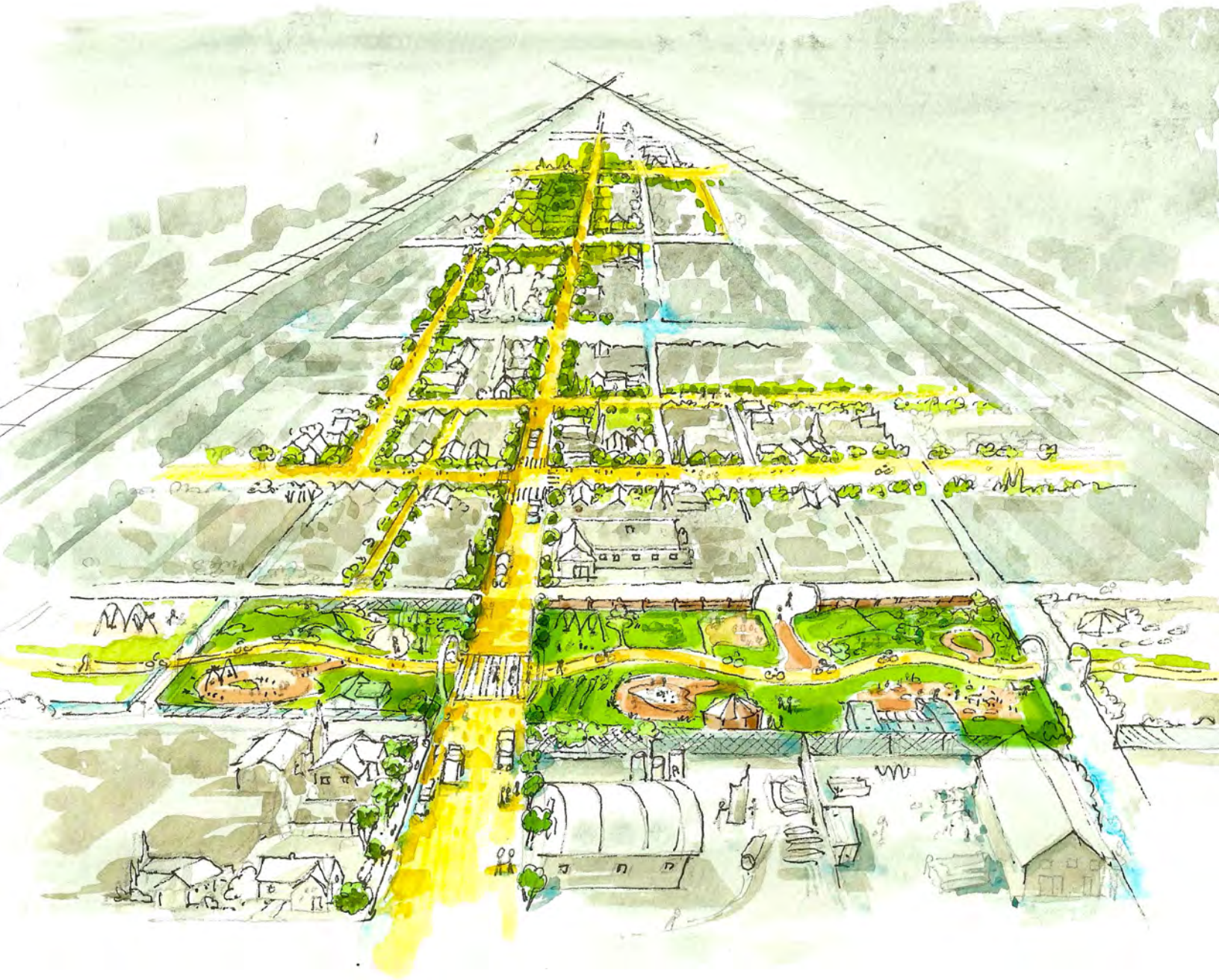
YELLOW BRICK ROAD

in Richmond's Iron Triangle Neighborhood



ACTIVE TRANSPORTATION PROGRAM

Grant Application

City of Richmond

June 2015

City Manager's Office
450 Civic Center Plaza
Richmond, CA 94804

Application Part B –Narrative
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SECTION B: NARRATIVE

Screening Criteria:
1. Demonstrated fiscal needs of the applicant:

The City of Richmond and the Iron Triangle Community are ready to implement Phase 1 of the Yellow Brick Road (YBR) project, consisting of three key routes: Peres Elementary School to Elm Playlot; 8th Street, the primary north-south route through the neighborhood; and the Richmond Greenway, an important east-west walking and biking route to the Richmond Intermodal Transit Center. This phase includes infrastructural improvements to:

- Pennsylvania Avenue, 2nd Street to Harbour Way;
- 7th Street, Pennsylvania Avenue to Ripley Avenue;
- Elm Avenue between 7th and 8th
- 8th Street, Lincoln Avenue to Ohio Avenue
- Street crossings on the Richmond Greenway at 2nd, 4th, 6th, 8th, 20th Streets and Harbour Way

While the City strongly supports the YBR plan and its improvements, the recent recession continues to adversely impact the City's budget, even as other Bay Area communities have experienced recovery. As a result, the City lacks the funds to construct YBR improvements. No elements of the project are directly or indirectly related to past or future environmental mitigation resulting from separate development or capital improvement project.

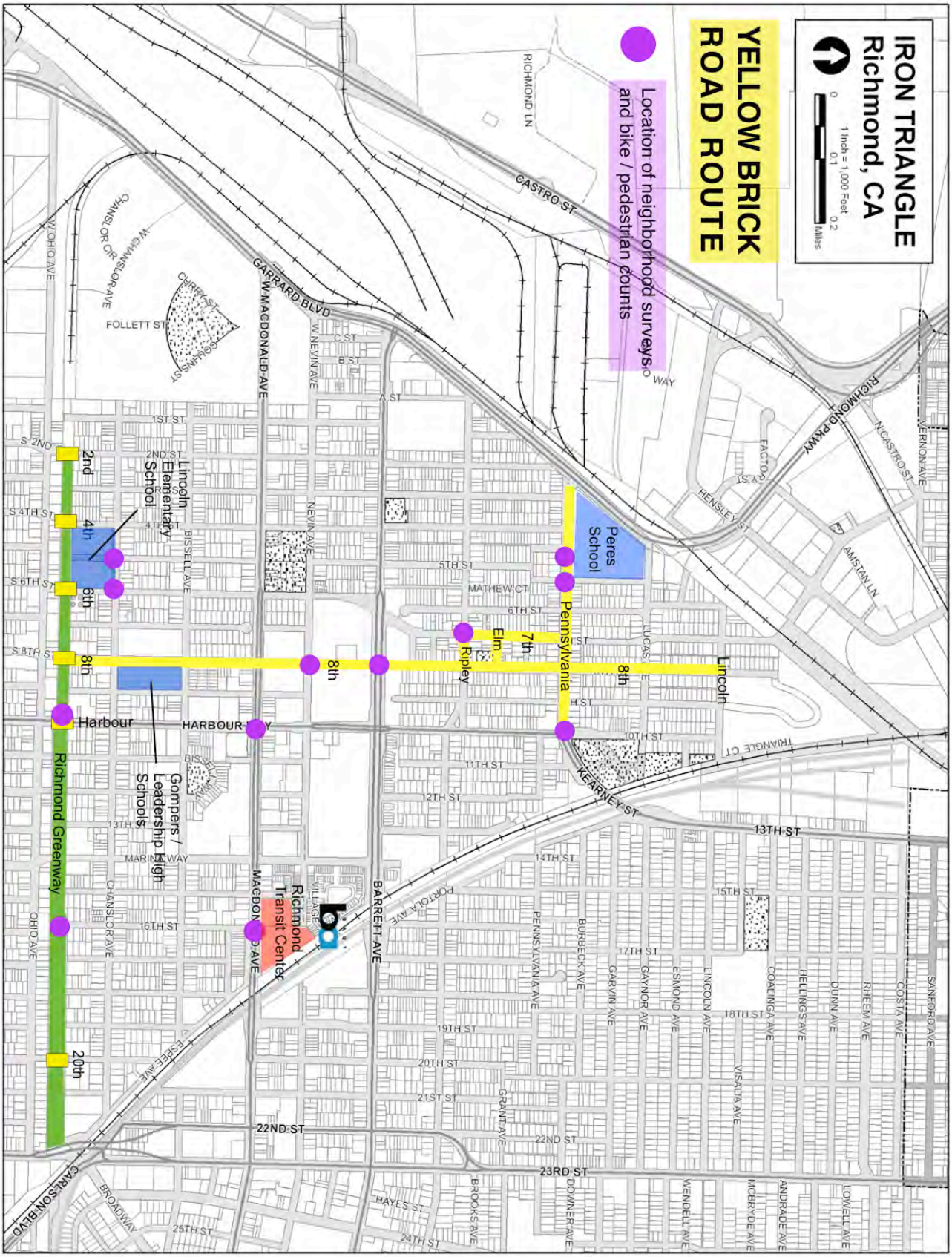
2. Consistency with Regional Plan:

This project is consistent with the *MTC's Plan Bay Area Regional Transportation Plan and Sustainable Communities Strategy for the San Francisco Bay Area 2013-2040.* Page 75 documents that the plan supports active transportation street improvements and page 78 supports projects that connect to Priority Development Areas (Central Richmond), while the *Final Plan Bay Area Project List* includes regional and local pedestrian and bicycle improvements in Contra Costa County on their list of transportation projects.

1A. Describe the current and projected types and numbers rates/users:

The Iron Triangle is a one-square mile neighborhood with 12,924 residents, many of whom rely on cars for transportation due to actual and perceived lack of safety on their streets. One third of residents live below the poverty line and many do not own cars; a significant number are seniors and/or use wheelchairs and cannot drive. Constructing the YBR, a network of safe walkable and bikable streets, would provide active transportation routes and improve access to the most important destinations in their neighborhood, including schools, retail, health services, parks and Richmond's Intermodal Transit Station.

Richmond-based nonprofit Pogo Park conducted counts of existing bicycle and pedestrian volumes in May 2015 along the streets to be improved by the Project.


IRON TRIANGLE
Richmond, CA
1 Inch = 1,000 Feet
Miles
YELLOW BRICK ROAD ROUTE
Location of neighborhood surveys and bike / pedestrian counts
Peres School
Pennsylvania
Ripley
Elm
7th
8th
Lincoln
Lincoln Elementary School
2nd
4th
6th
Harbour
Gompers / Leadership High Schools
Richmond Greenway
20th
Richmond Transit Center
CASTRO ST
GARRARD BLVD
W MACDONALD AVE
BARRETT AVE
HARBOUR WAY
KEARNEY ST
13TH ST
22ND ST
23RD ST
CARLSON BLVD
RICHMOND PKWY
FOLLETT ST
W OHIO AVE
CHANSLOR AVE
MARINA WAY
BISSELL AVE
NEVIN AVE
MATHEW CT
LUCAS CT
TRIANGLE CT
HENSLEY ST
AMSTAN LN
RICHMOND LN
PORTOLA AVE
ESSEE AVE
BROADWAY
HAYES ST
PENNSYLVANIA AVE
BURBECK AVE
GARVIN AVE
GAYNOR AVE
ESMOND AVE
LINCOLN AVE
COALINGA AVE
HELLINGS AVE
DUNN AVE
RHEEM AVE
COSTA AVE
SANFORD AVE
LOVELL AVE
ANDRADE AVE
MCBRYDE AVE
VENDELL AVE
DOWNER AVE
BROOKS AVE
GRANT AVE
VISALIA AVE
VERNON AVE
N CASTRO ST
FACTORY ST
W GRANSOR CIR
CHANSLOR AVE

The counts were taken on different days and collected the number of pedestrians and bicyclists at each location. Given the proximity to school sites, the counts were conducted during the weekday peak hours, 7-9AM and 3-5PM The results are summarized in **Table 1** below:

Table 1 May 2015 Existing Peak Hour Bicycle and Pedestrian Counts		
Location	**Total Bicyclists**	**Total Pedestrians**
4th Street/Pennsylvania Avenue	11	1390
5th Street/Pennsylvania Avenue	38	680
7th Street/Ripley Avenue	5	17
8th Street/Barrett Avenue	30	64
8th Street/Nevin Avenue	38	248
Lincoln Elementary School	57	1008
Harbour Way/Richmond Greenway	112	215
Source: AM and PM peak hour data collected in May 2015.		

Note that counts from Lincoln Elementary School (located near the Richmond Greenway and 8th Streets) are used as a proxy for future pedestrian volumes on 8th Street at Gompers and Leadership High School sites, which are currently under construction and will open next year.

CURRENT USE

Based on the 2015 observed peak hour volumes, existing daily bicycle volumes on the proposed Elm to Peres Elementary, 8th Street, and Richmond Greenway are estimated to be 3,613 daily bicycle trips. Attachment I-A1-1 documents the method used to arrive at the daily figure and trip purpose. The 3,613 daily bike trips figure reflects the average between a high and low range developed based on the peak hour counts taken in May 2015. Peak hour counts taken at seven sites along the YBR route were summed to create a total number of existing peak hour bicycle trips that would be benefit from the project. This number was then extrapolated to average daily trips (ADT) using low and high extrapolation factors, as there is not an established way to extrapolate between peak hour bike counts and bike ADT. For the low range, the National Bicycle and Pedestrian Database (NBPD) extrapolation factor of 14 was used to translate between peak period and ADT, including

the 1.05 two hour peak period multiplier. This is a low range, because that method is designed to extrapolate for a two-hour peak period; however, two hours of data was not available at each count location. As a result, the NBPD extrapolation method underestimates the bike ADT. A high range was developed using observed 2014 bike ADT on a corridor in Oakland, a similar East Bay community. The low and high ranges were averaged to arrive at 3,613 bicyclists.

As no other data source was available, the default trip distribution data from the ATP application of 11% commute trips and 33% recreation trips was assumed for this location, yielding 397 daily bicycle commute trips and 1,192 daily bike recreation trips. Additionally, 1% of trips are assumed to be made to school, estimated to be 36 daily trips.

Based on May 2015 peak hour counts on the Elm to Peres route, 8th Street, and the Richmond Greenway, there are approximately 28,853 daily pedestrian trips occurring on these corridors. This estimate is conservative, as the seven selected count locations likely are not able to capture all pedestrian activities on those corridors, especially short trips. It is assumed that 9% of trips are for school related purposes (per McDonald, NC, et al "US School Travel: An Assessment of Trends", 2011), totaling 2,597 daily school trips by walking. The default ATP assumption of 11% commute trips and 33% recreation trips are used to derive 3,174 pedestrian commute trips and 9,521 recreational trips. Note that it is likely that the pedestrian commute trips are significantly higher than that, as the area is well-served by the Richmond BART Station and AC Transit Route 76. Most of those trips likely start as walk trips to transit stops. See 2015 existing pedestrian counts in Attachment I-1A-2.

PROJECTED USE

Projected use is derived from the existing 2015 peak hour counts. Because the Project is located in a dense urban environment with major barriers that prevent connectivity to the west, north, and east, the NCHRP 770 methodology that looks at three-mile bikesheds

around a project area to project future bike trips was **not** used, as this is considered to substantially overestimate the bike shed in an area with significant infrastructural barriers. The Iron Triangle neighborhood has a limited number of access points to the west, due to Richmond Parkway and cul-de-sac streets, and to the north and east, due to railroad infrastructure that limits the number of through roadways. The approach outlined below is more conservative; it is based on observed biking and walking trips on the corridor today. By 2020 it is assumed that the project will be built and in operation for one year.

Without the Yellow Brick Road project, an average of 3,790 daily bike trips can be expected in 2020. This number was derived through assuming the ABAG population growth rate of 4.9%, or approximately a 1% increase in population per year, between 2015 and 2020, assuming the project would be built an in operation for one year in 2020. Attachment -1A-3 presents those calculations.

With the Yellow Brick Road project, an average of 6,784 daily bicycle trips can be expected. It is assumed that trip purpose will remain similar, with 11% of trips made for commute purposes and 33% for recreation, yielding an average of 746 daily bike commute trips in 2020 and 2,239 recreation trips. Assuming 1% of bike trips are for school purposes, 68 daily bike trips to school are projected. These calculations are presented in Attachment -1A-4 and, like the existing counts, reflect a high and low range. These numbers reflect the 4.9% ABAG population growth rate in addition to a "network build out effect" that was an average rate of bicycling increase (279%) associated with building out portions of the bicycle network in several west coast cities (Los Angeles County Metropolitan Transportation Authority, "Bicycle Transportation Account Compliance Study," 2006). This is a reasonable growth rate due the projects that the City of Richmond has planned in the Iron Triangle, which include the YBR network of bikeways through the Iron Triangle in addition to other planned projects for which funding is actively being sought, including the Harbour Way improvements (connecting the Iron Triangle and future Ferry Terminal in South Richmond) and the 16th Street bicycle boulevard (connecting

Richmond BART to the Richmond Greenway). Additionally, as they are based on observed counts, these projections represent a conservative approach.

In 2020 without the Yellow Brick Road project, 30,069 daily pedestrian trips are expected to be made, reflecting a 4.9% ABAG population growth estimate, as shown on Attachment - 1A-5.

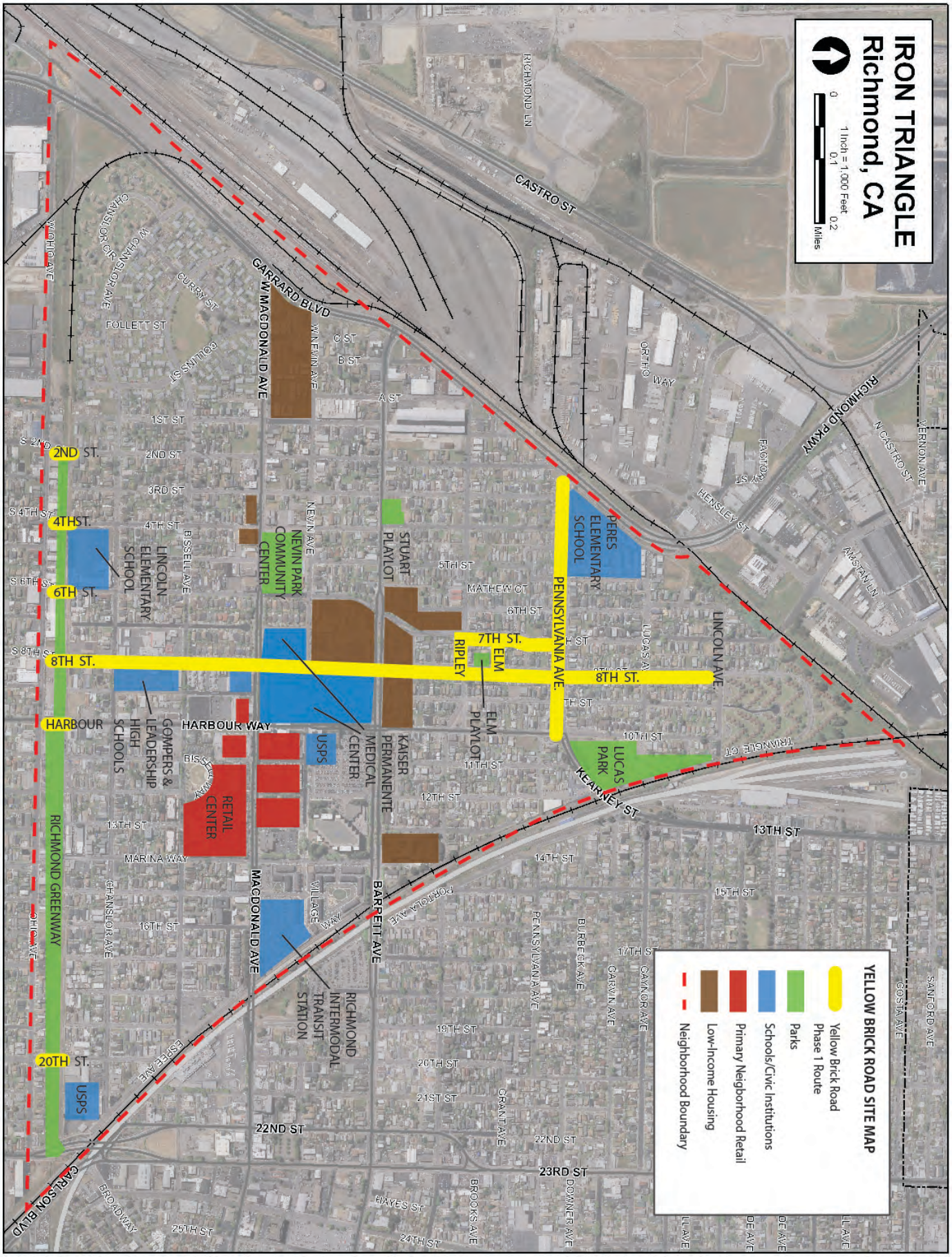
In 2020, assuming a build out of the YBR project plus one year of operations, 34,809 daily pedestrian trips can be assumed. This represents 4,540 new pedestrian trips, as shown on Attachment I-1A-6**.** Because pedestrian trips in many communities are made out of necessity and may be made on foot despite poor walking conditions, a conservative growth estimate of 10% was initially assumed. However, based on public outreach conducted in the Iron Triangle neighborhood, **it is understood that there is a high latent demand for walking trips as a result of safety and personal security concerns**. Because the project would be transformative in constructing pedestrian-scale lighting in some locations, implementing significant pedestrian safety improvements, and reclaiming the project streets as community spaces, an additional 5% growth rate was assumed to account for trips that are not being made by any mode today but would be with the project.

SAFE ROUTES TO SCHOOL

The two Iron Triangle elementary schools nearest to the YBR route are Peres (534 students), and Lincoln (465 students). According to a 2014 survey compiled by the West Contra Costa Safe Routes to School program, the current percentage of students that currently walk to school at Peres Elementary School is approximately 40% while at Lincoln Elementary School it is approximately 50%. Gompers Continuation High School (261) and the Leadership Academy (480) do not currently participate in the Safe Route to Schools program. All school-aged children (3,205) in the Iron Triangle live within walking distance (.5 mile) of one of these schools. See Attachment I-1A-7 for additional data about these schools.

1B. Describe how the project links or connects, or encourages use of existing routes (for non-infrastructure applications) to transportation-related and community identified destinations where an increase in active transportation modes can be realized, including but not limited to: schools, school facilities, transit facilities, community, social service or medical centers, employment centers, high density or affordable housing, regional, State or national trail system, recreational and visitor destinations or other community identified destinations.

With recent renovations to Elm Playlot and the construction of Harbour-8 Park, residents urgently desire a safe walking and biking route through their neighborhood to connect to the above parks and the nearby Lucas Park; to the Kaiser Permanente Medical Center; Richmond's BART, Amtrak and bus terminal; local retail, housing; and to the Richmond Greenway regional bike trail that connects to the San Francisco Bay Trail. The YBR project will create an active transportation network interlinking these community facilities and will provide Safe Routes to Peres Elementary, Lincoln Elementary School, Gompers Continuation High School, and the Leadership Academy Public School. The chart on pages 11-12 summarizes the proposed Project improvements. See proposed improvements maps for each intersection in Attachment E.


IRON TRIANGLE
Richmond, CA
1 Inch = 1,000 Feet
0
0.1
0.2
Miles
YELLOW BRICK ROAD SITE MAP
Yellow Brick Road Phase 1 Route
Parks
Schools/Civic Institutions
Primary Neigborhood Retail
Low-Income Housing
Neighborhood Boundary
CASTRO ST
RICHMOND LN
RICHMOND PKWY
N CASTRO ST
VERNON AVE
AMSTAN LN
ORTHO WAY
FACTORY ST
HENSLEY ST
GARRARD BLVD
W MACDONALD AVE
NEVIN AVE
W NEVIN AVE
C ST
B ST
A ST
CURRY ST
FOLLETT ST
COLLINS ST
CHANSLOR AVE
W CHANSLOR AVE
W OHIO AVE
1ST ST
2ND ST
3RD ST
4TH ST
5TH ST
6TH ST
7TH ST
8TH ST
10TH ST
11TH ST
12TH ST
13TH ST
14TH ST
15TH ST
16TH ST
17TH ST
19TH ST
20TH ST
21ST ST
22ND ST
23RD ST
24TH ST
25TH ST
S 2ND
S 4TH ST
S 6TH ST
S 8TH ST
2ND ST.
4TH ST.
6TH ST.
8TH ST.
HARBOUR
HARBOUR WAY
BISSELL AVE
LINCOLN ELEMENTARY SCHOOL
NEVIN PARK COMMUNITY CENTER
STUART PLAYLOT
MATHEW CT
PERES ELEMENTARY SCHOOL
PENNSYLVANIA AVE.
LUCAS AV
LINCOLN AVE.
7TH ST.
ELM
RIPLEY
ELM PLAYLOT
LUCAS PARK
TRIANGLE CT
KEARNEY ST
13TH ST
GOMPERS & LEADERSHIP HIGH SCHOOLS
RETAIL CENTER
USPS
KAISER PERMANENTE MEDICAL CENTER
MARINA WAY
RICHMOND GREENWAY
MACDONALD AVE
VILLAGE WAY
BARRETT AVE
PORTOLA AVE
PENNSYLVANIA AVE
BURBECK AVE
GARVIN AVE
CAYLOR AVE
SANFORD AVE
COSTA AVE
RICHMOND INTERMODAL TRANSIT STATION
CHANSLOR AVE
ESTEE AVE
CRANT AVE
BROOKS AVE
DOWNER AVE
HAYES ST
BROADWAY
CARLSON BLVD
OHIO AVE

Yellow Brick Road Phase 1 Street Improvements

Locations	Type of Improvements
7th Street between Pennsylvania and Ripley Aves.	Class II bicycle lanes in both directions
	Extend sidewalk on west side
	Yellow Brick Road crosswalks
	Pedestrian and bicycle wayfinding signs
	Pedestrian-scale lighting
	Landscaping
Elm Avenue between 7th and 8th Streets	Back-in angled parking
	Yellow Brick Road crosswalks
	Pedestrian and bicycle wayfinding signs
	Pedestrian-scale lighting
	Landscaping
7th Street/Ripley Avenue Intersection	Curb extensions onto Ripley Avenue
	Stripe crosswalk on north side of 7th Street
	Roundabout
	Ladder crosswalks with splitter islands
	Sharrows through intersection
	Directional curb ramps
7th Street/Acacia Avenue Intersection	Curb extensions onto Acacia Avenue
	High-visibility ladder crosswalk
	Class II bicycle lanes through intersection
	Directional curb ramps
8th Street/Elm Avenue Intersection	Curb extension
	Traffic circle
	Curb extensions on all corners
	Landscaping in traffic circle
8th Street between Lincoln and Ohio Avenues	Bicycle Boulevard signs, striping and sharrows
	Speed Tables along corridor
	Yellow Brick Road crosswalks
	Yellow Brick Road raised intersections
	Pedestrian and bicycle wayfinding signs
	Pedestrian-scale lighting
	Landscaping
Richmond Greenway/8th Street Intersection	Raised crosswalk
	Rectangular rapid flashing beacons (RRFBs)
Chanslor, Bissell, Nevin, and Lincoln Avenues Intersections with 8th Street	
	Raised intersection with decorative paving
	Ladder crosswalks on 8th Street
	Standard crosswalk across side-street

Barrett Avenue/8th Street Intersection	Pedestrian hybrid beacon
	Decorative paving crosswalk
	Curb extensions
	Median refuge
	Speed tables/raised crosswalks
Ripley Avenue/8th Street Intersection	Traffic circle with yield-control
	Ladder crosswalks with decorative paving
Elm Avenue/8th Street Intersection	Traffic circle with yield-control
	Ladder crosswalks with decorative paving
	Large curb extension shadowing
	Back-in angled parking
Pennsylvania Avenue/8th Street Intersection	Raised intersection with decorative paving
	Landscaped medians with refuges
Lucas Avenue/8th Street Intersection	Traffic circle with yield control
Pennsylvania Avenue between Richmond Parkway and Harbour Way	Raised, landscaped median
	Green painted bicycle lane
	Yellow Brick Road crosswalks
	Yellow Brick Road raised intersections
	Pedestrian and bicycle wayfinding signs
	Pedestrian-scale lighting
5th and 7th Streets Intersection	Curb extensions onto 5th and Pennsylvania
	Ladder crosswalks across Pennsylvania
6th and 8th Streets Intersection	Raised intersection with decorative paving
	Ladder crosswalks across Pennsylvania
	Standard crosswalks across side-streets
	Landscaped median refuges
Richmond Greenway between 2nd Street and Harbour Way	Yellow Brick Road trail crossings
	Parallel crosswalks (raised and at-grade)
	Rectangular rapid flashing beacons (RRFBs)
	Pedestrian and bicycle wayfinding signs
	Pedestrian-scale lighting
	Landscaping
2nd, 4th, 6th, and 8th Streets Intersections	Raised trail crossing with decorative paving
	Rectangular rapid flashing beacons (RRFBs)
	Advanced yield markings and signs

a. Creation of new routes:

The YBR Project, by its nature, creates a network of routes. It adds two new bike routes, the

first is a new .39-mile green-painted bicycle lane on Pennsylvania Avenue between Richmond Parkway and Harbour Way that will reduce conflicts between bicycles and autos along the Peres Elementary School frontage during pick-up/drop-off.

The Project also builds new Class II bicycle lanes along on 7th Street between Pennsylvania and Ripley Avenues. This new 750-foot route will allow for safe biking between Peres Elementary and Elm Playlot–a critical route for hundreds of children who travel from school to the park every day.

Additionally, the Project installs new Bicycle Boulevard signs and oversized sharrows on 8th Street between Lincoln and Ohio Avenues (1 mile), which is the most direct and community-preferred north-south route connecting the neighborhood from Peres Elementary and Elm Playlot to the Richmond Greenway.

b. Removal of barrier to mobility:

The YBR Plan identified that the primary barriers to mobility on the Project streets are cars traveling at excessive speeds, unsafe crossings, poor adherence to traffic and streets signs and poor or non-existent sidewalks. The Project will address these problems with street improvements that are listed in the chart above on p. 12. The improvements that remove to barriers to mobility are detailed in the response to question 2B, p. 18.

c. Closure of gaps: The YBR Project will close the gap to regional transit by creating a network of active transportation routes to make it easier, safer and more comfortable for Iron Triangle residents to bike or walk to the Richmond Intermodal Transit Center. The street improvements will provide better access for residents to take advantage of regional educational and employment opportunities that are not currently available in the Iron Triangle neighborhood.

d. Other improvements to routes:

Tree planting will create shade where there is none currently and planted medians will provide additional neighborhood greening. Pedestrian-scale lighting will illuminate areas that are currently too dark for residents to feel safe walking or biking. Stenciling yellow bricks Street painting across roads and sidewalks and the unique design of directional signage will reflect the diverse culture of the Iron Triangle.

e. Educates or encourages use of existing routes:

The YBR project will encourage the use of existing walking and biking routes by installing Pedestrian and Bicycle Wayfinding Signs that use WCCTAC design guidelines and sign types to indicate distances to key destinations along the route.

1C. Referencing the answers to A and B above, describe how the proposed project represents one of the Implementing Agency's highest unfunded non-motorized active transportation priorities.

Pages 76-81 in the City of Richmond's Pedestrian Plan show planned improvements to Pennsylvania Avenue and 7th at Elm Avenue. Pages 92-93 detail planned improvements to the crossings at the Richmond Greenway at 2nd, 4th, 6th, 8th, and 20th Streets and Harbour Way. In addition, the entire YBR Plan was adopted into the City's Pedestrian Plan, demonstrating that the improvements to all the streets that comprise the YBR route are on the City's list of priorities of unfunded non-motorized active transportation projects. Please see Attachments I-1C and K for the aforementioned documents.

2A. Describe the project influence area or project location's history of collisions resulting in fatalities and injuries to non-motorized users and the source(s) of data used (e.g. collision reports, community observation, surveys, audits).

Richmond faces high rates of unintentional injury, largely from vehicular crashes. From 2008-2012, 161 pedestrians and 127 bicyclists were killed or injured in Richmond (http://tims.berkeley.edu/index.php). The Iron Triangle is the epicenter of many of these accidents. Using data from SWITRS, the map below details the rate and type of injuries in Iron Triangle streets from 2008-2012. During this period, there were 50 traffic accidents that involved a bicyclist (24) or a pedestrian (26). While there were no fatalities reported, 75 of the accidents resulted in severe or visible injuries. Most significantly, many of the accidents involved pedestrians in crosswalks. Many accidents involved vehicles not observing traffic signs or traveling at unsafe speeds. In addition, the most severe pedestrian accidents took place near Peres Elementary School and on 7TH Street near Elm Playlot.

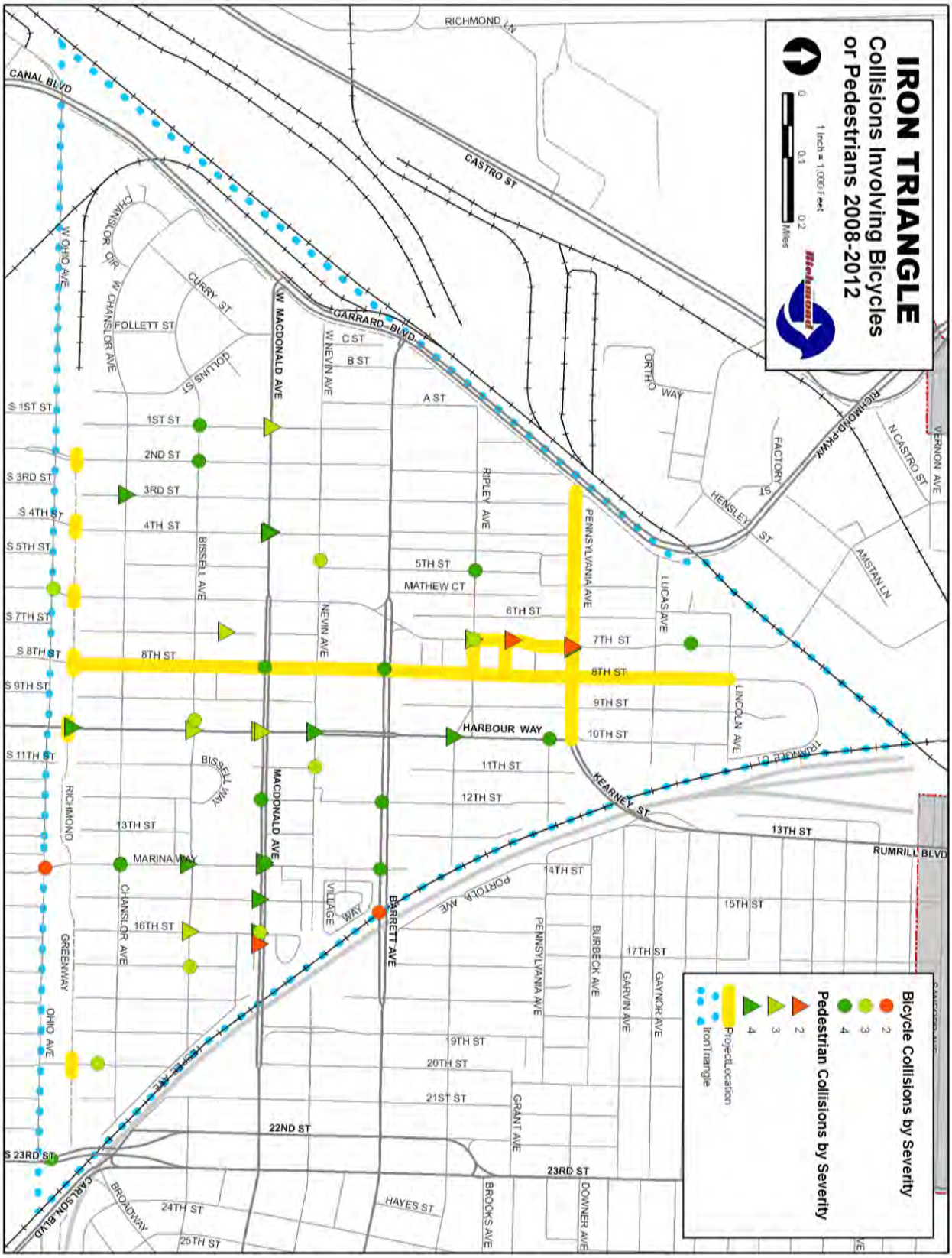
It must be noted that the data detailed in SWITRS does not document 100% of collisions and accidents in this neighborhood. Many residents in this low-income neighborhood are wary of any contact with authorities. Consequently, it is likely a significant number of accidents go unreported.

For a variety of reasons, the actual number of accidents/collisions reported to the police between motorized vehicles and pedestrians or bicyclists in the Iron Triangle neighborhood is under-reported."

Captain Anthony Williams
Central District
City of Richmond Police Department
May 29, 2015

To address the under-reporting of traffic incidents, nonprofit Pogo Park conducted a survey of 74 local residents to whether they – or someone they knew – had been hit by a motorized vehicle while walking or biking in the Iron Triangle neighborhood. The survey revealed that almost 20% knew someone who had been in a traffic accident and did not report it to the police. (Attachment I-2A-2).

In addition to the collision history above, residents in the community have expressed concerns about high vehicular speeds on Pennsylvania Avenue (next to Peres School), 6th Street (next to Lincoln School), 7th Street (a key route from Peres School to Elm Playlot) and where the Richmond Greenway crosses city streets. They also note that cars fail to obey stop signs. Implementing a plan to slow vehicular traffic and provide safe crossings to reduce the threat of pedestrian and bicycle injury are the residents' highest priorities.


IRON TRIANGLE
Collisions Involving Bicycles or Pedestrians 2008-2012
1 Inch = 1,000 Feet
0 0.1 0.2 Miles
Richmond
Bicycle Collisions by Severity
2
3
4
Pedestrian Collisions by Severity
2
3
4
Project Location
Iron Triangle
CANAL BLVD
RICHMOND AV
CASTRO ST
GARRARD BLVD
RICHMOND PKWY
N CASTRO ST
VERNON AVE
FACTORY ST
HENSLEY ST
AMSTAN LN
ORTHO WAY
W OHIO AVE
CHANSLOR CIR
W CHANSLOR AVE
CURRY ST
FOLLETT ST
COLLINS ST
W MACDONALD AVE
W NEVIN AVE
C ST
B ST
A ST
S 1ST ST
1ST ST
2ND ST
S 3RD ST
3RD ST
S 4TH ST
4TH ST
S 5TH ST
BISSELL AVE
RIPLEY AVE
PENNSYLVANIA AVE
LUCAS AVE
5TH ST
MATHEW CT
6TH ST
S 7TH ST
NEVIN AVE
7TH ST
S 8TH ST
8TH ST
S 9TH ST
9TH ST
LINCOLN AVE
HARBOUR WAY
10TH ST
TRIANGLE CT
S 11TH ST
BISSELL WAY
11TH ST
KEARNEY ST
12TH ST
RICHMOND
13TH ST
MACDONALD AVE
13TH ST
RUMRILL BLVD
MARINA WAY
14TH ST
PORTOLA AVE
VILLAGE WAY
BARRETT AVE
15TH ST
CHANSLOR AVE
16TH ST
PENNSYLVANIA AVE
BURBECK AVE
17TH ST
GAYNOR AVE
GARVIN AVE
GREENWAY
OHIO AVE
19TH ST
20TH ST
21ST ST
GRANT AVE
22ND ST
S 23RD ST
23RD ST
BROADWAY
24TH ST
HAYES ST
BROOKS AVE
DOWNER AVE
CARLSON BLVD
25TH ST

2B. Describe how the project/program/plan will remedy (one or more) potential safety hazards that contribute to pedestrian and/or bicyclist injuries or fatalities; including but not limited to the following possible areas.

The MTC Safety Toolbox was reviewed for appropriate safety countermeasures when selecting the Project proposed solutions below.

Reduces speed or volume of motor vehicles in the proximity of non-motorized users.
As many of the accidents reported in the Iron Triangle involve excessive vehicular speed, traffic calming is a primary Project goal. Proposed improvements include the installation of elements that narrow roadways and encourage vehicular traffic to slow down,. They also assist with the neighborhood problem of vehicle drivers ignoring stop signs or other roadway signage. Roadway narrowing Roundabouts will be constructed in key intersections to replace side-street STOP control intersections. Traffic Circles will be used in smaller intersections, especially around Elm Playlot, to replace existing all-way stop-controls at strategic intersections. A Bicycle Boulevard with Speed Tables will be added along 8th Street to maintain low residential vehicular speeds.

Improves sight distance and visibility between motorized and non-motorized users.
Since a large number of traffic accidents took place within crosswalks, a primary Project goal is to make YBR crossings more visible. Special YBR Crosswalks YBR Raised Intersections will be installed in intersections that have special community significance and a history of traffic conflicts. Raised Crosswalks, Ladder Crosswalks, Stripe Crosswalks and Pedestrian-Scale Lighting, as well as the green-painted bicycle lane on Pennsylvania Ave. will improve sight distance and visibility between motorized and non-motorized users, preventing and decreasing the number and severity of accidents between vehicles, pedestrians and bicyclists. By creating and demarcating safer crossings, the Project will prevent accidents that are caused by pedestrian crossings outside of crosswalks and in other unsafe locations.

Eliminates potential conflict points between motorized and non-motorized users, including creating physical separation between motorized and non-motorized users. SWITRS traffic data and community observation have indicated that non-observation of rights-of-way is a major contributor to conflicts between motorized and non-motorized users. To eliminate conflicts, the Project will install improvements that provide refuge to non-motorized users. Curb Extensions will be constructed in several intersections to decrease the distance that pedestrians and bicyclists must traverse to cross roadways. Splitter Islands will channelize traffic into two directions of travel, providing refuge to allow bicyclists and pedestrians to safely wait clear of the travel lane. Landscaped Median Refuges will ease pedestrian and bicycle crossing of busy arterials. Conversion of parallel parking to back-in angled parking, will prevent drivers from having to back out of parking spots into the path of young children walking and biking to Elm Playlot from Peres Elementary.

Improves compliance with local traffic laws for both motorized and non-motorized users. On Pennsylvania Avenue near Peres Elementary School drivers currently do not use traffic lanes appropriately, creating unsafe conditions for dropping and picking up school children. Narrowing the width of the roadway at Pennsylvania Avenue with median strips, adding physical obstacles to travel such as traffic circles and bulb-outs at the 7th and Ripley intersection will cause cars to slow, compelling drivers to travel within the 25 mph speed limit.

Addresses inadequate traffic control devices.

8th Street intersects Barrett Avenue, a major east-west arterial. Crossing here is challenging, the roadway is wide, vehicles travel at high speed and the wait to cross is a barrier to active transportation. The Project installs a Pedestrian Hybrid Beacon on the west side of Barrett Avenue at Barrett Avenue/8th Street Intersection, giving walkers and cyclists better control at this location.

Community members have also expressed concern about accidents at the locations where the Richmond Greenway intersects with streets. To address excess vehicular speeds and low visibility at these intersections, the Project places raised crosswalks with RRFBs at trail crossings between 2nd Street and Harbour Way.

Eliminates or reduces behaviors that lead to collisions involving non-motorized users.

Each day hundreds of children cross 7th Street between Pennsylvania and Ripley Avenues on their way to Elm Playlot. On the west side of 7th Street there is no sidewalk and no crosswalks at any point on this segment. The Project provides clearly designated crosswalks and signage that enable children to cross 7th Street safely. On Pennsylvania Avenue near Peres Elementary School, crosswalks, bulb-outs and landscaped medians, combined with a traffic circle and a designated drop-off zone in front of the school, will discourage drivers from making U-turns in unsafe locations**.**

Addresses inadequate or unsafe traffic control devices, bicycle facilities, trails, crosswalks and/or sidewalks.

The project will extend the sidewalk on west side of 7th Street between Pennsylvania and Ripley Avenues to provide a wider, safer and more comfortable walking area.

3A. Who: Describe who was engaged in the identification and development of this project:

As part of a 2008 summer youth program, 12 teenagers from Richmond's Iron Triangle neighborhood were given the task of thinking of a project that could improve their neighborhood. They came up with the YBR concept. They envisioned the YBR as a network of bright yellow bricks stenciled on sidewalks and streets, creating an active transportation network connecting key community assets. Through a 2012 Environmental Justice grant from Caltrans, the teenager's vision became a full-fledged planning project; and the *Yellow Brick Road Iron Triangle Walkable Neighborhood Plan* was completed. (see Attachment K).

This planning process engaged over 400 residents through an intensive resident-driven community design process. Representatives from the City of Richmond, nonprofit Local Government Commission, and the nonprofit Pogo Park (the "Design Team") collaborated to prepare the Caltrans Environmental Justice Transportation Planning Grant proposal that was awarded funding in 2013. The project partners engaged walkable streets expert Dan Burden to assist with community visioning and selected the transportation firm Fehr and Peers to provide transportation planning, engineering and design expertise for the YBR plan.

While early community meetings were informal, the 2014 events were extensively recorded. Please see Attachments I-3B1-3 for additional documents pertaining to the community engagement activities detailed below.

Iron Triangle Yellow Brick Road Community Engagement

The Yellow Brick Road in Richmond's Iron Triangle Neighborhood - ATP Cycle 2
04-City of Richmond-03

DATE	LOCATION	HOW PUBLICIZED?	PURPOSE / ACTIVITY	# OF PEOPLE	ATTENDEES	FOOD?	TRANSPORTATION?	CHILD CARE ?	TRANSLATION?
2/18/15 - 3/5/14	Iron Triangle neighborhood	Notices regarding community outreach effort are posted in key community centers, churches, on lamposts next to schools, shopping centers, local business, churches and parks; e-mail blast distributed to 2,256 people on Pogo Park's e-mail list; announcement at Iron Triangle neighborhood council; door-to-door outreach at homes that surround Elm Playlot, a city park in the heart of the Iron Triangle neighborhood that	Community Outreach Team (COT) comprised of 30 community residents walk every single street in the one-square mile Iron Triangle neighborhood to identify barriers to walking and biking and select the most favorable route for the Yellow Brick Road.	30	Local residents walk every street in Iron Triangle neighborhood over 14 days	yes	yes	yes	yes
3/6/14	Nevin Community Center	Notices regarding community outreach efforts are posted in key community centers, churches, on lamposts near to schools, shopping centers, local business, churches and parks; e-mail blast distributed to 2,256 people on Pogo Park's e-mail list; announcement at Iron Triangle neighborhood council; door-to-door outreach at homes that surround Elm Playlot	COT team of local residents report on findings concerning barriers to walking and biking in the Iron Triangle neighborhood	43	COT, local residents, city staff, and Professional Design Team	yes	yes	yes	yes
5/8,9,10/14	Richmond City Hall; Pogo Park community meeting space, Iron Triangle	Notices are posted in key community centers, churches, on lamposts near to schools, shopping centers, local business, churches and parks; e-mail blast distributed to 2,256 people on Pogo Park's e-mail list; over 4,000 people reached on city councilperson Tom Butt's e-mailing list; roughly 700 people on city staff e-mail list; announcement at Iron Triangle neighborhood council; door-to-door outreach at homes that surround Elm Playlot	Day 1: COT team meets with Professional Design Team and city staff to review and discuss solutions to barriers presented at 3/6/14 community meeting at Nevin Center. Day 2 and 3: COT team and other community residents walk the neighborhood with Professional Design Team and city staff to identify solutions to barriers to walking and biking along the proposed YBR route.	28	COT team, local residents, Professional Design Team, city staff	yes	yes	yes	yes
10/17-18/14	Elm Playlot, 8th and Elm Avenue	Notices are posted in key community centers, churches, on lamposts near to schools, shopping centers, local business, churches and parks; e-mail blast distributed to 2,256 people on Pogo Park's e-mail list; over 4,000 people reached on city councilperson Tom Butt's e-mailing list; roughly 700 people on city staff e-mail list; announcement at Iron Triangle neighborhood council; door-to-door outreach at homes that surround Elm Playlot; announcements in local media	To construct a three-dimensional, full-scale model of the proposed street improvements on 7th Street (from Pennsylvania to Ripley), 8th Street (at Elm Avenue) and on Elm Avenue (from 7th to 8th Streets) so that local residents can actually experience the proposed improvements in 3D and in real-time.	1,500+	COT team, local residents, Professional Design Team, city staff, Caltrans staff, media	yes	yes	yes	yes

3B.How: Describe how stakeholders were engaged:

Residents and key stakeholders were engaged through an intensive, hands-on, community-driven visioning and design process. During the first phase of the YBR community outreach process, Pogo Park formed the Community Outreach Team (COT) made up of 30 community residents who represented the demographics of the neighborhood. The COT team was diverse in race, ethnicity, and gender, and included children, youth, adults, seniors and disabled. Walking every street in the Iron Triangle over 14 days (February 18-March 5, 2014), the COT catalogued every physical barrier to mobility, such as lack of crosswalks, sidewalks in poor condition, wide streets, poor lighting, vacant houses, etc. On March 6, 2014, Pogo Park lead a community meeting at Richmond's Nevin Community Center during which the COT worked with the meeting participants to identify the optimum route for the YBR.

Youth members of the Community Outreach Team identify barriers to walking and biking in their neighborhood

In the next phase, the Design Team and the COT walked sections of the YBR together (May 8-10, 2014). Stopping at every barrier the COT had identified, the two teams discussed possible solutions. Burden described possible solutions used in other cities around the world, sketching them on butcher paper and then drawing them in full-scale on the ground

in chalk. With all participants able to see and comment on the proposed changes, residents and the Design Team easily came to agreements on the proposed solutions at each site. The Design Team then refined the solutions into a working draft plan document.

Members of Community Outreach Team walk the streets of the Iron Triangle with Dan Burden, an expert on livable and walkable streets, to discuss possible solutions to mobility barriers identified by the community

On October 17-18, 2014, the Design Team and COT created the "Living Preview" of the YBR on 7th Street between Pennsylvania Avenue and Ripley Avenue, at 8th and Elm Avenue, and on Elm Avenue between 7th and 8th Streets. The Living Preview utilized a three-dimensional full-scale model as a way to communicate some of the proposed street improvements to the local community. The Living Preview was publicized with notices going out to over 5,000 neighborhood residents, city officials, and police, fire, and schools. Over

two days, 354 people signed in at the Living Preview event. Over 1,000 cars traveled through a real-life mock-up of the street improvements on 7th Street. To sum up the success of the event, Dan Burden stated, "people in the world of livable streets will be talking about the Yellow Brick Road Living Preview in decades to come."

For the "Living Preview" provided end users with a full-scale scale model to preview and test the proposed Yellow Brick Road street improvements

Richmond's Fire Department tests the clearance at the proposed mini-circle at 8th Street and Elm Avenue

3C. What: Describe the feedback received during the stakeholder engagement process and describe how the public participation and planning process has improved the project's overall effectiveness at meeting the purpose and goals of the ATP:

During the stakeholder engagement process, local residents clearly identified the best, most advantageous routes for the YBR – and identified the barriers to walking and biking along their proposed route. Understanding that local residents are the experts in their own neighborhood, the City and Design Team listened deeply to the community's ideas – and then worked the community to craft a plan that answered every one of the community's concerns.

The public's participating in the planning process has helped to ensure that the YBR will meet the goals of the ATP grant: As stated above, the COT identified the sites' challenges and obstacles; defined the walking and biking routes that they prefer that will enhance public health by providing the most opportunities for exercise on their neighborhood streets and Safe Routes to Schools; were active participants in selecting the project's solutions that will increase safety and mobility for non-motorized users and are the best fit for the neighborhood. The City and Design Team listened to the community's desires to change their residential streets, adding to the broad spectrum of projects to benefit many types of active transportation users that ATP is aiming to provide. Residents had the opportunity to decide for themselves what is best for their community, ensuring that this disadvantaged community fully shares in the benefits of the ATP program.

In addition, Pogo Park completed a recent survey of 333 neighborhood residents (summary below). 98% of respondents stated they would definitely walk or bike more if the YBR improvements were constructed, guaranteeing the Project will increase the proportion of trips accomplished by biking and walking, rather than by car, thus advancing the active transportation efforts of regional agencies to achieve greenhouse gas (GHG) reduction goals.

2015 Pedestrian and Bicyclist Survey Locations and Numbers, Iron Triangle Neighborhood

Location	Child	Youth	Adult	Senior	Disabled	YES*	NO*
16th/Greenway	4	6	14	2	0	27	0
Harbour/Greenway	6	16	65	5	1	90	3
Richmond BART/ Macdonald	0	10	73	19	1	100	1
8th/Barrett	1	3	25	1	2	37	0
8th/Nevin	3	8	27	2	1	39	2
7th/Ripley	6	1	12	3	0	21	1
Harbour/ Macdonald	0	2	7	3	1	11	1
TOTAL	**20**	**46**	**223**	**35**	**6**	**325**	**8**
	6.06%	13.94%	67.58%	10.61%	1.82%	97.60%	2.40%
Grand Total	**330**						**333**

***** Would you walk or bike more, if the improvements shown in images from the *Yellow Brick Road Iron Triangle Walkable Neighborhood Plan,* were installed?

3D. Describe how stakeholders will continue to be engaged in the implementation of the project:

Additional community events are planned to inform Richmond's residents how their ideas will be translated into form and constructed. The City will keep the public informed about the construction timetable for the Project streets.

