

ATTACHMENT C

Racial Equity Analysis SAN PABLO AVENUE MULTIMODAL CORRIDOR



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EXECUTIVE SUMMARY

This report presents the findings of the racial equity impact analysis for the San Pablo Avenue Multimodal Corridor Near-Term Bus/Bike Improvement Project ("Project"), which is being led by the Alameda County Transportation Commission ("Alameda CTC"). The analysis follows City of Oakland methodology guidance to provide a systematic examination of racial equity implications of the Project on different racial and ethnic groups and communities, particularly Black, Indigenous, and People of Color (BIPOC) populations, along and near San Pablo Avenue.

The Project will convert an existing general-purpose lane to a side-running transit-only lane in each direction and existing on-street parking to a protected bike lane at most locations. The Project extends from the southern terminus of San Pablo Avenue in downtown Oakland to Heinz Avenue in southern Berkeley (Project Study Area). The transit-only lanes would extend from 20th Street in Oakland to just north of Ashby Avenue in Berkeley and the bike lanes to Heinz. The goals of the Project are to:

- Enhance safety for all travel modes;
- Improve comfort and quality of trips for all users;
- Support a strong local economy and efficiently accommodate growth along the corridor while respecting local contexts; and
- Promote equitable transportation and design solutions for diverse communities throughout corridor.

Community engagement is an integral part of a racial equity analysis to inform communities about the benefits and trade-offs of the Project and to understand concerns they have about Project effects. Engagement for the Project began in 2017 and continues today. Outreach has included a variety of methods to reach community members where they are, particularly BIPOC and other historically underrepresented groups; the team has held pop-up events and focus groups, conducted intercept surveys and staffed existing events and is currently conducting door-to-door storefront surveys and in-person engagement with Community-Based Organizations (CBOs) and their memberships/constituencies. Engagement was instrumental in defining the current project to reflect community members' priorities to improve safety and transit and has also contributed to the identification of potential negative effects and strategies to address them. Three additional rounds of engagement are currently planned at key Project milestones during the project design phase, prior to construction, and after implementation as part of the project evaluation.

The demographics of the corridor are diverse, with BIPOC populations representing two-thirds of corridor residents but no single racial or ethnic group representing more than a third of residents overall or a majority of any corridor segment. The proportion of Black residents (23%) is higher than Oakland, Emeryville, or Alameda County as a whole. There is also a concentration of residents living in poverty along the corridor, especially in West Oakland. The corridor demographics



indicate that both the Project benefits and burdens would be experienced by a large population of BIPOC residents, especially Black residents, as well as low-income residents, together emphasizing the potential equity opportunities and consequences of the Project.

Given the Project will remove an auto lane and on-street parking in order to improve bicycle and transit quality and safety on San Pablo Avenue, benefits and disbenefits will depend on how people travel along the corridor. In Oakland overall, Black residents are three times more likely than White residents to not have access to a car¹. In the Project corridor, there is a much higher rate of zero-car households (23%) compared to the overall population in the cities of Oakland and Emeryville, meaning many people in this area are transit-dependent, and/or rely on carpooling, sharing vehicles, walking and/or biking to get around. West Oakland has both the highest rate of zero-car households and the highest percentage of BIPOC residents in the corridor. While 46% of corridor residents drive, the rates of commuting by transit (33%), by foot (5%), and by bike (6%) are all twice the County average and higher than Oakland or Emeryville as a whole (the remaining 9% of residents use other modes or work from home).

San Pablo Avenue is the third worst corridor in Alameda County as far as injuries and fatalities from collisions, and the West Oakland segment in particular has a disproportionate concentration of injuries and fatalities. Of the collisions in the Project Study Area that resulted in an injury or fatality between 2015 and 2019, nearly 37% occurred in West Oakland and all of the fatal pedestrian-related incidents occurred in West Oakland; only one fatality occurred during this time period elsewhere in the Project Study Area. While collision data by race is not available, it is notable that West Oakland has the highest BIPOC percentage (70%) within the Project corridor. In addition, pedestrians and bicyclists are much more likely to be involved in an injury, severe injury, or fatal collision than auto drivers in the Project Study Area. Speeding is the largest cause of collisions, and the average travel speed in the West Oakland segment was higher than anywhere else in the Project Area. The Project will significantly improve the safety of pedestrians and bicyclists in this area in particular through crosswalk improvements will also include substantial accessibility upgrades, including many new and improved curb ramps.

AC Transit riders who live near the San Pablo corridor are also largely BIPOC (70%). Half of transit riders living near the corridor do not have a vehicle. The bus lanes and transit islands will significantly improve transit speed and reliability, which will benefit these largely low-income and BIPOC transit riders. However, the project also proposes to consolidate the Rapid and Local bus stops which will increase the walking distance of some transit riders to the nearest transit stop – approximately 25% of riders will have to walk farther to a stop. Stop changes most affect seniors and people with disabilities who may have difficulty walking farther to a stop. During design, the project team will undertake a full Title VI analysis and will work with the community to ensure

¹ 2018 Oakland Equity Indicators Report



stops are located to best serve the most critical locations for these populations. Another critical accessibility issue is ensuring access for ADA paratransit drop-offs and pick-ups with the conversion of the curb space to a bike lane. During design, the project team will work to ensure paratransit access to all addresses along the street while maintaining the bike lane protection in partnership with City, AC Transit, and East Bay Paratransit staffs.

Many of the storefronts along the corridor are neighborhood-serving, occupied by small businesses and organizations, many of which may be BIPOC-owned (data on storefront occupancy and ownership by race is not available). Although improved pedestrian, bicycle, and transit access may improve the attractiveness and access of businesses for people using those modes, many businesses expressed concerns about the elimination of parking and loading spaces on San Pablo Avenue and the potential effects that doing so could have on customer, employee, and delivery access. Some storefronts and residents also expressed concerns about increased congestion and longer auto travel times due to converting one lane to a dedicated bus lane. The project team's surveys and analysis indicate most businesses have potential side street and/or off-street parking/loading solutions that are likely workable, but design details will need to be refined during preliminary engineering. Given that the loss of parking and loading space on San Pablo Avenue is likely to be a challenging transition for some businesses, Alameda CTC and City staffs are committed to working with the needs of individual storefronts during design to address parking and loading concerns. Strategies that will be explored include:

- Better management and metering of side street curb space,
- Additions of side-street and/or off-street spaces on publicly-owned property where feasible,
- Abandoned vehicle enforcement,
- Addition of lighting on side streets to help address safety issues, and
- Adding targeted, limited-location loading zone treatments on San Pablo Avenue where no other viable options are available.

In summary, the Racial Equity Analysis finds that the Project is likely to benefit BIPOC populations overall, despite these trade-offs. The existing community, which is majority BIPOC, is much more reliant on transit, walking, and bicycling than the broader populations in the Cities of Oakland and Emeryville and experiences disproportionate rates of collisions resulting in severe injuries and fatalities. The project will improve safety, reduce speeding, and improve transit reliability and travel time to benefit these populations and collectively improve the mobility and safety of residents along San Pablo Avenue, especially BIPOC populations. The project has a variety of solutions to mitigate parking, loading and access impacts of the project and is committed to working closely with corridor stakeholders to come up with workable solutions for storefronts.



1. INTRODUCTION

This report presents the findings of the racial equity impact analysis for the San Pablo Avenue Multimodal Corridor Near-Term Bus/Bike Improvement Project ("Project"), which is being led by the Alameda County Transportation Commission ("Alameda CTC"). As part of the analysis, a systematic examination of racial equity implications of the Project on different racial and ethnic groups and communities along and near San Pablo Avenue was conducted. This report serves as a vital tool in the larger process to identify and eliminate racial bias in project decision making.

1.1 **PURPOSE OF RACIAL EQUITY ANALYSIS**

The purpose of this racial equity impact analysis is to investigate the potential impacts of this Project on historically underserved communities quantitatively and qualitatively. As stated in the City of Oakland Racial Equity Impact Analysis Worksheet², policies exist today that have "real consequences that adversely affect how people of color experience and are impacted by systems" and may cause disparities that are predictable by race. "For these conditions to change, staff and policymakers must grow the capacity to assess and design explicitly for racial equity. By applying an equity focus and analysis to key deliberations, government can work with the community to create conditions where everyone has access to the opportunities necessary to meet their essential needs, advance their well-being and achieve their full potential". As noted in the City of Oakland Racial Equity Impact Analysis worksheet, questions that should be asked when implementing Projects such as this one include:

- 1. Will the proposal have impacts in the specific geographic areas (neighborhoods, areas, or regions)?
- 2. Who are the stakeholders who may be affected by this policy? How can we best reach them and engage them?
- 3. What are the racial demographics of those living in that area?
- 4. What are the root causes of the disparities identified from the impacted communities' perspective?
- 5. What are the needs or opportunities to address these inequities from the impacted communities' perspective?
- 6. How will we meaningfully consider the perspectives of underserved stakeholders during final decision making?
- 7. What adverse impacts or unintended consequences could result from this policy [Project] if enacted as envisioned/written?
- 8. How would different racial /ethnic groups in Oakland be impacted, benefits and burdens of this policy if it were enacted as envisioned/written?

² City of Oakland Racial Equity Impact Analysis Worksheet, https://cao-

^{94612.}s3.amazonaws.com/documents/Racial-Equity-Analysis-Worksheet-Rev4.pdf

RACIAL EQUITY ANALYSIS SAN PABLO AVENUE CORRIDOR PROJECT



- 9. What additional barriers might prevent individuals in certain racial/ethnic groups from benefitting fully if this policy were implemented as written?
- 10. What steps could be taken to prevent or minimize adverse impacts or unintended consequences?
- 11. What steps could we take to address historical harm or other barriers that could prevent various racial/ethnic groups from accessing the policy fully?
- 12. Based on this analysis, what are the recommendations for the most equitable policy option(s)?
- 13. What are the measures determining underserved groups are better off?
- 14. What is the mechanism we will utilize to measure for racial equitable outcomes? (Note: all measurement data needs to be disaggregated by race and any other relevant demographic to track impact on equity)
- 15. What is the mechanism for course correction if racial equity outcomes are not achieved?
- 16. How will the community be informed of progress toward achieving racial equitable outcomes?

These questions served as a guide through the completion of this Racial Equity Analysis.



