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Transformative Community Planning as a Tool for Advancing Mobility Justice: Two Case Studies Using Community-Based Participatory Action Research and Racial Equity Impact Assessment

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16. Abstract Top-down transportation planning practices have historically ignored the needs and concerns of low-income communities of color, which can lead to residential and commercial displacement as public investments increase land values and rents. The concept of mobility justice centers the needs of communities that have historically been excluded from transportation planning decisions. We partnered with community groups to examine two transportation planning projects in the Bay Area using collaborative research methods. The first was a retrospective analysis of the East Bay Bus Rapid Transit project in East Oakland that reflects the harms of top-down planning. The second study examined the City of Richmond's Transformative Climate Communities projects, a more collaborative approach to planning with low-income communities involved at every stage. We find that the top-down planning model employed in the East Oakland case study resulted in significant health, safety, and displacement impacts that could have been avoided. The Richmond case study shows project changes occurring as a direct result of using mobility justice principles.			
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The California Resilient and Innovative Mobility Initiative (RIMI) serves as a living laboratory – bringing together university experts from across the four UC ITS campuses, policymakers, public agencies, industry stakeholders, and community leaders – to inform the state transportation system’s immediate COVID-19 response and recovery needs, while establishing a long-term vision and pathway for directing innovative mobility to develop sustainable and resilient transportation in California. RIMI is organized around three core research pillars: Carbon Neutral Transportation, Emerging Transportation Technology, and Public Transit and Shared Mobility. Equity and high-road jobs serve as cross-cutting themes that are integrated across the three pillars.

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List of Abbreviations

ACS	American Community Survey
AC Transit	Alameda-Contra Costa Transit District
ADA	Americans with Disabilities Act
BRT	Bus Rapid Transit
CAC	Community Advisory Council
CBO	Community-Based Organization
CBPAR	Community Based Participatory Action Research
MHI	Median Household Income
OakDOT	Oakland Department of Transportation
RAC	Regional Advisory Council
REIA	Racial Equity Impact Assessment

Executive Summary

Transformative Community Planning as a Tool for Advancing Mobility Justice: Two Case Studies Using Community-Based Participatory Action Research and Racial Equity Impact Assessment

Executive Summary

Top-down interagency transportation planning practices have historically ignored the needs and concerns of low-income communities of color, or even deliberately harmed them. Federal funding guidelines, agency objectives, regional and local planning processes, and community priorities often conflict with each other at the expense of the health, safety, and livelihood of vulnerable populations. Decades of discriminatory government policies and disinvestment have enabled gentrification, particularly in underserved neighborhoods where new transportation investments may make these areas more accessible and attractive to wealthier, often whiter residents. Planners have traditionally not taken these histories and conditions into account when planning transportation investments, which can lead to residential and commercial displacement as public investments increase land values and rents (Kahn 2007). Mobility justice has been proposed as an alternative framework that centers the needs of communities that have historically been excluded from transportation planning decisions.

Working closely with two community advisory councils—one in East Oakland, CA and one in Richmond, CA—composed of local leaders, small business owners, environmental justice advocates, and transit-dependent residents, we undertook two transportation planning case studies using research methods—Community Based Participatory Action Research (CBPAR) and Racial Equity Impact Assessment (REIA)—that, while newer to transportation planning, have been widely used in public health and education (Wallerstein 2020). The first case study is a retrospective analysis of the East Bay Bus Rapid Transit (BRT) project that reflects the harms of a top-down planning process that failed to fully address community concerns. The second case study focuses on Richmond Rising—ten projects in the City of Richmond funded through the California Strategic Growth Council’s Transformative Climate Communities (TCC) Program—and illustrates that city’s commitment to a more collaborative approach to planning with low-income communities at every stage of the project life cycle.

Policy Recommendations

Overall, community advisory committees are essential in the planning, construction, and implementation of transportation projects to ensure they meet the needs of residents and sufficiently address their concerns. We urge local agencies to employ social impact assessments, such as the REIA, early in the planning process and to incorporate appropriate changes in the final approval process. The findings and recommendations from our two case studies which were vetted by our community councils are summarized in **Table ES-1** below.

Table ES-1. Case Study Research Findings and Policy Recommendations

Research Findings	Policy Recommendations
East Oakland BRT Case Study	
After BRT opened, reported traffic casualties on/near the corridor rose by over 30% in an already dangerous, high-injury network.	The City of Oakland, AC Transit, and Alameda County can implement context-sensitive design changes to BRT infrastructure to reduce traffic violence.
BRT may have helped fuel speculation in the real estate market that contributed to pre-existing patterns of residential displacement and gentrification.	City and county governments can require commercial and residential anti-displacement measures in approving transit-oriented development.
By 2019, 502 businesses (37%) had closed; in a 52-case subsample, 52% were legacy; business owners faced barriers to accessing City mitigation funds.	Local governments and transportation agencies can standardize, simplify, and expand access to business impact funds to prevent business closures. Business impact mitigation funds to small businesses should take the form of grants in anticipation of lost revenues.
Community knowledge about the broader impacts of the project, such as increased sex trafficking did not receive adequate attention in the planning and implementation stages.	Local agencies can work with community leaders to address unintended impacts of transit infrastructure.
Richmond Rising Case Study	
The three Richmond Rising mobility infrastructure projects may contribute to gentrification of low-income Black and Latino/x communities.	Richmond can consider adding to its -Displacement Avoidance Plan strategies such as affordability calculated based on neighborhood, rather than regional, incomes and a business impact mitigation fund.
Richmond Rising's transformative community process is working to directly address potential gentrification and displacement impacts through a Displacement Avoidance Plan, overseen by a Collaborative Stakeholder Committee.	Richmond can continue using transformative community planning processes, remaining responsive to stakeholder concerns.

Based on our research findings we recommend that transportation planning incorporate transformative community planning practices that share power with community stakeholders to avoid the harms of top-down planning. These practices would advance the goals of mobility justice while improving overall project outcomes.

Contents

Introduction

Mobility in American cities is profoundly influenced by top-down planning practices that can perpetuate racial and economic inequalities in transportation, housing, clean air, education, and economic opportunity. Despite increasing commitments to more equitable transportation planning, major transit investments can exacerbate these problems when implemented without meaningful community engagement. While even transportation planners working in the framework of equity may be encouraged to plan and implement high-profile projects such as bus rapid transit (BRT) based on success stories and the availability of funding, the outcome of any transportation investment is highly context dependent. Planning practices that rely solely on the professional expertise of planners, and ignore the local expertise of community stakeholders, risk missing context, which can lead to unintended harm and failure to achieve project goals. When community voices are disregarded, the lack of community input in project planning can result in displaced residents and businesses, reduced access, and worsen existing disparities. For example, transit-oriented development built without anti-displacement policies can lead to neighborhood gentrification that forces out the very people it is built for, converting transit users into long-distance car commuters. Projects opposed by neighborhood residents and business owners also risk prolonged legal battles and negative press, leading to delays and cost overruns.

Mobility Justice

Mobility justice is an alternative framework to top-down transportation planning that treats mobility as a fundamental human right and promotes a version of transportation planning that incorporates distributional justice (fair resource allocation), procedural justice (inclusive and transparent decision-making), and recognition justice (valuing diverse identities and histories). This approach requires paying greater attention to both who is involved in transportation planning decisions as well as how these decisions are made. Mobility justice advocates have proposed the concept of transformative community planning as an alternative decision-making model for advancing these goals ([Kennedy 1996](#)). Transformative community planning aims to build the capacity of the community to lead future planning and development projects by actively listening to, acknowledging, and respecting the expertise of community stakeholders; showing respect for stakeholders by challenging them to transform relations between groups, rather than glossing over conflict; and openly acknowledging the planning profession's history of bias.

Transformative community planning approaches incorporate tools such as Community Based Participatory Action Research and Racial Equity Impact Assessments (discussed below in the Research Approach section) that offer models for decision making that prioritize equity and long-term community benefits.

This study examines this potential to reform transportation planning through two case studies: the East Bay Bus Rapid Transit (BRT) project in the East Oakland portion of Oakland, California, which reflected traditional top-down planning methods, and the newly established Richmond Rising planning initiative, which applied

transformative community planning principles to develop a package of infrastructure projects in Richmond, California.

Working closely with community stakeholders in Oakland and Richmond we conducted racial equity impact assessments of the actual impacts of the East Bay BRT project after it was completed, and for the Richmond Rising Initiative to establish a baseline that can guide ongoing planning in Richmond.

Overview of Case Studies

We selected the following two case studies because they illustrate contrasting planning approaches.

The East Bay BRT project, developed by Alameda-Contra Costa Transit District (AC Transit) in East Oakland, exemplifies top-down planning with limited community involvement that insufficiently addressed community concerns. Planning for this \$232 million project began in 1999, with construction starting in 2015 and service launching in August 2020. The project was intended to improve transit access along International Boulevard by constructing bus-only lanes in the median of the roadway. However, residents maintain that longstanding community concerns about gentrification, displacement, public safety, and business closures were not adequately addressed in the planning process.

The Richmond Rising initiative represents an emerging model of transportation infrastructure planning that seeks to integrate community-led decision making. Funded by a \$35 million implementation grant from the State of California, Richmond Rising consists of ten public infrastructure projects, including three mobility infrastructure projects, proposed through an extensive public engagement process and being planned and carried out in collaboration with community-based organizations (CBOs). While the project is still in its early stages, it applies transformative community planning principles in ways the East Bay BRT project did not.

Our research investigated how each of these planning approaches, top-down versus community-driven, shaped project outcomes. In doing so, we ask:

1. What is the impact of major transportation projects on community displacement, health, homelessness, and overall well-being?
2. What types of data are needed to measure racial equity and include community knowledge?
3. What public policy and planning strategies can promote inclusive and equitable transportation?

Purpose of this Report

This report aims to advance equity-centered transportation planning by presenting findings from our case studies and highlighting lessons for policymakers, planners and researchers. We first present the results of our retrospective analysis of the impacts of the East Bay BRT project on East Oakland residents and businesses, demonstrating how this process could have had different outcomes if planners had more adequately addressed

community concerns and conducted a Racial Equity Impact Assessment during the planning process. Next, we share findings from Richmond, where transformative community planning principles have been embedded in the planning process from the outset. Finally, we discuss the implications of these case studies for future transportation projects, and recommend fully integrating equity assessments into transportation planning, much like environmental impact assessments. We provide concrete recommendations to help planners and policymakers embed mobility justice in their decision making and maximize equity outcomes.

Background

The history of a community can have a profound effect on project outcomes. To better understand how a proposed project might impact a community, planners need to understand how that community came to be, who lives and does business there, and how public policy has influenced its development. Historical forces that have shaped a community's present and its vulnerabilities are often invisible to an outside observer; for example, the 2007-2010 foreclosure crisis not only destroyed the hard-won wealth of many Bay Area families, but it also allowed for the conversion of affordable single-family homes into market rate rental units, altering the composition and characters of many communities. Due to the ban on local rent controls for single family homes in California's Costa-Hawkins law (AB 1482 1995), the rents in these formerly stable housing units can now be raised in response to an influx of new residents as transportation infrastructure makes the neighborhood more attractive to higher income families, potentially displacing existing lower income residents.

A community's history also informs how residents might view a transportation proposal and whether they support it or object to it. A transportation project that doesn't take into consideration the transportation needs and project concerns of the local community risks delays and cost overruns due to resident and business resistance. For these reasons, we include below brief histories of East Oakland and Richmond with a focus on transportation and housing policy.

Community Histories

East Oakland

In our study we define East Oakland as the Oakland neighborhoods between Lake Merritt and the San Leandro border and southwest of Interstate 580 (see **Figure 1**). This is an area of incredible demographic and cultural diversity, the result of both government policies and immigration patterns. The Chochenyo Ohlone people, Oakland's original inhabitants, once faced enslavement and extermination, yet remain a vibrant community today. Jim Crow laws and economic opportunities drew Black Southerners to Oakland, while white flight, incentivized by postwar federal mortgage insurance policies, transformed previously white neighborhoods into Black enclaves by the second half of the 20th century. Southeast Asian refugees established communities in the 1970s and 1980s, and Latin American immigrants have sought refuge and opportunity in East Oakland since the early 20th century (City of Oakland Department of Transportation 2021, 9-10).

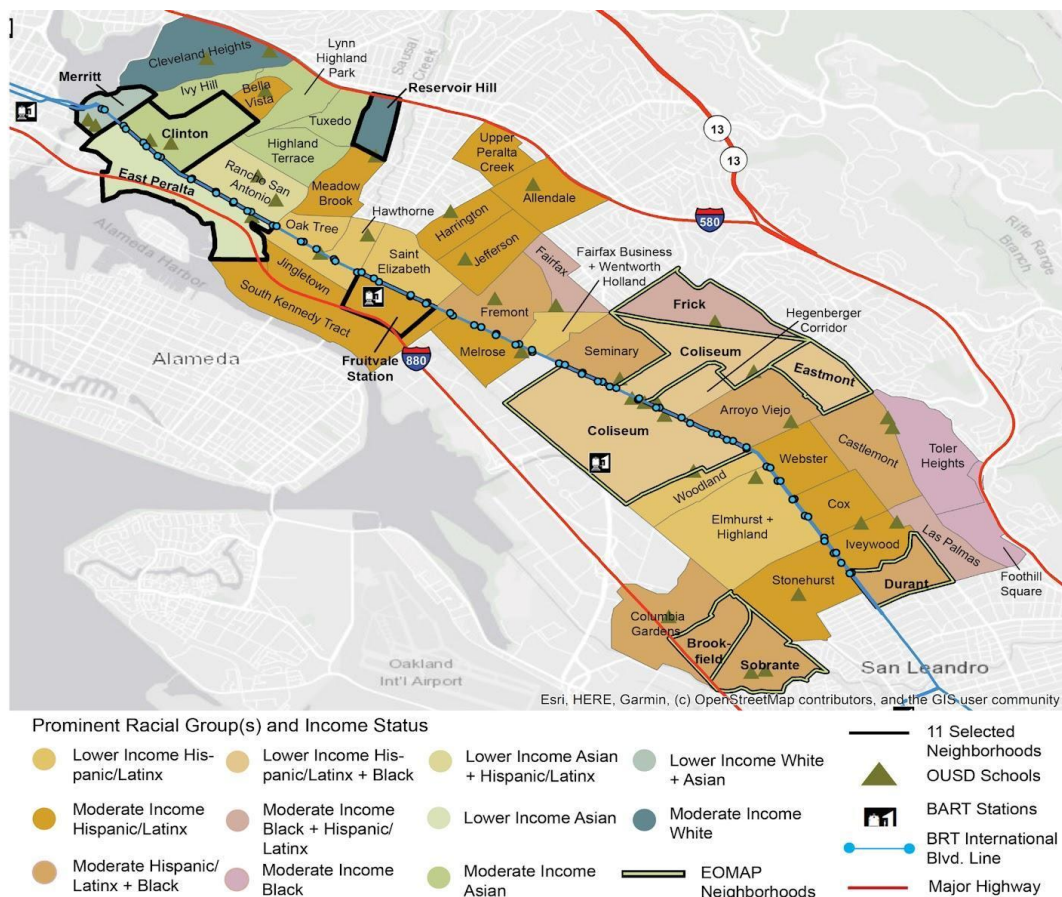


Figure 1. The 11 Ethnic Enclaves Studied for the City of Oakland’s East Oakland Mobility Action Plan¹

Source: East Oakland Mobility Action Plan, City of Oakland Department of Transportation, 2021.

Federal mortgage insurance redlining practices restricted access to lending and homeownership for residents of color. Although the 1968 Fair Housing Act outlawed racial discrimination in lending, barriers to capital access persist, hindering wealth accumulation through homeownership and small businesses. This environment allowed predatory lenders to exploit low-income communities of color even before the 2007-09 mortgage crisis (Rugh and Massey 2010). When the housing market crashed, many East Oakland residents lost their homes to foreclosure. Wealthy investors subsequently profited off the low home prices by “flipping” foreclosed properties to wealthier new residents (King and Spiker 2012). This turnover in the housing market led to demographic shifts in household incomes (gentrification) and the departure of people of color, particularly Black residents (racial displacement).

¹ The EOMAP was a joint transformative community planning effort undertaken by the City of Oakland, the East Oakland Collective, Transform, Just Cities, and numerous East Oakland residents. The impact and analysis team studied BRT impacts on the outlined neighborhoods in this map.

Discriminatory housing and land use policies contributed to and perpetuated the poverty that has often been used to justify transportation projects in lower income communities. Transportation planning has often prioritized the needs of wealthier suburbanites (Evans 2021), as for example when freeway projects take advantage of reduced land values by building through low-income neighborhoods (Dahlstrom-Eckman 2024). All heavy truck traffic, and its accompanying air pollution, is routed along Interstate 880, which runs through East Oakland's low-income communities of color. When the parallel Interstate 580 was constructed through whiter, more affluent neighborhoods, weight limits were instituted to keep heavy trucks from passing through these areas.

Despite the acknowledged history of both harm and neglect, East Oakland residents have long held great pride in their communities. Many residents still affectionately refer to International Boulevard by its old name, "E. 14th," or nicknames like "The E One Four" in defiance of the City's official name change in 1996 aimed at rehabilitating the corridor's image. East Oakland residents shared with us some of the people's movements that define East Oakland. For example, Ndidi Love, a community leader with EastSide Arts Alliance, described what brings residents together:

East Oakland, with its rolling hills, vibrant streetscapes and showstopping culture, continues to be an epicenter of movement generation, art, and resistance based in the legacy of Black Power and third world solidarity...International Boulevard remains a necessary East Oakland mainstay that demands true community-centered innovation to continue the great legacy of built environments undergirding the political organizing movements, mutual aid, and cultural regeneration.