4A. Describe the health status of the targeted users of the project.

As one of Richmond's most disadvantaged neighborhoods, the Iron Triangle community suffers significantly higher rates of health, poverty, lack of education and environmental-pollution burdens compared to the other 8,000 census tracts in the State of California. According to recent data supplied by The Office of Environmental Health Hazard Assessment (OEHHA), the two census tracts of this neighborhood (3760 and 3770) are listed among the state's most disadvantaged communities. These two census tracts consist of 12,924 residents that are 27.5% African-American, 59.5% Latino, 6% Asian, 5% White and 2% Other.

The Iron Triangle's neighborhood residents record some of the highest percentile rates in the State of California in the following disadvantaged community burdens:

Asthma: 98
Low Birth Weight: 74.5
Low Education: 85.5
Linguistic Isolation: 86.5
Poverty: 79.5
Unemployment: 72.5

Obesity is a major contributor to the chronic diseases in the neighborhood: 52% of students in Richmond's public schools are either overweight or obese (2010 Fitnessgram), as are 58% of adults (2009 CHIS). The three elementary schools within a mile of the YBR Project all have very low percentages of students who meet all the Healthy Fitness Zone standards. Only 6.2% of students at Peres Elementary and 11.1% at Lincoln Elementary meet the standards. At Nystrom Elementary, not a single student met all the fitness standards. (2014 Fitnessgram) Source: http://dq.cde.ca.gov/dataquest/.

Coire Reilly, Manager of Injury Prevention and Physical Activity Promotion at Contra Costa Health Services, was consulted and contributed to the content of this question.

4B. Describe how you expect your project/proposal/plan to enhance public health.

An overwhelming body of evidence links physical activity to positive health outcomes. A review by the Surgeon General in 1996 evaluated hundreds of studies that indicated that physical activity leads to longer lifespans; slower development of osteoarthritis and osteoporosis; increased bone, muscle, and joint health; decreased depression and anxiety; and reduced risk of cardiovascular disease, diabetes, high blood pressure, and certain types of cancers, all ailments Iron Triangle residents struggle with more than residents in other Richmond neighborhoods and Contra Costa County.[i]

The YBR Project will improve the health of Iron Triangle's residents by installing sidewalks, bike lanes and safer intersection crossings, all of which have been demonstrated to increase physical activity. The mere act of installing a bicycle lane has also shown to decrease the number of overall collisions and traffic related injuries on a street by up to 90%.[ii] Because fitness levels at the schools targeted by this project are so low, creating safer, more connected streets will encourage children and families to walk to their destinations more and receive daily exercise that is vital to improving their health. [iii]

The Project is a direct implementation of many health-promoting plans the City has adopted in recent years: The Community Health and Wellness Element of the General Plan, the Health in All policy, the Bicycle Master Plan, and the Pedestrian Plan. The Project will improve public health by preventing future accidents between vehicles and pedestrians and bicycles, encouraging more residents, students, and parents to walk, cycle and use the Richmond Greenway regional trail, and improving air quality by reducing VMT and dependence on autos.

Sources:

[i] US Department of Health and Human Services. 1996. Physical activity and health: a report of the Surgeon General. Atlanta, Georgia: US Department of Health and Human Services,

Public Health Service, CDC, National Center for Chronic Disease Prevention and Health Promotion.

[ii] http://usa.streetsblog.org/2012/10/22/study-protected-bike-lanes-reduce-injury-risk-up-to-90-percent/

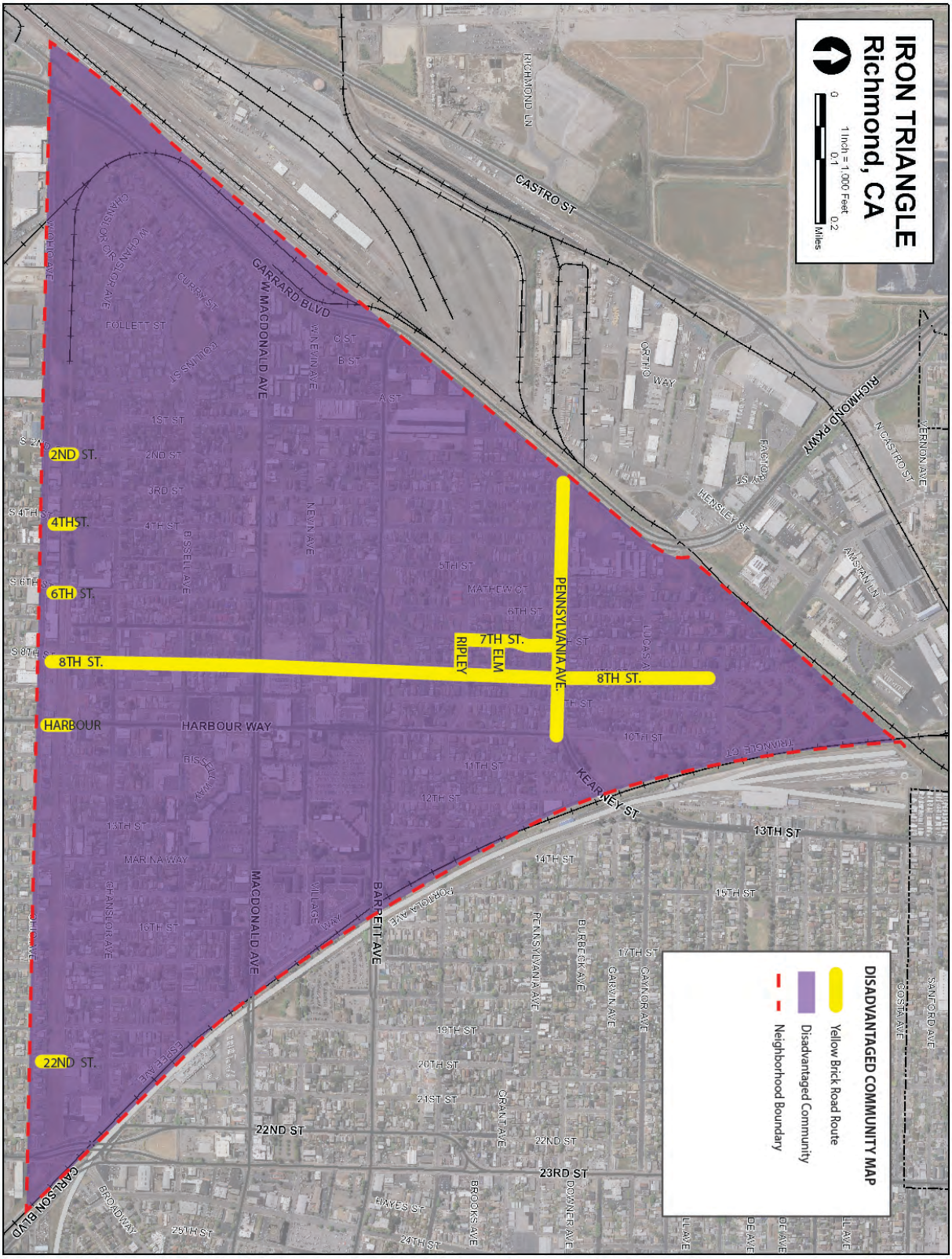
[iii] Warburton, Darren, Crystal Nicol and Shannon Bredin. 2006. "Health Benefits of Physical Activity: The Evidence." *Canadian Medical Journal*. 174(6):801-809.

5A. Identification of disadvantaged communities

The Project is located within The Iron Triangle Neighborhood, one of the most disadvantaged communities in California. According to the metrics established by CalEnviroScreen, the Iron Triangle is in the 91-100% percentage of the Population Characteristics, indicating very high rates of poverty, unemployment and health challenges. Please see Attachment I-5A for the CalEnviroScreen maps for the Iron Triangle.

The Iron Triangle has a high concentration of low-income residents. The median household income for Richmond as a whole is $54,589, but in the census tracts for the Project (3760 and 3770) the median income is significantly lower: $31,250 (2013 American Community Survey estimate).

The two elementary schools adjacent to the YBR route have very high levels of free and reduced lunch eligibility (Peres, 99.4%; Lincoln, 97.6%) (2014-2015 school year). Source: http://dq.cde.ca.gov/dataquest/


IRON TRIANGLE
Richmond, CA
1 Inch = 1,000 Feet
0 0.1 0.2
Miles
DISADVANTAGED COMMUNITY MAP
Yellow Brick Road Route
Disadvantaged Community
Neighborhood Boundary
2ND ST.
4TH ST.
6TH ST.
8TH ST.
HARBOUR
22ND ST.
7TH ST.
ELM
RIPLEY
PENNSYLVANIA AVE.
8TH ST.
HARBOUR WAY
KEARNEY ST.
13TH ST
22ND ST
23RD ST
CARRARD BLVD
W MACDONALD AVE
MACDONALD AVE
BARRETT AVE
CASTRO ST
RICHMOND PKWY
N CASTRO ST
CARLSON BLVD
BROADWAY

5B. What percent of the funds requested will be expended in the disadvantaged community? Explain how this percent was calculated.

100% of the funds will be expended in the Iron Triangle, one of California's most disadvantaged communities, as determined by the metrics established by ATP. All improvements are physically located within the Iron Triangle and will directly benefit residents of this community.

5C. Describe how the project provides a direct, meaningful, and assured benefit to members of the disadvantaged community. Define what direct, meaningful, and assured benefit means for your proposed project/program/plan, how this benefit will be achieved, and who will receive this benefit.

The Project will directly benefit the disadvantaged residents living directly on and adjacent to the YBR Project streets in meaningful way, by providing an active transportation network that is safe, comfortable and easy to navigate. Improvements to the Project streets are designed to modify the currently existing street infrastructure to slow traffic to decrease vehicular accidents; provide safe crossings for pedestrians and cyclists; provide Safe Routes to School for over 1,500 local children; create shade and urban greening; improve signage and wayfinding to local community assets and services; create effective safe routes to both local and regional transit; and provide easily accessible opportunities for recreation and exercise near home to address the residents' low levels of fitness and high levels of asthma, cancers and diabetes. As a Project that was initiated and planned by Iron Triangle residents, the improvements reflect changes that the community has sought for itself for many years, assuring that the improvements will bring benefit to exactly the individuals who requested them. YBR is an opportunity to empower local residents and provide them tools to improve their own health, access transit and financial opportunity, using the routes and infrastructural solutions they identified themselves. The Project also provides incentive for local residents to take pride, ownership and responsibility for their own streets, and for maintaining the improvements into the future.

6A. Describe the alternatives that were considered and how the ATP-related benefits vs. project-costs varied between them. Explain why the final proposed alternative is

considered to have the highest Benefit to Cost Ratio (B/C) with respect to the ATP purpose of "increased use of active modes of transportation".
Through the development of the Richmond Bicycle Master Plan, Richmond Pedestrian Plan, and the Iron Triangle Yellow Brick Road Neighborhood Plan, several different alternatives were studied for Elm to Peres, 8th Street, and the Richmond Greenway.

Elm to Peres: other alternatives included providing an uncontrolled crossing instead of a roundabout a 7th Street/Elm Avenue. A less costly, curb-protected walkway was considered on 7th Street to close the sidewalk gap on the west side of the street; however, a greater benefit would result from a sidewalk given the urban area and the families with strollers that frequently use this area, so that became the preferred alternative. Other alternatives considered closing Elm Avenue to vehicular traffic to make it a "play street", conversion to one-way operation, and different parking configurations. Maintaining access and parking on Elm Avenue is the most cost effective solution, as neighbors and emergency services require access to the street. As a result, the preferred alternative maintains mobility for autos while significantly improving pedestrian and bicycle safety.

8th Street: The Bicycle Master Plan proposed 7th Street (one block to the west) as a bicycle boulevard. The COT instead was proposed and prioritized 8th Street, as 8th Street's low auto volumes are already aligned with best practices in bicycle boulevard design. For example, volume-reducing treatments (traffic diverters) would likely not be required for a bicycle boulevard on 8th Street, but might be required for 7th Street to align with best practices. As a result, the improvements focus on speed reductions and enhanced crossings of major roadways.

Richmond Greenway: To provide a continuous user experience, and encourage slower speeds through this area, speed tables/raised crosswalks, RRFBs, and offset-correcting curb extensions at Ohio Avenue are proposed. These geometric solutions will be extremely effective at lowering speeds through this area. The raised crosswalk will provide a continuous experience for trail users and establish their priority at these intersections.

Research has shown that RRFBs have driver yield rates to pedestrians in the 80th percentiles (USDOT FHWA, "Rectangular Rapid Flashing Beacon", 2009.

6B. Use the ATP Benefit/Cost Tool, provided by Caltrans Planning Division, to calculate the ratio of the benefits of the project relative to both the total project cost and ATP funds requested. After calculating the B/C ratios for the project, provide constructive feedback on the tool.

The B/C ratio is estimated to be 32.77, as shown on Attachment I-6B. This captures much of the benefit, but there are several limitations of the tool that should show an even higher benefit:

- **Bike Class Type**: The tool does not allow for multiple bikeway types. Project consists of a bike boulevard, which should be its own category given the higher benefit of that facility, in addition to bike lanes on 7th Street and trail crossings. As a result, the benefit of these different facility types is not depicted.
- **AADT**: Project covers multiple streets, but there is only one input box for AADT.
- **Safety Countermeasures**: Many of the areas of high benefit are not equal to 15% of the total project cost, such as simple striping improvements like crosswalks or bike lanes. The benefit does not take these into account
- **Safe Routes to School**: It is ambiguous as to whether or not this area is ONLY for SR2S projects, or for all projects benefitting a school site.

7. The application funding plan will show all federal, state and local funding for the project.

$10,000 from the California Endowment to fund the local resident-conducted surveys.
$243,355 from a Caltrans Environmental Justice Planning Grant.

8. USE OF CALIFORNIA CONSERVATION CORPS (CCC) OR A CERTIFIED COMMUNITY CONSERVATION CORPS (5 point deduction if not done)

See Attachment I-8 for documentation.

9. Provide short explanation of the Implementing Agency's project delivery history for all projects that include project funding through Caltrans Local Assistance administered programs (ATP, Safe Routes to School, BTA, HSIP, etc.) for the last five years.

The City of Richmond is quite experienced with a wide variety of funding programs administered by Caltrans Local Assistance and has successfully delivered several projects of varying levels of complexity. All project managers have attended federal aid training courses administered at District 4 and understand the complexity of federal aid projects. Projects with Local Assistance involvement within the last five years include:

- Safe Routes to School Cycle II – install bicycle lanes, crossing improvements, road diet, cost $500k (completed 2014)
- Safe Routes to School Cycle I – bicycle facilities, crosswalk improvements at several schools, cost $630k (obligated, construction summer 2015)
- HSIP Cycle VI – install bicycle lanes, signal modifications, cost $640k (construction 2016)
- CMA Block Grant Bicycle Facilities Program – install bicycle lanes, road diet, cost $600k (completed 2014)
- CMA Block Grant Transportation for Livable Communities Program – extend street, construct plaza/stairway/ramp and elevator access to BART station, cost $5.9m (obligated, construction summer 2015)
- Regional Transportation for Livable Communities Program – streetscape and street reconstruction (pavement, sidewalks, street lighting, landscaping) stormwater improvements, cost $7.4m (obligated, construction underway)
- Regional Transportation for Livable Communities Program – pedestrian plaza, landscaping, streetscape improvements, cost $1.7m (completed 2013)

Application Part C –Application Attachments

List of Application Attachments

Signature Page ……Attachment A

ATP-Project Programming Request …… Attachment B

Engineer's Checklist……..Attachment C

Project Location Map …… Attachment D

Project Existing and Proposed Conditions …… Attachment E

Photos of Existing Conditions…… Attachment F

Project Estimate……Attachment G

Non-Infrastructure Work Plan ……N/A

Narrative Question Backup Information……..Attachment I

ScreeningData-1: regional plan
I-1A-1: Existing Bike
I-1A-2: Existing Ped
I-1A-3: Bike no project
I-1A-4: Bike projections
I-1A-5: Ped no project
I-1A-6: Ped projections
I-1A-7: School information
I-1A-8: Ped-bike counts-all
I-2A-1 : Full collision data
I-2A-2 : Unreported collision data
I-2A-3 : TIMS-Lincoln
I-2A-4:TIMS_Peres
I-1C: City Ped Plan pages
I-3B-1: Community Outreach-flyers
I-3B-2: Community Outreach-sign-in sheets
I-3B-3: Community Outreach-survey forms
I-5A: CalEnviroScreen Maps
I-6B: Benefit Cost Analysis
I-8: CCC email & responseS

Letters of Support……Attachment J

Additional Attachments……..Attachment K

Part C: Attachments
Attachment A: Signature Page

IMPORTANT: Applications will not be accepted without all required signatures.

Implementing Agency: Chief Executive Officer, Public Works Director, or other officer authorized by the governing board
The undersigned affirms that their agency will be the "Implementing Agency" for the project if funded with ATP funds and they are the Chief Executive Officer, Public Works Director or other officer **authorized by their governing board with the authority to commit the agency's resources and funds.** They are also affirming that the statements contained in this application package are true and complete to the best of their knowledge. For infrastructure projects, the undersigned affirms that they are the manager of the public right-of-way facilities (responsible for their maintenance and operation) or they have authority over this position.

Signature:	William Lindsay pah	Date:	June 1, 2015
Name:	William Lindsay	Phone:	(510) 620-6512
Title:	City Manager	e-mail:	bill_lindsay@ci.richmond.ca.us

For projects with a Partnering Agency: Chief Executive Officer or other officer authorized by the governing board
(For use only when appropriate)
The undersigned affirms that their agency is committed to partner with the "Implementing Agency" and agrees to assume the responsibility for the ongoing operations and maintenance of the facility upon completion by the implementing agency and they intend to document such agreement per the CTC guidelines. The undersigned also affirms that they are the Chief Executive Officer or other officer authorized by their governing board with the authority to commit the agency's resources and funds. They are also affirming that the statements contained in this application package are true and complete to the best of their knowledge.

Signature:		Date:	
Name:		Phone:	
Title:		e-mail:	

For Safe Routes to School projects and/or projects presented as benefiting a school: School or School District Official
(For use only when appropriate)
The undersigned affirms that the school(s) benefited by this application is not on a school closure list.

Signature:		Date:	6/1/15
Name:	Bruce Harter	Phone:	510-231-1101
Title:	Superintendent	e-mail:	bharter@wccusd.net

For projects with encroachments on the State right-of-way: Caltrans District Traffic Operations Office Approval*
(For use only when appropriate)
If the application's project proposes improvements within a freeway or state highway right-of-way, whether it affects the safety or operations of the facility or not, it is required that the proposed improvements be reviewed by the district traffic operations office and either a letter of support/acknowledgement from the traffic operations office be attached or the signature of the traffic manager be secured in the application. The Caltrans letter and/or signature does not imply approval of the project, but instead is only an acknowledgement that Caltrans District staff is aware of the proposed project; and upon initial review, the project appears to be reasonable and acceptable.

Is a letter of support/acknowledgement attached? _____ If yes, no signature is required. If no, the following signature is required.

Signature:		Date:	
Name:		Phone:	
Title:		e-mail:	

* Contact the District Local Assistance Engineer (DLAE) for the project to get Caltrans Traffic Ops contact information. DLAE contact information can be found at http://www.dot.ca.gov/hq/LocalPrograms/dlae.htm

STATE OF CALIFORNIA ● DEPARTMENT OF TRANSPORTATION

ATP PROJECT PROGRAMMING REQUEST

Date:	6/1/15

Project Information:

Project Title:	The Yellow Brick Road in Richmond's Iron Triangle				
District	**County**	**Route**	**EA**	**Project ID**	**PPNO**
4	Contra Costa	Various			

Funding Information:

DO NOT FILL IN ANY SHADED AREAS

Proposed Total Project Cost ($1,000s)

Component	Prior	14/15	15/16	16/17	17/18	18/19	19/20+	Total
E&P (PA&ED)		243		207				450
PS&E				725				725
R/W								
CON					5,277			5,277
TOTAL		243		932	5,277			6,452

Notes:

ATP Funds	Infrastructure Cycle 2							
Proposed Funding Allocation ($1,000s)								
Component	Prior	14/15	15/16	16/17	17/18	18/19	19/20+	Total
E&P (PA&ED)				207				207
PS&E				725				725
R/W								
CON					5,277			5,277
TOTAL				932	5,277			6,209

Program Code

Funding Agency: Caltrans

Notes:

ATP Funds	Non-infrastructure Cycle 2							
Proposed Funding Allocation ($1,000s)								
Component	Prior	14/15	15/16	16/17	17/18	18/19	19/20+	Total
E&P (PA&ED)								
PS&E								
R/W								
CON								
TOTAL								

Program Code

Funding Agency

Notes:

ATP Funds	Plan Cycle 2							
Proposed Funding Allocation ($1,000s)								
Component	Prior	14/15	15/16	16/17	17/18	18/19	19/20+	Total
E&P (PA&ED)								
PS&E								
R/W								
CON								
TOTAL								

Program Code

Funding Agency

Notes:

ATP Funds	Previous Cycle							
Proposed Funding Allocation ($1,000s)								
Component	Prior	14/15	15/16	16/17	17/18	18/19	19/20+	Total
E&P (PA&ED)								
PS&E								
R/W								
CON								
TOTAL								

Program Code

Funding Agency

Notes:

ATP Funds	Future Cycles							
Proposed Funding Allocation ($1,000s)								
Component	Prior	14/15	15/16	16/17	17/18	18/19	19/20+	Total
E&P (PA&ED)								
PS&E								
R/W								
CON								
TOTAL								

Program Code

Funding Agency

Notes:

STATE OF CALIFORNIA ● DEPARTMENT OF TRANSPORTATION

ATP PROJECT PROGRAMMING REQUEST

Date:	6/1/15

Project Information:

Project Title:	The Yellow Brick Road in Richmond's Iron Triangle				
District	**County**	**Route**	**EA**	**Project ID**	**PPNO**
4	Contra Costa	Various			

Funding Information:

DO NOT FILL IN ANY SHADED AREAS

Fund No. 2: Future Source for Matching

Proposed Funding Allocation ($1,000s)

Component	Prior	14/15	15/16	16/17	17/18	18/19	19/20+	Total
E&P (PA&ED)		243						243
PS&E								
R/W								
CON								
TOTAL		243						243

Program Code:

Funding Agency: Caltrans

Notes: Environmental Justice Planning Grant

Fund No. 3:

Proposed Funding Allocation ($1,000s)

Component	Prior	14/15	15/16	16/17	17/18	18/19	19/20+	Total
E&P (PA&ED)								
PS&E								
R/W								
CON								
TOTAL								

Program Code:

Funding Agency:

Notes:

Fund No. 4:

Proposed Funding Allocation ($1,000s)

Component	Prior	14/15	15/16	16/17	17/18	18/19	19/20+	Total
E&P (PA&ED)								
PS&E								
R/W								
CON								
TOTAL								

Program Code:

Funding Agency:

Notes:

Fund No. 5:

Proposed Funding Allocation ($1,000s)

Component	Prior	14/15	15/16	16/17	17/18	18/19	19/20+	Total
E&P (PA&ED)								
PS&E								
R/W								
CON								
TOTAL								

Program Code:

Funding Agency:

Notes:

Fund No. 6:

Proposed Funding Allocation ($1,000s)

Component	Prior	14/15	15/16	16/17	17/18	18/19	19/20+	Total
E&P (PA&ED)								
PS&E								
R/W								
CON								
TOTAL								

Program Code:

Funding Agency:

Notes:

Fund No. 7:

Proposed Funding Allocation ($1,000s)

Component	Prior	14/15	15/16	16/17	17/18	18/19	19/20+	Total
E&P (PA&ED)								
PS&E								
R/W								
CON								
TOTAL								

Program Code:

Funding Agency:

Notes:

ATP Engineer's Checklist for Infrastructure Projects

Required for "Infrastructure" applications ONLY

This application checklist is to be used by the engineer in "responsible charge" of the preparation of this ATP application to ensure all of the primary elements of the application are included as necessary to meet the CTC's requirements for a PSR-Equivalent document (per CTC's ATP Guidelines and CTC's Adoption of PSR Guidelines - Resolution G-99-33) and to ensure the application is free of critical errors and omissions; allowing the application to be accurately ranked in the statewide ATP selection process.

Special Considerations for Engineers before they Sign and Stamp this document attesting to the accuracy of the application:

Chapter 7; Article 3; Section 6735 of the Professional Engineer's Act of the State of California requires engineering calculation(s) or report(s) be either prepared by or under the responsible charge of a licensed civil engineer. Since the corresponding ATP ***Infrastructure****-application defines the scope of work of a future civil construction project and requires complex engineering principles and calculations which are based on the best data available at the time of the application, the application must be signed and stamped by a licensed civil engineer.*

By signing and stamping this document, the engineer is attesting to this application's technical information and engineering data upon which local agency's recommendations, conclusions, and decisions are made. This action is governed by the Professional Engineer's Act and the corresponding Code of Professional Conduct, under Sections 6775 and 6735.

The following checklist is to be completed by the engineer in "responsible charge" of defining the projects Scope, Cost and Schedule per the expectations of the CTC's PSR Equivalent. The checklist is expected to be used during the preparation of the documents, but not initialed and stamped until the final application and application attachments are complete and ready for submission to Caltrans.

1. **Vicinity map /Location map** **Engineer's Initials:** TNH
   a. The project limits must be clearly depicted in relationship to the overall agency boundary

2. **Project layout-plan/map** showing existing and proposed conditions must: **Engineer's Initials:** TNH
   a. Be to a scale which allows the visual verification of the overall project "construction" limits and limits of each primary element of the project
   b. Show the full scope of the proposed project, including any non-participating construction items
   c. Show all changes to existing motorized/non-motorized lane and shoulder widths. Label the proposed widths
   d. Show agency's right of way (ROW) lines when permanent or temporary ROW impacts are possible. (As appropriate, also show Caltrans', Railroad, and all other government agencies ROW lines)

3. **Typical cross-section(s)** showing existing and proposed conditions. **Engineer's Initials:** TNH
   (Include cross-section for each controlling configuration that varies significantly from the typical)
   a. Show and dimension: changes in lane widths, ROW lines, side slopes, etc.

4. **Detailed Engineer's Estimate** **Engineer's Initials:** TNH
   a. Estimate is reasonable and complete.
   b. Each of the main project elements are broken out into separate construction items. The costs for each item are based on calculated quantities and appropriate corresponding unit costs
   c. All non-participating costs in relation to the ATP funding are clearly identified and accounted for separately from the eligible costs.
   d. All project elements the applicant intends to utilize the CCC (or a certified community conservation corps) on need to be clearly identified and accounted for
   e. All project development costs to be funded by the ATP need to be accounted for in the total project cost

5. **Crash/Safety Data, Collision maps and Countermeasures:** **Engineer's Initials:** TNH
   a. Confirmation that crash data shown occurred within influence area of proposed improvements.

6. **Project Schedule and Requested programming of ATP funding** **Engineer's Initials:** TNH
   a. All applicants must anticipate receiving federal ATP funding for the project and therefore the project schedules and programming included in the application must account for all applicable requirements and timeframes.
   b. "Completed Dates" for project Milestone Dates shown in the application have been reviewed and verified
   c. "Expected Dates" for project Milestone Dates shown in the application account for all reasonable project timetables, including: Interagency MOUs, Caltrans agreements, CTC allocations, FHWA authorizations, federal environmental studies and approvals, federal right-of-way acquisitions, federal consultant selections, project permits, etc.
   d. The fiscal year and funding amounts shown in the PPR must be consistent with the values shown in the project cost estimate(s), expected project milestone dates and expected matching funds.

7. **Warrant studies/guidance (Check if not applicable)** **Engineer's Initials:** TNH
   ☒ N/A a. For new Signals – Warrant 4, 5 or 7 must be met (CA MUTCD): Signal warrants must be documented as having been met based on the CA MUTCD

8. **Additional narration and documentation:** **Engineer's Initials:** TNH
   a. The text in the "Narrative Questions" in the application is consistent with and supports the engineering logic and calculations used in the development of the plans/maps and estimate
   b. When needed to clarify non-standard ATP project elements (i.e. vehicular roadway widening necessary for the construction of the primary ATP elements); appropriate documentation is attached to the application to document the engineering decisions and calculations requiring the inclusion of these non-standard elements.

Licensed Engineer:

Name *(Last, First)*: HALABY, TAWFIC

Title: SENIOR CIVIL ENGINEER

Engineer License Number 73707

Signature: Tawfic Halaby

Date: June 1, 2015

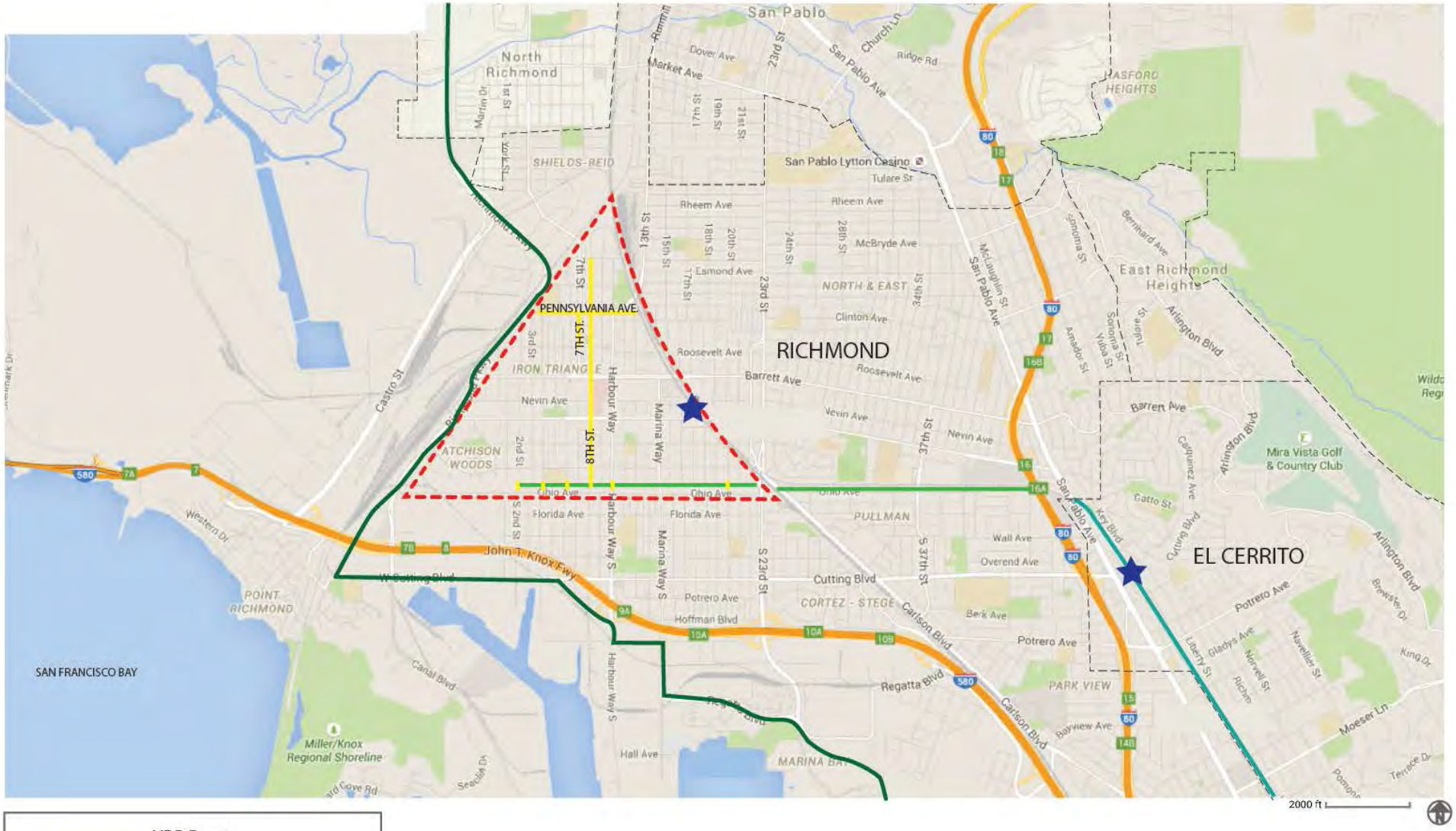
Email: tawfic_halaby@ci.richmond.ca.us

Phone: (510) 621-1612

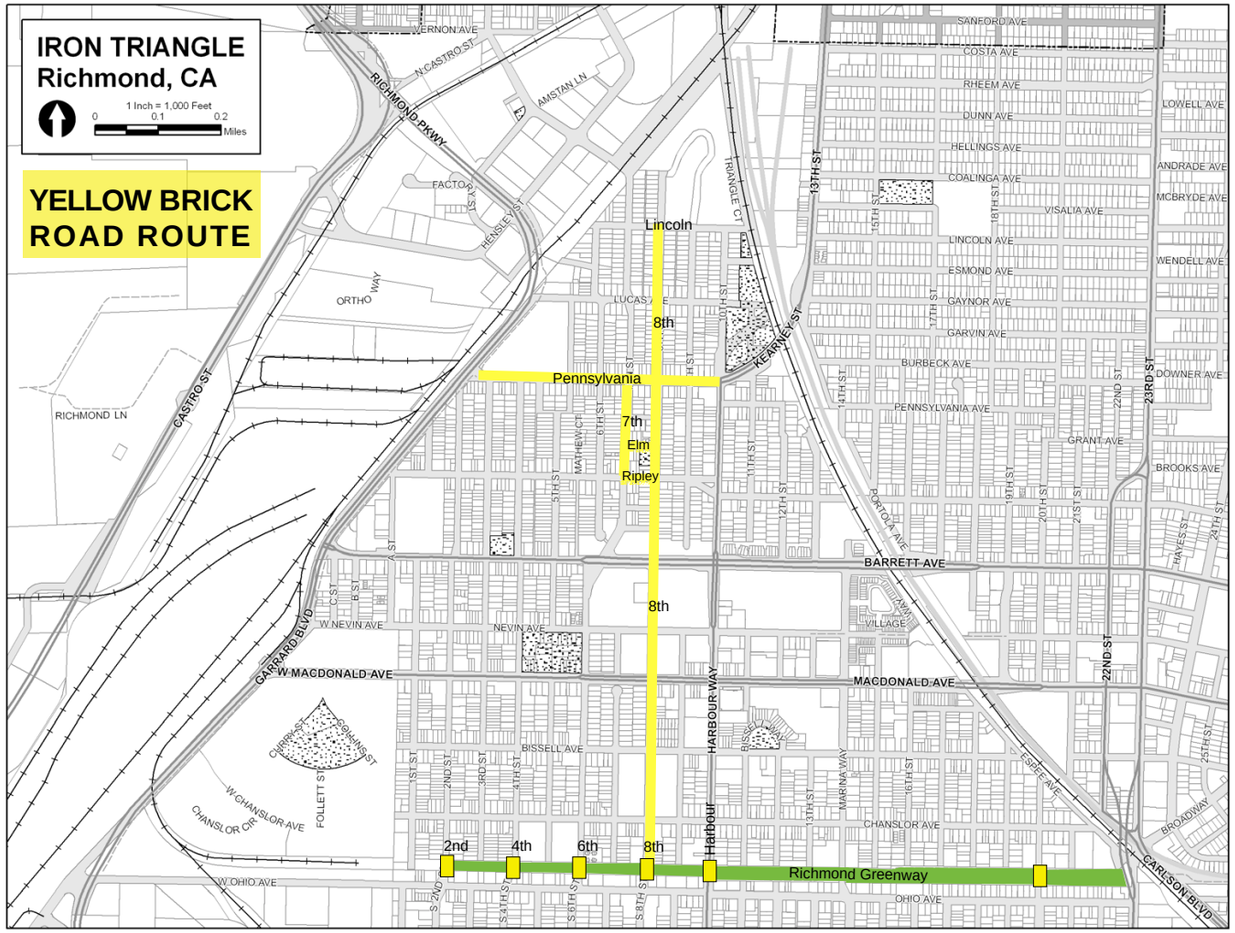
Engineer's Stamp:

Tawfic Halaby
CIVIL ENGINEER
LICENSE Nº 73707
EXPIRES JUNE 30, 2017

The Yellow Brick Road in Richmond's Iron Triangle Neighborhood
Project Location Map
Attachment D



- YBR Route
- Iron Triangle Boundary
- Ohlone Greenway
- Richmond Greenway
- San Francisco Bay Trail
- Richmond City Limit
- BART Stations



PROJECT PLAN

Existing and Proposed Conditions

along the proposed route of the **Yellow Brick Road** in Richmond's Iron Triangle neighborhood

Lack of crisp, clear crossing and signage psychologically reinforces the message that the needs of cars comes before needs of bicyclists and pedestrians

Extra wide intersection encourages cars to travel at high speeds; lack of crosswalks makes it difficult for pedestrians to cross one of the busiest west-east routes in this neighborhood safely

Critical crosswalk across 4th Street at western end of Lincoln Elementary School has poor signage; pedestrian ramp slopes down to street level

Highly used crossing at major access point to Lincoln Elementary School has poor signage; faded crosswalk markings

Critical crossing at corner of 6th Street and busy Ohio Avenue is extra wide and encourages cars to speed next to Lincoln Elementary School; in multiple surveys, parents complain about this intersection specifically

N

Crosswalk across 8th Street, 1/2 blocks from Gompers and Leadership High Schools has poor signage; pedestrian ramp slopes down to street level

Critical crossing at corner of 8th Street and busy Ohio Avenue is extra wide; encourages cars to speed and is a barrier to safe travel via walking and biking

Although streets are marked to direct cars into narrower lanes, cars don't obey. At this critical crossing (Harbour Way is main north-south route), it is imperative to have physical divider to make it impossible for cars to travel at high speed

N

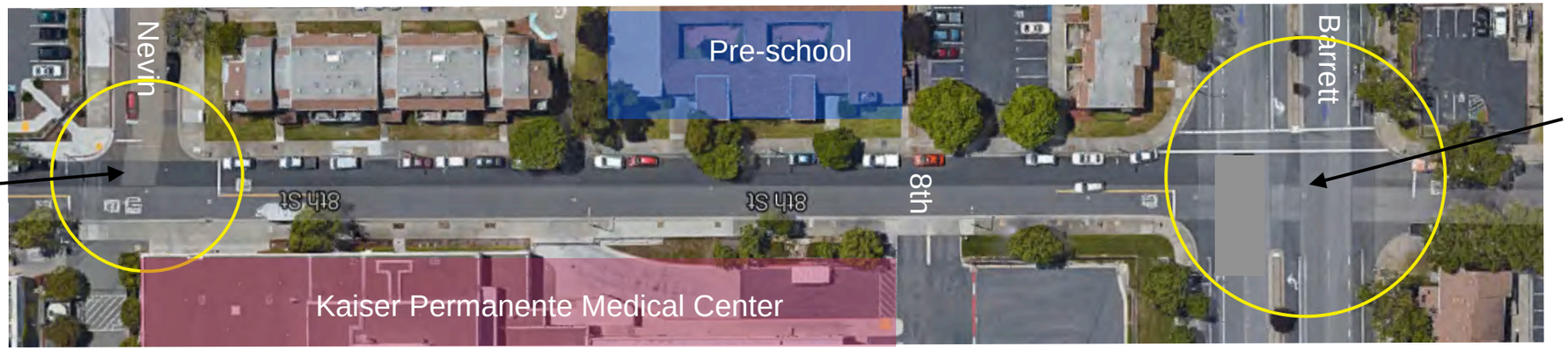
Wide intersection here encourages cars to speed; lack of crosswalks and poor signage make it difficult for pedestrians to cross

Poor signage and crosswalk marking on streets at critical intersection adjacent to two high schools that serve 741 students

Entryway to two high schools has poor signage and lacks visible crosswalk

Macdonald Ave is Richmond's Main Street; the street at the heart of retail, transit, and public services; wide intersection make it hard for pedestrians to cross

Much-used intersection as it leads to entry to Kaiser Hospital, US Post Office, and Nevin Community Center; intersection lacks signage and well-marked crosswalks



Barrett Ave is major east-west corridor; wide intersection make it hard for pedestrians to cross and unwelcoming for bicyclists; lack of signage

N

Wide intersection at intersection of Ripley and 8th encourages speeding; lack of signage or crosswalks is a major barrier for walking and biking

Elm Playlot has become a go-to place for hundreds of children who walk here every day from Peres Elementary School each day

A top complaint from local residents is that a large percentage of cars fail to obey the stop signs at the corner of 8th and Elm Ave, directly across the street from a busy city park filled with children (see detail on p.7)

Crossing at Pennsylvania Avenue and 8th Street lacks signage and clear crosswalks and was identified by local residents as a key site for street improvements that ensure safe passage for pedestrians and bicyclists

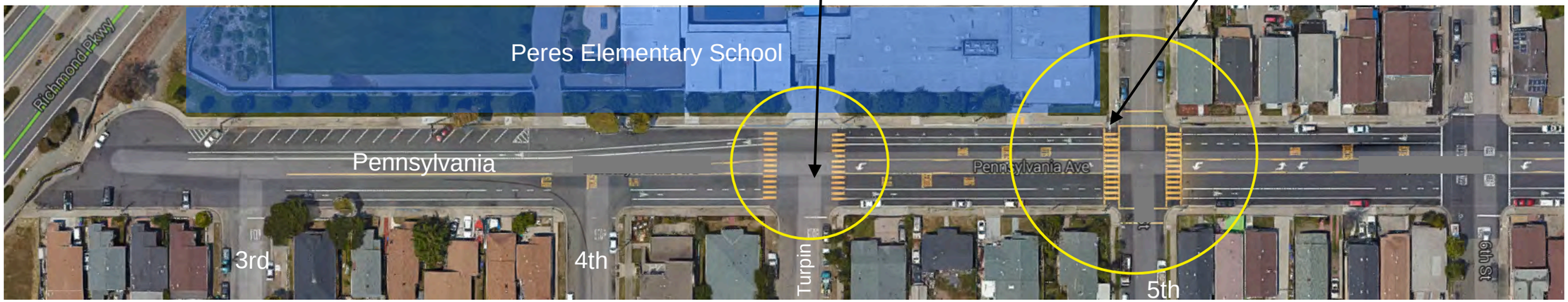
Many children and families walk and bike west on Lucas Ave. to get to Peres Elementary School, three blocks to the west; this intersection is wide, lacks signage and clearly-marked crosswalks

Local residents identified this intersection as the beginning of the Yellow Brick Road (north); the intersection lacks signage and crosswalks

N

Cars speeding both directions on Pennsylvania routinely ignore this crosswalk - even while children are crossing; local residents complain that the road is too wide and this crossing is dangerous

Main drop-off location for children at school is always snarled; cars double and triple park on Pennsylvania and 5th Street; top concern of parents



7th Street at Pennsylvania Ave. is a major north-south route for cars and buses (there are several bus stops along 7th Street); Pennsylvania is too wide and pedestrians have no way to cross here safely

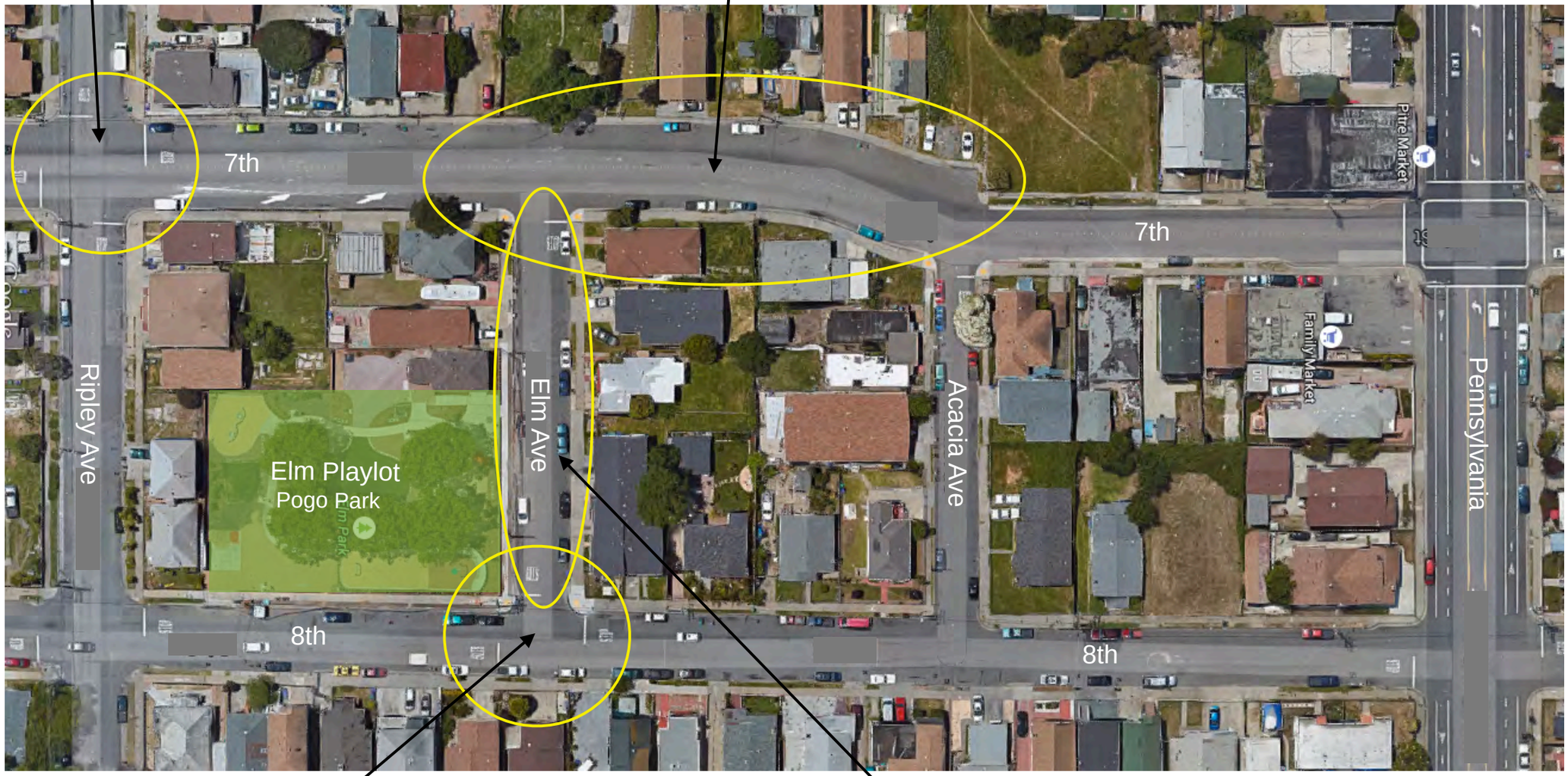
Community residents selected 8th Street as the preferred north-south route to walk and pike; at this intersection, there are no safe ways for bikes and people walking to cross wide Pennsylvania safely

Pennsylvania too wide to cross safely; lack of crosswalks or signage

One of the most dangerous and congested intersection in the Iron Triangle neighborhood; cars traveling west down the ramp (at right) pick up and maintain speed down Pennsylvania; no signage or clear, safe pathways for bike and pedestrians

No crosswalks at this critical intersection

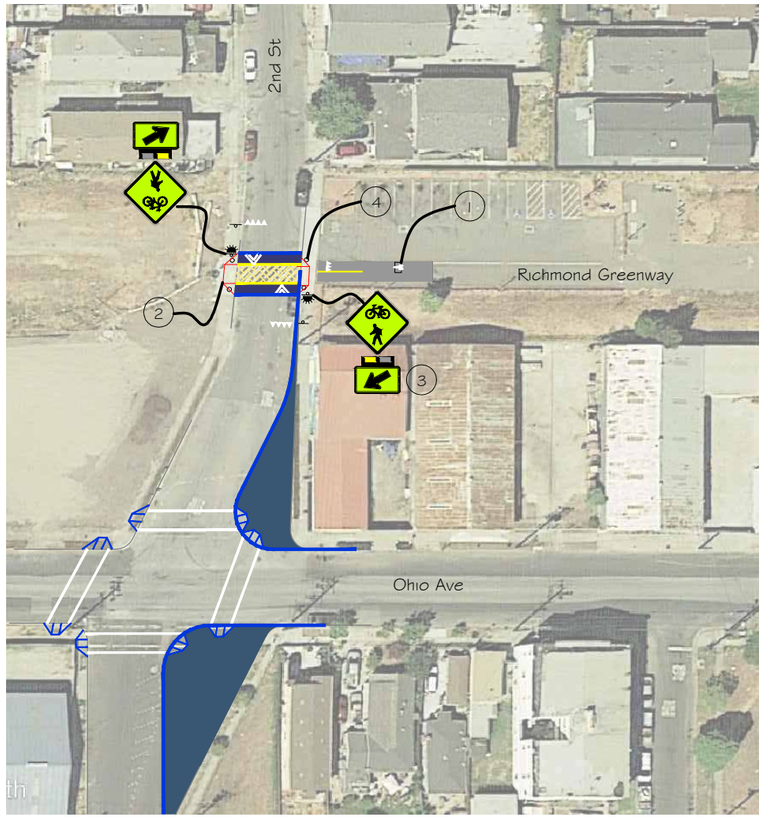
Cars travel at high speeds on the wide portion of 7th Street. With either no or extremely poor quality sidewalks, lack of signage and no crosswalks make 7th Street highly dangerous for bikes and pedestrians alike.

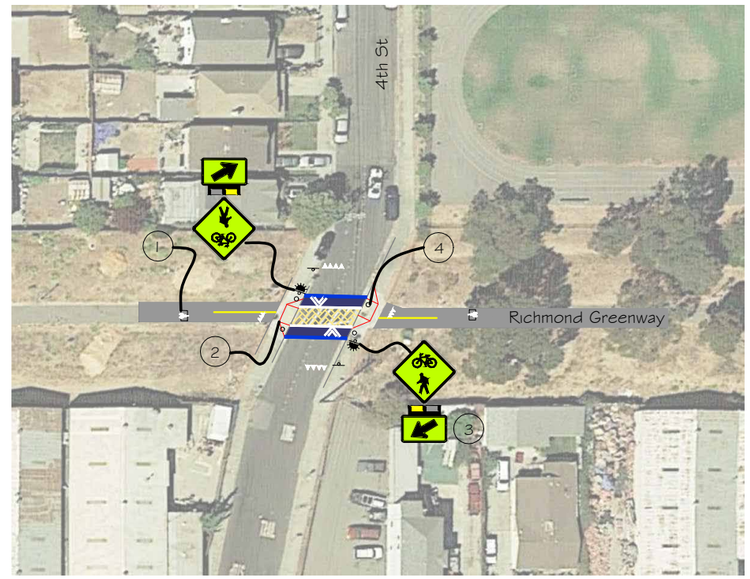


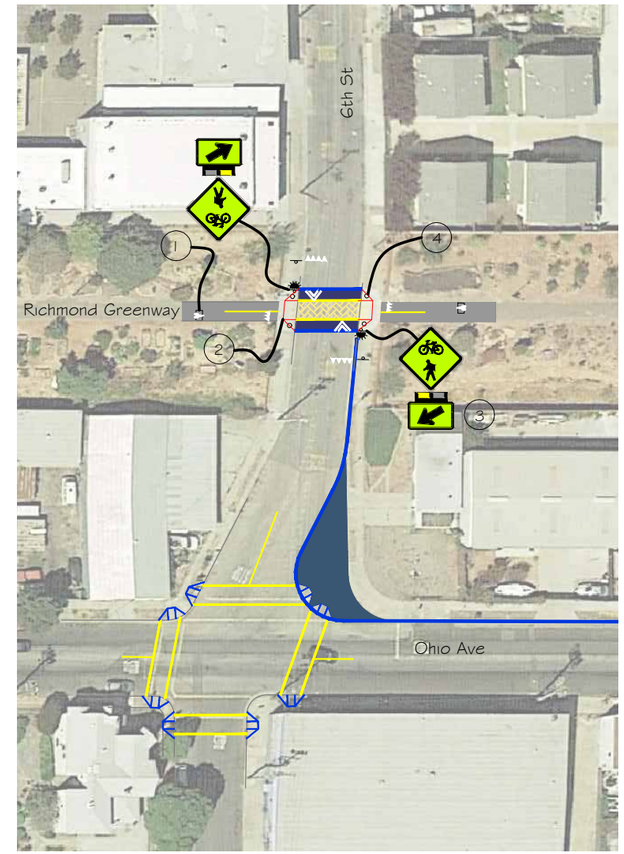
Cars traveling north and south on 8th Street routinely fail to obey stop signs (in fact, many cars speed through without pause). Because this is the main intersection at the much-used Elm Playlot, local resident identified this intersection as one of the KEY intersections to fix along the Yellow Brick Road.

Residents asked for traffic calming on Elm Avenue; right outside the park's boundary, children play in the street here all the time.

