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East Oakland Mobility Justice: A Case Study of the International Boulevard Bus Rapid Transit Project Safety and Displacement

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East Oakland Mobility Justice: A Case Study of the
International Boulevard Bus Rapid Transit Project Safety
and Displacement Impacts

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16. Abstract Low-income communities of color in formerly redlined neighborhoods face persistent racial disparities and inequities in pollution exposure, access to transportation and safe streets, and inadequate provisions for health, safety, stable housing, clean air, education, and employment. In the process of attempting to remedy such disparities through major transportation infrastructure and access improvements, residents who are intended to benefit from expanded transportation access and options are often placed at increased risk of harmful displacement, gentrification, and environmental injustice impacts. This research project employs a case study of the International Boulevard Bus Rapid Transit (BRT) project in East Oakland, guided by Community Based Participatory Action Research (CBPAR) principles, to investigate specific traffic safety and racialized displacement impacts from the project and considers potential solutions towards protecting residents and preventing harmful byproducts of major transportation projects. In collaboration with a Community Advisory Council (CAC), a quantitative analysis of collisions along the corridor and demographic changes in select East Oakland neighborhoods was conducted. The results show evidence of increased fatality and injury collisions along the corridor at the start of construction of the BRT and after opening of the service as well as continued trends of gentrification and displacement in many East Oakland neighborhoods along the corridor. It is inconclusive with this research if there is a causal link between the BRT project and exacerbated displacement trends in nearby neighborhoods. Further qualitative research is needed to ground-truth and understand more fully the indirect land and housing market impacts of the BRT project.			
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East Oakland Mobility Justice: A Case Study of the
International Boulevard Bus Rapid Transit Project Safety and
Displacement Impacts

Andre Soucy

CLIENT REPORT

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Introduction

Low-income communities of color in formerly redlined neighborhoods face persistent racial disparities and inequities in pollution exposure, access to transportation and safe streets, and inadequate provisions for health, safety, stable housing, clean air, education, and employment (Yearby, 2020; Smith et al., 2022). In the process of attempting to remedy such disparities through major transportation infrastructure and access improvements, residents who are intended to benefit from expanded transportation access and options are often placed at increased risk of harmful displacement, gentrification, and environmental injustice impacts as adequate housing and environmental protections or provisions are typically not concurrent with transportation projects (Cash et al, 2020, Zuk et al 2018).

This report investigates specific impacts and potential solutions towards protecting residents and preventing harmful byproducts of major transportation projects through a case study of the International Boulevard Bus Rapid Transit (BRT) project in East Oakland. I applied a case study approach here to examine transit-accessible neighborhoods with low-income communities of color targeted for housing and job growth as part of regional transportation policies aimed at reducing greenhouse gas emissions. Case studies can be used to explain, describe, or explore events or phenomena in the everyday contexts in which they occur. They rely on the convergence of multiple sources of evidence, both quantitative and qualitative, through triangulation (Yin, 2017; Stoecker, 1991). The East Oakland study area has a significant population of low-income communities of color that face multiple environmental justice burdens, e.g., poor air quality from their proximity to major sources and multipliers of emissions such as highways. East Oakland communities also confront challenges related to gentrification, displacement pressures, the lingering effects of redlining, the use of eminent domain, and systemic discrimination.

My analysis looks at specific safety and land market impacts of the BRT project on the corridor and surrounding neighborhoods. The question of whether the BRT exists to serve existing East Oakland residents of color, or if it is intended to accommodate racialized displacement and an influx of wealthier and whiter residents to East Oakland, is a core concern of this research. The BRT project is of particular concern because it has brought dramatic changes to the streetscape of one of the most important commercial corridors in East Oakland: International Boulevard. The corridor is nestled between and connects many low-income communities of color to job centers, businesses, schools, parks, and many more essential places. And while the BRT's goal is to improve transit frequency and accessibility to such destinations, there are implications of gentrification to low-income and vulnerable populations and exacerbations of displacement based on regional plans for East Oakland as a growth geography. Race-neutral assumptions of transportation benefits from the BRT have been

criticized for their failure to consider disparate racialized land and housing market impacts from increased transportation access, especially when considering for whom those access benefits are targeted.