This sentiment was echoed by Reverend Jeremy "Pastor Jey" McCants, MDiv., of the East Bay Alliance for a Sustainable Economy, who shared the community's rich legacy of leadership:

When we think about iconic places that have cultivated and still cultivates Black Brilliance, Black Resistance, Black Joy and Black Power, one cannot skip over the great city of Oakland, CA, but more specifically, Deep East Oakland (DEO).² DEO has been a proverbial savior of the soul, of not only this country, but of itself. From the great names of Dr. Huey P. Newton and Bobby Seale, to Marshawn Lynch and Damian Lillard, and to Rev. Dr. J. Alfred Smith Sr. and Regina Jackson, DEO have produced some of the greatest influencers, talented artists and paradigm shifting prophets that this country has ever seen.

Richmond

Like East Oakland, Richmond is home to a diverse, predominantly low- and middle-income population, and it has been shaped by much of the same history of migration and racial policies that shaped East Oakland. The area's original Chochenyo Ohlone people still live in Richmond and lay claim to their ancestral lands that were

² There is no official definition of Deep East Oakland, but it is usually used to describe the area southeast of Seminary Avenue and south of MacArthur Boulevard.

taken first by the Spanish, then by the U.S. government, from whom they still seek recognition as a tribe. Jobs in the Kaiser shipyards and escape from Jim Crow laws attracted thousands of Black workers to Richmond during World War II, and Hispanic immigration has occurred in waves throughout the postwar period. Immigrants fleeing the Laotian Civil War in the 1970s and 80s created their own ethnic enclaves in Richmond as well.

When Richmond was first incorporated in 1905 Standard Oil had already constructed a refinery there, and to this day the Chevron oil refinery creates severe pollution burdens. Historical racial segregation concentrated residents of color in the less desirable flatland neighborhoods, where pollution burdens are highest. Meanwhile, Point Richmond and the neighborhoods in the hills, which are less impacted by the refinery, were predominantly white. This segregation was the product of lending discrimination, government-endorsed racially restricted deed covenants, and outbreaks of mob violence when Black families attempted to move into white neighborhoods (City of Richmond 2023, F-14). The predatory lending and mortgage crisis also hit Richmond's neighborhoods of color hardest. An analysis of notices of default to homeowners counted 5,720 notices resulting in the property changing ownership and displacing the owners from 2006-2018 (Lan 2024), predominantly in low-income Black and brown neighborhoods such as Iron Triangle and North Richmond. From 2000 to 2019, the Black population fell 39 percent, and the Laotian population in Richmond dropped by 54 percent from 2010 to 2015 alone, with high rents playing a major role in this trend (City of Richmond 2023, F-25; Khansouvang et al. 2020).

Transportation planning has had stark consequences for low-income communities of color in Richmond. The "Iron Triangle," now the neighborhoods of Iron Triangle, Santa Fe, and Coronado, was originally named for the railroads that defined its borders, with the Chevron refinery to the west. Highway 580, a major commuter corridor which connects the North Bay to San Francisco and the East Bay, was built through poor, predominantly Black neighborhoods, and now borders the area to the south. According to CalEnviroScreen, a mapping tool for understanding cumulative environmental impacts, these neighborhoods are among the most polluted areas in California due largely to this infrastructure. They are also nearly entirely populated by people of color, particularly Hispanic residents.

Transformative community planning begins by acknowledging the lived histories of local communities and their residents and builds on those experiences as the basis for understanding the unique context of those communities. Ignorance of the historical and cultural context of a place can lead to development unwittingly perpetuating historical harms.

Project Histories

The processes used to conceive and plan a project can have a huge effect on its eventual impacts and success. We next compare the planning histories of the two projects we studied.

East Bay Bus Rapid Transit

In 1999, AC Transit began planning an enhanced public transit service along International Boulevard in Oakland (Bruns 2020). The planned BRT service would eventually replace the existing 1 and 1R lines and serve a nearly identical route. AC Transit's goals for this project as expressed to City of Oakland staff and residents were to improve service by achieving average bus speeds of 13 miles per hour with 5-minute headways, increase ridership, and enhance station safety (City of Oakland Public Works Department 2013).

The project was initially planned to run from the San Leandro Bay Area Rapid Transit (BART) station to the University of California Berkeley campus. However, in response to organized resistance from business owners along Telegraph Avenue, the Berkeley City Council unanimously voted to reject the conversion of Telegraph Avenue traffic lanes to bus-only lanes, and AC Transit withdrew the proposed segment through Berkeley and North Oakland (Allen-Taylor 2011). The shortened BRT route runs 9.5 miles from downtown Oakland to San Leandro's BART station (see **Figure 2**). It passes through neighborhoods mainly inhabited by low- and middle-income Black, Latinx/Hispanic and Asian American residents, many of which are considered ethnic enclaves (City of Oakland Department of Transportation 2021, 8).

The project took 15 years to plan and five years to construct (Alameda County Transportation Commission 2019; Transit Center 2020), costing about \$232 million, including \$81 million from the U.S. Department of Transportation (AC Transit 2014; 2020, 135). The availability of federal Small Starts grant funding for BRT projects conforming to specific design requirements incentivized AC Transit to plan for this project as a BRT service rather than a standard bus line (Government Accountability Office 2012; Hubbard 2010). Utility work to prepare International Boulevard for the BRT project began in 2015 (City of Oakland Department of Transportation 2021, 20), and infrastructure construction began in August 2016 (Baldassari 2016). The project's 1T line began service on August 9, 2020 (Bruns 2020).

EAST BAY BRT

A Public Transit Renaissance

Un renacimiento del transporte público

The **East Bay Bus Rapid Transit (BRT)** will operate with train-like frequency mostly through bus-only lanes. BRT is rapid with bus frequency at least every 7 minutes during peak times. It will operate between Downtown Oakland and San Leandro, primarily using International Boulevard and East 14th Street. To minimize disruption, construction will happen over several stages.

El autobús de tránsito rápido de la bahía del este (BRT)

funcionará con una frecuencia casi de tren, mayormente a través de carriles sólo para autobuses. El BRT es rápido con una frecuencia de autobuses al menos cada 7 minutos durante las horas pico. Funcionará entre Downtown Oakland y San Leandro, usando principalmente International Boulevard y East 14th Street. Para minimizar las molestias, la construcción se hará en varias fases.

Questions?

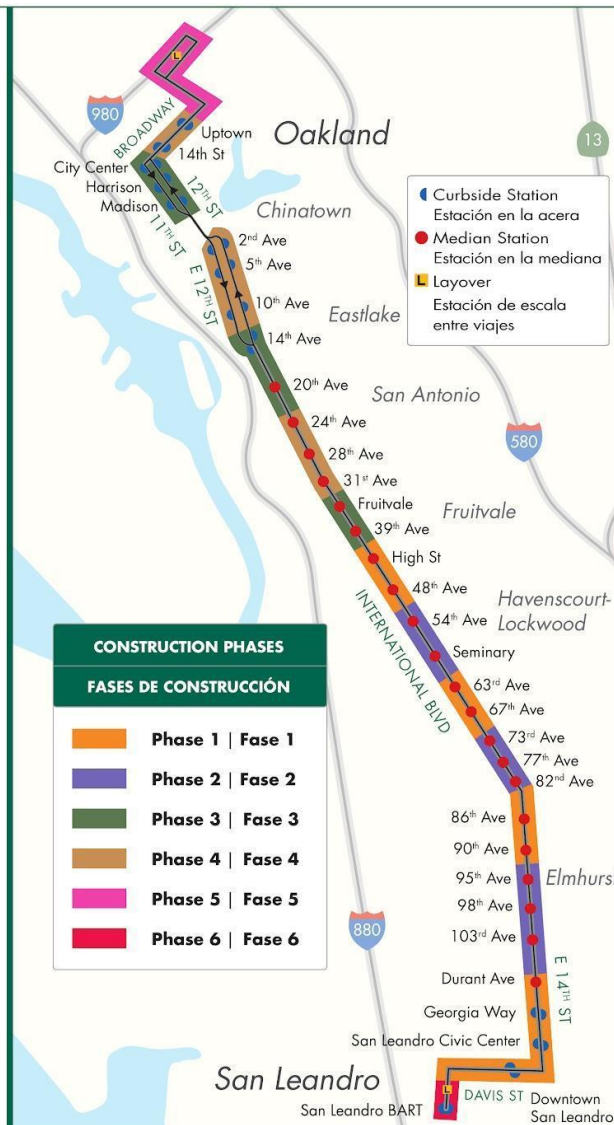
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East Bay Bus Rapid Transit

BRT is a public transit renaissance... Let AC Transit move you there!

BRT es un renacimiento del transporte público... ¡Deje que AC Transit le lleve allí!

12/20/16

Figure 2. East Bay BRT Route Map

Source: AC Transit, 2016.

During the planning process, East Oakland community members expressed their concerns about the project to AC Transit through public meetings, newspaper editorials, and interviews (Ahrens et al. 2020, 16-22; Roy 2012). Business owners were concerned about losing business due to loss of parking, construction impacts, and changes from upzoning areas from industrial to housing and business use (Ahrens et al. 2020, 17-21; CBS News 2014; City of Oakland 2011, 7-9). Residents communicated concerns about traffic safety, how elimination of stops could harm seniors and those with mobility impairments, how construction could shift sex trafficking to side streets, and gentrification and displacement (Ahrens et al. 2020, 37; Allen-Taylor 2012; David Kakishiba, CAC discussion, February 20, 2024). However, community members also acknowledged the potential benefits of investment in their neighborhoods such as reduced emissions (Ahrens et al. 2020, 20-21).



Figure 3. Mural “Gentrification Drives the Color Out of the Community”

Transportation investments in communities are often seen as precursors to gentrification, displacement, and the loss of community they represent (see **Figure 3**). Activism around these concerns was led by Allen Temple Baptist Church, East Bay Asian Youth Center, and the Unity Council. AC Transit’s response was to review bus stops for maximum efficiency coupled with accessibility; identify and remove low-demand bus stops; relocate and add bus stops near senior centers and medical facilities; and set up temporary parking lots to address loss of parking (City of Oakland Public Works Department 2013). The City of Oakland and AC Transit also established a business impact mitigation fund and technical assistance intended to keep businesses solvent during the construction period. However, community members involved in the planning process felt that these actions did not fully address their concerns. This report’s East Bay BRT case study was conceived to investigate to what extent the concerns community members expressed in the planning process have come to pass.

Richmond Rising

In 2018, the California Strategic Growth Council awarded the City of Richmond a \$170,000 planning grant, entitled “Planning for a Resilient Richmond.” This grant funded Richmond’s work to “advance the Strategic Growth Council’s sustainable communities objectives, such as improving air quality, improving water quality, reducing GHG emissions, improving transportation, and strengthening community resiliency to the impacts of climate change” (City of Richmond 2019). In coalition with the Richmond Community Foundation and The Trust for Public Land, the city identified several goals to address some of the environmental injustices facing residents of Richmond’s low-income communities of color. The Richmond Resilience Roadmap adopted by the City Council in 2020 laid out the following goals:

- Increase community services
- Provide job training and education
- Increase mobility
- Reduce pollution
- Increase energy independence and reduce long-term energy costs
- Increase housing security

In 2022, the California Strategic Growth Council awarded a \$35 million Transformative Climate Communities grant to the city to implement a series of complete streets, public wellness, energy efficiency, environmental protection, accessibility, and food access projects to address these goals. The City of Richmond created an open call for collaborators to select the projects, to which the CBOs GRID Alternatives, Groundwork Richmond, Rich City Rides, Trust for Public Land, Urban Tilth, and the Center for Global Healthy Cities at UC Berkeley responded. The City of Richmond initially supplied this group with a list of over 40 projects that supported resilience in the neighborhoods of Iron Triangle, Coronado, and Santa Fe (the project area). The project team narrowed down this list based on the above goals and the criteria of project readiness, compatibility with Strategic Growth Council grant guidelines, and public and environmental health co-benefits in the project area (City of Richmond 2019, 13). The final ten projects, known as Richmond Rising, include active transportation facilities, street lighting improvements, and an Americans with Disabilities (ADA) accessible garden (see **Figure 4**). Throughout this process, the City and the CBO partners each conducted outreach at community events to collect input and feedback from residents. Residents expressed concern about the city’s financial ability to maintain new infrastructure, and some stated that plans to improve the public transit accessibility would not increase their mobility as their jobs were not transit accessible. Nevertheless, Richmond Rising has strong community support due to the open, transparent selection process the city engaged in.

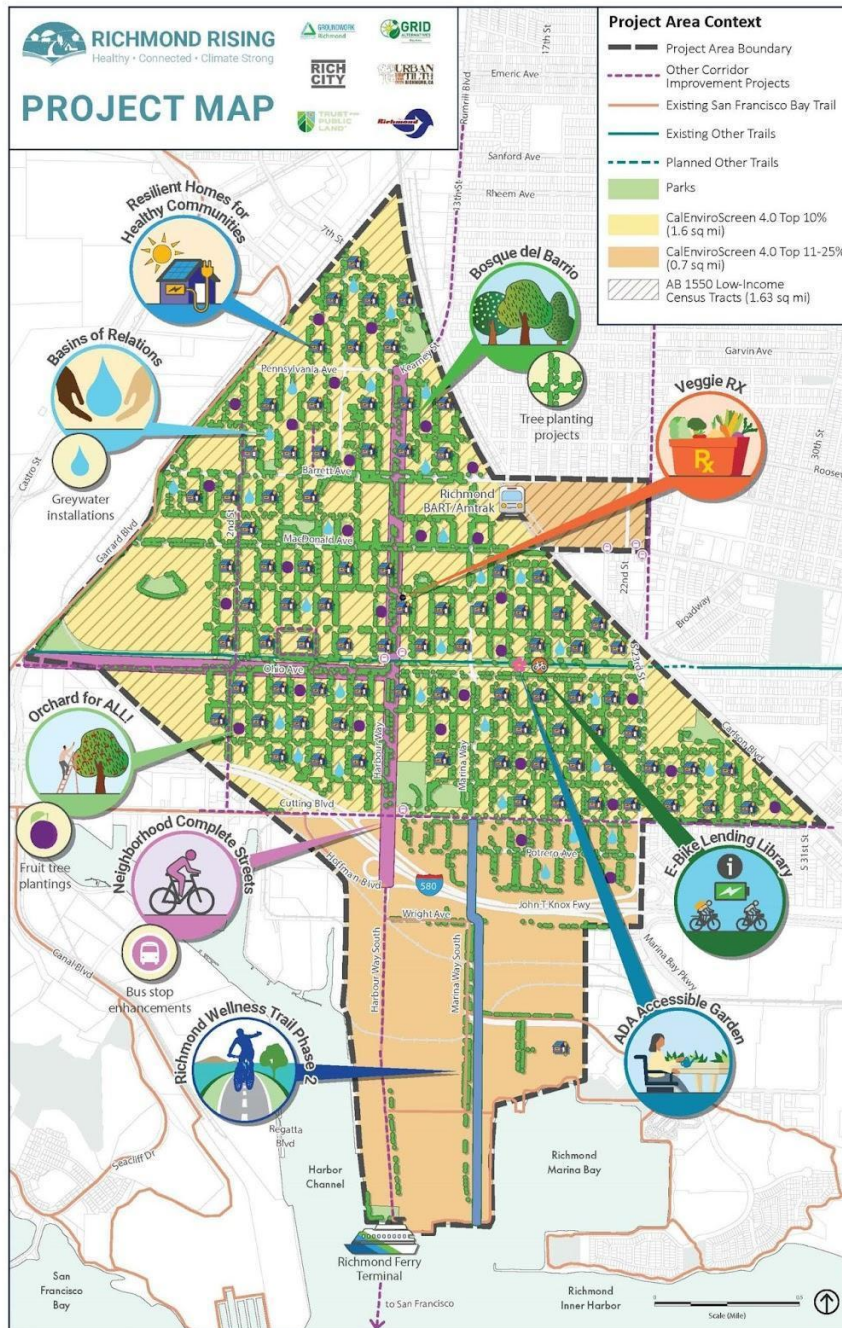


Figure 4. The Locations of the Ten Richmond Rising Projects

Source: City of Richmond website:

<https://www.ci.richmond.ca.us/ImageRepository/Document?documentID=67822>

Note: E-Bike Share is not pictured as it will be located throughout the project area.

The Richmond Rising Collaborative Stakeholder Committee was convened to oversee the City of Richmond planning department's implementation of the Richmond Rising projects. The committee is composed of a representative from the City of Richmond, each of the six Richmond Rising project collaborating CBOs mentioned above, two youth members nominated from among the Richmond Rising Youth Fellows program which hires young people 16 to 24 who live, work, or study in the program's target neighborhoods, and up to six community members. Community members must each live or operate a business, nonprofit, or grassroots or faith-based organization in the project area. The committee's bylaws lay out a clear role for the group to "make recommendations, offer input, and assist Project Leads in implementing project activities, who shall consider all public and Committee recommendations" (City of Richmond 2023). Each member has full voting rights on the committee, and the bylaws specify that the group will attempt to govern by consensus, though a two-thirds majority is sufficient to pass a motion if consensus can't be reached.

Research Approach

We used a case study approach to examine the impacts of the above-described transportation infrastructure projects on these two communities of color. This approach allowed us to analyze how different planning frameworks—top-down versus community-driven—shape social, economic, and mobility outcomes. The two cases—one retrospective and one prospective—reflect traditional planning versus transformative community planning in action. The case study method provides a comprehensive view of interrelated social, economic and historical dynamics within their real-life contexts (Flyvbjerg 2011). In particular, it enabled us to examine the implication of different approaches to transportation infrastructure investments for mobility justice.

