

# RECOMMENDATIONS TO IMPROVE PEDESTRIAN & BICYCLE SAFETY IN OAKLAND



July  
2017

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## INTRODUCTION

At the invitation of the East Bay Asian Local Development Corporation (EBALDC), Walk Oakland Bike Oakland (WOBO), and the San Pablo Area Revitalization Collaborative (SPARC), the University of California at Berkeley’s Safe Transportation Research and Education Center (SafeTREC) and California Walks (Cal Walks) facilitated a community-driven pedestrian and bicycle safety action-planning workshop in the City of Oakland to improve pedestrian safety, bicycle safety, walkability, and bikeability along a segment of San Pablo Avenue in the Hoover-Foster, Clawson, and McClymonds neighborhoods.

San Pablo Avenue is owned and operated by Caltrans as State Route 123 and is one of Oakland’s main thoroughfares. “State Route 123 begins at I-580 in Oakland and ends at I-80 in Richmond. The route is two lanes in each direction with the exception of some locations where left-turn pockets, pedestrian refuge areas and corner bulb-outs have been constructed to improve storage, accommodate

larger/longer vehicles and provide pedestrian safety.”<sup>1</sup> Bay Area residents use San Pablo Avenue on a daily basis to commute to nearby job centers in Oakland, Berkeley, and Richmond, with much of the vehicle traffic during peak hours coming from outside the neighborhood. Pedestrians and bicyclists, including youth, seniors, and individuals with limited mobility, also use San Pablo Avenue to reach nearby destinations.

Cal Walks facilitated the workshop on June 10, 2017, which consisted of: 1) an overview of multidisciplinary approaches to improve pedestrian and bicycle safety; 2) walkability and bikeability assessments along three key routes to identify existing conditions of the street and street furniture and the current human experience of the street; and 3) small group action-planning discussions to identify opportunities for intervention to help facilitate the development of community-prioritized recommendations to inform Oakland’s active transportation and sustainable community efforts. This report summarizes the workshop proceedings, as well as ideas identified during the process and recommendations for pedestrian and bicycle safety projects, policies, and programs. Workshop findings and this report will also be used to inform SPARC’s Urban Design Plan for the area.

## **BACKGROUND**

### **Community Pedestrian and Bicycle Safety Training Program**

The Community Pedestrian and Bicycle Safety Training (CPBST) program is a joint project of UC Berkeley SafeTREC and Cal Walks. Funding for this program is provided by a grant from the California Office of Traffic Safety (OTS) through the National Highway Traffic Safety Administration (NHTSA). The purpose of the CPBST program is to train local neighborhood residents and safety advocates on how to improve pedestrian and bicycle safety and to strengthen their collaboration with local officials and agency staff to make communities safer and more pleasant to walk and bike. For each training, the program convenes a multi-sector, multi-disciplinary local planning committee to tailor and refine the training’s curriculum and focus to meet the community’s needs. Additionally, Cal Walks staff conduct pre-training site visits to collect on-the-ground observations of existing walking and biking conditions to inform the training’s scope and focus.

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<sup>1</sup> Transportation Concept Report, State Route 123, available at <http://www.dot.ca.gov/dist4/systemplanning/docs/final-sr-123-tcr-063017.pdf>

The half-day training is designed to provide participants with both pedestrian and bicycle safety best practices and a range of proven strategies (the 6 E's: Empowerment & Equity, Evaluation, Engineering, Enforcement, Education, and Encouragement) to address and improve pedestrian and bicycle safety conditions and concerns. Participants are then guided on a walkability and bikeability assessment of nearby streets before setting pedestrian and bicycle safety priorities and actionable next steps for their community.

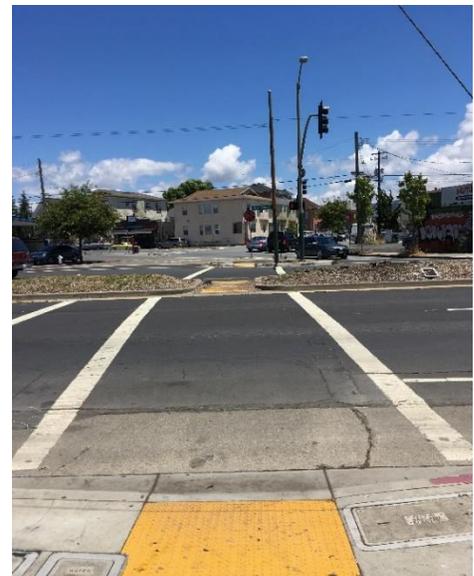
For a summary of outcomes from past CPBST workshops, please visit:

[www.californiawalks.org/wp-content/uploads/2016/05/CPST-Annual-Report-2015.pdf](http://www.californiawalks.org/wp-content/uploads/2016/05/CPST-Annual-Report-2015.pdf) and <https://safetrec.berkeley.edu/programs/cpbst>

## Selected Pedestrian & Bicycle Safety Conditions Along San Pablo Avenue, Between 35<sup>th</sup> Street and West Grand Avenue

### HIGH SPEEDS & WIDE ROADS

The posted speed limit along San Pablo Avenue in the workshop area—from 36<sup>th</sup> Street to West Grand Avenue—is 30 miles per hour (mph), yet drivers appear to travel at much higher speeds. Within the workshop area, it is a wide road with a center median, two travel lanes in each direction, parallel parking on both sides of the street, intermittent bicycle sharrows, sidewalks, and a mix of standard and high-visibility crosswalks. Research has demonstrated that wide streets and wide travel lanes are associated with higher vehicle speeds<sup>2</sup>, which affect the safety of people walking and bicycling. Additionally, over a dozen bicyclists were observed riding on the sidewalk due in part, perhaps, to excessive vehicle speeds long San Pablo Avenue.



*San Pablo Avenue in the Hoover-Foster neighborhood is a wide multi-lane road.*

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<sup>2</sup> See Kay Fitzpatrick, Paul Carlson, Marcus Brewer, and Mark Wooldridge, "Design Factors That Affect Driver Speed on Suburban Arterials": Transportation Research Record 1751 (2000):18–25.

## COMPLEX & SKEWED INTERSECTIONS

A variety of complex intersections can be found along San Pablo Avenue. These skewed intersections, where streets do not intersect at the traditional 90-degree angle, can be found along the corridor at 34<sup>th</sup> Street/Linden Street, Brockhurst Street/Filbert Street, and 31<sup>st</sup> Street. Such skewed intersections result in longer pedestrian crossings, difficult turning movements for drivers, and unsafe road user behavior due to the difficulty of navigating the intersection.



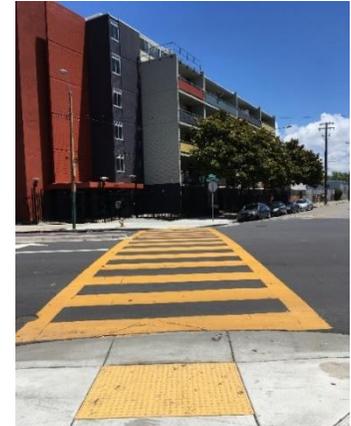
*A complex intersection at San Pablo Avenue and 34th Street. Source: Google*

## FADED STREET MARKINGS

During Cal Walks' site visit, staff observed numerous worn and faded markings at crosswalks along San Pablo Avenue. In particular, along San Pablo Avenue and many adjacent streets, the road pavement is in poor condition. Faded marked crosswalks were also observed, making crossing more difficult and dangerous for pedestrians. Faded sharrow markings, which are meant to alert motorists to bicyclists sharing the road, made it more difficult for bicyclists to share the road, especially with vehicles traveling at high rates of speed.

## PEDESTRIAN CROSSING CHALLENGES

During the site visit, Cal Walks staff observed a number of crossing types along San Pablo Avenue including linear and skewed crossings. A high-visibility crosswalk is located on one side of San Pablo Avenue at Brockhurst Street. Signalized San Pablo Avenue crossings can be found at West Grand Avenue, 25<sup>th</sup> Street, 27<sup>th</sup> Street, 31<sup>st</sup> Street and Market Street. The majority of crossings are standard or continental crosswalks at unsignalized intersections. At most signalized intersections, only a single marked crossing across San Pablo Avenue exists, while the other is prohibited. This three-legged crossing design unnecessarily restricts



*High-visibility crosswalk at San Pablo and Brockhurst Street.*

pedestrian and bicyclist movement and crossings, particularly in high foot traffic areas located on either side of San Pablo Avenue at these intersections (e.g., shopping centers, parks). Pedestrian crossings are long and measure the full street width (often 9 lanes to cross, including parking and median, with few or no pedestrian crossing improvements and four vehicle traffic lanes). Long crossings were observed at San Pablo Avenue and 27<sup>th</sup> Street and 34<sup>th</sup> Street with an unmarked crossing at 34<sup>th</sup> Street. Throughout the corridor, Cal Walks staff observed older style curb ramps which appeared to be non-compliant with current ADA standards. In several locations where ADA ramps were unavailable, community members used driveway ramps as ADA ramps to access the street.