This report also documents the process and effectiveness of the Community Advisory Council (CAC) convened to guide this research, informed by Community Based Participatory Action Research (CBPAR) principles (Israel et al., 2005; Minkler & Wallerstein, 2008). East Oakland, harboring a mosaic of diverse communities of color, is home to many residents and cultural communities whose experiences are difficult to track with and often overlooked by traditional research methods. CBPAR broadens the opportunities for planners and researchers to create, execute, and share impactful interventions within diverse communities like those in East Oakland. This is achieved by addressing power disparities, fostering mutual benefits between community and academic collaborators, and encouraging knowledge exchange, integrating community perspectives into the research process. The CAC for this project was established to advance those CBPAR methods, bringing community leaders to the table to steer the direction and methods of the research. CAC members act as sources of community-based knowledge, points of contact for reaching communities of concern, and participants in rich discussions that help develop the scope of the project towards a shared vision for community benefit.

My analysis starts with context-setting on East Oakland's history as well as some background on the International Boulevard BRT project's beginnings, construction, and current situation. This background will be followed by a review of the literature around safety and market-based displacement impacts of BRT projects. The report will then outline the methods of conducting this research into the safety and displacement impacts of the BRT project in East Oakland, including quantitative and qualitative analysis as well as the role of the CAC. The report will conclude with a summary of the research findings, followed by conclusions and recommendations for planning practice and future research.

Background

History of East Oakland

The areas that are now known as East Oakland were first inhabited by the indigenous Ohlone people for thousands of years preceding Spanish colonization. The Chochenyo Ohlone people lived in the East Bay and established the village of Huichin in what is present-day Oakland. Spanish colonization and subsequent American occupation led to calamitous declines in indigenous populations in Oakland, the Bay Area, and California as a whole by way of state-sanctioned violence and disease spread (Bay Area Equity Atlas, 2023). Rampant land thefts were concurrent with this violence. Despite the

genocidal efforts of colonizers into the late 1800s, Ohlone descendants continue to thrive and carry on their cultural legacies in Oakland to this day.

East Oakland's modern American history began with the end of Spanish colonization and the start of American control of California in the mid-1800s. The City of Oakland was incorporated in 1852 as the San Francisco Bay Area was becoming rapidly settled. By 1909, the City had begun annexing surrounding towns, including Fruitvale, Melrose, Lockwood, and Elmhurst, which constitute much of what is considered East Oakland today.

The expansion of Oakland led to new transportation infrastructure development in the early 1900's with the development of the Key System of streetcars, which included a route running along East 14th Street (also known currently as International Boulevard), later replaced by buses after 1940 (Oakland Planning History, n.d.). AC Transit took over this system of transit routes in 1960.

While increased transportation access came to East Oakland, the area itself was not accessible to all for much of its early history, with the establishment of racial covenants in most of its communities. The resulting racial segregation effectively barred non-white Oaklanders from homeownership and associated wealth-building opportunities. Meanwhile, a new white middle class was allowed to develop in these exclusive communities. Into the mid-1900s, white wealth-building continued in many East Oakland communities as the Home Owners Loan Corporation's (HOLC) redlining maps assigned grade D to most neighborhoods along and below East 14th Street, preventing the issuing of loans to any Black residents and other residents of color living in those areas. Freeway construction further exacerbated segregation and inequities, as white residents fled to suburban communities with subsidized home mortgages and easy vehicular access to job centers following World War II and the completion of I-880 and I-580 by the mid 1960s.

With suburbanization and white flight to post-WWII suburbs, state investment in the formation of a white, suburban middle class emerged. This stage of development made inner city suburbs and neighborhoods like East Oakland more available to non-white and immigrant communities. Many Black Oaklanders were finally able to purchase homes in East Oakland as white populations declined. Despite these new opportunities for wealth-building and access, public disinvestment and disregard for East Oakland communities would follow, with such changes as reduced bus services along 14th Street signaling this trend. In the 1980s, the economic stability of East Oakland neighborhoods was weakened by the loss of over 12,000 manufacturing jobs across the city, leaving low-income Black neighborhoods vulnerable to the epidemic of drugs and crime of that period.