N







ATTRIBUTES OF ALL GREENWAY CROSSINGS:

1. Bike loop detects bikes in advance to activate flashing beacons
2. Remove existing pedestrian ramp and raise sidewalk to level of raised crosswalk
3. Include audible message to alert trail users when beacon is activated to cross with caution
4. Bollards with sensors detect pedestrians to activate flashing beacons

N

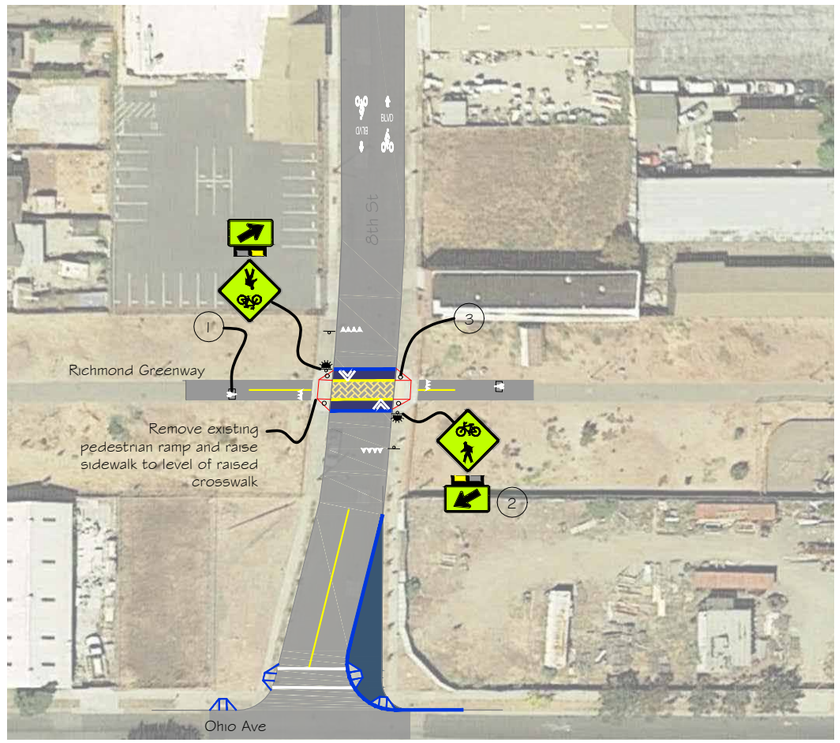
LEGEND

80 0 80 160

1" = 80' GRAPHIC SCALE

Figure E-3

Oct 16, 2014 CADD FILE: W:\Oakland N Drive\Projects\2013\WC13-3084_YBR_Walkable_Neighborhoods\CAD\Graphics\3084-Figures.dwg



ATTRIBUTES OF ALL GREENWAY CROSSINGS:

1. Bike loop detects bikes in advance to activate flashing beacons
2. Include audible message to alert trail users when beacon is activated to cross with caution
3. Bollards with sensors detect pedestrians to activate flashing beacons

N

LEGEND

Study Intersection

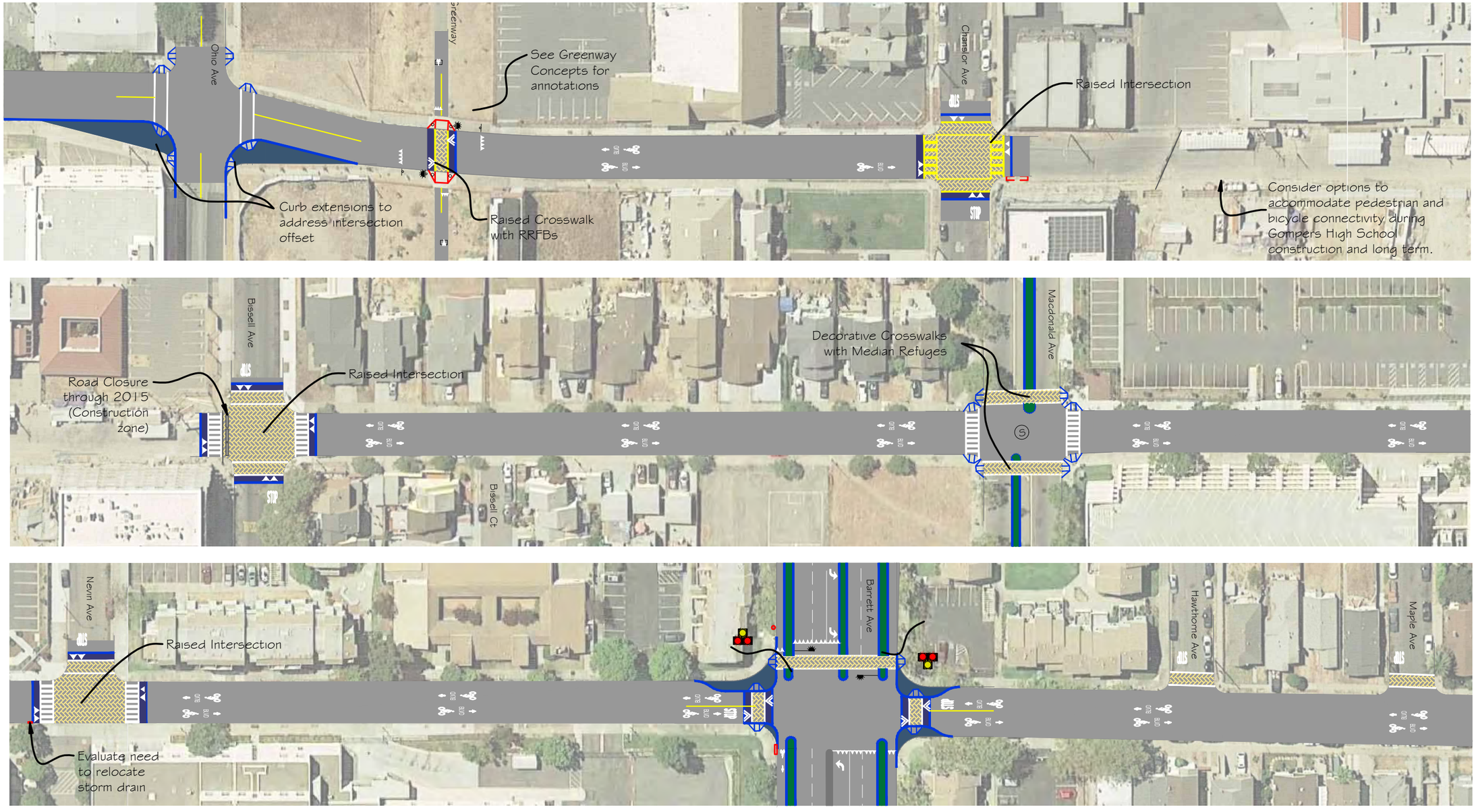
80 0 80 160

1" = 80' GRAPHIC SCALE

Figure E-4

Richmond Greenway Yellow Brick Road Improvements

Oct 16, 2014 CADD FILE: W:\Oakland N Drive\Projects\2013\WC13-3084_YBR_Walkable_Neighborhoods\CAD\Graphics\3084-Figures.dwg



LEGEND

Ⓢ Existing Traffic Signal

Existing Storm Drain Inlet

80 0 80 160

1" = 80' GRAPHIC SCALE

Figure E-1

8th Street Yellow Brick Road Improvements

May 31, 2015 CADD FILE: W:\Oakland N Drive\Projects\2013\W013-3084_YBR_Walkable_Neighborhoods\CAD\Graphics\3084-Figures-02.24.15.dwg

N

LEGEND

Existing Storm Drain Pipe

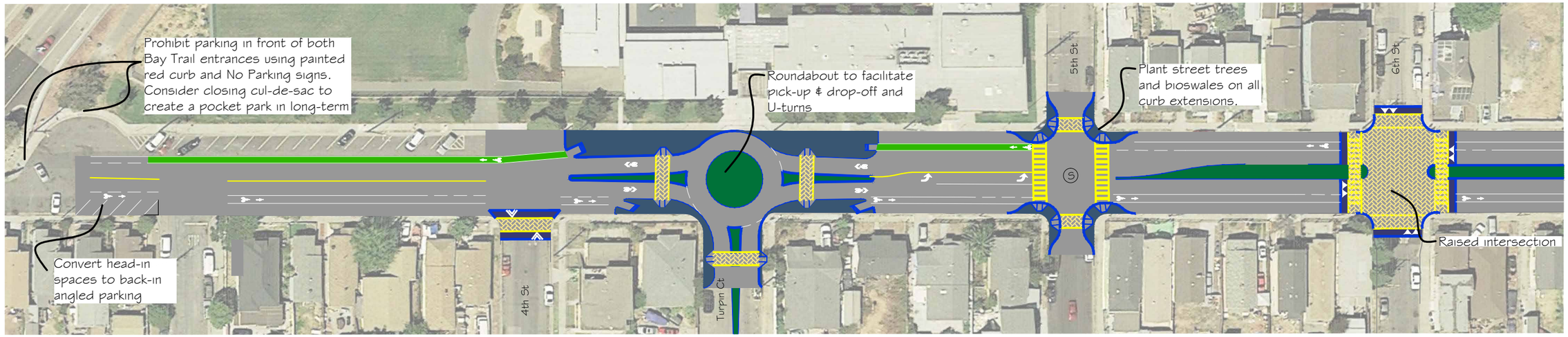
80 0 80 160

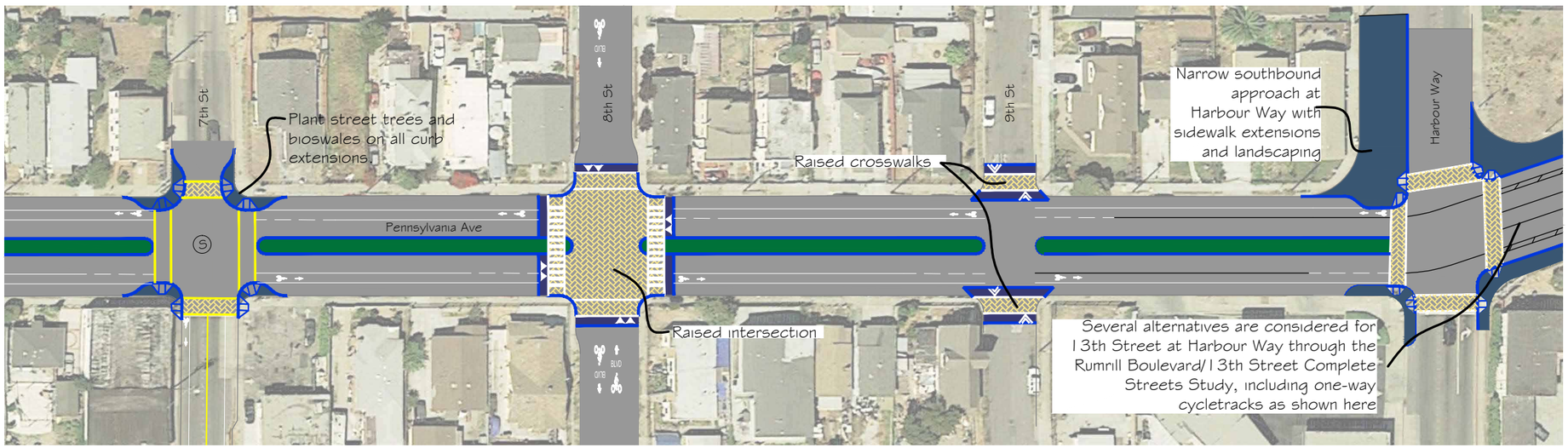
1" = 80' GRAPHIC SCALE

Feb 24, 2015 CADD FILE: W:\Oakland N Drive\Projects\2013\WC13-3084_YBR_Walkable_Neighborhoods\CAD\Graphics\3084-Figures-02.24.15.dwg

Figure E-2

8th Street Yellow Brick Road Improvements





N

LEGEND

Ⓢ Existing Traffic Signal

80 0 80 160

1" = 80' GRAPHIC SCALE

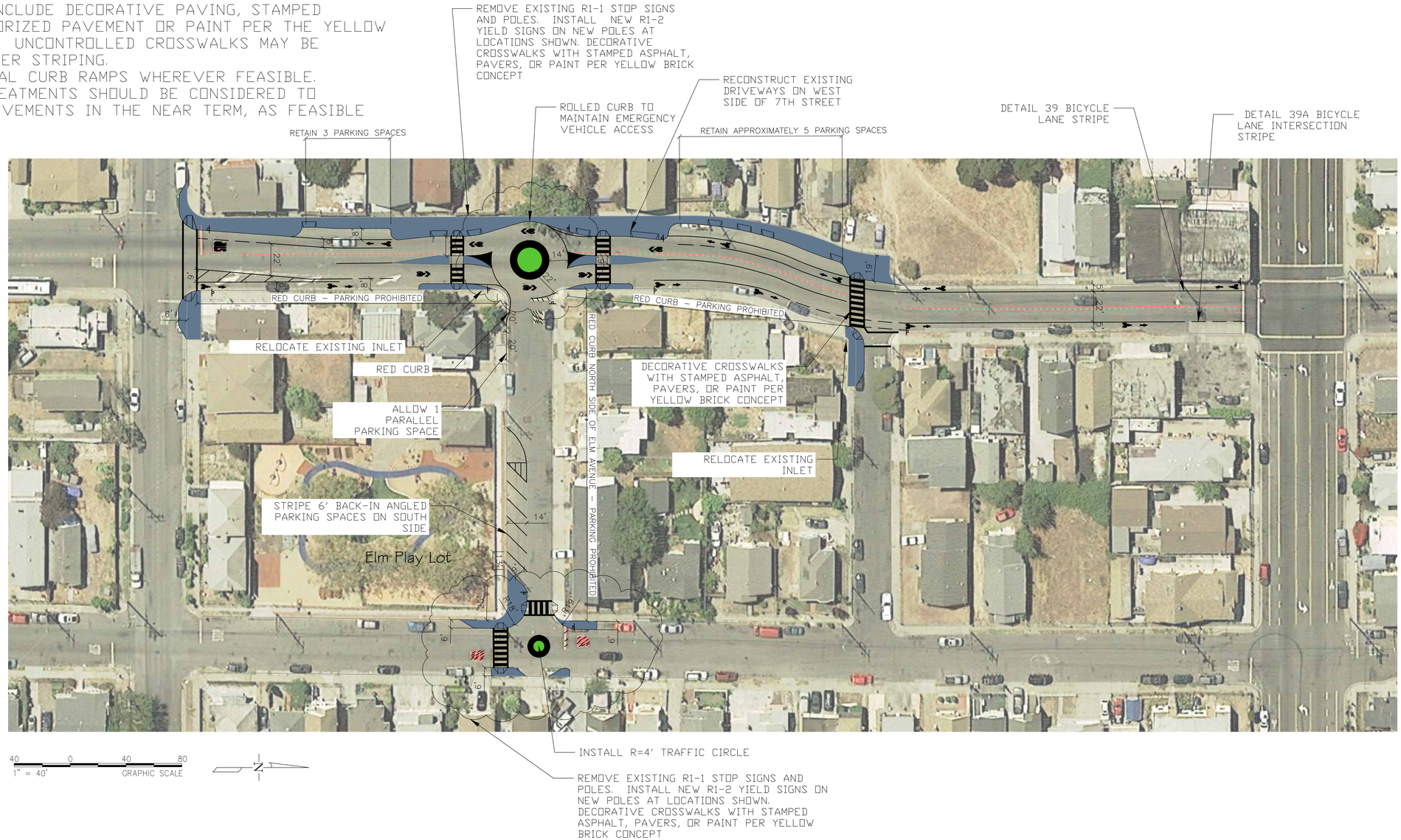
Figure E-5

Pennsylvania Avenue Yellow Brick Road Improvements

Feb 24, 2015 CADD FILE: W:\Oakland N Drive\Projects\2013\WC13-3084_YBR_Walkable_Neighborhoods\CAD\Graphics\3084-Figures-02.24.15.dwg

GENERAL NOTES:

1. CROSSWALKS MAY INCLUDE DECORATIVE PAVING, STAMPED ASPHALT AND/OR COLORIZED PAVEMENT OR PAINT PER THE YELLOW BRICK ROAD CONCEPT. UNCONTROLLED CROSSWALKS MAY BE HIGH-VISIBILITY LADDER STRIPING.
2. INSTALL DIRECTIONAL CURB RAMPS WHEREVER FEASIBLE.
3. INTERIM DESIGN TREATMENTS SHOULD BE CONSIDERED TO CONSTRUCT THE IMPROVEMENTS IN THE NEAR TERM, AS FEASIBLE



LEGEND

- NEW OR RECONSTRUCTED SIDEWALK OR CURB EXTENSION
- REPLACE AND RELOCATE EXISTING R1-1 STOP SIGNS WITH NEW R1-2 YIELD SIGNS
- CUSTOMIZED BICYCLE & PEDESTRIAN WAYFINDING SIGNS
- SHARROW (TYP.) IN SHARED LANES AND THROUGH ROUNDABOUTS
- MOUNTABLE AREA OF TRAFFIC CIRCLE, ROUNDABOUT, OR SPLITTER ISLAND FOR TRUCK & EMERGENCY VEHICLE ACCESS
- RAISED LANDSCAPED MEDIAN OR TRAFFIC CIRCLE
- CLASS II BICYCLE LANE LEGENDS (TYP.)

REVISIONS

NO.	DESCRIPTION	DATE	BY

FEHR & PEERS
100 Pringle Avenue Walnut Creek, CA 94596
Suite 600 (925) 930-7100
Walnut Creek, CA · Roseville, CA · San Jose, CA · San Francisco, CA · Orange County, CA · Los Angeles County, CA · San Diego, CA · Oakland, CA · Salt Lake City, UT · Reno, NV · Denver, CO · Seattle, WA

Designed By: _____
Drawn By: KR/CN
Checked By: CN/RM
Drawing No.: _____
Date: FEBRUARY 2014

CITY OF RICHMOND

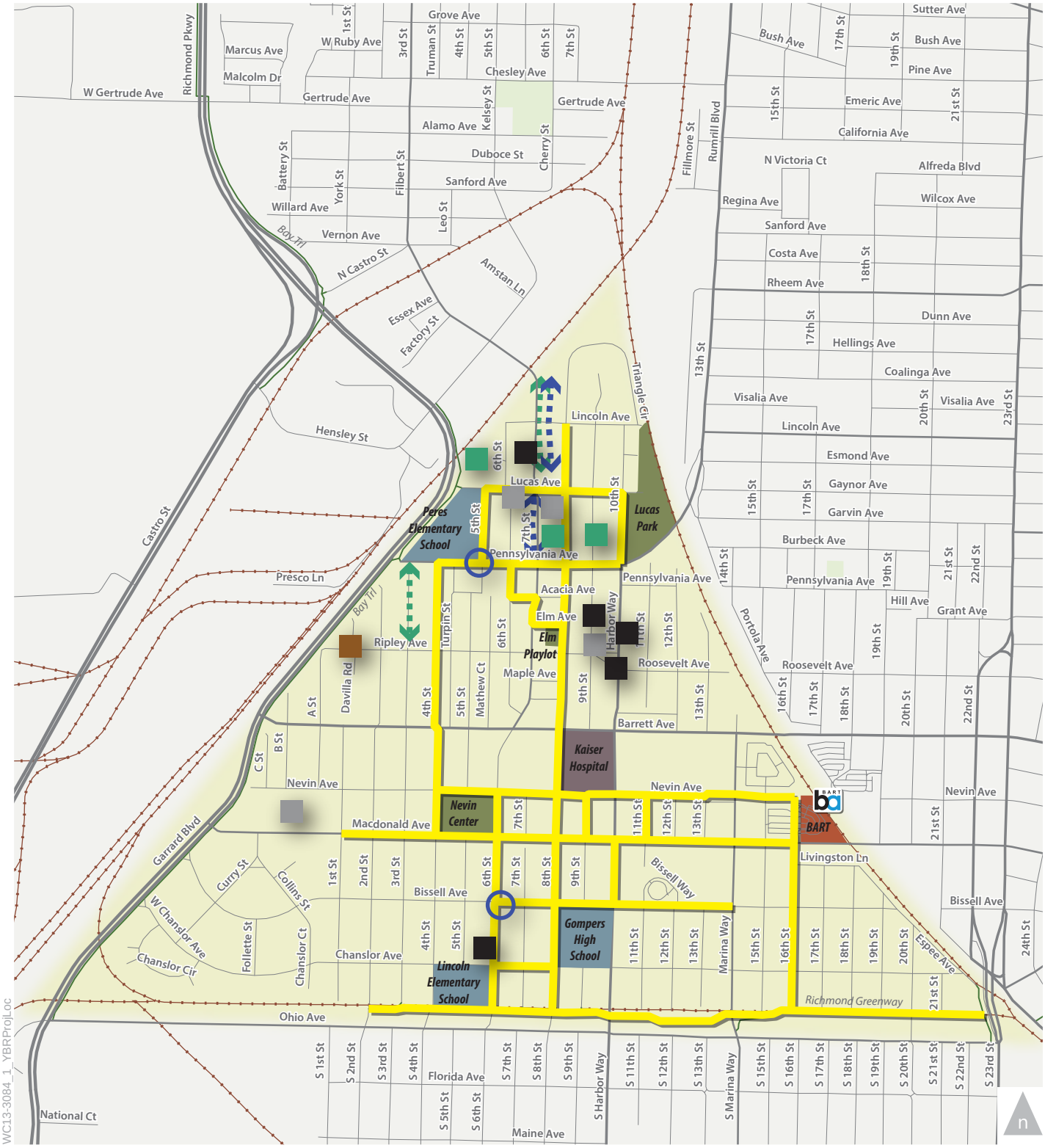
ELM TO PERES – PHASE 1

YELLOW BRICK ROAD/IRON TRIANGLE NEIGHBORHOOD PLAN

SHEET 1 OF 1

Fehr & Peers Associates, its employees, its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

CADD FILE: W:\Oakland N Drive\Projects\2013\WC13-3084_YBR_Walkable_Neighborhoods\CAD\30% Plans\3084-Striping_v3_cn.dwg
May 31, 2015



LEGEND

Yellow Brick Road | School | Park | Iron Triangle Study Area

Dogs | Crosswalk Improvements | Sidewalk Improvements | Abandoned Houses | Maintenance (Vegetation, Trash, Potholes)

Enforcement/Illegal Activities

Figure 5

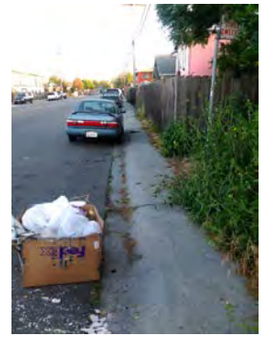
Yellow Brick Road
Community-Identified Issues & Opportunities

PHOTOS OF EXISTING CONDITIONS

along the proposed **Yellow Brick Road** route

Bullet-ridden stop sign on Lincoln Avenue sends a message that the streets are not safe

Graffiti along the route on 8th Street; children walking the proposed Yellow Brick Road route pointed out that “187” is the police code for murder



Sidewalk on busy 7th Street and Elm Avenue is too narrow to walk (or for a parent to push a stroller)

Sidewalk on 8th Street next to the Richmond Greenway in disarray and becomes a magnet for trash dumping and blight

Local residents point out that on wide Pennsylvania Avenue cars fail to follow street markings; the only way to slow cars down is to make it physically impossible for cars to speed

Poor sidewalk conditions on 8th Street near Pennsylvania; cars blocking sidewalks; menacing graffiti tags discourage walking and biking in the Iron Triangle neighborhood

Poor sidewalk conditions on 7th Street near Acacia; this sidewalk is a main route for hundreds of children who walk each day from Peres Elementary to Elm Playlot, a city park four blocks away

20th Street at the Richmond Greenway is a wide street with crosswalk that is difficult for cars to see; residents complain that cars do not respect bikes and pedestrians as they cross the streets on the Greenway

Existing Conditions on Intersections along the YELLOW BRICK ROAD route

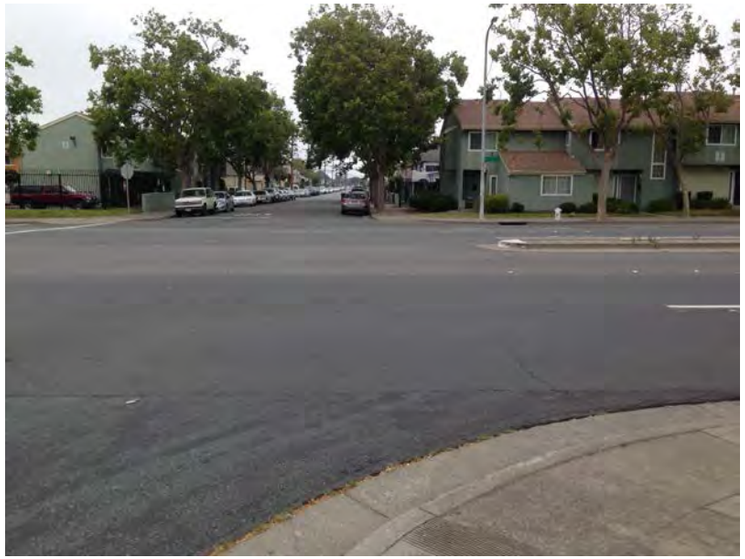
8th and Lincoln

8th and Lucas

8th and Pennsylvania

8th and Elm

8th and Ripley



8th and Barrett

8th and Nevin

8th and Macdonald

8th and Bissell (construction completed in fall 2015)

8th and Chanslor

8th and Ohio

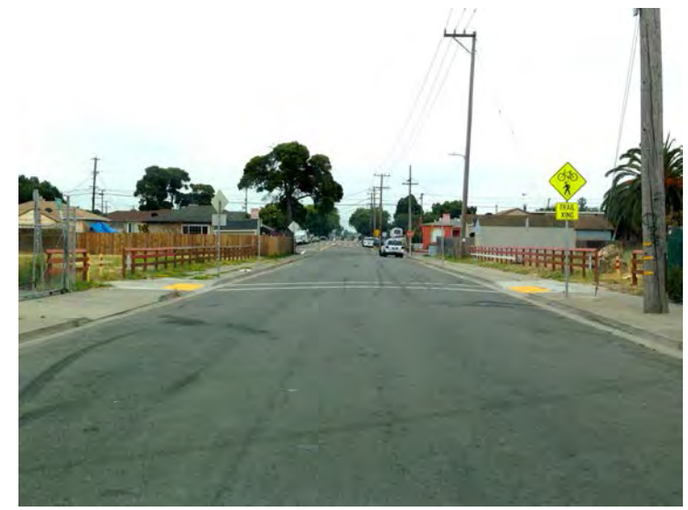
2nd and Richmond Greenway

4th and Richmond Greenway

6th and Richmond Greenway

8th and Richmond Greenway

Harbour and Richmond Greenway



20th and Richmond Greenway

2nd and Pennsylvania

4th and Pennsylvania

Turpin and Pennsylvania

5th and Pennsylvania

8th and Pennsylvania

9th and Pennsylvania

Harbour (10th St) and Pennsylvania
(facing east)

Harbour and Pennsylvania
(facing south)

Detailed Engineer's Estimate and Total Project Cost

Important: Read the Instructions in the other sheet (tab) before entering data. Do not enter in shaded fields (with formulas).

Project Information:

Agency:	City of Richmond				
Application ID:	04-City of Richmond-3	**Prepared by:**	Chadrick Smalley	**Date:**	**5/31/15**
Project Description:	This project implements the community-driven Yellow Brick Road Iron Triangle Walkable Neighborhood Plan, by creating, improving pedestrian and cyclist connections to key neighborhood assets in Richmond's Iron Triangle.				
Project Location:	Pennsylvania Ave. at 2nd and Harbour Way; 7th St. at Pennsylvania St. and Ripley St.; Elm St. at 7th and 8th; 8th St. between Lincoln St. and Ohio Ave.; and the crossings at the Richmond Greenway at 2nd, 4th, 6th, 8th, Harbour Way and 20th St.				

Engineer's Estimate and Cost Breakdown:

Engineer's Estimate (for Construction Items Only)						Cost Breakdown							
						Note: Cost can apply to more than one category. Therefore may be over 100%.							
						ATP Eligible Items		Landscaping		Non-Participating Items		To be Constructed by Corps/CCC	
Item No.	**Item**	**Quantity**	**Units**	**Unit Cost**	**Total Item Cost**	**%**	**$**	**%**	**$**	**%**	**$**	**%**	**$**
1	Pavement Removal	74,200	SF	$1	$74,200	100%	$74,200						
2	Concrete Curb	2,540	LF	$30	$76,200	100%	$76,200						
3	Concrete Curb & Gutter	4,360	LF	$40	$174,400	100%	$174,400						
4	Concrete Sidewalk	33,130	SF	$15	$496,950	100%	$496,950						
5	Concrete Driveway	505	SF	$15	$7,575	100%	$7,575						
6	ADA Curb Ramp	104	Each	$3,500	$364,000	100%	$364,000						
7	Path Curb Ramp	8	Each	$6,000	$48,000	100%	$48,000						
8	Decorative Crosswalk Paving	11,170	SF	$13	$145,210	100%	$145,210						
9	Paver Treatment	29,250	SF	$18	$526,500	100%	$526,500						
10	Drainage Improvements	1	LS	$120,000	$120,000	100%	$120,000						
11	Roadway Section (3" AC/8" Class II AB)	10,100	SF	$8	$80,800	100%	$80,800						
12	Slurry Seal	37,000	SF	$2	$74,000	100%	$74,000						
13	Mountable Median Island	650	SF	$12	$7,800	100%	$7,800						
14	Grading	1	LS	$30,000	$30,000	100%	$30,000						
15	In Pavement Warning Lights Removal	1	Each	$500	$500	100%	$500						
16	Pedestrian Hybrid Beacon	3	Each	$80,000	$240,000	100%	$240,000						
17	Rectangular Rapid Flashing Beacon	5	Each	$30,000	$150,000	100%	$150,000						
18	Relocate Existing Sign and Post	3	Each	$400	$1,200	100%	$1,200						
19	Remove Existing Sign and Post	4	Each	$150	$600	100%	$600						
20	New Sign and Post	28	Each	$750	$21,000	100%	$21,000						
21	New Sign and Post (Wayfinding)	18	Each	$1,200	$21,600	100%	$21,600						
22	Remove Thermoplastic Striping and Markings	22	SF	$5.00	$110	100%	$110						
23	Detail 39 Bicycle Lane Line (Thermo)	6,350	LF	$1.50	$9,525	100%	$9,525						
24	Centerline	560	LF	$2.00	$1,120	100%	$1,120						
25	Detail 23 (Double Yellow w/ Markers)	480	LF	$4.50	$2,160	100%	$2,160						
26	Detail 24/25/27B (4" solid)	820	LF	$1.00	$820	100%	$820						
27	8" Channelization Line	75	LF	$4.80	$360	100%	$360						
28	12" Limit Line/Crosswalk Stripe	6,130	LF	$7.00	$42,910	100%	$42,910						
29	Paint Curb	880	LF	$3.00	$2,640	100%	$2,640						
30	Preformed Green Thermoplastic Panels	2,210	SF	$8.00	$17,680	100%	$17,680						
31	Thermo Pavement Legends	1,300	SF	$8.00	$10,400	100%	$10,400						
32	Bicycle Boulevard Legend @ 51 Sq Ft Each	64	Each	$408	$26,112	100%	$26,112						
33	Bicycle Lane Legend or Sharrow @ 14 Sq Ft each	32	Each	$112	$3,584	100%	$3,584						
34	Ladder Striped Crosswalk	860	LF	$442	$380,120	100%	$380,120						
35	New Light Poles	1	LS	$1,000,000	$1,000,000	100%	$1,000,000						
36	Landscaping and Irrigation	13,000	SF	$12	$156,000	100%	$156,000	100%	$156,000				
37	Bike Rack	2	Each	$200	$400	100%	$400						
38	Trash Can	4	Each	$1,500	$6,000	100%	$6,000						
39	Trees	6	Each	$800	$4,800	100%	$4,800						
40	Tree Grates	6	Each	$1,500	$9,000	100%	$9,000						
41	Benches	4	Each	$2,000	$8,000	100%	$8,000						
				Subtotal of Construction Items:	**$4,342,276**		**$4,342,276**		**$156,000**				
	Construction Item Contingencies (% of Construction Items): **Enter in the cell to the right**			**10.00%**	**$434,228**								
	Total (Construction Items & Contingencies) cost:				**$4,776,504**								

Engineer's Estimate (for Construction Items Only)

Note: Cost can apply to more than one category. Therefore may be over 100%.

Item No.	Item	Quantity	Units	Unit Cost	Total Item Cost	ATP Eligible Items %	ATP Eligible Items $	Landscaping %	Landscaping $	Non-Participating Items %	Non-Participating Items $	To be Constructed by Corps/CCC %	To be Constructed by Corps/CCC $

Project Cost Estimate:

Type of Project Delivery Cost	Cost $		
Preliminary Engineering (PE)			
Environmental Studies and Permits(PA&ED):	$ 450,000		
Plans, Specifications and Estimates (PS&E):	$ 725,000		
Total PE:	**$ 1,175,000**	**24.60%**	25% Max
Right of Way (RW)			
Right of Way Engineering:	$ -		
Acquisitions and Utilities:	$ -		
Total RW:	**$ -**		
Construction (CON)			
Construction Engineering (CE):	$ 500,000	**9.48%**	15% Max
Total Construction Items & Contingencies:	$4,776,504		
Total CON:	**$ 5,276,504**		
Total Project Cost Estimate:	**$ 6,451,504**		

BayArea Plan

Strategy for A Sustainable Region

Adopted July 18, 2013

Association of Bay Area Governments

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COVER IMAGE: Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS user community

Plan BayArea

Regional Transportation Plan and Sustainable Communities Strategy for the San Francisco Bay Area 2013–2040

Adopted July 18, 2013

Association of Bay Area Governments

METROPOLITAN TRANSPORTATION COMMISSION

Plan Bay Area's total capital investment of $30 billion in committed and discretionary revenues will be sufficient to fund all revenue vehicle replacements and 76 percent of fixed guideway and other high-priority needs, a substantial improvement over the 60 percent funded in the Transportation 2035 Plan. Chapter 6 outlines priorities for the region to cover the remaining capital needs, totaling $17 billion, to achieve our performance target.

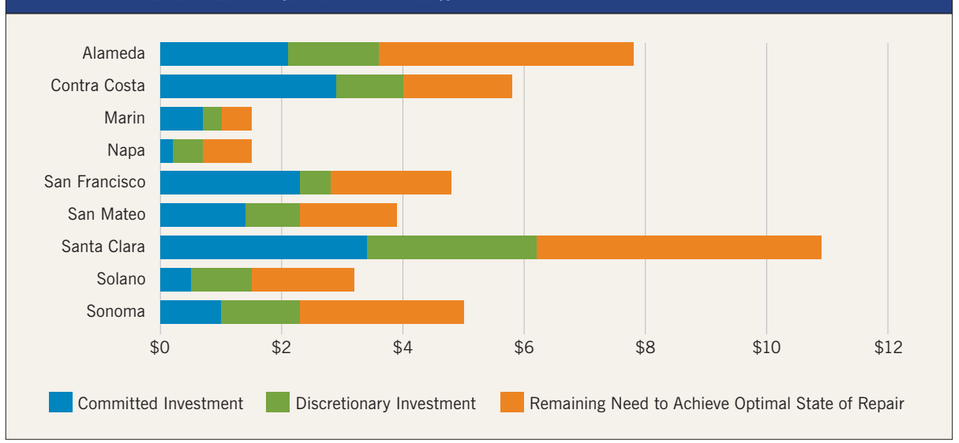
Investment in Local Streets and Roads

A critical component of the OneBayArea Grant (OBAG) investment strategy discussed later in this chapter is the investment of discretionary funds for the purpose of preserving the existing local street and road network. While congestion management agencies have the flexibility to spend their OBAG county shares on any eligible OBAG programs, Plan Bay Area provides sufficient funding within the program to reaffirm the commitment to maintain the region's pavement conditions at existing levels.

The 42,000 lane-miles of local streets and roads interconnect in a way that knits the region together, and they form the foundation of the region's transportation system. They are the conduits to the highways, ports and farmlands that are vital to the economic vitality and sustainability of the San Francisco Bay Area. All trips begin and end on a local street and road, and all modes of surface travel rely on the local street and road infrastructure. In addition to pavement, the local street and road system includes all of the safety and accessibility infrastructure that makes a functioning network possible — sidewalks, curbs and gutters, storm drains, signs and signals, and so forth.

The typical life cycle of a pavement is about 20 years. Over the first three-quarters of its life, the pavement will deteriorate slowly, resulting in a 40 percent drop in condition. Past that point, pavement will begin to deteriorate rapidly. It costs five to ten times more to rehabilitate or reconstruct a roadway that has been allowed to deteriorate, than it costs to maintain that roadway in good condition. Through the OneBayArea Grant program, Plan Bay Area invests $10 billion in discretionary funding to maintain the region's existing pavement condition, currently at a regional average of 66 on a pavement condition index (PCI) scale of 0 to 100. Even with an infusion of discretionary funds, sizable funding gaps remain in each county to bring pavement up to a state of good repair, as shown in Figure 19.

FIGURE 19: Local Streets and Roads Investments and Remaining Needs by County, 2013–2040 (in billions of YOE $)



Noah Berger

The total amount of funding needed for the Bay Area to achieve a PCI of 75 (the plan's adopted performance target, as discussed in Chapter 5) over the Plan Bay Area period is $45 billion. Committed revenues over the same period of time are expected to cover $15 billion, or about one-third of the need. Add in the $10 billion in discretionary funds, and the region still falls $20 billion short of the revenue needed to achieve the plan's performance target, with the biggest shortfalls occurring in the region's largest counties, as shown in Figure 19. Chapter 6 discusses ways to pursue the revenues that will allow the region to meet its targets for roadway preservation.

Funding Active Transportation

Plan Bay Area makes a significant commitment to increase the convenience and safety of walking and bicycling by delivering complete streets for all users. State Transportation Development Act (TDA) and local sales tax funds committed to bicycle and pedestrian improvements total $4.6 billion during the plan period. In addition, the OneBayArea Grant program discussed in the next section includes $14.6 billion over the life of the plan. These funds may be used for complete streets projects, including stand-alone bicycle and pedestrian paths, bicycle lanes, pedestrian bulb-outs, lighting, new sidewalks, and Safe Routes to Transit and Safe Routes to Schools projects that will improve bicycle and pedestrian safety and travel.

Investment in State Bridges

The bridges that span San Francisco Bay are critical transportation links for the region. It is vital to the economic health of the region and quality of life of its residents that these essential structures be kept in a state of good repair. Currently, existing toll revenues are used to strengthen, reinforce and maintain bridge structures and roadways on all of the seven state-owned Bay Area bridges; this includes replacing the eastern span of the San Francisco-Oakland Bay Bridge.

Plan Bay Area assumes a single one-dollar toll increase on all state-owned bridges, beginning in the year 2019. These new bridge tolls are considered a source of regional discretionary funds and total $2.7 billion over the course of the plan.

Due to the important role that our toll bridges play in the ability of the region's transportation network to function smoothly, Plan Bay Area assumes that approximately $1 billion, or about one third of the $2.7 billion in estimated new bridge toll funds, will be needed for additional maintenance or unforeseen repairs to the Bay Area's bridges.

Investment in State Highways

California's 50,000 lane-mile state highway system is an essential contributor to the state's economic vitality, linking people and goods with intermodal

> "MTC's new OneBayArea Grant program is an innovative way to use transportation funding to promote coordinated and environmentally responsible regional planning for jobs and housing. All Californians will benefit from such efforts to put SB 375's sustainability principles into practice."
>
> *— Senator Darrell Steinberg, President Pro Tempore, California Senate*

transportation facilities, growing metropolitan centers, and major international airports and ports. The value of this important transportation resource is reckoned at more than $300 billion. Of the total mileage, 6,500 lane-miles are within the nine-county Bay Area, giving residents a network of interstate, freeway, highway and arterial routes maintained and managed by Caltrans. These lane-miles carry more than one-third of our region's vehicle miles traveled.

State law requires Caltrans to prepare a 10-year plan for the State Highway Operation and Protection Program (SHOPP). The SHOPP identifies the various needs for all state-owned highways and bridges. Bay Area highway maintenance needs over the 28-year life of this plan are forecasted to total about $22 billion. Projected revenues over the same period are expected to cover only $14 billion. Plan Bay Area has not yet identified any new funding sources for the $8 billion in unfunded needs, despite its heavy emphasis on maintaining our current transportation system. The magnitude of the Bay Area's highway rehabilitation needs and lack of available funding suggests that maintenance will have to be delayed or deferred on some highways. New state funding, as discussed later in Chapter 6, will need to be secured in order to ensure the long-term health of today's system.

Investment Strategy 2
Support Focused Growth

To encourage more development near high-quality transit and reward jurisdictions that produce housing and jobs, Plan Bay Area proposes to target transportation investments in Priority Development Areas (PDAs), support planning efforts for transit-oriented development in PDAs, and support Priority Conservation Areas.

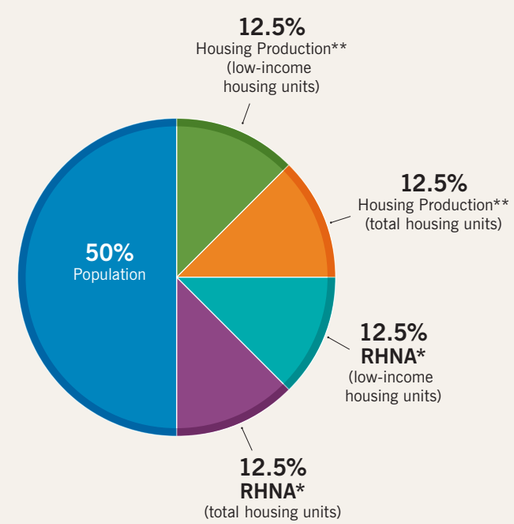
In May 2012, MTC approved a new funding approach that directs specific federal funds to support more focused growth in the Bay Area. The OneBayArea Grant (OBAG) program commits $320 million over the next four years ($14.6 billion over the life of the plan), from federal surface transportation legislation currently known as MAP-21 (Moving Ahead for Progress in the 21st Century). OBAG is designed to support jurisdictions that focus housing growth in Priority Development Areas through their planning and zoning policies, and the production of housing units. Specifically the program rewards jurisdictions that accept housing allocations through the Regional Housing Need Allocation (RHNA) process. The distribution of OBAG funds to counties is based on the following factors: population, past housing production and future housing commitments, and efforts to produce low-income housing.

Focus on Priority Development Areas

As outlined in Chapter 3, Priority Development Areas (PDAs) are transit-oriented, infill development opportunity areas within existing communities that are expected to host the majority of future development. The OBAG program allows communities flexibility to invest in transportation infrastructure that supports infill development by providing funding for bicycle and pedestrian improvements, local street repair, and planning activities, while also providing specific funding opportunities for Safe Routes to Schools projects and Priority Conservation Areas. By promoting transportation investments in PDAs, the OBAG program supports the Sustainable Communities Strategy for the Bay Area.

Per OBAG requirements, congestion management agencies (CMAs) will develop a PDA Investment and Growth Strategy for their respective counties; this will be used to guide future transportation investments that are supportive of PDA-focused development. The growth strategy also will consider strategies and plans to increase the production of affordable housing in PDAs, as well as ways to preserve existing affordable housing opportunities. The CMAs in larger counties (Alameda, Contra Costa, San Mateo, San Francisco and Santa Clara) must direct at least 70 percent of their OBAG investments to the PDAs. For North Bay counties (Marin, Napa, Solano and Sonoma) the requirement is 50 percent.

FIGURE 20: OneBayArea Grant Distribution Formula: FY 2012–13 through FY 2015–16



OBAG County Fund Distribution
(millions $, rounded)

County	Total Funds
Alameda	$63
Contra Costa	$45
Marin	$10
Napa	$6
San Francisco	$38
San Mateo	$26
Santa Clara	$88
Solano	$18
Sonoma	$23
Total	**$320**

*RHNA 2014–2022
**Housing Production Report 1996–2006, ABAG

The OneBayArea Grant distribution formula is based on the following factors: population, past housing production and future housing commitments. This includes weighting to acknowledge jurisdiction efforts to produce low-income housing. The county congestion management agencies (CMA) are responsible for local project solicitation, evaluation and selection.

Renee Goodard

A project lying outside the limits of a PDA may count toward the minimum provided that it directly connects to or provides proximate access to a PDA. A zoomable map of PDAs in the Bay Area is available at **http://geocommons.com/maps/141979**. The counties are expected to conduct an open decision process to justify projects that geographically fall outside of a PDA but are considered directly connected to (or provide proximate access to) a PDA.

To complement these locally administered funds, OBAG also directs additional funds to support the region's Priority Conservation Areas and Priority Development Areas. The first round of OBAG funding directs an additional $10 million to the Bay Area's Transit Oriented Affordable Housing (TOAH) Fund. These funds will see TOAH grow from a $50 million pool today to at least a $90 million pool by 2014. TOAH will help finance affordable housing projects in transit-rich locations and target neighborhood-stabilization investments, including housing acquisition and rehabilitation, small-site acquisition and land banking in the region's PDAs. OBAG also includes $30 million for the PDA Planning Program to assist cities and counties planning for employment and housing growth in their city centers and transit-served corridors. In addition, these funds will continue to facilitate the entitlement of affordable housing. Finally, the first round of OBAG commits $10 million to support the Priority Conservation Areas with funding for planning, farm-to-market projects, and to support strategic partnerships that seek to purchase conservation lands for long-term protection and use by Bay Area residents.

The OneBayArea Grant Program will provide a solid platform to advance Priority Development Areas as walkable, amenity-rich "complete communities," and to protect our Priority Conservation Areas for future generations. However, as outlined in Chapter 6, realizing the plan's full potential will require a concerted, collaborative effort on the part of federal and state agencies.

Performance and Accountability Policies

In addition to providing funding to support Priority Development Areas, OBAG requires each jurisdiction to adopt policies to support complete streets and planning and zoning policies that are adequate to provide housing at various income levels, as required by the Regional Housing Need Allocation (RHNA) process. These requirements must be met before a jurisdiction is eligible for OBAG funding:

- **Complete Streets Policy Resolution:** In addition to meeting MTC's 2005 complete streets requirements, a jurisdiction will now need to adopt a complete streets resolution. A jurisdiction can also meet this requirement by having a general plan that complies with the California Complete Streets Act of 2008. All jurisdictions seeking future rounds of OBAG funding will be required to have the updated general plan language adopted.
- **RHNA-Compliant General Plan:** A jurisdiction is required to have its general plan housing element adopted and certified by the State Department of Housing and Community Development (HCD) to be eligible for OBAG funding.

Investment Strategy 3 Build Next-Generation Transit

As discussed in Chapter 5, Plan Bay Area relied on a transportation Project Performance Assessment, which, together with public involvement, helped identify priorities for the next generation of transit investments. These include improvements to the region's core transit systems, new bus rapid transit lines in San Francisco and Oakland, rail extensions that support and rely on high levels of future housing and employment growth, and an early investment strategy for high-speed rail in the Peninsula corridor. MTC's Resolution 3434, a 2001 framework that identified regional priorities for transit expansion projects, has served the region well.

TABLE 19: MTC Resolution 3434 Project Status

Project	Project Cost* (in millions of YOE $)	Status
Caltrain Express: Baby Bullet	$128	Open for Service
Regional Express Bus	102	
BART to Warm Springs	890	In Construction
East Contra Costa BART Extension (eBART)	493	
Transbay Transit Center: Phase 1	1,589	
BART/Oakland Airport Connector	484	
Sonoma-Marin Rail Initial Operating Segment	360	
Expanded Ferry Service to South San Francisco (Berkeley, Alameda/ Oakland/Harbor Bay, Hercules and Richmond, and other improvements)	180	
MUNI Third Street Light Rail Transit Project – Central Subway	1,578	
BART: Warm Springs to Berryessa	2,330	
BART: Berryessa to San Jose/Santa Clara	3,962	Environmental Docs Approved
Transbay Transit Center/Caltrain Downtown Extension: Phase 2	2,596	
AC Transit Berkeley/Oakland/San Leandro Bus Rapid Transit	218	
Downtown to East Valley; Light Rail & Bus Rapid Transit Phases 1 & 2	559	
Caltrain Electrification	785	Environmental Docs in Process
Caltrain Express: Phase 2	427	
Van Ness Avenue Bus Rapid Transit	126	
Tri-Valley Transit Access Improvements to/from BART	168	
AC Transit Enhanced Bus: Grand-MacArthur corridor	41	
Dumbarton Rail	701	
ACE Right-of-Way Acquisition for Service Expansion	150	
Capitol Corridor: Phase 2 Enhancements	254	
Total	**$18,121**	

*Full project cost may not be included in Plan Bay Area.

Plan BayArea

Strategy for a Sustainable Region

July 2013

Sonoma
Napa
Solano
Marin
Contra Costa
Alameda
Santa Clara
San Mateo
Pacific Ocean
San Pablo Bay
San Francisco Bay
Vallejo
Fairfield
Vacaville
Napa
Petaluma
Novato
San Rafael
Richmond
Berkeley
Oakland
Alameda
San Francisco
Daly City
South San Francisco
San Mateo
Redwood City
Palo Alto
Mountain View
Sunnyvale
Santa Clara
San Leandro
Hayward
Fremont
Union City
Castro Valley
Concord
Walnut Creek
Danville
San Ramon
Pleasanton
Livermore
Pittsburg
Antioch
Crockett
Hercules
Rodeo
Emeryville
Sausalito
Belvedere
Tiburon
Mill Valley
Corte Madera
Larkspur
Fairfax
Woodacre
Lucas Valley
Ignacio
Sonoma
Santa Rosa
Petaluma
Cloverdale
Healdsburg
Windsor
Calistoga
St. Helena
Yountville
Rutherford
Oakville
Deer Park
Angwin
Pope Valley
Lake Berryessa
Davis
Suisun Bay
Grizzly Bay
Honker Bay
Tomales Bay
Drakes Bay
Bolinas
Stinson Beach
Muir Beach
Dillon Beach
Point Reyes Station
Inverness
Olema
Forest Knolls
Nicasio
Novato
Ignacio
Sausalito
Belvedere
Tiburon
Mill Valley
Corte Madera
Larkspur
Fairfax
San Anselmo
San Rafael
Kentfield
Greenbrae
San Quentin
Point Richmond
Pinole
Hercules
Rodeo
Crockett
Martinez
Pittsburg
Antioch
Concord
Walnut Creek
Lafayette
Orinda
Moraga
Danville
San Ramon
Dublin
Pleasanton
Livermore
Castro Valley
San Lorenzo
Hayward
Union City
Fremont
Newark
Alameda
Oakland
Emeryville
Piedmont
Berkeley
Albany
El Cerrito
Richmond
San Pablo
Pacifica
Montara
Moss Beach
El Granada
Half Moon Bay
San Carlos
Belmont
Redwood City
Menlo Park
Atherton
Woodside
Portola Valley
Los Altos Hills
Los Altos
Mountain View
Sunnyvale
Santa Clara
Milpitas
Campbell
Los Gatos
Saratoga
Cupertino
Monte Sereno
Los Gatos
Ben Lomond
Felton
Boulder Creek
Scotts Valley
Capitola
Soquel
Aptos
Rio Del Mar
Pescadero
Loma Mar
La Honda
Woodside
Portola Valley
Ladera
Menlo Park
Atherton
Redwood City
Belmont
San Carlos
Emerald Hills
Fair Oaks
Menlo Park
Stanford
Palo Alto
Los Altos
Los Altos Hills
Mountain View
Sunnyvale
Santa Clara
Milpitas
Alameda
Oakland
San Leandro
Hayward
Fremont
Union City
Newark
Pleasanton
Livermore
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Hercules
Rodeo
Martinez
Vallejo
Fairfield
Vacaville
Davis
Napa
Yountville
Rutherford
Oakville
Calistoga
St. Helena
Angwin
Pope Valley
Lake Berryessa
Deer Park
Santa Rosa
Sebastopol
Cloverdale
Healdsburg
Windsor
Sonoma
Petaluma
Novato
San Rafael
Richmond
Berkeley
Oakland
Alameda
San Francisco
Daly City
South San Francisco
San Mateo
Redwood City
Palo Alto
Mountain View
Sunnyvale
Santa Clara
San Leandro
Hayward
Fremont
Union City
Castro Valley
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Walnut Creek
Danville
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Councilmember Ash Kalra
City of San Jose

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William Kissinger
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Final List of Plan Bay Area Transportation Projects/Programs by County

July 17, 2013

**Amounts shown in millions of year of expenditure (YOE) dollars*

County	RTPID	Project	Total Cost	Committed Funding	Discretionary Funding
Contra Costa	21134	Construct enhancements of the San Pablo Rapid service, including real-time passenger information, queue jump lanes, buses and on-board equipment, and passenger amenities	$ 19	$ 13	$ 6
Contra Costa	21205	Improve I-680/Route 4 interchange (includes connecting northbound I-680 to westbound State Route 4, connecting eastbound State Route 4 to southbound I-680, and widening SR4 between Morello and SR242)	$ 205	$ 33	$ 172
Contra Costa	21206	Implement landscaping for Caldecott Tunnel 4th Bore	$ 2	$ 2	$ -
Contra Costa	21208	Implement improvements to Richmond Parkway Transit Center	$ 50	$ 29	$ 20
Contra Costa	21210	Construct Capitol Corridor train station in Hercules	$ 19	$ 19	$ -
Contra Costa	21211	Extend BART/East Contra Costa Rail (eBART) eastward from the Pittsburg/Bay Point BART station into eastern Contra Costa County	$ 493	$ 493	$ -
Contra Costa	21214	Widen Wilbur Avenue over Burlington Northern Santa Fe Railroad from 2 lanes to 4 lanes	$ 16	$ 16	$ -
Contra Costa	21225	Regional and local pedestrian and bicycle improvements, including overcrossing locations to be determined	$ 97	$ 57	$ 40
Contra Costa	22122	Provide ferry service from Richmond to San Francisco	$ 53	$ 1	$ 53
Contra Costa	22350	Improve I-680/Route 4 interchange Phases 4 and 5 (includes connecting soutbound I-680 to eastbound State Route 4, connecting westbound State Route 4 to northbound I-680, and constructing HOV flyover ramps from westbound State Route 4 to I-680 southbound from I-680 northbound to eastbound State Route 4)	$ 221	$ -	$ 221
Contra Costa	22351	Construct an HOV lane on I-680 nortbound between North Main Street and Route 242 (See Bay Area Region/Multi-County Project #240587)	$ 48	$ -	$ -
Contra Costa	22352	Construct Direct Access Ramps along I-680 in the vicinity of Norris Canyon Road	$ 102	$ 48	$ 54
Contra Costa	22353	Construct an HOV lane on I-680 southbound between North Main Street and Livorna (See Bay Area Region/Multi-County Project #240588)	$ 74	$ 54	$ 20
Contra Costa	22355	Modify I-80/Central Avenue interchange, includes connecting Pierce Street to San Mateo Street and relocating traffic signal to San Mateo/Central Avenue intersection	$ 25	$ 21	$ 4
Contra Costa	22360	Reconstruct I-80/San Pablo Dam Road interchange, includes relocating of westbound El Portal on-ramp to the full interchange northwards, providing access to McBryde Avenue through a new connector road from San Pablo Dam Road interchange, and replacing Riverside Avenue pedestrian overcrossing	$ 114	$ 30	$ 84
Contra Costa	22388	Construct on- and off-ramp for State Route 242 at Clayton Road	$ 35	$ 6	$ 29
Contra Costa	22390	Reonstruct State Route 4/Willow Pass Road ramps in Concord	$ 35	$ 26	$ 9
Contra Costa	22400	Conduct environmental and design studies to create a new alignment for SR239 and develop corridor improvements from Brentwood to Tracy - project development	$ 30	$ 14	$ 16
Contra Costa	22402	Implement the San Ramon School Bus Program, and continue the Lamorinda School Bus Program	$ 261	$ 261	$ -
Contra Costa	22602	Construct auxiliary lane on I-680 in both directions between Sycamore Valley Road in Danville to Crow Canyon Road in San Ramon	$ 34	$ 15	$ 20
Contra Costa	22604	Improve safety and operations of Vasco Road from Brentwood to Alameda County line - Phase 2 (includes potential realignment)	$ 61	$ -	$ 61
Contra Costa	22607	Widen and extend major streets, and improve interchanges in east Contra Costa County	$ 45	$ 45	$ -
Contra Costa	22609	Widen and extend major streets, and improve interchanges in central Contra Costa County	$ 39	$ 39	$ -

TABLE 1: EXISTING BICYCLE ACTIVITY BASED ON 2015 COUNT DATA

	Step 1: 2015 Count Data of Yellow Brick Road Project Sites		
Yellow Brick Road Segment	**Location**	**Peak Hour Bicycle Trips**	**Notes/Sources**
Elm to Peres	7th Street and Ripley Avenue	4	[1]
	4th Street and Pennsylvania Avenue	11	
	5th Street and Pennsylvania Avenue	38	
8th Street	8th Street and Barrett Avenue	29	[1]
	8th Street and Nevin Avenue	38	[1]
	Lincoln Elementary School (comparable to future Gompers High School site on 8th Street)	57	
Richmond Greenway	Harbour Way and Richmond Greenway	112	[1]
Total Observed Bikes Benefitting from Yellow Brick Road in PM Peak Period		**289**	

Step 2: Calculate Daily Extrapolation	**Low Range [6]**	**High Range [4]**	**Average**	
Total daily bicycle trips (2015)	2,168	5,058	3,613	[4]
Total daily bicyclists (2015)	1,355	3,161	2,258	[2]

Step 3: Calculate Bike Trips by Purpose	**Low Range [6]**	**High Range [4]**	**Average**	
Daily School Bike Trips (2015)	22	51	36	[5]
Daily Commute Bike Trips (2015)	238	556	397	[3]
Daily Recreational Bike Trips (2015)	715	1,669	1,192	[3]

[1] Peak hour data based on counts conducted oat locations 5/12/15 - 5/18/15 during the afternoon Peak period (2:00 to 4:00 PM) at the intersections listed.