*One of only a few pedestrian-oriented light fixtures along San Pablo Avenue.*

### **LACK OF LIGHTING**

A lack of pedestrian-scale lighting was observed during the site visit. A lack of adequate lighting was observed at transit stops, near storefronts, community activity areas, and I-580 underpasses, especially at San Pablo Avenue and West Street. Community murals located at I-580 underpasses would also benefit from additional lighting.

### **LACK OF BICYCLE FACILITIES AND WAY FINDING**

Currently, there are sharrows and several small bicycle wayfinding

signs along San Pablo Avenue, identifying the street as a bicycle route and directing cyclists to Downtown Oakland or Lakeside Park. Residents noted that a main safety issue for cyclists along San Pablo Avenue appeared to be the high speed of drivers.

### **SIDEWALKS IN DISREPAIR AND DEBRIS**

Sidewalks throughout the neighborhood are in disrepair, damaged by cracks or uprooted trees. Utility boxes in the middle of the sidewalk are in disrepair, including one at SPARC-It-Place with a hole larger than an adult foot. Sidewalks were also narrowed by various types of

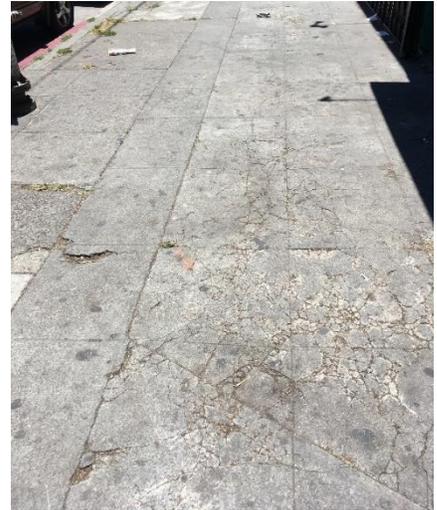


*Due to high speeds, bicyclists prefer the road shoulder to bicycle sharrows.*

debris from personal belongings, business signs and displays, trash, and overgrown vegetation as well as utility poles and pole anchors. Utility poles and pole anchors, which are light in color and missing reflectors can be obstructive and dangerous, especially at night. Low hanging tree branches blocked the view of the street as well as the view of drivers backing out of driveways.

## MEDIANS

Medians along San Pablo Avenue vary in width, design, and landscaping. In general, medians have minimal and inconsistent landscaping and were characterized by dry vegetation and debris. Medians did not extend into marked and unmarked crosswalks, thus leaving pedestrians and cyclists to stand in the crosswalk if they needed to cross the full travel lane.



*Cracked sidewalks and debris along San Pablo Avenue.*

## Pedestrian and Bicyclist Collision History

Thirty-six percent of pedestrian collisions in Oakland occur on just 2% of streets. These most dangerous streets are known as the City's "High Injury Network." An analysis of pedestrian collisions between 2008-2014, identified 34 high-injury corridors and 37 high-injury intersections. The San Pablo Avenue and 34<sup>th</sup> Street intersection has been identified as one of the dangerous streets in the High Injury Network. Prioritizing engineering enhancements to the High Injury Network has the potential to greatly improve pedestrian and bicyclist safety.<sup>3</sup>

Between 2011-2015,<sup>4</sup> citywide in Oakland, there were 1,417 pedestrian collisions, including 47 fatalities, and 135 severe injuries, and 1,044 bicycle collisions, including 9 fatality and 68 severe injuries. Based on our analysis of the collision data, one of the high-collision corridors includes San Pablo Avenue in West Oakland.