The development of Bay Area Rapid Transit (BART) station areas and efforts to rebrand the East 14th Street corridor as International Boulevard marked a transition in the 1990s and early 2000s in the City's approach to the economic development of East Oakland neighborhoods, with mixed feelings from the community (Walker, 1996). Many residents saw this name change as a move by the City government to attract investment along the corridor without concern for the wants and needs of the area's residents. The foreclosure crisis of the late 2000s disproportionately impacted East Oakland residents based on predatory lending practices that targeted homeowners of color, especially Black homeowners.

At present, East Oakland communities remain resilient against the lasting impacts of explicit segregation and disinvestment, structural racism, and the growing pressure of displacement amidst the Bay Area's housing crisis. East Oakland has experienced a growing desirability for properties in the area from wealthier homebuyers, developers, and investors. This situation has made projects like the BRT even more precarious in the eyes of residents beyond direct transportation safety and access impacts from the project.

The International Boulevard BRT Project

International Boulevard, previously known as East 14th Street, is a major corridor that runs the entire length of East Oakland neighborhoods. In 1996, the City renamed the corridor International Boulevard, with the main purpose of improving its public image. The East Oakland Bus Rapid Transit (EB BRT) Project is a \$216 million transit infrastructure investment running from Downtown Oakland, near the 19th Street BART Station to the San Leandro BART Station. Across the two cities, the BRT is approximately 9.5 miles. The BRT came to fruition after AC Transit started the planning and design process in 2002, with official construction beginning in 2016. The project operates in the areas of Downtown Oakland/Chinatown, the many diverse neighborhoods of East Oakland's flatlands, and Downtown San Leandro.

Community engagement for the BRT proposal was fairly thorough, with the project team consulting various citizen-staffed commissions and committees with the City of Oakland over the many years that the project was in planning. The Commission on Aging, Commission on Peoples with Disabilities, and Bicycle and Pedestrian Advisory Committee were all consulted for the design of the project, with their input standing as conditions of approval for the project. Meetings with businesses and residents that may be impacted by parking losses were also held throughout the planning process. Some outcomes of this engagement included stop placements with considerations for certain destinations for mobility-impaired and elderly users, and a business impact mitigation fund, which was particularly fraught with difficulties to access by small businesses along

International. While engagement with a select set of official City commissions and committees as well as nearby businesses and residents was extensive, these efforts were narrow in scope and depth, focused mostly on assessing impacts on transportation access, rather than potential residential and business displacement impacts as well as safety impacts from a limited infrastructure design. These overlooked impacts are now some of the most pressing concerns for community members in the years following the BRT's opening.

The BRT has brought significant and dramatic changes to the streetscape of International Boulevard, including twenty-one median board stations, twelve curbside stations, as well as pedestrian and bicycle infrastructure. While the goal of the BRT project was to improve transit frequency and accessibility, there are significant concerns surrounding traffic violence and safety, as well as the exacerbation of gentrification and displacement pressures on lower income and vulnerable populations. Residents of East Oakland have expressed frustrations and worries regarding unsafe feelings crossing International and accessing the stations due to speeding traffic and a perceived increase in occurrences of fatal and serious crashes involving pedestrians and bicyclists along International. In a similar vein as much of the concerns surrounding the rebranding to International Boulevard, many residents are concerned about long term impacts on their sense of stability and community as more changes occur in the hearts of their communities, signaling the potential for gentrification and eventual displacement of long-term East Oakland residents. Concerns regarding for whom the BRT project was implemented are top of mind for long-established communities and residents of the area.

Literature Review

In order to effectively analyze specific safety and displacement impacts of the BRT project, I completed a review of the literature on the BRT project and similar infrastructure projects.

Safety

Understanding the safety impacts of major transportation infrastructure projects like the International Boulevard BRT is essential for guiding future initiatives and urban planning efforts. Previous research offers valuable insights into the anticipated impacts and methodological approaches for assessing observed outcomes across diverse BRT systems.

