Oakland Bicycle Pedestrian Advisory Committee
November 19, 2009
Meeting Minutes

Meeting called to order at 5:40pm

Introductions were made

Attendees:
Brian Toy, Carol Levine, Daniel Schulman, Fred McWilliams, Jonathan Bair, Karen Smulevitz, Midori Tabata, Rebecca Saltzman, Robert Raburn, Isaac Rodriguez (Cycles of Change), Chris Kattenberg

Staff/presenters: Jason Patton, Jennifer Stanley, Cameron White, Paul Keener, Jennifer Donlon, Ian Moore, Liz Fleck, Peter Chun, Chris Miley, Judy De Vries, Joe Wang

Minutes of previous meeting
Approval of Minutes was tabled until the end of the meeting pending some modifications to the minutes

Kaiser Hospital-MacArthur Blvd Median Crossing Design
Kaiser representatives presented revised plans to open up the MacArthur/Shafter intersection to bicyclists and pedestrians. This is in response to concerns and comments raised by the BPAC at previous meetings that the recent construction by Kaiser including closing of the median at that intersection has negatively impacted ped/bike access. This improvement includes a break in the median, crosswalk on the east side of Shafter, signage and warning beacons.

Questions were raised including: Was there any consideration about adding a signal at this intersection? Per the City's response, a signal is not warranted there based on traffic (pedestrian or vehicular). What is the schedule for construction? As soon as Kaiser gets City approval, they are ready to move forward. MOTION: To support the project as presented. MOTION PASSED.

Alameda County Union Pacific Railroad Oakland Subdivision Corridor Improvement Study Presentation by Paul Keener, Alameda County Public Works Agency and Ian Moore, Alta Planning + Design
This is a study combining potential abandonment of this ROW, the East Bay Greenway, and Dumbarton Rail. The focus of this study is on the rail ROW itself specifically how to accommodate bikes/peds in the ROW either with or without rail. This alignment runs along the BART alignment in Oakland to develop both the corridor wide and local recommendations.

Entire corridor is 18 miles and includes both freight and passenger rail from Fruitvale BART to Union City BART. 17 miles of Class I, Class 2 about .2 miles, Class 3 about 1.3 miles. It is divided into 3 segments based on rail operations. Some will be rail-to-trail

and some will be rail-with-trail. Likely won't be changes in passenger rail but could be changes in freight service. The segment in City of Oakland is narrower than other segments. The development of Class 1 facilities would preclude some on-street bike lanes. Questions included: Who would maintain the off-street facility? The Ohlone Greenway has been used as template with local jurisdiction to be responsible. How many grade crossings would there be for Class 1 segment? Not sure, generally they are long blocks but probably about 10 which is not too many. Using the Ohlone Greenway as an example, the crossings there are somewhat scary. Response that this is still a very conceptual planning study with the hope to learn from the experience with Ohlone Greenway. Question about Class 1 versus Class 2? The Oakland Plan shows both in some segments. Should consider the cost differential between these types and also consider phasing with on-street as Phase 1. There are some inherent problems with San Leandro related to truck traffic, width of the roadway, quality of pavement. Please submit more detailed comments on the question of Class 1 vs. Class 2.

At High Street Class 3, is now 1-way? It will need to be converted to 2-way. Some analysis has been done but more will be necessary.

Comment that cost for ROW is very scary high. Response that there are ongoing negotiations with UPRR but study reflects a very conservative estimate.

Next Steps: ACTIA is looking at how to continue moving this forward with available funds. Affected jurisdictions are in agreement that ACTIA will be lead agency for the ongoing work including environmental review and how to proceed with additional planning, program/project level environmental review and design.

To address comments by December 8, 2009, go to tonight's agenda and hit weblink.

City of Oakland update: 12th Street section is being worked on now and using stimulus money is expected for construction in 2011. Section around Coliseum BART is also being developed

Safe Routes to School
Presentation by Joe Wang, Oakland Transportation Services Division
Three projects have been granted. 1 is at 95% design stage. Other 2 are beginning design.

SR2S, Cycle 7 project - Road diet on MacArthur Blvd (without bike lanes) by Castlemont High School and other schools including bulb outs and refuge islands

SRTS, Cycle 1 project – Mostly bulbouts

SRTS, Cycle 2 project – sidewalks, ped signals, bike lanes on Alcatraz. First Oakland Safe Routes to School to include bicycle lanes. Generally they focus more on pedestrian improvements which are more in tune with elementary schools. Peralta Elementary School actually does have an active bike program so this bike lane is most appropriate.

Question: What is the anticipated public outreach? Historically Safe Routes to School projects have not been subjected to public outreach because they have been minor in nature. However, the MacArthur road diet project may need further outreach. Unfortunately, the road diet would still not provide adequate width for bike lanes.