To assess these impacts, we applied two key research frameworks:

1. Community-Based Participatory Action Research (CBPAR), which prioritizes co-learning and shared governance in research.
2. Racial Equity Impact Assessment (REIA), a structured tool for identifying the benefits, harms, and unintended consequences of transportation investments on racial and ethnic communities.

CBPAR fosters equitable, collaborative partnerships to address locally relevant issues, balance research with action, and disseminate findings through community channels (Israel et al. 2003). This study is grounded in principles of CBPAR. This involves developing research questions, vetting data sources and preliminary findings, and interpreting results all in collaboration with community members. When preliminary findings contradict the experiences of community members, the research team then revisits data sources and methodology to determine whether there is a gap or methodological issue in existing data sets and, if possible, finds alternative sources of data that precisely and accurately answer the questions being asked. CBPAR compels researchers to dig deeper and seek beyond conventional wisdom. This iterative process reflects CBPAR principles of co-learning, capacity building, and shared ownership of research outcomes (Minkler and Wallerstein 2011).

REIAs are a key tool for achieving distributional justice by identifying potential benefits, harms, and unintended consequences of a project before decisions are finalized. Distributive justice, which has long been a topic of emphasis in transportation planning, involves the fair allocation of resources and social goods among diverse community members with competing claims (Kaufman 2012). REIAs are employed to analyze equitable outcomes of transportation policies, plans, and projects.

REIAs systematically examine of how different racial/ethnic groups will likely be affected by a proposed action, and are used to minimize unanticipated adverse consequences in different contexts (Race Forward 2009). Conducting a REIA has become a widespread practice in helping to inform government decision-making. Cities that have a Department of Race and Equity, including Washington D.C., Seattle, Los Angeles, and Oakland, routinely conduct REIAs to help inform government decision-making. Given the historical role of traditional

transportation planning in perpetuating racial inequities, examining impacts on racial/ethnic groups is an essential part of expanding distributional justice in transportation.

Many jurisdictions and organizations use similar assessment tools such as Racial Justice Impact Analysis, Racial Equity Analysis, Equity Impact Analysis, and Minority Impacts Analysis. These methods all seek to understand the differential impacts a project or policy will have on various racial or ethnic groups, with the goal of helping planners reverse the tendency of race-neutral planning practices to disproportionately harm communities of color.

In this project we employed the principles of CBPAR to develop a REIA for each of the two chosen projects, as explained below.

Community-Based Participatory Action Research

The CBPAR approach guided our collaboration with a Community Advisory Council (CAC) convened for the East Oakland BRT case study and the Richmond Resident Advisory Council (RAC) for the Richmond Rising case study. These advisory groups, along with local community-based organizations, ensured that our research questions, analysis and findings remained aligned with community priorities and knowledge.

We recruited members for the East Oakland CAC from diverse racial, ethnic, and linguistic groups based on their prior involvement in the East Bay BRT or East Oakland planning processes. Native American, Asian, Latinx/Hispanic, Black, youth, senior, faith and immigrant group representatives all served on the East Oakland CAC.

We built an equitable partnership with the East Oakland CAC by moving at the speed of trust, ensuring all members fully understood and agreed on each research step before proceeding. While this slowed progress at times, it was essential to our goals of maintaining trust and aligning the research with community priorities. We co-created and vetted our research questions, analysis, and REIA findings with the members. Pre-existing relationships from prior collaborations made it possible for us to convene the group quickly without a formal partnership agreement, though we generally recommend such agreements to establish a strong foundation of trust for community-based participatory action research projects.

The CAC met monthly starting in February 2024. The research team led the meetings, in which we discussed the history of East Oakland and the BRT, asked community members what questions they wanted answered, and used that list to collaboratively define our research questions. The research team then conducted the data analysis independently but vetted our data sources and preliminary findings with them and asked for their help interpreting the findings.

For the Richmond Rising study, we worked closely with the Richmond RAC, a city-funded body engaged in a transformative community planning process consisting of a diverse group of Richmond residents working to implement the City's updated Housing Element by creating a Housing Equity Roadmap. The Richmond RAC

helped shape our racial equity assessment by vetting preliminary findings and contextualizing them within broader community experiences. We also vetted our findings with city employees and consulted a group of Richmond-based CBOs convened for the creation of the Housing Equity Roadmap and funded by the Fair Housing Advocates of Northern California. This facilitated direct engagement with stakeholders, ensuring that the study captured diverse perspectives on the anticipated impacts of new transportation infrastructure.

The Richmond Rising project, through extensive community collaboration, represents ongoing efforts by the City of Richmond to embed transformative community planning principles into infrastructure and housing investments. Unlike the East Bay BRT project, where community members reported that their concerns were largely disregarded, Richmond Rising has structured their project to actively include residents and CBOs in governance bodies in both planning and implementation activities. The project's processes and outcomes are also being documented by the UC Berkeley Center for Global Healthy Cities to provide a model for future planning efforts.

Racial Equity Impact Assessment

We performed a REIA for both the East Oakland and Richmond case studies, adapting the approach used by Race Forward (2009).

Typically, a REIA is organized into five sections: Overview, Background, Racial Equity Impacts, Further Considerations, and Assessment Limitations. These sections further ask the following questions, concluding whether the action or decision will benefit, harm, or have a negligible impact on specific racial and ethnic groups:

- **Identifying Stakeholders:** Which racial/ethnic groups may be most impacted by the proposal?
- **Engaging Stakeholders:** Have the identified stakeholders been informed, meaningfully involved, and authentically represented in the development process?
- **Identifying and Documenting Racial Inequities:** Which groups are advantaged/disadvantaged by the proposal?
- **Examining the Causes:** What are the root causes and significant factors causing the racial disparities?
- **Clarifying the Purpose:** Will the purpose of the proposal advance or prevent racial discrimination and inequities?
- **Considering Adverse Impacts:** What are the potential negative impacts to which racial groups from the proposal?
- **Advancing Equitable Impacts:** Will the proposal result in equitable benefits to racial/ethnic groups?
- **Examining Alternatives:** How can the proposal be changed to address potential negative impacts and create positive outcomes instead?

- **Ensuring Viability and Sustainability:** What resources are needed to ensure that the proposal is effectively implemented?
- **Identifying Success Indicators:** What, how, and who will be involved in defining whether or not the proposal achieves its desired outcomes?

By integrating quantitative data analysis with lived experience and community knowledge, our study presents a holistic view of the ways infrastructure decisions shape displacement, business closures, and mobility access in historically marginalized neighborhoods. See Appendices A and B for the REIAs we prepared for the East Oakland and Richmond projects.

Research Questions and Data Sources

For the East Oakland case study, the East Oakland CAC members helped us to select our research questions. First, did the East Bay BRT project fulfill AC Transit’s promises—improved bus speeds, shorter waits between buses, increased ridership, and improved station infrastructure and safety? Second, did the project lead to unintended consequences raised by the community during planning? Our assessment of the second question involved looking at housing unaffordability, gentrification, racial/ethnic displacement, homelessness, business closures, traffic accidents, and increased neighborhood sex trafficking. This analysis drew from a combination of quantitative and qualitative data, aligned with community-based research principles of balancing community knowledge with empirical data. We adopted the borders for ethnic enclaves from the City of Oakland Department of Transportation’s (OakDOT) 2021 East Oakland Mobility Action Plan, a joint transformative community planning effort undertaken by the City of Oakland, the East Oakland Collective, Transform, Just Cities, and numerous East Oakland residents (see **Figure 1** above). The EOMAP analysis used 2000 Census data and historic redlining maps to highlight areas impacted by housing and transportation policies. To capture the East Bay BRT’s localized effects, we incorporated census tracts along International Boulevard into the analysis. Our key data sources covering the years 2008-22 (pre, during and post-construction) were:

- 2000 and 2010 U.S. Census data and 5-year American Community Survey (ACS) estimates for 2008-2012, 2013-17 and 2018-22. We analyzed data from every census tract along International Boulevard, as well as the census tracts from OakDOT’s 2021 East Oakland Mobility Action Plan. The area of analysis was composed of the following census tracts: 4053.02, 4054.01, 4054.02, 4055, 4059.01, 4059.02, 4060, 4061, 4062.01, 4062.02, 4063, 4072-4075, 4077, 4084-4089, 4091-4096, 4103, and 4104.
- Zillow Observed Rent Index data to capture neighborhood-level housing unaffordability trends
- AC Transit bus trip data from spring 2019 and spring 2023 for bus ridership, speed, and headways

- Historical redlining maps from the University of Richmond’s Digital Scholarship Lab
- California Statewide Integrated Traffic Records System for collision data
- Oakland Crime Watch for police report data

For the Richmond Rising case study, we used data published in the Affirmatively Furthering Fair Housing section of the 2023 Housing Element Update to Richmond’s General Plan. These data were used to project the possible racial disparities in impacts from the three projects with mobility infrastructure impacts that are part of the Richmond Rising projects. After conducting our REIA, we vetted the findings with the Richmond RAC.

Findings and Analysis

East Oakland REIA

Finding 1: BRT design exacerbated existing traffic dangers

The BRT system was implemented in a narrow corridor that does not allow for bus lanes that are physically separated from general traffic. This heightened pre-existing traffic dangers along International Boulevard. According to data from the Statewide Integrated Traffic Records System, the number of traffic casualties along the route increased by 24 percent when BRT service began in 2020 and continued to increase in 2021 and 2022. At least two bus riders have been killed crossing the street to stations in the median (Fermoso 2023a; 2024). In 2024, the City of Oakland reported five auto-pedestrian fatalities along the BRT route in East Oakland (City of Oakland 2025).

International Boulevard was the most dangerous street in Oakland prior to the East Bay BRT project. From 2001 to 2010, eleven pedestrians were killed along International Boulevard, and nearby Foothill Boulevard was the next deadliest, with six fatalities (Miller 2011). Improving pedestrian safety was a key aspect of the BRT project. The Final Environmental Impact Statement/Report touted benefits to pedestrians from improved pedestrian road infrastructure and longer crossing times, median bus stations providing pedestrian refuges, and lower automotive speeds due to lane reductions (City of Oakland Public Works Department 2013). Nevertheless, International Boulevard has become more dangerous since the 1T line started operating in 2020.

Community accounts of traffic issues have been corroborated in media interviews. Jeanine Grayson, whose uncle, Joseph Morehouse Sr., was killed in a collision on International, told *The Oaklandside* that “The road is most definitely more dangerous than before...When it was being built, my grandma said ‘This is a death trap. It needs to go.’” (Fermoso 2023b).

Our analysis backs up the experiences shared with us by members of the East Oakland CAC. As shown in **Figure 5**, the number of people killed and injured in all types of traffic collisions within 100 feet of the BRT route in Oakland jumped 24 percent from 251 in 2019 to 310 in 2020 and continued to increase through 2022. Traffic casualties in the rest of Oakland declined 14 percent from 3,046 in 2019 to 2,607 in 2020, and stayed at that new low through 2022.³ This divergence in trends suggests that both impacts from construction

³ There are pronounced racial disparities in these casualty figures. Utilizing reports of the 56 Oakland traffic fatalities in 2022 and 2023 (Fermoso 2023a; 2024), we estimated that most of those who were killed were Black (36 percent) or Hispanic (38 percent), compared with 16 percent white and 12.5 percent Asian American. According to U.S. Census data, Oakland’s population is 30 percent white, 21 percent Black, 26 percent Hispanic, and 16 percent Asian American. In other words, there was a higher incidence of Blacks and Hispanics being killed in traffic incidents over this period than whites and Asian Americans. The races of the individuals involved were determined based on the photos and descriptions in the *Oaklandside* article where possible. When not available directly through *Oaklandside* reporting, some individuals’ races

as well as the new lane configuration may have contributed to the surge in incidents before and at the start of BRT service, as drivers who had previously been able to use the bus lane were now forced into a single lane of traffic, increasing congestion and creating opportunities for frustrated drivers to use the bus lanes to speed past the gridlock.

People injured and killed along International

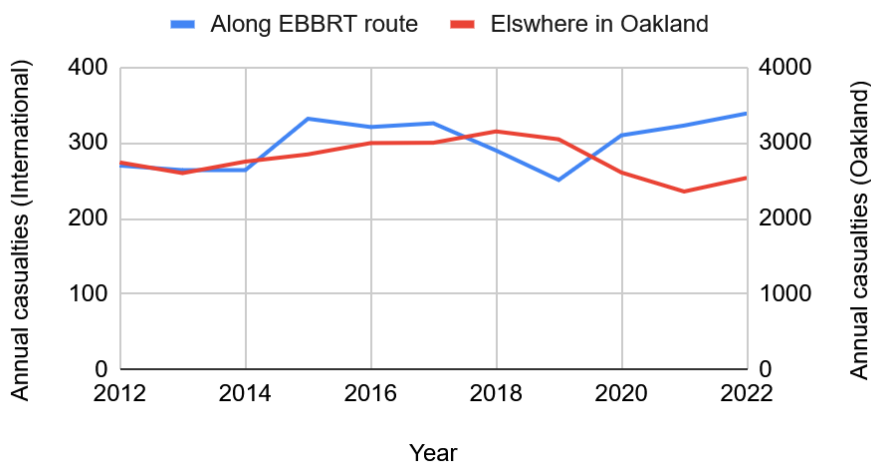


Figure 5. Traffic Casualties in Oakland by Location

Source: Statewide Integrated Traffic Records, 2023.

Our conversations with East Oakland CAC members reinforce this interpretation of the data. They reported that frustration at the elimination of a driving lane in each direction as well as many of the left turns off International has led some drivers to engage in dangerous and even reckless behaviors, such as speeding in the bus lane or jumping medians to make left turns. A 2023 traffic speed analysis by Traffic Violence Rapid Response, an Oakland-based traffic safety advocacy group, also found that 85th percentile speeds (the speed at or below which 85 percent of all vehicles are observed to travel under free-flowing conditions) increased in nearly every segment of the route from 2020 to 2022, showing that the corridor’s fastest drivers have increased their speeds. This speed increase is possible due to the bus lanes being nearly empty of traffic and encouraged by the congestion in the remaining car lane. The only part of International Boulevard that saw a reduction in 85th percentile speeds was the segment just south of the San Leandro border, which was also the only segment that did not install a bus-only lane (Traffic Violence Rapid Response 2023). This increase in reckless driving has impacted BRT riders, who are required to cross an increasingly dangerous street to access the median stations.

East Oakland CAC members also informed us that the reduction in the number of stops and their placement has impaired mobility access for vulnerable communities. Those most adversely affected by extended stop

were determined through police records. Some individuals’ races were assigned as “Hispanic” if they had a Spanish name. Only one victim’s race was indeterminate based on these methods.

spacing are older adults, people with disabilities, families with children, and low-wage night workers; they must travel longer distances on foot to access transit services in an already compromised travel corridor.

Finding 2: BRT construction and barriers to mitigation funds may have displaced legacy businesses

Drawing on the City of Oakland's East Oakland Mobility Action Plan (EOMAP), we document a substantial wave of business closures during BRT construction. EOMAP reports the scale and timing; our comparative analysis (vs. statewide trends and Piedmont Avenue) indicates construction-related disruption and parking loss were important contributors. The City of Oakland Department of Transportation's East Oakland Mobility Action Plan analysis found that 502 businesses out of 1,356 businesses had closed by 2019, representing 37 percent of all businesses (City of Oakland 2021). Out of a sample of 52 of these closed businesses, 27 (52 percent) had been legacy businesses (defined as those open for at least five years or more before 2014). Business Employment Dynamics data from the Federal Bureau of Labor Statistics consistently show that 90 percent or more of businesses that have survived for at least five years survive to the next year, and 68 percent of California businesses founded in 2009 that survived to 2014 were still open in 2019. The high rate of legacy business closure was unusual for East Oakland: a 2015 analysis by Main Street Launch found that 66 percent of businesses along International Boulevard had been in business for five years or more, and 43 percent had been in business for 10 or more, (Ahrens et al. 2020, 42). That year, 64 percent of California businesses were 5 years old or more, and 42 percent were 10 years old or more. The loss of legacy businesses in a neighborhood can contribute to the loss of community identity and belonging, and the acceleration of residential gentrification and displacement (City of Oakland Department of Transportation 2021, 31). Notably, these closures all occurred before the COVID-19 pandemic, eliminating the confounding effect of pandemic lockdowns from the effects of the BRT construction.

While some new businesses opened from 2014 to 2019, the total number of businesses licensed along International Boulevard in 2019 was 1,147, a 15 percent decline over the five-year period (City of Oakland Department of Transportation 2021, 36). Over the same period, Business Employment Dynamics data show that the number of businesses in the state of California increased 14 percent. The number licensed along Piedmont Avenue, a more affluent Oakland corridor, jumped 159 percent from 163 to 422 (City of Oakland Department of Transportation 2021, 36).

Because of the demographics of East Oakland, these business closures likely had a disproportionate impact on low-income people of color. The 2015 Main Street Launch analysis found that 84 percent of business owners along International Boulevard were minorities, 37 percent were women, and 67 percent had household incomes of less than \$60,000 (Ahrens et al. 2020, 42).

In response to concerns raised during the planning process by East Oakland residents, including some who later served on the East Oakland CAC for this case study, AC Transit and the City of Oakland created mitigation plans for businesses, loss of parking, and construction impacts. The city developed a Business Impact Mitigation Plan, which included creating and funding a Business Impact Mitigation Fund, which paid for

technical assistance and construction impact mitigations. It also created a Business Assistance and Sustainability Fund using one million dollars of municipal funds supplemented with one million dollars from the U.S. Department of Housing and Urban Development Community Development Block Grant program, which provided “direct monetary assistance due to adverse permanent impacts from BRT infrastructure” (City of Oakland Public Works Department 2016).