Existing studies indicate a general reduction in crashes and severity along BRT corridors, but with notable exceptions. For instance, while Albuquerque's BRT project saw a decrease in overall collisions, the collision rate per vehicle on the corridor increased significantly (Bia & Ferenchak, 2022). Similarly, Bogotá's TransMilenio BRT system

experienced reduced crashes overall, but certain areas around busy stations saw an uptick in incidents, necessitating targeted safety interventions (Bocarejo et al., 2012)

The literature also highlights the influence of specific factors on safety outcomes. Studies have identified that lane count, pedestrian crossings, and median presence can impact crash likelihood (Vecino-Ortiz & Hyder, 2015). Moreover, reports from advocacy groups underscore localized safety concerns along BRT corridors, emphasizing the need for enhanced pedestrian infrastructure and revised urban speed policies (Traffic Violence Rapid Response, 2023)

Detailed observations of dangerous driving behaviors along BRT corridors inform targeted design and policy recommendations (Traffic Violence Rapid Response, 2022). These recommendations include interventions like speed control measures, lane separation enhancements, and intersection redesigns aimed at curbing unsafe driving practices and improving corridor safety standards.

Overall, the literature contributes to a more comprehensive understanding of safety dynamics within BRT contexts, informing this research and possible future safety improvements to the BRT corridor in East Oakland.

Transit-Oriented Development & Displacement

BRT systems are often implemented as cost-effective alternatives to more built-out Light Rail Transit (LRT) systems, with less of an emphasis on land development opportunities that coincide with the transit project. The term “Transit-Oriented Development” (TOD) and such developments like transit villages around stations and stops have much less of an association with BRT development. Given this gap in perceptions and evaluations of the land market and development impacts of BRT systems, recent research has delved into the impact of BRT systems on property values, particularly within the United States. An analysis of 11 BRT systems across various metropolitan areas in the U.S. revealed nuanced patterns (Acton et al., 2022): multi-family properties near BRTs with dedicated lanes appreciated, while those around off-street busway systems depreciated. BRT-lite systems that run mostly in mixed-traffic, showed mixed effects but were associated with property appreciation in densely populated areas with established transit networks. Quantifying the impact of BRT stations on single-family home values in Pittsburgh found decreasing marginal effects, indicating that proximity to BRT stations positively influenced property values, albeit with diminishing returns (Perk, 2010). These findings point to a notable relationship between BRT infrastructure and property values, with particularly significant impacts on property values for built-up systems that preserve pedestrian-level access to dense urban neighborhoods with existing transit, like many parts of East Oakland. Though there are limited studies on BRT in the United States, there is a general implication that BRT systems bringing lasting improvements in

accessibility comparable to a rail transit system may have similar impacts on land and housing markets as rail transit (Chapple & Loukaitou-Sideris, 2019). Regardless of varying impacts of transit infrastructure developments, it is critical for planners and policymakers to put mechanisms and policies in place to protect existing residents from displacement.

Previous Analyses of the International Boulevard BRT Project

There have been two studies on the racial equity impacts of the International Boulevard BRT project: one from the non-profit consultant group Just Cities for the City of Oakland, and one from a studio course of Master's students in city planning, in collaboration with Just Cities. Each of these reports documented a wide range of impacts, lessons learned, and recommendations from the planning, construction, and operation of the BRT on International Boulevard. The studio report recorded some lessons already learned by AC Transit and others from the BRT project up to its opening in 2020, including:

- Better preparation for common points of concern like parking to avoid associated time and cost overruns
- Establishment of a standing commission on transportation projects in Oakland, better planning for businesses to access mitigation funds
- Recognition that regional agencies would be better equipped for planning and construction of BRT projects
- Earlier and more intentional engagement with communities and businesses to prevent displacement and gentrification impacts as well as business impacts
- Coordination of regional assistance funds for affordable housing with the project to support affordable housing near the stations
- Use of specific metrics to track changes and impacts along the corridor

A summary of key themes from interviews with community leaders for the Just Cities and studio reports identified gentrification and displacement, tree loss, poor engagement and disconnects between “technocrats” and the community, and poor engagement and implementation of the business impacts mitigation fund as major concerns or shortcomings of the BRT project. Though most leaders and community members at-large were hopeful about emissions reductions and voiced desires for additional incentives for residents taking transit and improvements in bus network connections, the project was afflicted with many concerns about detrimental impacts in other important areas and weak connections with the community. The full summary of themes from interviews with community leaders and professional voices is laid out in Table 1 below.