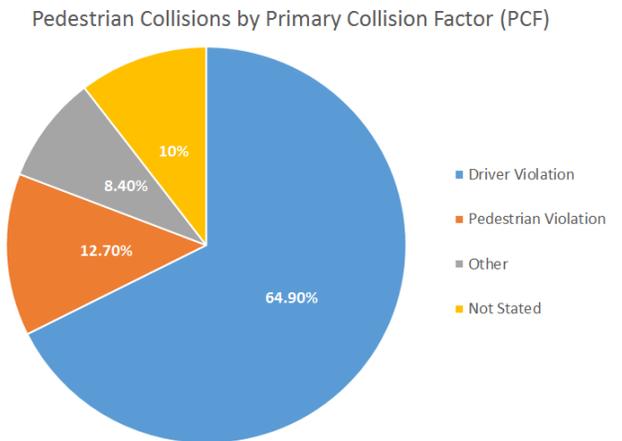
In Oakland, 64.9% of pedestrian collisions can be attributed to a driver violation, while 12.7% of

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<sup>3</sup> City of Oakland Department of Transportation 2017 Draft Pedestrian Master Plan Update, available at <http://www2.oaklandnet.com/oak/groups/pwa/documents/report/oak063431.pdf>

<sup>4</sup> Please note that 2014 and 2015 collision data are provisional and not yet final.

pedestrian collisions can be attributed to pedestrian violation. Driver violations largely included failure to yield to pedestrian right-of-way,<sup>5</sup> while pedestrian violations were primarily failure of the pedestrian to yield to vehicle traffic when crossing outside a crosswalk.<sup>6</sup> For bicycle collisions, 19.8% are attributed to a right-of-way violation either by a bicyclist or a driver and 18.6% are attributed to improper turning either by a bicyclist or driver.<sup>7</sup>



## JUNE 10 WORKSHOP

The community-based organization, Walk Oakland Bike Oakland (WOBO), requested a workshop to 1) provide City/County staff, community organizations, and residents with a toolkit for promoting pedestrian and bicycle safety to inform future active transportation projects; 2) strengthen working relationships between WOBO and other stakeholders to ensure the best outcomes for the residents of Oakland; and 3) develop consensus regarding pedestrian and bicycle safety priorities and actionable next steps. WOBO, along with East Bay Asian Local Development Corporation (EBALDC), and San Pablo Area Revitalization Collaborative (SPARC) comprised the local planning committee, with St. Mary’s Center, and United Seniors of Oakland and Alameda County (USOAC) joining us during the Site Visit.

The workshop, from 10:00 am to 2:30 pm, was hosted at SPARC-It-Place; lunch and childcare were provided. Twenty-six (26) individuals attended the workshop, including community residents, and representatives from City of Oakland Department of Transportation's Great Streets Division, City of

<sup>5</sup> Pedestrian Right-of-Way Violations are defined as instances where a driver fails to yield to a pedestrian in a marked or unmarked crosswalk when the pedestrian has the right of way (e.g., when the pedestrian has a “Walk” signal at a signalized intersection).

<sup>6</sup> Pedestrians have the right-of-way in marked and unmarked crossings, and drivers are legally required to yield to pedestrians in these instances. However, when pedestrians cross outside of marked or unmarked crossings, pedestrians must yield the right-of-way to drivers. This is not the same as the term “jaywalking,” which refers to crossing outside of a marked or unmarked crossing between two signalized intersections. A pedestrian is legally able to cross outside of a marked or unmarked crossing between two intersections where one or none of the intersections is signalized but only if the pedestrian yields the right-of-way to oncoming drivers.

<sup>7</sup> The California Vehicle Code 21200(a) specifies that a person riding a bicycle “has all the rights and is subject to all the provisions applicable to the driver of a vehicle...” Accordingly, some primary collision factors are ambiguous as to whether the driver or bicyclist committed the violation, without examining individual traffic incident reports.

Emeryville Planning Division, and City of Vallejo Planning Division. Many of the professionals were themselves Oakland residents.

### **Reflections from Walkability and Bikeability Assessment**

Workshop participants conducted walkability and bikeability assessments on three routes along San Pablo Avenue. The first route traveled South on San Pablo Avenue to 30th Street. The second route traveled south on San Pablo Avenue to West Grand Avenue and assessed infrastructure on West Grand Avenue and Brush Street, where EBALDC is in the process of developing a new building. The third route traveled east on 35th Street, south on West Street, west on Brockhurst Street, and north San Pablo Avenue. This third route emphasized evaluating the underpasses, especially the San Pablo Avenue Underpass (35th-36th Streets) where a major #72 AC Transit bus stop is located.