2. **PROJECT INTRODUCTION**

2.1 **PROJECT BACKGROUND**

San Pablo Avenue is a critical inter-jurisdictional roadway traversing multiple cities in Northern Alameda County and Western Contra Costa County communities. It is the arterial spine of a multimodal travel corridor that connects tens of thousands of people between their places of residence, employment, schools, centers of public life, and other activity hubs. Nearly 134,000 trips are made each weekday along the San Pablo Avenue corridor between Oakland and Richmond by car, bus, or BART during the morning peak-period. Over 30 percent of trips occur via transit, including over 10,000 daily riders on the AC Transit 72 series bus routes.

San Pablo Avenue provides north-south connectivity parallel to the BART Richmond (Red/Orange) Line and Interstate 80 (I-80) and is a reliever route for freeway traffic during incidents on I-80. It carries local, rapid, and Transbay buses, includes many high-activity pedestrian areas, and is designated as a bicycle facility in many local jurisdiction plans. Demand for travel on San Pablo Avenue is projected to increase as jurisdictions concentrate growth along the corridor in multiple Priority Development Areas (PDAs), with several high-density, mixed-use developments recently completed and numerous others under consideration.

San Pablo Avenue consistently has two travel lanes in each direction, with signalized intersections spaced roughly 1,000 feet apart on average. The curb-to-curb street width is generally about 73 feet wide within Project extents. In most areas, approximately 13 feet on each side of San Pablo Avenue are dedicated to sidewalks and landscaping, although there are segments of the corridor with narrower sidewalk areas and/or no landscaping. Portions of the corridor have raised medians with landscaping and mature street trees.

Between 2017 and 2020, Phase 1 of the San Pablo Avenue Corridor Project conducted analysis and community engagement to establish a long-term vision for the entire corridor from Oakland to Richmond. A wide variety of configurations were considered for San Pablo Avenue; however, the analysis found that given the limited right-of-way, all needs cannot be accommodated on San Pablo Avenue itself and each alternative required trade-offs. There was a lack of consensus among the seven City jurisdictions included in that Phase 1 effort on what ultimate cross-section to advance.

Based on the Phase 1 findings, a more focused near-term set of improvements was identified within Alameda County to demonstrate the feasibility, benefits, impacts and desirability of multimodal improvements and assist in defining a long-term vision for San Pablo Avenue. To achieve that end, the Bus/Bike Lanes Project will include a comprehensive post-project evaluation to measure Project outcomes and how they may apply to future expansion or modification of corridor improvements.



The Alameda CTC is the sponsoring and implementing agency working in cooperation with Caltrans, AC Transit, and the cities of Oakland, Emeryville, and Berkeley for completion of the project approval document for the Project. Project scoping and environmental clearance for the Project will be led by Alameda CTC to enable a consistent project implementation that spans across multiple jurisdictions.

The project is included in the 2020 Alameda CTC Countywide Transportation Plan and recognized in Alameda CTC's 2014 Transportation Expenditure Plan under the Local Street Maintenance and Safety program.

2.2 PROJECT NEED AND OPPORTUNITY

The purpose of the Project is to improve multimodal mobility, efficiency, and safety in an effort to sustainably meet current and future transportation needs, support a strong local economy and growth along the corridor, and serve existing residents and businesses.

Components of the Project purpose include:

- Improve safety for people walking and bicycling to access employment, education, shopping, and other areas of community life.
- Enhance multimodal mobility and network connectivity through protected bike lanes, transit priority treatments, and pedestrian-friendly design.
- Increase the desirability of active transportation travel options.
- Improve transit reliability and travel time to make transit more competitive as a modal option.
- Provide equitable transportation solutions for the diverse communities along the project corridor, which are largely low-income and communities of color.
- Improve corridor capacity, while reducing vehicle miles traveled, through transit priority treatments.
- Support the ongoing and planned growth along the corridor.
- Demonstrate implementable near-term improvements that will allow for evaluation and community feedback prior to advancing long-term corridor multimodal infrastructure changes.

San Pablo Avenue is one of the busiest corridors in Alameda County. The project needs are as follows:

- The San Pablo Avenue corridor is the third worst high injury network corridor in Alameda County.
 - There were five pedestrian and bicycle fatalities within the Project extents in a recent five-year period (2015-2019).



- 64% of fatalities and severe injuries on the corridor are pedestrians or bicyclists, even though they represent less than 10% of all modal trips.
- 24% of all collisions involve pedestrians; 20% of all collisions involve bicyclists.
- 75% of pedestrian collisions occur in crosswalks or within 100 feet of an intersection.
- Speeding is the largest contributor to collisions.
- A lack of bicycle network connectivity through the corridor creates high stress for bicyclists, impacting the viability of cycling as a low-cost and environmentally sustainable mobility option.
- Much of San Pablo Avenue serves as a community "Main Street" lined with local-serving retail, necessitating a pedestrian-oriented roadway. Gaps between pedestrian crossings, ADA deficiencies, a wide roadway cross-section, and speeding result in an uninviting pedestrian environment.
- San Pablo Avenue is one of the highest-ridership bus corridors in Alameda County, but service is unreliable for the largely transit-dependent populations along the corridor.
 - 23% of households near the project corridor are zero car households (compared to 9% in Alameda County).
 - The percentage of residents near the corridor who use public transit to commute to and from work is twice the County average (33% versus 16%).
 - Transit trips are up to 30% slower than auto travel with the San Pablo Rapid bus (72R) averaging 10 miles per hour during peak hours.
 - Transit trip times vary significantly throughout the day which results in some riders having to wait 1.5 times longer than bus schedules indicate.
 - One third of transit arrival times are more than 6 minutes before or after scheduled arrival time.
- San Pablo Avenue serves Equity Priority Communities within the Project extents as well as BIPOC populations on bus routes along the corridor. These populations are currently disadvantaged due to unreliable transit service and limited or disconnected bicycle and pedestrian facilities in the corridor.
 - The percentage of residents of color along the corridor is 67%.
 - There is a higher percentage of households in poverty (11%) within the project corridor compared to Alameda County overall (6%).
 - Over 70% of bus riders in the corridor are non-white and over 50% are transit dependent.
 - Over half of the fatal and severe injury collisions within the Project corridor in a recent five-year period occurred in West Oakland, the most diverse and lowestincome community within the Project extents.
- The entire Project corridor is in a Priority Development Area, with many dense, mixed-use development projects already completed, underway, and planned. Many of these have limited parking supplies and are oriented toward multimodal transportation options, but pedestrian, bicycle, and transit improvements are needed to support this development.



• Without intervention, traffic congestion is forecast to grow along the corridor, representing a significant increase in vehicle miles traveled and causing further deterioration in transit service. Analysis conducted during Phase 1 identified that bus travel times will increase by 40 to 80 percent by 2040 without transit priority treatments due to increased auto congestion.

2.3 DESCRIPTION OF PROPOSED PROJECT IMPROVEMENTS Figure 1. Street Cross Section Renderings

This near-term Project will include the conversion of an existing general-purpose lane in each direction to a side-running transitonly lane and the removal of existing on-street parking to install protected bike lanes, as shown in Figure 1. Other project improvements will include safety upgrades at bicycle and pedestrian crossings and accessibility improvements at bus stops and intersections.. The Project extends from the southern terminus of San Pablo Avenue in downtown Oakland to Heinz Avenue in



southern Berkeley. The transit-only lanes would extend from 20th Street in Oakland to just north of Ashby Avenue. **Figure 2** shows the proposed project area and corridor.





Figure 2. San Pablo Avenue Corridor Bus and Bike Infrastructure Project Limits

Phase 1 of the Project identified significant opportunities to reduce collision rates and improve comfort along San Pablo Avenue, especially for pedestrians, through a series of near-term improvements such as high-visibility and signalized crosswalks, improved bike crossings of San Pablo Avenue, improved bus stops, upgraded lighting at bus stops and crosswalks, and accessibility upgrades.



3. APPROACH AND METHODOLOGY

A key component of the racial equity analysis includes collecting and analyzing data to determine existing racial disparities in access and safety along the San Pablo Avenue corridor, potential racial disparities of the proposed Project, and how they may be avoided, addressed or minimized by the Project. The methodology outlined below documents data that was collected and analyzed to assist in considering the questions posed above as part of the racial equity analysis. It is important to note that relevant data with disaggregation by race and ethnicity is limited. The City of Oakland Equity Indicators 2018 Report³ tracks racial equity outcomes across six themes. The report explicitly identifies three transportation-specific metrics, including access to a car, bus frequency, and curb ramp access. The Project Racial Equity Analysis builds on these metrics and includes additional metrics to inform Project decision-making more effectively.

3.1 METHODOLOGY

The racial equity analysis evaluates the racial equity implications of the project across six categories of metrics: safety, bike and pedestrian activity levels, bus service quality, access to transit, parking usage, and automobile usage. For each data category, local analysis and comparative analysis was conducted as appropriate and available to understand local conditions in the affected community, benchmark data, and ensure an equitable distribution of benefits (or disbenefits) from the Project. The following sections describe the data source and comparison for each of the seven topics.

3.1.1 CORRIDOR SEGMENTS

The Project was divided into three segments for this analysis (Segment 1, Segment 2, and Segment 3), as shown in **Figure 3**. These segments are located in the Cities of Berkeley, Oakland, and Emeryville. The Project corridor extends from Heinz Avenue in southern Berkeley to the end of San Pablo Avenue at 16th Street/Frank Ogawa Plaza in Oakland. Census tracts that are completely or partially within a 0.25-mile buffer of the Project corridor were used for this analysis. Some Census tracts are included in the 0.25-mile buffer of more than one segment of the Project corridor.