Taxi Stands

Joe Wang of the City made a presentation on the status of taxi stands. A meeting was held to discuss changes in taxi stands to provide more on street parking. It was understood that the number of taxi stands in several areas of the City was reduced. It is unknown who was included in this meeting but it was believed that the taxi companies were not included. City is putting in new taxi stands for areas that have consistent demand. Meters will stay in until 6pm and then converted to taxi stands in evening. There is a proposal to add other taxi locations. Information on this will be sent out by Jennifer to committee for our comments.

BPAC Agenda development

Discussion led by Chris Hwang, BPAC vice-chair to discuss proposal to convene a subcommittee to set and prioritize agenda items and to do outreach to staff member or others who would be good to include as speakers or resources. Jennifer keeps good supply of resources on the BPAC website. Chris will lead the group. Robert Raburn and Midori Tabata will participate. Others may contribute topics as they desire.

Revisions to October Minutes

Some revisions to the October minutes were suggested. These include:

1. Comment: Remove paths from the priority list for consideration if they already have been “adopted” and regularly cared for by a non-City entity, e.g., neighborhood association or group

Should be replaced with “Comment: Identify as a spearate priority level paths that are already cared for by other institutions, e.g., Parks and Rec, Amtrak, neighborhood association or group”

2. Response: Too expensive to include in project budget and may experience significant delay due to lack of dedicated resources

Should be replaced with “Response: Too expensive to include new pedestrian lighting in the project budget and may experience significant delays due to lack of dedicated resources. Signage will be incorporated into the new projects.”

3. Projects identified through data modeling will focus on paths that only require select repairs.

Should be replaced with “projects identified through data modeling will focus on paths that only require selective repairs.

MOTION: Approve minutes with suggested revisions. MOTION PASSED

Announcements
Check out the El Embarcadero markings, new paving on Lakeshore, Stanford median crossing. Great work!

Would like informational presentation on new changes to Oak Street, update on measure DD.

Meeting adjourned at 7:30 pm

Minutes respectfully submitted by Carol Levine

Map 1: Oakland

Map 1 covers the area of Oakland from the Fruitvale BART Station south to 105th Avenue near the San Leandro Border. **Figure 4-3** presents the recommended project alignment in Oakland.

The Oakland segments are surrounded by a mix of industrial, commercial and residential land uses. There are few park and open space areas and limited pedestrian and bicycle facilities. Local residents must rely on transit or private vehicles to access regional open space on the Bayshore or in the East Bay Hills.

Pursuant to this study's goals to investigate the feasibility of a multi-use path in the Oakland Subdivision, rail-with-trail and rail-to-trial scenarios were investigated. Rail-with-trail is not a likely option between 47th and 98th Avenues for numerous reasons, including lack of sufficient setback and crossing issues. The Oakland Subdivision is not immediately adjacent to San Leandro Street. Corridor distance from intersections poses crossing and safety issues and mid-block crossings may cause circulation problems. A rail-to-trail scenario in the Oakland subdivision provides the same crossing and circulation issues.

Alignment alternatives to the Oakland Subdivision include facilities proposed in the City of Oakland Bicycle Plan: Class II bike lanes on San Leandro Street and the East Bay Greenway multi-use path along San Leandro Street. Installation of either facility would preclude the other and each has its own opportunities and challenges.

Bike lanes and multi-use paths may serve different users. Bike lanes often serve confident bicyclists who may travel for sport or commuting. Multi-use paths may serve bicyclists who are not comfortable traveling near traffic and ride for recreational and utilitarian trips. Paths also serve both bicycles and pedestrians while lanes do not.

Both facility types also have design challenges. Bike lanes require less right-of-way however can result conflict between bicyclists and buses. This portion of the corridor includes the Fruitvale and Coliseum BART stations, both of which are served by numerous AC Transit routes. Multi-use paths do not pose conflict with transit however; paths have limited access to the opposite side of the street and pose unique intersection crossing challenges.

Given this study's goals, the following recommended segment alignments are Class I multi-use paths, where there is available right-of-way. Both facilities have been reviewed by the public through the adoption of the Oakland Bicycle Plan and outreach conducted during the development of the East Bay Greenway Concept Plan. The City of Oakland will determine the final alignment. The estimated annual operations and maintenance cost for the Class I facilities in Oakland is $40,000.

Figure 4-3: Proposed Map 1 Alignment - Oakland

Segment 1.1: 35th Avenue to 37th Avenue

Summary

Segment 1.1 is immediately adjacent to the Fruitvale BART Station and is surrounded by the Fruitvale Transit Village, a mixed-use transit-oriented development. This segment is subject to several constraints including lack of available right-of-way precluding development of a trail. The right-of-way is occupied by the BART station parking lot where the UPRR rail lines have been removed.