Participants were asked to 1) observe infrastructure conditions and the behavior of all road users; 2) apply strategies learned from the 6 E's presentation that could help overcome infrastructure concerns and unsafe driver, pedestrian, and bicyclist behavior; and 3) identify positive community assets and strategies which can be built upon. Following the walkability and bikeability assessment, the participants shared the following reflections:

### **POOR SIDEWALK CONDITIONS & ACCESSIBILITY CHALLENGES**

Sidewalks are continuous along San Pablo Avenue; however, many sections are in disrepair, uneven, cracked, and/or narrow. Sidewalk damage was noted in front of vacant buildings on the north side of San Pablo Avenue, between Myrtle Street and 32nd Street. Participants observed that tree roots created large cracks and uplifted sidewalks, as well as the actual road pavement in some areas. These uneven pavement conditions create a tripping hazard for people walking and make it difficult or impossible to navigate the sidewalk or cross the street with assistive mobility devices. Tree branches and overgrown vegetation encroached onto the sidewalk in many areas, making it difficult to walk.

Curbs ramp designs and conditions varied along San Pablo Ave, from older concrete non-compliant

ramps, to newer ADA-compliant yellow truncated dome ramps, and to no ramps at some corners. In some areas, apex curb ramps direct pedestrians diagonally into intersections rather than directly into the crosswalk.

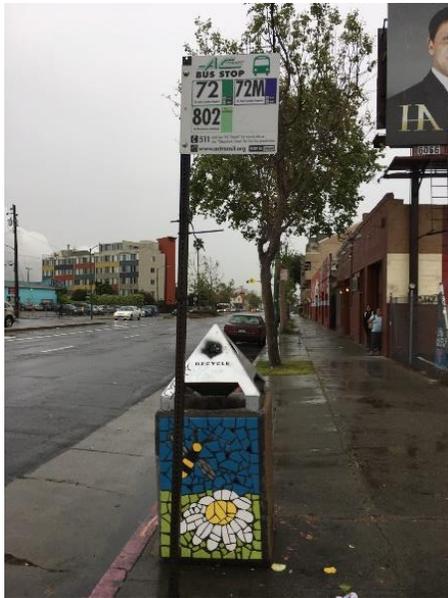
### LACK OF SIDEWALK FURNITURE

Lack of bus shelters and benches were noted throughout San Pablo Avenue. Residents were observed bringing their own chairs to sit and view activity on San Pablo Avenue. Residents commented that the City of Oakland removed several bus shelters in the area due to “safety” concerns. A transit stop on San Pablo Avenue, between 29th and 30<sup>th</sup> Street did have a bus shelter, however, the bus shelter was obstructing the sidewalk.



*Left: Newer ADA-compliant yellow truncated dome ramp.  
Right: Older, concrete non-compliant ramp.*

### LACK OF PEDESTRIAN-SCALE LIGHTING



*Lack of bus shelter, bench, and pedestrian-scale lighting at San Pablo Avenue bus stop.*

Residents noted that a lack of pedestrian scale-lighting in some areas may be supporting certain types of negative activity. Minimal or no lighting near unmarked and unsignalized crosswalks makes it difficult for drivers to see pedestrians. Participants commented that the lighting at the I-580 underpasses was inadequate, especially at San Pablo Avenue and West Grand Avenue, San Pablo Avenue and 36th Street, and West Street and 35th Street.

### WALKING EXPERIENCE

Participants noted that murals along San Pablo Avenue are a great community asset that helps identify their particular neighborhood and brighten the underpasses. Residents observed a reduction in crime as underpasses were reclaimed, attracting more pedestrian activity. Residents were friendly and greeted participants during the walkability and bikeability assessment. Blank walls, graffiti,

litter, dumping and empty parking lots were also noted as areas for improvement. Participants commented that billboards along San Pablo Avenue were car centric, giving people the idea they can travel quickly through the corridor.

### LACK OF CONTROLLED OR ENHANCED UNCONTROLLED CROSSINGS



*Long, unmarked crosswalk at San Pablo Avenue and 31<sup>st</sup> Street.*

Pedestrian crossings are long, often requiring people to cross 9 lanes of traffic, including vehicle lanes, parking, and the median, with few or no pedestrian crossing enhancements. There is a lack of well-marked, enhanced crossings along San Pablo Avenue, particularly at 27th Street (signalized, no striping) and 34th Street (unmarked, unsignalized). At San Pablo Avenue and 24th Street, there are 5 crosswalks at this complex intersection but only 3 marked crosswalks. Participants noted that San Pablo Avenue lacked stop signs, traffic signals, high-visibility marked crosswalks, or other traffic control devices to assist residents in crossing the street. Participants were particularly concerned with the lack of traffic control markings and/or devices in proximity to schools, senior centers, and senior housing on the corner of San Pablo Avenue and Brockhurst Street.