³ City of Oakland, Oakland Equity Indicators, https://cao-

^{94612.}s3.amazonaws.com/documents/2018FullReport-12021edit.pdf



Figure 3. Corridor Segments



3.1.2 CORRIDOR DEMOGRAPHICS

Recent American Community Survey (ACS) data (2015-2019) was utilized to document the existing demographics of the communities along San Pablo Avenue within the Project area. This was compared to citywide demographics to understand whether any groups are disproportionally present in the Project area compared to the city overall. The following data was analyzed for Census block groups within the corridor buffer:

- Racial and/or ethnic composition of residents
- Household income level

3.1.3 BICYCLE AND PEDESTRIAN ACTIVITY LEVELS

Bicycle and pedestrian counts have been collected at several signalized and unsignalized locations along San Pablo Avenue in 2017 and 2021. These counts did not include race/ethnicity



data of pedestrians or cyclists, so analysis and conclusions related to equity are somewhat speculative, especially for bicyclists. Because pedestrian trips are typically shorter in length, pedestrian counts are often representative of the pedestrian activity generated in adjacent neighborhoods. Additionally, conditions that make it unsafe for people walking disproportionately impact the people who live along and adjacent to San Pablo Avenue. While pedestrians are likely to have a nearby origin/destination, bicyclists could have a nearby origin/destination or could be passing through. This analysis compares areas of higher bicycle and pedestrian activity levels with the racial demographics in those areas as a proxy to identify potential benefits or dis-benefits to racial populations. The following data analysis was conducted:

- Identify areas of bicycle and pedestrian activity
- Race/ethnicity of adjacent residents

3.1.4 BUS SERVICE QUALITY

For transit riders, especially transit-dependent riders, the quality of bus service is directly linked to their overall mobility and access to economic opportunities. The demographics of existing transit users were obtained from the 2017 AC Transit On-Board Survey. This was utilized to assess the degree to which different ethnic/racial groups are relying on transit for their mobility needs and would benefit from the Project.

Service quality is dependent on a variety of factors, including travel time and reliability. Data analyzed in the San Pablo Avenue Project 2017 Existing Conditions Memorandum was utilized to document the existing bus service quality in the corridor. A detailed micro-simulation model was also developed for the Project, analyzing how all of the Project features would be expected to affect transit performance such as travel time, reliability, and delay.

The following data analyses were conducted for the bus service quality category:

- Demographics of existing transit users
- Existing service quality on San Pablo Avenue, including travel time and reliability metrics
- Travel time and reliability benefits of Project, as estimated by the Project's microsimulation model

3.1.5 ACCESS TO TRANSIT

Transit service also means ensuring transit stops are easily accessible, comfortable, safe, and located in convenient areas near desirable origins and destinations for riders. The Project plans to modify transit stop placement to both enhance bus service efficiency as well as provide a safe and accessible corridor for all users, including enhancing ADA accessibility. This will include stop consolidation and stop relocation. The distance to some stops may increase; however, there will



also be an increase in transit frequency at many existing or nearby stops and an increase in overall transit reliability and speeds.

It is noted that the on-board survey data is not valid for ridership at the stop level. Given the location-specific limitations of the on-board survey data, the demographics of Census block groups in close proximity to the proposed bus stop changes were used in this analysis.

An analysis was conducted of how bus stop changes will impact existing riders. This quantified the number of riders who will experience improved transit access and those who may experience longer walks to access transit. The following data analyses were included in the access to transit category:

- Demographics around stops proposed for modification
- Bus stop impact analysis

3.1.6 SAFETY

The Project includes a number of safety improvement measures that will benefit all users of the corridor, particularly people walking and biking who are more vulnerable to severe and fatal outcomes when collisions do occur. In addition, improvements to pedestrian access and infrastructure surrounding transit stops will also improve the transit user experience.

Collision history indicates the safety risk for travelers in a given area. The number and percentage of all severe and fatal collisions (regardless of how people are traveling) are also important to understand the severity of safety issues in an area. The number of collisions involving pedestrians and bicyclists were analyzed with a goal of identifying if any specific areas are disproportionately experiencing collisions and fatal/severe collisions. This data was also used to identify whether people walking and biking are disproportionately represented in collisions compared to auto drivers.

Collision data was collected for 2015 to 2019 using the Statewide Integrated Traffic Records System (SWITRS), and the following analyses were conducted:

- Number and/or rate of all collisions
- Number and/or rate of collisions involving pedestrians and bicyclists
- Total collisions and fatal/severe collisions
- Vehicle speed
- Race/ethnicity data of adjacent residents
- Race/ethnicity data of people killed or severely injured in Oakland, overall



3.1.7 PARKING USAGE

Access to storefronts along San Pablo Avenue may be affected with the removal of on-street parking and loading space by the Project. While transit and bicycle access improvements may enhance storefront access for some customers and employees, the removal of an auto lane and loss of parking may make business access more challenging for others. Some storefronts along San Pablo Avenue may be BIPOC-owned, and the removal of on-street parking may affect those businesses, especially if off-street parking is not readily available; however, there is no existing data to identify which businesses are BIPOC-owned in this corridor, therefore specific racial equity impact assessments are not feasible. Noting the inability to assess the impact of parking and loading removal specifically on BIPOC-owned businesses, the impact of this parking and loading removal is a concern that has been raised by businesses along San Pablo Avenue, and thus is important to include in this analysis. Therefore, the following data analyses were completed in the parking usage category:

- Parking loss from Project
- Existing parking utilization

3.1.8 AUTO USAGE

The Project proposes to remove an auto lane and on-street parking in order to achieve the Project purpose. This may increase auto travel time, which may negatively affect existing auto users, but result in a benefit to transit and bike users. Some existing auto users would be expected to shift to a different mode of travel, while others will still drive and be negatively impacted by the longer travel time and fewer parking spaces in the area. In order to determine the distribution of Project effects on different ethnic/racial groups, existing access to autos and primary commute mode were evaluated across race and ethnicity.

Additionally, households without access to a motor vehicle and other transit/bike users would benefit from improved comfort and quality of alternative travel options. ACS data provides the number of zero-car households in Census block groups. This metric will be used to evaluate auto usage and the number of potential residents who are transit dependent.

Recent Project modeling results document the anticipated effect of the Project on auto travel time with the Project. The following analyses were completed in the auto usage category:

- Number of zero-car households
- Primary commute mode for residents in block groups along the corridor
- Race/ethnicity data for residents in block groups along the corridor
- Auto travel time impacts from the Project, as estimated by Project microsimulation model



4. COMMUNITY ENGAGEMENT

Community engagement is important in conducting a racial equity analysis to inform communities about the benefits and trade-offs of the Project and to understand any concerns they may have about Project effects. This engagement also helps understand how community stakeholders can best be engaged over the course of the Project to receive project input and address concerns raised. Community engagement was instrumental in defining the current project and has directly led to the identification of potential negative effects and strategies to address them that are included in this analysis.

Engagement for the Project began in 2017 and continues today, most recently with on-the-ground surveys of storefronts along San Pablo Avenue and engagement with Community-Based Organizations (CBOs) and their community networks.

4.1 PHASE 1 OUTREACH

<u>Outreach for Phase 1 of the Project</u> occurred in a variety of venues using several mechanisms to ensure that a broad spectrum of people were reached and opinions regarding desired changes to the roadway were heard. In total, 4,699 people were reached along the entire corridor in Alameda and Contra Costa Counties, including 1,028 who self-identified that they live in Oakland and 310 from Emeryville (additional participants may have been from Oakland or Emeryville but did not self-identify their city). Input was collected using the following methods:

- Map-based corridor needs and issues survey: This online survey asked respondents to identify specific issues they encounter on San Pablo Avenue and to show the location of each on a map. A link to the survey was publicized in English, Spanish and Chinese via postcards distributed by the seven cities along the corridor, at meetings and via emails. The <u>survey</u>, which was also available in the three languages, was promoted via the Alameda CTC website, agency newsletter, partner agency distribution, in the East Bay Times, on AC Transit bus cards, and postcards distributed to businesses along the corridor for customers. Participants described existing conditions in specific locations by dropping pins onto an online map. A total of 495 spots were identified along the corridor (including 126 in Oakland and Emeryville).
- Merchant loading survey: A survey was distributed to all businesses along the corridor, which asked about their loading/unloading and parking curbside needs, but response rates were very low in Oakland and Emeryville. The low responses rate led to more focused and intensive merchant outreach during Phase 2 that has been much more effective in engaging local merchants in Oakland and Emeryville.
- **Focus Groups**: Eight focus groups were held, including two with AC Transit riders (one each for residents of Alameda County and Contra Costa County), seniors and people with disabilities (also one in each county), three with merchants and one with bicyclists.



- Transit Riders: Recruitment was via AC Transit's email list of passengers who asked to be notified regarding Route 72/72M/72R changes. A \$100 Clipper card was offered as an incentive to participate; over 100 people responded. Interested passengers completed a survey to indicate their frequency of use on one or more of these routes, typical boarding/alighting locations, age, and ethnicity. This was the only Phase 1 outreach activity that tracked ethnicity. Of the 28 total participants in the two focus groups, two were Latinx (7%), three were multiracial (11%), three were Asian (11%), nine (32%) were African-American, and 11 were Caucasian (39%).
- Seniors and People with Disabilities: One meeting each was held for residents of Alameda County and Contra Costa County. Participants included representatives of public and private non-profit agencies that serve these communities, as well as senior citizens and people with mobility and visual disabilities themselves.
- **Bicyclists**: Two meetings were held with 14 total representatives of Oakland, Emeryville, Berkeley, and Albany. Participants were recruited by Bike East Bay.
- **Merchants**: Three focus groups were held, including one each in Oakland and Emeryville: one with a group of Oakland merchants convened by SPARC (San Pablo Avenue Revitalization Collaborative) one with Emeryville's Economic Development Advisory Committee (EDAC).
- Workshops: Over 150 people participated in one of four workshops that were held in Emeryville (combined with Oakland), Berkeley, Albany, and El Cerrito. All workshops were publicized with postcards in English, Spanish and Chinese, flyers were distributed at other meetings in cities along the corridor, and emails were sent to city email lists. All included a link to the online survey (see below). Some feedback regarding which concepts participants preferred was communicated at the workshops, but detailed feedback was collected via the online survey (see below) the survey web address was publicized at the meeting. There were iPads available at the meeting on which to complete the survey.
- **Online survey**: An online survey was developed in Spanish, English and Chinese and distributed through a variety of methods described in the outreach activities above. 2,154 people submitted a survey, including 572 Oakland residents and 143 Emeryville residents.
- Intercept surveys: Project staff talked with 1,211 people at 11 busy locations along the corridor, including 151 people at three locations in Oakland and 243 at two Emeryville locations. Of these, 88 in Oakland and Emeryville completed a <u>survey</u> (totals included in the "online survey" description above).
- **Preference matrix**: In the latter stages of Phase 1, outreach participants were shown three scenarios and asked about their preferences. <u>63 people</u> completed a matrix.
- **Popups**: The project team spoke with 235 people at seven events, including 70 people at two popup events in Oakland and 35 at one event in Emeryville. Notes were taken of these conversations and iPads were available for visitors to use for the online survey.