In response to activism by Allen Temple Baptist Church on behalf of seniors and other people with mobility impairments AC Transit relocated three proposed BRT stations and created two more (Ahrens et al. 2020, 24). AC Transit also funded a Business Technical Assistance Project that provided outreach and education to Corridor businesses and constructed two off-street parking lots to replace lost street parking in the Fruitvale and Elmhurst neighborhoods. However, these actions only addressed direct construction impacts and did not address concerns about business displacement due to lost business or rising commercial rents caused by gentrification. A 2016 staff report to the City of Oakland states that “BRT corridor business owner groups continue to voice concerns that protracted and or uncontrolled construction activities may spell disaster for existing businesses. AC Transit design has been consistent in its response that. . .no business interruption program is required under the BRT Project” (City of Oakland Public Works Department 2016, 9).

The EOMAP analysis documented significant administrative and eligibility barriers and very low disbursement through early 2020. Corroborated by conversations with our CAC and the timing of closures, these barriers likely contributed to business failures. Poor implementation of the programs made it extremely difficult for businesses to access the business assistance funds. As of January 2020, only two businesses had received money: one for business relocation and one for equipment (Ahrens et al. 2020, 41). Business owners in East Oakland interviewed for the 2021 OakDOT East Oakland Mobility Action Plan identified four main barriers:

- Long and cumbersome application form and process.
- Funds were initially not available to address revenue loss from construction impacts and the operating costs needed to sustain the business.
- Funding structure as a reimbursement program prevented small businesses with cash flow issues from accessing the program.
- Mailers and phone calls from the city and technical assistance providers were not being received by business owners because their businesses were closed due to COVID-19 shelter-in-place orders (City of Oakland Department of Transportation 2021, 33).

Implementation issues with the program were not the only challenges facing business owners. Construction impacts such as traffic and loss of parking were cited by Sean Perry, owner of Perry’s Fine French Furniture, as the final blow leading to the closure of his family’s 70-year-old business. According to Mr. Perry, “Two lanes of traffic in either direction were closed, so if there’s a truck backing up in front of your building or is going to double park in the street to off-load stuff to a liquor store or whatever, it’s going to stop that flow of traffic completely” (Tadayon 2018). Technical assistance consultants hired for the Business Impact Mitigation Fund also reported that some businesses encountered resistance from their landlords to signing new leases due to

expected increases in land value due to the BRT project (Ahrens et al. 2020, 41). These community experiences show that real estate speculation was occurring in response to the BRT project and harming small businesses.

In response to community activism around these barriers and facing the pressures of the COVID-19 emergency, in May 2020, the City of Oakland restructured the Business Assistance and Sustainability Fund as an operating cost grant for businesses impacted by COVID-19. By September of that year, most of the funds had been disbursed and applications had been received for the remaining funds (City of Oakland Department of Transportation 2021, 33). This came too late for many businesses impacted by the construction, however.

Finding 3: BRT may have contributed to pre-existing residential displacement and gentrification

The International corridor and vicinity have seen increases in commercial and residential rents, increases in the population of higher-income residents, racial/ethnic displacement, and landlords refusing to sign extended lease terms or make habitability repairs.

From 2012, before construction began, to 2022, after BRT service started, median household incomes grew 33 percent (compared to a citywide increase of 42 percent), and residential rents in neighborhoods along the BRT line rose 35 percent, similar to the citywide change of 31 percent (adjusted for inflation).⁴ Pre-existing racial displacement trends continued in Black, Asian, and Latinx/Hispanic ethnic enclaves. In addition, homeless encampments in East Oakland increased from 26 in 2012 to 131 in 2017. In neighborhoods along and in the vicinity of the corridor, the project may have exacerbated these problems.

BRT services with dedicated lanes have been attributed to increases in land values, particularly for multifamily housing (Acton et al. 2022). Of particular interest, this study showed that AC Transit's 72R "BRT lite" service on San Pablo Avenue in Oakland led to increased land values, which the authors attribute to the competitive real estate market, traffic congestion, and high public transit ridership in the greater metropolitan area. These conditions, particularly throughout the greater Bay Area, only became more pronounced over the course of the East Bay BRT construction. The conditions were right for a new BRT system to lead to higher land values, particularly for multifamily housing. We would therefore expect to see these higher property values passed on to tenants in the form of higher rents.

Over the course of BRT planning and construction in East Oakland, higher-income white residents moved into the area, possibly in part due to the prospect of improved transportation. According to American Community

⁴ This comparison was complicated by a Zillow server crash that led to the loss of much of their Zillow Observed Rent Index (ZORI) data. Our research team had previously saved ZORI data for Oakland neighborhoods, but not Oakland at large, from 2010 to 2019, and Zillow has since restored some data for Oakland ZIP codes from 2019 to the present. To calculate the percent change for neighborhood ZORIs, for each neighborhood with available data from 2012 to 2019, we projected the ZORI forward to 2022 using the annual percent change for the ZORI of the corresponding ZIP code. We then averaged these percent changes to get the overall percent change for the neighborhoods of interest. For the citywide ZORI change, we calculated the percent change from 2012 to 2017 for each neighborhood using the old neighborhood-level ZORIs, then averaged that change to estimate the citywide percent change. We then calculated the 2017 to 2022 percent change using new city-level ZORI and combined those two percent changes.

Survey (ACS) data, the white proportion of the population increased in 21 of the 30 census tracts we analyzed from 2012 to 2017, and in 20 of the 30 tracts from 2017 to 2022. Overall, the white population increased by 5,672 in these census tracts from 2012 to 2022, a 69 percent increase. In addition to the attraction of new transportation infrastructure, some of this demographic shift may have been caused by the marketing of foreclosed properties to higher-income residents. However, determining the causes will require follow-up qualitative research.

As white residents moved in, Black populations fell. From 2012 to 2022, the number of Black residents in the census tracts we studied fell by 3,857 (11 percent), the Hispanic population increased by 7,052 (12 percent), and the Asian American population increased by 588 (3 percent). However, different Asian ethnicities are not disaggregated in census data, which could obscure lower-income Asian American residents such as the Southeast Asian populations in East Oakland being displaced by higher-income newcomers. Indeed, from 2012 to 2017, the Asian American population in the tracts we studied fell by 1,032, then rebounded by 1,620 from 2017 to 2022, suggesting a possible demographic shift in the Asian American population itself.

The shifts in racial demographics were accompanied by increases in income as well. Median Household Income (MHI) increased on average by 78 percent in the census tracts we studied (adjusted for inflation). However, these increases were greatest for white and Asian American households. From 2012 to 2022, the census tract-level MHI for white households increased by an average of 164 percent; by 117 percent for Asian American households; and by 73 percent and 76 percent for Black and Hispanic households, respectively. This suggests that the new white and Asian residents may have had higher incomes than existing East Oakland residents, though further research will be required to prove or disprove this hypothesis.

The possible displacement of lower-income non-white residents from East Oakland is at least consistent with historical patterns of gentrification related to transportation projects. While we only had rent data from 2012 to 2022 for Clinton, East Peralta, Eastmont, Frick, Fruitvale, Merritt, and Reservoir Hill, these neighborhoods saw large rent increases in the range of 53 percent to 71 percent from 2012 to 2017. The Merritt and Frick neighborhoods exemplify these trends (see **Table 1**).

Table 1. Housing trends in East Oakland Frick and Merritt neighborhoods

Neighborhood	Frick		Merritt	
Year	2012	2022	2012	2022
Zillow Observed Rent Index	\$1,509	\$2,786	\$1,771	\$2,912
Predominant racial group(s)	Black/African American Latinx/Hispanic		Latinx/Hispanic Asian American	White Asian American
Population of predominant racial groups	5,095 (Black/African American) 3,988 (Latinx/Hispanic)	3,311 (Black/African American) 4,557 (Latinx/Hispanic)	940 (Latinx/Hispanic) 973 (Asian American)	159 (Latinx/Hispanic) 795 (Asian American)
Percent change in predominant racial group population	–	-35% (Black/African American) 14% (Latinx/Hispanic)	–	-83% (Latinx/Hispanic) -18% (Asian American)
Predominant racial group MHI	\$48,572 (Black/African American) \$42,951 (Latinx/Hispanic)	\$80,426 (Black/African American) \$86,171 (Latinx/Hispanic)	\$30,741 (Latinx/Hispanic) \$17,917 (Asian American)	\$65,972 (Latinx/Hispanic) No data (Asian American)
Neighborhood	Frick		Merritt	
Year	2012	2022	2012	2022
Percent change in predominant racial group MHI	–	66% (Black/African American) 101% (Latinx/Hispanic)	–	115% (Latinx/Hispanic) No data (Asian American)
White population	1,066	2,569	492	876

Neighborhood	Frick		Merritt	
Year	2012	2022	2012	2022
Percent change in white population	–	141%	–	78%
White MHI	\$65,944	No data ⁵	\$30,537	\$127,794
Percent change in white MHI	–	No data	–	126%

Sources: ACS 5-year tables (B03002: Hispanic or Latino Origin by Race, S1903: Median Income in the Past 12 Months (in 2023 Inflation-Adjusted Dollars), Zillow Observed Rent Index.

While the Frick neighborhood remained a predominantly Black/African American and Latinx/Hispanic enclave from 2012 to 2022, the Black population declined by 35 percent. In contrast, Frick’s white population significantly increased by 141 percent. This racial demographic shift was accompanied by a 46 percent increase in the Zillow observed rent index.

From 2012 to 2022, the Merritt neighborhood transformed from a lower income Latinx/Hispanic and Asian American enclave to a predominantly higher income Asian American and white neighborhood. The Zillow observed rent index in Merritt increased by 39 percent as the Latinx/Hispanic/Hispanic population fell by 83 percent and the Asian American population declined by 18 percent. The white population, meanwhile, grew 78 percent. These shifts highlight racial disparities in displacement, with residents of color in former ethnic enclaves disproportionately affected.

High housing costs are a major cause of homelessness (Colburn and Aldern 2022: 127-130). Eleven percent of respondents in the 2019 Alameda County homelessness point-in-time count indicated that rent increases were the main cause of their homelessness, making it the third most common cause (Alameda County Housing and Community Development Department 2019, 80). Another seven percent of the people interviewed for the 2019 count cited eviction/foreclosure as the main reason for their homelessness, and six percent cited family or friends being unable to afford to let them stay in their homes (Alameda County Housing and Community Development Department 2019, 80). We should therefore expect to see homelessness increase with rising housing costs. Indeed, as rents in East Oakland rose, the number of people in Oakland experiencing homelessness rose 130 percent, from 2,191 in 2015 to 5,055 in 2022 (Everyone Counts 2017; 2022). Reports of homeless encampments in East Oakland also increased, from 26 in 2012 to 131 in 2017 (Anti-Eviction Mapping Project 2018). These trends disproportionately affected Black residents, who represented 53 percent

⁵ We were unable to calculate the white Median Household Income (MHI) for Frick in 2022 as there was insufficient data for one of the census tracts that make up the neighborhood. However, the white MHI more than doubled for the census tract with the larger white population, from \$71,875 to \$144,531.

of those experiencing homelessness in 2022, despite being only 23 percent of Oakland’s total population (Applied Survey Research 2022).

Further research is needed to investigate the causes of gentrification and displacement in East Oakland. For instance, it would be valuable to interview landlords to see why they raised residential rents. Speaking with new residents might yield insights into the reasons for their moves into former East Oakland ethnic enclaves. Interviews with homeless residents of East Oakland could also help us understand the connections between gentrification, displacement, and homelessness.

Finding 4: Community crime concerns were insufficiently addressed in BRT planning and implementation

BRT construction changed the spatial distribution of illicit street activities. In particular, construction pushed sex trafficking networks onto side streets and out of public view. Oakland Police reports from CrimeWatch of sex trafficking on East 15th Street rose from five in 2014 to 65 in 2019, peaking again at 69 in 2021 (see **Figure 6**). Reports along International Boulevard peaked at 133 in 2017 before a precipitous decline in 2018. Reports in the rest of Oakland followed a similar but more pronounced trajectory, peaking at 176 in 2016 before plummeting. The increase in sex trafficking on side streets has had devastating effects on local residents, especially those living near schools. Sex traffickers have reportedly targeted girls as young as 14 outside Roosevelt Middle School on East 19th Street (Sierra 2023).

After peaking in 2021, reports of sex trafficking along E. 15th dropped back down to only three in 2023, and reports along International have remained low relative to their heights from 2015 to 2017. However, police reports do not necessarily reflect the true levels of sex trafficking occurring due to under-reporting, officer resistance to paperwork, and social stigma. Indeed, East Oakland residents continue to report unacceptable levels of sex trafficking in their neighborhoods, particularly in the San Antonio area (Horta 2024; Lin 2024).

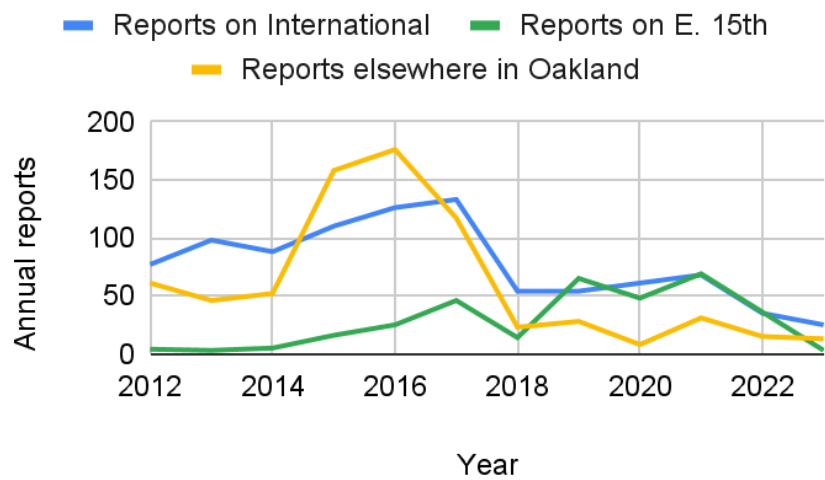


Figure 6. Comparative Sex Trafficking Police Reports by Location

Source: Oakland Crimewatch, 2024.

Most sex trafficking victims in Oakland are women and girls of color, reflecting broader socioeconomic vulnerabilities. According to the FBI's Crime Data Explorer, 54 percent of those arrested for prostitution by Oakland police over the past decade were Black and 34 percent were white (Federal Bureau of Investigation 2024). However, these data do not track the number of Latinx/Hispanic people arrested in East Oakland. Our complete REIA for the East Bay BRT project can be found in Appendix A.

Richmond REIA

While Richmond Rising contains ten different projects, only three involve changes to existing mobility infrastructure: Neighborhood Complete Streets, Richmond Wellness Trail, and E-Bike Share. As the E-Bike Lending Library will not make changes to mobility infrastructure, we excluded that project from our study. Given our focus on transportation planning, we also excluded the Resilient Homes, Basins of Relations, Bosque del Barrio, ADA Accessible Garden, Orchard for All, or Veggie RX projects. Furthermore, because all three projects are in the same neighborhood, serve the same populations, and share similar aims, we conducted a single REIA for the Neighborhood Complete Streets, Richmond Wellness Trail, and E-Bike Share projects.

Finding 1: Planned Mobility Infrastructure Projects Can Potentially Contribute to Business Displacement

As shown in emerging academic literature like the Acton study and the East Bay BRT case study, transportation infrastructure projects in low-income communities of color have the potential to contribute to gentrification and displacement through increased land values. Loss of parking and construction impacts can also lead to business closures if remedial steps are not taken. Fears of gentrification and displacement are not unfounded in Richmond. Former Mayor Tom Butt spoke plainly about transportation infrastructure as an investment to attract wealthier residents to the city. The mayor expressed hope in 2017 that the opening of a new ferry terminal with service to San Francisco would give people who “work in some tech industry in San Francisco, an opportunity to live in Richmond at a very low rate compared to say San Francisco or Oakland” (Harrison 2017).

Based on our REIA of Neighborhood Complete Streets, the Richmond Wellness Trail (Phase 2), and E-Bike Share, we identify three main displacement pathways: (1) construction-phase access disruptions and parking loss for small businesses along project corridors; (2) longer-term curb reallocation that reduces customer access; and (3) market signaling from improved bike connectivity to the ferry that can elevate commercial and residential rents. The City's Displacement Avoidance Plan includes measures that speak to longer-term risks, such as community ownership strategies (e.g., a Community Land Trust policy) and small-business supports. Implementation measures to manage construction-phase business impacts and equitable design for E-Bike Share are provided in Section C (Richmond Recommendations) and Appendix B (Further Considerations).

Finding 2: Richmond’s Transformative Community Planning Process is Working to Address Potential Harms

Richmond Rising has committed to a transformative community planning process through the Collaborative Stakeholder Committee and a Youth Fellows program. According to the November 19, 2024, City Council report (City of Richmond 2024), the CSC has adopted bylaws and recruited four community members, while members are currently being recruited for the Youth Fellows program. The committee’s commitment in its bylaws to consensus and informed decision-making is encouraging. By bringing community stakeholders into planning and implementation, the Richmond Rising project is practicing transformative community planning. Crucially, this process builds community capacity for future planning and empowers community members to influence decision making.

In response to safety concerns raised by residents who actively participated in the committee meetings and townhalls organized for the city’s Neighborhood Complete Streets project, the City applied for additional funding to supplement the Richmond Wellness Trail and Neighborhood Complete Streets projects with additional connectivity and safety features for pedestrians, focusing on schools, youth, and people who cannot drive. The city’s responses to the concerns raised by community stakeholders in its planning process demonstrate its commitment to transformative community planning principles.