The studio report conducted analysis in 5 general categories: Community Participation Analysis; Housing & Land Use Analysis; Access & Safety Analysis; Business & Construction Analysis; and Environmental Justice Analysis. For the purposes of this

research, the review will focus on the Housing & Land Use and Access & Safety Analyses' methods and findings. The Housing & Land Use Analysis section tracked zoning changes along the corridor as well as housing market and demographic changes along the corridor. The Access & Safety Analysis section examined changes in bus stop spacing as well as collision rates along the corridor.

The Just Cities report, produced as an appendix to the East Oakland Mobility Action Plan (EOMAP), conducted a thorough analysis of 11 selected neighborhoods in East Oakland, along the BRT corridor. This analysis found significant trends of shrinking ethnic enclaves and racialized income declines in most East Oakland neighborhoods, as well as generalized housing precarity for longtime East Oakland residents. The authors also found increased rates of collision along the corridor after construction started on the BRT, significant concerns and risks for pedestrians and bicyclists accessing median stations, and poor administration of business mitigation funds and significant construction impacts on business access led to the displacement of many small, minority-owned, legacy businesses along International Boulevard.

Table 1. Summary of Key Themes from Interviews for Just Cities EOMAP Report and UC Berkeley Studio Report

Community Leaders	Professional Voices
<p>Recommendations</p> <ul style="list-style-type: none"> • Engage community early in the planning process • Find ways to fix the mitigation fund allocation • Offer incentives for residents to use transit • Improve bus network connections <p>Overall Positives</p> <ul style="list-style-type: none"> • Hopeful about reduction in pollution emissions • Increase in property values - future development <p>Disinvestment and Gentrification Concerns</p> <ul style="list-style-type: none"> • Concerns of gentrification and displacement <ul style="list-style-type: none"> ◦ How is the city going to address it moving forward? ◦ EBBRT signals displacement and gentrification • Long-time disinvestment in East Oakland • Disparities in construction build out • Cut down (loss) of trees • Businesses wanted to be left alone <p>Lack of Engagement and Accountability</p> <ul style="list-style-type: none"> • The community the project is intended for was not engaged • Project created by “technocrats” - disconnected from the community • Lack of accountability across institutional actors • People supported the project (idea) but not how it developed • Lack of business input on mitigation fund process 	<p>Overall Positives</p> <ul style="list-style-type: none"> • EBBRT will improve commute time • EBBRT will add construction jobs • Oakland’s busiest corridor will see an improvement • EBBRT will improve road conditions • EBBRT is AC Transit’s coveted project • AC Transit: Important to have a physical presence in the corridor <p>Small Business Impacts</p> <ul style="list-style-type: none"> • Construction creates disruptive impacts on merchants • Small businesses need “hand holding” (technical assistance) • City of Oakland and AC Transit have structural challenges • Limited attention was paid to mitigation impacts and funding • Businesses don’t understand the mitigation funds process • Difficult to keep track of local hiring goals • Small businesses are not the only constituents, but they have more opportunity to vocalize concerns <p>Other Concerns</p> <ul style="list-style-type: none"> • EBBRT does not have a vision • Some people do not know the project is happening • Internal political difficulties • Connection between EBBRT and displacement/gentrification isn’t proven

Excerpts from interviews with community voices highlight the history and continuing trends of displacement that face East Oakland’s communities. While reflecting on her nearly 40 years in Oakland, Ms. Sherry lamented the dispersion of her grandchildren to more distant cities like San Leandro, Antioch, and even Sacramento. She recalled a time when Oakland was predominantly Black, with vibrant community life centered around places like International Boulevard, known as East 14th Street by her and many other

long-term residents. As businesses left the area and the housing crisis hit, many residents lost their jobs and were forced to leave. The Great Recession further exacerbated displacement, particularly affecting Black and Latinx communities.