• A summary of findings from Phase 1 Outreach and Engagement can be found In the Phase 1 Outreach Report and Outreach Report Appendices, located on the Project History tab of the project website (www.alamedactc.org/sanpablo).

4.2 STOREFRONT AND RESIDENT OUTREACH

The Phase 2 outreach is focusing on understanding the needs and priorities of storefronts and residents along San Pablo Avenue in Oakland and Emeryville to the Project, as these community members stand to be most impacted by the Project. Merchants along San Pablo Avenue in Oakland and Emeryville had been the hardest to meaningfully reach in Phase 1. The Phase 2 outreach has two components:

- Storefront outreach: In December 2021 and January 2022, Project staff visited every commercial storefront (i.e., businesses, organizations, etc.) on the Oakland and Emeryville segments of San Pablo Avenue. Similar engagement is underway in April 2022 in southern Berkeley. Where an owner, manager or knowledgeable employee was available, they were told about the Project and asked to answer survey questions about their loading and parking needs. Where storefronts were closed, staff returned or telephoned the business.
- Outreach to San Pablo Avenue residents: The second step in Phase 2 was to talk with people who live on and very near San Pablo Avenue. This outreach included four focus groups in January and February, 2022. Recruitment for all groups was coordinated through local Community-Based Organizations: West Oakland Neighbors, Lincoln Family Services and the East Bay Asian Local Development Corporation (EBALDC) in West Oakland, and the Golden Gate Community Association in North Oakland. Emeryville residents also participated in the EBALDC focus group. Each organization reached out to residents in different ways, including email, flyers and personal contacts. In all but the EBALDC focus group, people interested in participating completed a recruitment survey, the purpose of which was to recruit as diverse a group as possible in terms of age, gender, race, income, use of San Pablo Ave and travel mode. The EBALDC focus group drew entirely from residents of two nonprofit housing properties that are populated largely by people of color, many of whom do not use computers or smart phones, so the survey instrument was replaced with face-to-face recruitment. Participants received a \$100 incentive for participating, if selected.

Of the 44 total participants in the four focus groups, 18 were African American (41%), ten were Caucasian (23%), eight were multi-ethnic (18%, most part African American), five were Asian or Asian American (11%) and three were Latinx (7%).



4.3 PLANNED CONTINUED COMMUNITY ENGAGEMENT

Three additional engagement rounds are currently planned at key Project milestones:

- **Project design phase:** Gather community input on specific design features. Several groups are anticipated to be engaged during this process, including active transportation users, bus riders, business merchants, and BIPOC residents representing the communities impacted by the potential design. The exact nature of the community engagement is not yet defined, but is likely to include a combination of surveys, focus groups, pop-up events, and other meetings. This input will be utilized to shape Project design.
- **Prior to construction**: Inform the community about the upcoming construction, including any construction impacts. It is expected that this will include targeted reach-outs to the storefronts along San Pablo Avenue as well as nearby residents. Input received will be used to prepare materials to better inform the community about construction effects and identify any construction strategies that may lessen those effects.
- After implementation: To gather information to support the project evaluation. This will include asking users and the community along the corridor about how the Project has affected them, including effects on overall mobility, changes in mode choice and travel patterns, and impacts on storefront access. This information will be utilized to determine the future vision for San Pablo Avenue, including future phases in Berkeley and Albany.



5. CORRIDOR DEMOGRAPHICS

Understanding the existing demographics of the corridor provides the necessary baseline conditions for the analysis categories included in this report. The demographic analysis examined the ethnic composition of residents in Census tracts that are completely or partially within 0.25-mile buffer of the three corridor segments (as shown in **Figure 4**).

5.1.1 RESULTS

The racial demographics of the residents in Census tracts within the 0.25-mile buffer of each Project segment as well as the cities and County are shown in **Figure 4** and **Table 1** below. Due to the nature of Project improvements, residents within the buffer will likely be affected in more ways by the Project than those further away from San Pablo Avenue.



Figure 4. Percent Minority Census Tracts Near Corridor

Source: American Community Survey (2015-2019)



Table 1 shows the percentage breakdown of race within the various Project segments, cities,and County.

Table 1. Corridor Demographics Summary

Segment / Area	#of Tracts	Total Population	% Hispanic	% Black	% Asian	% White	% Other	%2+ Races
Segment 1 (N Oakland)	7	23,279	13.9%	20.1%	16.0%	40.5%	1.6%	7.9%
Segment 2 (Emeryville)	7	30,048	19.0%	25.4%	13.5%	32.9%	2.0%	7.2%
Segment 3 (W Oakland)	11	41,907	18.5%	23.8%	20.2%	29.0%	2.2%	6.3%
Project Corridor	17	60,812	16.9%	22.6%	18.5%	33.1%	2.0%	6.9%
City of Oakland	110	426,469	29.4%	20.8%	15.3%	27.2%	1.6%	5.7%
City of Emeryville	4	12,905	11.1%	15.2%	30.4%	35.4%	1.5%	6.4%
Alameda County	360	1,682,353	23.4%	9.5%	32.1%	28.1%	1.7%	5.3%

Source: 2020 Census

Table 2 and **Figure 5** depict the poverty status of residents along the Project corridor applying the Federal poverty level guidelines. Given the high cost of living in the Bay Area, this likely understates the portion of the population that is challenged to meet a basic standard of living. This metric is also broken down by Project corridor segment, cities, and the County.



Table 2. Household Poverty Status

Segment / Area	Total Households	Households in Poverty	% Households in Poverty
Segment 1 (N Oakland)	5,215	352	6.8%
Segment 2 (Emeryville)	4,220	432	10.3%
Segment 3 (W Oakland)	5,462	821	15.0%
Project Corridor	10,020	1,127	11.3%
City of Oakland	87,478	10,857	12.4%
City of Emeryville	2,298	146	6.4%
Alameda County	384,676	24,034	6.3%

Source: American Community Survey (2015-2019)

Figure 5. Percent of Households in Poverty



Source: American Community Survey (2015-2019)



5.1.2 FINDINGS

The corridor is diverse, with no racial or ethnic group representing more than a third of corridor residents overall or a majority of any corridor segment. The percentage of BIPOC populations along the Project corridor (67%) is similar to that of the City of Oakland (73%), the City of Emeryville (65%), and Alameda County (72%). Black residents represent 23% of people who live on or near San Pablo Avenue, compared to citywide averages of 21% in Oakland, 16% in Emeryville and 10% in Alameda County. This indicates that the Project benefits and burdens would be experienced by a large population of BIPOC residents, especially Black residents, emphasizing the potential equity opportunities and consequences of the Project.

There is also a higher percentage of households in poverty in the proposed Project study area (11%) compared to the City of Emeryville (6%) and Alameda County (6%). This represents a similar percentage as the City of Oakland as a whole (12%). However, the West Oakland segment has notably higher concentrations of residents living in poverty (15%) than the rest of the corridor (11%) and Oakland as a whole (12%). This Project will benefit residents living in poverty by providing improved bicycle, pedestrian, and transit mobility, which are all lower-cost transportation options, especially in relation to car ownership and maintenance costs. The project will also increase safety and mobility options to economic opportunities. Improved safety and comfort of walking and biking modes will also have health benefits, potentially lowering health care costs, for all nearby populations, especially impactful to low-income populations.



6. ANALYSIS OF PROJECT EFFECTS

6.1 MODE OF TRAVEL

The Project will remove an auto lane and on-street parking in order to improve bicycle and transit quality and safety on San Pablo Avenue. As a result, while bicycle, pedestrian, and transit users will benefit from the Project, auto users who continue to rely on San Pablo Avenue may experience disbenefits. By analyzing auto ownership and primary commute mode trends by race, the effect of this shift from prioritizing auto travel to other modes on racial equity can be assessed.

6.1.1 RESULTS

According to the Oakland Equity Indicators Report completed in 2018, Black residents are three times more likely than White residents to not have access to a car⁴. Nearly one in five African American Oakland residents did not have access to a car (18.7%), compared to 6.1% of White Oakland residents. The percentage of zero car households among Asians (10.0%) was similar to the citywide rate (10.2%), while the rate was lower for Latinos (7.6%). **Table 3** summarizes the number and percentage of zero car households in the Census block groups within 0.25 miles of the Project corridor as well as the City of Oakland, Emeryville, and Alameda County.

Segment / Area	Households	Zero Car Households	% Zero Car Households
Segment 1 (N Oakland)	10,192	1,365	13.4%
Segment 2 (Emeryville)	10,970	2,015	18.4%
Segment 3 (W Oakland)	15,195	4,349	28.6%
Project Corridor	23,429	5,333	22.8%
City of Oakland	155,049	23,342	15.1%
City of Emeryville	6,568	656	10.0%
Alameda County	577,177	54,451	9.4%

Table 3. Zero Car Households

Source: American Community Survey (2015-2019)

Figure 6 shows the percent of zero car households relative to the Project corridor.

⁴ 2018 Oakland Equity Indicators Report



Figure 6. Percent Zero-Car Households⁵



Source: American Community Survey (2015-2019)

Table 4 summarizes the mode of transportation used to travel to/from work as a percent of total working residents in the Census block groups within 0.25 miles of the Project corridor as well as the City of Oakland, Emeryville, and Alameda County.