The City of Richmond also worked with Richmond LAND, a local CBO dedicated to community land stewardship, to create a Displacement Avoidance Plan, which calls for the “development and adoption of a Renter Access Ordinance, Community Land Trust policy, [Accessory Dwelling Unit (ADU)] toolkit [to make it easier for homeowners to design and build ADUs], Buy Local Campaign, and Façade Improvement Pilot Program for businesses in the Project Area” (Velasco et al. 2023). The Plan creates opportunities for impacted businesses to benefit from investment and addresses several displacement risks, but gaps remain, especially around construction-phase business interruption (access/parking and revenue loss) and near-term commercial rent pressures that were central in East Oakland. Additional implementation measures will be needed to fully mitigate those risks. Our REIA for the Richmond Rising case study can be found in Appendix B.

Policy Recommendations

Overall Recommendations

Local Governments Can Advance Social Equity by Requiring Social Impact Assessments, such as REIA, and Harm Prevention as Part of the Project Approval Process

Local governments already use Environmental Impact Reports in the interests of protecting the environment. Once the impacts are projected, the city can then condition approval of a project on a specific set of mitigation measures. Social impact assessments, such as the REIA, would accomplish a similar goal of protecting the interests of communities that have historically been disenfranchised or marginalized. By implementing this system during the East Bay BRT planning stages, AC Transit and the City of Oakland might have addressed the economic impacts of transportation infrastructure—issues voiced by concerned East Oakland residents—that fell outside the scope of the environmental impact review, such as gentrification and displacement caused by real estate speculation. Social impact assessments, like environmental impact reviews, would identify foreseeable problems which cities could then require project planners to address by conditioning project approvals.

Transportation Agencies and Local Governments Can Work with a Community Advisory Committee to Inform Project Planning, Design, Construction, and Implementation

Planners across public agencies can avoid harming communities by adopting community-centered methods. As employed in our research approach, a community advisory committee representing the community's diversity can be convened for project planning, construction, and implementation to ensure it meets the needs of residents and sufficiently addresses their concerns. These collaborations should employ the principles of CBPAR, such as co-ownership of work products and power sharing. Additionally, local agencies should require equity impact analyses during the planning phase.

East Oakland Recommendations

The City of Oakland could consider the following recommendations to address continuing concerns raised by East Oakland residents about the East Bay BRT service and to help avoid similar problems with future transportation improvement efforts.

Implement Context-Sensitive Design Changes to BRT Infrastructure to Reduce Traffic Dangers for All

The City of Oakland and AC Transit could collaborate with community advocacy groups to address design elements that may be contributing to an increase in traffic accidents. Transit remains an essential part of

accessibility, especially for communities in East Oakland. BRT can play a role in improving accessibility, but its current design could be augmented beyond existing BRT Service Design Guidelines to take into account the social and physical context of International Boulevard. For example, the Guidelines could recommend considering the impact on riders from having center median stations through analyzing the current traffic safety issues, or advise against the conversion of left-turn lanes into through lanes that increase speeds; preserve essential loading/ADA spaces, short-term customer parking, and designated truck access routes that are essential for corridor businesses.

Several cities have successfully adapted BRT designs to improve pedestrian safety and reduce traffic conflicts. Well-designed pedestrian crossings are critical to reducing conflicts between BRT and pedestrians, a known issue in many urban corridors (Han and Kim 2008). In Johannesburg, South Africa, for example, the installation of signalized pedestrian crossings and protected right-turn phases has been key to reducing conflicts between BRT and general traffic (Brislin 2009). Similarly, the Las Vegas BRT system introduced a "BRT Station" concept that integrates mid-block crossings and pedestrian-friendly infrastructure to improve accessibility and safety (Carolin and Gross 2009).

Furthermore, tactile ground surface indicators and dedicated pedestrian pathways have been successfully implemented in South Africa to improve accessibility for visually impaired pedestrians and prevent jaywalking near BRT stations (Combrinck 2014). Overall best practices from these studies on BRT stop design emphasize the need for signalized crossings near stops, pedestrian bridges, and clear pedestrian pathways to reduce conflicts and improve passenger safety.

By incorporating these proven safety measures, Oakland's BRT system can be adapted to better serve communities, particularly vulnerable populations such as elderly residents, children, and families. Implementing signalized pedestrian crossings, well-designed station environments, and traffic calming elements can help to improve mobility without increasing traffic injuries and fatalities.

Include Anti-displacement Measures in Plans for Transit-Oriented Development in Low-income Communities of Color

We urge the City of Oakland to work with local community organizations to support anti-displacement efforts. For example, the city could prioritize the \$100 million raised by Rise East Oakland to purchase commercial properties to be placed in a community land trust to assure permanent affordability for small business owners. In addition, the city and Alameda County could require that any affordable housing they fund includes below-market rate retail commercial rental space. Anti-displacement measures such as these should be put in place prior to the launch of major transportation projects like BRT.

Because real estate speculation that can accompany transportation investments can lead to rent increases, gentrification, and displacement in low-income communities of color, anti-displacement measures are essential to keeping these communities intact. One such measure would be conditioning approval of new affordable housing along corridors with transportation improvements on giving preference to current or displaced

residents of the neighborhood. Using neighborhood MHI rather than city or regional MHI when calculating rents in these types of projects would help ensure that the new housing is affordable for the neighborhood's existing residents. If these types of policies had been in place during the development of the East Bay BRT, some of the people displaced from East Oakland may have been able to stay in their longtime communities.

Displacing people and businesses from a project area can result in the new infrastructure benefiting people other than the target populations and the failure of the project to meet its own goals. If a transportation project like BRT is intended to encourage drivers to switch to transit, displacement can undercut that effort by attracting wealthier residents who can afford the costs associated with driving and use transit only when it is convenient. These demographic shifts can then displace current transit users to transit-poor exurbs, forcing them to drive more. More fundamentally, a project that strives for racial equity necessarily fails if the low-income communities of color it seeks to serve are displaced by its creation.

Standardize, Simplify and Expand Access to Business Impact Mitigation Funds to Prevent Business Closures

Business mitigation funds could be made standard for infrastructure projects that would impact small businesses. While transit agencies may not be able to use federal funds for these purposes, city governments can create separate business mitigation funds for transportation projects that have significant impacts on local businesses.

The application process should be restructured to help small businesses access financial support more easily. Funds could be structured as grants rather than reimbursements to protect small businesses from delays or financial gaps during construction.

Because federal transportation funds such as Small Starts grants are limited to specific uses, local governments that wish to implement prevention and remediation strategies must often locate other sources of funding. Providing easily accessible business impact mitigation funds could be made standard practice to help small businesses make it through the disruption caused by construction. The application process should be simple and streamlined, as many small business owners lack the facility to complete lengthy applications, or they may lack appropriate financial documentation, as many small business owners also do their own accounting with little to no training. Business impact mitigation funds could also be structured as cash grants rather than reimbursements to allow businesses with low cash flow to benefit. By making business impact mitigation funds easier to secure and structuring them as grants, the City of Oakland might have helped hundreds of small businesses remain open after BRT construction commenced. This would have benefitted the city as well by keeping these businesses in the tax base.

Work with Community Leaders to Address Unintended Impacts of Transit Infrastructure

The City of Oakland can support community-led initiatives informed by community-based knowledge about the potential broader impacts of the BRT project. In providing this support, the city can build trust with impacted

residents and grassroots organizations whose needs and efforts have historically gone unacknowledged. Additionally, the conditions for project approval could use a more holistic concept of safety that addresses the ripple effects they trigger, such as changes in sex trafficking activities.

Richmond Recommendations

Consider Additional Anti-Displacement Measures

As part of its Displacement Avoidance Plan, the City should implement anti-displacement measures concurrently with construction and operations. Consistent with the Plan and our REIA (Appendix B), prioritize a Business Impact Mitigation Fund with up-front grants (not reimbursement-only), curb access management that maintains ADA/loading and short-term customer parking near storefronts, and community ownership strategies (e.g., the Plan's Community Land Trust policy) near the Wellness Trail and Complete Streets corridors, while continuing Buy Local and Façade Improvement supports. Richmond could consider integrating access to anti-displacement resources as part of community engagement, defining affordability according to neighborhood incomes rather than regional incomes, and prioritizing current and displaced Richmond residents for new affordable housing units. The lessons learned from the East Oakland BRT project suggest that the city could address business displacement by creating a business impact mitigation fund that distributes grants to businesses in anticipation of revenues lost due to construction impacts.

Continue Using Transformative Community Planning

As we saw in the EBBRT process, the importance of community involvement in development continues through the planning and implementation stages. The City of Richmond has so far conducted its planning according to the principles of Transformative Community Planning and should continue doing so throughout the implementation of the Richmond Rising projects. Use the CSC and Youth Fellows to co-decide construction phasing and curb changes and to adopt E-Bike Share equity features such as discounted/cash memberships, station siting at affordable housing and community hubs, secure parking, and community ambassador programming (see Appendix B). Engaging in community partnerships, shared decision-making, and paying due attention to feedback from residents, will be essential to achieve racial equity.

Implications for Researchers

Researchers Should Adopt Trauma-Informed Practices and Use Culturally Relevant Materials When Working with the Community

In working with the East Oakland CAC, we were reminded of the importance of enabling the people directly impacted by a project or policy to define the research questions to be investigated. We relied heavily on the CAC members to define the issues that were associated with the BRT project and its construction from their perspective. The questions the CAC members raised addressed real problems facing their communities, helped to define our research program, and informed our findings.

Our experiences with the East Oakland CAC also informed our meeting facilitation practices, particularly how we designed our slide decks. Early on, we noticed that CAC members were having trouble following our presentations because we were presenting as we would to fellow academics. Because the purpose of a community advisory committee is to bring their lived experience and local knowledge to the research project, and not to vet the minutiae of data sources and methodology, we adjusted our presentations to focus on the broader themes of our findings. For this reason, we began including only a few succinct, high-level findings on each slide, and created slides at the end of each deck with more in-depth figures and statistics in case members wanted to dig deeper into any particular result. In addition to the content of the slides, we also heard from CAC members that they appreciated when our slides showed images of street art in their neighborhoods, a practice which made them feel their neighborhoods were seen and valued. We began photographing street art with themes relevant to our research focus when travelling through East Oakland for inclusion in our presentations. The archive of murals on the Oakland Local Wiki was an invaluable resource for finding high-quality images as well.

East Oakland CAC meetings led to discussions on best practices for discussing sensitive topics, such as the displacement of people of color from ethnic enclaves. This displacement, which participants experienced as the loss of friends, neighbors, and local businesses, was deeply painful. CAC members suggested three strategies for constructively addressing traumatic topics: celebrating community strengths alongside challenges; drawing on historical examples of resilience and justice; and connecting findings to actionable steps that promote justice (underlining the “action” in community-based participatory action research). This important guidance helps us advance the emerging methodology of trauma-informed research (Edelman 2023).

The Involvement of the CAC Strengthened Research Questions, Methodology, Findings, and Conclusions

The involvement of the East Oakland CAC in our research improved both the research process and our findings. Enabling the CAC to define our research questions led to unanticipated avenues of research. For example, CAC members suggested investigating the relocation of sex trafficking in response to BRT construction, a topic we would otherwise have overlooked. The CAC vetted our work, guiding our choice of data sources and the conclusions we drew from our findings. Their feedback prompted us to re-evaluate the ACS as a source for rent data when our preliminary housing unaffordability analysis didn't align with their lived experiences, which led us to reconsider using Zillow data. We had initially decided not to use Zillow data as it did not exist for all neighborhoods over the time period of our study. However, it was more appropriate for our purposes, as Zillow data was designed to answer the question, "what might a prospective renter expect to pay for an apartment today?" while the ACS answers the question, "what is the median renter currently paying for rent?" Additionally, the CAC was invaluable for highlighting the ways East Oakland residents interact with transportation infrastructure and their attitudes toward local government and AC Transit. In a discussion on reckless driving, for example, we learned about dangerous behaviors such as turning left over the median which we had never observed.

Funders Who Wish to Support CBPAR Should Allow for More Flexibility in the Application Process and in How Funding is Disbursed

Our work with both of our community advisory councils revealed lessons for funders who want to support the more widespread adoption of CBPAR as a research methodology. First, the application for the UC Institute of Transportation Studies grant that funded our work required us to define our research questions before even convening the councils. However, allowing community members to guide the direction of research is a core principle of CBPAR. A more useful way for funders to evaluate grant applications for CBPAR projects might be to ask applicants to define their overarching research goals, discuss their plans for a community-led process to define the research questions, and describe how their research will build capacity among community participants and support action on the topics of concern.

CBPAR is also made more difficult by bureaucratic and financial barriers. Funders rarely accommodate paying community members as equal participants in the research process, which reinforces the researcher-subject power dynamic that CBPAR was created in part to disrupt. It is also very challenging for university financial systems to expeditiously process community stipend payments. One solution is for university researchers to partner with community-based organizations who have the capacity to become university subawardees or vendors. These community-based partners can then process community payments first while awaiting invoice reimbursements from the university.

Discussion

As discussed above, many of the concerns raised by residents and community advocates throughout the East Bay BRT planning process came about. The CAC shared concerns regarding housing unaffordability, gentrification, racial/ethnic displacement, business closures, traffic violence⁶, increased sex trafficking in residential neighborhoods, and decreased accessibility for seniors and those with mobility impairments. Concerns about business losses, safety, and loss of access for riders with mobility impairments were noted in planning documents submitted to the City of Oakland. As documented in Oakland City Council Resolution No. 84016 C.M.S. (July 17, 2012), the City requested that AC Transit's Final Environmental Impact Statement/Report (FEIS/R) evaluate left-door boarding, parking losses and potential mitigations, impacts of reduced local service on older adults and people with disabilities, security issues related to off-board cash payment, increased walking distance to stops, and economic effects on local businesses during and after construction; the City also requested analysis of a "Rapid Bus Plus" alternative without dedicated lanes. AC Transit addressed these topics in the FEIS/R (January 2012) and in a companion Bus Bulbs Analysis (January 2012), and the City—acting as a CEQA responsible agency—adopted the FEIS/R and AC Transit's rejection of certain alternatives as infeasible (Resolution No. 84016 C.M.S., Exh. B). (City of Oakland Public Works Department 2013, 12)⁷.

One way to potentially avoid some of these undesirable outcomes would be for agencies undertaking planning projects, especially in low-income communities of color, to convene community advisory committees throughout the planning, design, and implementation stages. The membership of these committees should be representative of the diversity of the community and empowered to make meaningful decisions about the project, including implementation. Convening a committee for the East Bay BRT project likely would have lent much-needed local expertise on how local residents use International Boulevard, which could have led to safer and more effective road design. They also would have helped AC Transit planners center the needs of East Oakland's most vulnerable residents, such as seniors and the disabled. The business mitigation fund could have been made more easily accessible and could have been structured as grants rather than reimbursements. Issues that were raised in the planning stage but weren't adequately addressed, such as the shift of sex trafficking onto residential side streets, might have been acted upon and possibly eliminated.

⁶ We use the term traffic "violence" rather than "accident" to underscore that these injuries were not inevitable. They could have been prevented through responsibly listening to community concerns during the planning process, taking the concerns to heart, and changing the design of the EBBRT project. Similar to the concept of designing for public safety, our profession needs to design for humanity.

⁷ Oakland City Council. 2012. Resolution No. 84016 C.M.S., "Resolution to Adopt the Downtown Oakland–San Leandro Alternative (DOSL) as the Locally Preferred Alternative for the AC Transit District's East Bay Bus Rapid Transit Project....," July 17, 2012. (See WHEREAS clauses; Exh. B for adoption of FEIS/R and rejection of alternatives.)

During the planning stages of a project, planning agencies could prioritize applying for grants that fund transformative community planning practices, such as the Richmond Rising grant, rather than grants tied to a set of rules for the project's implementation. Once project plans have been formulated through community involvement, agencies could pursue grants that match the specific project type. In the case of the East Bay BRT project, if AC Transit's planning grant had come from a source other than the Small Starts program, and the prospect of \$75 million had not been tied to a specific type of project, AC Transit may not have pursued a BRT project as aggressively. In conjunction with a diverse and empowered community, this might have allowed AC Transit planners to devise a project better adapted to the local realities of East Oakland and more aligned with the needs of its existing residents.

To facilitate this kind of planning would require state and federal granting agencies to switch to a funding model that awards planning grants based on adopting transformative community planning practices in the planning phase, then awards implementation funds based on the outcomes of that process. This model would give local agencies flexibility in addressing local needs according to local contexts rather than committing to alternatives that may not work in their community. Policymakers at higher levels of government could still use their funding to achieve their policy goals by tying implementation grants to measurable outcomes rather than specific alternatives, provided the planning agency had used transformative community planning practices. For instance, instead of funding BRT projects that fit specific criteria, the Small Starts program could have funded transportation projects that improve safety, bus speeds, and wait times. If the Small Starts planning grants were tied to transformative community planning practices, this could yield local projects that serve both local needs and federal policy goals.

Conclusion

Top-down transportation planning practices in American cities have frequently, though often unintentionally, created and perpetuated racial inequality. While planning professionals and agencies have made attempts in recent years to address the unequal outcomes created by these practices, the problematic power structures have remained largely untouched. Our case study of the East Bay BRT project demonstrates some of the possible harmful unintended consequences of transportation infrastructure projects conceived, designed, and implemented in top-down fashion by planners without involving stakeholders in the communities they serve.

The principles of mobility justice demand that community stakeholders be empowered to shape development in the low-income communities of color that have been harmed by past injustices. The Richmond Rising project is a good example of transformative community planning practices being used to design projects meant to achieve this ideal. While it is too early to draw any conclusions about the project's impacts, we look forward to the annual reports and case studies to be authored by the Center for Global Healthy Cities. Furthermore, we know that a better world is not only possible, it is here today. Both the City of Richmond community partnership and our experience collaborating with the East Oakland CAC demonstrate that genuine partnership and collaboration with community members can improve projects for all stakeholders. We hope our recommendations will help planning professionals, researchers, funders, and policymakers implement planning practices that unite rather than divide; liberate rather than confine; and empower rather than marginalize.