Despite the lack of unoccupied right-of-way, the area is rich in supportive amenities. The adjacent land uses include residential neighborhoods, transit-oriented development, the Fruitvale commercial district, and light industrial. The surrounding area is at the heart of the development of the pedestrian oriented Fruitvale Transit Village, as potential attractor and generator for the trail. The transit village would tie into the development of the corridor as a multi-use trail serving as a recreational and transportation corridor.

Parallel alignment options include East 12th and San Leandro Streets. The City of Oakland Bicycle Plan identifies the East Bay Greenway along San Leandro Street from Fruitvale Avenue to the San Leandro border as a priority project. The City of Oakland Bicycle Master Plan also includes a Class III bike route along East 12th Street. The East 12th Street route is the City's preferred alternative.

Alternatives on the Oakland Subdivision alignment are not feasible because the railroad right-of-way has been abandoned and is occupied by industrial and storage uses. San Leandro Street was considered as an alignment but peak hour and average daily vehicle volumes suggest that adding bicycle lanes by removing travel lanes may not be feasible. A shared lane treatment is not recommended given the traffic volumes and speeds on this truck route.

Alignment Recommendations

The recommended alignment option in Segment 1.1 is a Class III bike route on E. 12th Street from 35th Avenue to 37th Avenue (**Figure 4-4**). This alignment is a Class 3A arterial bike route proposed bikeway in the Oakland Bicycle Master Plan.

Crossings

The proposed alignment is on-street and this study assumes that the intersections will be upgraded consistent with the design guidance set forth in the City of Oakland Bicycle Master Plan and Pedestrian Master Plan.

Planning-Level Cost Estimate

Table 4-5 summarizes the cost estimates for the recommended alignment in Segment 1.1. The cost estimate includes the implementation of a Class III bike route on East 12th Street.

Table 4-5: Segment 1.1 Cost Estimates

Facility Type	Route	From	To	Length (miles)	Cost
Class III	East 12th Street	35th Avenue	37th Avenue	0.12	$2,000

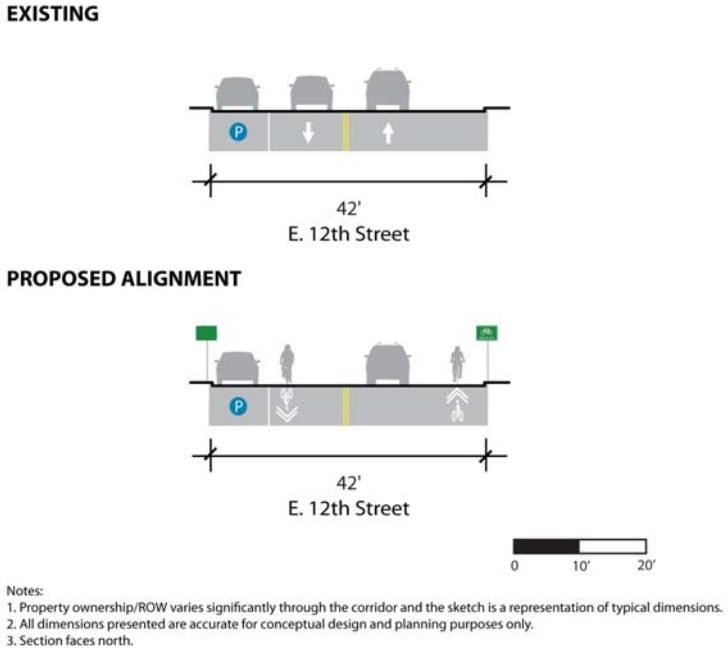


Figure 4-4: Segment 1.1 Proposed Alignment

Segment 1.2: 37th Avenue to 47th Avenue

Summary

Segment 1.2 is defined by industrial land uses and occupied right-of-way. The at-grade freight tracks have been removed. Rail operations here are limited to BART, which operates on elevated tracks. The corridor is adjacent to the Fruitvale BART Station, the Fruitvale Commercial District, and nearby residential communities; all of which generate and attract pedestrians and bicycle trips.

The constraints in Segment 1.2 include available right-of-way, adjacent industrial land uses, and functional trail characteristics. In this segment, the corridor runs through the interior of many blocks and provides little opportunity to use the right-of way. The right-of-way between 37t and 39th Avenues is occupied by Ascend Academy. The remainder of the corridor is intermittently occupied by industrial uses. The UPRR Oakland Subdivision corridor crosses over the trestle bridge at 42nd Street.

The block lengths, frequent crossings, and mid-block location limit the feasibility of the UPRR Oakland Subdivision and BART right-of-way as a multi-use path alignment. The East Bay Greenway's preferred route for Segment 1.2 is a Class II bike lane on San Leandro Street. San Leandro Street was considered as an alignment but peak hour and average daily vehicle volumes

suggest that adding bicycle lanes by removing travel lanes may not be feasible. A shared lane treatment is not recommended given the traffic volumes and speeds on this truck route. The Oakland Bicycle Plan identifies the East Bay Greenway as a priority project and also identifies a proposed Class III bike route (Class 3A arterial bike route) on East 12th Street. The City of Oakland recently striped a Class II bike lane on East 12th between 37th and 40th Streets.