⁵ American Community Survey (2019)



Table 4. Finnary Mode of Commute								
Segment / Area	% Drive Alone	% Carpool	% Public Transit	% Walk	% Bike	% Other	% Work from Home	
Segment 1 (N Oakland)	42.3%	8.3%	27.9%	3.9%	7.6%	1.7%	8.2%	
Segment 2 (Emeryville)	38.8%	9.9%	32.0%	3.7%	6.1%	3.0%	6.6%	
Segment 3 (W Oakland)	35.3%	8.2%	36.6%	5.6%	5.5%	3.2%	5.7%	
Project Corridor	38.2%	7.9%	33.2%	5.4%	6.1%	2.4%	6.7%	
City of Oakland	51.8%	10.5%	22.8%	3.3%	2.7%	2.2%	6.7%	
City of Emeryville	45.0%	11.2%	26.6%	5.0%	3.4%	2.1%	6.7%	
Alameda County	60.9%	9.8%	15.8%	3.5%	1.9%	1.7%	6.4%	

Table 4. Primary Mode of Commute

Source: American Community Survey (2019)

6.1.2 FINDINGS

The percent of zero car households in Alameda County is approximately 9%. However, in the areas near the Project corridor, the average increases to approximately 23%. There is a much higher rate of zero-car households in the Project corridor compared to the overall population in the cities of Oakland and Emeryville, meaning this area is more transit-dependent, or relies on carpooling or sharing vehicles. A higher transit-dependent population would strongly benefit from pedestrian, bicycle, and transit improvements. Along the corridor, West Oakland has the highest rate of zero car households at 28.6%. This segment also has the highest percentage of BIPOC residents (71%). While cross-tabulation of auto ownership by race is not available in the dataset used, given the geographic correlation, it can be surmised that BIPOC residents comprise a higher rate of zero car household and thus would receive greater proportional benefit from the project's improvements to pedestrian, bicycle, and transit modes.

The percent of residents in Alameda County who use public transit to commute to and from work is approximately 16%. In the Census tracts close to the Project, the percentage of public transit users increases to approximately 33%, almost twice the County average. In addition, the percent of residents near the Project corridor who walk or bike is also twice the County average (5% and 6% versus 3% and 2%, respectively). Residents in the Project corridor utilize alternate modes of transportation at a higher rate compared to the cities of Oakland and Emeryville as a whole. These



residents would greatly benefit from the Project as it would directly benefit their current mode choice. Among corridor segments, West Oakland has the highest percentage of residents who use transit to commute (36.6%) while also having the highest percentage of BIPOC residents (71%). While cross-tabulation of primary commute mode by race is not available in the dataset used, given the geographic correlation, it can be surmised that BIPOC residents have a higher rate of non-auto primary commute mode than the overall population and thus would receive greater proportional benefit from the project's improvements to pedestrian, bicycle, and transit modes.

6.2 BICYCLE AND PEDESTRIAN USAGE

Providing safer, more attractive alternatives to driving can potentially lead to improved outcomes in public health, safety, and economic development.⁶ Understanding where bicyclists are riding and where pedestrians are utilizing crosswalks along the corridor today provides information on where demand for improved facilities may be highest today, which can be compared against the demographics of those areas.

6.2.1 RESULTS

The 2019 Oakland Bike Plan includes objectives and actions regarding bicycle usage and access for groups of Oakland residents who face greater vulnerabilities and disparities in the transportation system. The Bike Plan challenges the Oakland Department of Transportation (OakDOT) to correct the disparity of bike investments in disadvantaged communities. The Project aligns with and supports many of the Bike Plan objectives which are listed below:

- Access
 - Build low-stress bicycle facilities that provide access to local destinations in every neighborhood in Oakland.
 - Design bikeways that provide first and last-mile connections to transit.
 - Increase the overall mileage of the low-stress bicycle network in low-income neighborhoods by 25% by 2025.
 - Prioritize the construction of bikeways that address disparities and close gaps in the bicycle network between neighborhoods
- Health & Safety
 - Build a bicycle network that encourages Oakland residents to choose modes of transportation other than driving by providing low-stress facilities and integrating bikes with transit.
- Affordability
 - Build a bicycle network that provides low-stress bicycle facilities for people in lowincome neighborhoods, encouraging the use of bicycling as low-cost transportation.

⁶ Pedestrian and Bicycle Information Center (https://www.pedbikeinfo.org/topics/equity.cfm)



• Build bikeways that provide first and last mile connections to public transit stations and major bus stops.

The Bike Plan completed a survey of 1,688 Oakland residents. The survey data provides insight into who is currently utilizing biking infrastructure across the City, as well as preferences of those who do not currently ride bikes. The plan describes that 1 in 5 Oakland residents regularly bicycles for transportation, and 6 in 10 Oakland residents indicated that they would like to bike more than they do today⁷. Additionally, the Bike Plan identified "vision priority" projects. One of these vision priority projects is the separated Class IV protected bikeway on San Pablo Avenue to connect people biking in Oakland to Emeryville, Berkeley, and Albany. The Project aligns with and supports this recommendation.

Figure 7 and **Figure 8** display the total AM and PM pedestrian and bicycle volume counts at intersections along San Pablo Avenue using a density map.

⁷ Oakland Bike Plan, 2019



Figure 7. Bike Volume (Total, AM and PM Peak Periods) by Intersection



Sources: San Pablo Avenue Corridor Project Existing Conditions Report, 2017 Kimley-Horn and Associates, 2021



Total Pedestrian Volume Corridor Segment Segment 1 (N Oakland) 0 < 75 Segment 2 (Emeryville) 75 - 150 Segment 3 (W Oakland) 150 - 225 0.25 mi buffer Percent BIPOC 225 - 300 < 37% 37 - 51% 51 - 65% 65 - 79% > 300 > 79% eoTechnologies, Inc., METI/NASA, USGS, Bureau e Management, EPA, NPS, US Census Bureau, USGA 1.2 Miles 0.3 0.6

Figure 8. Pedestrian Volumes (Total, AM and PM Peak Periods) by Intersection

Sources: San Pablo Avenue Corridor Project Existing Conditions Report, 2017 Kimley-Horn and Associates, 2021

6.2.2 FINDINGS

Bicycle and pedestrian volumes at intersections in the proposed Project study area range from 75 – 350 users across both the AM and PM peak periods. Given the usage of these modes of transportation, there is a demonstrated need for bike and pedestrian improvements along the corridor. Additionally, given the rate of households without a vehicle (23%), the bike and pedestrian improvements may benefit these households, making transportation in this area more accessible and equitable.

As noted earlier in this analysis, pedestrian (and to a lesser extent, bicycle) trips are often shorterdistance; therefore, the level of pedestrian activity in a certain area can be related to the racial makeup of that area to speculate on the racial effects of project improvements focused on pedestrian (and bicycle) safety and comfort. It is notable that the highest bike volumes occur in



and adjacent to the portions of the corridor with the highest concentration of BIPOC and lowincome populations (70% BIPOC in area immediately surrounding West Oakland). In addition, pedestrian volumes are highest in both Emeryville and West Oakland, both areas with higher BIPOC and low-income populations than their respective cities as a whole. The Project would significantly improve bicycle and pedestrian safety by providing enhanced crossings, dedicated bike facilities, and reduced auto speeds. Therefore, the Project is surmised to provide equitable benefits to existing BIPOC populations along the corridor.

6.3 **BUS SERVICE QUALITY**

For transit-dependent riders, bus service quality is directly linked to the overall level of mobility and access to economic opportunities. By enhancing the quality and reliability of transit, the Project will address some of the basic needs of the community -- a community that is predominantly BIPOC as described in Section 5.0.

6.3.1 RESULTS

Using the 2017 Rider Survey information, origins, destinations, and demographic information of riders within 0.5 miles of the Project as well as riders who utilized Lines 72, 72M, and 72R were identified. **Table 5** shows demographic information about these transit riders compared to all corridor residents and to all AC Transit Users who completed the survey.



Table 5. Survey Respondents Demographic Information

	% Hispanic	% Black	% Asian	% White	% Other	Zero Car Available
All Survey Respondent Residents 0.5 Miles of Project	15.2%	42.4%	15.3%	29.9%	6.0%	51.6%
Survey Respondent Riders: Route 72 & 72M (0.5 Miles of Project)	17.2%	42.7%	13.0%	28.5%	8.4%	51.5%
Survey Respondent Riders: 72R (0.5 Miles of Project)	20.8%	45.8%	13.2%	31.3%	6.9%	45.8%
All Residents, Oakland	29.4%	20.8%	15.3%	27.2%	1.6%	15.1%
All Residents, Emeryville	11.1%	15.2%	30.4%	35.4%	1.5%	10.0%
All Residents, Project Corridor	16.9%	22.6%	18.5%	33.1%	2.0%	22.8%
All AC Transit Survey Respondents	19.7%	35.3%	17.6%	30.3%	6.5%	42.7%



The Existing Conditions Report for Phase 1 of the Project analyzed existing service quality, travel time, and reliability metrics. Improving on these reliability metrics is integral to building a reliable and equitable project. Some of the findings are listed below:

- The average speed of local AC Transit buses during peak periods ranges from 8.7 to 12.4 mph and the average speed of 72 Rapid route during peak periods ranges from 10 to 14.6 mph.
 - Given the automobile speed during peak periods is between 14 and 19 mph, transit options are measurably slower than using a car, making transit a less convenient choice. Given the demographics of transit riders relative to the population in this area, this represents an inequitable existing condition.
- Almost one-third of buses arrive either six minutes before or after their scheduled headway (time between bus arrivals). Approximately five percent of buses experience a gap of more than double the scheduled headway (more than 24 minutes).
 - This large level of variance from intended headways results in longer wait times for many bus riders and more unpredictability, which makes relying on the bus to arrive at a destination on time a challenge and inconvenient.

Table 6 shows the average passenger wait time and service reliability at two key timepoints on San Pablo Avenue for the Line 72R. The average wait time if buses strictly adhered to schedules, assuming random passenger arrivals, would be six minutes, which is equal to half of the headway. Current bus delay and reliability challenges associated with congestion impact the mobility of transit riders, and thus disproportionally impact BIPOC residents as well as low income residents.

	Northbour	nd	Southbound			
Location	Average Actual Wait	% Increase compared to scheduled wait	Location	Average Actual Wait	% Increase compared to scheduled wait	
2 nd & Washington (Oakland)	7.3	22%	Contra Costa College (San Pablo)	7.1	18%	
40 th & San Pablo (Emeryville)	8.0	34%	El Cerrito del Norte BART (El Cerrito)	7.7	28%	

Table 6. Average F	Passenger Wait Time	for Line 72R at Time	points
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Source: San Pablo Avenue Corridor Project Existing Conditions Report, 2017

Initial microsimulation modeling of the Project indicates that the proposed improvements would provide significant travel time and reliability benefits for transit users along the corridor. These benefits are summarized below:



- Travel times for Lines 72, 72R, and 72M along the corridor from Oakland to El Cerrito would improve by 6% to 20% compared to the No Build scenario in both the AM and PM peak periods.
- Segments in Oakland and Emeryville, which would include dedicated side running bus lanes would experience travel time improvements of approximately 10% to 25%.
- Transit reliability, measured as the standard deviation of corridor travel times, would improve dramatically with the provision of dedicated transit lanes and in-lane stops. By bypassing auto queues and avoiding conflicts in departing stops on San Pablo Avenue, transit signal priority along San Pablo Avenue, being implemented as part of a separate project, would become more effective and buses would experience much greater consistency in travel time (Table 7).