She shared a heartbreaking story of an elderly couple from her church who lost their home after living there for 23 years. Despite their efforts to keep their home, they ultimately had to move in with their daughter and son-in-law in the San Joaquin Valley. Ms. Sherry underscores the typicality of such displacement experiences, where people, lacking resources and affordable housing options, are pushed out by predatory lenders and newcomers buying up properties.

Ms. Sherry's hope is for people to realize the importance of preserving communities like Oakland. Without intervention, she fears the loss of identity and sense of belonging that such displacement brings, not just for individuals but for the entire essence of what East Oakland communities represent.

Carina Lieu recounts how most of the Asian American residents in enclaves like Clinton and East Peralta are elders, with younger generations struggling to remain in these places. She described the remodeling or upgrading of homes in these neighborhoods, suggesting that newcomers who can afford such renovations are altering the housing landscape. She shared her family's experience of attempting to buy a home in Oakland in 2013 but facing competition from outside buyers who were able to outbid them.

Fruitvale resident, Silvia Guzman, reflected on the importance of community in the neighborhood for Spanish speakers and speakers of indigenous Latin American languages to access goods and services in their native tongues. She said that while the Fruitvale had not experienced much rapid gentrification, patterns of overcrowding in larger apartments and the loss of long-term residents as they pass their homes on to family members still signal the precarity of many residents' housing situations.

Methods

This report will generally serve as an update to the previous reports from Just Cities and the UC Berkeley studio course, applying the methods outlined in those reports with more current data on traffic safety and racialized displacement risks along the International Boulevard BRT corridor. Along with these analyses, I will document the role of the Community Advisory Council (CAC) in guiding the broader research project.

The Community Advisory Council (CAC)

In order to better meet the needs of the communities concerned with this research project, a Community Advisory Council was convened for the purpose of providing guidance, feedback, and community participation opportunities throughout the project.

The process for recruiting CAC members started with a list of known Community-Based Organizations (CBOs) based out of or operating within East Oakland communities. Recruitment emails were sent out to representatives from each organization and preliminary meetings were scheduled to gauge individuals' interest in participation. Once a sufficient number of committed members representing a range of East Oakland communities was recruited, monthly CAC meetings were scheduled. Table 2 below summarizes the general composition of the final CAC membership.

Table 2. Summary of CAC Membership	
CAC Member's Organization	Rationale for Inclusion
Frontline Catalyst	Connections to and representation of youth climate justice organizing in East Oakland
Hood Planning Group	Representation of East Oakland community interests through its culturally-relevant community-based planning and engagement practice in East Oakland
Communities for a Better Environment (CBE)	Representing environmental justice interests in East Oakland
East Side Arts Alliance (ESAA)	Connections to and representation of East Oakland cultural infrastructure assets and interests
City of Oakland, Department of Transportation (OakDOT)	City department with most involvement/proximity to the BRT project, facilitating much of the engagement on projects and plans in East Oakland
East Bay Alliance for a Sustainable Economy (EBASE) & Faith Alliance for a Moral Economy (FAME)	Representing economic/workforce development interests as well as faith organizations in East Oakland
Black Cultural Zone (BCZ)	Connections to Black community and cultural organizations in East Oakland
Lao Family Community Development (LFCD)	Connections to newer immigrant/refugee communities
Native American Health Center (NAHC)	Connections to Indigenous communities, representing public health interests as well
Mujeres Unidas	Connections and representation of Latinx community
Communities United for Restorative Youth Justice (CURYJ)	Connections to and representation of youth empowerment and community-based crime prevention
East Bay Asian Youth Center (EBAYC)	Connections to Asian American youth and broader Asian American community in East Oakland

The CAC convened two times during the completion of this report, in February and March 2024. An April meeting was planned, but eventually canceled due to the research team being behind schedule on assembling initial findings to present to the members. At the time of writing, the next scheduled meeting will be in May 2024.