Alignment Recommendations

A continuation of the Segment 1.1 Class III bike route on East 12th Street is recommended for Segment 1.2 (**Figure 4-5**) where there is no existing Class II bike lane. This recommendation includes a one-to-two way conversion of East 12th Street between 40th Avenue and High Street. The Oakland Bicycle Master Plan identifies a Class 3A arterial bike route on this segment.

Crossings

The proposed alignment is on-street and this study assumes that the intersections will be upgraded consistent with the design guidance set forth in the City of Oakland Bicycle Master Plan and Pedestrian Plan. Traffic signal improvements will be necessary at East 12th Street and High Street due to the one-to-two way conversion.

Planning-Level Cost Estimate

Table 4-6 summarizes the cost estimates for the recommended alignment in Segment 1.2. The cost estimate includes the implementation of a Class III bike route on East 12th Street and a one-to-two way conversion with signal improvement on East 12th Street between 40th Avenue and High Street.

Table 4-6: Segment 1.2 Cost Estimates

Facility Type	Route	From	To	Length (miles)	Cost
Class III	East 12th Street	37th Avenue	47th Avenue	0.60	$12,000
One-to-two way conversion	East 12th Street	40th Avenue	High Street	0.20	$150,000
				Total	$162,000

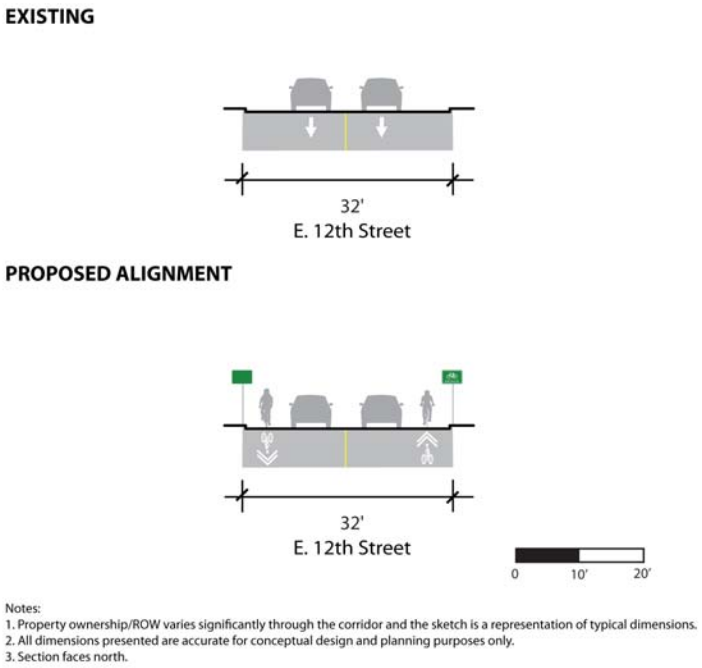


Figure 4-5: Segment 1.2 Proposed Alignment

Segment 1.3: 47th Avenue to Seminary Avenue

Summary

Segment 1.3 is surrounded primarily by industrial uses with surface automobile parking, no nearby open space access, and few bicycle and pedestrian opportunities. The industrial uses to the east of the corridor include large industrial buildings and storage yards. These industrial facilities may be an access barrier for the residential communities to the east. Like many neighborhoods along the Study Corridor, this area does not meet MTC's Lifeline transit service objectives designed to ensure low-income families, seniors, and youth have access to transit when and where it is needed.

The primary opportunities in this segment include long block lengths and limited roadway crossings, making this segment conducive to a regional trail. There are no existing bikeways within the immediate vicinity of the corridor. The City of Oakland Bicycle Master Plan recommends north/south facilities including the East Bay Greenway and a Class III route (Class 3A arterial bike route) on East 12th Street. A proposed Class 3B bicycle boulevard on 54th Avenue would provide an east/west connector.

Key constraints on this segment include at-grade rail operations begin at 47th Avenue where a spur from the Niles Subdivision connects to the Oakland Subdivision. In this segment, the Oakland subdivision has two at-grade tracks. There are no known current freight customers on this segment but freight operations do serve customers further south.

The City of Oakland's Bicycle Plan includes both a Class II bicycle lane on San Leandro Street and the East Bay Greenway's Class I multi-use path in the BART ROW (between 54th Avenue and

Seminary Avenue). The installation of either facility would preclude the other, each may serve different users and each facility type provides its own design challenges.

