, OR		
Photo-Enforced Red Light Cameras	X								X				X				Low			
Tattletale Lights	X								X				X				Low			

8. FUNDING AND IMPLEMENTATION

Over the past decade Albany has focused primarily on implementing bicycling routes that require considerable alterations to the physical landscape or motorist lanes, including the reconfiguration of Marin Avenue, the commitment to rebuild the 500 block of Pierce Street with a bicycling path, and the current effort to develop 100 percent design plans for the bikeways on Buchanan Street. As the currently planned heavy infrastructure projects are put into construction, though, the City should use opportunities, such as roadway repaving or utility work, to implement network segments that require “sign and paint only.” These features can be implemented relatively rapidly at low cost and greatly expand the network, which would both facilitate and encourage increased cycling in the City. This approach allows the City to implement more of the Plan at a quicker pace, consistent with the *Climate Action Plan*, which calls for implementing 50 percent of the bicycling network by 2015 and 90 percent by 2020. Implementing all the paint and sign-only routes or route components provides a ready means to achieve the near term goal, which will occur within the initial five years of this Plan.

Numerous funding sources are potentially available at the federal, state, regional, county, and local levels for the City of Albany to implement the projects and programs in the Active Transportation Plan. Below is a description of the most promising funding programs available for the proposed projects. The first five are administered by the Metropolitan Transportation Commission (MTC), the regional planning organization for the Bay Area, while the rest are administered by other agencies and organizations, as described below. Most of these sources are highly competitive and require the preparation of extensive and time-consuming applications.

Regional Bikeway Network Program

MTC’s “Regional Bicycle Plan for the San Francisco Bay Area” designates a regional bikeway network covering approximately 2,140 miles throughout the nine Bay Area counties. MTC has pledged \$1 billion to fully fund this regional bikeway network (with the exception of links on toll bridges) and will create a funding program with the intention of completing construction of the network by 2035. This program will replace the expired Regional Bicycle and Pedestrian Program.

Transportation Enhancements

Under the Transportation Enhancements (TE) program, California receives approximately \$60 million per year from the federal government to fund projects and activities that enhance the surface transportation system. The program funds projects under 12 eligible categories, including the provision of bicycling lanes, trails, bicycle parking, and other bicycling facilities; safety-education activities for pedestrians and bicyclists; landscaping, streetscaping, and other scenic beautification projects; and the preservation of abandoned railway corridors and their conversion to trails for nonmotorized transportation. In California, 75 percent of TE funding is distributed by the regional transportation planning agencies. For the Bay Area, MTC allocates the



money through its Transportation for Livable Communities program (see below). The remaining 25 percent is allocated by Caltrans at the district level.

Transportation for Livable Communities

MTC created the Transportation for Livable Communities (TLC) program in 1998. It provides technical assistance and funding to cities, counties, transit agencies, and nonprofit organizations for capital projects and community-based plans that encourage multimodal travel and the revitalization of town centers and other mixed-use neighborhoods. The program funds projects that improve bicycling and walking to transit stations, neighborhood commercial districts, and other major activity centers.

- More information on MTC's TLC program is available at: www.mtc.ca.gov/planning/smart_growth/tlc_grants.htm

Transportation Development Act (TDA), Article 3

TDA Article 3 is perhaps the most readily available source of local funding for bicycling projects. TDA funds are derived from a statewide quarter-cent retail sales tax. This tax is returned to the county of origin and distributed to the cities and county on a population basis. Under TDA Article 3, two percent of each entity's TDA allocation is set aside for walking and bicycling projects; this generates approximately \$3 million in the Bay Area annually. Eligible projects include the design and construction of walkways, bicycling paths and bicycling lanes, and safety education programs. According to MTC Resolution 875, these projects must be included in an adopted general plan or bicycle plan and must have been reviewed by the relevant city or county bicycle advisory committee.

- More information on MTC's Procedures and Project Evaluation Criteria for the TDA Article 3 program is available at: www.mtc.ca.gov/funding/STA-TDA/RES-0875.doc

Climate Action Program

In partnership with the Bay Area Air Quality Management District (BAAQMD), Bay Conservation Development Commission (BCDC), and the Association of Bay Area Governments (ABAG), MTC is sponsoring a transportation-oriented Climate Action Program, designed to reduce mobile emissions through various strategies, including a grant program. The grant program will provide funding for active transportation projects through new Safe Routes to School and Safe Routes to Transit programs, with total funding expected to be approximately \$400 million. This funding will be in addition to the state and federal Safe Routes to School programs and MTC's existing Safe Routes to Transit program.