Route/Direction	Existing	No Build	With Project	% Change With Project
	AI	N Peak Hour		
72/72M Northbound	02:11	02:44	01:31	-57%
72/72M Southbound	03:19	02:51	01:58	-37%
72R Northbound	02:25	02:54	01:33	-61%
72R Southbound	02:49	02:59	02:01	-39%
	P <i>I</i>	A Peak Hour		
72/72M Northbound	04:00	03:47	02:20	-47%
72/72M Southbound	01:17	04:24	01:25	-103%
72R Northbound	03:09	03:41	03:28	-6%
72R Southbound	01:52	02:28	01:58	-23%

Table 7: Projected AM & PM Peak Period Transit Variability

Note: All numbers shown are standard deviation of transit travel time Source: Kimley-Horn and Associates, 2021

6.3.2 FINDINGS

For existing transit riders within 0.5 miles of the Project, approximately 70% are BIPOC, and approximately half do not have a vehicle available to use. When compared to residents of the Cities of Emeryville and Oakland, transit users in this area represent a much more racially diverse population. For example, throughout the entire City of Oakland, approximately 21% of the residents are Black; however, existing transit users within 0.5 miles of the Project are approximately



42% Black, twice the City average. This indicates that a higher proportion of BIPOC populations are currently relying on transit for mobility usage in the Project area. Therefore, the Project's transit benefits will be experienced by a racially diverse group of residents who are primarily BIPOC. Increasing the efficiency and reliability of transit will provide improved mobility and economic opportunity for BIPOC communities.

6.4 ACCESS TO TRANSIT

Equitable transit includes transit stops that are easily accessible, safe, and located in convenient areas near desirable origins and destinations for riders to access. The Project will be modifying transit stop placement to both enhance bus service efficiency as well as provide a safe and accessible corridor for all users, including minimizing mixing between buses and bicycles. This will include stop consolidation and stop relocation associated with the modification of the existing Local 72/72M and Rapid 72R stop pattern. All proposed stops in the Project corridor, to be spaced at approximately 1,250-foot intervals, will served by both the Local and Rapid service. This will result in fewer local stops (currently spaced approximately every 800 feet) and more Rapid stops (currently spaced approximately every 2,500 feet). Therefore, while there will be a longer walk for some existing local bus stop users, there will be more places to access the more frequent Line 72R service.

East Bay Paratransit currently provides service along the San Pablo corridor. Service is typically curb to curb, but drivers provide door-to-door service upon request. Protected bike lanes along the corridor could make access to the curb more challenging for paratransit vehicles if the Project is not designed to adequately accommodate paratransit service.

6.4.1 RESULTS

Those most heavily impacted by the stop changes include the residents within 0.25 – 0.5 miles of the proposed stop changes. This may impact residents who currently walk to and from transit to their final destination, or those who did not have access to a car, as they will have to dedicate more time to travel to and from the relocated transit stops. The proposed changes will reduce the number of Local bus stops and increase the number of Rapid bus stops. With the Project, all local stops will be served by at least 9 buses per hour (5 Rapid + 4 Local) instead of 4 buses per hour. Based on the stop impact analysis conducted, approximately 75% of riders will either have more frequent service at their current bus stop or will have no or minimal change.

- 61% of existing boardings and alightings will have no change to their stop location or service (Rapid stop is not moving)
- 10% of existing boardings and alightings will have no change to their stop location but will have more service at their stop (Local stop is not moving but will become a Rapid stop)



- 4% of existing boardings and alightings are at stops that will be moved, but only slightly (such as shifted to far-side or within 100-150 feet)
- 25% of existing boardings and alightings are currently at stops that will be removed (average walk distance to the next closest stop is 350 feet)

For current riders who board at stops that may be removed as a result of this Project, , the average additional walk distance will be approximately 350 feet assuming a random distribution of trip origins/destinations. Accounting for both stop relocations and removals, the average rider will have approximately less than 90 feet of additional walk distance to the transit stop. **Figure 9** (Northbound) and **Figure 10** (Southbound) show the removed and proposed stops with the percent of BIPOC residents overlayed on the map.



Figure 9. Northbound Removed and Proposed Stops



RACIAL EQUITY ANALYSIS SAN PABLO AVENUE CORRIDOR PROJECT



Figure 10. Southbound Removed and Proposed Stops



6.4.2 FINDINGS

The stop changes will impact some populations along the corridor, particularly those with disabilities who will have to travel further to a bus stop. As noted earlier in this analysis, transit riders disproportionately consist of BIPOC and low-income populations, relative to the overall adjacent community demographics and the demographics of the adjacent cities as a whole. Therefore, both the impact of this longer walk to a bus stop and the benefit of the additional service at Local bus stops that are upgraded to Rapid stops will be disproportionately experienced by BIPOC and low-income populations. Further outreach will be conducted as part of the stop modifications development to receive feedback on proposed stop locations. This will include mailing out notices to residents and businesses in proximity to the stop locations proposed for removal and addition. Specific bus stop locations and spacing will be further refined as the Project advances based on that input in order to minimize negative impacts of stop consolidation. In addition, consideration will be given to how to best accommodate paratransit loading along San Pablo Avenue in response to any impacts to bus stop access.



6.5 SAFETY

Collision data quantifies the safety risk for travelers in a given area. Pedestrians and cyclists are particularly vulnerable to more significant injuries. In addition, all transit users who board or alight transit in the Project area are pedestrians or cyclists for part of their trip, and thus the quality of the pedestrian and bicycle infrastructure and safety surrounding transit stops can significantly affect transit usability. The current corridor conditions do not comfortably accommodate people of all ages and abilities who would desire to ride their bike along San Pablo Avenue and the propensity of injury bicycle collisions on San Pablo Avenue demonstrates the hazards for existing users. The Project includes a number of safety improvement measures that will benefit all users of the corridor, particularly pedestrian and bicycle users.

6.5.1 RESULTS

While people walking and biking along San Pablo Avenue constitute less than 10% of those traveling on the corridor, they comprise 64% of fatalities and severe injuries (**Figure 11**). Most of these collisions occur within 100 feet of an intersection and speeding is a common cause. The 2019 Oakland Bike Plan identified San Pablo Avenue as one of the City's high injury corridors⁸, and it is the third highest-injury corridor in all of Alameda County.

According to analyses conducted as part of Safe Oakland Streets (SOS) initiative, crashes in the City of Oakland do not impact communities equally. Black Oaklanders are two times more likely to be killed or severely injured in a traffic crash, and three times more likely to be killed or severely injured while walking as compared to all other Oaklanders. Additionally, 30

Figure 11. Share of Fatal and Severe Injuries



Source: San Pablo Avenue Corridor Project Existing Conditions Report, 2017

percent of streets in majority Asian census tracts fall on the City of Oakland Pedestrian High Injury Network - the highest percentage of any ethnicity. Older Oaklanders (ages 65+) are more than 2 times as likely to be killed in a crash compared to all other Oaklanders; the majority of senior traffic deaths occur while walking.

Additional analysis was conducted on the project corridor using SWITRS data for the period from 2015-2019. The San Pablo Avenue corridor between Heinz Avenue and 16th Street experienced a total of 235 crashes at 59 different intersections.

⁸ 2019 Oakland Bike Plan



- Fifty-seven (53) collisions resulted in pedestrian injuries, of which, 4 collisions occurring near 32nd street, 34th street, and Brockhurst Street/Filbert Street intersections resulted in pedestrian fatalities.
- Fatalities were the result of unsafe speed, pedestrian right of way, or pedestrian violations.
- The majority of pedestrian injuries were related to improper turning (9%), pedestrian right of way (55%), and pedestrian violations (26%).
- Forty-nine (49) bicycle-vehicle collisions occurred along the corridor.
- Ashby Avenue and 32nd Street had the highest number of pedestrian conflicts, while Ashby Avenue and 34th Street had the highest recording of bicycle conflicts.
- The sole bicycle-related fatality occurred on 65th Street.

The majority of San Pablo Avenue has a posted speed limit of 30 mph. Average travel speeds, which include delay associated with traffic signals, are between 21 and 30 miles per hour in multiple time periods on San Pablo Avenue between I-580 and I-980 in West Oakland, indicating that maximum speeds not including signal delay are likely higher. Speeds on this segment are among the highest anywhere on San Pablo Avenue. During outreach, members of the community also citing frequent speeding as a major concern. These high speeds translate to a concentration of fatalities and severe injuries in this segment of San Pablo Avenue. It is noted that the BIPOC population in this segment of San Pablo Avenue is measurably higher than on other segments of San Pablo Avenue within the Project corridor and is higher than the City of Oakland as a whole. Thus, BIPOC populations have a disproportionate level of impact from existing high auto speeds on San Pablo Avenue.

The collision and crash data for the Project corridor is summarized in **Table 8** through **Table 10**. The tables summarize all injury collisions, bicycle and pedestrian-involved crashes, and severe injuries and fatalities by mode of travel.