Alignment Recommendations

The recommended alignment begins as a Class III bike route (Class 3A arterial bike route) on East 12th Street between 47th Avenue and 54th Avenue (**Figure 4-6**). This alignment follows a route proposed in the Oakland Bicycle Master Plan. The recommended alignment then continues on 54th Avenue as a Class III bike route to a Class I multi-use path on the western BART ROW adjacent to San Leandro Street (**Figure 4-7**). This Class I facility is the East Bay Greenway preferred route and will serve both bicyclists and pedestrians.

The curb-to-curb with of San Leandro Street from 54th Avenue to Seminary Avenue is 52-feet and includes four travel lanes and curb-side parking on the west. Removal of on-street parking will allow the construction of the Class I multi-use path.

Crossings

The proposed alignment is a combination of an on-street and a multi-use pathway in close parallel to existing San Leandro Street. The on-street bicycle route and Class I pathway do not require special crossing considerations or costs. It is assumed that the Class I pathway segments will cross intersecting streets at existing pedestrian crossings at existing intersections.

Planning-Level Cost Estimate

Table 4-7 presents planning level cost estimates for the recommended Class I and Class III bikeways in Segment 1.4. The cost estimate includes the implementation of Class III bike routes on East 12th Street and 54th Avenue, and a Class I multi-use path along San Leandro Street.

Table 4-7: Segment 1.4 Cost Estimates

Facility Type	Route	From	To	Length (miles)	Cost
Class III	East 12th St.	47th Ave.	54th Av.	0.35	$5,000
Class III	54th Ave.	E. 12th St.	San Leandro St.	0.15	$2,000
Class I	San Leandro St.	54th Ave.	Seminary Ave.	0.35	$457,000
				Total	$464,000