### BIKE ROUTES & BIKE NETWORK

San Pablo Avenue, between 32nd Street and West Grand Avenue, has sharrows and a bike wayfinding signage. Class II Bike Lanes start at San Pablo Avenue and West Grand Avenue, travelling southeast towards downtown. There is minimal signage and bike parking along San Pablo Avenue, while the adjacent vehicle parking all along San Pablo Avenue increases the opportunity for dooring, a traffic incident where a cyclist is struck by a vehicle door.

### DRIVER BEHAVIOR

Though the posted speed limit on San Pablo Avenue is 30 mph, participants commented that drivers travel much faster than the posted speed limit. It is clear the design speed for this state highway far exceeds 30 mph and drivers respond accordingly.

## **GENTRIFICATION/HOUSING**

Cost of housing is increasing, making it harder for local residents to purchase homes and to stay in rental homes. New developments and buildings are further displacing homeless populations without providing replacement housing or supportive services.

### **Community Resident Recommendations**

Following the walkability and bikeability assessment, Cal Walks facilitated small-group action planning discussions. Workshop participants discussed two sets of questions: the first focused on prioritizing infrastructure improvements for reducing the number of injuries and fatalities at crosswalks and intersections, while the second focused on prioritizing non-infrastructure community-led projects.

Workshop participants provided the following recommendations for overall pedestrian and bicyclist safety improvements:

#### *Infrastructure Concerns & Priorities*

### **IMPROVE SIDEWALK CONDITIONS & ADDRESS SIDEWALK GAPS**

There is a general need to ensure that sidewalks are level and free from obstructions, such as overgrown vegetation and uplifted sidewalks. Curbs throughout the San Pablo Avenue corridor need new paint, particularly red paint to daylight crosswalks at corners. Curb ramps should be updated to meet ADA requirements. Installation of a pedestrian safety island at San Pablo Avenue/Brockhurst Street is a priority due to the students and seniors who frequently try to cross this intersection to access transit and daily destinations. To increase visibility and safety, participants called for more investments in pedestrian-scale lighting, especially at transit stops, storefronts, and activity areas, while existing lighting should be surveyed to ensure it is in working order. Underpasses used as waiting areas for food giveaways would benefit from street furniture (benches, trash cans) and pedestrian-scale lighting (e.g., San Pablo Avenue from 35th-36th Streets).

### **IMPROVE CROSSING CONDITIONS & ENSURE ADA COMPLIANCE**

Participants identified the need for high-visibility crosswalks and the addition of rectangular flashing or pedestrian hybrid beacons at numerous intersections along San Pablo Avenue, including at 32nd Street. To improve crossing conditions, participants also noted the need for more curb ramps and high-visibility restriping of faded crosswalks. Participants also expressed that some signalized intersections needed increased crossing times and pedestrian countdown signals. They requested that the City

and/or Caltrans inspect, evaluate, and change the San Pablo Avenue pedestrian signal timing/phasing near senior facilities and schools. There is a leading pedestrian interval on the west side at West Street (where there is no left turning conflict), but it did not appear that the leading pedestrian interval on the east side was operable; participants recommended that West Street entrance to I-580 be inspected and fixed. Participants also requested installation of pedestrian safety islands, especially at all unsignalized San Pablo Avenue intersections.

### **IMPROVE BICYCLIST CONNECTIVITY**

Participants and cyclists expressed a need to strengthen the existing bike network in Oakland. Ideas shared included: improved signage for existing and new bike routes; improved vehicular speed limit signage; addition of bike lanes on San Pablo Avenue; buffered bike lanes that provide physical separation from traffic; and the prioritization of projects connecting new bike lanes to the existing City bike route network. Participants also wanted to see potholes filled to prevent bicyclist injuries.