[2] Dill, J. and Gliebe, J. (2008) "Understanding and Measuring Bicycling Behavior: A focus on travel time and route choice." OTREC Final Report, OTREC-RR-08-03.

[3] Defaults from ATP application.

[4] Daily extrapolation factor method sourced from observed ADT bike counts a similar East Bay city in 2014. Ratio of bike ADT to either AM and afternoon peak hour bike counts was observed to be approximately 17.5

[5] McDonald, N.C., et. Al. (2011). "US School Travel, 2009. An Assessment of Trends." American Journal of Preventative Medicine. 41 (2): 146-151.

[6] Because counts were conducted for a mix of peak hour and peak period, counts are adjusted to reflect just the peak hour for the purposes of comparable data. The NBPD assumes a two-hour peak period for extrapolation to ADT. However, as no better information is available on extrapolating peak hour (other than the bike ADT from an neighboring communit described in [4]), a "lower" estimate was establish using the NBPD adjustments factors. This would likely underestimate bike ADT for the Iron Triangle, as only peak hour volume inputs were used.

[5] Daily extrapolation factor method sourced from National Bicycle and Pedestrian Documentaiton Project Extrapolation Workbook based on time of year, district type, and climate zone http://bikepeddocumentation.org/downloads/

	Factors	Notes/Sources
5%	ABAG Population Growth Rate 2010 - 2015	input into 2
17.5	Peak Period to ADT Growth Factor (2014 Bike ADT counts)	[4]
1.0%	Annual ABAG Population Growth Rate	[2]
11%	Commute trips	[3]
33%	Recreational trips	[3]
1%	K-12 Bike Trips	[5]
1.05	NBPD Peak Period Multiplier	[6]
0.14	Peak Period to Daily Extrapolation Factor from NBPD	[6]

TABLE 2: EXISTING PEDESTRIAN ACTIVITY BASED ON 2015 COUNTS

Step 1: 2015 Count Data (Peak Period) in Iron Triangle			
Segment	**Location**	**PM Bicycle Trips**	**Notes/Sources**
	7th Street and Ripley Avenue	31	[1]
	4th Street and Pennsylvania Avenue	1,390	[1]
Elm to Peres	5th Street and Pennsylvania Avenue	680	[1]
	8th Street and Barrett Avenue	98	[1]
	8th Street and Nevin Avenue	370	[1]
8th Street	Lincoln Elementary School (comparable to future Gompers High School site on 8th Street)	1,008	[1]
Richmond Greenway	Harbour Way and Richmond Greenway	270	[1]
Total Existing Pedestrian on Yellow Brick Road (PM Peak Period)		3,847	[1]

Step 2: Calculate Daily Pedestrian Trips in Iron Triangle		
Total daily ped trips (2015)	28,853	[5]
Total daily peds (2015)	18,033	[3]

Step 3: Calculate Current Pedestrian Trip Types		
Daily Ped Trips (2015)	28,853	[5]
Daily Commute Ped Trips (2015)	3,174	[4]
Daily School Ped Trips (2015)	2,597	[6]
Daily Recreational Ped Trips (2015)	9,521	[4]

[1] Peak hour data based on counts conducted oat locations 5/12/15 - 5/18/15 during the afternoon Peak period (2:00 to 4:00 PM) at the intersections listed.

[2] ABAG, *Plan Bay Area, 2014* <http://planbayarea.org/plan-bay-area.html>

[3] The same average number of trips has been applied to pedestrians as well as bicyclists: Dill, J. and Gliebe, J. (2008) "Understanding and Measuring Bicycling Behavior: A focus on travel time and route choice." OTREC Final Report, OTREC-RR-08-03.

[4] Default trip purpose splits from ATP instructions.

[5] Daily extrapolation factor method sourced from National Bicycle and Pedestrian Documentaiton Project Extrapolation Workbook based on time of year, district type, and climate zone http://bikepeddocumentation.org/downloads/

[6] McDonald, N.C., et. Al. (2011). "US School Travel, 2009. An Assessment of Trends." American Journal of Preventative Medicine. 41 (2): 146-151.

	Factors	Notes/Sources
4.9%	ABAG Population Growth Rate 2010 - 2015	input into 2
0.14	Peak Period to Daily Extrapolation Factor from NBPD	[5]
1.05	Two-Hour Peak Period Multiplier from NBPD	[5]
1.0%	Annual ABAG Population Growth Rate	[2]
11%	Commute trips	[3]
33%	Recreational trips	[4]
9%	School trips	[6]

TABLE 3: 2020 BICYCLE TRIPS NO PROJECT

Daily Bicycle Trips No Project	Low	High	Average	
Total daily bicyclists (2015)	1,355	3,161	2,258	
Factored by ABAG growth rate	1,421	3,316	2,369	[1]
Total daily bike trips 2020 No Proj	**2,274**	**5,306**	**3,790**	[2]

[1] ABAG Population Growth Estimates

[2] Dill, J. and Gliebe, J. (2008) "Understanding and Measuring Bicycling Behavior: A focus on travel time and route choice." OTREC Final Report, OTREC-RR-08-03.

Inputs			Source
ABAG	**2015**	**2020**	**Growth**
Alameda County Total Pop Growth 2015 to 2020	1,626,100	1,705,900	4.9% [1]

TABLE 4: 2020 BICYCLE TRIPS PLUS YELLOW BRICK ROAD PROJECT

Daily Bicycle Trips plus Project	Low	High	Average	
Total daily bike trips 2020 No Proj	2,274	5,306	3,790	
Factored by Network Buildout Effect	6,344	14,803	10,573	[1]
Daily bike trips added by project	4,070	9,497	6,784	

Factors	
279%	Network Buildout Effect
11%	Commute trips
33%	Recreational trips
1%	School trips

Trip Types	Low	High	Average
Daily Bike Trips	4,070	9,497	6,784
Daily Commute Bike Trips	448	1,045	746
Daily Recreational Bike Trips	1,343	3,134	2,239
Daily School Bike Trips	41	95	68

[1] Build-out factor of 279% applied, from LA County Metropolitan Transportation Authority (2006). This is an average rate based on studies in City of Portland, San Francisco, and Seattle. "Bicycle Transportation Account Compliance Study." http://ebb.metro.net/projects_studies/bikeway_planning/images/BTA.pdf

[2] Factored up to 2020 by 4.9% ABAG growth projection

TABLE 3: 2020 PEDESTRIAN TRIPS NO PROJECT

Daily Pedestrian Trips No Project		
Total daily peds (2015)	18,033	
Factored by ABAG growth rate	18,918	[1]
Total daily ped trips 2020 No Proj	**30,269**	[2]

[1] ABAG, *Plan Bay Area, 2014* <http://planbayarea.org/plan-bay-area.html>
[2] The same average number of trips has been applied to pedestrians as well as bicyclists: Dill, J. and Gliebe, J. (2008) "Understanding and Measuring Bicycling Behavior: A focus on travel time and route choice." OTREC Final Report, OTREC-RR-08-03.

	Inputs			Source
ABAG	**2015**	**2020**	**Growth**	
Alameda County Total Pop Growth				
2015 to 2020	1,626,100	1,705,900	4.9%	[1]

TABLE 4: 2020 PEDESTRIAN TRIPS PLUS YELLOW BRICK ROAD

Daily Pedestrian Trips Plus Yellow Brick Road		
Total daily ped trips 2020 without Yellow Brick Road	30,269	
Factored by 15% Population Growth Rate	34,809	[1]
Daily Pedestrian Trips Added by Yellow Brick Road	4,540	

Trip Types	
Daily Ped Trips	4,540
Daily Commute Ped Trips	2,497
Daily Recreational Ped Trips	1,498

Factors

15%	Growth Rate	[1]
33%	Recreational trips	
11%	Commuter trips	

[1] Unlike the bicycling estimates, pedestrian improvements may or may not influence the rate of people who choose to walk; therefore a conservative estimate of future pedestrian activity was assumed to be 10%. This was added to a 5% assumption of existing latent demand for walking in the neighborhood due to safety and personal security concerns that would likely generate new walking trips.

RICHMOND'S YELLOW BRICK ROAD PROJECT - SCHOOL DATA

SCHOOL NAME	SCHOOL ADDRESS	DISTRICT NAME	DISTRICT ADDRESS	DISTRICT SCHOOL CODE	SCHOOL TYPE	TOTAL STUDENT ENROLLMENT	% OF STUDENTS WHO WALK OR BIKE TO SCHOOL	APPROXIMATE NUMBER OF STUDENTS WHO LIVE ALONG PROPOSED ROUTE	% OF STUDENTS ELIGIBLE FOR FREE OR REDUCED MEAL	CONTACT	PHONE	E-MAIL
Peres Elementary School	719 - 5th Street Richmond, CA 94801	West Contra Costa Unified School District	1108 Bissell Avenue, Richmond, CA 94801	07-61796-6004907	K-6	534	45%	120	99.40%	Jawan Eldridge	510-231-1407	jeldridge@wccusd.net
Lincoln Elementary School	29 - 6th Street Richmond, CA 94801	West Contra Costa Unified School District	1109 Bissell Avenue, Richmond, CA 94801	07-61796-6004832	K-6	465	52%	363	97.60%	Cynthia White-Vinson	510-231-1404	CWhiteVinson@wccusd.net
Gompers Continuation High School	715 Chanslor Avenue Richmond, 94801	West Contra Costa Unified School District	1110 Bissell Avenue, Richmond, CA 94801	07-61796-0733253	High School	261	42%	78	68.20%	Vince Rhea	510-231-1402	VRhea@wccusd.net
Leadership Public School	8th and Bissell Richmond, CA 94801	West Contra Costa Unified School District	1111 Bissell Avenue, Richmond, CA 94801	07 61796 0101477	High School	480	42%	120	94.80%	Shawn Benjamin	510-235-4522	sbenjamin@leadps.org

ASSUMPTIONS - Number of students who walk or bike to school

Peres - Conta Costa Health Service 2014 STRS survey determined that roughly 50% of students walked to school; Pogo Park''s May 2105 bike and ped counts estimated that 40% of children walk or bike to school. Based on these two assumptions, we assume here that 45% of current students walk or bike to school

Lincoln - Conta Costa Health Service 2014 STRS survey determined that roughly 58% of students walked to school; Pogo Park's May 2105 bike and ped counts determined that roughly 50% of children walk or bike to school. Based on these two assumptions, we assume here that 52% of students walk or bike to school

Gompers - Pogo Park's May 2105 bike and ped counts determined that roughly 58% of children walk or bike to Lincoln Elementary school, two blocks from Gompers High School. Using counts from Lincoln and observing high school students using the Richmond Greenway and Harbour Way as major routes to get to Gompers, we assume 42% of students walk or bike to school.

Leadership - Pogo Park's May 2105 bike and ped counts determined that roughly 58% of children walk or bike to Lincoln Elementary school, two blocks from Leadership High School. Using counts from Lincoln and observing high school students using the Richmond Greenway and Harbour Way as major routes to get to Leadership, assume 42% of students walk or bike to school.

ASSUMPTIONS - Number of students who live upon proposed route

Peres - With a few exceptions, virtally every child attending Peres Elementary School lives in the two US Census tracks that make up Richmond's Iron Triangle neighborhood. As the Yellow Brick Road route lies no farther than .5 mile of the boundaries of the neighborhood, we assume that all 3,205 school-age children and youth, ages 5-19 (2010 US Census), "live" upon the proposed YBR route. For the purpose of determining number of students from Peres who live along the YBR route, we assume 98%.

Lincoln - Children attending Lincoln Elementary School live in the two US Census tracks that make up Richmond's Iron Triangle neighborhood as well as the Santa Fe neighborhood in Richmond, just south of the school. As the Yellow Brick Road route lies no farther than .5 mile of the boundaries of the neighborhood, we assume that all 3,205 school-age children and youth, ages 5-19 (2010 US Census), "live" upon the proposed YBR route. For the purpose of determining number of students from Lincoln who live along the YBR route, we assume 78%.

Gompers - Students attending Gompers Continuation School come from different parts of Richmond. In a conversation with administrative staff at Gompers, it is estimated that 30% of students live in the Iron Triangle neighborhood and live no farther than .5 miles from the YBR route.

Leadership - Students attending Leadership Public High School come from different parts of Richmond. In a conversation with administrative staff at Leadership it is estimated that 25% of students live in the Iron Triangle neighborhood and live no farther than .5 miles from the YBR route.

The Yellow Brick Road in Richmond's Iron Triangle
Pedestrian and Bicycle Counts

Date	Time	Location	Pedestrians North	Pedestrians South	Pedestrians East	Pedestrians West	Total Peds	Bicyclists North	Bicyclists South	Bicyclists East	Bicyclists West	Total Bikes
5/14/15	2:00-2:15	**7th and Ripley**	4	5	0	0		1	1	0	0	
	2:15-2:30		0	2	0	0		0	3	0	0	
	2:30-2:45		0	0	0	0		0	0	0	0	
	2:45-3:00		0	3	3	0		0	0	0	0	
	3:00-3:15		0	1	3	3		0	0	0	0	
	3:15-3:30		0	1	3	2		0	0	0	0	
	3:30-3:45		0	1	0	0		0	0	0	0	
	3:45-4:00		0	0	0	0		0	0	0	0	
		Totals:	**4**	**13**	**9**	**5**	**31**	**1**	**4**	**0**	**0**	**5**

Date	Time	Location	Pedestrians North	Pedestrians South	Pedestrians East	Pedestrians West		Bicyclists North	Bicyclists South	Bicyclists East	Bicyclists West	
5/12/15	1:00-1:15	**8th and Barrett**	4	11	13	9		1	1	3	2	
	1:15-1:30		0	1	1	0		6	0	3	9	
	1:30-1:45		0	6	1	9		0	2	0	0	
	1:45-2:00		9	0	0	0		0	2	1	0	
	2:00-2:15		0	5	2	6		1	0	0	1	
	2:15-2:30		2	0	2	4		0	0	1	1	
	2:30-2:45		0	4	2	7		0	4	0	8	
	2:45-3:00		0	0	0	0		0	0	3	10	
		Totals:	**15**	**27**	**21**	**35**	**98**	**8**	**9**	**11**	**31**	**59**

Date	Time	Location	Pedestrians North	Pedestrians South	Pedestrians East	Pedestrians West		Bicyclists North	Bicyclists South	Bicyclists East	Bicyclists West	
5/12/15	1:00-1:15	**8th and Nevin**	16	25	45	23		4	2	3	4	
	1:15-1:30		0	0	4	3		1	0	1	1	
	1:30-1:45		0	0	0	3		0	0	0	0	
	1:45-2:00		0	0	3	0		0	0	0	0	
	2:00-2:15		0	0	5	4		1	1	1	0	
	2:15-2:30		6	12	20	14		2	8	0	0	
	2:30-2:45		9	13	15	10		0	3	2	13	
	2:45-3:00		20	21	42	57		2	0	0	5	
		Totals:	**51**	**71**	**134**	**114**	**370**	**10**	**14**	**7**	**23**	**54**

Date	Time	Location	Pedestrians North	Pedestrians South	Pedestrians East	Pedestrians West		Bicyclists North	Bicyclists South	Bicyclists East	Bicyclists West	
5/14/15	7:00-7:15	**Harbour & Greenway**	8	11	2	10		4	0	0	1	
	7:15-7:30		0	0	0	0		0	0	0	0	
	7:30-7:45		0	0	0	0		0	0	2	0	
	7:45-8:00		0	8	2	14		0	0	0	12	
	8:00-8:15		15	48	11	24		6	12	11	4	
	8:15-8:30		13	25	11	2		7	11	6	3	
	8:30-8:45		11	14	10	0		10	10	5	2	
	8:45-9:00		10	10	10	1		10	10	5	0	
		Totals:	**57**	**116**	**46**	**51**	**270**	**37**	**43**	**29**	**22**	**131**

Date	Time	Location	Pedestrians North	Pedestrians South	Pedestrians East	Pedestrians West		Bicyclists North	Bicyclists South	Bicyclists East	Bicyclists West	
5/11/15	7:30-7:45	**Lincoln Elementary**	13	47	10	6		2	6	2	6	
	7:45-8:00		19	89	11	2		7	1	0	2	
	8:00-8:15		82	142	28	18		3	5	4	2	
	8:15-8:30		66	362	85	28		2	2	7	6	
		Totals:	**180**	**640**	**134**	**54**	**1008**	**14**	**14**	**13**	**16**	**57**

Date	Time	Location	Pedestrians North	Pedestrians South	Pedestrians East	Pedestrians West		Bicyclists North	Bicyclists South	Bicyclists East	Bicyclists West	
5/18/15	7:00-7:30	**Peres - 4th + Penn**	3	0	8	1		1	0	0	0	
	7:30-8:00		48	14	12	7		2	0	2	0	
	8:00-8:30		189	100	147	84		0	0	0	1	
	8:30-9:00		209	208	185	175		2	0	1	2	
		Totals:	**449**	**322**	**352**	**267**	**1390**	**5**	**0**	**3**	**3**	**11**

Date	Time	Location	Pedestrians North	Pedestrians South	Pedestrians East	Pedestrians West		Bicyclists North	Bicyclists South	Bicyclists East	Bicyclists West	
5/18/15	7:00-7:30	**Peres - 5th + Penn**	7	3	7	6		0	0	0	0	
	7:30-8:00		82	13	11	8		2	0	1	4	
	8:00-8:30		48	33	29	15		2	2	2	1	
	8:30-9:00		142	111	72	93		10	1	5	8	
		Totals:	**279**	**160**	**119**	**122**	**680**	**14**	**3**	**8**	**13**	**38**
		Site Total:					**3847**					**355**

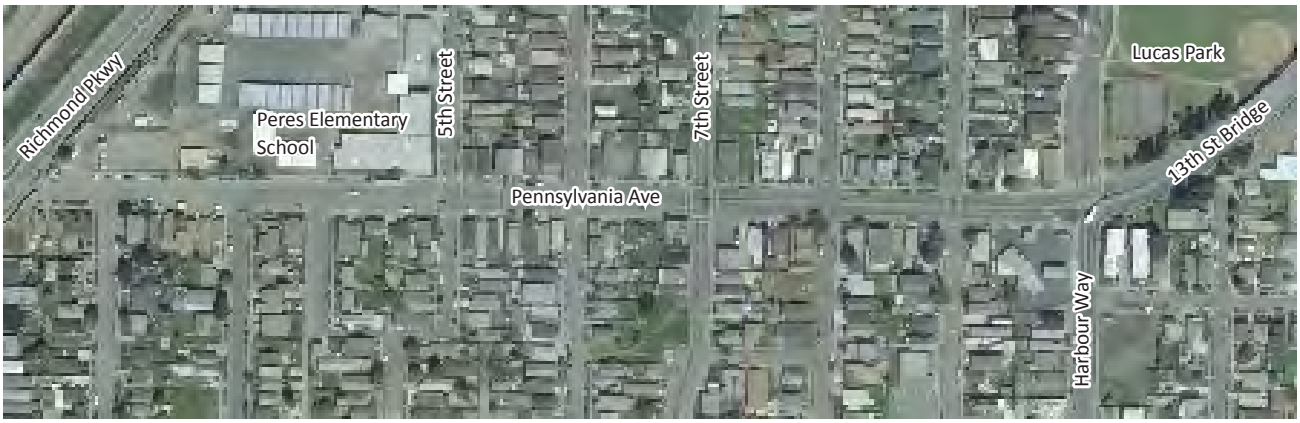
Local Streets

Participants at the May workshops reported unsafe speed, careless driving, and failure to yield to pedestrians are common occurrences on local residential streets. The pages that follow show proposed improvements at sample locations developed with community input from the pedestrian plan workshops. The recommendations coincide with suggested treatments for "Neighborhood Routes" as defined in the Bicycle Master Plan, which proposes a system of Neighborhood Routes along residential streets with lighter, slower moving traffic and access to local destinations such as schools and parks. These routes are relatively narrow and generally lack the space for continuous bicycle lanes. But they are appropriate for shared use of the travel way given the low volumes of traffic, as long as drivers maintain appropriate speeds.

Treatments to consider on local streets to increase pedestrian comfort and safety include:

- Traffic calming to produce uniform consistent vehicle speeds and reduce the need for stop signs at intersections. Requiring vehicles to stop frequently has the side effect of increasing exhaust emissions and noise. A vehicle traveling at a uniform speed produces less noise and air pollution than one which must brake to a stop and then accelerate to its original speed.
- On residential neighborhood streets where volumes are low, conversion of stop-controlled intersections to yield intersections through installation of traffic calming circles in the middle of the intersection. This technique has been used in other cities and has been shown to lower speeds and reduce crashes on residential streets. Where mini-circles are not possible (e.g., due to traffic volumes or emergency responder access needs), develop a planned pattern of alternating two-way stop signs, so that motorists travel two blocks between stops and each intersection has two stop signs..
- Roundabouts.
- Curb extensions.
- Traffic control at intersections with busy cross streets.
- High-visibility crosswalks.
- Landscaping.
- Signage and Wayfinding.

Many of these treatments are described in the previous chapter on overall recommendations. Refer also to the Design Guidelines chapter of the Bicycle Master Plan for additional bicycle-specific design details.



Pennsylvania Avenue - Peres Elementary School

Located in the northern end of the Historic Triangle neighborhood, Pennsylvania Avenue, from Harbour Way to Richmond Parkway (where it dead ends) is an example of a former arterial street that now functions as a local neighborhood street. It is very wide and has ample space that can be rededicated to create safe pedestrian and bicycle access to Peres Elementary School and the surrounding neighborhood.

Summary of Issues

- Peres Elementary School.
- Road is 4 lanes, promotes unsafe speed, enables reckless driving, and creates hazardous crossings.
- The road no longer provides through traffic to Garrard Boulevard/Richmond Parkway.
- Provides a connection to trail spurs that link to the Bay Trail system along the Richmond Parkway and North Richmond.

Proposed Improvements

Short Term:

- Re-stripe to two lanes with bike lanes, parallel parking, and angled parking in front of Peres School. Consider pilot area back-in angled parking for use in conjunction with bike lanes.
- Widen sidewalk and create formal pickup and dropoff area in front of school.

Mid Term:

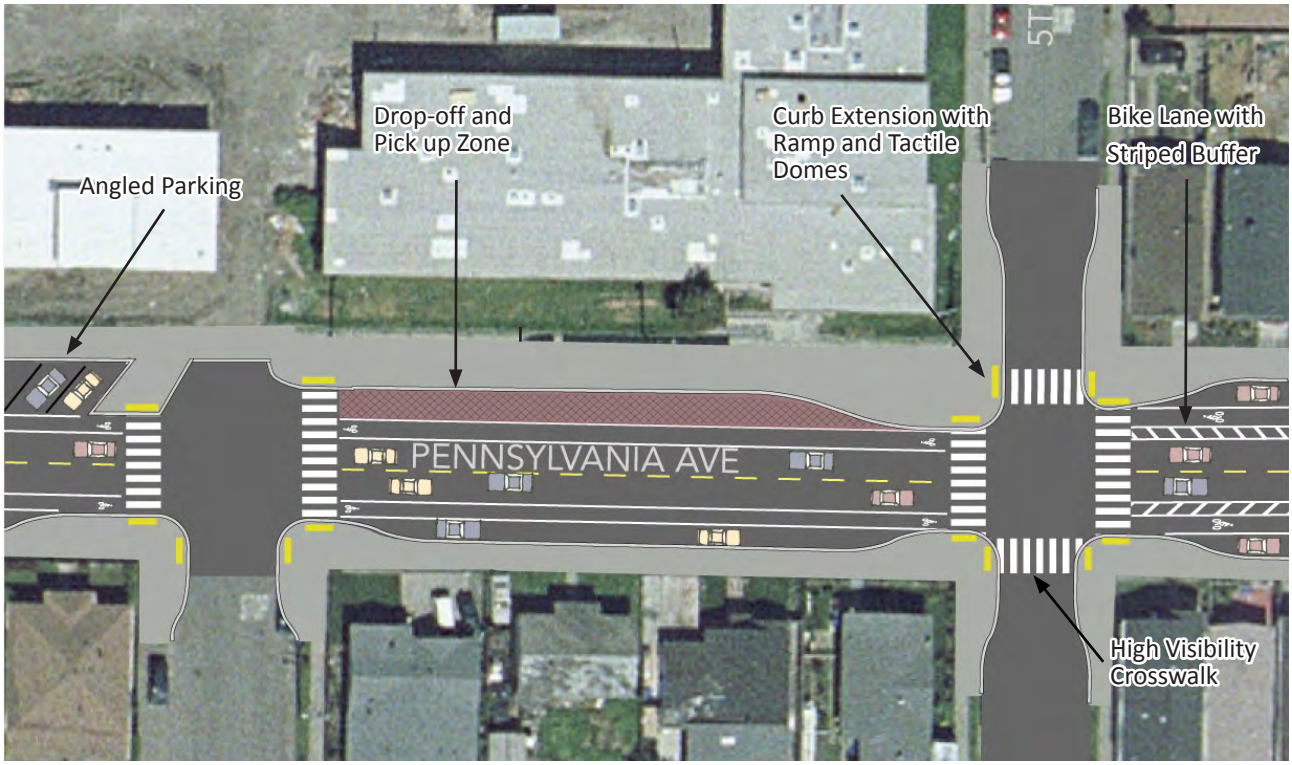
- East of 5th to 13th Street Bridge, stripe 7 foot parallel parking lanes, 7 foot bike lanes with 6 foot buffers, and 10 foot travel lanes.

Long Term:

- Consider conversion of portions east of 5th Street to angled parking on one side with a wider sidewalk to support higher intensity mixed-use infill development.

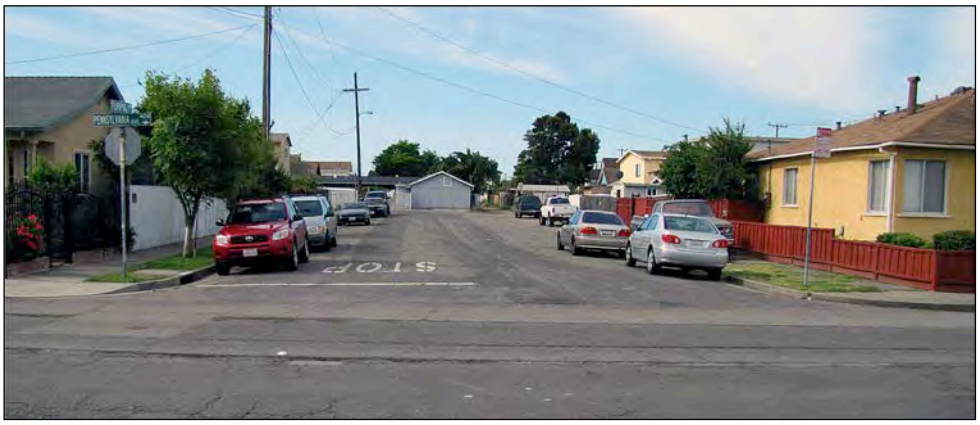
Pennsylvania Avenue Improvements - Peres School

Aerial view of Pennsylvania Avenue near Peres School as it exists today. The curb to curb road width is 62 feet.



Reducing Pennsylvania Avenue from four lanes to two lanes provides space for a wider sidewalk in front of the school, bicycle lanes that can connect to the Bay Trail system where the street terminates at the Richmond Parkway to the west, a safe drop off and pick up area in front of the school, and curb extensions for traffic calming and safer crossings.

Pennsylvania Avenue and Turpin Street — Before

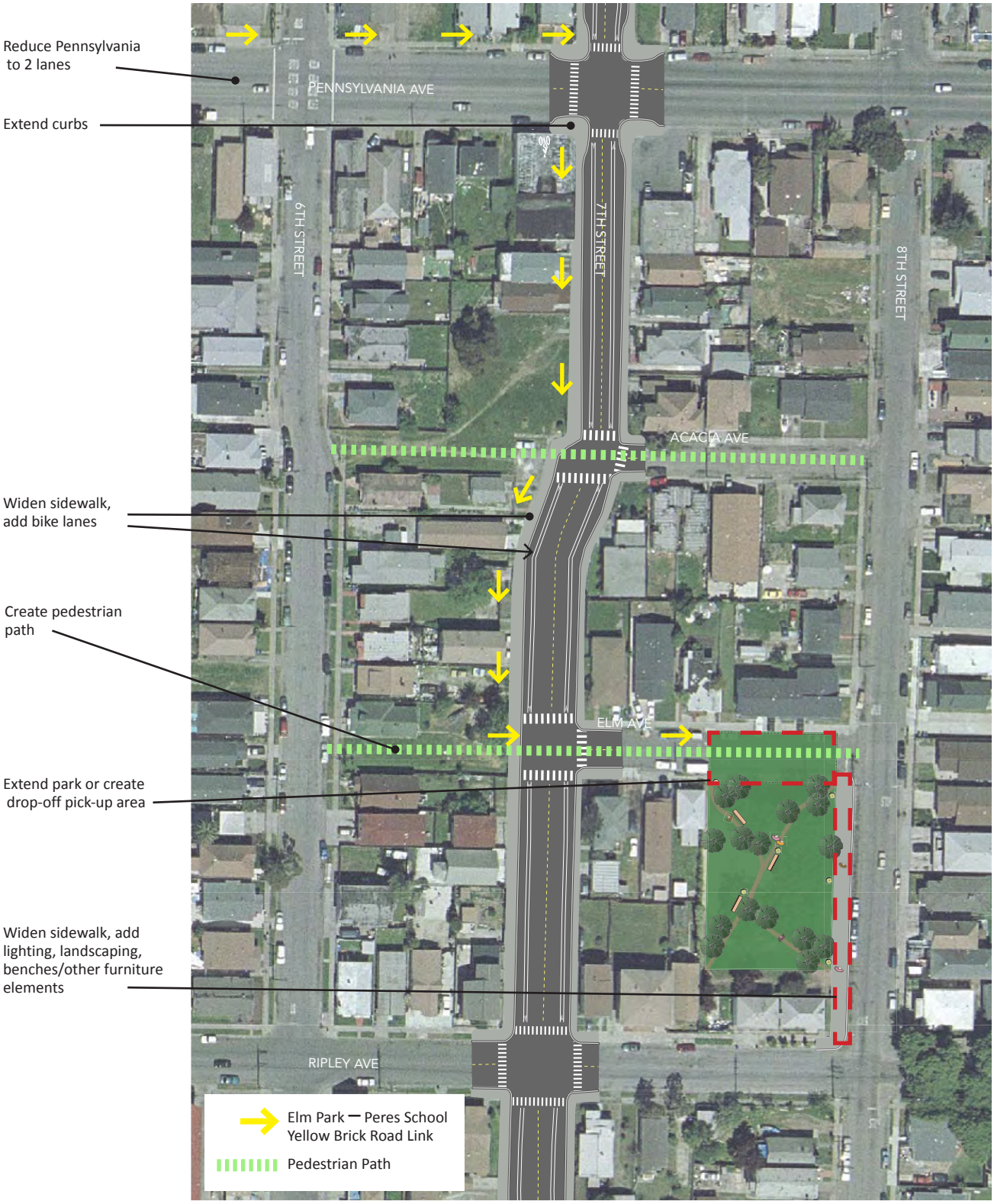


Crossing Improvements — After

The photo simulation shows the addition of curb extensions at the intersection of Pennsylvania Avenue and Turpin Street in front of Peres Elementary School, narrowing the travelway to encourage cautious motor speeds, shortening the crossing for school children, and adding space for street lamps and benches where pedestrians can rest and add surveillance to neighborhood surroundings.

Connecting Assets in the Historic Triangle: The Yellow Brick Road and Elm Park. With the assistance of the nonprofit organization, Opportunity West, a youth group from the Iron Triangle neighborhood conceived the idea of a "Yellow Brick Road" that would deploy thematic symbols on roads and sidewalks to designate safe walking routes and connect key community assets. An additional grass roots effort spearheaded by the local nonprofit organization Pogo Park has generated ambitious plans to transform Elm Playlot, located two blocks south of Pennsylvania Avenue, into a safe and vital public space that can serve as a model for other city parks in under-served Richmond neighborhoods. The concept on the following page illustrates improvements that build upon and reinforce these efforts.

7th Street and Elm Park Improvements



The intersection of Pennsylvania and Harbour Way produces fast -turning traffic and risky crossing conditions for pedestrians. The bridge carries four lanes of traffic that must be distributed onto two-lane roadways in the southbound and northbound direction. Channelized islands can be added to simplify crossings and reduce pedestrian exposure to traffic.

Pennsylvania Avenue and Harbour Way/13th Street Overpass

Several blocks east of Peres Elementary School, Pennsylvania Avenue terminates at the junction of Harbour Way, 10th Street and 13th Street overpass over the Union Pacific railroad, forming a wide intersection with numerous barriers for pedestrians and bicyclists. Both the intersection and the bridge can be improved to create a positive gateway into the Historic Triangle neighborhood and link to neighborhoods northeast of the railroad tracks.

Summary of Issues

- Bridge is a principal connection across railroad tracks and direct link between Belding Woods and Iron Triangle neighborhoods.
- Bridge is 4 lanes and steep with narrow shared sidewalk on only one side.
- Intersection with Harbour Way is wide, with poor site lines, especially at the southeast corner.
- Median on west side blocks the crosswalk.

Proposed Improvements

Short Term:

- Improved crosswalks, median, channelized islands and advance stop bars at Pennsylvania and Harbour Way.
- Crosswalk and ramps on southbound entry on north end of the bridge.

Mid to Long Term:

- Close right-hand turn lane on 10th Street and extend curb on northwest corner.

Long Term:

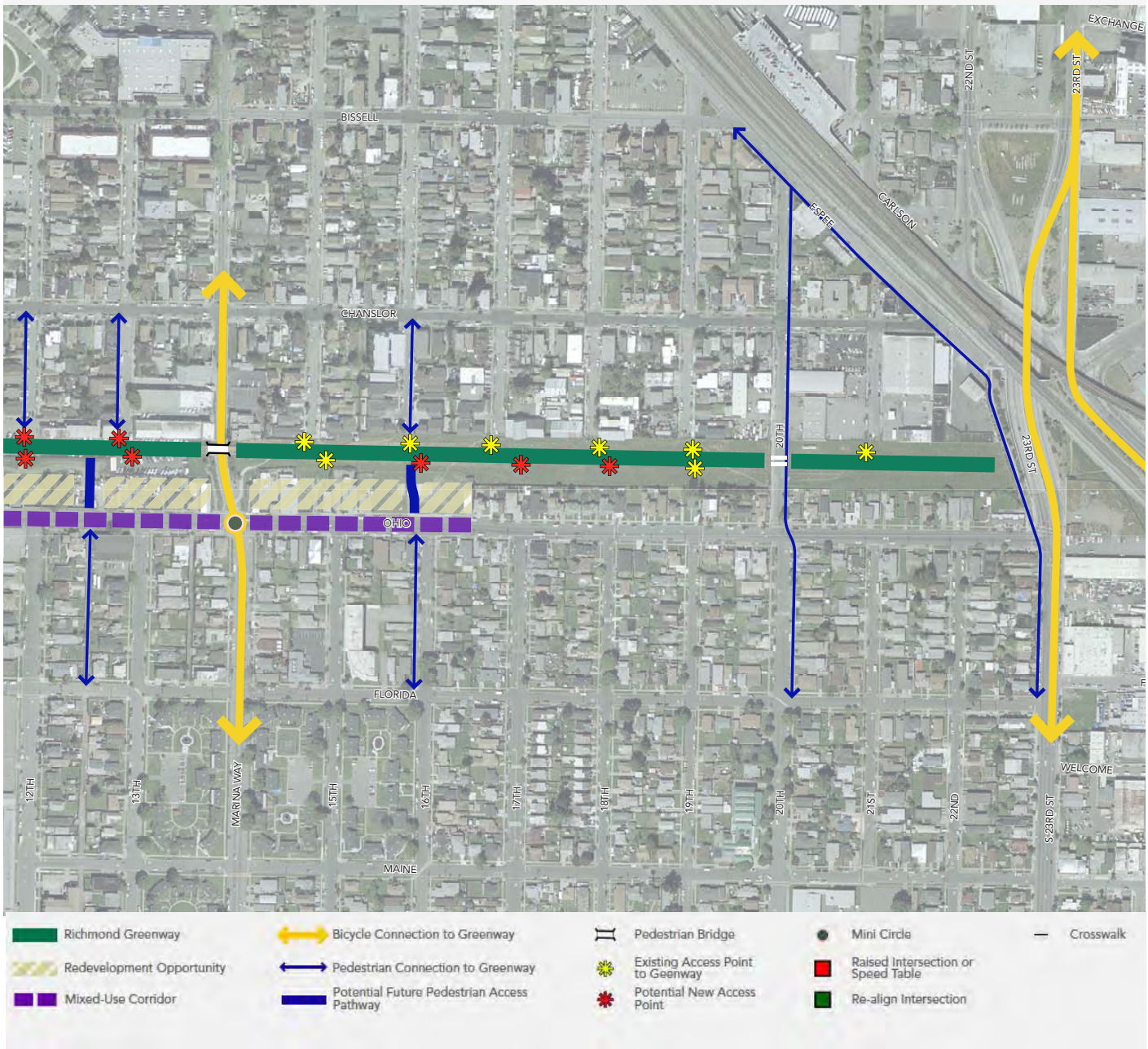
- Reduce number of lanes on bridge from 4 to 2, provide median-separated two-way bike path on northwest side of the bridge, and a median-separated 6' sidewalk on the northwest side of the bridge.
- Consider roundabout at intersection with Harbour Way/Pennsylvania.

Richmond Greenway Access: First Street to 11th Street

The diagram above and on the pages that follow depict an overall strategy to activate the area around the greenway and create more entry and exit opportunities for access, convenience, ownership, security and integration into the fabric of the surrounding neighborhoods.

Ohio Avenue, west of 23rd Street, is envisioned as a change area in the General Plan, with the potential to evolve into a revitalized corridor with a mix of uses and housing types and densities. A series of public spaces and private areas between the street and trail oriented to the Greenway will strengthen the Corridor's distinctive

Richmond Greenway Access: 11th Street to 23rd Street



character and provide a desirable context for new development.

Primary bicycle access connections to the Greenway and cross connections from the Greenway are shown, as well as important routes for pedestrian enhancements from the surrounding neighborhoods, potential pathways linking streets or walkways across the Greenway, and current or potential future direct pedestrian access points onto and off the trail.

IRON TRIANGLE PEDESTRIAN AND BICYCLE COLLISIONS - 2008-2012

DATE OF COLLISION/ INCIDENT	PrimaryRd	SecondRd	COLLISION/INCIDENT DESCRIPTION	Type of Collision	Ped Action	SEVERITY OF INJURY	VICTIM - BIKE (B) OR PEDESTRIAN (P)	At Fault Party
2008-02-16	PENNSYLVANIA AV	7TH ST	Pedestrian Right of Way	Vehicle/Pedestrian	Crossing in Crosswalk at Intersection	4	P	
2008-02-26	7TH ST	RIPLEY AV	Automobile Right of Way	Broadside	No Pedestrian Involved	3	B	Passenger Car
2008-05-12	BARRETT AV	8TH ST	Automobile Right of Way	Broadside	No Pedestrian Involved	4	B	Passenger Car
2008-06-06	MACDONALD AV	8TH ST	Traffic Signals and Signs	Broadside	No Pedestrian Involved	4	B	
2008-06-30	MACDONALD AV	MARINA WY	Traffic Signals and Signs	Not Stated	No Pedestrian Involved	4	B	Bicycle
2008-09-22	PENNSYLVANIA AV	7TH ST	Traffic Signals and Signs	Broadside	Crossing in Crosswalk at Intersection	2	P	Passenger Car
2008-09-27	MARINA WY	OHIO AV	Traffic Signals and Signs	Broadside	No Pedestrian Involved	2	B	Bicycle
2008-12-28	MACDONALD AV	15TH ST	Pedestrian Right of Way	Vehicle/Pedestrian	Crossing in Crosswalk at Intersection	4	P	
2009-01-30	20TH ST	CHANSLOR AV	Wrong Side of Road	Other	No Pedestrian Involved	3	B	Bicycle
2009-02-21	16TH ST	MACDONALD AV	Unknown	Other	Crossing Not in Crosswalk	4	P	
2009-04-17	RIPLEY AV	57TH ST	Unsafe Speed	Head-On	No Pedestrian Involved	4	B	
2009-05-18	BARRETT AV	MARINA WY	Unknown	Not Stated	No Pedestrian Involved	2	B	
2009-05-29	HARBOUR WAY	HARBOUR DR	Pedestrian Violation	Sideswipe	Crossing Not in Crosswalk	4	P	Pedestrian
2009-07-01	4TH ST	MACDONALD AV	Pedestrian Right of Way	Vehicle/Pedestrian	Crossing in Crosswalk at Intersection	4	P	Passenger Car
2009-07-18	MACDONALD AV	MARINA WY	Unsafe Speed	Rear End	Crossing in Crosswalk at Intersection	4	P	Passenger Car
2009-07-23	CHANSLOR AV	3RD ST	Unsafe Speed	Vehicle/Pedestrian	Crossing Not in Crosswalk	4	P	
2009-08-14	NEVIN AV	11TH ST	Improper Turning	Broadside	No Pedestrian Involved	3	B	Passenger Car
2009-09-08	1ST ST	MACDONALD AV	Pedestrian Right of Way	Vehicle/Pedestrian	Crossing in Crosswalk at Intersection	3	P	Passenger Car
2009-10-09	MACDONALD AV	16TH ST	Unknown	Vehicle/Pedestrian	In Road, Including Shoulder	2	P	
2009-12-29	HARBOUR WAY	NEVIN AV	Pedestrian Right of Way	Vehicle/Pedestrian	Crossing in Crosswalk at Intersection	4	P	Passenger Car
2010-01-09	BISSELL AV	17TH ST	Traffic Signals and Signs	Broadside	No Pedestrian Involved	3	B	Bicycle
2010-08-26	MACDONALD AV	4TH ST	Pedestrian Right of Way	Vehicle/Pedestrian	Crossing in Crosswalk at Intersection	4	P	Passenger Car
2010-10-03	NEVIN AV	5TH ST	Unsafe Starting or Backing	Rear End	No Pedestrian Involved	3	B	Passenger Car
2010-10-08	BISSELL AV	HARBOUR WY	Automobile Right of Way	Other	No Pedestrian Involved	3	B	Passenger Car
2010-11-04	7TH ST	RIPLEY AV	Pedestrian Right of Way	Vehicle/Pedestrian	Crossing Not in Crosswalk	3	P	Passenger Car
2010-11-18	MACDONALD AV	16TH ST	Driving or Bicycling Under the Influen	Sideswipe	No Pedestrian Involved	3	B	Bicycle
2010-12-17	HARBOUR WY	MACDONALD AV	Pedestrian Violation	Vehicle/Pedestrian	Crossing Not in Crosswalk	3	P	Pedestrian
2010-12-20	MARINA WY	BISSELL AV	Pedestrian Violation	Vehicle/Pedestrian	Crossing Not in Crosswalk	4	P	Pedestrian
2011-02-06	7TH ST	LUCAS AV	Unknown	Other	No Pedestrian Involved	4	B	
2011-02-12	23RD ST	OHIO AV	Unsafe Speed	Overturned	No Pedestrian Involved	4	B	
2011-07-05	MACDONALD AV	16TH ST	Pedestrian Right of Way	Vehicle/Pedestrian	Crossing in Crosswalk at Intersection	4	P	Passenger Car
2011-07-27	CHANSLOR AV	MARINA WY	Other Hazardous Violation	Broadside	No Pedestrian Involved	4	B	Bicycle
2011-08-22	BISSELL AV	HARBOUR WY	Pedestrian Violation	Vehicle/Pedestrian	Crossing in Crosswalk at Intersection	3	P	Pedestrian
2011-08-30	MARINA WY	CHANSLOR AV	Wrong Side of Road	Head-On	No Pedestrian Involved	4	B	Bicycle
2011-09-19	MARINA WY	MACDONALD AV	Traffic Signals and Signs	Broadside	Not in Road	4	P	Passenger Car
2011-10-07	BARRETT AV	MARINA WAY	Other Hazardous Violation	Sideswipe	No Pedestrian Involved	4	B	Bicycle
2011-10-13	HARBOR WY	MACDONALD AV	Traffic Signals and Signs	Vehicle/Pedestrian	Crossing in Crosswalk at Intersection	3	P	Passenger Car
2011-10-23	6TH ST	OHIO AV	Unsafe Speed	Rear End	No Pedestrian Involved	3	B	
2012-01-13	2ND ST	BISSELL AV	Automobile Right of Way	Broadside	No Pedestrian Involved	4	B	Bicycle
2012-02-09	MACDONALD AV	12TH ST	Traffic Signals and Signs	Other	No Pedestrian Involved	4	B	
2012-02-19	7TH ST	ELM AV	Driving or Bicycling Under the Influen	Rear End	Not in Road	2	P	Passenger Car
2012-04-01	MACDONALD AV	MARINA WY	Pedestrian Right of Way	Broadside	Crossing in Crosswalk at Intersection	4	P	Passenger Car
2012-04-23	1ST ST	BISSELL AV	Automobile Right of Way	Broadside	No Pedestrian Involved	4	B	
2012-09-08	BISSELL AV	16TH ST	Pedestrian Right of Way	Vehicle/Pedestrian	Crossing in Crosswalk at Intersection	3	P	
2012-09-19	7TH ST	BISSELL AV	Pedestrian Violation	Vehicle/Pedestrian	In Road, Including Shoulder	3	P	Pedestrian
2012-09-20	HARBOUR WY	NEVIN AV	Pedestrian Right of Way	Broadside	Crossing in Crosswalk at Intersection	4	P	Passenger Car
2012-09-25	HARBOR WY	PENNSYLVANIA AV	Wrong Side of Road	Broadside	No Pedestrian Involved	4	B	Bicycle
2012-10-15	MACDONALD AV	1ST ST	Pedestrian Right of Way	Vehicle/Pedestrian	Crossing in Crosswalk at Intersection	3	P	
2012-11-12	BARRETT AV	12TH ST	Wrong Side of Road	Broadside	No Pedestrian Involved	4	B	Bicycle
2012-12-06	HARBOUR WAY	ROOSEVELT AVE	Pedestrian Right of Way	Vehicle/Pedestrian	Crossing in Crosswalk at Intersection	4	P	Passenger Car

ACCIDENTS IN RICHMOND'S IRON TRIANGLE NOT REPORTED TO THE POLICE

	UNREPORTED ACCIDENT WITH VEHICLE AS A PED/BICYCLIST IN LAST FIVE YEARS?		WHERE	WHAT HAPPENED?
	yes	*no*		
1		x		
2		x		
3	x		MacDonald Ave & Harbour Way	Car clipped a bicyclist and knocked her off her bike who was turning south on Harbour to MacDonald; after impact, car sped away; accident never reported to the police
4		x		
5	x		Harbour and Pennsylvania	Car traveling south down ramp from Rumrill/13th and turning south on Harbour knocked a 13 year old off his bike; youth knocked off his bike and suffered multiple contusions; car sped off - hit and run - accident not reported to police
6	x		8th Street / Maple Ave	Car speeding south on 8th Street jumped curb, hit mother moving groceries from her car to her house; also clipped her car; accident never reported to the police
7		x		
8		x		
9		x		
10		x		
11		x		
12	x		MacDonald Avenue and 16th Street (BART / Amtrak)	Car speeding south from BART on 16th forced two bicyclists to crash into line of parked cars; both cyclists fell off bike and suffered cuts, contusions, and damage to their bikes; accident not reported
13		x		
14		x		
15		x		
16		x		
17	x			
18		x		
19		x		
20		x		
21		x		
22		x		
23	x		Barrett and 6th/7th	Car speeding on Barrett Ave. going south runs red light and hits cyclist who is crossing Barrett at 6th/7th Street; bicyclist suffers minor injuries; accident not reported to police
24		x		
25		x		
26		x		
27		x		
28		x		
29		x		
30	x		MacDonald Avenue & 11th Street	Pedestrian exiting FoodsCo parking lot, car hits them while traveling north on MacDonald; pedestrian suffered minor injuries; accident never reported to police
31		x		
32	x		4th and Pennsylvania	Speeding car clips 8-year old student from Peres Elementary who is walking across Pennsylvania Avenue @ 4th Street with his sister and mother; family suffers minor injuries; accident reported to Peres Elementary school only, not to the police
33		x		
34		x		
35		x		
36		x		

ACCIDENTS IN RICHMOND'S IRON TRIANGLE NOT REPORTED TO THE POLICE

37		x		
38		x		
39		x		
40		x		
41		x		
42		x		
43		x		
44		x		
45		x		
46		x		
47		x		
48		x		
49	x		Harbour Way and Richmond Greenway	Cyclist crossing Harbour Way @ Greenway is hit by speeding car traveling north on Harbour; breaks arm; accident not reported to the police
50		x		
51		x		
52		x		
53		x		
54		x		
55		x		
56		x		
57		x		
58		x		
59		x		
60	x		MacDonald Avenue @ Marina Way	Bicyclist hit crossing MacDonald Avenue on Marina; thrown from bike; suffered cuts and bruises; accident not reported to the police
61	x		MacDonald @ 12th Street	Senior knocked down by car on MacDonald while crossing 12th Street; hit and run; accident not reported to the police
62		x		
63		x		
64		x		
65		x		
66		x		
67		x		
68		x		
69		x		
70		x		
71	x		7th and Elm Avenue	Family that consisted of a mother, three children and a toddler in a stroller crossing 7th @ Elm Avenue jump out of the way to avoid a car speeding south on 7th; car clips mother; hit and run; mother suffers sprained ankle, multiple contusions on left leg; accident not reported to the police
72		x		
73		x		
74		x		

Safe Routes to School Collision Map Viewer

Interactive map and data summaries of bicycle and/or pedestrian collisions around school.