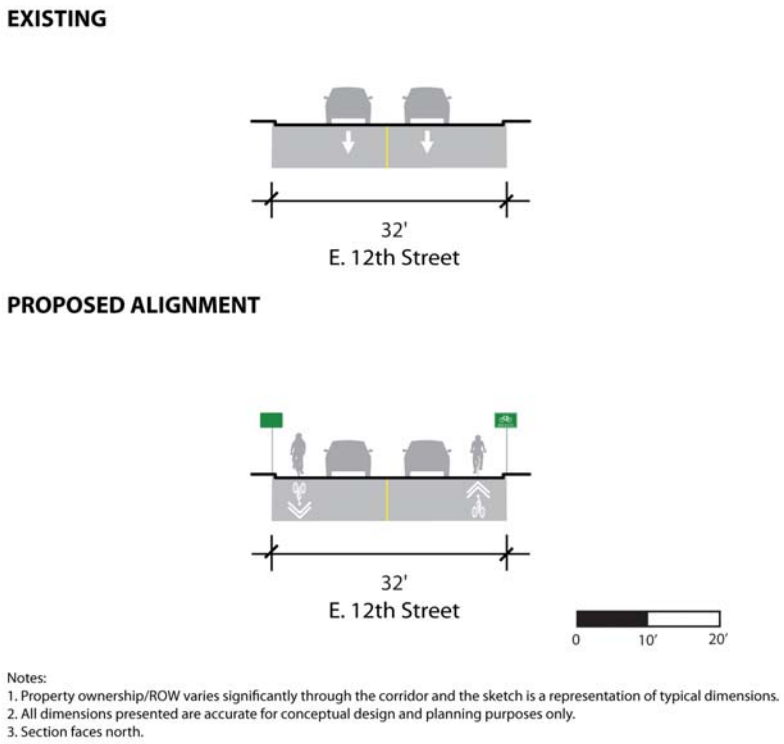


Figure 4-6: Proposed Segment 1.3 Alignment North of 54th Avenue

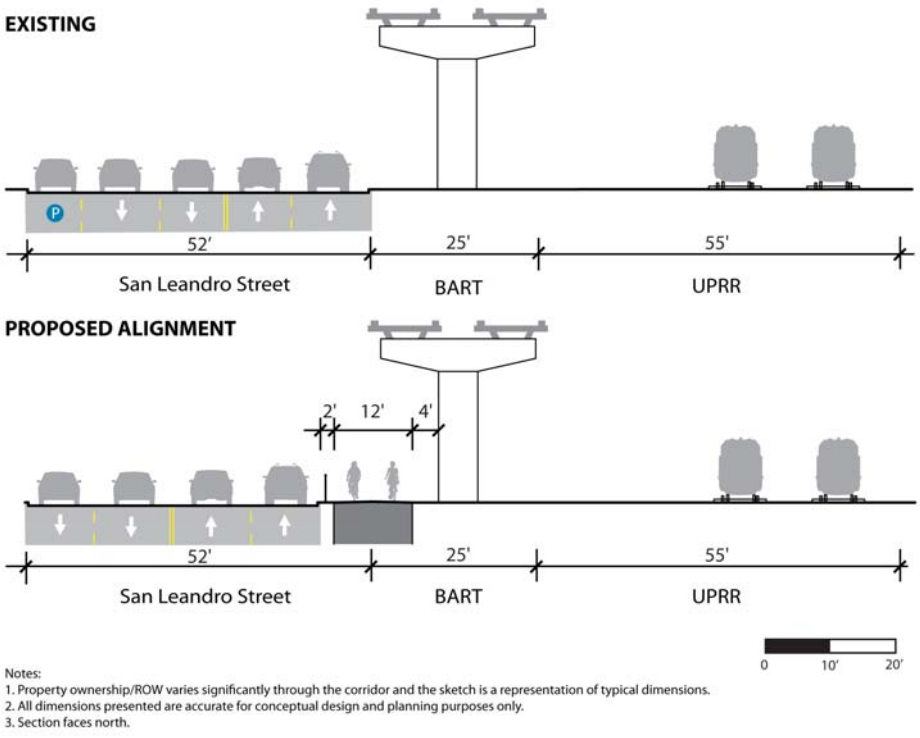


Figure 4-7: Proposed Segment 1.3 Alignment South of 54th Avenue

Segment 1.4: Seminary Avenue to 81st Avenue

Summary

Segment 1.4 is surrounded by mixed-use transit oriented development to the east and industrial uses to the west and in close proximity to existing Bay Trail segments. The corridor is adjacent to the elevated BART tracks and runs parallel to San Leandro Street. The Coliseum BART Station, McAfee Coliseum and the Oracle Arena are all located immediately adjacent to the Oakland Subdivision.

As in the previous segment, there are existing rail operations. BART operates on elevated tracks while two freight rail tracks operate at grade. An active rail spur between 77th and 81st Avenues serves fright customers east of the corridor. The corridor is currently fenced in and adjacent to the back of buildings on the eastern edge from Seminary Avenue to approximately 69th Avenue. Between the Coliseum BART Station and 81st Avenue, the corridor is fenced in from the BART tracks to the industrial buildings.

This segment, in terms of block length and number of crossings, is conducive to a regional trail corridor. The block lengths are long and there are few roadway crossings.

The adjacent land uses, specifically the existing and planned transit oriented development near the Coliseum BART Station provide potential users for the trail; however, the existing TOD development walls off the corridor. Proposed bikeways include three east/west connections via 66th Avenue, Hegenberger Road, and 75th Avenue.

The East Bay Greenway's preferred route is a multi-use path parallel to San Leandro Street. This pathway would occupy BART property and City of Oakland street right-of-way. At the Coliseum BART Station, the preferred East Bay Greenway alignment is routed on-street to a proposed Class III bike route east of the Station on Snell Street and back onto a multi-use path in the BART right-of-way. The Oakland Bicycle Plan identified this same concept as a priority project; however it does not include the Snell Street diversion. The Oakland Bicycle Plan also includes a Class II bike lane on San Leandro Street. As in Segment 1.3, the installation of either facility would preclude the other, each may serve different users and each facility type provides its own design challenges.

Alignments considered included a path within the UPRR Oakland Subdivision right-of-way and an on-street facility, however they were determined to not meet the project goals. It is likely the Oakland Subdivision right-of-way will have active short-haul freight activity creating setback challenges. Additionally, the Oakland Subdivision right-of-way is not adjacent to intersections and would pose crossing challenges. A bicycle lane on San Leandro Street is an option however; a multi-use path serves both bicyclists and pedestrians.

Alignment Recommendations

The alignment recommendation for Segment 1.4 (**Figure 4-8**) is a continuation of the Class I multi-use path from Segment 1.3 on the western BART property adjacent to San Leandro Street south to 69th Avenue. At 69th Avenue, the alignment will go around the Coliseum BART Station and continue as a Class III bike route on 69th Avenue, to Snell Street, to 75th Avenue. A Class I multi-use path continues along the western boundary of the BART right-of-way adjacent to San Leandro

Street to 81st Avenue. This alignment will allow path users to access BART by the station underpass on Snell Street.

The curb-to-curb with of San Leandro Street on this segment is 76-feet and includes four travel lanes, a center turn lane, and on-street curb-side parking on the west. Reallocation of this width and lane configuration allows for the construction of the Class I multi-use path.

Crossings

Table 4-8 outlines the four roadway crossings in Segment 1.4 and the recommended improvements with associated costs.