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Appendix A

East Oakland Bus Rapid Transit Project

Racial Equity Impact Assessment

Overview

In 1999, the Alameda-Contra Costa Transit District (AC Transit) began planning an enhanced public transit service along International Boulevard in Oakland, California (Bruns 2020). The planned bus rapid transit (BRT) service would eventually replace the existing 1 and 1R lines and serve a nearly identical route. Utility work to prepare the street for the East Bay BRT service began in 2015 (City of Oakland Department of Transportation 2021, 20), and construction of the BRT infrastructure began in August 2016 ([Baldassari 2016](#)). The East Bay BRT 1T line began service on August 9, 2020 (Bruns 2020). The route runs 9.5 miles from downtown Oakland to San Leandro's Bay Area Rapid Transit (BART) station, passing through mainly low- and middle-income Black, Latinx and Asian American neighborhoods, many of which are ethnic enclaves (City of Oakland Department of Transportation 2021, 8). During planning for the project community residents complained that their concerns about gentrification, displacement, public safety, and business closures were not being fully acknowledged by AC Transit or the City of Oakland. This Racial Equity Impact Assessment (REIA) was conducted to determine whether and to what extent the community's concerns were valid, and how the low-income communities of color in East Oakland were helped and/or harmed by the project.

We conclude that the East Bay BRT project exacerbated pre-existing racial inequities. Despite explicit warnings by community stakeholders, the project contributed to pre-existing patterns of gentrification and racial displacement, worsened traffic dangers along International Boulevard, displaced minority-owned and legacy businesses, and decreased accessibility for mobility-impaired riders due to longer distances between stations. Some community members did express enthusiasm for an improved rider experience thanks to new lighting, buses, and bus shelters at stations.

Background

East Oakland is defined in our study as the Oakland neighborhoods between Lake Merritt and the San Leandro border and southwest of Interstate 580. This is an area of incredible demographic and cultural diversity, the result of both government policies and immigration patterns. The Chochenyo Ohlone people, Oakland's original inhabitants, faced enslavement and extermination, yet remain a vibrant community today. Jim Crow laws and economic opportunities drew Black Southerners to Oakland, while white flight, incentivized by postwar federal mortgage insurance policies, transformed previously white neighborhoods into Black enclaves by the second half of the 20th century. Southeast Asian refugees established communities in the 1970s and 1980s, and Latin American immigrants have sought refuge and opportunity in East Oakland since the early 20th century (City of Oakland Department of Transportation 2021, 9-10).

Federal mortgage insurance redlining practices restricted access to lending and homeownership for residents of color. Although the 1968 Fair Housing Act outlawed racial discrimination in lending, barriers to accessing capital persist, hindering wealth accumulation through homeownership and small businesses. This environment allowed predatory lenders to exploit low-income communities of color before the 2007-09 mortgage crisis (Rugh and Massey 2010). When the housing market crashed, many East Oakland residents lost their homes to foreclosure. Wealthy investors subsequently profited off the low home prices by “flipping” foreclosed properties to wealthier new residents (King and Spiker 2012). This turnover in the housing market led to demographic shifts in household incomes (gentrification) and the departure of people of color, particularly Black residents (racial displacement).

Transportation systems have often prioritized the needs of wealthier suburbanites (Evans 2021), as for example when freeway projects take advantage of reduced urban land values to build through low-income neighborhoods (Dahlstrom-Eckman 2024). This is exemplified by the historical destruction of West Oakland's thriving Black neighborhoods for freeway development and construction of Interstate 880 and the West Oakland Bay Area Rapid Transit (BART) commuter rail station. Moreover, I-880, which also runs through East Oakland's low-income communities of color, carries all the heavy truck traffic and its accompanying air pollution since the parallel Interstate 580, which was constructed through whiter, more affluent neighborhoods, has weight limits to keep heavy trucks from passing through these areas.

Despite the harms created by government policy and neglect, East Oakland residents have long held great pride in their communities. Many residents still affectionately refer to International Boulevard by its old name, “E. 14th,” or nicknames like “The E One Four” in defiance of the city's official name change in 1996 aimed at rehabilitating the corridor's image.

Racial Equity Impacts

Data Sources

Our analysis draws from a combination of quantitative and qualitative data, aligned with community-based participatory action research (CBPAR) principles of balancing community knowledge with empirical data. Our key data sources were:

- 2000 and 2010 U.S. Census data and 5-year American Community Survey (ACS) estimates for 2008-2012, 2013-17 and 2018-22
- Zillow Observed Rent Index data to capture housing neighborhood-level unaffordability trends
- Historical redlining maps from the University of Richmond's Digital Scholarship Lab
- California Statewide Integrated Traffic Records System for collision data
- Bay Area Air Quality Management District sensors for environmental exposure data
- Oakland Crime Watch for police report data
- AC Transit for bus ridership and speed data

Neighborhoods Chosen for Study

We focused on ethnic enclaves identified in the OakDOT East Oakland Mobility Action Plan, which used 2000 census data and redlining maps to highlight areas disproportionately impacted by housing and transportation policies. To capture the East Bay BRT's localized effects, we also analyzed all other census tracts along International Boulevard. The analysis area was composed of the following census tracts: 4053.02, 4054.01, 4054.02, 4055, 4059.01, 4059.02, 4060, 4061, 4062.01, 4062.02, 4063, 4072-4075, 4077, 4084-4089, 4091-4096, 4103, and 4104.

Community Advisory Council and Participatory Methods

We formed a community advisory council with representatives from diverse racial, ethnic, and linguistic groups in East Oakland to guide our research, ensuring alignment with community needs. This iterative process reflects CBPAR principles of co-learning and capacity building (Minkler and Wallerstein 2011). Native American, Asian, Latinx, Black, youth, senior, faith and immigrant group representatives were selected for their prior involvement in the East Bay BRT project or East Oakland planning generally, and support for equitable decision-making (Fraser 1995).

Quantitative and Qualitative Data Analysis

We began our work by outlining the broad questions we wanted to investigate:

- What were the impacts of these decisions on displacement, health, homelessness, and overall well-being in East Oakland?
- What gaps exist in current datasets from the perspective of racial equity and local community knowledge?
- What public policy and planning strategies can promote inclusive and equitable transportation for neighborhoods, communities and regions?

Before we formulated our research plan, we took these questions to our community advisory council and, over the course of two meetings, honed in on a set of specific research questions they wanted answered about the East Bay BRT project. In the third meeting, we laid out our research plan based on the questions they had asked previously and discussed how we planned to address them. By the end of this meeting, we had settled on the following specific research questions:

- Did the BRT project exacerbate or improve pre-existing neighborhood conditions of:
 - Housing Unaffordability?
 - Homelessness?
 - Racial/ethnic displacement?
 - Gentrification?
- How did new AC Transit infrastructure impact:
 - Unemployment?
 - Air pollution?
 - Transit ridership?
 - 1T ridership?
 - Reliability of the buses?
 - Trip speed?
 - Vehicle miles traveled (VMT)?
 - Seniors?
 - Sex trafficking patterns?
 - Traffic casualties?
 - Public safety?

- In what specific ways did the BRT project result in racial/ethnic commercial displacement?
 - What were the specific issues that impacted businesses during construction?
 - What were the barriers to receiving business mitigation funds?

This was an ambitious set of questions to answer over the coming months, and due to time constraints and data unavailability, we were unable to get to all of them. For all our analyses, we focused on the census tracts described above. It was important to us to get the finest geographical resolution possible for our analysis, which necessitated our use of 5-year ACS data, as sample sizes are too small at that spatial resolution to allow 1-year data to be used. For that reason, unless stated otherwise, all ACS data used in our analyses are 5-year census-tract level data. We used ACS data from the years 2012, 2017, and 2022, roughly corresponding to the BRT planning period, construction period, and the post-construction period. We were unable to line these years up precisely as the 2023 ACS data has not yet been released.

Housing Unaffordability

To measure housing unaffordability, we used five data sources: the monthly Zillow Observed Rent Index at the neighborhood level from 2010 to 2019, the monthly index at the ZIP code level from 2018 to 2024, 5-year census tract-level ACS data on median household income (MHI) for renter households (Table S2503: Financial Characteristics), 5-year census tract-level ACS data on number of renter households (Table DP04: Selected Housing Characteristics), and the consumer price index (CPI).

We chose to use Zillow rather than ACS data to measure rents because of the methodological differences: we wanted to know what a renter looking for a new place to live might expect to pay, which Zillow's methodology is meant to estimate. ACS data, on the other hand, measures the rents people are currently paying, which, due to rent controls, gives a much lower estimate of the market rents in an area. Unfortunately, Zillow's servers crashed after we completed our review of the OakDOT East Oakland Mobility Action Plan and wiped out much of their neighborhood-level data, making their data unavailable past 2019, though we still had access to the neighborhood-level Zillow data we used in our analysis. We projected the rents through to 2022 by calculating the year-over-year percent change in ZIP code rent data and applying those changes to the rents in the neighborhoods in those ZIP codes. We then adjusted both Zillow rent data and MHI by the CPI to reflect 2022 values. For the Frick, Coliseum, and Clinton neighborhoods, which were composed of multiple census tracts, we also calculated a weighted average renter MHI by multiplying the MHI for each tract by the number of rental households in that tract, then dividing by the total number of households in the entire neighborhood.

Homelessness Risk

We defined a household as at risk of homelessness if their household income was below \$20,000 and they were paying fifty percent or more of their income on housing (the ACS definition of "severely rent-burdened"). We used data on the number of severely rent-burdened households in each income bracket (ACS Table B25074: Household Income by Gross Rent as a Percentage of Household Income in the Past 12 Months), and the total number of households in each census tract (ACS Table S2502: Demographic Characteristics for Occupied

Housing Units). For neighborhoods composed of multiple census tracts, we added together the corresponding populations to get a total for the neighborhood. To calculate homelessness risk, we divided the number of very- or extremely-low income households that are severely rent-burdened by the total number of households.

Racial Demographic Change and Displacement

Our analysis of racial demographic change and displacement compared the number of residents of each racial group in an area at different times. We used demographic data from the ACS (Table B03002: Hispanic or Latino Origin by Race) and calculated the populations for neighborhoods composed of multiple census tracts. This analysis would be much more robust if the census race categories were more detailed. For instance, “Asian” is an incredibly diverse category that includes Southeast Asian refugees of the Vietnam War and their descendants as well as South Asians who immigrated to study in American universities. It is therefore difficult to tell whether and how populations are changing in some areas.

Gentrification

For purposes of this analysis, we focused on gentrification in the strict sense of the influx of higher-income residents. We used MHI data by housing tenure (ACS Table S2503) and by race (ACS Table S1903: Median Income in the Past 12 Months (in 2023 inflation-adjusted dollars)) and measured the changes in MHI overall and by race in each census tract and neighborhood. As with the homelessness risk calculations, we calculated the MHI for neighborhoods composed of two or more census tracts by calculating averages weighted by the appropriate populations.

Findings from our quantitative analyses were systematically presented to the East Oakland CAC for co-analysis, with adjustments made to our interpretations where members’ lived experiences contradicted numerical trends. This iterative validation process enhanced the accuracy and resonance of our findings with local realities, emphasizing the CBPAR principle of integrating research and action for mutual benefit (Minkler and Wallerstein 2011).

Sex Trafficking

We used police report data available at Oakland CrimeWatch to count reports of prostitution with addresses on International Boulevard, addresses on East 15th Street, and all other reports in Oakland. We compared these trends over the years 2012 to 2023.

Traffic Casualties

We used traffic collision data from the California Statewide Integrated Traffic Records System to count all people killed or injured in collisions that took place within 100 feet of International Boulevard. We included all collisions with a reported injury of any severity and with all vehicle types, pedestrians, and cyclists. We compared that number with the total number of people killed or injured in the rest of Oakland over the years 2012 to 2022.

AC Transit Goals

While we requested bus data from AC Transit several times, we were unable to access the full set of data required for a thorough analysis. We were, however, able to get data on bus ridership, average speed, and so on for the months of April and May of 2023. We added up the total ridership for the month of April and compared that to a historical monthly ridership estimate provided to the City of Oakland by AC Transit (City of Oakland Public Works Department 2013). We also averaged the speeds of the buses in April and compared that to the speed provided to the city by AC Transit (City of Oakland Public Works Department 2013).

Findings

Finding 1: BRT design exacerbated existing traffic dangers

International Boulevard was the most dangerous street in Oakland prior to the East Bay BRT project. From 2001 to 2010, 11 pedestrians were killed along the roadway, and nearby Foothill Boulevard was the next deadliest, with six pedestrian fatalities (Miller 2011). Our analysis of the state collision data showed that from 2012 to 2014 roughly nine percent of all traffic injuries and fatalities in Oakland occurred within 100 feet of International Boulevard. AC Transit identified improving pedestrian safety as an important justification for the BRT project. The Final Environmental Impact Statement/Report touted benefits to pedestrians from improved pedestrian road infrastructure and longer crossing times, median bus stations providing pedestrian refuges, and lower car speeds due to lane reductions (City of Oakland Public Works Department 2013).

Contrary to the project’s traffic safety goals, however, our analysis found that International Boulevard has become more dangerous since the 1T line started operating in 2020. According to the state collision data, the number of traffic casualties along the BRT route has increased by 30 percent and more since service began in 2020. After the BRT began operation, at least two bus riders have been killed crossing the street to stations in the median (Fermoso 2023a; 2024). Moreover, as shown in **Figure A-1**, the number of people killed and injured

People injured and killed along International

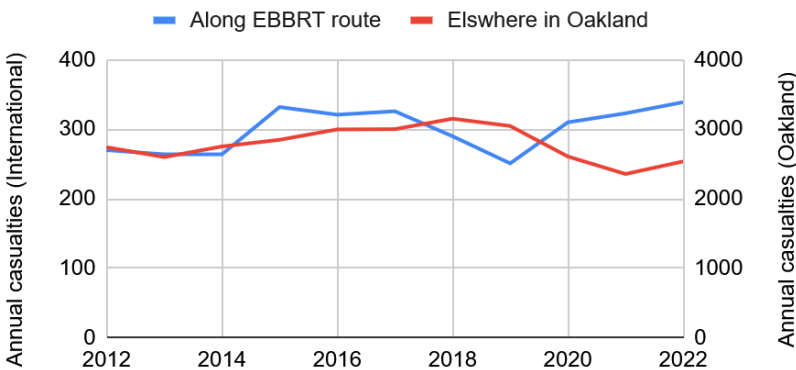


Figure A-1. Traffic Casualties in Oakland by Location

Source: California Statewide Integrated Traffic Records System, 2023.

in traffic collisions within 100 feet of the BRT route in Oakland jumped 24 percent from 2019 to 2020, and remained elevated through 2022. During the same period, traffic casualties in the rest of Oakland declined 14 percent and stayed at that new low through 2022.⁸ This divergence in trends suggests that the new road structure may have contributed to the surge in traffic incidents.

Conversations with CAC members reinforce this interpretation of the data. They report that frustration at the elimination of a driving lane in each direction as well as the many left turns on International Boulevard has led some drivers to engage in dangerous and even reckless behaviors, such as speeding in the bus lane or jumping medians to make left turns. A traffic speed analysis by Traffic Violence Rapid Response, an Oakland-based traffic safety advocacy group, also found that 85th percentile speeds (the speed at or below which 85 percent of all vehicles are observed to travel under free-flowing conditions) increased in nearly every segment of the route (Traffic Violence Rapid Response 2023). The only part of International that saw a reduction in 85th percentile speeds was the segment just south of the San Leandro border, which was also the only segment where a bus-only lane was not installed (Traffic Violence Rapid Response 2023). This increase in reckless driving has impacted BRT riders: people trying to reach the stations in the median must cross an increasingly dangerous road to access transit, and at least two people were killed as they tried to reach the median stations in 2022 and 2023 (Fermoso 2023a; 2024).

Finding 2: BRT may have contributed to residential displacement and gentrification

Recent research suggests that BRT services with dedicated lanes increase land values, particularly for multifamily housing (Acton et al. 2022). Of particular interest, this study showed that AC Transit's 72R "BRT lite" service on San Pablo Avenue in Oakland led to a 4.3 percent increase in land values. Because this effect was only seen for some BRT systems the authors hypothesize that a competitive real estate market, traffic congestion, and high public transit ridership in the greater metropolitan area are necessary for this effect. These conditions, occurring throughout the greater Bay Area, became more pronounced over the course of the East Bay BRT construction. Thus, conditions were right for the new BRT system to lead to higher local land values, particularly for multifamily housing. We would therefore expect to see these higher property values passed on to tenants in the form of higher rents.

Over the course of the East Bay BRT planning and construction, higher-income white residents moved into East Oakland, likely in part due to the improved transportation infrastructure. According to ACS data, from 2012 to

⁸ There are pronounced racial disparities in these casualty figures. Utilizing reports of the 56 Oakland traffic fatalities in 2022 and 2023 (Fermoso 2023a; 2024), we estimated that most of those who were killed were Black (36 percent) or Hispanic (38 percent), compared with 16 percent white and 12.5 percent Asian American. According to U.S. Census data, Oakland's population is 30 percent white, 21 percent Black, 26 percent Hispanic, and 16 percent Asian American. In other words, there was a higher incidence of Blacks and Hispanics being killed in traffic incidents over this period than whites and Asian Americans. The races of the individuals involved were determined based on the photos and descriptions in the Oaklandside article where possible. When not available directly through Oaklandside reporting, some individuals' races were determined through police records. Some individuals' races were assigned as "Hispanic" if they had a Spanish name. Only one victim's race was indeterminate based on these methods.

2017 the white population increased in 21 of the 30 census tracts we analyzed, and in 20 of the 30 tracts from 2017 to 2022. Overall, the white population increased by 5,672 in these census tracts from 2012 to 2022.