Segment	Total Crashes	Total Fatal	Total Severe	Corridor Length (mi.)	Collisions per Mile
Downtown Oakland	19	0	2	0.4	42.5
West Oakland	86	4	9	1.0	83.5
Emeryville	45	0	0	0.7	61.4
North Oakland	39	1	3	1.0	41.0
Berkeley	46	0	3	0.3	152.3
Grand Total	235	5	17	3.5	67.9

Table 8. Injury Collisions by Segment (2015 – 2019)

Sources: Kimley-Horn and Associates; Statewide Integrated Traffic Records System (SWITRS) (2015-2019)



Table 9. Bicycle- and Pedestrian-Involved Collisions (2015 - 2019)

Segment	Bicycle	Pedestrian	Total
Downtown Oakland	3	5	8
West Oakland	17	28	45
Emeryville	11	6	17
North Oakland	8	10	18
Berkeley	9	8	17
Grand Total	48	57	105

Sources: Kimley-Horn and Associates; Statewide Integrated Traffic Records System (SWITRS) (2015-2019)

Table 10. Severe Injuries and Fatalities by Mode (2015 – 2019)

Intersection or	Bicycle		Pedestrian		Automobile	
Mid-Block Location	Severe	Fatal	Severe	Fatal	Severe	Fatal
Downtown Oakland	0	0	1	0	1	0
West Oakland	1	0	6	4	2	0
Emeryville	0	0	0	0	0	0
North Oakland	0	1	1	0	2	0
Berkeley	0	0	1	0	2	0
Grand Total	1	1	9	4	7	0

Sources: Kimley-Horn and Associates; Statewide Integrated Traffic Records System (SWITRS) (2015-2019)

6.5.2 FINDINGS

The rates of pedestrians and bicyclists involved in an injury, severe injury, or fatal collision are much higher than for people in autos in the Project study area. As noted previously, the Project corridor is more reliant on walking, biking, and transit for mobility than the broader populations of Oakland and Emeryville. Therefore, the safety hazards for pedestrians and cyclists in this area highlight an existing racial disparity. Of the injury-causing collisions along the corridor, nearly 37% occurred in West Oakland. Of the bicycle and pedestrian related crashes, nearly 43% occurred in West Oakland. All of the fatal pedestrian-related incidents occurred in West Oakland. It is notable that West Oakland has the highest BIPOC percentage (70%) within the Project corridor. The Project will



significantly improve the safety of pedestrians and bicyclists, addressing those identified existing safety inequities.

6.6 STOREFRONT ACCESS AND PARKING

The removal of an auto lane and the loss of on-street parking may negatively affect at least some storefronts along San Pablo Avenue by making access to these businesses more challenging for people who drive and for business loading and unloading activities. Although anecdotally some businesses along the San Pablo corridor are BIPOC-owned, data on the racial composition of business ownership along San Pablo Avenue is not available; therefore, no definitive conclusions can be made about the relative impact of parking loss on racial equity. However, this information is presented to reflect the potential effects to access that may be experienced by business owners in the corridor as a result of the project.

6.6.1 RESULTS

During public outreach efforts, business owners were engaged through door-to-door canvasing and surveying. Additionally, parking utilization along San Pablo Avenue and the side-street segments was measured and is summarized below in **Table 11**.

Segment	Front- age (Total)	Occupied Spaces			% Occupied			
		Spaces (Total)	Weekday (AM)	Weekday (PM)	Saturday	Weekday (AM)	Weekday (PM)	Saturday
Segment 1 (N Oakland)	SPA	235	128	134	127	54%	57%	54%
	Side	891	424	407	397	48%	46%	45%
	Total	1126	552	540	524	49 %	48%	46%
Segment 2 (Emeryvill e)	SPA	135	58	58	56	43%	43%	41%
	Side	253	166	143	160	65%	56%	63%
	Total	388	224	200	216	58%	52%	56%
Segment 3 (W Oakland)	SPA	201	122	113	109	61%	56%	54%
	Side	747	495	485	476	66%	65%	64%
	Total	948	616	598	585	65%	63%	62%
Project Corridor	SPA	571	308	305	292	54%	53%	51%
	Side	1891	1084	1034	1032	57%	55%	55%
	TOTAL	2,462	1,392	1,339	1324	57%	54%	54%

Table 11. Parking Utilization on SPA and Side Streets by Segment



Source: Kimley-Horn and Associates, 2021

Existing parking utilization across the three analysis time periods (weekday midday/evening and weekend afternoon) varied between 51% to 54% on San Pablo Avenue and 55% to 57% on side streets. The southern section of the corridor from Grand Avenue to 36th Street in Oakland had the highest parking utilization rates that ranged from 54% to 61% on San Pablo Avenue and 64%-66% on side streets.

There are 278 parcels that front San Pablo Avenue, 30 of which are vacant. Of these 248 nonvacant parcels, 157 parcels (63%) have off-street parking (89 commercial and 68 noncommercial), while 50 parcels (20%) have side-street frontage and no off-street parking lot. Offstreet parking or direct access to side street frontage may provide options to accommodate parking and loading activities. Only 39 parcels (16%) do not have access to an off-street parking lot or side street frontage. Loading zones may be provided in select locations along San Pablo Avenue to provide loading solutions for those parcels.

The corridor overall has available on-street parking supply on side streets to accommodate a shift of existing parking demand currently on San Pablo Avenue. However, there are a number of locations where both San Pablo Avenue and the side streets are heavily utilized or parking is prohibited, which could result in a localized shortage of parking and longer trips to find available space. This may require parking management strategies to better utilize existing parking supply.

6.6.2 FINDINGS

On-street parking utilization along San Pablo Avenue and side streets is just above 50%, which is generally considered low utilization. While there may not be universal effects from the loss of parking space on San Pablo Avenue, there may be localized effects on specific storefronts that are dependent on parking or loading access. Side street loading solutions are being considered on a case-by-case bases along the Project corridor. Challenges associated with the proposed removal of parking and loading on San Pablo Avenue were identified by merchants during Phase 2 engagement. These include concerns about the proximity of loading zones and concerns about customers avoiding side streets for personal safety concerns and thus not patronizing businesses. This may more heavily impact mid-block businesses without off-street parking. Other existing parking challenges exist such as issues with double parking, long-term parking occupying space that could otherwise be customer and employee parking, and parked cars on sidewalks blocking access for pedestrians. Sidewalk parking makes it more difficult for people in wheelchairs trying to navigate the sidewalk around parked cars. Double parking can slow down adjacent traffic, as well as create safety and access issues for drivers and bicyclists.

Providing loading zones on side-streets will require trucks accessing those loading zones to route through residential neighborhoods instead of along San Pablo Avenue. This may raise concerns around traffic, noise, and safety along those residential and collector streets. As the design



process progresses, the Project will consider strategies to minimize potential parking and loading effects to storefronts, including working closely with the business community to identify and advance solutions. Strategies to be considered by the Project and/or local jurisdictions could include:

- Better management and metering of side street curb space,
- Additions of side-street and/or off-street spaces on publicly-owned property where feasible,
- Abandoned vehicle enforcement,
- Addition of lighting on side streets to help address safety issues, and
- Adding targeted, limited-location loading zone treatments on San Pablo Avenue where no other viable options are available.

In addition, strategies to address the impacts to side-streets associated with the re-routing of loading vehicles could include defining approved vehicle circulation paths and traffic calming strategies.

It is also noted that there is a higher rate of zero-car households in the Project corridor and increased reliance on walking, biking, and transit for mobility. Thus, replacing parking spaces with improved bicycle, pedestrian, and transit facilities may serve to increase business accessibility from the local community.



7. SUMMARY OF FINDINGS

7.1 REVIEW OF RACIAL EQUITY IMPACT ANALYSIS QUESTIONS

The City of Oakland Racial Equity Impact Analysis includes a series of questions that were used in developing this racial impact analysis. The summary below states the question and the project-specific response determined through the preparation of this analysis.

- 1) Will the proposal have impacts in the specific geographic areas (neighborhoods, areas, or regions)?
 - A. Yes, this Project will have impacts on the specific geographic area close to the San Pablo Avenue Corridor, primarily businesses and residents within 0.25 miles of the Project.
- 2) Who are the stakeholders who may be affected by this policy? How can we best reach them and engage them?
 - A. The stakeholders who will be affected by this Project include the various businesses and residents along San Pablo Avenue, as well as all who use San Pablo Avenue for travel.
- 3) What are the racial demographics of those living in that area?
 - A. Within 0.25 miles of the Project corridor, there are approximately 60,812 residents. 64% of these residents are BIPOC. (23% Black, 19% Asian, 11% Other, 11% two or more races).
- 4) Identify any relevant Equity Indicator(s) or disparities that your activity might impact?
 - A. There is a high concentration of zero car households (Section 5) in the areas surrounding the Project (23% versus the 9% in Alameda County). Segment 3 (West Oakland) of the Corridor has the highest rate of zero car households at 29% and the highest percentage of residents who use transit to commute (37%). Of the injury-causing collisions, nearly 37% occurred in West Oakland. Of the bicycle and pedestrian related crashes, nearly 43% occurred in West Oakland. All of the fatal pedestrian-related incidents occurred in West Oakland. West Oakland has the highest BIPOC percentage (71%) within the Project corridor.

The Project will have a positive impact on the quality of life for those without a vehicle by improving their mobility through improved bike and pedestrian facilities (Section 6.2) and safer streets(Section 6.5). Transit riders would benefit from faster and more reliable transit, although some would have longer walks to a stop (Section 6.3 and 6.4). Parking and loading for storefronts and others driving to San Pablo would be less convenient (Section 6.6).

- 5) What are the needs or opportunities to address these inequities from the impacted communities' perspective?
 - A. Community outreach has found that safety and transit improvements are the top priorities along the Oakland and Emeryville segment of the corridor. Disparities among current residents in the area may be caused in part by limited access to economic opportunities resulting from a lack of viable and reliable transportation choices. If residents do not have



the resources to travel to education or job opportunities, the economic inequality and the income gap may worsen over time. This can be addressed through improved mobility options, such as faster and more reliable transit service and improved bicycle and pedestrian connectivity. This alternative is a low-cost option in relation to car ownership. Disparities are also caused by increased safety hazards in the community associated with street design that currently does not prioritize safety for people walking and biking. Safety hazards can be addressed through the construction of facilities that incorporate best practice designs. Community member concerns about parking, loading, stop consolidation, and ADA/paratransit access will inform the detailed design process as described in Chapter 6.