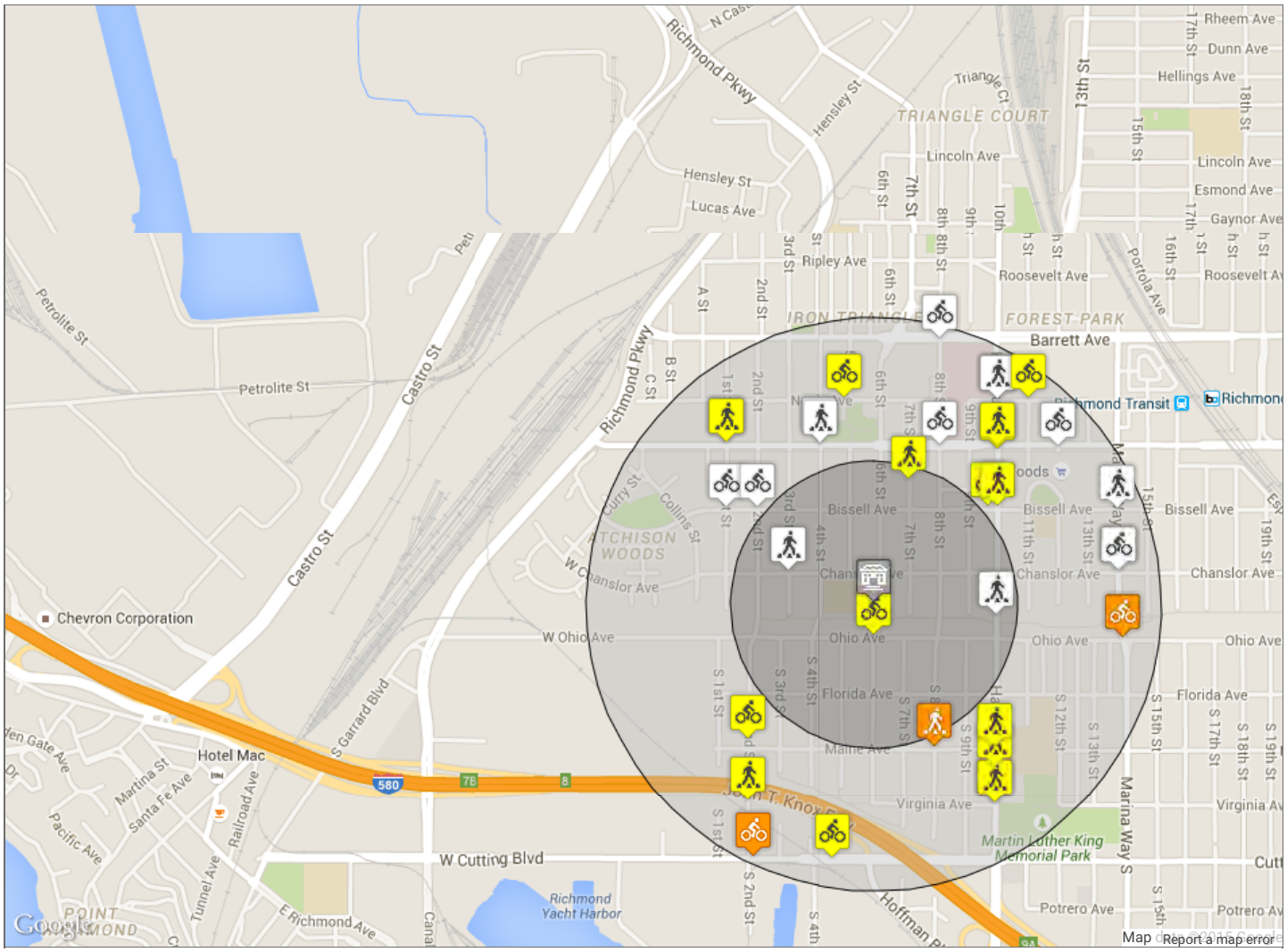
Lincoln Elementary

29 Sixth St. | Richmond | Contra Costa County | CDS: 7617966004832

Types of Collisions: ☑ Bicycle ☑ Pedestrian

Collision Severity: ☑ Fatal ☑ Severe Injury ☑ Other Visible Injury ☑ Complaint of Pain

Years : 2008 - 2012



Summary Statistics							
Radius	Fatal	Severe Injury	Visible Injury	Complaint of Pain	Pedestrian	Bicycle	**Total**
<¼ mi.	0	0	2	2	3	1	**4**
¼ - ½ mi.	0	3	14	13	15	15	**30**
Total	0	3	16	15	18	16	**34**

Safe Routes to School Collision Map Viewer

Interactive map and data summaries of bicycle and/or pedestrian collisions around school.

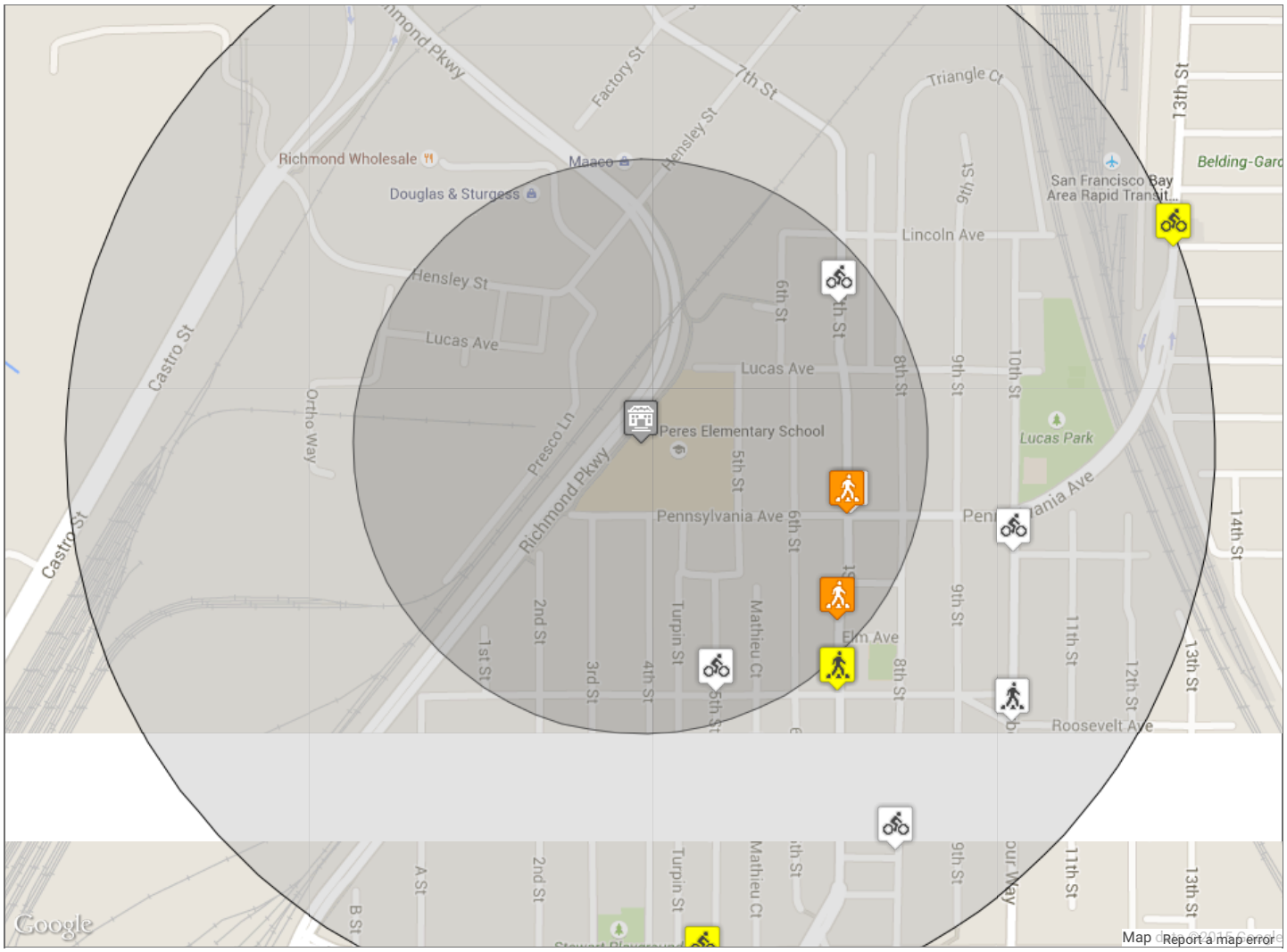
Peres Elementary

719 Fifth St. | Richmond | Contra Costa County | CDS: 7617966004907

Types of Collisions: ☑ Bicycle ☑ Pedestrian

Collision Severity: ☑ Fatal ☑ Severe Injury ☑ Other Visible Injury ☑ Complaint of Pain

Years : 2008 - 2012



Summary Statistics

Radius	Fatal	Severe Injury	Visible Injury	Complaint of Pain	Pedestrian	Bicycle	**Total**
<¼ mi.	0	2	0	3	3	2	**5**
¼ - ½ mi.	0	0	4	3	2	5	**7**
Total	0	2	4	6	5	7	**12**

We invite you

to the YELLOW BRICK ROAD

Living Preview

Friday, October 17
1pm – 4pm

Saturday, October 18
10am – 1pm

Elm Playlot (Pogo Park)
720 Elm Avenue
Richmond, CA 94801

Information
call: 510-215-5500
email: contact@pogopark.org

Come and experience the "Living Preview" for yourself: a life-sized, temporary installation to show the proposed changes to the streets around Elm Playlot, a small city park and children's playground located in the heart of Richmond's Iron Triangle neighborhood.

Funded by a grant from Caltrans, our goal is to design street improvements that will a) slow cars down and b) create a network of child and family-friendly streets that encourage people to walk and ride a bike (instead of using a car) to get to key destinations in the Iron Triangle neighborhood.

We encourage you to come to the Living Preview, test a sample route (in 3-D!), and let us know what you think. We want to incorporate your feedback into our final design. See you there!

Caltrans

Richmond

POGO PARK

FEHR & PEERS

Local Government Commission

Lo invitamos

EL CAMINO DE LADRILLO AMARILLO

Viernes 17 de octubre
1 a 4 de la tarde

Sábado 18 de octubre
10am a 1pm

Parque Elm (Pogo Park)
Avenida Elm720
Richmond, CA 94801

Para más información
510-215-5500
contact@pogopark.org

Participe en la “reseña en vivo” y vea como estas instalaciones temporáneas en las calles alrededor del Parque Elm pueden mejorar las condiciones para caminar, andar en bicicleta y convivir de manera sana con sus vecinos. El Parque Elm es un pequeño parque y patio infantil ubicado en el centro del vecindario “Triangulo de Acero” en Richmond.

Nuestra meta es diseñar cambios a las calles para reducir la velocidad de los carros y crear una red de calles seguras para niños y adultos que motiven a la gente a caminar y andar en bicicleta para circular a destinos dentro del vecindario. El proyecto esta siendo financiado por el Departamento de Transporte del Estado (Caltrans).

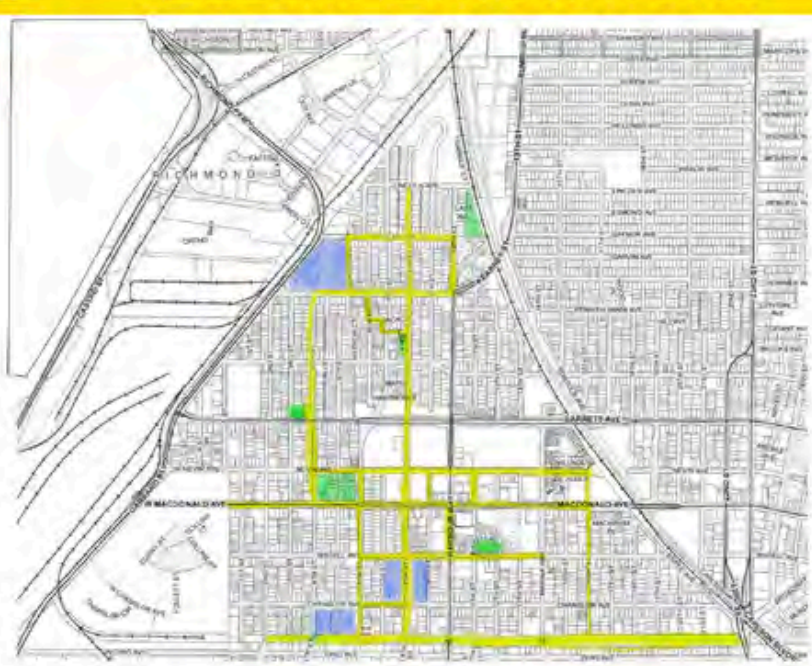
Venga a la “reseña en vivo”, pruebe la ruta propuesta y díganos si le gusta. Queremos más ideas para que el diseño final sea el mejor posible. ¡Nos vemos ahí!

Caltrans · Richmond · POGO PARK · FEHR PEERS · Local Government Commission

We invite you

To review the **DRAFT PLAN** for the

YELLOW BRICK ROAD



Monday, January 26
4:00pm - 6:30pm

Elm Playlot (Pogo Park)
720 Elm Avenue
Richmond, CA 94801

Information
phone: 510-215-5500
email: contact@pogopark.org

You are invited to review and discuss the draft plan for the Yellow Brick Road project in Richmond's Iron Triangle neighborhood.

Funded by a grant from Caltrans, we mapped the Yellow Brick Road: a network of child and family-friends bike and walking routes that connect key community assets together. At our Living Preview event in October, we designed and tested the proposed street improvements along the Yellow Brick Road to slow cars down.

We encourage you to attend this final meeting, review the draft plan, and let us know what you think. Dinner will be served at 5pm.

See you there!

Caltrans · Richmond · POGO PARK · FEHR PEERS · Local Government Commission

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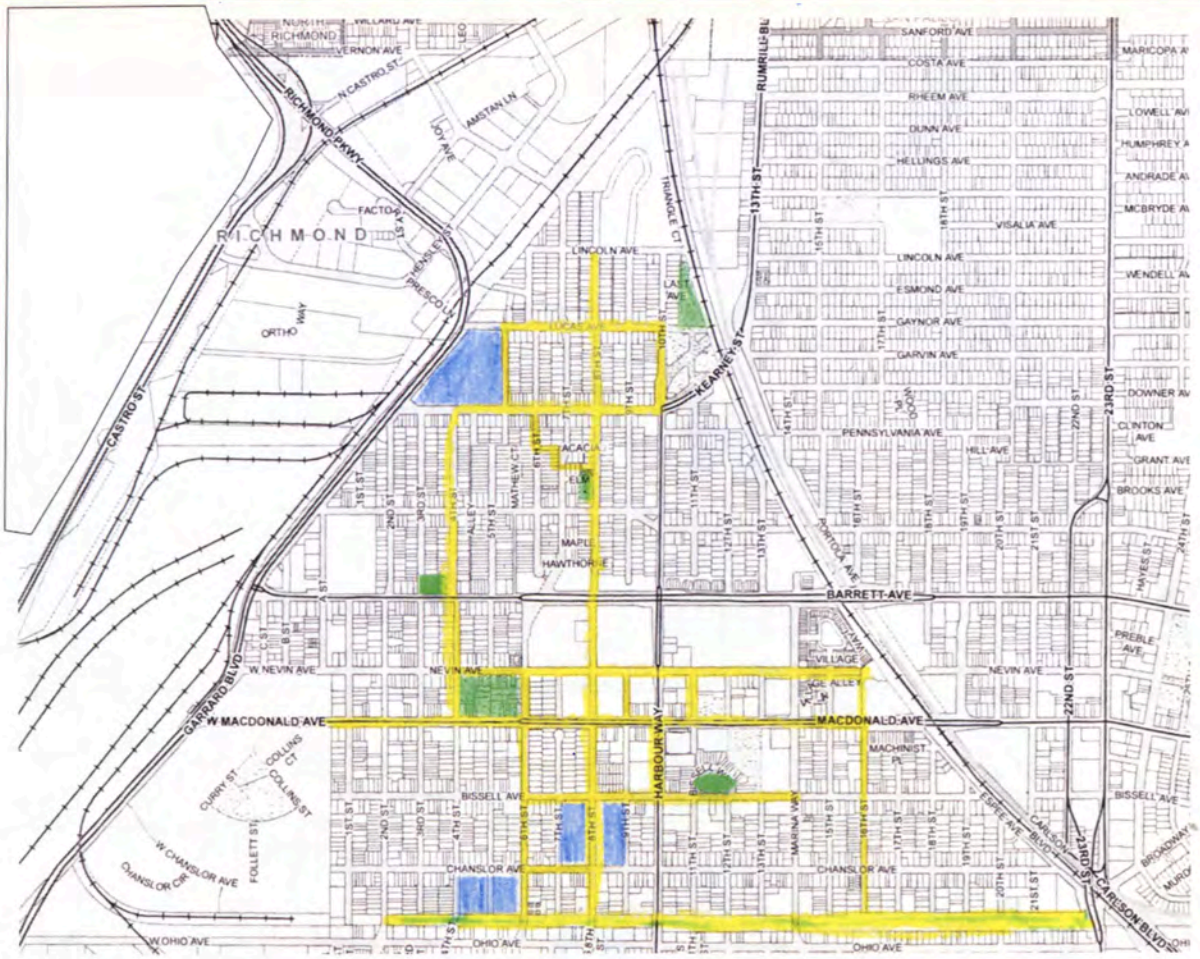
Lo invitamos

A revisar el PLAN PRELIMINAR para EL CAMINO de LADRILLO AMARILLO



Esta invitado a revisar y discutir el plan preliminar para el proyecto del Camino de Ladrillo Amarillo en el vecindario del "triangulo de acero" (Iron Triangle) de Richmond.

Con una subvención de Caltrans, preparamos un plan preliminar con la ruta para el Camino de Ladrillo Amarillo: una red de rutas seguras para que los niños y las familias puedan caminar o andar en bicicleta de manera segura en todas partes del vecindario con conexiones a los destinos principales. En la "reseña en vivo" de octubre pasado diseñamos y probamos algunos de los cambios que se pueden hacer para mejorar el Camino y reducir la velocidad de los carros.

Le invitamos a que asista a esta reunión final para que pueda revisar el plan preliminar y darnos sus comentarios. Habrá cena a las 5 de la tarde. ¡Nos vemos ahí!

Lunes 26 de enero de 2015
4:00 - 6:30 de la tarde

Elm Playlot (Pogo Park)
Avenida Elm 720
Richmond, CA 94801

Par más información

llame al: 510-215-5500
o por internet en: contact@pogopark.org

Caltrans · Richmond · POGO PARK · FEHR PEERS · Local Government Commission

YELLOW BRICK ROAD - SIGN IN SHEET / Community Outreach Team

2/18/14 – 5/10/14

	NAME	2/18	2/19	2/20	2/21	2/22	2/24	2/25	2/26	2/27	2/28	3/3	3/4	3/5	3/6	5/8	5/9	5/10
1	Zarnia Johnson	✓		✓		✓			✓				✓		✓			
2	Doris Mason	✓	✓				✓	✓		✓	✓	✓		✓	✓	✓	✓	
3	Deshawn Ford	✓		✓	✓				✓				✓		✓			✓
4	Amarie D.	✗	✓			✗		✓	✓		✓	✗		✓	✗	✓	✓	
5	Christian	✓		✓		✗	✓			✗				✓	✓	✓		
6	Quevonte Anderson	✓		✓									✓		✗		✓	
7	Daniela Guadalupe	✓	✓	✓	✓	✗	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
8	Karina Guadalupe	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
9	Candelaria Martinez	✓		✗						✓		✓			✓			✓
10	Richard Muro	✗	✓			✗		✓	✗	✓			✓		✓	✓	✓	✓
11	Eddie Doss	✗	✓	✗	✓		✓	✓			✓	✓		✓	✓			
12	Aurelio Ybarra	✓	✓	✓	✓	✓	✓		✓	✓			✓	✓	✗	✓	✓	
13	Carmen Avila	✓			✓		✓				✓	✓		✗	✓		✓	✓
14	Rosa Gutierrez	✓	✓	✓	✓	✓		✓	✓		✓			✓	✓	✓		✓
15	Trey	✓								✓		✗			✓	✓		
16	Jose Rangs	✓	✓	✓		✓	✓	✓	✓		✓		✓	✓	✓		✓	✓

YELLOW BRICK ROAD - SIGN IN SHEET / Community Outreach Team

	NAME	2/18	2/19	2/20	2/21	2/22	2/24	2/25	2/26	2/27	2/28	3/3	3/4	3/5	3/6	5/8	5/9	5/10
17	Danta R.	✓					✓		✓	✓			✓		✓	✓		
18	Oscar A	✓			✓		✓	✓	✓			✓	✓	✓			✓	✓
19	Rodolfo A.	✓	✓			✓					✓		✓		✓	✓	✓	
20	Jesus Bargas	✓	✓					✓	✓		✓	✓		✓	✓			✓
21	~~MA MKE~~	✓			✓	✓			✓					✓	✓	✓		
22	Ma hk eth	✓						✓		✓	✓	✓			✓		✓	✓
23	Razaiba Russell			✓					✓			✓		✓	✓		✓	✓
24	Ashanti		✓		✓			✓		✓			✓		✓	✓	✓	
25	mia brown						✓		✓		✓	✓		✓	✓			
26	Mardell Anderson						✓			✓		✓			✓		✓	
27	Jaelon Hill				✓			✓	✓		✓		✓	✓				✓
28	Anilayh Jones		✓		✓	✓		✓				✓	✓		✓	✓	✓	
29	Amaya	✓	✓		✓	✓	✓	✓	✓		✓	✓		✓	✓			
30	Aniyha Pier		✓	✓	✓		✓	✓		✓			✓		✓	✓		✓
31	Martha Barajas	✓	✓		✓	✓	✓	✓	✓	✓		✓			✓		✓	
32	Carmen Lee	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

YELLOW BRICK ROAD - SIGN IN SHEET / Community Outreach Team

	NAME	2/18	2/19	2/20	2/21	2/22	2/24	2/25	2/26	2/27	2/28	3/3	3/4	3/5	3/6	5/8	5/9	5/10
33	D'Yanie A Reed	✓			✓		✓		✓		✓		✓	✓	✓	✓	✓	
34	Devyn Calhoun	✗		✗				✗	✓		✓		✗	✓	✓		✗	
35	[illegible]	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
36	Ishmial Willia[illegible]	✓				✗	✓		✓		✓		✓	✓	✓		✓	
37	Carlisa [illegible]	✗		✓					✗				✓		✓	✓		
38	Norma Campos	✗	✓	✓	✓	✓	✓	✓		✓	✓	✓		✓	✓	✗	✓	✓
39	Joselin Reyes	✓		✓			✗	✗	✓		✓		✗	✓				
40	Anthony Vierkul	✓	✓			✓					✓		✓		✓		✓	
41	maria Sanboval	✓		✓			✓	✗	✓			✓	✓	✓	✓	✓	✓	

Yellow Brick Road - Sign In

3/6/14

Name	Organization	Email
Carn		
Toody Maher	POGO PARK	toody@pogopark.org
Richard Muro	Pogo Park	richard@pogopark.org
Josh Meyer	Local Govt. Commission	jmeyer@lgc.org
Jose Rugs	Pogog	Jose@pogopark.org
Martha Barajas	Recidente	
MARIA BARAJAS	recidente	
Gabino Arredondo	COR	gabino_arredondo@ci.richmond.ca.us
OMOWACE SERENGETI		
DAWN Flemings	Yes	

Yellow Brick Road - Sign In 3/6/14

Name	Organization	Email
Rosa Gutierrez		
Rita Cerda		
Nancy Baer	Richmond Bike/Ped Advisory Committee	nbaer48@yahoo.com
NAJARI SMITH	RICHMOND BICYCLE/PED ADVISORY COMMITTEE	NAJARI@RICHCITYRIDES.ORG
Ed Miller	Pogo Park	ed@pogopark.org
Caire Reilly	Contra Costa Health Services	caire.reilly@hsd.cccounty.us
Brooke DuBose	Fehr & Peers	b.dubose@fehrandpeers.com
Carrie Nielson	"	c.nielson@fehrandpeers.com
Matthew Kidgway	"	m.kidgway@fehrandpeers.com
Kwesi Anku	East Bay Center	kwesi@eastbaycenter.org.

Yellow Brick Road - Sign In

3/6/14

Name	Organization	Email
Norma Campos	Pogo Park	
Fred Franklin	Resident	
Othere Christian	Iron Triangle NC	oqkc2001@yahoo.com
Danny Ramirez		

Total = [redacted] (71) +13 10/17/14

NAME	ORGANIZATION	E-MAIL
Eva Tabor		—
Isabel		—
Keely		—
Richard & Brian	KCRT-TV	info@kcrt.com
Linda Whitmore	Santa Fe Neighborhood	lindajwhitmore@aol.com
Corbino Arredondo	City of Richmond	
Michael Banks	Richmond Fire	michael_banks@ci.richmond.ca.us
Terry Harris	Richmond Fire	terry_harris@ci.richmond.ca.us
RACHAEL RODRIGUEZ	FEHR & PEERS	r.rodriguez@fehrandpeers.com
ERIC GOVAN	Richmond FIRE	eric_govan@ci.richmond.ca.us
Cair Kelly	Contra Costa Health Services	cair.kelly@hsd.cccounty.us
Toni Toscano	UC Berkeley	tonittoscano@gmail.com
Norma Campos		
Mireya Aguilera		
Amaha Hicks	BLACK WOMEN ORGANIZED FOR ACTION BWOTA	amaha_hicks@hotmail.com
Aubrey & Judy Morgan	RFOR	aubreyandjudy@comcast.net
Cam Nielsen	Fehr & Peers	cnielsen@fehrandpeers.com
Mary Swirsky	Richmond PD	mswirsky@richmondpd.net

10/17/14

NAME	ORGANIZATION	E-MAIL
Blesilda Gebreyesus	Caltrans	blesilda.gebreyesus@dot.ca.gov
Josh Meyer	Local Govt. Commission	jmeyer@lgc.org
MICHELE SEVILLE	CITY OF RICHMOND	michele_seville@ci.richmond.ca.us
☆ Edgardo Cervano	RYSE - RYOT	edgardo@ryse center.org
ASHLEY		
Mike Uberti	city of Richmond	mike_uberti@ci.richmond.ca.us
Kieron Slaughter	"	Kieron_Slaughter@ci.richmond.ca.us
Patrick Phelan	City	patrick_phelan@ci.richmond.ca.us
Manuel Floriano	RYSE	manuel@ryse center.org
Eduardo Martinez	RPA	ezedmartin@yahoo.com
Ana Gonzalez		Ana_Gonzalez@Yahoo.com
Alicia & Amanda	RMSI	
Amanda Elliott	RMSI	
J.J. Balogh	BBK	jbalogh@bbk-richmond.org
Mariana Camacho		

Phone #'s entered 10/23/14 10/17/14

NAME	~~ORGANIZATION~~ PHONE #	E-MAIL
Natajahmay		
Dwaydriana		
Angel		
Adrian		
Amy Anderson	Apact Cadre	powerful soul75@yahoo
Curly		
Hermelinda Espay		
Alicia Lopes		
Claudia Hernandes		
Maria Bultazar		
[illegible]		
[illegible]		
Jose Larreta		
Jovon Green	510-334-3496	
GUS SOTO	510-827-9604	
WILLIAM SOTO	SAME	
MARCELLO	SAME	
JOHNY ORTEGA	NONE	

Entered 10/23/14

10/17/14

NAME	ORGANIZATION	E-MAIL
Patricia Quezada		
SHARI SOTO		
MARY SOTO		
JOSE ORTEGA		
CHARLES		
PETE		
JAME'S		
GENA		
Brianna		
Nadia		
Howard	(419) 286-8689	
MAKEI		
CARLA RIOS		
CESAR HERNANDEZ		
YAMIN		
MARYJEI		
VIRGINIA		
TAMI		

(82)

10/17/14

Yellow Brick Road

Living Preview Sign-in Sheet

Name	Email/Phone Number	Affiliation/Organization/Resident
Roderick Johnson	(510) 4785451	4346 St #A
Ana Gonzalez	5104935406	
Apolonia Resendiz	510 334-0864	
Veronica Rodriguez	510-~~260~~- 680-6109	
Gonzalo Rodriguez	510-260-6895	
Leticia Rodriguez	510-	
Ermelinda R.		
Ignacio R.		
Diesel Rodes	dieselr@gmail.com	
Christina Mendoza	bakeyrich23@gmail.com	
Raul Chavez	Chavezraul510@gmail.com	
cecilia rodriguez	rodriguez51017@gmail.com	
Angelita Rodriguez		
Abigail Herrera		
Stephanie Herrera		
Daniel Miranda.		
Rita Maria Lima	510)621 45 06	

POGO PARK Richmond FEHR + PEERS Local Government Commission

#'s entered 10/22/14

Yellow Brick Road

10/17/14

Living Preview Sign-in Sheet

Name	Email/Phone Number	Affiliation/Organization/Resident
Michelle Walker	maw.anthonik1@gmail.com	Resident
Dominic Walker	510·260·3018	Resident
Alexis Martinez	235-2021	Resident
Alexander Martinez	235-2021	Resident
Antonio Brown	232-4872	Resident
Yesenia Alvarez	510·283·4865	Resident
Tyreen Stanley	(510)776-7347	
[illegible]	510-612-1668	
Julie McCarty	(510) 355-5106	
Richard McCarty	(510)395-5796	
Natasha Adams	407 776-2212	
Gabriela Delfin	(510)478-5090	
Rosalba Delfin	(510)478-8416	Resident
Miguel Delfin	(510)860-6302	
Alejandro Delfin	(510) 215-1090	

POGO PARK Richmond FEHR + PEERS Local Government Commission

Yellow Brick Road

Living Preview Sign-in Sheet

10/17/14

Name	Email/Phone Number	Affiliation/Organization/Resident
Stephanie		
Jesus		
Ivan		
Jhoselyn R		
Lidia Rivera		
CARMEN AVALOS	510-837-24-17	
FELISIANO AVALOS	837-24-17	
OSCAR AVALOS		
Feli Pevehasco		
noventa cenDA		
Luis Aguilera		
MARiena Aguilera		
Amada Aguilar		
Amalia Aguilar		
JONJE AGUILAR		
Luis AGUILAR		
Eri		

POGO PARK Richmond FEHR PEERS Local Government Commission

Yellow Brick Road

Living Preview Sign-in Sheet

10/17/14

Name	Email/Phone Number	Affiliation/Organization/Resident
Esmeralda Tobar		
Ana Tobar		
Angel Tobar		
Elijah		
Kaniesha		
Lucila Troso		
Carlen Meeks		
Iselia Ramirez		
Deshawn Clark		
Danny Ramirez		
Nadiea Ramirez		
Carlos Ramirez		
Anny Ocampos		
Ruben Martinez		
Olga Rios	510 [illegible]-95-88	
Federico Rios	510 334-1841	

POGO PARK Richmond FEHR PEERS Local Government Commission

Yellow Brick Road

Living Preview Sign-in Sheet

10/17/12

Name	Email/Phone Number	Affiliation/Organization/Resident
Jesus Gallego		
Dante Reed	dante1234@hotmail.com	
[illegible]	702-502-5659	?? NOT ENTERE
Rachel Williams	lilscrappy900@gmail.com	
Jose Rodriguez	(510)672-7692	
Randy Weiss	510769-2962	
Terrie Sale		
Marco Landaverde	5108309069	
Michelle [illegible]	925 7275626	
Blanch Martin	(510) 730-40-07	
Antonio Hutson	776-2212	
Paula Colston	(510) 228-8816	
Jessica Verduzco	(510) 932-9001	
Antahnay Hutson	776-2212	
Antonio Valdivia	710-2047	
Micaela Garcia		
Cristian Valdivia		

POGO PARK Richmond FEHR & PEERS Local Government Commission

Entered 10/22/14

(20)

SIGN UP FOR TEXT ALERTS

10/17/14

CELL PHONE	ENGLISH	SPANISH	
5104784372 Norma	✓		
510 478-3746 Mineya	✓		
510·260·3018 Michelle.	✓		
" " Dominic	✓		
510 776-3004 Fanisha	✓		add (A)
510-283-4865 Yesenia	✓		
510-860-3456 Rodolfo	✓		(A)
510·334·8517 Edgardo	✓		
Anthony Herrer	✓	✓	
Stephanie Herrera	✓		
Nagel Herrera.	✓		
Ashley	✓	✓	
Carlos	✓		
Joshua Zimmerman +2			(A) +2
Brian Walker (510) 478-5478	X		(A)
Jerry Doss	✓		(A)
Azucena Estrada Teresa Andrade 510/232-6853			(A)

SIGN UP FOR TEXT ALERTS

10/17/14

CELL PHONE	ENGLISH	SPANISH	
maria cruz (415) 240 6229		✓	A
Ezequiel Aranda " "		✓	A
isaias Aranda " "	" "	✓	A
Julia gonzalez " "	" "	✓	A
Ashanti	✓		
Eva	520-9374	✓	
Isabel	" "	✓	
AMIR BLAKE			A
NuQura Cunningham	925-221-1010 ✓		A
Jovon Green	510-334-314		??? Not entered
James L Anderson	510-221-1114		A
LORI JACOBSON	707 965 615		A
Oscar Avalos (415) 920-381	✓		
ONOWALE SERENGETI	(510) 837-0434 ✓ RICH., CA. 94801		A
Shafari Harris	(510) 837-5258		A
Issis Tolbert			A
AQURIE BROWN			A
Elijah tobelt			

#s entered 10/22/14

Total [redacted] 60 + 16 10/18/14

NAME	ORGANIZATION	E-MAIL
Casey Beck	RYSE Center	casey@rysecenter.org
Randy Joseph	RYSE Center	randy@rysecenter.org
Diane Aranda	TCE	daranda@calendow.org
Rosamond Carrillo	Healthy Rich.	rcegerza@usc.org
Katrina Banks		
Daylanna Gray		
Quevonte Anderson	Pogo Park	Quevonte49@gmail.com
Ronny Luna	Pogo Park	RonnyLuna415@gmail.com
DEBRA BANTA		MUSCMUT59@GMAIL.COM
Jan Schilling	Weigh of Life	janschilli@aol.com
Trudy Garber	TPL	trudy.garber@tpl.org
Carlos Pedraza	Pogo Family	CarlosPedraza2292@Gmail.Com
Antonio Mota	Pogo Park Family	
Sean Piles	Radio Free Richmond	sean@radiofreerichmond.com
Shirley & Tom Butt	Tom Butt for Mayor 2014 Citizen	shirleybutt@intres.com
Kate Sibley	Public Art Adv. Comm.	k8sibley@gmail.com
Cindy Bota	—	
Sam Storey		samuellindsaystorey@gmail.com

10/18/14

NAME	ORGANIZATION	E-MAIL
Matthew Cramer	Reno Bike Project	matthew@renobikeproject.com
Candese Charles	Richmond Confidential	
OMOWALE SERENGETI	IRON TRIANGLE COMMUNITY COUNCIL	
Yuryleidy	Pogo Park family	
Joshua	Pogo Park family	
Danny LEE	Pogo Park Family	(510) 210-4959
Tony Lawrence	LCI	Tony@LawrenceConstruction.biz
Patsy Byers	(RPA)	patsy94804@gmail.com
Rita Barouch	Richmond Progressive	bailerita@sbcglobal.net
Norma Campos		
Iris	Pogo Park	iris1_86@yahoo.com

10/18/12

NAME	ORGANIZATION	E-MAIL
Katrina Banks	510-	510-776-4254
[illegible] McLaughlin	Mayor	510-620-6503
Paul Kilkenny	Richmond Progressive Alliance	kilkennygreen@yahoo.

10/18/14

NAME	ORGANIZATION	E-MAIL
KWAME GRANT	(510) 491-8157	
Rodolfo Martinez	(510) 927-7242	
[illegible]		
James Gardner	860-3450	
ANGEL SANCHES		
ALEJADRO SANCHE		
ALICI SANCHES		
Lara Erin		
Moises Caron		
Francisco A.		
Tony Flores		
Toody Maher		
Julie Roemer		
Karen Roemer		
Richard Buckner		
Chelsis		
YADIRA		
Sebere		

(67) 10/18/14

Yellow Brick Road

Living Preview Sign-in Sheet

Name	Email/Phone Number	Affiliation/Organization/Resident
[illegible]	510 691-7629	Resident
Isabel [illegible]	izzy alvarez 90 @gmail	Resident
ESTEFANI [illegible]		
Nancy Valdes		
Keyla Gonzalez		
Angel Valdes		
Guadalupe Alvarado		
Jazmin Alvarado		
Abril Hernandez		
Ana Flores		
Perla Garcia	(510) 478-5221	
Rosa Sanchez		
Esmeralda Romero		
Jesse Romero		
Disraeli Hives	(510) 228-8816	

POGO PARK Richmond FEHR PEERS Local Government Commission

Yellow Brick Road

10/18/14

Living Preview Sign-in Sheet

Name	Email/Phone Number	Affiliation/Organization/Resident
Roberto Eduardo		
Maria Cabrales Kimberly		
Jose Camacho		
Cristian Camacho		
Sebastian Camacho		
Ebony Muhammad	inobem@yahoo.com	
Lilly Barnes		
Michelle Reynoso		
Edith Reynoso		
Bebahi Lopez		
Ruby Garcia		
Kevin Garcia		
Julio Garcia		
Denise Garc...		
Miguel		
Maria Castellano	510927 1170	

POGO PARK Richmond FEHR PEERS Local Government Commission

Yellow Brick Road

10/18/14

Living Preview Sign-in Sheet

Name	Email/Phone Number	Affiliation/Organization/Resident
Azucena Estrada		
Teresa Andrade	510) 237-6853	
Atagracia Estrada		
Guillermo Estrada	510) 237-6853	
Dalia Estrada		
Fernando Contreras	415) 618-9114	
Norma Campos		
Jesus Campos		
Cristal Millan	510 210 7160	
Vicky Avalos	(OMI) vickyavalos6@yahoo.com	
Claudia Cruz		
Noely Valencia	(510) 887 1544	
Lorena Sanchez	510 478 5383	
Ormeatiers Doss	510) 228-9788	
Mark Keith		
Chancll Jones	(510) 478-7950	
Viridiana Parra	702 - 542-6698	
Efren Reynoso		
~~Efren Reynoso~~		
Jesse		

POGO PARK Richmond FEHR PEERS Local Government Commission

Yellow Brick Road

10/18/14

Living Preview Sign-in Sheet

Name	Email/Phone Number	Affiliation/Organization/Resident
Rios Viridiana	415 5040976	
America Marquez		
Diana Marquez		
Anamaria Rios		
Geidy Pérez	510 2601740	
Abril Perez		
Lunna Carreto		
Jasmyn Carreto.		
Araceli Magana.	(510) 730 4842	
Jonathan Magan	(510) 730-4842	
Aislynn Magana	(510)	
Osbaldo Magana.		
Adriana Lizarde		
Maria E. Calderón	510)412-2136	
Cadrina Duncan	(510) 478-4678	
Angel Foster	(510) 478-4678	
Teresa Andrade	(510)237-6853	

POGO PARK Richmond FEHR PEERS Local Government Commission

5

SIGN UP FOR TEXT ALERTS

10/18/14

CELL PHONE	ENGLISH	SPANISH	
Mark [illegible]			A
Ariel Ford			A
Lanèja Roberson			A
Jesse	✓		
JACKIE JOHNSON	✓		A
FRED FRANKLIN	✓		A

SIGN UP FOR TEXT ALERTS 10/18/

CELL PHONE	ENGLISH	SPANISH
510-478-7950	✓	
415-410-6615	✓	
(510) 478-8786	✓	

BIKE + PEDESTRIAN SURVEY

Date/Time: 5/15/15

Location: HARBIPWA/Inc

Team: RITA, ROSA, JEARY

- [ ] child
- [x] youth
- [ ] adult
- [ ] senior
- [ ] disabled

1. If the street and sidewalk improvements you see were actually made, would you walk and bike more than you do now?

- [x] yes
- [ ] no

2. What improvements would it take to make you walk and bike more?

More community centers
More Bikes
More BBQ
Clean Area's
Safety for the children
More police & security

BIKE + PEDESTRIAN SURVEY

Date/Time: 5/14/15

Location: H/Greenway

Team: Rita, Rosa, Jerr

- [ ] child
- [ ] youth
- [x] adult
- [ ] senior
- [ ] disabled

1. If the street and sidewalk improvements you see were actually made, would you walk and bike more than you do now?

- [x] yes
- [ ] no

2. What improvements would it take to make you walk and bike more?

* More lights at Dusk on.
* Working pedestrian lights at crosswalk on Harbour Way & Greenway.

BIKE + PEDESTRIAN SURVEY

Date/Time: 5-14-15

Location: Greenway

Team: Rita Rosa Jerry

- [ ] child
- [ ] youth
- [x] adult
- [ ] senior
- [ ] disabled

1. If the street and sidewalk improvements you see were actually made, would you walk and bike more than you do now?

   - [x] yes
   - [ ] no

2. What improvements would it take to make you walk and bike more?

   Protected bike lanes!

BIKE + PEDESTRIAN SURVEY

Date/Time: 5 14 15

Location: Green way

Team: Rita Resa Jerry

- [ ] child
- [ ] youth
- [ ] adult
- [x] senior
- [ ] disabled

1. If the street and sidewalk improvements you see were actually made, would you walk and bike more than you do now?

- [x] yes
- [ ] no

2. What improvements would it take to make you walk and bike more?

- 23RD ST OVERPASS FOR BIKES.
- PLAYGROUNDS FOR KIDS
- BALL FIELDS
- SENIOR AREAS
- BATHROOMS
- DRINKING WATER
- LIGHTING
- PERFORMANCE STAGE.

SURVEY

Fecha/Tiempo: 5/14/15

Ubicación: Greenway

Equipo: Rita Rosa Jorge

- [ ] niño
- [ ] juventud
- [x] adulto
- [ ] mayor
- [ ] discapacitado

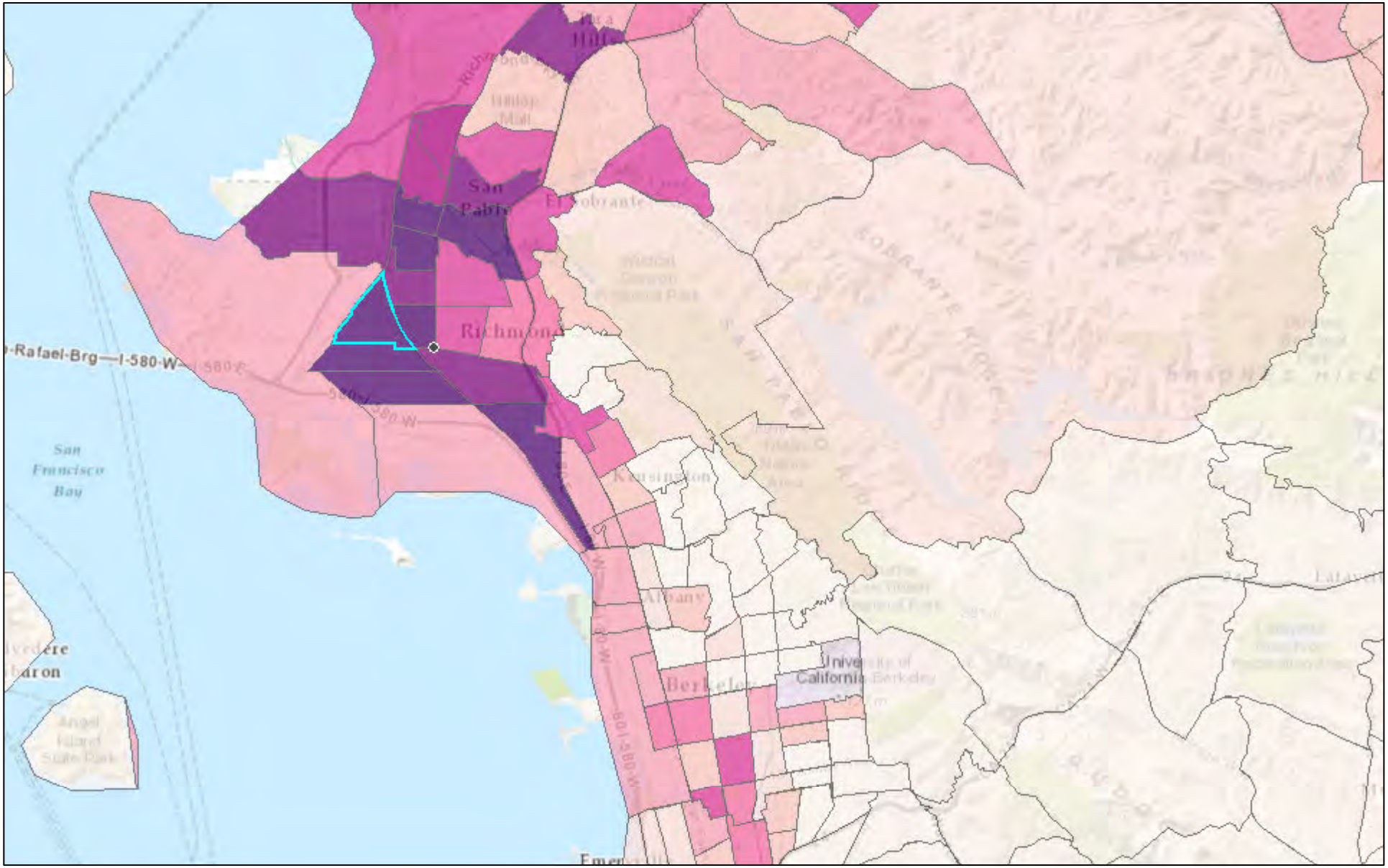
1. Si los cambios que ve en las calles y banquetas son realisados, caminaria y usaria su bicicleta mas que lo ase ahora?