As white residents moved in, Black populations fell. From 2012 to 2022, the number of Black residents in the census tracts we studied fell by 3,857 (11 percent), the Latinx/Hispanic population increased by 7,052 (12 percent), and the Asian American population increased by 588 (3 percent). However, different Asian ethnicities are not disaggregated in census data, which could obscure lower-income Asian American residents such as the Southeast Asian populations in East Oakland being displaced by higher-income newcomers. Indeed, from 2012 to 2017, the Asian American population in the tracts we studied fell by 1,032, then rebounded by 1,620 from 2017 to 2022, suggesting some sort of demographic shift in the Asian American population. In addition to the attraction of new transportation infrastructure, some of these demographic shifts may have been caused by the marketing of foreclosed properties to higher-income residents. However, determining the causes will require follow-up qualitative research.

The shifts in racial demographics were accompanied by increases in household income as well. Median Household Income (MHI) increased on average by 78 percent in the census tracts we studied (adjusted for inflation). However, these increases were greatest for white and Asian American households. From 2012 to 2022, the census tract-level MHI for white households increased by an average of 164 percent; by 117 percent for Asian American households; and by 73 percent and 76 percent for Black and Latinx/Hispanic households, respectively. The City of Oakland at large saw MHI increases of 97 percent for white households, 92 percent for Asian American households, 68 percent for Black households, and 71 percent for Latinx/Hispanic households. This disparity suggests that new white and Asian residents may have been predominantly higher income than existing East Oakland residents.

At the same time incomes were increasing, the mortgage crisis led to decreases in homeownership rates for most racial groups. From 2012 to 2017, across all census tracts we studied, homeownership rates among Black households dropped 6.5 percent, and they dropped for Latinx/Hispanic households by 12.1 percent. White household homeownership rates dropped 4.2 percent, but Asian households saw a one percent increase in homeownership. Homeownership rebounded from 2017 to 2022, with growth among all racial groups, however, Black homeownership rates recovered the least, with rates still down by 3.4 percent from 2012 to 2022.

These demographic and income changes in East Oakland likely contributed to or caused increased residential rents and the displacement of Black residents, especially lower-income Black residents. This uneven displacement consistent with historical patterns of transportation projects that trigger gentrification and lead to demographic and income changes. While we only had rent data from 2012 to 2022 for Clinton, East Peralta, Eastmont, Frick, Fruitvale, Merritt, and Reservoir Hill, these neighborhoods saw large rent increases in the range of 53 percent to 71 percent from 2012 to 2017. The Merritt and Frick neighborhoods exemplify these trends (see **Table A-1**).

Table A-1. Housing Trends in East Oakland Frick and Merritt Neighborhoods

Neighborhood	Frick		Merritt	
Year	2012	2022	2012	2022
Zillow Observed Rent Index	\$1,509	\$2,786	\$1,771	\$2,912
Predominant racial groups in 2012	Black/African American Latinx/Hispanic		Latinx/Hispanic Asian American	White Asian American
Population of predominant racial groups	5,095 (Black/African American) 3,988 (Latinx/Hispanic)	3,311 (Black/African American) 4,557 (Latinx/Hispanic)	940 (Latinx/Hispanic) 973 (Asian American)	159 (Latinx/Hispanic) 795 (Asian American)
Percent change in predominant racial group population	–		-35% (Black/African American) 14% (Latinx/Hispanic)	
Predominant racial group MHI	\$48,572 (Black/African American) \$42,951 (Latinx/Hispanic)	\$80,426 (Black/African American) \$86,171 (Latinx/Hispanic)	\$30,741 (Latinx/Hispanic) \$17,917 (Asian American)	\$65,972 (Latinx/Hispanic) No data (Asian American)
Percent change in predominant racial group MHI	–	66% (Black/African American) 101% (Latinx/Hispanic)	–	115% (Latinx/Hispanic) No data (Asian American)
White population	1,066	2,569	492	876
Percent change in white population	–	141%	–	78%
White MHI	\$65,944	No data ⁹	\$30,537	\$127,794

⁹ We were unable to calculate the white Median Household Income (MHI) for Frick in 2022 as there was insufficient data for one of the census tracts that make up the neighborhood. However, the white MHI more than doubled for the census tract with the larger white population, from \$71,875 to \$144,531.

Neighborhood	Frick		Merritt	
Year	2012	2022	2012	2022
Percent change in white MHI	–	No data	–	126%

Source: ACS 5-year tables (B03002: Hispanic or Latino Origin by Race, S1903: Median Income in the Past 12 Months (in 2023 Inflation-Adjusted Dollars), Zillow Observed Rent Index.

While the Frick neighborhood remained a predominantly Black/African American and Latinx/Hispanic enclave from 2012 to 2022, the Black population declined by 35 percent (see **Table A-2**). In contrast, Frick’s white population significantly increased by 141 percent. This racial demographic shift was accompanied by a 46 percent increase in the observed rent index.

From 2012 to 2022, the Merritt neighborhood transformed from a lower income Latinx/Hispanic and Asian American enclave to a predominantly higher income Asian American and white neighborhood. The observed rent in Merritt increased by 39 percent as the Latinx/Hispanic/Hispanic population fell by 83 percent and the Asian American population declined by 18 percent. The white population, meanwhile, grew by 78 percent. These shifts highlight racial disparities in displacement, with residents of color in former ethnic enclaves disproportionately affected.

Housing impacts were particularly severe for Black residents of neighborhoods that were identified as Black ethnic enclaves in the OakDOT East Oakland Mobility Action Plan (Brookfield Village, Coliseum, Durant Manor, Eastmont, Frick, and Sobrante Park). Each of these neighborhoods was at least 30 percent Black; they were all also heavily Latinx/Hispanic (all at least 44 percent Latinx/Hispanic). Of these neighborhoods, Coliseum’s Black population grew by 3.5 percent and Eastmont’s by 8.6 percent from 2012 to 2022; the other Black ethnic enclaves lost from 7.8 percent to 35 percent of their Black residents. Over this period, Black homeownership increased by 40 percent in Sobrante Park, but decreased in every other Black enclave. Compared to the Oakland MHI of \$96,998 in 2022, only in Frick did the Black MHI reach 80-120 percent of the area MHI (the “moderate income” tier). The Black MHI in each of the other Black enclaves ranged from 50 percent (Brookfield Village) to 74 percent (Durant Manor).

Table A-2. Neighborhood Demographic and Economic Trends in East Oakland Black Ethnic Enclaves

Neighborhood (Black and Hispanic/Latinx ethnic enclaves)	2012-22 Black population change	2012-22 Percent change in Black homeownership	2012 Black MHI as a percent of Oakland MHI	2022 Black MHI as a percent of Oakland MHI
Brookfield Village	-51%	-10.3%	94.3% (moderate income)	49.6% (very low income)
Coliseum	3.5%	-5.7%	36% (very low income)	53.3% (low income)
Durant Manor	-7.8%	-23.1%	107.6% (moderate income)	73.7% (low income)
Eastmont	8.7%	-4.2%	50.8% (low income)	51.6% (low income)
Frick	-35%	-10.2%	90.1% (moderate income)	82.9% (moderate income)
Sobrante Park	-15.6%	40%	75.8% (low income)	71.6% (low income)

Sources: ACS Tables B03002 (Hispanic or Latino Origin by Race), S2502 (Demographic Characteristics for Occupied Housing Units), S1903 (Median Income in the Past 12 Months (in 2023 Inflation-Adjusted Dollars).

High housing costs are a major cause of homelessness (Colburn and Aldern 2022, 127-130). Eleven percent of respondents in the 2019 Alameda County homelessness point-in-time count indicated that rent increases were the main cause of their homelessness, making it the third most common cause (Alameda County Housing and Community Development Department 2019). Another seven percent of the people interviewed for the 2019 count cited eviction/foreclosure as the main reason for their homelessness, and six percent cited family or friends being unable to afford to let them stay (Alameda County Housing and Community Development Department 2019). We should therefore expect to see the number of people at risk of homelessness increase with rising housing costs. Our count of the number of households at risk of homelessness (those making less than \$20,000 per year and spending at least half their income on housing) shows an increase of 152 households, while the number in Oakland at large decreased by 367. These numbers are both within the margin of error. However, the annual point in time count showed a 130 percent increase in the number of people experiencing homelessness citywide from 2,191 in 2015 to 5,055 in 2022 (Everyone Counts 2017; 2022). Reports of homeless encampments in East Oakland also increased, from 26 in 2012 to 131 in 2017 (Anti-Eviction Mapping Project 2018). These trends disproportionately affected Black residents, who represented 53 percent of those experiencing homelessness in 2022, despite being only 23 percent of Oakland's total population (Applied Survey Research 2022).

Further research is needed to investigate the causes of the gentrification and displacement taking place in East Oakland. For instance, it would be valuable to interview landlords to see why they raised residential rents. Speaking with new residents might yield insights into the reasons for their moves into former East Oakland ethnic enclaves. Interviews with homeless residents could also help us understand the connections between gentrification, displacement, and homelessness. These kinds of qualitative research will take time.

Finding 3: BRT construction and barriers to mitigation funds may have displaced legacy businesses

BRT construction had a devastating impact on small businesses along International Boulevard. The OakDOT East Oakland Mobility Action Plan analysis found that 502 businesses out of 1,356 businesses had closed by 2019, representing 37 percent of all businesses (City of Oakland 2021). Out of a sample of 52 of these closed businesses, 27 (52 percent) had been legacy businesses (defined as those open for at least five years or more before 2014). Business Employment Dynamics data from the Federal Bureau of Labor Statistics consistently show that 90 percent or more of businesses that have survived for at least five years survive to the next year, and 68 percent of California businesses founded in 2009 that survived to 2014 were still open in 2019. The high rate of legacy business closure was unusual for East Oakland: a 2015 analysis by Main Street Launch found that 66 percent of businesses along International Boulevard had been in business for five years or more, and 43 percent had been in business for 10 or more, (Ahrens et al. 2020, 42). That year, 64 percent of California businesses were 5 years old or more, and 42 percent were 10 years old or more. The loss of legacy businesses in a neighborhood can contribute to the loss of community identity and belonging, and the acceleration of residential gentrification and displacement (City of Oakland Department of Transportation 2021, 31). Notably, these closures all occurred before the COVID-19 pandemic, eliminating the confounding effect of pandemic lockdowns from the effects of the BRT construction.

While some new businesses opened from 2014 to 2019, the total number of businesses licensed along International Boulevard in 2019 was 1,147, a 15 percent decline over the five-year period (City of Oakland Department of Transportation 2021, 36). Over the same period, Business Employment Dynamics data show that the number of businesses in the state of California increased 14 percent. The number licensed along Piedmont Avenue, a more affluent Oakland corridor, jumped 159 percent from 163 to 422 (City of Oakland Department of Transportation 2021, 36).

Because of the demographics of East Oakland, these business closures likely had a disproportionate impact on low-income people of color. The 2015 Main Street Launch analysis found that 84 percent of business owners along International Boulevard were minorities, 37 percent were women, and 67 percent had household incomes of less than \$60,000 (Ahrens et al. 2020, 42).

Business owners' concerns about the impacts of construction and the loss of parking were raised consistently throughout the East Bay BRT planning process. As discussed previously, the City of Oakland responded to these concerns by creating and funding the Business Impact Mitigation Fund, which funded technical assistance and construction impact mitigation, and a Business Assistance and Sustainability Fund, which

provided “direct monetary assistance due to adverse permanent impacts from BRT infrastructure” (City of Oakland Public Works Department 2016). Federal Small Starts grant money for the project was ineligible for the business assistance fund, however, so the city used one million dollars of municipal funds supplemented with one million dollars from the U.S. Department of Housing and Urban Development Community Development Block Grant program.

Poor implementation of the business assistance program made it extremely difficult for businesses to access the funds. As of January 2020, only two businesses had received money from the fund: one for business relocation and one for equipment (Ahrens et al. 2020). Business owners in East Oakland interviewed for OakDOT’s 2021 East Oakland Mobility Action Plan identified four main barriers to accessing funds:

- Long and cumbersome application form and process.
- Funds were initially not available to address revenue loss from construction impacts and the operating costs needed to sustain the business.
- Funding structure as a reimbursement program prevented small businesses with cash flow issues from accessing the program.
- Mailers and phone calls from the city and technical assistance providers were not being received by business owners because their businesses were closed due to the COVID-19 shelter-in-place orders (City of Oakland Department of Transportation 2021, 33).

Implementation issues with the business assistance fund were not the only challenges facing business owners. Construction impacts such as traffic and loss of parking were cited by Sean Perry, owner of Perry’s Fine French Furniture, as the final blow leading to the closure of his family’s 70-year-old business. According to Mr. Perry, “Two lanes of traffic in either direction were closed, so if there’s a truck backing up in front of your building or is going to double park in the street to off-load stuff to a liquor store or whatever, it’s going to stop that flow of traffic completely” (Tadayon 2018). Technical assistance consultants hired for the Business Impact Mitigation Plan also reported that some businesses encountered resistance from their landlords to signing new leases due to expected increases in land value due to the BRT project (Ahrens et al. 2020, 41). This community input shows that real estate speculation was occurring in response to the project and harming small businesses.

In response to community activism around these barriers and facing the pressures of the COVID-19 emergency, the City of Oakland restructured the business assistance fund as an operating cost grant for businesses impacted by COVID-19 in May 2020. By September of that year, most of the funds had been disbursed and applications had been received for those remaining (City of Oakland Department of Transportation 2021, 33). This came too late for many businesses impacted by BRT construction, however.

Finding 4: Community crime concerns were insufficiently addressed in BRT planning and implementation

Our analysis of CrimeWatch data revealed a steady increase in police reports of sex trafficking on East 15th Street, rising from five incidents in 2014 to 69 in 2021 (see **Figure A 2**). Meanwhile, reports along

International Boulevard peaked at 133 in 2017 before a precipitous decline in 2018. Reports in the rest of Oakland followed a similar but more pronounced trajectory, peaking at 374 in 2016 before plummeting. The increase in sex trafficking on side streets has had devastating effects on local residents, especially those living near schools. Sex traffickers have reportedly targeted girls as young as 14 outside Roosevelt Middle School on East 19th Street (Sierra 2023).

After peaking in 2021, reports of sex trafficking along E. 15th dropped back down to only three in 2023, and reports along International have remained low relative to their heights from 2015 to 2017. However, police reports may not reflect the true levels of sex trafficking occurring due to under-reporting, officer resistance to paperwork, and social stigma. Indeed, East Oakland residents continue to report unacceptable levels of sex trafficking in their neighborhoods, particularly in the San Antonio area (Horta 2024; Lin 2024).

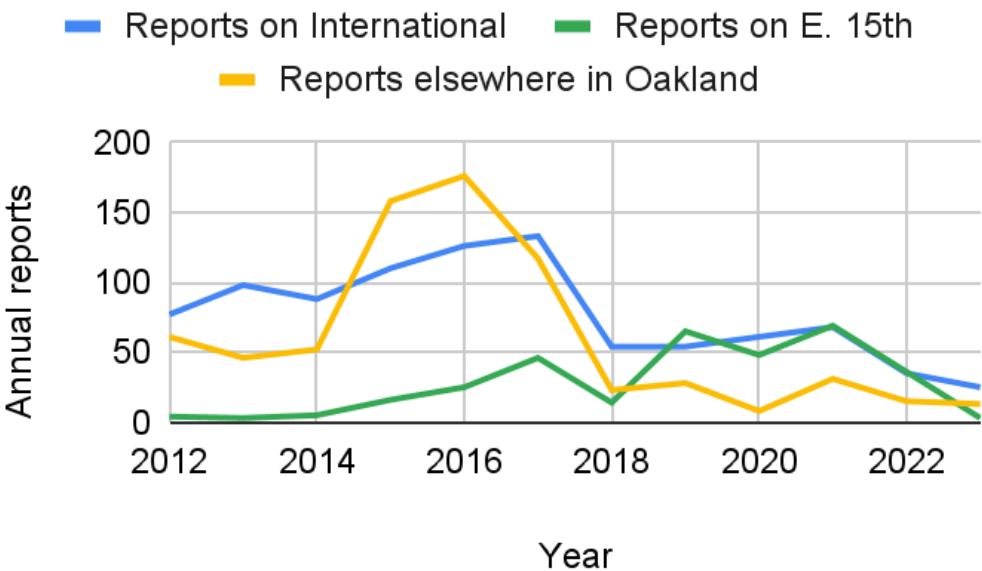


Figure A 2. Comparative Sex Trafficking Police Reports by Location

Source: Oakland Crimewatch, 2024.

Most sex trafficking victims in Oakland are women and girls of color, reflecting broader socioeconomic vulnerabilities. According to the FBI’s Crime Data Explorer, 54 percent of those arrested for prostitution by Oakland police over the past decade were Black and 34 percent were white (Federal Bureau of Investigation 2024). However, these data do not track the number of Latinx/Hispanic people arrested, which likely heavily skews the numbers in East Oakland.

Further Considerations

Based on our analysis we recommend the City of Oakland and AC Transit consider the following actions to address the various concerns raised by residents regarding the East Bay BRT project.

Implement Context-Sensitive Design Changes to BRT Infrastructure to Reduce Traffic Danger for All

The City of Oakland, AC Transit, and community advocacy groups could collaborate to address infrastructure design elements that create or exacerbate dangerous traffic conditions. Transit remains an essential part of accessibility, especially for communities in East Oakland. BRT can play a role in improving accessibility, but its design must be augmented beyond existing BRT Service Design Guidelines to function appropriately for the social and physical context of International Boulevard.