Bicycle Transportation Account (BTA)

The BTA is a Caltrans-administered program that provides funding to cities and counties for projects that improve the safety and convenience of bicycling commuting. Eligible projects include secure bicycle parking; bicycle-carrying facilities on transit

vehicles; installation of traffic-control devices that facilitate bicycling; planning, design, construction and maintenance of bikeways that serve major transportation corridors; and elimination of hazards to bicycling commuters. In fiscal year 2008/09, the BTA provided \$7.2 million for projects throughout the state. To be eligible for BTA funds, a city or county must prepare and adopt a bicycling transportation plan that meets the requirements outlined in Section 891.2 of the California Streets and Highways Code.

- More information on the Bicycle Transportation Account is available at:
www.dot.ca.gov/hq/LocalPrograms/bta/btawebPage.htm

Safe Routes to Transit (SR2T)

SR2T is a grant-funding program that emerged out of the Bay Area's Regional Measure 2, which instituted a \$1 toll increase on the Bay Area's seven state-owned toll bridges. Through the SR2T program, up to \$20 million is to be allocated through 2013 on a competitive basis to programs, planning efforts, and capital projects designed to reduce congestion on toll bridges by improving bicycling and walking access to regional transit services that serve toll-bridge corridors. Funds can be used for secure bicycle storage at transit; safety enhancements and barrier removal for bicycling access to transit; and system-wide transit enhancements to accommodate bicyclists. The SR2T program is administered by two nonprofit organizations, TransForm and the East Bay Bicycle Coalition, with MTC serving as the fiscal agent. The program awarded approximately \$3.9 million during each of its first two cycles, in 2005 and 2007. Future funding cycles are scheduled to occur in 2011 and 2013.

- More information on the Bay Area Safe Routes to Transit funding program is available at:
www.transformca.org/campaign/sr2t

Safe Routes to School (SR2S)

California's Safe Routes to Schools program (SR2S) is a Caltrans-administered grant-funding program established in 1999 (and extended in 2007 to the year 2013). Eligible projects include bikeways, walkways, crosswalks, traffic signals, traffic-calming applications, and other infrastructure projects that improve the safety of walking and biking routes to elementary, middle, and high schools, as well as "incidental" education, enforcement, and encouragement activities. Planning projects are not eligible. In fiscal year 2007/08, approximately \$25.5 million was available in grant funding.

- More information on the Caltrans Safe Routes to School program is available at:
www.dot.ca.gov/hq/LocalPrograms/saferoutes/saferoutes.htm

Bay Trail Grants

The San Francisco Bay Trail Project—a non-profit organization administered by the Association of Bay Area Governments (ABAG)—provides grants to plan, design, and construct segments of the Bay Trail. The amount, and even availability, of Bay Trail



grants varies from year to year, depending on whether the Bay Trail Project has identified a source of funds for the program. In recent years, grants have been made using funds from Proposition 84, the 2006 Clean Water, Parks and Coastal Protection Bond Act; however, this is a limited-term source of funds.

- More information on Bay Trail grants is available at: www.baytrail.org/grants.html

Transportation Fund for Clean Air (TFCA)

TFCA is a grant program administered by the Bay Area Air Quality Management District (BAAQMD). The purpose of the program, which is funded through a \$4 surcharge on motor vehicles registered in the Bay Area, is to fund projects and programs that will reduce air pollution from motor vehicles. A sub-program of the TFCA is the Bicycling Facility Program (BFP), which provides funding for bicycling paths, lanes, signed routes, bicycle parking, bus racks, and other bicycling-related projects. Grant awards are generally made on a first-come, first-served basis to qualified projects. Funding for bicycling projects is also available through the TFCA's County Program Manager Fund. Under that sub-program, 40 percent of TFCA revenues collected in each Bay Area county is returned to that county's congestion management agency (CMA) for allocation (the Alameda County Transportation Commission (ACTC), in Alameda County's case). Applications are made directly to the CMAs, but must also be approved by the BAAQMD.

- More information on the TFCA Bicycling facility Program is available at: www.baaqmd.gov/pln/grants_and_incentives/bfp/index.htm
- More information on the TFCA County Program Manager Fund is available at: www.baaqmd.gov/pln/grants_and_incentives/tfca/cpm_fund.htm

Measure WW

In 2008, Contra Costa and Alameda County voters approved EBRPD's Measure WW, the "Regional Open Space, Wildlife, Shoreline and Parks Bond." This extension of a similar 1988 bond measure allocates \$33 million specifically to trail projects in the County. In addition, the measure will provide \$48 million directly to cities, the County and special park and recreation districts for their park and recreation needs, including trails and other non-motorized transportation projects.