   - [x] yes
   - [ ] no

2. Que cambios se necesitarían aser para que camine y use la bicicleta mas?

   que este limpio y que halla mas vigilancia de parte de los Policias y que la gente ayude con la limpieza y con ayudar en lo que se tenga que ayudar gracias

Population Characteristics Scores



May 29, 2015

1:144,448

0 1.25 2.5 5 mi

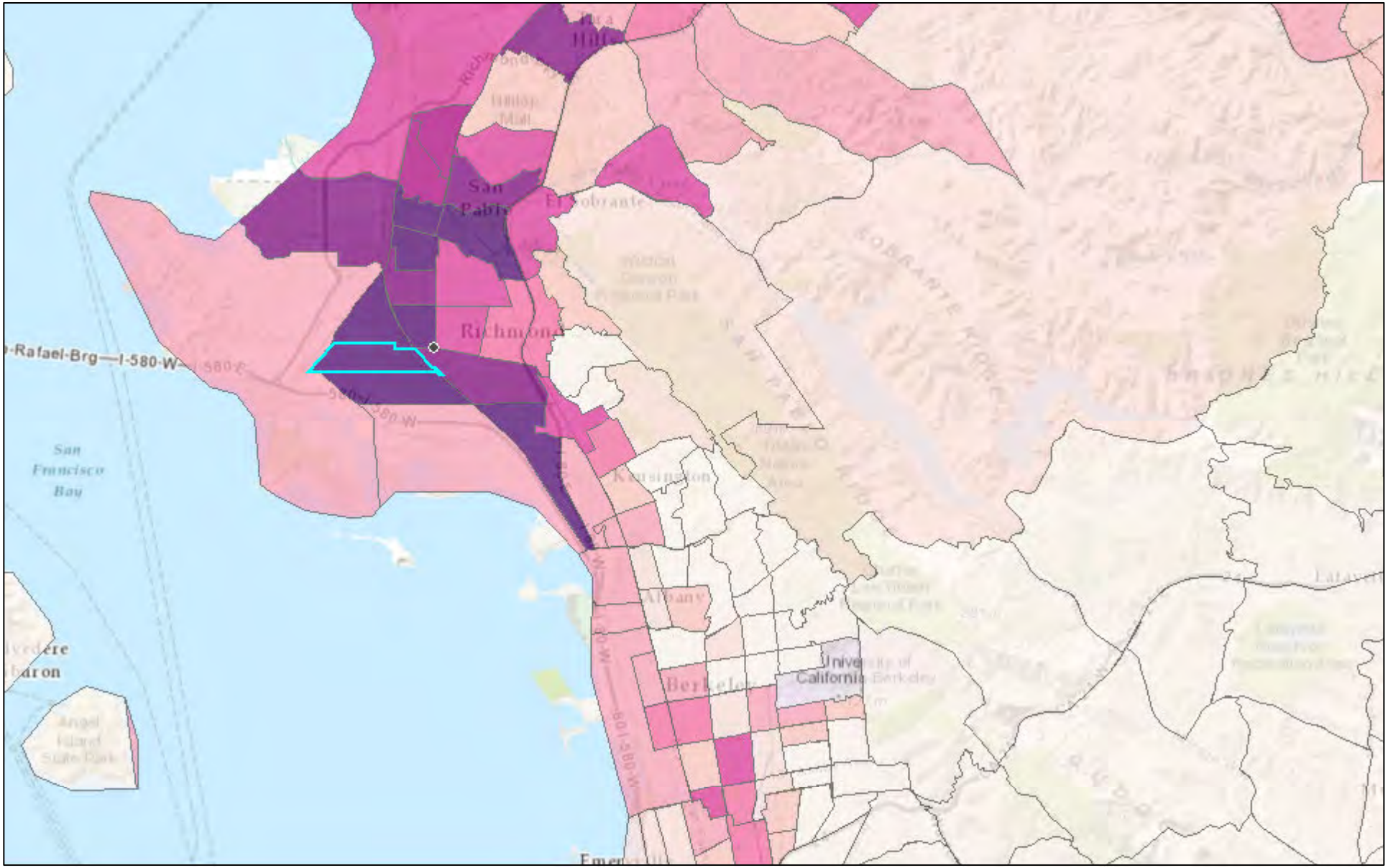
0 2 4 8 km

CalEnviroScreen Population Characteristics scores

- 1 - 10% (Lowest Population Characteristics Scores)
- 11 - 20%
- 21 - 30%
- 31 - 40%
- 41 - 50%
- 51 - 60%
- 61 - 70%
- 71 - 80%
- 81 - 90%
- 91 -100% (Highest Population Characteristics Scores)

Sources: Esri, HERE, DeLorme, TomTom, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL,

Population Characteristics Scores



May 29, 2015

1:144,448

CalEnviroScreen Population Characteristics scores

- 1 - 10% (Lowest Population Characteristics Scores)
- 11 - 20%
- 21 - 30%
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- 41 - 50%
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- 61 - 70%
- 71 - 80%
- 81 - 90%
- 91 -100% (Highest Population Characteristics Scores)

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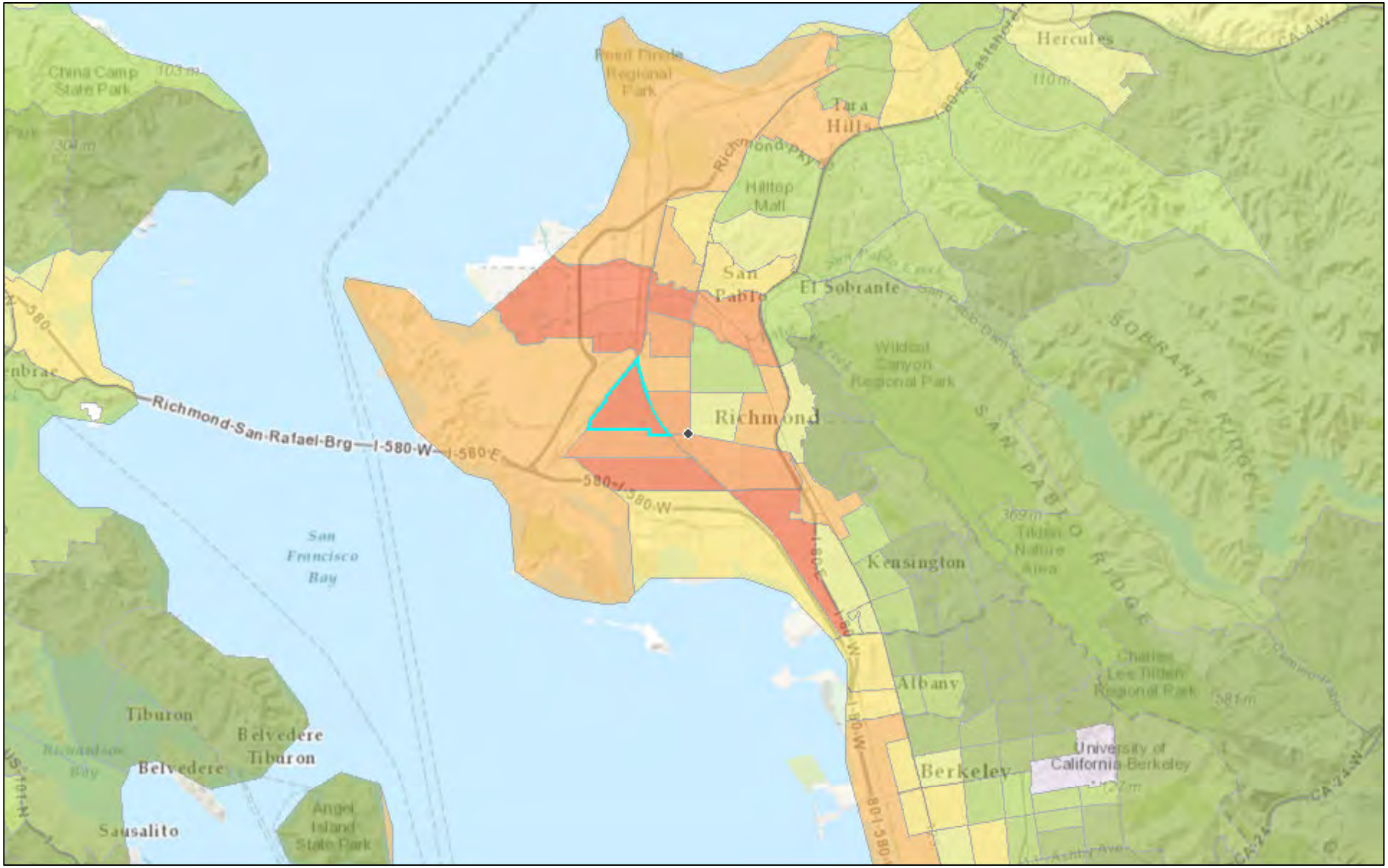
Sources: Esri, HERE, DeLorme, TomTom, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL,

CalEnviroScreen 2.0 results



May 29, 2015

CalEnviroScreen 2.0 Results

- Lowest Scores (Bottom 10%)
- 11 - 20%
- 21 - 30%
- 31 - 40%
- 41 - 50%
- 51 - 60%
- 61 - 70%
- 71 - 80%
- 81 - 90%

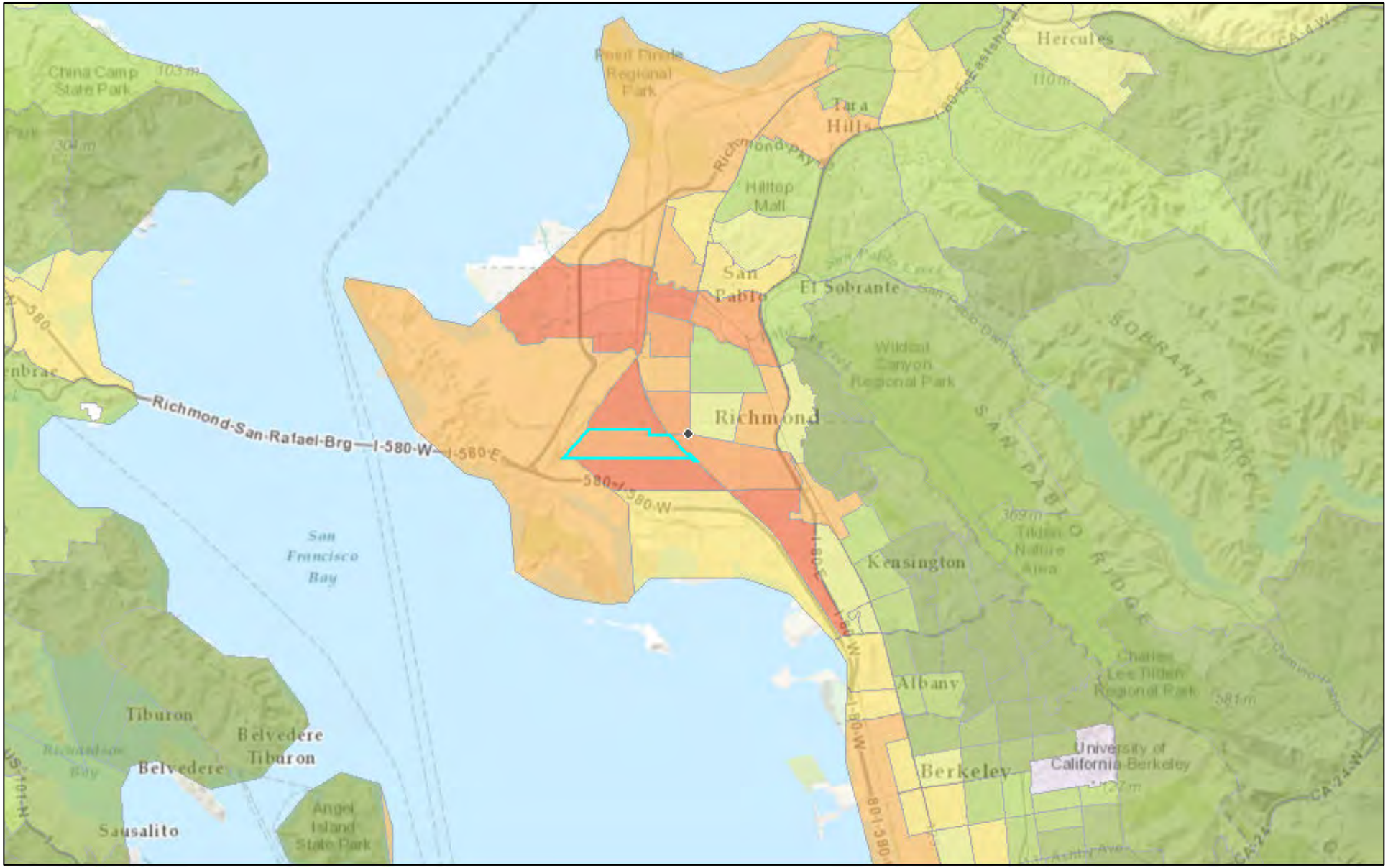
1:144,448

0 1.25 2.5 5 mi

0 2 4 8 km

Sources: Esri, HERE, DeLorme, TomTom, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL,

CalEnviroScreen 2.0 results



May 29, 2015

CalEnviroScreen 2.0 Results

- Lowest Scores (Bottom 10%)
- 11 - 20%
- 21 - 30%
- 31 - 40%
- 41 - 50%
- 51 - 60%
- 61 - 70%
- 71 - 80%
- 81 - 90%

1:144,448

0 1.25 2.5 5 mi

0 2 4 8 km

Sources: Esri, HERE, DeLorme, TomTom, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL,

20 Year Invest Summary Analysis	
Total Costs	$6,451,504.00
Net Present Cost	$6,203,369.23
Total Benefits	$273,614,932.87
Net Present Benefit	$181,209,565.04
Benefit-Cost Ratio	29.21

20 Year Itemized Savings	
Mobility	$83,915,174.24
Health	$32,455,751.79
Recreational	$146,595,280.18
Gas & Emissions	$7,273,562.83
Safety	$3,375,163.84

Funds Requested	$6,451,504.00
Net Present Cost of Funds Requested	$6,203,369.23
Benefit Cost Ratio	29.21

Kirsten Negus <kirsten@pogopark.org>

CCC letters

Toody Maher <toody@pogopark.org> Fri, May 22, 2015 at 6:44 PM
To: Kirsten Negus <kirsten@pogopark.org>

---------- Forwarded message ----------
From: **Chadrick Smalley** <chadrick_smalley@ci.richmond.ca.us>
Date: Fri, May 22, 2015 at 6:12 PM
Subject: ATP Project Inquiry - City of Richmond
To: "atp@ccc.ca.gov" <atp@ccc.ca.gov>, "inquiry@atpcommunitycorps.org" <inquiry@atpcommunitycorps.org>
Cc: "Toody Maher (toody@pogopark.org)" <toody@pogopark.org>, "TRAC (tracbaytrail@earthlink.net)" <tracbaytrail@earthlink.net>, Michael Williams <Michael_Williams@ci.richmond.ca.us>

Good afternoon:

The City of Richmond, in partnership with community groups Pogo Park and Trails for Richmond Action Committee, is preparing to submit three (3) applications to Caltrans for the Active Transportation Program. Pursuant to the application's guidance, we are requesting the California Conservation Corps and Community Conservation Corps review the attached project information and indicate whether either corps can participate in some or all of the projects.

The projects are:

The Yellow Brick Road in Richmond's Iron Triangle

Transit Connectivity Improvements: Harbour Way with 16th Street

Goodrick Avenue Bay Trail Gap Closure Project

Attached please find a description, estimate, schedule, map and plans assembled for each of these three projects.

We hope the corps are able to participate in one or all of these projects, and are looking forward to your response. Please feel free to contact me with any questions.

Sincerely,

Chadrick Smalley, MPA

Capital Projects Manager

Successor Agency to the

Richmond Community Redevelopment Agency

510-412-2067

---

3 attachments

CCC - project information - Goodrick.pdf
763K

CCC - project information - Harbour 16th.pdf
1683K

CCC - project information - YBR.pdf
5826K

Kirsten Negus <kirsten@pogopark.org>

Fwd: ATP Project Inquiry - City of Richmond

1 message

Toody Maher <toody@pogopark.org> Wed, May 27, 2015 at 10:50 AM
To: Kirsten Negus <kirsten@pogopark.org>

---------- Forwarded message ----------
From: **ATP@CCC** <ATP@ccc.ca.gov>
Date: Wed, May 27, 2015 at 10:37 AM
Subject: RE: ATP Project Inquiry - City of Richmond
To: "Smalley, Chadrick@CI.RICHMOND" <chadrick_smalley@ci.richmond.ca.us>, "toody@pogopark.org" <toody@pogopark.org>, "tracbaytrail@earthlink.net" <tracbaytrail@earthlink.net>
Cc: "Hsieh, Wei@CCC" <Wei.Hsieh@ccc.ca.gov>, "ATP@CCC" <ATP@ccc.ca.gov>, "inquiry@atpcommunitycorps.org" <inquiry@atpcommunitycorps.org>, "Arzaga, Frank@CCC" <Frank.Arzaga@ccc.ca.gov>, "Notheis, Larry@CCC" <Larry.Notheis@ccc.ca.gov>

Hi Chadrick,

Thank you for contacting the CCC. Unfortunately, we are unable to participate in this project. Please include this email with your application as proof that you reached out to the CCC.

Thank you,

Wei Hsieh, Manager

Programs & Operations Division

California Conservation Corps

1719 24th Street

Sacramento, CA 95816

(916) 341-3154

Wei.Hsieh@ccc.ca.gov

From: Chadrick Smalley [mailto:chadrick_smalley@ci.richmond.ca.us]

From: Active Transportation Program
To: Chadrick Smalley
Cc: atp@ccc.ca.gov
Subject: Re: ATP Project Inquiry - City of Richmond
Date: Wednesday, May 27, 2015 12:19:01 PM

Hi Chadrick,

Thank you for your question. We did review the additional two projects, and only identified the first as potential for corps partnership.

Thank you,
Danielle

On Wed, May 27, 2015 at 12:17 PM, Chadrick Smalley <chadrick_smalley@ci.richmond.ca.us> wrote:

> Thank you Danielle. Were you able to review the Yellow Brick Road and Harbour Way/16th projects as well? In other words, is this all that was identified amongst the three projects, or are you still reviewing the other two?
>
> Thanks-
>
> -chad
>
> **From:** Active Transportation Program [mailto:inquiry@atpcommunitycorps.org]
> **Sent:** Wednesday, May 27, 2015 12:12 PM
> **To:** Chadrick Smalley; atp@ccc.ca.gov
> **Subject:** Re: ATP Project Inquiry - City of Richmond
>
> Hi Chadrick,
>
> Thank you for your ATP inquiry. Alan Lessik of Civicorps has responded with the following partnership opportunities for the Goodrick Avenue Bay Trail Gap Closure Project:
>
> - Clearing and grubbing
> - Wetlands replacement
>
> Please include this email with your application as proof of reaching out to the Local Conservation Corps. Please feel free to reach out to Alan (alan.lessik@cvcorps.org) directly if your project receives funding.

Thank you,
Danielle

On Wed, May 27, 2015 at 10:26 AM, Active Transportation Program <inquiry@atpcommunitycorps.org> wrote:

Hi Chad,

Thank you for your inquiry. We are looking into your request and will get back to you by May 28th.

Thank you

Monica

On Fri, May 22, 2015 at 6:12 PM, Chadrick Smalley <chadrick_smalley@ci.richmond.ca.us> wrote:

Good afternoon:

The City of Richmond, in partnership with community groups Pogo Park and Trails for Richmond Action Committee, is preparing to submit three (3) applications to Caltrans for the Active Transportation Program. Pursuant to the application's guidance, we are requesting the California Conservation Corps and Community Conservation Corps review the attached project information and indicate whether either corps can participate in some or all of the projects.

The projects are:

The Yellow Brick Road in Richmond's Iron Triangle

Transit Connectivity Improvements: Harbour Way with 16th Street

Goodrick Avenue Bay Trail Gap Closure Project

Attached please find a description, estimate, schedule, map and plans assembled for each of these three projects.

We hope the corps are able to participate in one or all of these projects, and are looking forward to your response. Please feel free to contact me with any questions.

Sincerely,

Chadrick Smalley, MPA

Capital Projects Manager

Successor Agency to the

Richmond Community Redevelopment Agency

510-412-2067

--

Monica Davalos | Legislative Policy Intern

Active Transportation Program

California Association of Local Conservation Corps

1121 L Street, Suite 400

Sacramento, CA 95814

916.426.9170 | inquiry@atpcommunitycorps.org

--

Monica Davalos | Legislative Policy Intern

Active Transportation Program

California Association of Local Conservation Corps

1121 L Street, Suite 400

Sacramento, CA 95814

916.426.9170 | inquiry@atpcommunitycorps.org

--

Monica Davalos | Legislative Policy Intern
Active Transportation Program
California Association of Local Conservation Corps
1121 L Street, Suite 400
Sacramento, CA 95814
916.426.9170 | inquiry@atpcommunitycorps.org

WCCTAC

West Contra Costa Transportation Advisory Committee

El Cerrito

Hercules

Pinole

Richmond

San Pablo

Contra Costa County

AC Transit

BART

WestCAT

May 22, 2015

Ms. Lucetta Dunn, Chair
California Transportation Committee
1120 N. Street, MS-52
Sacramento, CA 95814

Dear Ms. Dunn:

WCCTAC, West County's subregional transportation planning agency, is pleased to support the City of Richmond's application for an Active Transportation Program (ATP) grant for the Yellow Brick Road (YBR) project. This plan calls for a revolutionary investment in the city's one-square mile *Iron Triangle* neighborhood - one of the most neglected communities in the San Francisco Bay Area. It was conceived by a grassroots planning effort that involved hundreds of residents over the past eight years and will drastically increase walking and biking, provide safe routes to schools, transit, parks, churches and community centers and significantly decrease roadside accidents.

The Iron Triangle is a historic neighborhood defined by three railroad lines around its border with roughly 15,000 low-income residents; about 40% of its children live below the poverty line. The area's industrial uses include the Port of Richmond, the Chevron Richmond Refinery and large manufacturing sites that contribute to bad air quality. It's a blighted and forgotten wasteland of abandoned houses, chronic unemployment, underfunded schools, high violent crime, deserted playgrounds, and poor child health – more than 50% of kids are overweight or obese.

The Yellow Brick Road was originally conceived by a group of the neighborhood's teenagers in 2008 to interconnect the key hubs in the community through a network of brightly lit and yellow stenciled walking and bicycling paths. In 2014, about 30 local residents walked all the streets in the Iron Triangle and meticulously noted the barriers to mobility in the neighborhood: broken sidewalks and missing crosswalks, wide streets, poor lighting, vacant houses, reckless driving near schools, snarling dogs, unsafe dumping areas, and lack of signage.

In conjunction with community organizations, transportation consultants and design firms, a "Living Preview" of the Yellow Brick Road was constructed shortly thereafter to spectacular affect. Traffic cones, chopped wood pieces, potted plants, sawhorses, chalk, paint, Astroturf and straw waddles created an illusion of wider sidewalks, slimmer streets, clearly designated crosswalks and bike lanes. Over two days, 354 people

attended the community event including firemen, police, designers and local residents to critique the design and give their enthusiastic input.

The result is a dynamic plan that will drastically increase walking and bicycling in a neighborhood ripe for mobile transformation. The Iron Triangle's flat, short, interconnected and low traffic streets provide a perfect environment for a new network of pedestrian and bike paths connecting three local schools, several renovated parks and playlots, BART, the Kaiser Hospital and the Nevin Community Center. The Yellow Brick Road will provide safe and secure roadways for kids, parents and all members of the community many of who have few cars or face dangerous street access to public transportation. It will flush residents out of their homes and sedentary lifestyles, improve public health, and lower the area's carbon footprint.

This community-conceived and implemented project will demonstrate a highly public commitment to innovative and critically needed transportation in one of the most needy communities in the Bay Area. We urge your support for what could be one of the most positively transformative neighborhood projects in recent memory.

Sincerely,

John Nemeth

John Nemeth
Executive Director

13831 San Pablo Avenue, San Pablo, CA 94806
Ph: 510.215.3220 ~ Fx: 510.237.7059 ~ www.wcctac.org

May 14, 2015
Ms. Lucetta Dunn, Chair
California Transportation Committee
1120 N. Street, MS-52
Sacramento, CA 95814

Dear Ms. Dunn:
I wish to add my voice, experience and enthusiastic support for the City of Richmond's application for an Active Transportation Program (ATP) grant for the Yellow Brick Road (YBR) project. In my position as a town transportation walkability and livability expert in more than 3500 neighborhoods, towns and cities, I find this grant request, this organizational talent and the Iron Triangle Neighborhood one of the best places of investment to see measurable results. After working in more than 300 California neighborhoods, the Iron Triangle has become my first choice. Let me explain why.

I have had the pleasure of working with Toody Maher and her fellow applicants at three significant engagements to conceptualize and to build this YBR plan. The project has been well vetted, and it has serious backers. I have also traveled with the Pogo Park team to national conferences, co-presenting their dream to inspire other cities to place investments where the greatest lift to a community is found. The Yellow Brick Road (YBR) project will improve this neighborhood, and these actions will inspire other diverse neighborhoods throughout our nation to build better places.

This project is worthy in many ways. Let me skip elements listed in the grant application, focusing on relevance to the future of California. Caltrans, other transportation agencies, and the communities and agencies they support, seek a future where per capita Vehicle Miles Traveled (VMT) is reduced. This quest for lowering car dependency, especially in low socio-economic places is an essential step to achieve modal diversity, shorter trips, healthier places to live, and a sustainable future. This calls for building communities through transportation, not transportation through communities. Model projects are needed, especially in our most diverse, most overlooked communities. The built environment, good or bad, is a high determinate of how people grow, develop aspirations that matter, age well, and stay out of care facilities. From a community health perspective this is the model that not just California, but troubled cities throughout our nation are looking for. Please give me a call if I can provide additional details in support of the Yellow Brick Road project.

Sincerely,

Dan Burden
Director of Innovation and Inspiration
Blue Zones, LLC
(614) 595-0976
dan.burden@bluezones.com

WEST CONTRA COSTA UNIFIED SCHOOL DISTRICT
1108 Bissell Avenue
Richmond, CA 94801-3135

Bruce Harter, Ph.D.
Superintendent

Telephone: (510) 231-1101
FAX: (510) 236-6784

May 18, 2015

Ms. Lucetta Dunn, Chair
California Transportation Commission
1120 N. Street, MS-52
Sacramento, CA 95814

Dear Ms. Dunn:

As representatives of the local school district and in particular the four public schools that serve Richmond's Iron Triangle neighborhood, we are writing to express our enthusiastic support for the City of Richmond's Active Transportation Program (ATP) grant for the Yellow Brick Road project.

The one-square mile Iron Triangle neighborhood is one of the most disadvantaged and under-served in California. Statistics support this fact: nearly 40% percent of local children live below the poverty line; roughly 98% of school-age children qualify for free or reduced meals.

There are three public elementary schools (Peres, Lincoln, and Nystrom) and one high school in or adjacent to the Iron Triangle (Gompers). These four schools serve roughly 1,600, low-income children who are predominantly African American (30%) and Latino (60%).

In a 2014 survey with local parents of Peres Elementary and Lincoln Elementary, the Contra Costa Health Department found that roughly 40% of families walked to and from these local schools each day. Among the primary barriers local parents identified to walking and biking included "scary cars" (e.g. cars traveling at high speeds down residential streets) and fear of crime (the Iron Triangle has historically featured high levels of violence).

Parents and children also face the obstacles of decaying infrastructure, including crumbling sidewalks, missing crosswalks, dark and treeless streets, houses that sell drugs, snarling guard dogs, blight, and abandoned lots. It is no wonder that these barriers contribute to local children and their families to stay inside their homes, isolated, inactive, scared, and unmotivated to venture out outside to walk or bike along public streets.

The Yellow Brick Road (YBR) will assist in transforming this reality for thousands of local people. The YBR will designate and create safe, green, and clean bike and walking routes through the Iron Triangle neighborhood that connects key community assets (schools, transit, parks, shopping, and recreation) together. Mini-circles and narrower streets will discourage speeding cars and encourage walking and biking.

The community vision for the Yellow Brick Road plan has been in motion for several years. Envisioned by local youth as a vehicle to transform their neighborhood, the Yellow Brick Road plan has the backing of thousands of community members. This community driven effort ensures the plan is representative and responsive to the community's needs, and will be an effective use of funds. We cannot think of a more comprehensive, far-reaching, and ambitious neighborhood project for the Richmond community.

We strongly encourage you to select Richmond's Yellow Brick Road for the ATP grant. This project aligns with the very heart of the Active Transportation Program's goals, and will positively impact this high need neighborhood for decades to come.

Sincerely,

Bruce Harter
Superintendent

Jawan Eldridge
Principal, Peres Elementary School

Cynthia White-Vinson
Principal, Lincoln Elementary School

Vince Rhea
Principal, Gompers High School

LaDonna Williams
Principal, Nystrom Elementary School

Loni Hancock SENATOR, NINTH DISTRICT

May 27, 2015

Lucy Dunn, Chair
California Transportation Commission
1120 N. Street, MS-52
Sacramento, CA 95814

RE: Support for the City of Richmond's Yellow Brick Road Project Application

Dear Ms. Dunn:

I am writing to express my support for the City of Richmond's Yellow Brick Road Project application submitted for consideration for the Active Transportation Program (ATP). This project will promote a network of safe and vibrant walking and biking routes throughout Richmond's Iron Triangle neighborhood, and will profoundly increase the number of local residents who walk and bike, rather than use a car or bus.

For decades, the underserved Iron Triangle neighborhood has suffered from a paralyzing reliance on cars and spotty bus service. For those who wish to bike or walk there are significant obstacles – missing sidewalks, lack of access to paths and parks, and neighborhoods that are unsafe due to traffic and violence. There are also long distances to useful and appealing destinations. The result is physical inactivity that results in significant and cumulative community health problems.

The Yellow Brick Road Project, with its series of clearly marked bike and walking routes, will provide an incentive for local people to walk to their parks, ride a bike to visit a friend, or walk through a safe, tree-filled, beautiful pathway. Signage will point the way to the local hospital, neighborhood school or BART. Stress, isolation, and chronic diseases will be reduced. Air quality will improve. There will be new incentives to walk or bike to work, seek services, or visit a library. The positive effects will ripple through the neighborhood, causing improved quality of life and a sense of community.

The Iron Triangle neighborhood has suffered from years of neglect. Its own residents have created a grass-roots proposal that they know can transform their community from the ground up. I know that this project will radically and positively change thousands of lives for years to come, and I hope you will give it full consideration.

Sincerely,

Loni Hancock

LONI HANCOCK
Senator

LH:mm

DISTRICT OFFICE • 1515 CLAY STREET, #2202 • OAKLAND, CA 94612 • (510) 286-1333 • FAX (510) 286-3885
CAPITOL OFFICE • STATE CAPITOL, ROOM 2082 • SACRAMENTO, CA 95814 • (916) 651-4009 • FAX (916) 651-4909

STATE CAPITOL
P.O. BOX 942849
SACRAMENTO, CA 94249-0015
(916) 319-2015
FAX (916) 319-2115

DISTRICT OFFICE
1515 CLAY STREET, SUITE 2201
OAKLAND, CA 94612
(510) 286-1400
FAX (510) 286-1406

Assembly
California Legislature

TONY THURMOND
ASSEMBLYMEMBER, FIFTEENTH DISTRICT

COMMITTEES
BUDGET
EDUCATION
HEALTH
HUMAN SERVICES
LABOR AND EMPLOYMENT

SUB COMMITTEES
CHAIR: BUDGET SUBCOMMITTEE NO. 1 ON HEALTH AND HUMAN SERVICES
BUDGET SUBCOMMITTEE NO. 6 ON BUDGET PROCESS OVERSITE AND PROGRAM EVALUATION

May 27, 2015

Ms. Lucetta Dunn, Chair
California Transportation Commission
1120 N. Street, MS-52
Sacramento, CA 95814

Dear Ms. Dunn:

I urge you to support the City of Richmond's Active Transportation Program grant for the Yellow Brick Road proposal. This plan is the result of a nearly decade-long community effort to create a robust network of biking and walking routes in a critically underserved neighborhood - Richmond's one-square-mile Iron Triangle.

In California, pedestrian injuries are 17% of all traffic-related injuries, though only about 7% of all trips are made on foot according to the state's most recent Strategic Highway Safety Plan – a significantly higher rate than the country as a whole. Each year, a large number of fatal and serious injuries to pedestrians and bicyclists occur on neighborhood streets.

Through a combination of factors, the Iron Triangle's bicyclists and pedestrians have logged a disproportionate rate of destructive collisions involving automobiles in comparison with other Bay Area communities. According to SWITRS data, between 2008-2012 there were 50 incidents of vehicular collisions with cyclists and pedestrians.

For decades, residents in this neighborhood have struggled with numerous barriers that discourage walking and – wide streets, speeding cars, abandoned property and blight, lack of sidewalks and crosswalks, loiterers, and vicious dogs. As the streets are viewed as dangerous, many residents - especially children - stay inside their homes.

The Yellow Brick Road project addresses barriers to walking and biking. The plan calls for a marked and illuminated network of cycling and pedestrian pathways with colorful signposts, painted curbs and intersections. Street improvement methods include slowing cars, known as traffic calming, especially near schools and in residential and commercial areas. There will be clean, clearly defined routes for kids to walk to school, spacious lanes for weekend bikers, and foliage-shaded paths for residents to rediscover the wonders of their new neighborhood. People will feel compelled to get outside - to walk and get on their bikes instead of sitting inside their residences or just relying on their cars for transportation.

The Yellow Brick Road project consists of many critical elements that are perfectly aligned with the goals of the Active Transportation Program. I am absolutely convinced that, if funded, the manifestation of this project in the community will be a triumph.

Sincerely,

Tony Thurmond
Assemblymember, 15th District

Printed on Recycled Paper

John Gioia (say "Joy-a")
District One
Board of Supervisors

Contra Costa County

11780 San Pablo Avenue, Suite D
El Cerrito, CA 94530
Phone: (510) 231-8686
Fax: (510) 374-3429

May 14, 2015
Ms. Lucetta Dunn, Chair
California Transportation Commission
1120 N. Street, MS-52
Sacramento, CA 95814

Dear Ms. Dunn:

Contra Costa County is a strong proponent of urban policies and plans that promote physical exercise through alternative modes of public transportation that emphasize walking and cycling. For this reason, I strongly support the city of Richmond's Active Transportation Program grant for their "Yellow Brick Road" project.

Located in Richmond's Iron Triangle neighborhood, the Yellow Brick Road ("YBR") will be a life-changing investment for one of the most disadvantaged communities in the Bay Area. Its conception came from a community groundswell of hundreds of residents working in concert with city planners, community designers, health advocates, and neighborhood activists over many years.

In Richmond, as in many post-World War II communities, neighborhoods were built to accommodate vehicle traffic and often neglected the safety of pedestrians and bicyclists. The Iron Triangle is typical of this development pattern. It has wide vehicle travel lanes, few designated spaces for bicycles, limited space for walking, and inadequate pedestrian crossings. These and other factors encourage unsafe auto speeds and increase conflicts between vehicles, pedestrians and bicyclists, contributing to injuries and deaths.

The YBR plan calls for a network of clearly-defined bike and walking paths that connect residents with their community assets (i.e. churches, schools, transit centers and parks). It will slow automobile traffic by narrowing streets and widening bicycling and pedestrian routes. There will be clear alternatives to car travel, increased opportunities for walking or cycling to wider transit networks and more useful and attractive destinations.

The YBR will increase physical activity reducing the risk of obesity, asthma and other chronic diseases prevalent in the Iron Triangle neighborhood. The proposal will promote public health by decreasing air pollution and achieve climate change goals by decreasing carbon dioxide emissions. In short, the YBR will provide the local community with a neighborhood that is safer, more livable, walkable, bikeable and equitable.

This creative - and critically needed - project will transform the community from an isolated car-centric district into a neighborhood with opportunities to move through the neighborhood on foot or on bike. The result is community health.

The YBR is a once-in-a-generation project that will significantly impact thousands of the most vulnerable people living in California. I urge you to support this far-seeing and transformative proposal.

Sincerely,

John Gioia

John Gioia
Board of Supervisors Chair, District One

May 18, 2015

Ms. Lucetta Dunn, Chair
California Transportation Committee
1120 N. Street, MS-52
Sacramento, CA 95814

Dear Ms. Dunn:

We are writing on behalf of two local bike and/or pedestrian organizations, Bike East Bay and the Richmond Bicycle and Pedestrian Advisory Committee (BPAC) to support the city of Richmond's "Yellow Brick Road" ATP grant application.

Bike East Bay is a 501c3 non-profit organization with more than 4,000 members in Alameda and Contra Costa Counties. Our mission is to promote healthy and sustainable communities by working to make bicycling safe, fun and accessible through advocacy, education and community engagement.

The Richmond BPAC is a volunteer-led organization that works in partnership with the city and others to implement the city's bicycle master plan, help guide staff decisions and work plans and promote bicycling and walking in Richmond.

Both our organizations wish to express our deepest possible support for the City of Richmond's Yellow Brick Road project. The Yellow Brick Road creates a network of safe bike and walking routes through one of California's toughest low-income neighborhoods - Richmond's Iron Triangle.

Multiple studies all over the world have revealed that building a pedestrian and bike-centric community leads to significant and impactful health gains among its population. Instead of sitting passively in a car or bus, walking and cycling promote life-changing physical activity that reduces chronic disease, obesity and a variety of illnesses. Biking and walking enable social interactions to increase, brings more eyes on the street, and contributes to a decrease in a neighborhood's carbon footprint. Denmark's capital, Copenhagen, is the most bike-friendly city in the world with more than 50 percent of all trips outside the home made by bicycle. Its people's "happy and healthy" index is one of the globe's highest for a large city.

The Yellow Brick Road (YBR) is a well-thought out plan to transform the Iron Triangle's car-centric community into a safe biking and pedestrian grid. The YBR envisions safe, clean, will-lighted bike and walking routes that connect neighborhood parks, libraries, churches, community centers, hospital and schools. It will build on a partnership with law enforcement to decrease bike theft, improve safety and promote education. Once built, residents will have more convenient and safe access mass transit (Richmond has the only Bay Area BART station that connects to Amtrak).

The YBR will calm traffic by narrowing streets, expanding curbs and crosswalks, and constructing min-circles in intersections – making it safer for parents to walk their kids to schools and parks, and for children to ride their bikes across town. The YBR will slow down traffic on busy streets while ramping up physical activity, improving public health and weaving the community together.

The plan for this project, the mobilization of hundreds of residents in its design, and the community's overwhelming enthusiasm for the Yellow Brick Road's vision make this project one of the most positive neighborhood developments we've seen in years.

Bike East Bay and the Richmond BPAC urge you to support the City's Yellow Brick Road project, a deeply conceived, well-thought-out, and life-changing community project that the Active Transportation Program will be proud to partner with.

Sincerely,

Cynthia Armour

Cynthia Armour
Project Manager
Bike East Bay

Sincerely,

Richmond BPAC
Chair
Richmond Bicycle and Pedestrian Committee

WILLIAM B. WALKER, M.D.
HEALTH SERVICES DIRECTOR

WENDEL BRUNNER, M.D.
PUBLIC HEALTH DIRECTOR

CONTRA COSTA
HEALTH SERVICES

CONTRA COSTA
PUBLIC HEALTH
COMMUNITY WELLNESS &
PREVENTION PROGRAM
597 CENTER AVENUE, SUITE 125
MARTINEZ, CALIFORNIA 94553
PH (925) 313-6808
FAX (925) 313-6840

May 8, 2015

California Transportation Committee

To Whom It May Concern:

I am writing to voice my enthusiastic support for the City of Richmond's application for an Active Transportation Program (ATP) grant for the Yellow Brick Road (YBR) project. The plan calls for a revolutionary investment in the city's one-square mile *Iron Triangle* neighborhood - one of the most neglected communities in the San Francisco Bay Area. The plan was conceived by a grassroots planning effort that involved hundreds of residents over the past eight years that will drastically increase walking and biking, provide safe routes to schools, transit, parks, churches and community centers and significantly decrease roadside accidents.

The Iron Triangle is a historic neighborhood defined by three railroad lines around its border with roughly 15,000 low-income residents; about 40% of its children live below the poverty line. The area's industrial uses include the Port of Richmond, the Chevron Richmond Refinery and large manufacturing sites that contribute to bad air quality. It's a blighted and forgotten wasteland of abandoned houses, chronic unemployment, underfunded schools, high violent crime, deserted playgrounds and poor child health – more than 50% of kids are overweight or obese.

The Yellow Brick Road was originally conceived by a group of the neighborhood's teenagers in 2008 to interconnect the key hubs in the community through a network of brightly lit and yellow stenciled walking and bicycling paths. In 2014, about 30 local residents walked all the streets in the Iron Triangle and meticulously noted the barriers to mobility in the neighborhood: broken sidewalks and missing crosswalks, wide streets, poor lighting, vacant houses, reckless driving near schools, snarling dogs, unsafe dumping areas, and lack of signage.

The Iron Triangle's flat, short, interconnected and low traffic streets provide a perfect environment for a new network of pedestrian and bike paths connecting three local schools, several renovated parks and playlots, BART, the Kaiser Hospital and the Nevin Community Center. The Yellow Brick Road will provide safe and secure roadways for kids, parents and all members of the community many of who have few cars or face dangerous street access to public transportation. It will flush residents out of their homes and sedentary lifestyles, improve public health, and lower the area's carbon footprint.

This community-conceived and implemented project will demonstrate a highly public commitment to innovative and critically needed transportation in one of the most needy communities in the Bay Area. I'm quite sure that a decade from now, people will be talking about The Yellow Brick Road as one of the most positively transformative neighborhood projects in recent memory.

Sincerely,

Wendel Brunner

Wendel Brunner, MD
Public Health Director
Contra Costa Health Services

THE IRON TRIANGLE NEIGHBORHOOD COUNCIL
RICHMOND CA

May 10, 2015

Ms. Lucetta Dunn, Chair
California Transportation Commission
1120 N. Street, MS-52
Sacramento, CA 95814

Dear Ms. Dunn:

The Iron Triangle Neighborhood Council writes to you today to express our strong and enthusiastic support for the city of Richmond's ATP (Active Transportation Program) grant application for their Yellow Brick Road project.

As noted in the ATP grant application, the Yellow Brick Road project was envisioned in 2008 by teenagers from Iron Triangle neighborhood. As part of a summer project, they were asked to think of something that would improve their neighborhood. Their idea: Yellow Brick Road – yellow bricks stenciled on streets and sidewalks to designate safe walking and biking routes through the neighborhood. The Yellow Brick Road would connect community assets together.

Our Iron Triangle community is beyond excited to even start to believe that the Yellow Brick Road can actually happen in this neighborhood. Iron Triangle is a neighborhood filled with low-income families who struggle every day to get by. Many in our community cannot afford a car. The only way for local people to get to the local school, market, post office, doctor's office, church or BART/Amtrak station is to travel there either by walking or riding a bike.

But these families literally cannot walk or bike safely in our neighborhood because of steep barriers. The streets are scary: big cars speed down small residential and commercial streets alike, terrorizing pedestrians. Many sidewalks are broken – or nonexistent. Lighting at night is poor. Many crosswalks are poorly marked; many cars ignore them altogether. Aggressive dogs guard houses behind fences adjacent to the sidewalk where children walk to school.

The Yellow Brick Road will impact our neighborhood in multiple ways – but the most important way is that is will create routes where the needs of pedestrians and bicyclists clearly outrank the needs of a car. The Yellow Brick Road can bring a sea-change to our neighborhood. It will encourage and enable our community to walk and bike through the neighborhood with confidence and without fear.

We urge you to support Richmond's The Yellow Brick Road project in the Iron Triangle neighborhood.

Sincerely,

Otheree Christian
President Iron Triangle Neighborhood Council

500 B Street • Richmond • California • 94801

RICHMOND POLICE DEPT.

May 26, 2015

Ms. Lucetta Dunn, Chair
California Transportation Commission
1120 N. Street, MS-52
Sacramento, CA 95814

Dear Ms. Dunn:

As Richmond's Police Chief, I am writing to offer my support for the City of Richmond's application for an Active Transportation Program (ATP) grant for the Yellow Brick Road project. The proposal calls for building a network of walking and biking routes in Richmond's Iron Triangle neighborhood. The YBR will connect key community hubs and increase physical activity.

For decades, the Iron Triangle community in Richmond has struggled with violent crime and other problems common to many urban areas including endemic poverty and feelings of hopelessness. In many crime hotspots, residents have had to deal with the issue of illegal dumping and the sounds of gunfire. Drug dealers have used local parks to loiter. Some local residents in the Iron Triangle have responded by having vicious dogs in their front yards to ward off the potential of intruders. In addition, the streets in the Iron Triangle are in need of repair: many have missing crosswalks, poor signage and broken sidewalks. These conditions encourage the use of automobiles for transportation and discourage local residents from walking, biking, and using public transportation.

According to the Contra Costa Health Department, between 2008-2012, there were 161 pedestrians and 127 bicyclists injured in accidents largely involving vehicular collisions in the 52.48 square mile area in Richmond. These rates were significantly higher than rates throughout the Contra Costa County. Between 2008 and 2012 in the one-square mile of the Iron Triangle neighborhood of Richmond, there were 50 accidents that involved a bicyclist or pedestrian – 17.3% of the total.

In 2008, we began to work with Pogo Park, a non-profit organization working in the Iron Triangle to transform broken and under-utilized city parks into vibrant public spaces for children to play. Pogo Park in partnership with the City and local residents renovated the Elm Playlot, a small park located in the heart of the neighborhood, and transformed it into a vibrant public space. Parents now bring their children for recreation and exercise in the renovated park. Children come – unaccompanied – to play. Serious crimes such as aggravated assaults, homicides, rapes, robberies and property crimes including arson, theft, burglary and stolen motor vehicles have decreased in the blocks surrounding this park.

By creating a safe environment, residents have finally come out of their residences to walk, play and socialize in their neighborhood. The Yellow Brick Road will take this successful micro-

1701 Regatta Boulevard, Richmond, CA 94804-7409
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model and extend it throughout the whole one-square mile of the Iron Triangle. It will increase the convenience and safety of walking and biking by renovating streets and routes for all users. There will be stand-alone bike and pedestrian paths, clearly marked street bike lanes, and safe pedestrian routes to transit and schools. The YBR will also connect churches, libraries, community centers and parks through a clearly designated pathway to walk and bike.

I am certain that funding the Yellow Brick Road will reduce crime, increase public safety, encourage physical activity and drastically boost public health. I strongly urge you to back this project as so many in our city have, and make this community dream a reality.

Sincerely,

Chris Magnus
Chief of Police

Yellow Brick Road

Iron Triangle Walkable Neighborhood Plan

Transforming lives by transforming public space.

FEHR PEERS

Richmond

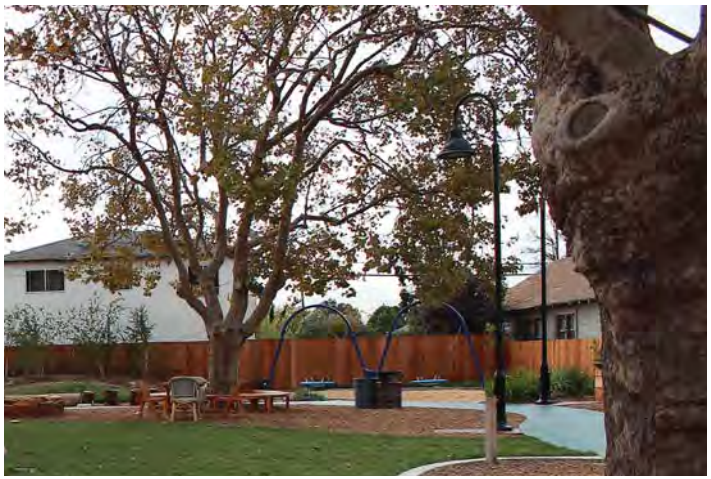
POGO PARK

Local Government Commission

VALLIER DESIGN ASSOCIATES, INC.

February 2015

This project is funded in part by a grant from the Environmental Justice grant program of the California Department of Transportation



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2 Envisioning the Yellow Brick Road

3 Existing Conditions

4 Yellow Brick Road Design Guidelines

5 Public Outreach

6 Yellow Brick Road Vision Network

7 Roots

8 Trunks

9 Branches

10 Next Steps

A Appendix A: Elm to Peres Concept Plans and Cost Estimate

This project is funded in part by a grant from the Environmental Justice grant program of the California Department of Transportation

About the Yellow Brick Road Iron Triangle Walkable Neighborhood Plan

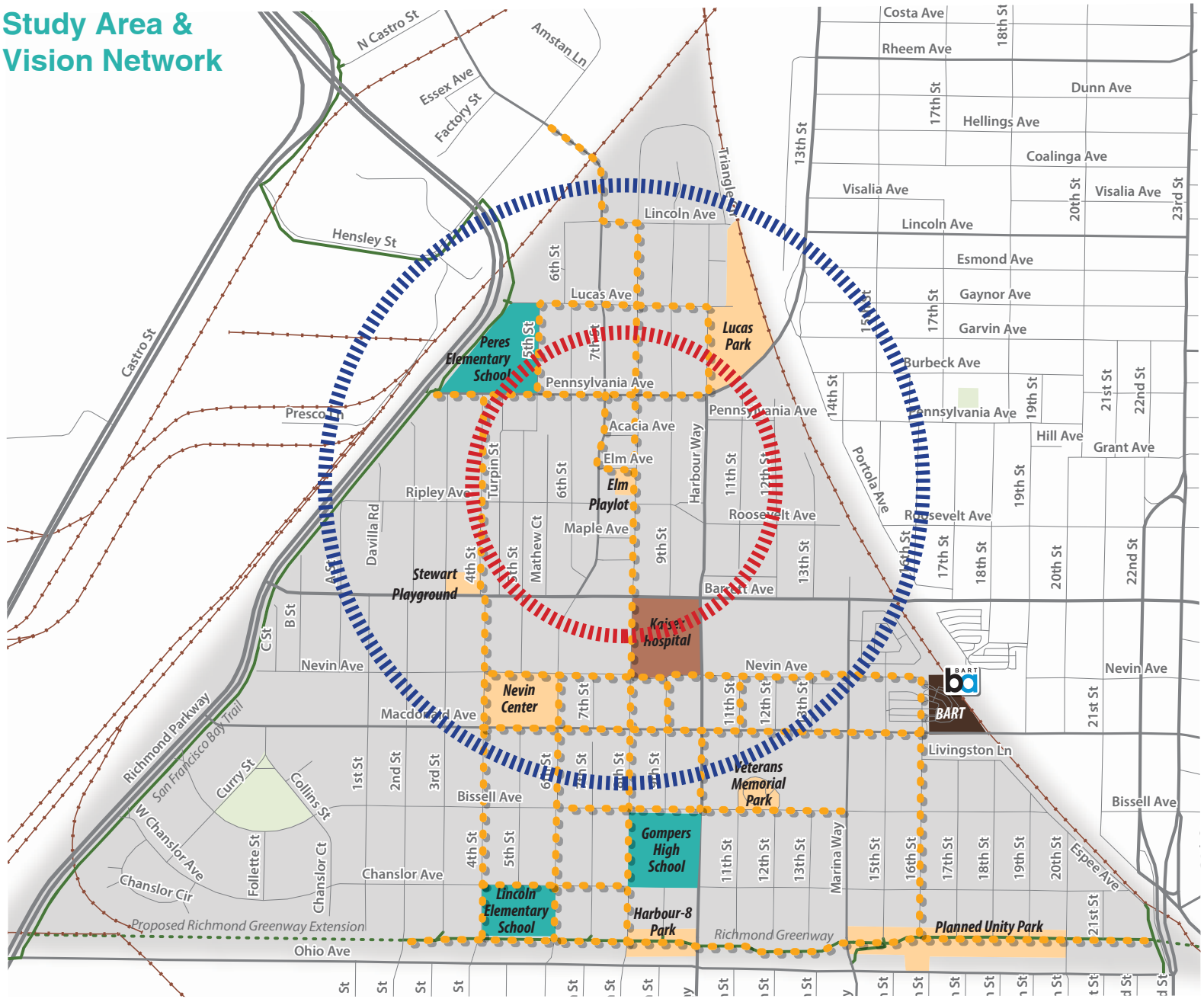
The Yellow Brick Road Walkable Neighborhoods Project addresses key community-identified barriers, issues, and opportunities in the community in order to design and implement complete streets improvements along roadways in the community-identified Yellow Brick Road (YBR) network. These complete streets improvements would be implemented in conjunction with rehabilitation of abandoned buildings and properties, code enforcement issues of aggressive dogs and fence lines, and personal security improvements to create safe, pleasant, artful, and walkable roadways in the Iron Triangle Neighborhood. The routes would connect the key assets in the neighborhood, including local elementary schools, parks, and transit.

The Yellow Brick Road concept was conceived by local youth living in the Iron Triangle neighborhood as a way to safely link key areas in the neighborhood through bright yellow brick patterns on the sidewalks and roadways, as described in the next chapter Envisioning the Yellow Brick Road. While the Yellow Brick Road idea originated in the Iron Triangle neighborhood, it is a model for neighborhood planning and creating safe routes to key destinations that can be replicated in neighborhoods throughout Richmond and the United States. As such, the Yellow Brick Road Walkable Neighborhood Plan is intended as a stand alone document and as an appendix to the Richmond Pedestrian Plan (2011). This Plan documents the first application of the Yellow Brick Road concept in Richmond.

Source: Pogo Park

This Walkable Neighborhood Plan is the outcome of an intensive community-driven process to improve the safety, security and desirability of walking for transportation and health in the Iron Triangle neighborhood. The City of Richmond, Local Government Commission and Pogo Park collaborated to prepare a Caltrans Environmental Justice Transportation Planning Grant proposal to fund the project. Caltrans awarded the grant to the City and its partners in 2012. The project partners selected Fehr and Peers, a firm with extensive multi-modal transportation planning, engineering and design expertise, to help inform the hands-on community-driven visioning process used to develop the plan, and to prepare the detailed design concepts presented in the pages that follow.

Yellow Brick Road Study Area & Vision Network



LEGEND

- Yellow Brick Road
- School
- Park
- Iron Triangle Study Area
- 5 Minute Walk Shed from Elm Playlot
- 10 Minute Walk Shed from Elm Playlot

Study Area

The study area of this Plan is generally defined as the Iron Traingle neighborhood of Richmond.

The neighborhood is bounded by the Richmond Greenway and Ohio Avenue to the south, the BART and Union Pacific Railroad tracks to the east, and Richmond Parkway to the west.

Overview

The Yellow Brick Road is envisioned as a network of safe, green, and clean walking and biking routes in Richmond, California's Iron Triangle neighborhood

This section explains the concept, place, partners, strategies, and lessons learned in envisioning and creating the Yellow Brick Road in the Iron Triangle Neighborhood.

1 THE CONCEPT: *The Yellow Brick Road*

In a 2008 summer youth program, a group of teen-agers from Richmond, California's Iron Triangle neighborhood were given the task of thinking of a project that would improve their neighborhood. They came up with a brilliantly simple idea: the Yellow Brick Road.

They envisioned Iron Triangle residents identifying key community assets (e.g., schools, parks, churches, community centers, transportation hubs, etc.). Then they would connect those assets via the Yellow Brick Road – a network of "safe, green, and clean" (their words) walking and biking paths designated by brightly colored yellow bricks, stenciled on sidewalks and roads.

The City of Richmond and its partners, the Local Government Commission and Pogo Park, received an Environmental Justice Transportation Planning Grant for the Yellow Brick Road from the California Department of Transportation in 2012 to further develop this neighborhood vision into a plan. The project partners selected Fehr and Peers, a transportation planning and engineering firm and Dan Burden of Walkable and Livable Communities Institute, a non-profit that inspires, teaches, connects and supports communities in their efforts to improve health and well-being through better built environments, to help inform the intensive community-driven visioning process used to develop the plan and to prepare the detailed design concepts presented in the pages that follow.

2 THE PLACE: *Richmond, California's Iron Triangle Neighborhoood*

The Iron Triangle is a historic neighborhood of roughly 15,000 people in the center of Richmond. Its one square mile was originally defined by three major railroad lines that formed a triangle around its border, hence its name. Today, its southern boundary is the Richmond Greenway, a multi-use path that was constructed in the former Atchison-Topeka and Santa Fe Railroad corridor.

The Neighborhood Has Good Bones: Historic and architecturally notable houses, a well-laid-out street grid with short, walkable blocks, and a major regional transit hub (Richmond is the only Bay Area city with a direct BART-to-Amtrak connection).

Demographics: According to the 2010 US Census, the Iron Triangle neighborhood was 60% Latino, 27% African-American, 5% Asian, 7% other. The Iron Triangle is a historic center for African Americans who came from the South to work in the Richmond shipyards and the recent population trend has been an increase in Latinos, including immigrants from Mexico and Central America.

Economics: Low-income and working poor; 50% of children live in poverty.

Environment: The Chevron Richmond Refinery, Port of Richmond, Richmond Parkway, railroad lines, and industrial uses contribute to poor air quality, few trees or natural areas.

Challenges: Unemployment, blight and decay, beleaguered and underfunded schools, little access to healthy foods, persistent health problems including asthma and obesity, high levels of violent crime, dangerous streets, and hopelessness.

3 THE PARTNERS: The Right Place, Right Time, Right People

CITY GOVERNMENT

The City of Richmond: This effort involved several City departments including the City Manager's Office, Planning and Building Services, Engineering Services, Public Works, Parks Division, Police Department, Code Enforcement, and the Fire Department, working together to implement the City's Pedestrian Plan and Bicycle Master Plans, adopted in 2011, and the City's "Health in All Policies" strategy to address health disparities and work towards health equity in Richmond (adopted by the Richmond City Council in 2014). (www.ci.richmond.ca.us/index.aspx?NID=2575)

NONPROFIT PARTNER

Pogo Park: A community-based nonprofit working to transform city parks and streets in Richmond's Iron Triangle neighborhood into safe and vibrant green spaces. Pogo Park organized and managed the unique resident-driven community engagement process described below. (www.pogopark.org)

PROFESSIONAL DESIGN TEAM

Local Government Commission: A nonprofit organization that assists local governments and community leaders in California and beyond with design tools and strategies and innovative public engagement initiatives to develop locally driven solutions. (www.lgc.org)

Fehr & Peers: Transportation engineers with extensive multi-modal transportation planning, engineering, and design expertise. Fehr & Peers helped to develop the community's vision for the Yellow Brick Road into detailed designs that are presented in this document. (www.fehrandpeers.com)

Dan Burden, Blue Zones: A nationally recognized educator and leader on pedestrian and bicycle path design and creating more livable, walkable, equitable communities. (www.bluezones.com/speaking/dan-burden-speaking-2/)

4 THE STRATEGY:
How We Empowered the Community

A

Community Outreach Team formed. Made up of 30 local residents, diverse in race, ethnicity, and gender, mirroring the demographics of the neighborhood, and including children, youth, adults, and seniors–people who know their neighborhood best.