### **HOMELESSNESS**

Participants wanted to ensure that infrastructure and non-infrastructure improvements on San Pablo Avenue would not further displace community members experiencing homelessness. Planning along San Pablo Avenue should include homelessness advocates to ensure communities, including encampments along the corridor, are not being displaced and that additional housing is provided for those now homeless. Residents stressed the need for additional supportive services for community members experiencing homelessness including: housing and shelter, physical and mental health services, employment and social inclusion. Participants agreed that further and sustained dialogue and action steps are needed for the community regarding the current status of the environment and the potential changes that could occur with increased investments in pedestrian and bicycle improvements.

### **WALKING ENVIRONMENT**

Participants cited the need for more trashcans and more regular pick-up services along San Pablo Avenue to improve cleanliness and to discourage dumping. Some residents showed interest in downloading the City's See-Click-Fix app on their phones to report dumping needs to the City of Oakland. Participants also supported the improvement of planting strips and medians, as well as the installation of pedestrian-scale lighting at bus stops and bus shelters.

### *Non-Infrastructure Concerns & Priorities*

Participants also identified the following enforcement, educational, and encouragement programs that could be implemented to improve pedestrian and bicycle safety in northwest Oakland:

#### **COMMUNITY-BASED ENFORCEMENT**

Participants identified encouraging more residents to actively participate in Neighborhood Watch as a priority. Participants also requested that signage be added to vacant lots with the message “don't dump here” or “camera monitored” to deter dumping and other negative activity.

#### **EDUCATIONAL CAMPAIGNS**

Participants would like to take advantage of the City's and community organizations' social media accounts to launch an educational campaign to educate Oakland residents regarding the rules of the road. The educational campaign would target drivers to communicate the need for drivers to respect the pedestrian right-of-way at intersections and crosswalks and to drive more safely. Participants also identified establishing an educational program targeting bicyclists to enhance their understanding of the rules of road as a next step action.

#### **COMPLETE STREETS PLANNING**

Participants identified pursuing funding from the Caltrans Sustainable Transportation Planning grant program to develop Complete Streets Plans for San Pablo Ave (State Route 123).

#### **CONTINUED & SUSTAINED COMMUNITY ENGAGEMENT**

Participants identified new residents slated to move into new housing being built on San Pablo Avenue within the next few years as a key demographic to mobilize and involve in follow-up activities and processes. Residents want to establish new community activity areas along San Pablo Avenue and a reason to get together. Participants see opportunities to build on the 2nd Saturday community event at SPARC-It-Place. Participants would like to create partnerships with senior centers, churches, schools, and the City to host various community events. Participants expressed interest in community events such as a farmer's market; installing art projects, community gardens, walking clubs, walking school buses, and senior walks. The community would also like to see more youth engagement around pedestrian and bicycle improvements.

## **GENTRIFICATION/DISPLACEMENT**

Residents raised the necessity to prevent displacement as integral to the San Pablo Avenue community. Participants would like to see the preservation and addition of affordable housing units for long term residents, additional homeless services (bathrooms, transitional housing, supportive social services) and policies to help long-term home owners keep their homes while the cost of living continues to increase.

## **California Walks/SafeTREC Recommendations**

California Walks and SafeTREC also submit the following recommendations for consideration by the City of Oakland, EBALDC, and other community non-profits:

### **TRAFFIC CALMING MEASURES**

Traffic calming measures, including a road diet, the addition of curb extensions, pedestrian safety islands, enhanced crossings, and on-street bicycle infrastructure, can decrease driver's speed along San Pablo Avenue. A San Pablo Avenue road diet can create space for separated bicycle lanes highlighted with green pavement to enhance visibility. We recommend that the City of Oakland work with community-based organizations and residents to submit an application to the Caltrans Sustainable Transportation Planning Grant Program to develop a focused Complete Streets plan for San Pablo Avenue with a shared vision for the corridor and identified priority projects to improve walking and biking conditions in West Oakland. We recommend that participants review the City of El Cerrito San Pablo Avenue Specific Plan and Complete Streets Plan to inform how they could structure a similar planning process for San Pablo Avenue in West Oakland.

### **BIKE CONNECTIVITY, SIGNAGE & WAY FINDING**

Although sharrows are present along San Pablo Avenue, more and improved bicycling facilities and wayfinding is necessary to ensure safe travel and direct cyclists to existing and preferred bike routes.

### **LIGHTING**

As part of its complete streets upgrades, Caltrans can install pedestrian-scale lighting on the underpasses and ramp feeder streets (35th and 36<sup>th</sup> Streets). A night-time light assessment is recommended to identify other specific areas needing additional lighting and repair/replace existing

lighting that is not in working order.