- More information on Measure WW is available at: www.ebparks.org/ww

Hazard Elimination Safety

Administered in California by Caltrans, the federal Hazard Elimination Safety (HES) program provides funds to eliminate or reduce the number and severity of traffic collisions on public roads and highways. Cities and counties compete for HES funds by submitting candidate projects to Caltrans for review and analysis. Caltrans prioritizes these projects statewide and approves

priority projects for funding through its annual HES program plan. Historically, only about 20 percent of applications are approved for funding. In the 2005-2006 program cycle, Caltrans awarded approximately \$16 million under the HES program.

- More information on the Hazard Elimination Safety program is available at:
www.dot.ca.gov/hq/LocalPrograms/hesp/hesp.htm

Alameda County (ACTC) Measure B

Measure B is a ½ cent sales tax revenue in Alameda County that is used in transportation projects. Five percent of this revenue should be used for bicycle and pedestrian projects and support programs. There are two categories for this source of funding, the competitive and the non-competitive programs. The competitive program includes all modes of transportation and it is done by cycles throughout the County. The non-competitive program is distributed to jurisdictions based on population.

Alameda County Vehicle License Fee.

In 2010, Alameda County voters approved a \$10 Vehicle License Fee to be used in transportation projects. Alameda County Transportation Commission is defining a program for this new source of revenue.

Table 8.1 presents a summary of eligible project types for each of these funding sources.

Table 8.1 – ELIGIBLE PROJECTS BY FUNDING SOURCE

<p>Regional Bikeway Network Program (MTC)</p> <ul style="list-style-type: none"> • Projects on the Bay Area regional bikeway network, except links on toll bridges
<p>Transportation Enhancements (MTC, Caltrans)</p> <ul style="list-style-type: none"> • Twelve categories of projects and activities that enhance the surface transportation system, including: bicycling lanes, trails, bicycle parking and other bicycling facilities; safety education activities for pedestrians and bicyclists; landscaping, streetscaping and other scenic beautification projects; and the preservation of abandoned railway corridors and their conversion to trails for non-motorized transportation
<p>Transportation for Livable Communities (MTC)</p> <ul style="list-style-type: none"> • Capital projects and community-based planning that encourage multimodal travel and the revitalization of town centers and other mixed-use neighborhoods • Projects that improve bicycling and walking to transit stations, neighborhood commercial districts and other major activity centers
<p>Transportation Development Act, Article 3 (MTC, Authority)</p> <ul style="list-style-type: none"> • Walking and bicycling projects in an adopted general plan or bicycle plan • Examples: design and construction of walkways, bicycling paths and bicycling lanes; safety education programs; the preparation of comprehensive bicycle or pedestrian plans
<p>Climate Action Program (MTC, BAAQMD, BCDC, ABAG)</p> <ul style="list-style-type: none"> • Walking and bicycling projects as part of safe routes to school and safe routes to transit



Table 8.1 – ELIGIBLE PROJECTS BY FUNDING SOURCE

Bicycle Transportation Account (Caltrans)

- Projects that improve the safety and convenience of bicycling commuting
- Examples: secure bicycle parking; bicycle-carrying facilities on transit vehicles; installation of traffic-control devices that facilitate bicycling; planning, design, construction and maintenance of bikeways that serve major transportation corridors; and elimination of hazards to bicycling commuters

Safe Routes to Transit (TransForm, EBBC)

- Programs, planning efforts and capital projects that will improve bicycling and walking access to regional transit services that serve toll-bridge corridors
- Examples: secure bicycle storage at transit; safety enhancements and barrier removal for walking or bicycling access to transit; system-wide transit enhancements to accommodate bicyclists or pedestrians; access improvements to car-sharing pods

Safe Routes to School (Caltrans)

- Bikeways, walkways, crosswalks, traffic signals, traffic-calming applications, and other infrastructure projects that improve the safety of walking and biking routes to elementary, middle and high schools including “incidental” education, enforcement and encouragement activities

Bay Trail Grants (Bay Trail Project)

- Planning, design and construction of segments of the Bay Trail

Transportation Fund for Clean Air (BAAQMD)

- Projects and programs that will reduce air pollution from motor vehicles: Bicycling paths, lanes, signed routes, bicycle parking, bus racks and other bicycling-related projects

Measure WW (EBRPD)

- Park and recreation needs of cities, the county and special park and recreation districts, including trails and other non-motorized transportation projects

Hazard Elimination Safety (Caltrans)

- Projects that eliminate or reduce the number and severity of traffic collisions on public roads and highways

Alameda County Measure B

- Streets projects and bicycle and pedestrian projects.