Table 4-8: Segment 1.4 Crossings

Crossing Location	Type	Notes	Improvements	Cost
Seminary Avenue (key crossing)	Roadway, at grade	Path directed to intersection	High Visibility Crosswalk	$1,000
66th Avenue (key crossing)	Roadway, at grade	Path directed to intersection	High Visibility Crosswalk	$1,000
69th Avenue	Roadway, at grade	Path directed to intersection	High Visibility Crosswalk	$1,000
75th Avenue	Roadway, at grade	Path directed to intersection	High Visibility Crosswalk	$1,000

Planning-Level Cost Estimate

Table 4-9 summarizes the cost estimates for the recommended alignment in Segment 1.4. The cost estimate includes the implementation of Class III bike routes on 69th Avenue, Snell Street and 75th Avenue as well as a Class I on San Leandro Street. The recommended high visibility crosswalks are also included in the cost estimate.

Table 4-9: Segment 1.4 Cost Estimates

Facility Type	Route	From	To	Length (miles)	Cost
Class I	San Leandro St.	Seminary Ave.	69st Ave.	0.85	$1,123,000
Class III	69th Ave.	San Leandro St.	Snell St.	0.15	$1,000
Class III	Snell St	66th Ave.	75th Ave.	0.35	$4,000
Class III	75th Ave	Snell St.	San Leandro St.	0.15	$450
Class I	San Leandro St.	75th Ave.	81st Ave.	0.25	$326,000
Crosswalks					$4,000
				Total	$1,458,000

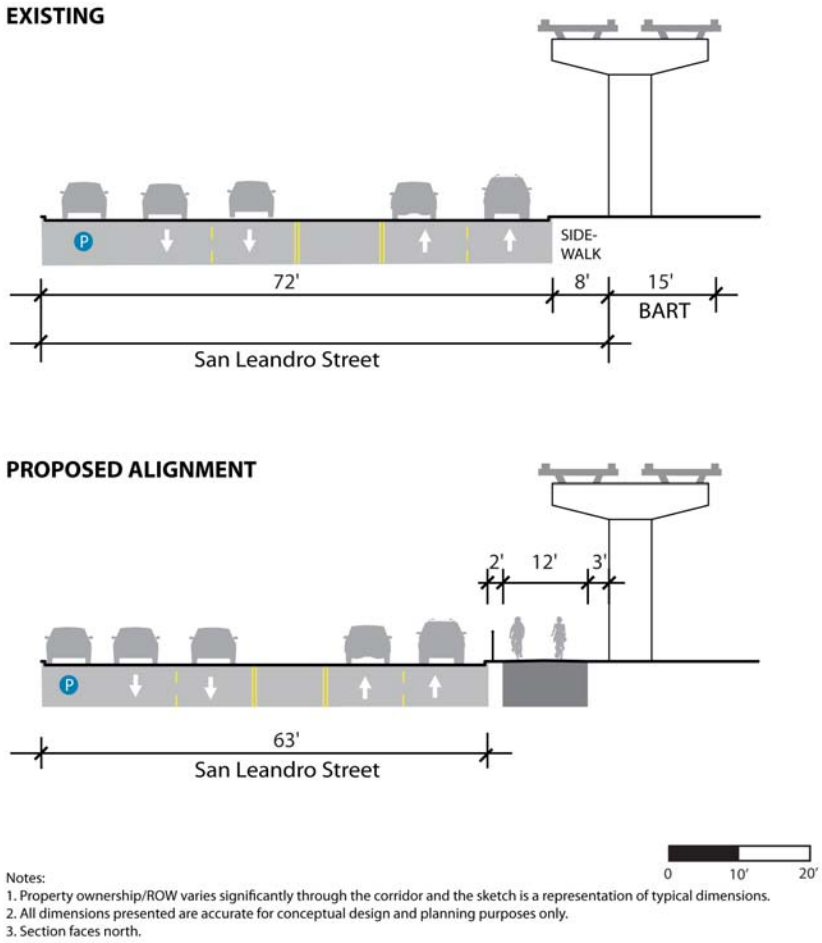


Figure 4-8: Proposed Segment 1.4 Alignment

Segment 1.5: 81st Avenue to 105th Avenue

Summary

Segment 1.5 is immediately surrounded by commercial and industrial uses with surface automobile parking. Single family residential neighborhoods are located east of the existing commercial and industrial proprieties and immediately border the southern end of this segment. The right-of-way is occupied by elevated BART tracks and runs parallel to San Leandro Street.

Opportunities in this segment include available right-of-way and functional suitability for a regional trail facility. The total right-of-way in this segment is approximately 72 feet. The block lengths are long and there are few roadways crossings making it conducive to a regional trial. A proposed east/west connector bicycle facilities includes a Class III route (3A arterial) on 85th and Avenue.

Segment 1.5 constraints include rail operations, adjacent land uses, and potential crossing conflict with at-grade rail spurs. Rail operations in this segment include BART (elevated), two at-grade tracks, and three at grade rail spurs. Between 81st and 85th Avenues, an at-grade spur turns east from the UPRR tracks. South of 85th Avenue, a spur turns west and crosses San Leandro Street. Finally,

between 92nd and 98th Avenues another spur turns west and crosses San Leandro Street into the Oakland Foreign Trade Zone.