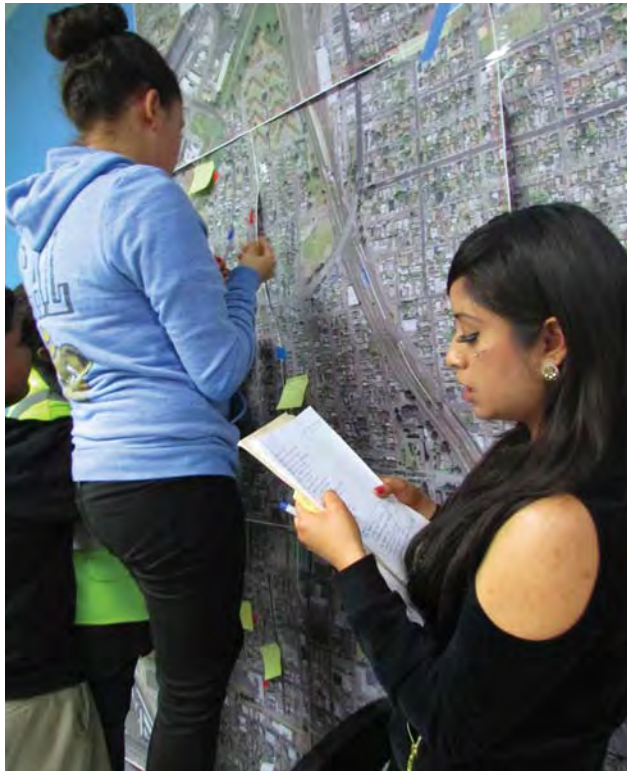
B

The Community Outreach Team maps the neighborhood. Walking every street in the Iron Triangle over 21 days, the team makes detailed notes on what they observe–both "positive" (a yard with flowers) and "negative" spaces (vacant houses, snarling guard dogs, speeding cars, menacing gang tags). They meticulously catalogue every physical barrier to mobility such as lack of crosswalks, wide streets, poor lighting, vacant houses, and men who sit in open-door garages, commenting and leering at women who pass by.

By beginning the planning process with local residents walking and documenting the streets with their own eyes, the typical sequence of city planning is turned around. Instead of outsiders (consultants) telling residents what they see is right and wrong with their neighborhood, the community becomes an active player in assessing their own neighborhood assets and constraints.

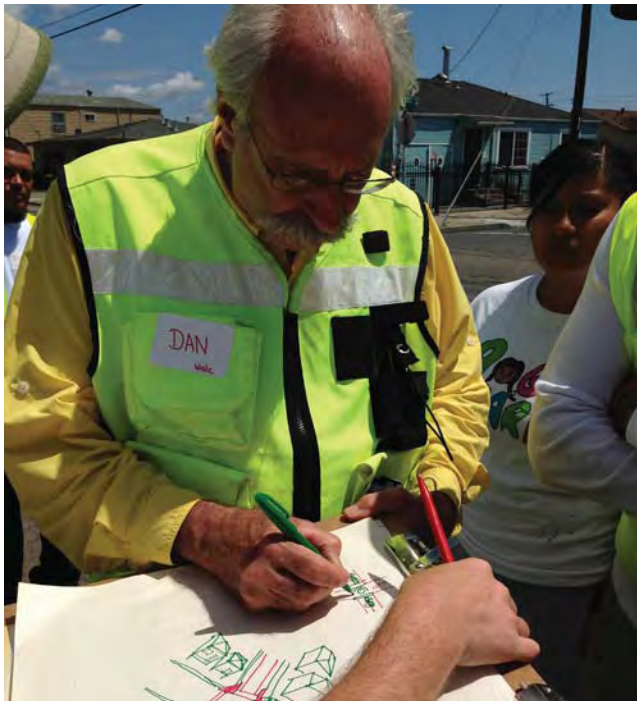
C

The Community Outreach Team reports its findings. Writing on a large wall map, the team pinpoints the Iron Triangle's positive and negative spaces. Local residents write their observations and ideas on post-it notes and stick them to the map in the appropriate spots. At this meeting, the group decides on the routes for the Yellow Brick Road.

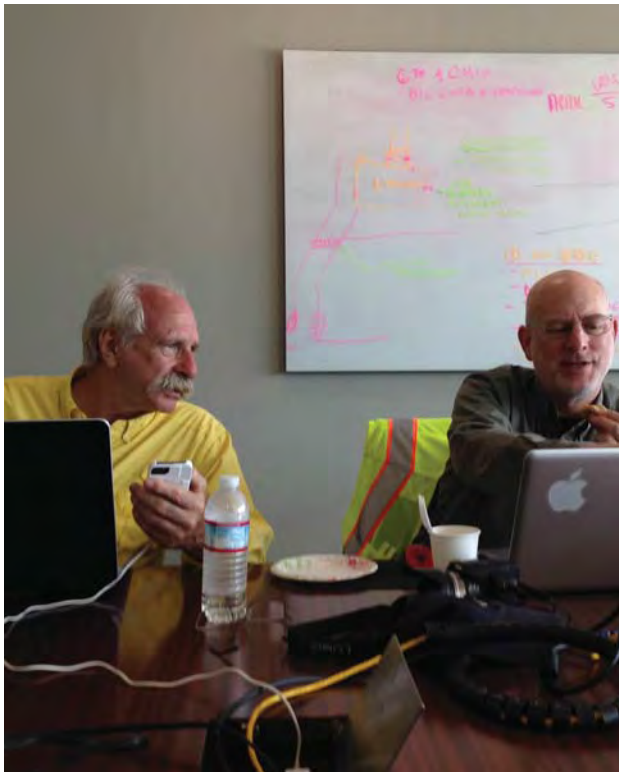


The Professional Design Team and Community Outreach Team walk the proposed routes together. Stopping at each barrier, the two teams and city staff discuss possible solutions onsite. Dan Burden explains why stop signs fail, how bulb-outs and mini-circles make it physically impossible for cars to speed, and how islands in the middle of wide streets help people to cross them. When the Community Outreach Team presents him with a barrier, Burden describes possible solutions used in other cities around the world, sketching them on butcher paper or on the ground in chalk. Everyone can see and comment on the proposed changes.

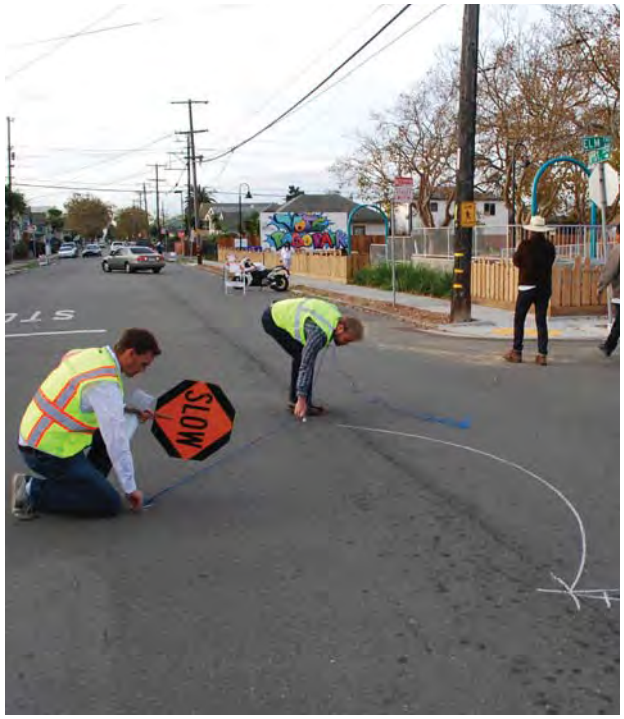
The process works like magic. Residents quickly develop a shared language and understanding of how to solve the barriers to walking and biking in subsequent locations. The residents, city staff, and professional design team are in synch.



The Professional Design Team refines the plan. The Professional Design Team refines the plan. The Professional Design team, using the COT and community's ideas develops a working draft plan with detailed measurements and plans for street and sidewalk improvements.



The Professional Design Team and Community Outreach Team create a "Living Preview" of the Yellow Brick Road. As a way to communicate the proposed street improvements to the local community, the project partners create a three-dimensional full-scale model for a segment of the YBR. They use chopped wood pieces, potted plants, sawhorses, Astroturf, traffic cones, chalk, paint, scavenged road signs, two huge carved wooden totems to create mini-circles, straw waddles to create the illusions of wider sidewalks, narrower streets, crosswalks, and bike lanes.



The Living Preview of the Yellow Brick Road is publicized to the entire community. Notices go out

to neighborhood residents, city officials, police and fire departments, local schools, and the public bus system providers who has a stop in the Living Preview segment. Over two days, 354 people attend the event. Residents mingle with city officials, police officers, and professional transportation planners and engineers to examine and critique the design. A transit bus tests how the vehicle would maneuver around the new traffic circle.

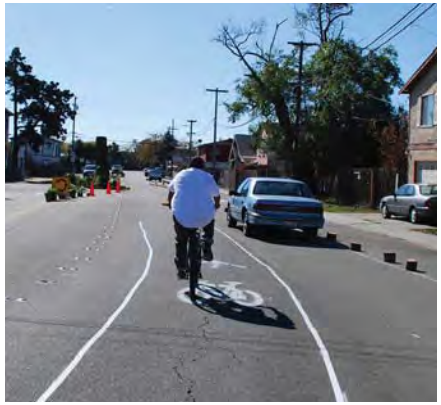
The City sends a fire engine and fire truck to test the two traffic circle designs. But when it tries to get around the first mini-circle it gets stuck. Firemen and local residents work on a solution together, logs and potted plants are rearranged, and the fire truck tries again. Still no luck. It takes 13 tries to find exactly how the mini-circle must be built to allow passage by the fire truck.

The engineer from the Fire Department is jubilant. He explains that Richmond's fire trucks are several feet longer than standard models, causing headaches with road design changes. Professional designers always assume the standard length, he said. "No one ever asked us for our opinion before." Dan Burden says, "People in the world of livable streets will be talking about the Yellow Brick Road Living Preview in decades to come."

5 THE TAKE-AWAYS:
Lessons Learned

- We need to rethink our understanding of who is an expert. The premise of this project–recognizing that local residents are experts in their own environment–works.
- Empowering a core group of committed local residents–in this case, the young people who first envisioned the Yellow Brick Road–acknowledges this local expertise and builds a foundation of trust in the community.
- Organized and empowered community residents can work together with city staff, transportation planners and engineers, and other professionals to create a detailed conceptual design.
- If they are thus empowered, community residents are capable of learning the language of street design, building neighborhood capacity and skills.
- The Living Preview model is a powerful method to test ideas and engage community members in the transformation of their own streets.
- Design professionals should see their roles as partners who can guide and collaborate and not simply deliver solutions.
- The Yellow Brick Road concept is a dynamic model for neighborhood planning and creating safe routes to key destinations that can be replicated in other neighborhoods in Richmond and across the United States.

YELLOW BRICK ROAD
Living Preview
EL CAMINO DE LADRILLO AMARILLO
Reseña en Vivo
Sign In



ELM
7TH ST.

Iron Triangle Neighborhood

The Iron Triangle neighborhood is a one square mile region located in central Richmond, just east of the Richmond Parkway and north of Interstate 580. The neighborhood extends east-west from Richmond Parkway to the Burlington Northern Santa Fe (BNSF) rail line, and north-south from Lincoln Avenue to Ohio Avenue. It is primarily a residential neighborhood with several schools, parks and other important community destinations. Elm Playlot, Richmond Greenway, Peres Elementary School, and Lincoln Elementary School are four key hubs in the neighborhood in addition to BART, Nevin Community Center, and other destinations. The existing roadways in the Iron Triangle neighborhood vary from "slow streets" with one lane of traffic in each direction to major arterials that provide regional access to destinations in Richmond, local freeways and BART.

Key Destinations

There are several important destinations accessible by foot within the Iron Triangle, including schools, parks, the Kaiser Permanente Hospital and Medical Center, and the Richmond BART/Amtrak Station. However, Elm Playlot serves as the key focal point for the neighborhood. Distances between these destinations range between a quarter to a full mile, which are considered walkable distances. For example, Peres Elementary School is located 1/4 miles from the Elm Playlot. Similarly, Nevin Community Center and Lincoln Elementary School are 1/4 mile apart, approximately a five minute walk. The Richmond BART station is just under a half mile from the Kaiser Hospital, about an eight minute walk.

Pedestrian Environment

Although sidewalk coverage is fairly continuous in the area, the condition of pedestrian facilities and the surrounding environment make for a challenging walking experience within the Iron Triangle neighborhood. Sidewalks are broken or missing along some of the Yellow Brick Road routes and uncomfortable conditions exist, such as abandoned buildings, squatters, dogs and litter. Creating a more inviting pedestrian environment will have a meaningful effect on the safety, comfort and mobility of Iron Triangle residents and visitors. Many of the "slow streets" identified as preferred walking routes cross major roadways, such as

Barrett and Macdonald Avenues, where additional enhancements to pedestrian crossings may be required. Many of the roadways that connect through the neighborhood feel like "fast streets" and observed speeds are high on these corridors.

Bicycle Facilities

The Iron Triangle's flat, interconnected and low traffic streets provide a great environment for bicycling. The Richmond Greenway is an important asset for regional connectivity. The Greenway runs through the Iron Triangle just north of Ohio Avenue. Class II bicycle lanes are provided on western portions of Pennsylvania Avenue and Ohio Avenue. Class III sharrows are marked on the portion of Barrett Avenue west of the Kaiser Hospital and Medical Center. Providing comfortable, continuous facilities may encourage more people to bike in the neighborhood.

Transit Facilities

Macdonald Avenue and Harbour Way act as the main transit corridors through the study area, with bus routes also available on 7th Street and Barrett Avenue. AC Transit bus lines that run along the Yellow Brick Road include 71, 72M, 76, and 376. Bus stops along these routes offer very few stop amenities beyond benches at some of the locations. Additional lighting, seating, and overhead coverage will greatly improve the transit environment. The Richmond BART station is located at the northeast edge of the Iron Triangle, and is accessible via Macdonald Avenue, 16th Street, and Nevin Plaza with connections to multiple AC Transit bus lines and Amtrak.

Bicycle & Pedestrian Collisions

Pedestrian and bicycle related collisions in the Iron Triangle neighborhood for the six year period from 2007 through 2012 was obtained through the Statewide Integrated Traffic Records System (SWITRS). A total of 68 bicycle and pedestrian-related collisions were reported at intersections and mid-block locations in the study area, with an equal amount involving bicycles (34) and pedestrians (34), as shown in Figure 2. A pedestrian death occurred in 2008 at the Carlson Boulevard and Ohio Avenue intersection.

The highest number of pedestrian collisions was reported along Macdonald Avenue (14) and Harbour Way (9), which accounted for two-thirds of all pedestrian collisions in the study area. The Marina Way and Macdonald Avenue intersection had the greatest number of collisions (4). Bicycle collisions were greatest along Macdonald Avenue (5), Bissell Avenue (4), and Barrett Avenue (4).

As compared to other areas in central Richmond, bicycle collisions are higher within the Iron Triangle neighborhood. The rise in collisions may partially be due to the higher volume of bicyclists that ride in the area; both the Richmond BART station and segments of the Richmond Greenway are within the study area. The number of pedestrian collisions within the triangle is similar to the other nearby neighborhoods in central Richmond.

TABLE 1
Intersections with Two or More Pedestrian or Bicycle Collisions - 2007 to 2012

Intersection	Collisions Reported
Pedestrian Collisions	
Macdonald Avenue & Marina Way	3
Macdonald Avenue & 16th Street	3
Macdonald Avenue & 4th Street	3
Macdonald Avenue & Harbour Way	2
Harbour Way & Bissell Avenue	2
Harbour Way & Nevin Avenue	2
Harbour Way & Roosevelt Avenue	2
Pennsylvania Avenue & 7th Street	2
Bicycle Collisions	
7th Street & Lucas Avenue	2
Chanslor Avenue & Marina Way	2

Source: SWITRS 2007-2012

Overview

This section presents the design vision for the Yellow Brick Road network. The Yellow Brick Road is envisioned to be an interconnected network of safe and secure roadways where children, parents, and all members of the community can travel safely. The Yellow Brick Road streets are intended as important walking routes through the community and, in many cases, this coincides with important bicycle connections. The Yellow Brick Road routes are intended to create "slow streets" that are community focused and include the following key elements:

- **Pedestrian and bicycle improvements, including considerations of safety, comfort, wayfinding, and crosswalk enhancements**
- **Traffic calming improvements, such as traffic circles, raised crosswalks, and speed tables**
- **Public art, including sculpture, murals, and painted intersections/streets**
- **Streetscape amenities and secure places, including street trees, bioswales and landscape plantings, benches, and garbage cans as well as pedestrian-scale street lighting and law enforcement**

The following pages highlight the key distinctive features of the Yellow Brick Road routes.

Design Vision for Yellow Brick Road

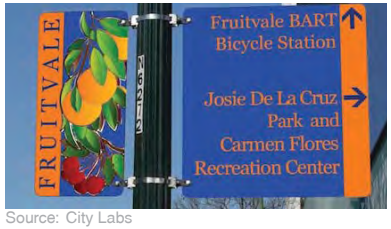
Before: 7th Street Today

After: Peres to Elm Yellow Brick Road Route (7th Street)

Design Inspirations and Potential Treatments

Source: www.hubss.com

Source: City Labs



Source: City Labs

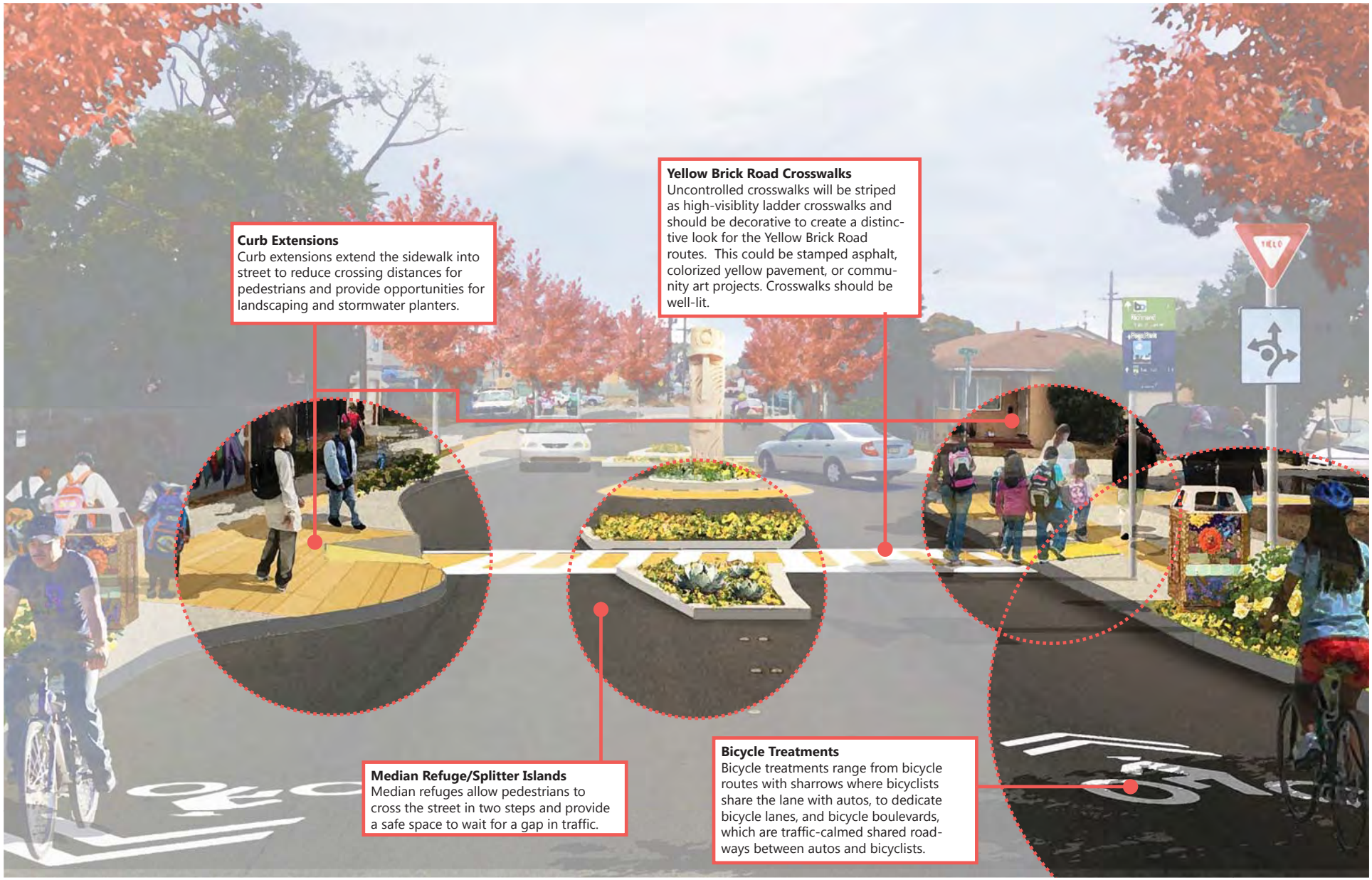
Source: flickr/Lara Justine

Source: flickr/Thanh Ha Dang

Source: flickr/Dylan Passmore

Source: flickr/Josh S Jackson

Pedestrian & Bicycle Improvements

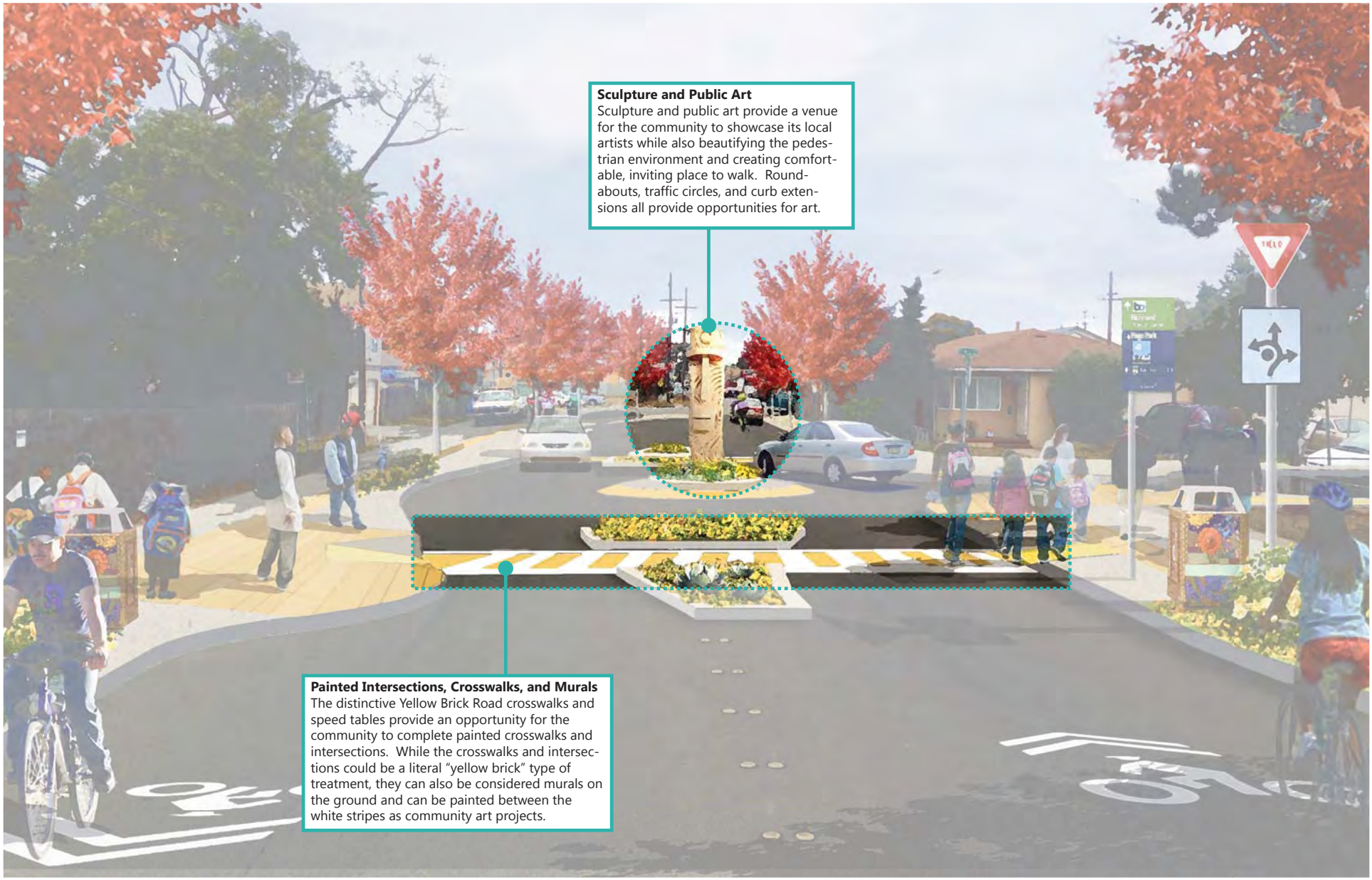


Traffic Calming Improvements

Amenities

Bicycle & Pedestrian Wayfinding
Wayfinding signs provide directions and information on the amount of time needed to travel between key destinations.
Trash Cans, Benches, Bus Shelters
Streetscape amenities such as trash cans, benches, and bus shelters can help provide clean environments that provide comfortable places for people to pause and rest.

Public Art



Sculpture and Public Art
Sculpture and public art provide a venue for the community to showcase its local artists while also beautifying the pedestrian environment and creating comfortable, inviting place to walk. Roundabouts, traffic circles, and curb extensions all provide opportunities for art.

Painted Intersections, Crosswalks, and Murals
The distinctive Yellow Brick Road crosswalks and speed tables provide an opportunity for the community to complete painted crosswalks and intersections. While the crosswalks and intersections could be a literal "yellow brick" type of treatment, they can also be considered murals on the ground and can be painted between the white stripes as community art projects.

Overview

The Pogo Park Team and Community Outreach Team (COT) have been engaged in the Iron Triangle neighborhood long before this Plan, walking every street in the neighborhood, discussing key issues with local residents and business owners, and identifying issues and opportunities for improvements. Through the Yellow Brick Road/Iron Triangle Neighborhood Plan, their work has continued and has been supplemented with larger public outreach events including walking audits, temporary installation, and meetings with representatives from various City of Richmond departments and Contra Costa Health Services.

Outreach Events

March 2014 Community Walk Audit & Nighttime Walk

On March 6, 2014 Pogo Park and COT led a walking audit with City staff, the consultant team, and residents through the Iron Triangle neighborhood. Through this effort, key barriers, issues, and opportunities in the neighborhood were identified and mapped.

The following key themes were identified:

- **Code enforcement, security, and lighting issues:** Residents identified many locations with abandoned houses and empty lots, unsafe dumping along the streets, and reckless driving near schools. They also identified discomfort caused by aggressive dogs and crime hotspots. Improving police presence and enforcement, installing pedestrian-scale lighting, providing emergency phones, moving dogs to the backyard, and repurposing abandoned lots can help to improve the safety along the Yellow Brick Road routes.
- **Need for neighborhood greening:** The community expressed a need for improved greenery to provide shade, comfortable places to sit, and create a more comfortable and pleasant pedestrian experience. Opportunities for improvement include planting more trees, better tree maintenance, providing public seating areas, and creating incentives for residents to maintain their yards and sidewalk areas.
- **Improved sidewalks and enhanced crosswalks:** Broken sidewalks and missing crosswalks, particularly near schools and parks, were of major concern to the community. Repairing and maintaining the pedestrian network along the YBR is a key opportunity to improve circulation. Enhancing uncontrolled crosswalks at major intersections was another key issues.
- **Wayfinding to key destinations and highlighted YBR route:** Providing signage that guides pedestrians, bicyclists and drivers to key destinations within the Iron Triangle will help connect the community and improve the mobility for residents of all ages along the YBR. Another key feature could be flags, banners, art, signs, and other distinct elements that define the YBR routes, which could have a yellow brick motif.

May 2014 Walk Audit and Charrette

In May 2014, Pogo Park and the COT team hosted a two-day walking audit and charrette event with Dan Burden, who is a nationally-recognized leader in walkability and neighborhood transformation, and the consultant team. Dan worked with Pogo Park and COT to identify site-specific issues and opportunities and developed a series of preliminary improvement ideas for corridors around the neighborhood.

The following corridors were studied in depth:

- 8th Street/Elm Avenue
- 16th Street connecting the Greenway to BART
- Lucas Avenue
- Pennsylvania Avenue
- Ripley Avenue and Harbour Way

These concepts were used to inform the recommendations presented in this Plan.

October 2014 Living Preview Temporary Installation

In October 2014, the proposal for 7th Street and Elm Avenue were treated as a 48-hour temporary installation. 7th Street between Pennsylvania and Ripley Avenues and Elm Avenue between 7th and 8th Streets were treated with temporary striping, potted plants, totem pole art installations, and spray chalk to show the community the improvements proposed for the Elm to Peres Root Route. Many residents turned out for the event and showed broad support for the improvements. Many key Richmond stakeholders including Mayor Gayle McLaughlin and US Congressman George Miller also supported the event. The Richmond Fire Department also showed support for the project and worked closely with Pogo Park and the consultant team to field-test turning radii of their various fire trucks on the roundabout and traffic circle temporary installations. AC Transit buses were also field tested through the roundabout on 7th Street. These dimensions and measurements are reflected in the concept plans for the Elm Play Lot to Peres Elementary School Roots Route.

The following improvements were installed for the two-day installation:

- **Roundabout at 7th Street/Elm Avenue** — included potted plants and a totem pole art installation in the circle, splitter islands with high-visibility crosswalks, and curb extensions to reduce vehicle speeds through the intersection
- **Protected Walkway on 7th Street** — to close the existing sidewalk gap on the west side of the roadway a protected "curb" (landscape waddle) was installed
- **Bicycle Lanes on 7th Street** — parking was prohibited on the east side of the street and bicycle lanes were striped in both directions. Sharrows were striped through the roundabout.
- **Traffic Circle at 8th Street/Elm Avenue** — included a totem pole art installation in the circle and curb extensions to reduce auto speeds. Stop signs were covered to show how Yield control would work on all approaches.
- **"Play Street" on Elm Avenue** — Elm Avenue was blocked to vehicle traffic to allow for kids to play in the street and for the community event to take place. Pogo Park painted the streets to create artful images in the roadway.

January 2015 Community Workshop

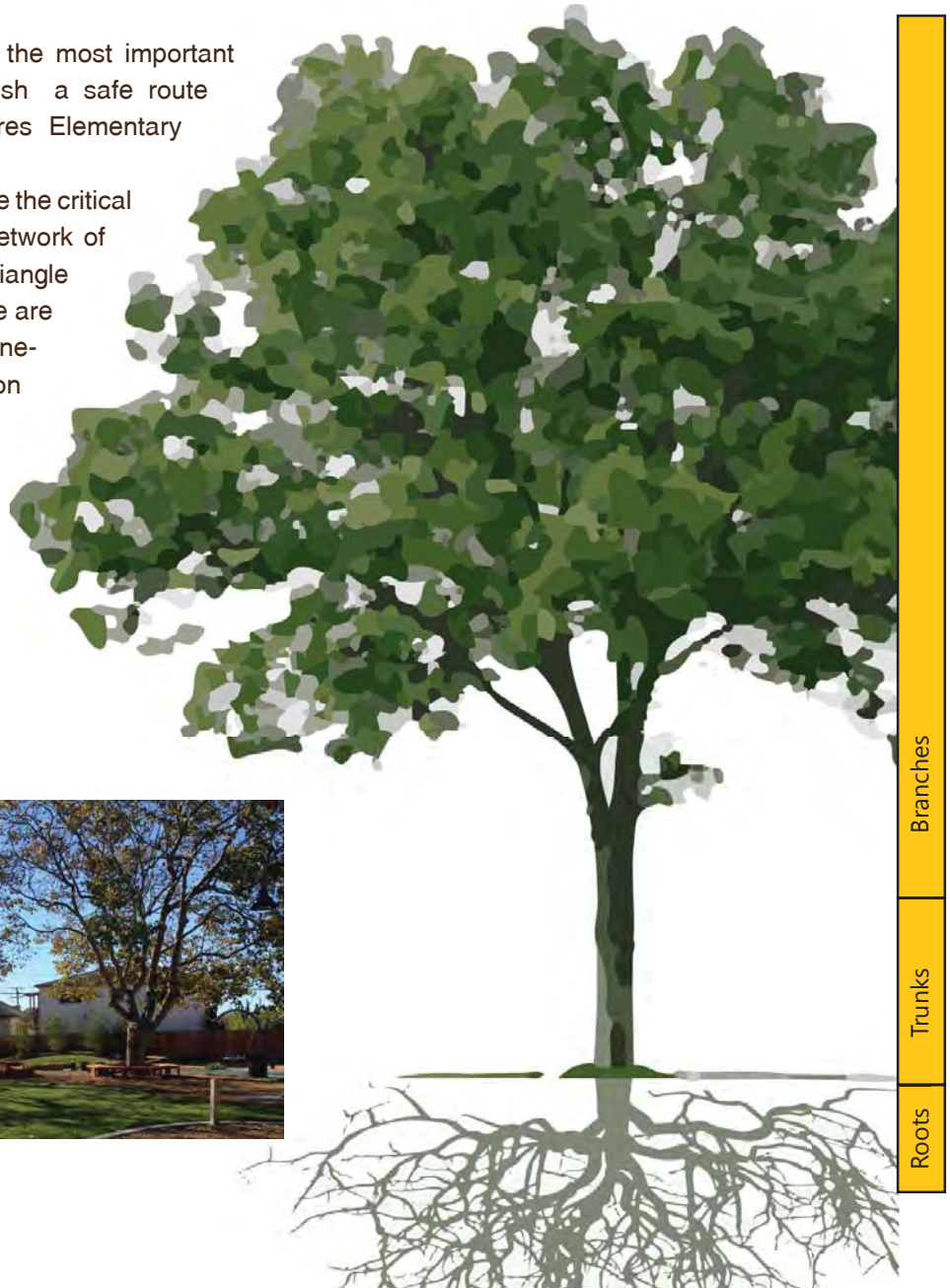
On January 26, 2015, Pogo Park and the consultant team hosted an evening public workshop and dinner at the Elm Playlot. Participants included neighborhood residents, Pogo Park staff, City of Richmond staff, and other community members. The workshop consisted of a presentation focused on the "design toolkit" used to create the Yellow Brick Road vision. Participants had the opportunity to review concepts for the Elm to Peres, 8th Street, 16th Street, and Richmond Greenway routes. They also had the opportunity to review the full Yellow Brick Road network and the types of treatments proposed for the routes. Feedback was incorporated into the recommendations presented in this Plan.

Overview

The Yellow Brick Road (YBR) vision network was established by the residents of the Iron Triangle neighborhood. The map at right shows the long term vision of the YBR network, with all routes implemented. As the network covers an extensive area, phasing for the project is necessary. The YBR vision network can be divided into three phases of the project, which can be likened to the parts of a tree:

1. **The Roots: Phase 1** — This is the most important Yellow Brick Routes that establish a safe route between Elm Play Lot and Peres Elementary School
2. **The Trunks: Phase 2** — These are the critical Phase 2 projects that create a network of YBR routes throughout the Iron Triangle
3. **The Branches: Phase 3** — These are the Phase 3 routes that create a fine-grain network throughout the Iron Triangle

The beautiful large Elm trees at the Elm Play Lot provide the naming inspiration for the phasing strategy. The following chapters define the Root, Trunk, and Branch YBR routes in detail.



-Bissell Avenue
-Lincoln Elementary School (4th Street, 6th Street, Chanslor Avenue)
-4th Street
-Macdonald Avenue
-Nevin Avenue
-6th, 9th, and 11th Streets
-Harbour Way

-Pennsylvania Avenue
-8th Street
-16th Street
-Richmond Greenway

Elm Play Lot to Peres Elementary School: Pennsylvania Avenue, 7th Street, and Elm Avenue

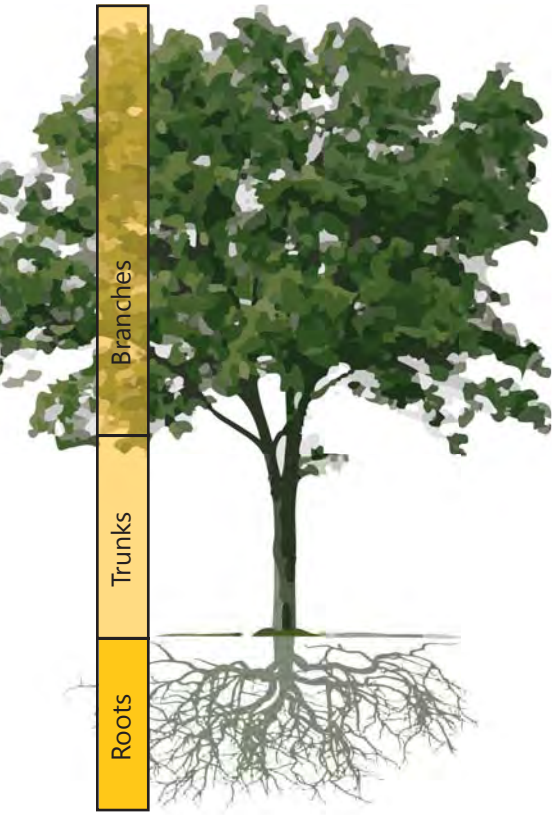
Yellow Brick Road Phasing Strategy

Overview

The "Root Route" is envisioned to create the first phase of the Yellow Brick Road. The Root Route will provide a critical north-south route between Elm Playlot, located at the intersection of 8th Street and Elm Avenue, to Peres Elementary School, located near the intersection of Pennsylvania Avenue and 4th Street. This first Yellow Brick Route will build on recent community and City investments at the Elm Play Lot and on Pennsylvania Avenue. The Root Route consists of the following segments:

1. **Pennsylvania Avenue** — between 4th and 7th Streets
2. **7th Street** — between Pennsylvania and Elm Avenues
3. **Elm Avenue** — between 7th and 8th Streets

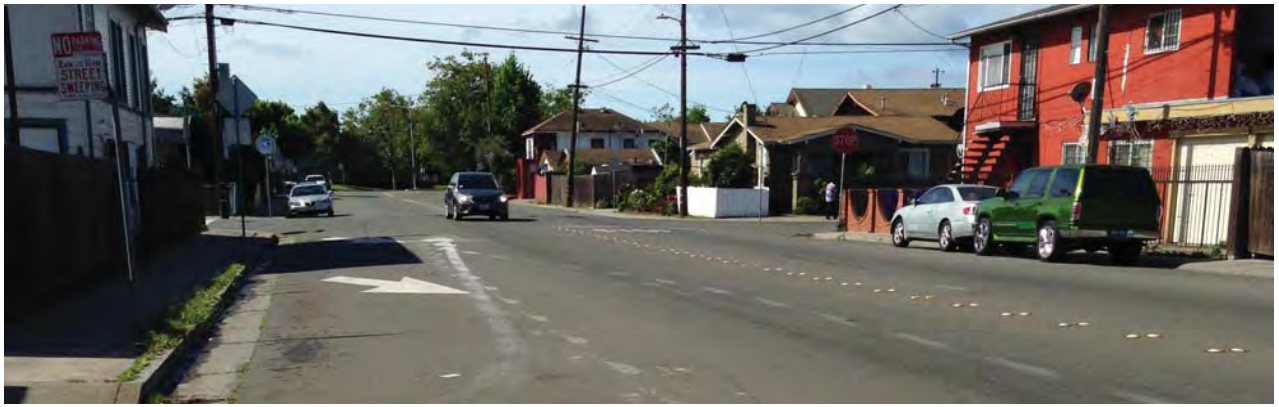
Design plans and a fact sheet are presented on the following pages.



Legend

- Yellow Brick Road Routes
- School
- Park
- Iron Triangle Study Area
- Root Route
- Existing Trail/Path
- Proposed Trail/Path

Elm Play Lot to Peres Elementary School



Description

Through pedestrian, bicycle, and traffic calming improvements, this route would build on the revitalization of Elm Playlot and create a strong walking connections between Peres Elementary School and the Elm Playlot. As such, it is identified as the highest priority for the neighborhood and should be considered as a "demonstration project" for the Yellow Brick Road. The drawings shown for this project represent a "long-term" or "grant-funded" solution with permanent materials, such as concrete sidewalk and curb and gutter. However, there may be an opportunity to use interim design materials to more quickly and cost-effectively get safety improvements onto the ground using high-quality but low-cost materials, such as striping and landscape planters. A short-term solution should be considered as the design is detailed. The concept drawings have been reviewed in the field with the Richmond Fire Department during the Living Preview event. These drawings reflect the measurements and design elements (e.g. rolled curb or mountable curb) needed for various sized Richmond fire trucks to operate through the area. **Detailed concept plans for the Elm to Peres route are presented in Appendix A.**

Cost

The project is expected to cost approximately, $722,800, including soft costs and contingencies. **The detailed breakdown of unit costs, quanitities, and soft costs is presented in Appendix A**. An interim design using temporary but attractive materials could cost significantly less than this and provide substantial safety and comfort benefits for pedestrians and bicyclists in the near-term before grant-funding for the permanent improvements can be secured.

Issues & Opportunities

- 7th Street has a wide cross-section which encourages high-speeds on this important pedestrian route
- Sidewalks are narrow (4' or less) on the west side of 7th Street
- 7th Street and Elm Avenue provide important connections between Peres Elementary School and Elm Playlot
- Elm Avenue is a one-block long roadway that could be converted to a "slow street" or "play street" in front of Elm Playlot
- STOP-sign compliance is low at the 8th Street/ Elm Avenue intersections
- Improvements to this corridor can build off of the recent investments in Elm Playlot and serve as a catalyst for pedestrian improvements projects in the Iron Triangle neighborhood

Key Proposals

7th Street between Pennsylvania and Ripley Avenues

- Stripe Class II bicycle lanes in both directions
- Consider parking prohibition on east side of 7th Street to accommodate bicycle lanes or consider time of day bicycle lanes
- Maintain parking on west side of the roadway wherever possible
- Extend sidewalk on west side to provide

Elm Play Lot to Peres Elementary School

comfortable walking area
- Maintain driveway access on west side of street with sidewalk extension and consolidate driveways if possible
- Yellow Brick Road Crosswalks: Colorized, stamped asphalt pattern of yellow bricks within all parallel crosswalks (raised and at-grade) on the route
- Pedestrian and Bicycle Wayfinding Signs: Use WCCTAC design guidelines and sign types to indicate distance to activity centers along the route like schools, parks, and BART
- Pedestrian-scale lighting
- Landscaping, stormwater planters, and trees whereever feasible, including roundabouts and traffic circles

Elm Avenue between 7th and 8th Streets

- Parking prohibition on south side of Elm Avenue between 7th Street and 20' east of 7th Street
- Convert parallel parking in front of Elm Playlot to back-in angled parking
- Parking prohibition on north side of the street
- Elm Avenue should feel like a "slow street" or "play street" adjacent to the park
- Street painting and art could be considered
- Yellow Brick Road Crosswalks: Colorized, stamped asphalt pattern of yellow bricks within all parallel crosswalks (raised and at-grade) on the route
- Pedestrian and Bicycle Wayfinding Signs: Use WCCTAC design guidelines and sign types to indicate distance to activity centers along the route like schools, parks, and BART
- Pedestrian-scale lighting
- Landscaping, stormwater planters, and trees whereever feasible, including roundabouts and traffic circles

7th Street/Ripley Avenue Intersection

- Curb extensions onto Ripley Avenue
- Stripe crosswalk on north side of 7th Street

7th Street/Elm Avenue Intersection

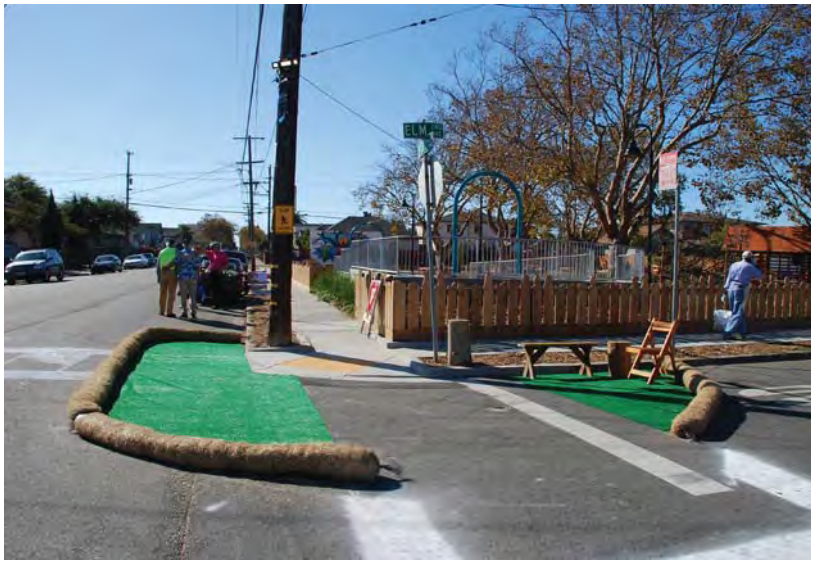
- Roundabout to replace side-street STOP control intersection
- Ladder crosswalks across 7th Street on north and south side of roadway with splitter islands
- Splitter islands should be mountable, as shown on the concept plans, to accommodate Richmond Fire Department fire trucks and emergency vehicles
- Splitter islands should be a minimum of 6' feet in width at the pedestrian refuge to allow bicyclists and pedestrians with strollers to safely wait clear of the travel lane
- Curb on west side of the roundabout should be rolled to accommodate Richmond Fire Department fire trucks and other emergency vehicles
- Roundabout should include landscaping and art
- Sharrows through intersection and intersection approach to guide bicyclists
- Directional curb ramps wherever feasible

7th Street/Acacia Avenue Intersection

- Curb extensions onto Acacia Avenue on southeast and southwest corner
- Stripe high-visibility ladder crosswalk on south side of 7th Street
- Continue Class II bicycle lanes through intersection
- Directional curb ramps where feasible

8th Street/Elm Avenue Intersection

- Large curb extension on southwest side of intersection to shadow back-in angled parking
- Traffic circle with Yield-control at 8th Street/Elm Avenue to replace existing all-way Stop-control
- Curb extensions on all corners of intersections to create deflection through the intersection
- Landscaping and art in traffic circle and curb extensions, wherever possible



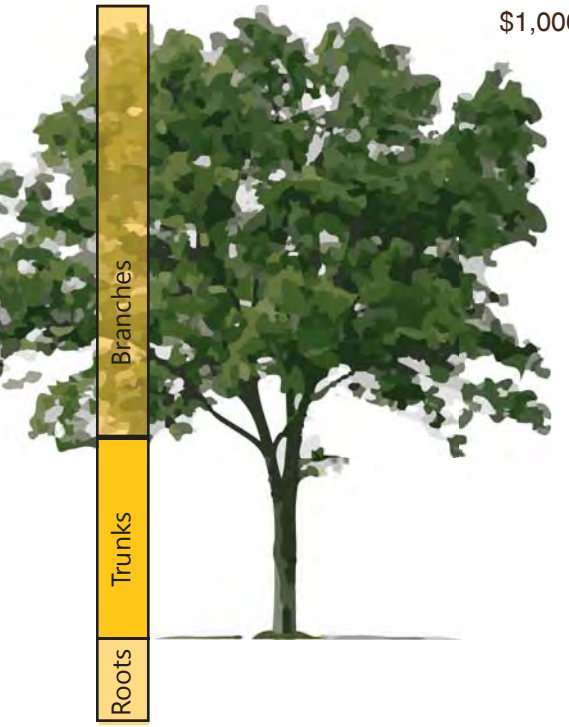
RICHMOND FIRE

Overview

The "Trunk Routes" are envisioned to create a core network for the Yellow Brick Road. These are the second phase of the Yellow Brick Road. With the Elm Play Lot to Peres Elementary School route completed, the following four routes are anticipated to provide primary north-south and east-west connectivity throughout the Iron Triangle neighborhood:

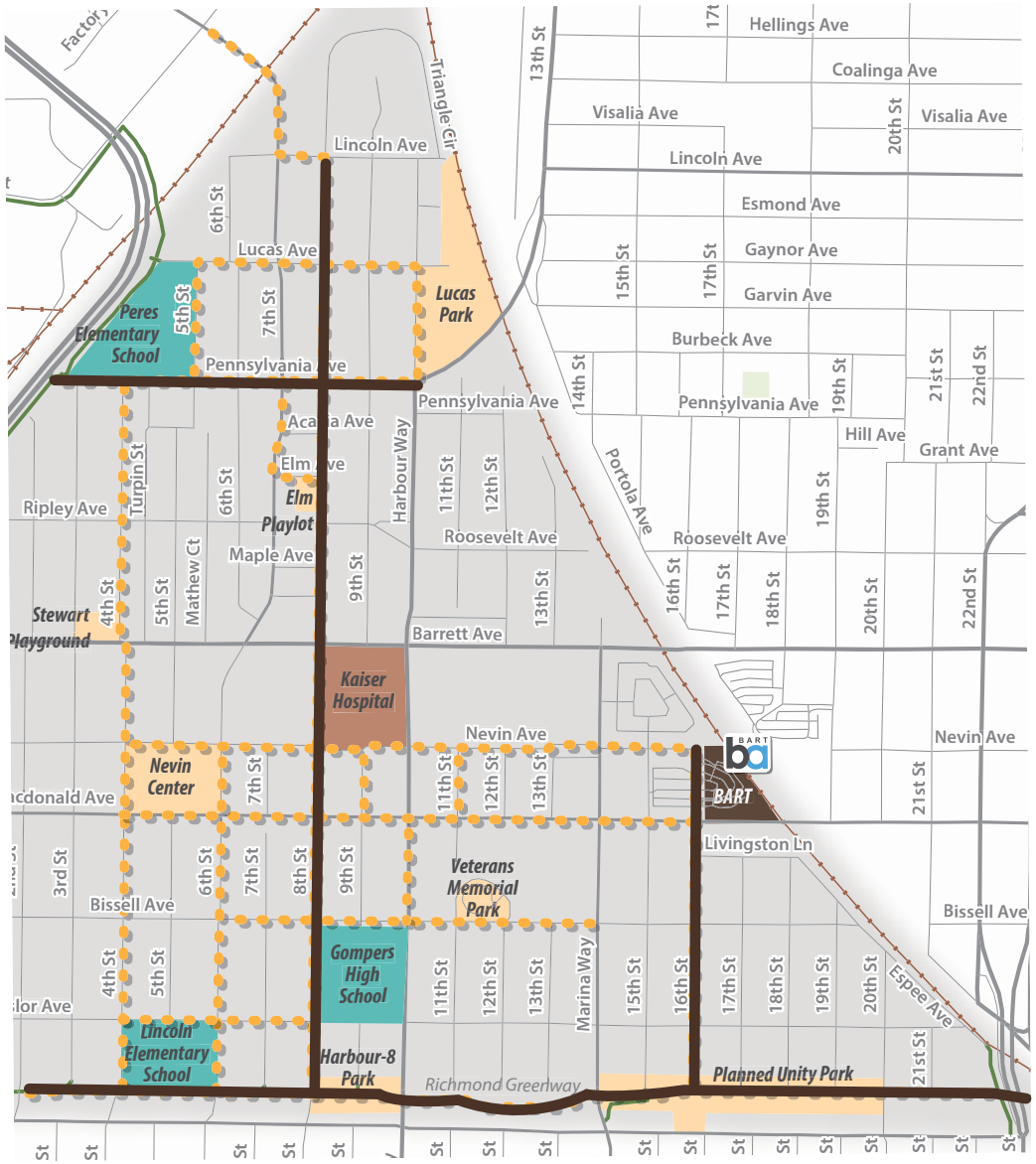
1. **8th Street** — between Lincoln and Ohio Avenues
2. **16th Street** — between Macdonald Avenue and Richmond Greenway
3. **Pennsylvania Avenue** — between 4th Street and Harbour Way/13th Street
4. **Richmond Greenway** — Trail Crossings between 2nd Street and 23rd Street

Concept diagrams and fact sheets are presented for each Trunk Route project on the following pages. Project costs are relative planning level costs, where: $ = less than $500,000; $$ = $500,001 to $1,000,000, and $$$ = greater than $1,000,000.