Alameda County Vehicle License Fee

- TBD

COST OF NEW BICYCLING FACILITIES

Table 8.2 provides a unit cost summary for the construction of bikeway facilities in Albany; Table 8.3 summarizes the conceptual cost estimates for each priority project. These estimates are based on costs experienced in other communities throughout the Bay Area. More detailed estimates should be developed following the preliminary engineering stage as individual projects advance towards implementation.

TABLE 8.2 – CONCEPTUAL UNIT COSTS FOR BIKEWAY CONSTRUCTION

Facility Type		Improvement	Estimated Cost Per Mile
Class I	Shared-Use Path	Construct Path with Minimal Grading Needed	\$1.2 million
Class II	Bicycling Lane	Signing/Striping Only	\$20,000
		Signing/Striping with Minor Improvements	\$80,000
Class III	Bicycling Route	Signing Plus Stencils	\$15,000
	Bicycling Boulevard	Signing/Stencils Plus Traffic Calming	\$250,000

Note: Costs are in 2011 dollars, excluding right-of-way costs

For purposes of this Plan, conceptual construction costs for the proposed system 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 given the existing topography within the City; cost of right-of-way acquisition is not included.
- New Class II facilities would require minimal or no roadway improvements
- New Class III facilities would require signing only and stencils.



TABLE 8.3 – SUMMARY OF PROJECT LIST COST ESTIMATES

Project		Cost Estimate
Tier 0 / Partially Funded and Planned		
1	Buchanan Street Path and Buchanan Merge Realignment	\$2.5 million
2	Bay Trail	\$1.8 million
3	Pierce Street Segment I Path/Segment II Path ¹	\$2.0 million
4	Codornices Creek Path	\$240,000
Tier 1		
5	Jackson Street Safe Routes to School	\$800,000
6	Adams Street Bicycling Route	\$190,000 / \$360,000
7	Masonic Avenue Bicycling Route and Pedestrian Improvements	\$17,000
8	Talbot Bicycling Route	\$15,000 / \$75,000
9	Solano Avenue Streetscape, Greening & Walking Safety Project	\$1.1 million
10	Kains Avenue Bicycling Boulevard	\$475,000
11	Ohlone Greenway Crossing Enhancements	\$540,000
12	San Pablo Streetscape and Walking Safety Project	\$1.7 million
13	Eastshore Frontage Road Path	\$160,000
Tier 2		
14	Marin Avenue Walking and Bicycling Enhancements	\$1.5 million
15	Dartmouth Bicycling Boulevard	\$1.1 million
16	Cerrito Creek Path	\$360,000 / \$720,000
17	Santa Fe Bicycling Route	\$3,000
18	Washington Avenue Bicycling Boulevard/Route	\$500,000
Tier 3		
19	Key Route Boulevard Median Walking Path and Separated Bikeway	\$800,000

TABLE 8.3 – SUMMARY OF PROJECT LIST COST ESTIMATES

Project		Cost Estimate
20	Polk Street / UC Village Connection	\$350,000
21	Peralta Bicycling Route	\$7,500
22	Portland Avenue Safe Routes to School	\$310,000
23	Francis Street Bicycling Route	\$3,000
Long-Term		
24	University Village / Eastshore Crossing	\$8.0 million
25	Posen Avenue Bicycling Facility	\$6,000
26	Sonoma Avenue Bicycling Facility	\$6,000
27	Waterfront Trail	Not Available

Note:

1. Segment II is not funded.

Note that some cost estimates for facility types are higher or lower than a direct multiplication of the unit cost and mileage. Some of the proposed facilities include other design elements that change the cost from a direct multiplication of unit cost and mileage.

Construction of the Class I, II and III system would require approximately \$25 million, which equates to an investment of approximately \$2.5 million per year over 10 years. This means that if the City were to implement these projects, a local match of between approximately \$2 and \$3 million would be needed. A portion of the proposed system may be constructed as part of new development or as redevelopment occurs, which may offset some costs.



Maintenance Costs

Multi-use path maintenance includes cleaning, resurfacing, and re-striping the asphalt path; repairing bridges and other structures; cleaning drainage systems; removing trash; and landscaping. While this maintenance effort may not be incrementally major, it does have the potential to develop heavy expenses if it is not done periodically.

The estimated annual maintenance expenses for Class I bicycling paths is approximately \$25,000 per mile. If all of the proposed bicycling paths are implemented, this would yield a total of 7.2 miles of Class I facilities. The annual maintenance cost for Albany's Class I facilities at build-out is estimated at about \$180,000.

For Class II bicycling lanes, the cost consists of maintaining pavement markings and striping. The estimated annual cost is \$54,000 for full build-out Class II facilities in Albany.

Lastly, Class III facilities will require maintenance of bicycling signs located along the route. The estimated annual cost of Class III bicycling routes at full build-out is \$7,000.