## **INTERSECTION ENHANCEMENTS**

A number of complex intersection redesign options can be found in the National Association of City Transportation Officials Urban Street Design Guide (NACTO). As the Guide shows, space from angled intersection redesigns can be used to create needed community gathering spaces such as parks and plazas or provide enhanced crossing zones. Latham Square in downtown Oakland is a recent example<sup>8</sup>. Moreover, Caltrans has long supported redesigning intersections and interchanges for its State Highway facilities, including authoring the 2010 publication “Complete Intersections: A Guide to Restructuring Intersections and Interchanges for Bicyclists and Pedestrians.” This document outlines 12 Guiding Principles for Caltrans engineers to evaluate pedestrian and bicyclist safety conditions at intersections and identifies common issues and treatments for various intersection types.

## **CROSSING ENHANCEMENTS**

Crossing signal timing varied along the corridor and should be inspected and retimed at no more than 2.8' per second as needed, especially near senior facilities and schools, providing the requisite time for seniors and children to safely cross. Additional leading pedestrian intervals, like the one found on the west side of West Street near the I-580 East entrance, should be considered along San Pablo Avenue. A lack of pedestrian safety islands, especially at unsignalized intersections was also observed. Safety islands allow pedestrians to stop at the halfway mark and finishing crossing the street on the next walk signal. They are especially helpful for seniors, young children and other individuals with limited mobility or that might need additional time to cross the street. This is increasingly important as more high density housing continues to be built along San Pablo, mostly for seniors.

Lastly, we recommend enhancing crossings along the San Pablo Avenue corridor at existing signalized three-legged crossings. At most signalized intersections, only a single marked crossing exists across San Pablo Avenue, while the other is prohibited. This three-legged crossing design unnecessarily restricts pedestrian and bicyclist movement and crossings, particularly in high foot traffic areas located on either side of San Pablo Avenue. Restoring pedestrian crossings to all four legs of a signalized

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<sup>8</sup> San Francisco Chronicle, Oakland Celebrates a Renovated Latham Square, available at <http://www.sfchronicle.com/bayarea/article/Oakland-celebrates-a-renovated-Latham-Square-8669485.php>

intersection would allow pedestrians to cross San Pablo Avenue safely at more intersections. Current design standards and technological advancements alleviate the need to restrict crossings at signalized intersections. For example, implementing leading pedestrian interval (LPI) at signalized PCH pedestrian crossings greatly reduces the left-turn vehicle-pedestrian conflict that likely motivated the original crossing restriction. A consistent median design and landscape plan could enhance the aesthetics of the corridor and act as a gateway into the neighborhood. Installation of pedestrian safety islands at medians would also improve pedestrian access and safety, allowing a place for rest at unsignalized crosswalks. Narrowed medians would provide repurposed right of way for bicycle and pedestrian facilities.

### **EDUCATIONAL CAMPAIGNS**

Education and, if necessary, code enforcement action is needed to reclaim sidewalks for pedestrian activity.

### **GENTRIFICATION/DISPLACEMENT**

Participants and/or the planning committee should include coordination with groups addressing the issue of gentrification/displacement so that pedestrian and bicycle improvements do not exacerbate the already high cost of living and further displace residents.

### **FUNDING**

We strongly encourage the planning committee organizations to submit an application to the state Strategic Growth Council's Affordable Housing Sustainable Community Grant program to develop 34<sup>th</sup> Street/San Pablo Avenue, both as a residential and transit center. Investing in each of the surrounding neighborhood streets and defining its neighborhood as the residential gateway from Emeryville to Downtown Oakland (not the throughway to Downtown, to the Port and to East and South County) could be a great next step.

### **ACKNOWLEDGMENTS**

We would like to thank the Walk Oakland Bike Oakland (WOBO), East Bay Asian Local Development Corporation (EBALDC), San Pablo Area Revitalization Collaborative (SPARC), United Seniors of Oakland and Alameda County (USOAC), and St. Mary's Center, for inviting us into their community and for

hosting the Community Pedestrian and Bicycle Safety Training. We would like to acknowledge the City of Oakland and the many community members and agencies present at the workshop and their dedication to pedestrian and bicycle safety. Their collective participation meaningfully informed and strengthened the workshop's outcomes.

Funding for this program was provided by a grant from the California Office of Traffic Safety through the National Highway Traffic Safety Administration.