- 6) How will we meaningfully consider the perspectives of underserved stakeholders during final decision making?
 - A. Feedback from stakeholders has been utilized throughout the Project to guide the direction of the study and to influence specific improvements, as described in Chapter 4. The Project's pedestrian and bicycle safety and bus priority improvements within Oakland and Emeryville are a direct response to the strong support these treatments have received through several rounds of outreach activities. The perspectives of stakeholders will continue to be incorporated into the Project through additional community engagement prior to and during design and construction. Stakeholder input during the evaluation stage after construction will be utilized to shape the future vision of San Pablo Avenue. Future outreach will continue to incorporate a range of strategies, such as intercept surveys and CBO partnerships, to meet people where they are and ensure BIPOC community members' voices are fully represented.
- 7) What adverse impacts or unintended consequences could result from this policy [Project] if enacted as envisioned/written?
 - A. BIPOC business owners may be negatively impacted through the removal of on-street parking and more challenging loading access to their businesses along the corridor. This could result in a loss of revenue for some businesses. Some businesses may benefit from improved bus, bike, and transit accessibility to their business. Additional adverse impacts may be felt by local neighborhoods that may experience additional loading vehicle or other auto circulation on residential streets (Section 6.6). The need to shift parking and loading off of San Pablo Avenue is a result of an emphasis on improving safety, transit travel time, and transit reliability, which has notable benefits for BIPOC populations, as they represent a disproportionate share of severe and fatal traffic collisions and also a significant majority of transit riders. While transit riders will benefit from faster and more reliable service, some transit riders may experience impacts to stop accessibility through stop consolidation, requiring a longer walk to bus stops (Section 6.4). This stop consolidation is also intended to both improve transit speed and reliability as well as improve bicycle safety, which also may have benefits to BIPOC populations. The Project will reduce auto capacity on San Pablo Avenue. While BIPOC populations as a whole are found to be less



reliant on the automobile, many BIPOC residents travel via automobile on San Pablo Avenue. These users may experience additional auto travel time and congestion.

- 8) How would different racial/Ethnic groups in Oakland be impacted by the benefits and burdens of this policy [Project] if it were enacted as envisioned/written?
 - A. Residents adjacent to the corridor, who are predominantly BIPOC, would have greater access to reliable transit, and a safer and better-connected bike and pedestrian network nearby. The benefits would include safer routes for bicyclists and pedestrians and faster and more reliable transit options. While the proportion of BIPOC business owners is not known, some BIPOC businesses may be impacted as noted above by parking and loading loss, while others may benefit from improved corridor accessibility. Transit riders, who are also predominately BIPOC will be positively affected by the Project through improved transit speeds and reliability, although some may be impacted by longer walks to access transit stops. While local residents will benefit from bicycle and pedestrian safety improvements on San Pablo Avenue, some may be impacted by additional loading vehicle circulation on residential streets and those that use an automobile on San Pablo Avenue today may experience additional congestion.
- 9) What additional barriers might prevent individuals in certain racial/ethnic groups from benefitting fully if this policy [Project] were implemented as written?
 - A. For residents that do not have the means to own or rent a bike, are not able to purchase a bus fare, or do not have the physical ability to ride a bike or the bus (particularly with stops farther apart), then they may not be able to fully benefit from the Project. Traditional outreach practices may also pose a barrier to including the needs and priorities of all community members. These include community members and businesses who have not been able to participate in surveys and other outreach activities due to competing schedules or priorities.
- 10) What steps could be taken to prevent or minimize adverse impacts or unintended consequences?
 - A. Outreach and engagement efforts that reach community members where they are can help identify and then work to minimize any unintended consequences of this Project. This includes direct communication with storefronts that may be affected by parking and loading loss and engagement with disability and other stakeholder groups to better understand needs that will inform design. It also includes outreach regarding stop locations and working with East Bay Paratransit to ensure the corridor remains accessible. After the project construction has been completed, additional engagement will be performed to ask users and the community along the corridor about how the Project has affected them, including effects on overall mobility, changes in mode choice and travel patterns, and impacts on storefront access. That will provide an opportunity to refine the ultimate corridor vision to address unintended consequences or minimize adverse impacts. This may also provide an opportunity to address community concerns around loading vehicle or auto diversion into neighborhoods through traffic calming strategies.



- 11) What steps could we take to address historical harm or other barriers that could prevent various racial/ethnic groups from accessing the policy [Project] fully?
 - A. The Project by its nature is focused on improving access and mobility for populations that have been historically impacted by the prioritization of auto travel in this corridor. The project will improve transit speed and reliability, provide new bicycle facilities, and make the corridor safer for pedestrians and cyclists, which will all work together to provide more and better mobility choices for the local community.

Businesses along the corridor, including BIPOC-owned businesses, have been impacted by a lack of investment in the safety and connectivity of this corridor. This may lead to distrust of the Project process and lack of engagement in the process. Continued engagement with the businesses to solicit their input and address concerns raised will enhance the opportunity for businesses to benefit, or minimize harm, from the Project. Additionally, to address personal safety issues and historical neglect/disinvestment, coordination with various city departments will be critical to provide services such as sidewalk cleaning, social services to unhoused residents, and other context-sensitive beautification efforts (that do not displace the unhoused) before and after construction of the project.

- 12) Based on this analysis, what are the recommendations for the most equitable policy [Project] option(s)?
 - A. The Project design as identified in this report is the most equitable solution given that its safety and transit improvements would benefit the mobility of the existing, predominately BIPOC community. It is critical to address unintended consequences so that the project's benefits are shared broadly, especially for existing residents of the corridor.
- 13) What are the measures determining underserved groups are better off?
 - A. The community surrounding the project is predominately BIPOC and may be reliant on walking, bicycling, and transit for mobility needs out of economic necessity. The Project has been found to improve transit reliability and travel time and includes a number of measures to improve pedestrian and bicycle safety. Therefore, it will improve opportunities for underserved groups. Other measures may include reduced collisions, increased transit ridership, better access for paratransit to key destinations, and satisfaction reports from intercept surveys of people using San Pablo Avenue. Measurement of business effects of the Project and magnitude of diversion of loading vehicles and auto traffic to neighborhoods will assess potential impacts of the Project on underserved groups. While BIPOC populations more commonly rely on transit, walking, and biking relative to other populations, measurement of auto travel time on this corridor will identify impacts to BIPOC auto users.
- 14) What is the mechanism we will utilize to measure for racial equitable outcomes? (Note: all measurement data needs to be disaggregated by race and any other relevant demographic to track impact on equity)
 - A. Several data collection processes and analyses will be incorporated into the postconstruction project evaluation process to assess the racial equitability of project outcomes. These include analysis of transit usage, transit reliability, and safety. A survey will



be conducted of corridor users to obtain information about how the Project has shaped mobility and community perspectives. The survey will include demographic questions to allow for disaggregation by race and other demographic factors.

- 15) What is the mechanism for course correction if racial equity outcomes are not achieved?
 - A. The Project is intended as a demonstration project to help determine the effectiveness of proposed solutions in meeting corridor needs and in advancing towards the corridor vision. The findings of the post-construction evaluation will be utilized to assess how to continue to progress the corridor towards a more equitable and effective transportation solution. This evaluation process and vision refinement will serve as a mechanism for course correction if the current Project does not achieve anticipated outcomes.
- 16) How will the community be informed of progress toward achieving racially equitable outcomes?
 - A. Alameda CTC, the Cities of Oakland and Emeryville, the Project team, and other stakeholders will continue to engage the community throughout the design and construction phases. In addition, engagement is included as part of the post-construction evaluation. The results of the evaluation will be summarized in a report and shared with elected bodies and the general public.

7.2 STEPS TO MINIMIZE UNINTENDED CONSEQUENCES

The Project is continuing to conduct engagement efforts with the community to identify and address unintended consequences. Current engagement efforts include connecting with businesses with storefronts on San Pablo Avenue, local residents, and CBOs to identify concerns associated with the Project, particularly related to parking and loading, and incorporate design elements into the Project description to minimize those concerns. Active transportation users and bus riders will be engaged throughout the process to ensure that the Project is meeting their needs and represents an improvement on existing conditions. Feedback will be incorporated into the Project design to minimize unintended consequences. Prior to construction, the community will be informed about the upcoming construction and concerns about construction impacts will be considered in the construction process.

After construction has been completed, users and the community along the corridor will be asked about how the Project has affected them, including effects on overall mobility, changes in mode choice and travel patterns, and impacts on storefront access. These responses will be paired with a quantitative analysis of mobility and safety changes to assess the full consequences of the Project and any adjustments that may be needed in future phases to address racial inequities.

RACIAL EQUITY ANALYSIS SAN PABLO AVENUE CORRIDOR PROJECT



CONCLUSION

Given the lack of a corridor-wide consensus on long-term improvements during Phase 1 engagement, a near-term project is being advanced to test the feasibility, benefits, impacts and desirability of a range of mobility improvements on San Pablo Avenue. Based on stakeholder input and technical assessments conducted in Phase 1, a range of safety improvements, protected bike lanes, and dedicated bus lanes will be implemented on San Pablo Avenue in Oakland, Emeryville, and southern Berkeley. The Racial Equity Analysis contained in this report finds that these improvements are likely to benefit BIPOC populations. The existing community, particularly neighborhoods with high concentrations of BIPOC populations, is much more reliant on transit, walking, and bicycling than the broader populations in the Cities of Oakland and Emeryville. This is demonstrated by high rates of zero-auto ownership, transit usage, and non-auto primary commute mode. Transit, bicycle, and pedestrian users of this corridor were found to be significantly disadvantaged through high rates of severe injury collisions, slow and unreliable transit, and a lack of comfortable bicycle facilities. The project will address these current inequities through safety, connectivity, travel time, and reliability improvements that will collectively improve the mobility of residents along San Pablo Avenue, especially BIPOC populations.

In order to provide these improvements, trade-offs are required. Some of these trade-offs are likely to be experienced by BIPOC populations. Project impacts, resulting from the unintended consequences of prioritizing the safety and mobility of BIPOC populations, may include increased challenges in accessing businesses, diversion of loading and auto vehicles through neighborhoods, and increased walk distance to some transit stops. Strategies to address these impacts will be refined through continued engagement of affected populations within the local community during the design and implementation period.

By shifting San Pablo Avenue from a predominately auto-oriented street to a multi-modal street, the local community, and particularly BIPOC populations, will see improved mobility and access to economic opportunities. Undesirable Project outcomes may be minimized through continued engagement with the local community, including residents and storefronts. A post-project implementation evaluation will be utilized to measure the consequences of the Project, identify additional measures to address unintended consequences if needed, and define future corridor efforts to best meet the needs of BIPOC populations.