Legend

- Yellow Brick Road Routes
- School
- Park
- Iron Triangle Study Area
- Trunk Routes
- Existing Trail/Path
- Proposed Trail/Path



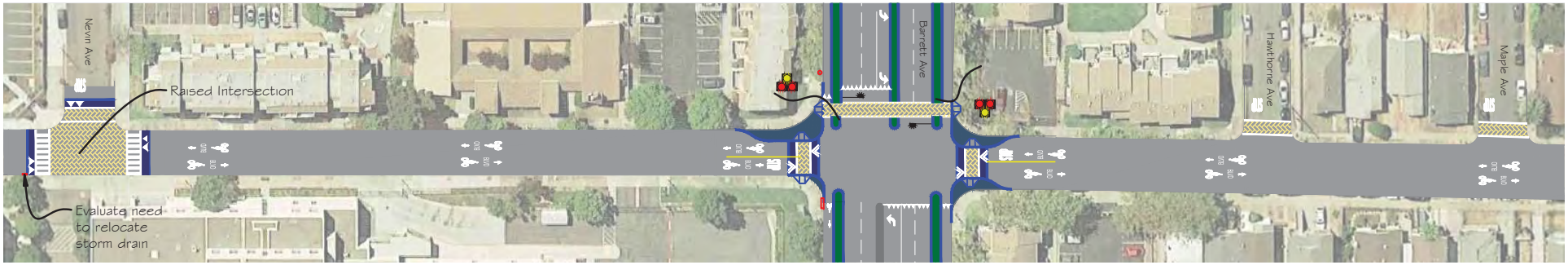
8th Street

Description

8th Street is a low volume roadway that runs north-south through the Iron Triangle neighborhood, connecting residents to the Richmond Greenway, Gompers High School, and the Elm Playlot. Additionally, several other key destinations are located one to two blocks east or west of 8th Street, including Lincoln and Peres Elementary Schools, Richmond BART Station, Nevin Community Center, and Kaiser Hospital and Medical Center. 8th Street is a community-identified "walking route" or "slow street" through the Iron Triangle neighborhood. As such, improvements are focused on traffic calming and bicycle boulevard type treatments to enhance unsignalized crossings for bicyclists and pedestrians, reduce auto speeds, and improve the streetscape.

Cost

$$$ - This is one of the highest cost projects in the network, as it includes significant traffic calming features to create slow walking street and bicycle boulevard. Key design features include raised intersections and crosswalks, which affect roadway drainage.



Issues & Opportunities

- Gompers High School: The newly reconstructed High School is located on both sides of 8th Street, which presents an opportunity to consider a special pedestrian zone on 8th along the school frontage as well as the gateways to the school at the intersections with Bissell Avenue and Chanslor Avenue
- Ohio Avenue: Existing intersection is skewed, which creates long crossing distances and unpredictable auto movements
- 7th Street is designated as a bicycle boulevard in the Richmond Bicycle Master Plan; however, with lower volume and speeds on 8th Street, 8th Street is considered as a preferred bicycle boulevard route.
- High turning movement speeds at some intersections, including Elm Avenue/8th Street
- Poor traffic control compliance at some all-way STOP intersections
- Difficult, long pedestrian crossings across multiple lanes of traffic at Barrett Avenue and Pennsylvania Avenue

Key Proposals

8th Street between Lincoln and Ohio Avenues

- Bicycle Boulevard signs and striping including oversized bicycle boulevard stencils
- Consider speed humps along corridor
- Yellow Brick Road Crosswalks: Colorized, stamped asphalt pattern of yellow bricks within all parallel crosswalks (raised and at-grade) on the route
- Yellow Brick Road Raised Intersections: Stamped asphalt with community-designed painted intersections
- Pedestrian and Bicycle Wayfinding Signs: Use WCCTAC design guidelines and sign types to indicate distance to activity centers along the route like schools, parks, and BART
- Pedestrian-scale lighting
- Landscaping and stormwater planters

8th Street between Lincoln Avenue and Triangle Court

- Work with property owners between 7th and 8th Streets to provide a mid-block connection between 7th Street/elevated rail tracks and Triangle Court
- Consider mid-block crosswalk and bicycle boulevard improvements on 8th Street through Triangle Court if mid-block improvements can be made

Ohio Avenue/8th Street Intersection

- Realignment of Ohio Avenue intersection to improve alignment with curb extensions

Richmond Greenway/8th Street Intersection

- Raised crosswalk with rectangular rapid flashing beacons (RRFBs)

Chanslor, Bissell, Nevin, and Lincoln Avenues Intersections with 8th Street

- Raised intersection with decorative paving
- Ladder crosswalks on 8th Street, and mark standard crosswalk across side-street

Macdonald Avenue/8th Street Intersection

- Install median noses at existing refuges

Barrett Avenue/8th Street Intersection

- Pedestrian Hybrid Beacon and decoative paving crosswalk on west side of Barrett Avenue, including curb extensions and a median refuge
- Speed tables/raised crosswalks with curb extensions on crosswalks across 8th Street

Ripley Avenue/8th Street Intersection

- Traffic circle with yield-control
- Ladder crosswalks with decorative paving

Elm Avenue/8th Street Intersection

- Traffic circle with yield-control
- Ladder crosswalks with decorative paving
- Large curb extension shadowing back-in angled parking on the southwest corner

Pennsylvania Avenue/8th Street Intersection

- Raised intersection with decorative paving
- Landscaped medians with refuges on east and west crosswalks across Pennsylvania

Lucas Avenue/8th Street Intersection

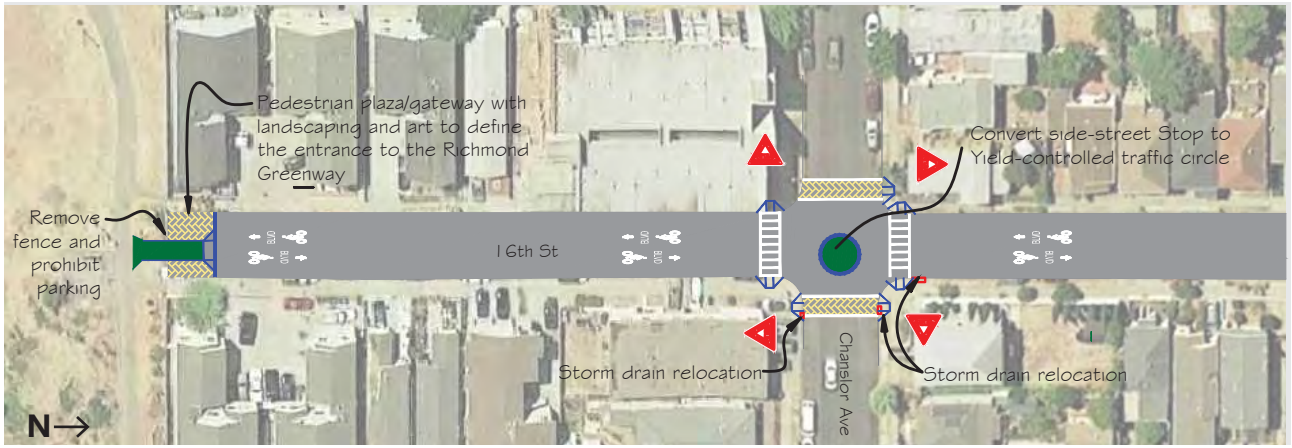
- Traffic circle with yield control

- Ladder crosswalks with decorative paving
- Curb extensions on northwest and southeast corners to correct intersection offset

16th Street

Description

16th Street is a key connection between the Richmond BART station and the Richmond Greenway and serves as a key walking route to access both destinations from adjacent neighborhoods. Improvements on this corridor would improve the aesthetics of the pedestrian facilities by adding Yellow Brick Road crosswalks, enhancing the sidewalk landscaping, and installing a pocket park at the entrance to the Richmond Greenway.



Cost

$ - This is one of the lower cost projects in the network, as it a short segment of roadway. Significant curb work, which can affect drainage, is proposed, including the gateway/path at the Greenway and the raised crosswalks at Bissell Avenue.

Issues & Opportunities

- **Sidewalking Parking:** Due to narrow roadway widths and a desire to keep autos out of street, cars are often parked on the sidewalk or blocking the sidewalk in short driveways
- **Landscape Sidewalk Buffer:** a landscape zone exists on 16th Street sidewalks, and residents in some blocks maintain the landscape strip while in others it has been paved over or is dirt. Opportunities exist to enhance existing landscape strip with low maintenance plants
- **Parked Cars at Greenway Entrance:** residents park perpendicularly against the entrance to the greenway, which blocks access for bicyclists and pedestrians and can create an unwelcome

feel to the Greenway. Prohibiting parking could allow for creation of a Greenway Gateway, community garden, or pedestrian plaza.

- **Existing Curb Extension at Macdonald Avenue**: the existing southwest curb extensions tapers onto Macdonald Avenue, creating longer crossing distances and an inconsistent pedestrian environment. Large turning radii is needed to accommodate buses coming out of BART.
- **Bicycle Boulevard Designation**: 16th Street is designated a proposed bicycle boulevard in the Richmond Bicycle Master Plan
- **Traffic Control:** Stop signs on 16th Street favor side-street traffic instead of bicycle boulevard traffic, causing bicyclists to start and stop

Key Proposals

16th Street between Richmond Greenway and Macdonald Avenue

- Bicycle boulevard signs and striping, including oversized bicycle boulevard stencils
- Replace existing landcape strip with bioswales and street trees, as width allows
- Yellow Brick Road Crosswalks: Colorized, stamped asphalt pattern of yellow bricks within all parallel crosswalks (raised and at-grade) on the route
- Yellow Brick Road Raised Intersections: Stamped asphalt with community-designed painted intersections
- Pedestrian and Bicycle Wayfinding Signs: Use WCCTAC design guidelines and sign types to indicate distance to activity centers along the route like schools, parks, and BART
- Pedestrian-scale lighting along corridor
- Landscaping and stormwater planters in curb extensions

Macdonald Avenue Intersection

- Curb extension on northwest corner of Macdonald Avenue/BART that accommodates AC Transit buses making the southbound right-turn onto Macdonald from the BART Station.

Livingston Avenue Intersection

- Raised crosswalk with decorative paving across Livingston Avenue

Bissell Avenue Intersection

- Raised crosswalks (or raised intersection) with decorative paving across Bissell Avenue
- Ladder crosswalks across 16th Street
- Curb extensions onto 16th Street at each corner

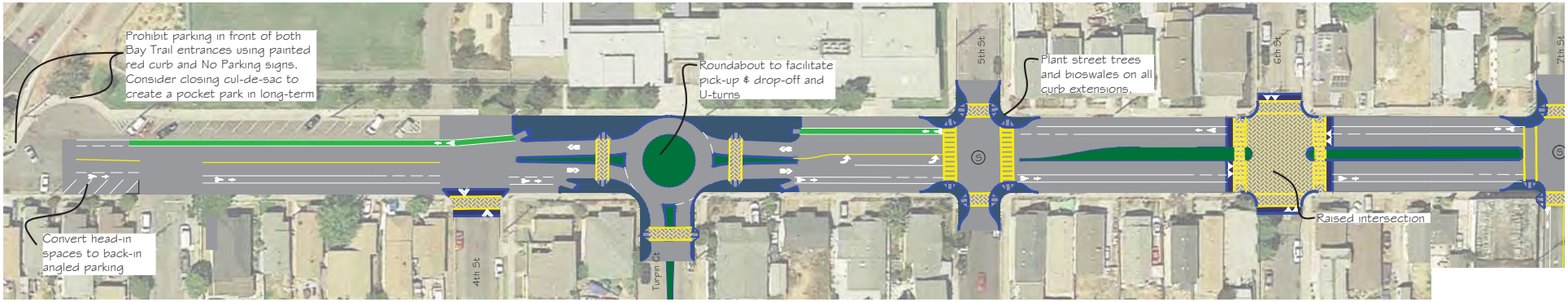
Chanslor Avenue Intersection

- Traffic circle with yield control
- Ladder crosswalks on all approaches

Richmond Greenway Cul-de-Sac/Intersection

- New pocket park at Richmond Greenway with gateway signage and community art installation
- Prohibit parking at cul-de-sac to accommodate pocket park

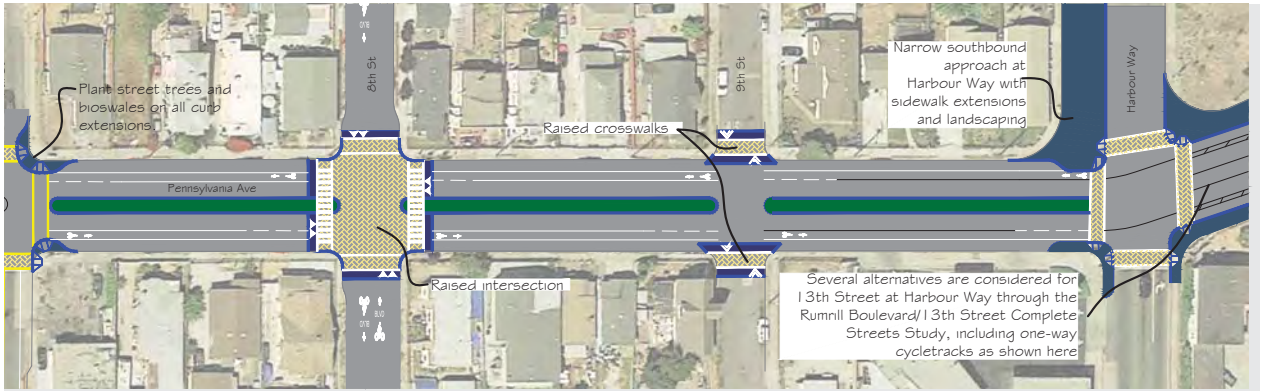
Pennsylvania Avenue



Description

Pennsylvania Avenue is a primary route for Peres Elementary School families. It is also a key connection between the School and Elm Playlot. Pennsylvania Avenue cul-des-sacs at the Richmond Parkway and extends east to Harbour Way, where it becomes 13th Street/Rumrill Boulevard. Substantial school pick-up and drop-off occurs on Pennsylvania Avenue and 4th Street along the school frontage. Many parents make mid-block U-turns across Pennsylvania Avenue. A four- to three-lane reduction occurred in 2012, which striped bicycle lanes and a center left-turn lane.

This project would colorize the existing Class II bicycle lanes along the school frontage, create a raised, landscaped median to provide pedestrian refuges at crosswalks, prevent mid-block U-turns, and improve the landscaping and aesthetics of the streetscape. Traffic calming improvements are also proposed, including raised intersections, raised crosswalks, and a single-lane roundabout at Turpin Court, adjacent to the school entrance. Yellow Brick Road wayfinding, colorized/stamped crosswalks, pedestrian-scaled lighting, and art would be located along the corridor.



Cost

$$$ - This is one of the higher cost projects in the network, as it includes significant traffic calming features to create a slower street. Key design features include a roundabout, multiple raised intersections and crosswalks, and a raised median, all of which affect roadway drainage, move curbs, and introduce landscaping.

Issues & Opportunities

- Harbour Way is a difficult intersection to navigate as a pedestrian with multiple right-turn slip lanes and could be realigned to improve accessibility, for which the Rumrill Boulevard/13th Street Complete Streets Study will refine recommendations
- Consider roundabout at Pennsylvania/Turpin Court to facilitate pick-up/drop-off turning movements along the school frontage

Key Proposals

Pennsylvania Avenue between Richmond Parkway and Harbour Way

- Raised, landscaped median between 4th and Harbour Way, with stormwater planters
- Green painted bicycle lane to highlight potential conflicts between bicycles and autos along the school frontage during pick-up and drop-off activity
- Yellow Brick Road Crosswalks: Colorized, stamped asphalt pattern of yellow bricks within all parallel crosswalks (raised and at-grade) on the route
- Yellow Brick Road Raised Intersections: Stamped asphalt with community-designed painted intersections
- Pedestrian and Bicycle Wayfinding Signs: Use WCCTAC design guidelines and sign types to indicate distance to activity centers along the route like schools, parks, and BART
- Pedestrian-scale lighting

Bay Trail/Richmond Parkway Intersection

- Stripe sharrows connecting to path entrance
- Prohibit parking in front of the path entrance

Turpin Court Intersection

- Roundabout with decorative pavement and ladder crosswalks and splitter islands
- Install “escape ramps” from bicycle lanes onto sidewalk for those who do not feel comfortable riding through the roundabout
- Utilize roundabout to facilitate school drop-off/ pick-up and allow U-turns

4th and 9th Streets Intersections

- Raised crosswalks with decorative paving across side-street

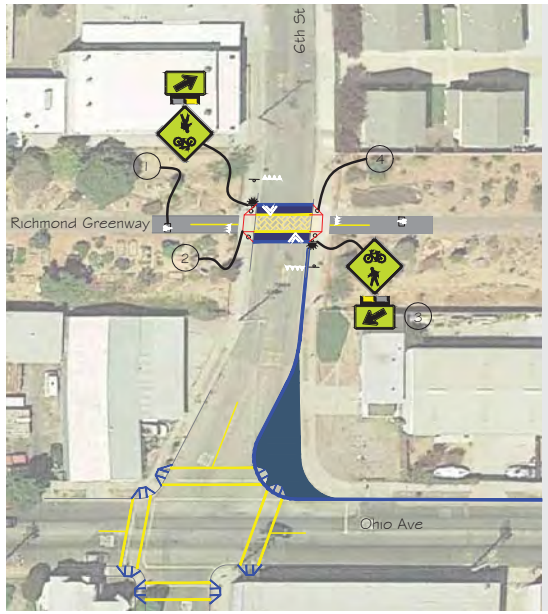
5th and 7th Streets Intersection

- Curb extensions onto 5th and Pennsylvania on all corners
- Ladder crosswalks across Pennsylvania and decorative stamped crosswalks across side-street

6th and 8th Streets Intersection

- Raised intersection with decorative paving
- Ladder crosswalks across Pennsylvania
- Standard crosswalks across side-streets
- Landscaped median refuges on east and west crosswalks

Richmond Greenway



Description

The Richmond Greenway is an important community asset and an east-west connection that runs through the entire Iron Triangle neighborhood. To the east, plans are in place to connect it with the Ohlone Greenway to connect to multiple East Bay communities. With Pogo Park's work on Harbour 8 Park and other park planning efforts, the Greenway is also an important neighborhood destination. Signs and beacons on the Greenway are often confusing to trail users and some crossing distances are long. Improvements on this route would improve crossings with Rectangular Rapid Flashing Beacons (RRFBs) with detection for both pedestrians and bicycles in addition to raised crosswalks/speed tables to decrease speed of approaching vehicles and emphasize the priority of trail users.

Cost

$$ - This is a relatively low cost project. The traffic calming features, including raised crosswalks and significant curb extensions to correct offsets at Ohio Avenue, require curb work and may affect roadway drainage.

Issues & Opportunities

- **Existing Flashing Beacons:** While existing flashing beacons are in place, there is confusing, non-standard signage that creates confusion between trail users and drivers to who has priority and whether or not the beacons are activated.
- **Long Crossings at Some Locations:** At Harbour Way, a median refuge could be installed to allow trail users to cross in two stages and provide a safe space to wait for a gap in oncoming traffic.
- **Skewed Ohio Avenue Intersections at 2nd, 6th, and 8th Streets:** realign intersection to narrow intersection and address the intersection offset to reduce speeds and clarify expectations between all modes.
- **Greening and Landscaping along the Greenway:** build off the recent investments from Harbour 8 Park. Irrigation equipment was stolen and should be restored.

Key Proposals

Richmond Greenway between 2nd Street and Harbour Way

- Yellow Brick Road Trail Crossings: Colorized, stamped asphalt pattern of yellow bricks within all parallel crosswalks (raised and at-grade) on the route. Install rectangular rapid flashing beacons (RRFBs) with high-visibility trail crossing sign assembly (W11-15 and W11-15p or similar) at all trail crossings
- Pedestrian and Bicycle Wayfinding Signs: Use WCCTAC design guidelines and sign types to indicate distance to activity centers along the route like schools, parks, and BART

- Pedestrian-scale lighting
- Landscaping and stormwater planters

2nd, 4th, 6th, and 8th Streets Intersections

- Raised trail crossing with decorative paving and rectangular rapid flashing beacons (RRFBs)
- Advanced yield markings and install “Yield Here to Pedestrian” signs at all crosswalk approaches

Harbour Way Intersection

- Raised trail crossing with decorative paving and rectangular rapid flashing beacons (RRFBs)
- Advanced yield markings and install “Yield Here to Pedestrian” signs at all crosswalk approaches Install raised median refuge
- New Class II bicycle lanes on Harbour Way to access the trail

Ohio Avenue Intersection

- Curb extensions at intersections of Ohio Avenue with 2nd Street, 6th, and 8th Street to address skewed intersections, create clear expectations, and to reduce speeds through the intersections

Overview

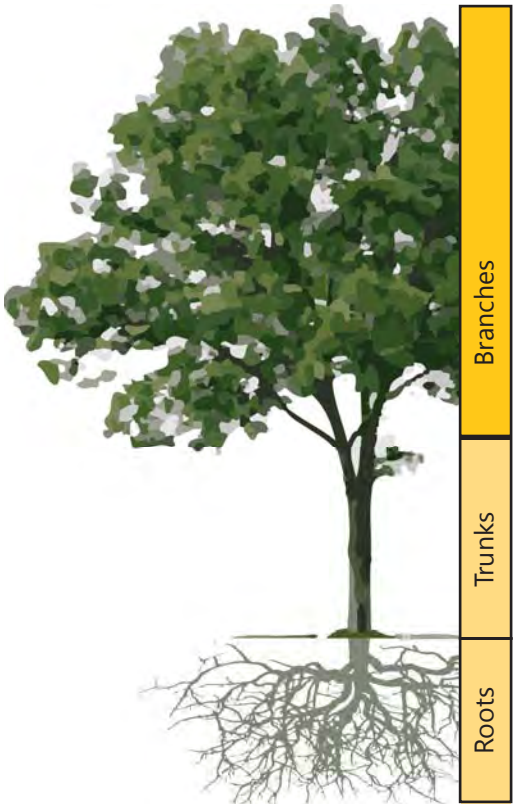
The "Branch Routes" are envisioned to create a finer grain Yellow Brick Road network, to fill in the gaps between the Roots and Trunk Routes. These are the third phase of the Yellow Brick Road. With the basic network in place, the following routes are anticipated to provide important secondary routes throughout the Iron Triangle:

1. **Lincoln Elementary School** — Chanslor Avenue, 4th Street, and 6th Street
2. **Lucas Avenue** — between 5th Street and Harbour Way
3. **Bissell Avenue** — between 4th Street and 16th Street

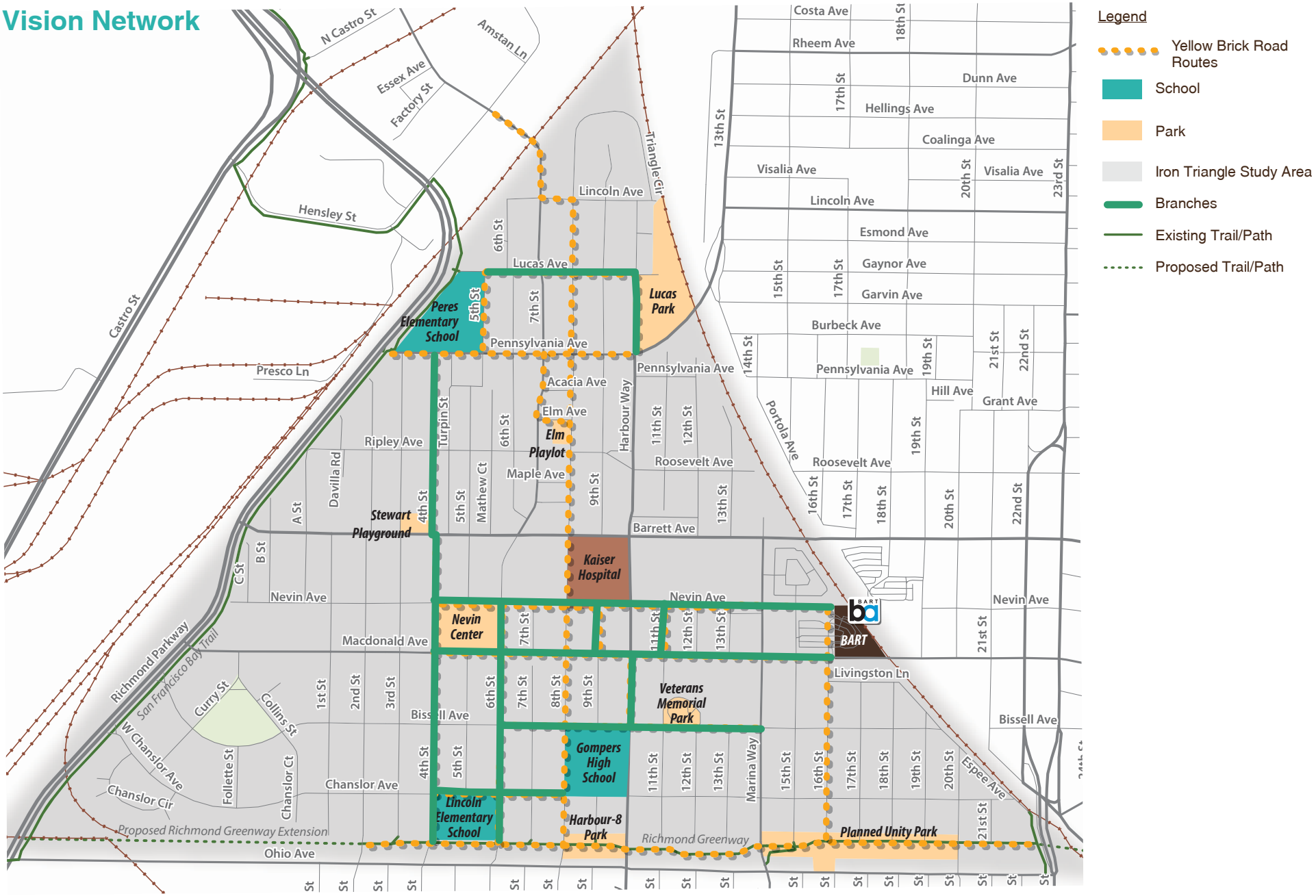
Concept diagrams and fact sheets are presented for each Trunk Route project on the following pages.

Additional Branch Routes

Macdonald Avenue, Nevin Avenue, 6th Street, 9th Street, Harbour Way, and 11th Street are additional Branch Routes in the Yellow Brick Road network. Macdonald Avenue, Nevin Avenue, 6th Street, and Harbour Way have proposed improvements and have been studied in further detail in the Richmond Bicycle Master Plan, Richmond Pedestrian Plan, and/or Richmond Livable Corridors. Plans for these roadways and the short segments of 9th and 11th Streets should include the range of treatments presented in the Design Guidelines section of this Plan.



Yellow Brick Road Vision Network



Lincoln Elementary School (Chanslor Avenue & 6th Street)

Description

Lincoln Elementary School is one of two neighborhood elementary schools in the Iron Triangle neighborhood. It is located adjacent to the Richmond Greenway, Chanslor Avenue, 4th Street, and 6th Street, all of which serve as important safe routes to school. Many parents and children walk to this school along Chanslor Avenue and although crosswalks are provided, additional pedestrian enhancements would improve the safety for school children using this route. Improvements in this area would narrow the crossing distances across Chanslor Avenue by adding median refuges and curb extensions. A raised intersection at Chanslor Avenue and 4th Street would emphasize the priority of pedestrians and reduce vehicle speeds.

Cost

$$ - This project involves curb work and traffic calming treatments which many affect drainage, including raised intersections and median refuges.

Issues & Opportunities

- **Vacant Parcels/Abandoned Buildings:** Several parcels and abandoned buildings along 5th Street and Chanslor Avenue could be rehabilitated and reactivated to create positive, attractive buildings adjacent to the school
- **Circulation Along School Perimeter:** Adding a pedestrian entry on 4th Street, along with a designated curbside drop off zone, could distribute school pick-up/ drop-off and enhance connectivity of the pedestrian network, reducing distances for students walking to school from the south and west

Key Proposals

4th Street, 5th Street, Chanslor Avenue, and Ohio Avenue

- Work with other City agencies to rehabilitate vacant and abandoned properties
- Yellow Brick Road Crosswalks: Colorized, stamped asphalt pattern of yellow bricks within all parallel crosswalks (raised and at-grade) on the route
- Yellow Brick Road Raised Intersections: Stamped asphalt with community-designed painted intersections
- Pedestrian and Bicycle Wayfinding Signs: Use WCCTAC design guidelines and sign types to indicate distance to activity centers along the route like schools, parks, and BART
- Landscaping and stormwater planters
- Pedestrian-scale lighting
- Landscaping and stormwater planters

5th Street/Chanslor Avenue Intersection

- Decorative crosswalks on all approaches
- Median refuges for crosswalks across Chanslor Avenue

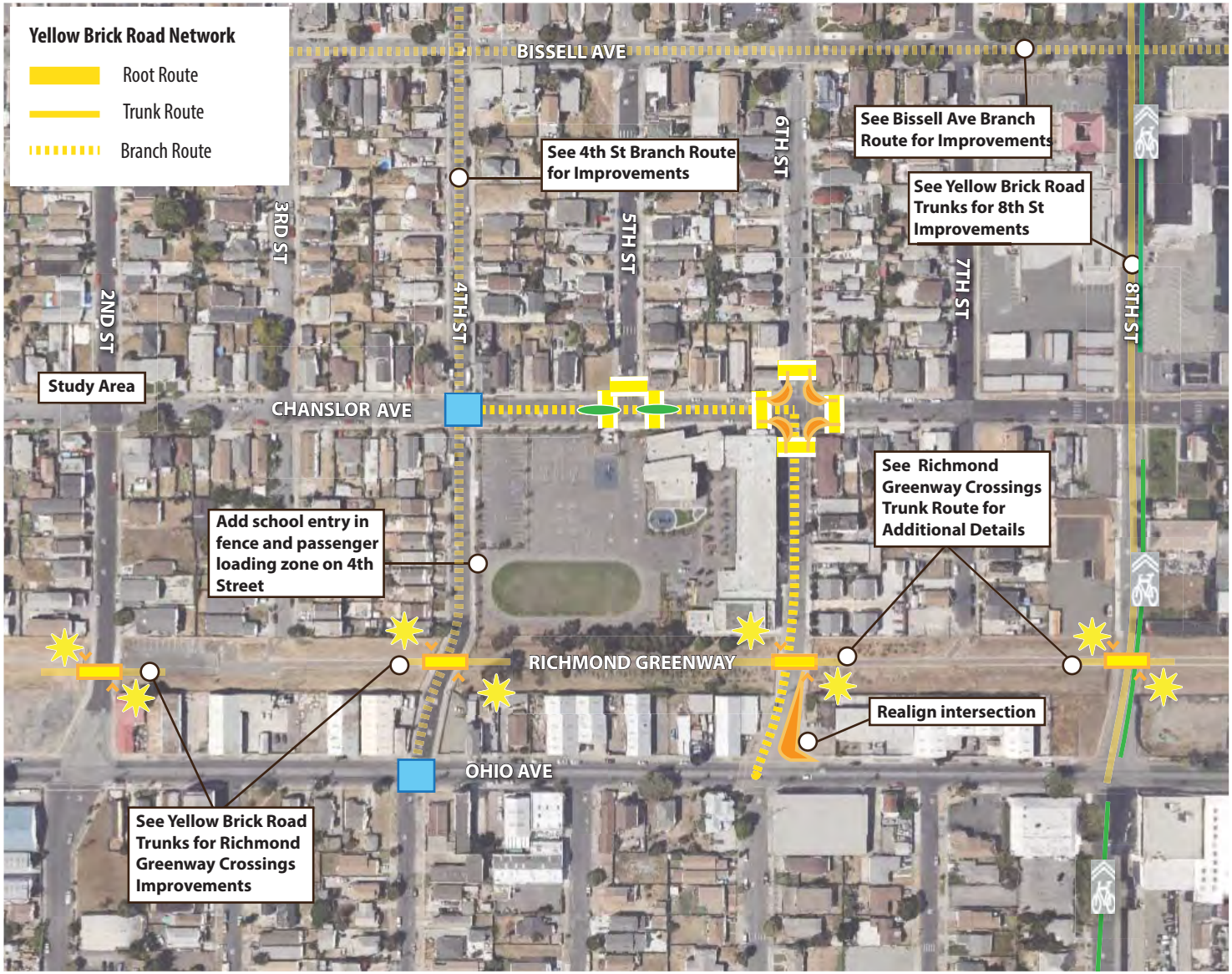
6th Street/Chanslor Avenue

- Decorative crosswalks on all approaches
- Curb extensions on all corners

4th Street/Chanslor Avenue and 4th Street/OhioAvenue Intersections

- Raised intersection with decorative paving

Lincoln Elementary School Proposed Improvements



Raised Intersection

Crosswalk With Yellow Brick Stamped Asphalt Pattern

Raised Crosswalk

Curb Extension With Directional Curb Ramps

Bike Boulevard

Bike Lanes

Median Refuge

Rectangular Rapid Flashing Beacon

Lucas Avenue

Description

Lucas Avenue is a residential street that runs east to west in the Iron Triangle neighborhood. The street ends with direct connections to pedestrian attractors on either end - Lucas Park on the east side and Peres Elementary School on the west side — and is fully contained within the Iron Triangle neighborhood with no outside connections for vehicles. Improvements on this route would improve offset intersections by adding curb extensions or traffic circles as well as add parallel Yellow Brick Road crosswalks to the route.

Cost

$$ - This is a relatively low cost project primarily consisting of stamped asphelt and crosswalk striping. Traffic circle require landscaping and curb work which could affect drainage.

Issues & Opportutnities

- **Offset/Skewed Intersections:** There are offset intersections along Lucas Avenue at 6th, 7th, and 8th Streets. Offset intersections disrupt a straight path for pedestrians and can cause long crossings at unmarked locations and confusion for drivers
- **Traffic Circles and Curb Extensions:** These tools can channelize vehicles along a predictable path and slow traffic down for pedestrians
- **Safe Routes to School:** Opportunity to create a safe route to school along Lucas Avenue from residents coming from north of the school

Key Proposals

Lucas Avenue between 5th Street and Harbour Way

- Yellow Brick Road Crosswalks: Colorized, stamped asphalt pattern of yellow bricks within all north-south crosswalks to highlight safe route to school along Lucas Avenue and 8th Street
- Pedestrian and Bicycle Wayfinding Signs: Use WCCTAC design guidelines and sign types to indicate distance to activity centers along the route like schools, parks, and BART

- Pedestrian-scale lighting
- Landscaping and stormwater planters

6th Street Interesction

- Traffic circle with Yield control on all approaches and landscaping
- Decorative paving in ladder crosswalks across 6th Street
- Traffic circle may be a dumbbell or similar configuration to account for the large intersection offset
- Install public art and landscaping in traffic circle while maintaining good sight lines between drivers, pedestrians, and bicyclists

7th Street Interesction

- Traffic circle with Yield control on all approaches and landscaping
- Decorative paving with ladder crosswalks across 7th Street
- Install public art and landscaping in traffic circle while maintaining good sight lines between drivers, pedestrians, and bicyclists

8th Street Interesction

- Traffic circle with Yield control on all approaches and landscaping
- Decorative paving with ladder crosswalk across 8th Street
- Install curb extensions with stormwater planters/green infrastructure on northwest and south
- Install public art and landscaping in traffic circle while maintaining good sight lines between drivers, pedestrians, and bicyclists

Lucas Avenue Proposed Improvements

Raised Intersection

Crosswalk With Yellow Brick Stamped Asphalt Pattern

Raised Crosswalk

Curb Extension With Directional Curb Ramps

Bike Boulevard

Bike Lanes

Median Refuge

Rectangular Rapid Flashing Beacon Signage

Intall Traffic Circle

Bissell Avenue

Description

Bissell Avenue connects a variety of uses including residential and commercial, as well as parks, schools and churches. This route crosses multiple designated Yellow Brick Road routes such as 4th, 8th, and 16th Streets. Improvements on this route would improve pedestrian safety and access to Veterans Memorial Park by installing Rectangular Rapid Flashing Beacons (RRFBs) at the existing crosswalk at one end of Bissell Way and raising the offset intersection on the other end. Curb extensions at some of the major intersections along the route would reduce crossing distances and improve visibility of pedestrians.

Cost

$$$ - This project involves curb work and traffic calming treatments which many affect drainage, including raised intersections and curb extensions.

Issues & Opportunities

- **Commercial Loading:** Large trucks can block the sidewalk at commercial loading zones near Veterans Memorial Park
- **Uncontrolled Crosswalks:** East of 7th Street, many crosswalks are uncontrolled along Bissell Avenue. Depending on volumes and speeds, these may be candidates for further enhancements, including high-visibility ladder striping and, at higher volume and speed crossings, rectangular rapid flashing beacons (RRFBs)

Key Proposals

Bissell Avenue between 4th Street and 16th Street

- Yellow Brick Road Crosswalks: Colorized, stamped asphalt pattern of yellow bricks within all parallel crosswalks (raised and at-grade) on the route
- Yellow Brick Road Raised Intersections: Stamped asphalt with community-designed painted intersections
- Pedestrian and Bicycle Wayfinding Signs: Use WCCTAC design guidelines and sign types to indicate distance to activity centers along the route like schools, parks, and BART
- Pedestrian-scale lighting
- Landscaping and stormwater planters

4th Street Intersection

- Replace existing all-way Stop intersection at 4th Street with traffic circle with Yield control on all approaches
- Stripe ladder crosswalks at all approaches

6th Street, Harbour Way, and Marina Way Intersections

- Install curb extensions with stormwater planters/green infrastructure
- Decorative paving crosswalks across side-streets

8th Street and Bissell Way Intersections

- Install raised intersections to reduce speeds and prioritize pedestrians
- Decorative paving crosswalks across side-streets

11th Street Intersections

- Install raised crosswalks with decorative paving across 11th Street
- Consider enhancing existing uncontrolled crosswalk across Bissell Avenue with Rectangular Rapid Flashing Beacon (RRFB)

Bissell Avenue Proposed Improvements

Raised Intersection

Crosswalk With Yellow Brick Stamped Asphalt Pattern

Raised Crosswalk

Curb Extension With Directional Curb Ramps

Bike Boulevard

Bike Lanes

Rectangular Rapid Flashing Beacon

T Intersection

Median Refuge

4th Street

Description

The 4th Street YBR Branch Route provides a continuous north-south route on the west side of the Iron Triangle neighborhood. This route provides connections between Peres Elementary School, Nevin Center, Lincoln Elementary School, and the Richmond Greenway.

Cost

$$ - This project involves some curb work and traffic calming treatments which many affect drainage, including raised intersections and median refuges.

Issues & Opportunities

- **Uncontrolled Crosswalks**: intersections at Barrett Avenue and Nevin Avenue both have uncontrolled and unmarked crosswalks
- **Intersection Offset**: At Barrett Avenue, 4th Street is offset which may be difficult to negotiate for pedestrians and bicyclists
- **Long Blocks**: long blocks with limited traffic control may increase auto speeds

Key Proposals

4th Street between Pennsylvania Avenue and Ohio Avenue

- Install speed tables or speed humps to reduce speeds
- Yellow Brick Road Crosswalks: Colorized, stamped asphalt pattern of yellow bricks within all parallel crosswalks (raised and at-grade) on the route
- Yellow Brick Road Raised Intersections: Stamped asphalt with community-designed painted intersections
- Pedestrian and Bicycle Wayfinding Signs: Use WCCTAC design guidelines and sign types to indicate distance to activity centers along the route like schools, parks, and BART
- Pedestrian-scale lighting
- Landscaping and stormwater planters

Barrett Avenue Intersection

- Ladder crosswalks with median refuge areas across Barrett Avenue and enhance with rectangular rapid flashing beacon (RRFB)

Nevin Avenue Intersection

- Raised intersection

Macdonald Avenue Intersection

- Roundabout at intersection with Macdonald Avenue, assuming lane reduction on Macdonald Avenue
- OR ladder crosswalks with median refuges and Rectangular Rapid Flashing Beacons (RRFBs) across Macdonald

Bissell Avenue Intersection

- Replace existing all-way Stop intersection with traffic circle with Yield control on all approaches
- Stripe ladder crosswalks on all approaches

4th Street Proposed Improvements

Raised Intersection

Crosswalk With Yellow Brick Stamped Asphalt Pattern

Raised Crosswalk

Curb Extension With Directional Curb Ramps

Bike Boulevard

Bike Lanes

Intall Roundabout

Rectangular Rapid Flashing Beacon Signage

T Intersection

Median Refuge

Speed Table/Hump

SLOW
ELM

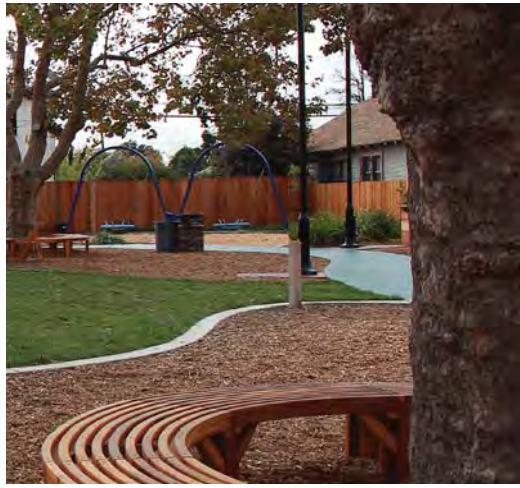
Vision Plan Going Forward

The Yellow Brick Road/Iron Triangle Vision Plan is intended to detail improvements first identified under the Richmond Pedestrian Plan. This document is organized around grant-ready fact sheets that the City and Pogo Park can take forward to secure grant funding based on concept designs, approximate cost estimates, public outreach documentation, and existing conditions information.

The Tree concept that frames this Plan is intended as a phasing plan for the Yellow Brick Road network. As such there are four distinct next steps envisioned for this project:

1. ***Adopt the Yellow Brick Road/Iron Triangle Neighborhood Plan as an Appendix to the Pedestrian Plan*** — integrate this planning document into the Richmond Pedestrian Plan by adopting this document as an appendix to the Pedestrian Plan. The Richmond Bicycle Master Plan can also be amended, as needed, to account for the bicycle improvements proposed in this Plan.
2. ***Secure Funding for & Implement the Roots Route: Elm Play Lot to Peres Elementary School*** — the concept design plans for the Elm to Peres Roots Route and corresponding cost estimate and fact sheet are intended to provide the City with clear documentation of the highest priority route associated with the Yellow Brick Road network. This project can be included in competitive grant applications to create the case for funding this critical Roots Route. While this route is a community priority, the City should pursue all Yellow Brick Routes opportunistically. Additionally, interim design improvements for all routes should be considered and may provide cost-effective, immediate solutions to improve walkability in the Iron Triangle neighborhood.
3. ***Secure Funding for & Implement the Trunk Routes: 4th Street, 8th Street, Pennsylvania Avenue, and the Richmond Greenway Trail Crossings*** — with the critical first phase in place and/or headed towards construction, identify grants and apply for funding for the Trunk Routes. The concept plans included in this Plan are scaled concept drawings prepared to a level of detail that will allow these projects to be competitive for grant funding. Detailed cost estimates should be prepared for the routes. The fact sheets included in this Plan can be included in competitive grant applications to create the case for funding the critical Root and Trunk Routes.
4. ***Continue to Develop the Branch Routes*** — Concept diagrams and project ideas are identified in this Plan for the secondary and tertiary Yellow Brick Road routes that will help create a fine-grained, highly-connected pedestrian-first network in the Iron Triangle. The City can pursue additional planning funding for these projects to further define the projects and get community feedback.

Yellow Brick Road



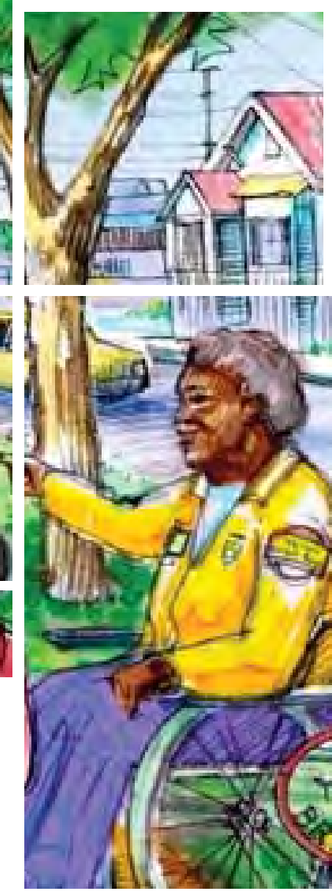
Improving Communities. FEHR PEERS

Yellow Brick Road

Iron Triangle Walkable Neighborhood Plan

Appendix A

Transforming lives by transforming public space.



FEHR PEERS

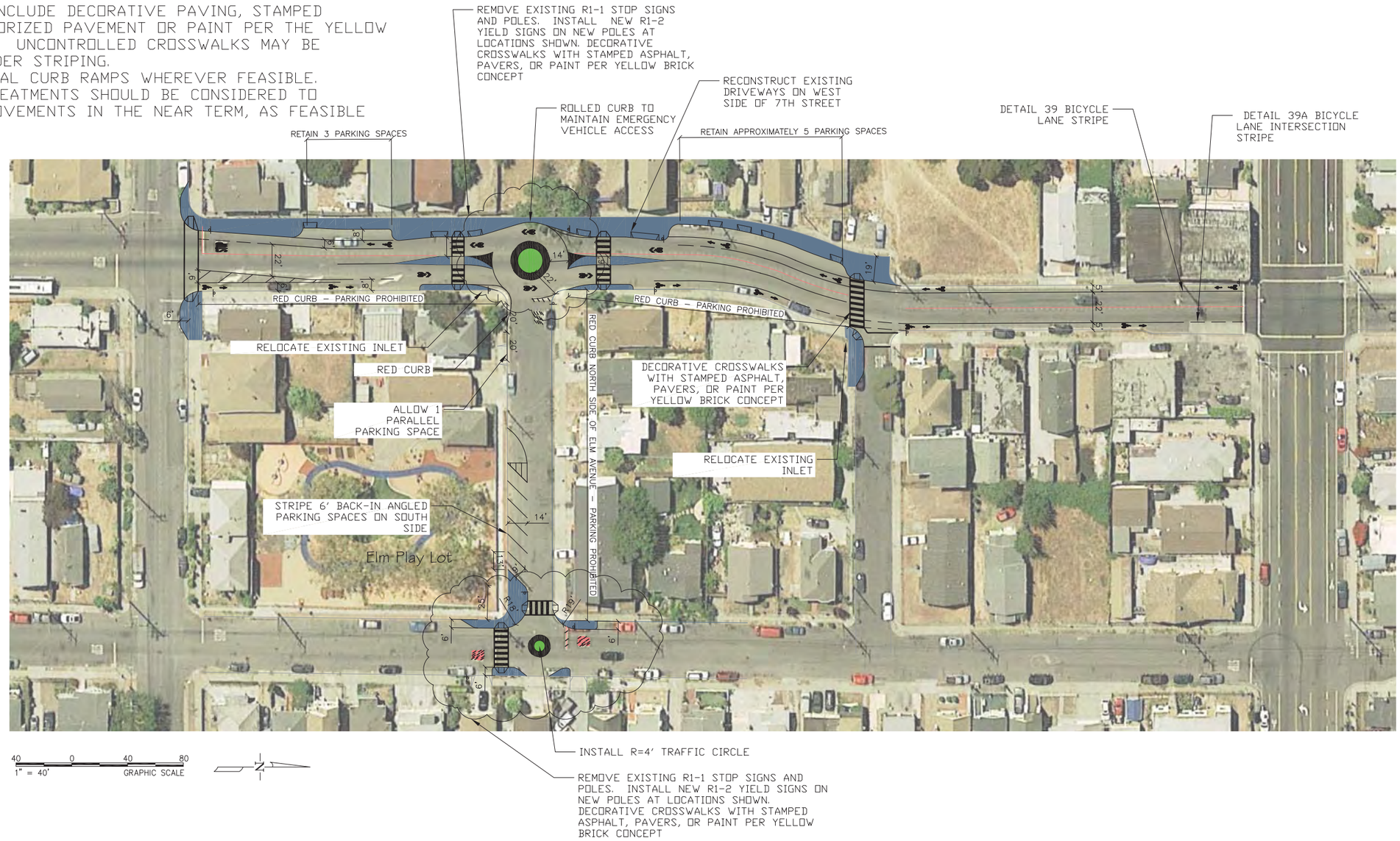
February 2015

Local Government Commission

VALLIER DESIGN ASSOCIATES, INC.

GENERAL NOTES:

1. CROSSWALKS MAY INCLUDE DECORATIVE PAVING, STAMPED ASPHALT AND/OR COLORIZED PAVEMENT OR PAINT PER THE YELLOW BRICK ROAD CONCEPT. UNCONTROLLED CROSSWALKS MAY BE HIGH-VISIBILITY LADDER STRIPING.
2. INSTALL DIRECTIONAL CURB RAMPS WHEREVER FEASIBLE.
3. INTERIM DESIGN TREATMENTS SHOULD BE CONSIDERED TO CONSTRUCT THE IMPROVEMENTS IN THE NEAR TERM, AS FEASIBLE



40 0 40 80
1" = 40' GRAPHIC SCALE

LEGEND

- NEW OR RECONSTRUCTED SIDEWALK OR CURB EXTENSION
- REPLACE AND RELOCATE EXISTING R1-1 STOP SIGNS WITH NEW R1-2 YIELD SIGNS
- CUSTOMIZED BICYCLE & PEDESTRIAN WAYFINDING SIGNS
- SHARROW (TYP.) IN SHARED LANES AND THROUGH ROUNDABOUTS
- MOUNTABLE AREA OF TRAFFIC CIRCLE, ROUNDABOUT, OR SPLITTER ISLAND FOR TRUCK & EMERGENCY VEHICLE ACCESS
- RAISED LANDSCAPED MEDIAN OR TRAFFIC CIRCLE
- CLASS II BICYCLE LANE LEGENDS (TYP.)

REVISIONS

NO.	DESCRIPTION	DATE	BY

FEHR & PEERS
100 Pringle Avenue Walnut Creek, CA 94596
Suite 600 (925) 930-7100

- Walnut Creek, CA
- Roseville, CA
- San Jose, CA
- San Francisco, CA
- Orange County, CA
- Los Angeles County, CA
- San Diego, CA
- Oakland, CA
- Salt Lake City, UT
- Reno, NV
- Denver, CO
- Seattle, WA

Designed By: ____
Drawn By: KR/CN
Checked By: CN/RM
Drawing No.: ____
Date: FEBRUARY 2014

CITY OF RICHMOND

ELM TO PERES – PHASE 1

YELLOW BRICK ROAD/IRON TRIANGLE NEIGHBORHOOD PLAN

SHEET 1 OF 1

CADD FILE: W:\Oakland N Drive\Projects\2013\WC13-3084_YBR_Walkable_Neighborhoods\CAD\30% Plans\3084-Striping_v3_cn.dwg
Feb 25, 2015

Fehr & Peers Associates, its employees, its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

Engineers Estimate of Construction Costs

FEHR PEERS

Project:	Yellow Brick Road: Elm to Peres Route
Location:	7th Street and Elm Avenue
Date:	02/25/2015
Project #:	WC13-3084
Checked:	RM

Signing & Striping

I.D	Design Element	Unit of Measure	Unit Cost	Quantity	TOTAL
	Signing				
000001	Install New Sign on New Post	ea	$700.00	28	$19,600.00
000002	Install New Customized Wayfinding Sign on New Post	ea	$1,000.00	16	$16,000.00
000005	Relocate Existing Sign and Post	ea	$400.00	1	$400.00
000008	Remove Existing Sign & Post	ea	$150.00	2	$300.00
	Striping				
000032	Detail 23 - Marker Type Double Yellow Center Line	lf	$4.50	173	$778.50
000033	Detail 24, 25, 27B - 4" Solid Edgeline	lf	$1.00	816	$816.00
000058	Detail 39 - Bike Lane (Paint)	lf	$1.25	1040	$1,300.00
000023	12" Limit Line/Crosswalk	lf	$6.60	754	$4,976.40
000032	Pavement Legends (Thermo)	sf	$8.50	274	$2,329.00
000033	Paint Curb	lf	$2.50	880	$2,200.00
000035	Remove Thermoplastic Striping and Markings	sf	$5.00	22	$110.00

CIVIL

I.D	Design Element	Unit of Measure	Unit Cost	Quanitty	TOTAL
	Paving/Curb				
000003	Slurry Seal	SF	$2.00	37000	$74,000.00
000004	Parking Lot Paving (3" AC/6" Class II AB)	SF	$6.00	2658	$15,948.00
000009	Concrete Curb	LF	$30.00	297	$8,910.00
000010	Concrete Curb & Gutter	LF	$40.00	1032	$41,280.00
000011	Concrete Driveway	SF	$15.00	504	$7,560.00
000012	Mountable Concrete Surface	SF	$15.00	639	$9,585.00
000013	Concrete Sidewalk	SF	$10.00	7341	$73,410.00
000016	Curb Ramp	EA	$3,500.00	12	$42,000.00
	Utilities				
000033	Drainage Inlet Relocation Along Pipe	EA	$7,500.00	2	$15,000.00
	Aesthetic/Architectural				
000044	Box Tree	EA	$750.00	6	$4,500.00
000045	Bench	EA	$1,000.00	4	$4,000.00
000046	Bike Rack	EA	$1,000.00	2	$2,000.00
000050	Decorative Crosswalk Paving	SF	$13.00	2520	$32,760.00
000053	Planting Area	SF	$20.00	559	$11,180.00
000057	Trash Can	EA	$400.00	4	$1,600.00
000058	Tree Grates	EA	$1,500.00	6	$9,000.00

	SUBTOTAL	$401,542.90
5%	*Traffic Control*	$20,077.15
10%	*Mobilization*	$40,154.29
10%	*Construction Management*	$40,154.29
20%	*Contingecy*	$100,385.73
	TOTAL CONSTRUCTION	$602,314.35
5%	*Environmental*	$30,115.72
15%	*Design*	$90,347.15
	TOTAL COST	**$722,777.22**