As in the previous two segments, the City of Oakland's Bicycle Plan includes both a Class II bicycle lane on San Leandro Street and a Class I multi-use path in the BART ROW. The installation of either facility would preclude the other, each may serve different users and each facility type provides its own design challenges.

Alternatives including a continuous path within the UPRR right-of-way and an on-street bicycle lane were considered, however they were determined to not be feasible. It is likely the UPRR right-of-way will have active short-haul freight activity to 98th Avenue and recommended setbacks may not be feasible. A bicycle lane on San Leandro Street is an option however; a multi-use path will serve both bicyclists and pedestrians.

Alignment Recommendations

A continuation of the Class I multi-use path on the western BART ROW adjacent to San Leandro Street is recommended from 81st Avenue south to 100th Avenue (**Figure 4-9**) where it would cross under the elevated BART tracks to the UPRR Oakland Subdivision right-of-way. As discussed in **Chapter 2**, this study assumes freight rail service will not continue south of 98th Avenue.

Crossings

Table 4-10 outlines the five roadway crossings in Segment 1.5 and the recommended improvements with associated costs.

Table 4-10: Segment 1.5 Crossings

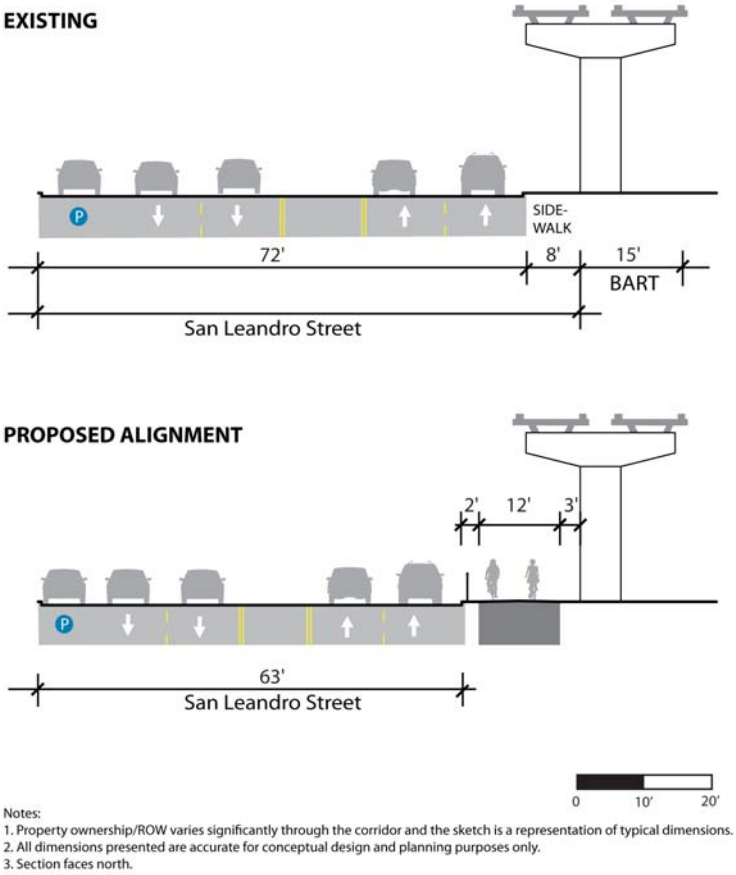
Crossing Location	Type	Notes	Improvements	Cost
81st Avenue	Roadway, at grade	Path directed to intersection	High Visibility Crosswalk	$1,000
83rd Avenue	Roadway, at grade	Path directed to intersection	High Visibility Crosswalk	$1,000
85th Avenue (key crossing)	Roadway, at grade	Path directed to intersection	High Visibility Crosswalk	$1,000
92nd Avenue (key crossing)	Roadway, at grade	Path directed to intersection	High Visibility Crosswalk	$1,000
98th Avenue (key crossing)	Roadway, at grade	Path directed to intersection	High Visibility Crosswalk	$1,000

Planning-Level Cost Estimate

Table 4-11 summarizes the cost estimates for the recommended alignment in Segment 1.5. The cost estimate includes the implementation of a Class I multi-use path on San Leandro Street and five intersection crossing improvements.

Table 4-11: Segment 1.5 Cost Estimates

Facility Type	Route	From	To	Length (miles)	Cost
Class I	San Leandro St.	81st Ave	105th Ave.	1.40	$1,828,000
Crosswalks					$5,000
				Total	$1,833,000



Notes:
1. Property ownership/ROW varies significantly through the corridor and the sketch is a representation of typical dimensions.
2. All dimensions presented are accurate for conceptual design and planning purposes only.
3. Section faces north.

Figure 4-9: Proposed Segment 1.5 Alignment