Well-designed pedestrian crossings are critical to reducing conflicts between BRT and pedestrians, a known issue in many urban corridors (Han and Kim 2008). Several cities have successfully adapted BRT designs to improve pedestrian safety and reduce traffic conflicts. In Johannesburg, South Africa, the implementation of signalized pedestrian crossings and protected right-turn phases has been key to reducing conflicts between BRT and general traffic (Brislin 2009). Similarly, the Las Vegas BRT system introduced a "BRT Station" concept that integrates mid-block crossings and pedestrian-friendly infrastructure to improve accessibility and safety (Carolin and Gross 2009).

Further, tactile ground surface indicators and dedicated pedestrian pathways have been successfully implemented in South Africa to improve accessibility for visually impaired pedestrians and prevent jaywalking near BRT stations (Combrinck 2014). Overall best practices from the above literature on BRT stop design emphasize the need for signalized crossings near stops, pedestrian bridges, and clear pedestrian pathways to reduce conflicts and improve passenger safety.

By incorporating these proven safety measures, Oakland's BRT system can be adapted to better serve communities, particularly vulnerable populations such as elderly residents, children, and families. Implementing signalized pedestrian crossings, well-designed station environments, and traffic calming elements will be essential to ensuring that BRT improves mobility without increasing traffic injuries and fatalities.

Include Anti-displacement Measures in Plans for Transit-Oriented Development in Low-income Communities of Color

The City of Oakland can work with local community organizations to support anti-displacement efforts. For example, the city could prioritize using the \$100 million raised by Rise East Oakland to purchase commercial properties to be placed in a community land trust to assure permanent affordability for small business owners. In addition, the city and Alameda County could require that any affordable housing that they fund include below-market rate retail commercial rental space. These recommendations would ensure anti-displacement measures are in place prior to the launch of major transportation projects like BRT.

Because real estate speculation that can accompany transportation investments can lead to rent increases, gentrification, and displacement in low-income communities of color, anti-displacement measures are essential to keeping these communities intact. One such measure would be conditioning approval of new affordable housing along improved transportation corridors on giving preference to current or displaced residents of the neighborhood. Using neighborhood MHI rather than city or regional MHI when calculating rents in these types of projects would help ensure that the new housing is affordable for the neighborhood's existing residents. If these types of policies had been in place during the development of the East Bay BRT, some of the people displaced from East Oakland may have been able to stay in their longtime communities.

Displacing people and businesses from a project area can mean the improvements end up benefitting people other than those it was intended to help and the failure of the project to meet its own goals. If a project is intended to encourage drivers to switch to transit, for example, displacement can undercut that effort by attracting wealthier residents who can afford the costs associated with driving and use transit only when it's convenient, while displacing current transit users to transit-poor exurbs, forcing them to drive more. More fundamentally, a project that strives for racial equity necessarily fails if the low-income communities of color it seeks to serve are displaced by its creation.

Standardize, Simplify and Expand Access to Business Impact Mitigation Funds and Prevent Business Closures.

Business mitigation funds could be made standard for infrastructure projects that would impact local small business owners. Because federal transportation funds such as Small Starts grants are limited to specific uses, local governments that wish to implement prevention and remediation strategies may need to locate other sources of funding. Providing easily accessible business impact mitigation funds should be standard practice to help small businesses make it through the disruption caused by construction. The application process should be simple and streamlined, as many small business owners lack the facility to complete lengthy applications, or they may lack appropriate financial documentation, as many small business owners also do their own accounting with little to no training. Business impact mitigation funds could also be structured as cash grants rather than reimbursements to allow businesses with low cash flow to benefit. By making business impact

mitigation funds easier to secure and structuring them as grants, the City of Oakland might have helped hundreds of small businesses remain open after the BRT construction commenced. This would have benefitted the city as well by keeping these businesses in the tax base.

Local Agencies Can Work with Community Leaders to Address Unintended Sex Trafficking Impacts of Transit Infrastructure

The City of Oakland can support community-led sex trafficking prevention initiatives by taking advantage of community knowledge about the broader impacts of the BRT project. This can build trust with impacted residents and grassroots organizations whose needs and efforts have historically gone unacknowledged. Additionally, transit project approvals could adopt a more holistic concept of safety that addresses the ripple effects that may be triggered by the projects.

Assessment Limitations

There were numerous data limitations and challenges in our REIA. We were unable to get access to AC Transit data despite our repeated requests. While we were able to obtain data from a fellow researcher for the months of April and May in 2019 and 2023, this did not give us a pre-BRT comparison point. While we were able to find AC Transit's reported ridership and average bus speeds in City of Oakland reports, we were unable to measure the actual change in ridership, speed, and headways.

Neighborhood-level Zillow rent index data were lost in a Zillow server crash, removing access to all data and cutting off the measurement of the index in the year 2019. Zillow data is now available at the ZIP code level, but not for all ZIP codes, and not for all years. Because we used ZIP code Zillow data to project the neighborhood rent index forward to 2022, we could only use ZIP codes that had data going back to 2019, which limited the scope of our analysis and made our neighborhood-level rent index less precise after 2019.

We used 5-year American Community Survey (ACS) data as the sample sizes were too small at the census tract level to use 1-year ACS data. This, taken with the fact that 5-year data starting in 2020 is not yet available, means that the planning (2008-2012), construction (2013-2013), and post-construction (2018-2022) periods represented by the ACS data do not line up perfectly with those periods. Small sample sizes also made it difficult to conduct some racial analyses at the neighborhood level. ACS data also do not distinguish between different ethnicities for Asian Americans, making it difficult to detect demographic changes such as the displacement of Southeast Asian residents by higher-income South Asian or East Asian residents. Our data show a number of Asian American residents leaving Merritt and a subsequent influx of Asian American residents, accompanied by a large increase in MHI, but we cannot determine from the available data what this means.

Police reports are not necessarily a reliable measure of the actual level of illegal activity taking place. Crime measures depend on residents and business owners calling the police, the police responding, and individual police officers filing reports. Changes in police priorities, policies, and staffing levels could affect the number of reports filed. Additionally, reluctance on the part of residents and business owners to make reports due to stigma, fear, or hopelessness could cause the number of reports filed to fall as well.

Quantitative analysis alone is also insufficient to determine the causes of rent increases, gentrification, displacement, and homelessness. Further qualitative study could yield insight into connections between the East Bay BRT project and real estate speculation in East Oakland.

Our analysis also did not examine the differences in impacts between neighborhoods such as Fruitvale and Merritt that are closer to downtown, and the "Deep East Oakland" neighborhoods south and east of Seminary Avenue. Residents have pointed out the stark differences in the commercial activity between various parts of International Boulevard. Future research should examine the different rates of business recovery along each stretch of International, perhaps through commercial property vacancy rates or measures of business diversity.

Of particular interest to residents is the availability of essential services such as banks, grocery stores, and pharmacies.

Appendix B

Richmond Transformative Climate Communities Projects

Racial Equity Impact Assessment

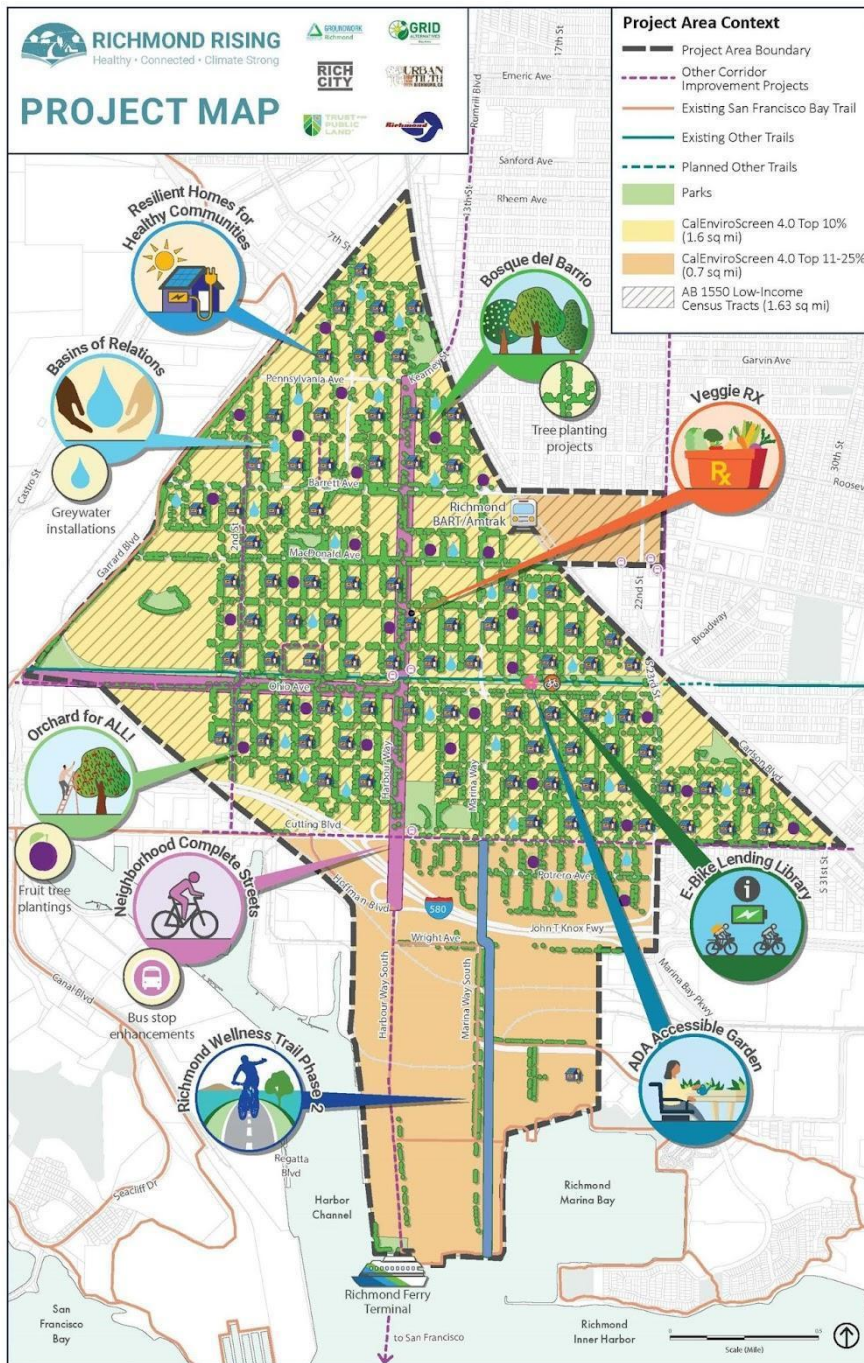
Overview

In 2018, the California Strategic Growth Council awarded the City of Richmond a \$170,000 Transformative Climate Communities planning grant. Together with six community partners, Richmond leveraged this into a \$35 million implementation grant from the State of California in 2022 through a comprehensive application process. In collaboration with community-based organizations, the city identified ten projects and five plans, known as Richmond Rising, to advance environmental justice in the neighborhoods of Iron Triangle, Coronado, and Santa Fe in Richmond. Three of the ten projects focus on improving mobility through changes to mobility infrastructure: Neighborhood Complete Streets, Richmond Wellness Trail (Phase 2), and E-Bike Share. The City of Richmond also created a Displacement Avoidance Plan for the project area that calls for the adoption of a renter access ordinance, a community land trust, an [Accessory Dwelling Unit (ADU)] toolkit [to make it easier for homeowners to design and build ADUs], and a Buy Local Campaign and Facade Improvement pilot program to benefit local businesses.

The following sections describe a REIA of the three grant projects that will make changes to mobility infrastructure. This REIA concludes that the projects will likely make progress towards racial equity if the transformative planning model is continued, the proposed displacement avoidance plan is successfully implemented, and resident voices are properly heard. This abridged REIA conducted by the research team could act as a framework or guide to future such assessments on these and other transportation projects.

Background

Richmond, California, is home to a diverse, predominantly low- and middle-income population, as well as one of the largest oil refineries on the U.S. West Coast, creating a host of severe pollution burdens. Strict racial segregation in earlier years concentrated white residents in Point Richmond (upwind from the oil refinery) and the hills, and residents of color in the flatlands, who disproportionately bear pollution burdens. The state's cumulative pollution burden mapping tool, CalEnviroScreen, ranks all the census tracts in the project area, (see Figure B-1) in the 92nd or 93rd percentile for pollution burdens. Contributing to these poor scores are the area residents' high levels of socioeconomic vulnerability, low educational attainment, large numbers of housing-burdened households, and high rates of linguistic isolation, poverty, and unemployment.



Source: <https://richmondrisingca.org/projects/Richmond Rising>

Note: E-Bike Share is not pictured as it will be located throughout the project area.

The causes of these disparities are deeply rooted in Richmond's history of settler-colonial violence committed on the Muwekma Ohlone people, later racial covenants and state-sponsored racial segregation measures

including insurance redlining, dismantling of wartime public housing to favor single-family houses, creating racial barriers to wealth-building, and heavily discriminatory industrial siting (Richmond Housing Element, F-13-F-14). Rising housing costs in the Bay Area also threaten to displace low-income communities of color in Richmond; from 2000 to 2019, the Black population fell by nearly 39 percent in Richmond (Richmond Housing Element, F-26).

Racial Equity Impacts

The objective of the proposed new projects is to create transformative environmental, health, and economic benefits by increasing community services, mobility, housing security and energy independence; providing job training; and reducing greenhouse gas emissions and long-term energy costs.

The East Bay BRT case study we conducted in tandem with this study demonstrated some of the dangers posed by transportation projects conceived through top-down planning. In contrast, the implementation of the Richmond Rising projects is governed by a Collaborative Stakeholder Committee with a diverse composition of members, and the projects are intended to address needs expressed by community members. However, no community is a monolith, and the research team's work with the Richmond Resident Advisory Council¹⁰ reveals that some residents are concerned with an overemphasis on the mobility of cyclists—a relatively small population—over that of residents who depend on their cars for transportation. Others expressed a desire for a greater emphasis on traffic safety, and in response, the city has applied for an additional grant to fund connectivity and safety features, particularly those focused on schools, youth, and people who don't drive.

The East Bay BRT case study also showed infrastructure projects could have unintended consequences such as prolonged construction, which can have negative impacts particularly for businesses, and a risk of worsening traffic conditions if safety concerns are not accounted for. Finally, infrastructure investment in low-income communities of color can lead to residential and commercial displacement as public investments increase land values and rents (Kahn 2007). Investments in transportation infrastructure can attract market rate development targeted at higher-income commuters. For example, the Richmond Wellness Trail project will make it easier for commuters to bike to the Richmond Ferry terminal, an improvement that former Mayor Tom Butt hoped would give people who “work in some tech industry in San Francisco, an opportunity to live in Richmond at a very low rate compared to say San Francisco or Oakland” (Harrison 2017).

Should the displacement avoidance plan be successful in retaining current residents and businesses, the projects will have transformative equitable outcomes for residents of the project area. The Complete Streets, E-Bike, and Wellness Trail projects could make it easier for residents without access to a car, who make up a higher proportion in the project area than the city at large,¹¹ to get around Richmond. The proposed Veggie RX and Orchard for All projects, together with the ADA Accessible Garden project will expand access to fresh, healthy food. based on the goals of the projects, the Basins of Relation and Resilient Homes projects will provide job training and energy independence, and the Bosque del Barrio project will make streets cooler and more pleasant and healthy. All these projects represent investments that will address existing environmental

¹⁰ The council is funded by the City of Richmond for Just Cities' work on the city's Housing Equity Roadmap.

¹¹ ACS Table S0802 (Means of Transportation to Work by Selected Characteristics)

inequities in Richmond. These impacts, targeted to the low-income neighborhoods of color that make up the project area, will be mainly felt by Hispanic, Black, and Asian residents.

Further Considerations

A robust anti-displacement or displacement avoidance plan is necessary to ensure the benefits of the proposed projects accrue to the current residents and business owners in the project area. As we have seen in East Oakland, failure to do so can contribute to massive rent spikes and displacement. As part of the Displacement Avoidance Plan, Richmond could also consider integrating access to anti-displacement resources as part of community engagement; defining affordability according to neighborhood incomes rather than regional incomes; and prioritizing current and displaced Richmond residents for new affordable housing units. The city could address business displacement by creating a business impact mitigation fund that would distribute grants to businesses in anticipation of revenues lost due to construction, and work to minimize parking losses, particularly for businesses that need access to loading zones.

In response to safety concerns raised by residents who actively participated in the Collaborative Stakeholder Committee meetings and townhall meetings organized for the Neighborhood Complete Streets project, the city applied for an additional grant. This funding will supplement the Richmond Wellness Trail and Neighborhood Complete Streets projects with additional connectivity and safety features for pedestrians, focusing on schools, youth, and other people who cannot drive. The city's responses to the concerns raised by community stakeholders in its planning process demonstrate its commitment to transformative community planning principles. Continuing to partner with the community in shared decision-making, and paying due attention to feedback from residents, will be essential to achieve racial equity.

Project implementation will be evaluated by the UC Berkeley Center for Healthy Global Cities. Success will be judged based on several factors, including whether community partners feel that implementation takes their needs into account, if they feel that they have decision-making power, if there is diverse participation, and if there is sufficient community education, among other things. Given these considerations, we conclude that the proposed projects will likely make progress towards racial equity if the transformative community planning model is continued, the displacement avoidance plan for residents is implemented, and stakeholder voices are heeded.

Assessment Limitations

This Racial Equity Impact Assessment was conducted by the research team and fact-checked by city staff. The City was just getting the Richmond Rising project off the ground during the time of this research study and meeting funding timeline requirements. Had timing been different and had there been more time and funding to support this study, we would have ideally trained the Richmond Rising project team and community participants to co-conduct the REIA with us. However, through this example of the Richmond Rising project, we hope to demonstrate the ability of a REIA to examine transportation plans through a racial equity lens, and to advance transformative mobility justice in transportation planning.