The February CAC meeting was used to introduce the members and the research project, for context-setting, and to discuss the project goals and scope. The main questions for discussion were:

- How do CAC members feel about the project goals/questions?
- What information is important to include in the research process & outcomes?
- What would CAC members like to see come out of a research project like this? What should the research team include that will be most useful to them?

The March CAC meeting was used to verify research priorities, discussing specific research questions and points of concern or interest for the members and the research team. The research team also asked about what community-based data already exists or could be produced to aid in answering the research questions.

Outside of the CAC meetings, the research team followed up on threads that were opened during the meetings, allowing for deeper discussions about specific research questions, data needs, and community data/contacts. This element of the CAC structure expands the quality and connections of this research to the East Oakland community.

Quantitative Analysis

The quantitative analytical approach of the Just Cities and studio reports are replicated in this study to investigate safety trends and patterns of demographic change in neighborhoods of interest that could point to broader displacement and gentrification trends or risks that exist in proximity to the BRT corridor. Beginning with the methodology for traffic safety analysis, the main data source for this analysis was geocoded collision data from the Statewide Integrated Traffic Systems (SWITRS) dataset. Data on all collisions within the City of Oakland was retrieved from SWITRS for the years 2012 to 2022. This data was cleaned and processed in ArcGIS to create a filtered dataset of crashes that occurred within 100 feet of the BRT route. Using this cleaned dataset, a temporal analysis of crash rates along the BRT route was conducted, examining the number of total collisions reported along International Boulevard before, during, and after construction of the BRT, as well as the number of injuries and fatalities, and the number of pedestrian and/or cyclist-involved collisions along International. I organized this data into charts for examination of temporal trends.

The second component of the quantitative analysis was examining spatial patterns and temporal trends of displacement and gentrification. For this portion of the analysis, a selection of East Oakland neighborhoods was gathered to track these trends in various ethnic enclaves and neighborhoods that are generally proximate to the BRT corridor.

These neighborhoods were selected based on their history as ethnic enclaves for various racial/ethnic communities in East Oakland as well as proximity to the BRT corridor, as established in the previous report from Just Cities. For the purposes of conducting quantitative analysis of these neighborhoods, each neighborhood was assigned one or more census tracts to represent their geographies in the analysis. Zip Codes were considered for use in the analysis based on the availability of rent data at that scale, but were ultimately not included as their geography tended to be too large such that they would mask the individual realities of lower income neighborhoods, particularly those that lie in proximity to wealthier neighborhoods in the Oakland Hills. The selection of neighborhoods, census tracts, and their rationale for inclusion is summarized in Table 3 below.

Table 3. Summary of 11 East Oakland Neighborhoods		
Neighborhood	Census Tract(s)	Rationale for Inclusion
Brookfield Village	4091	Hispanic/Latinx & Black/African American Enclave
Clinton	4054.02, 4055	Asian American Enclave
Coliseum	4086, 4088, 4089	Hispanic/Latinx & Black/African American Enclave
Durant Manor	4104	Hispanic/Latinx & Black/African American Enclave
Eastmont	4084	Hispanic/Latinx & Black/African American Enclave
East Peralta	4060	Asian American Enclave
Frick	4087, 4077	Black/African American & Hispanic/Latinx Enclave
Fruitvale Station	4061	Hispanic/Latinx Enclave
Merritt	4053.02	Asian American Enclave
Reservoir Hill	4064	Black/African American Enclave
Sobrante Park	4092	Hispanic/Latinx & Black/African American Enclave

American Community Survey (ACS) 5-Year Estimate data was collected for Oakland and the 11 selected neighborhoods for analysis. 5-Year Estimates for 2022 and 2017 were used to measure changes over time from one 5-year period to the next. Relative to the BRT's construction timeline, these two periods each contain three years during which there was active construction (2015-2017, and 2018 to 2020). While it would be preferable to compare more disaggregated data for pre-, during, and post-construction, at the time of this analysis, the most recent ACS data available for 2022 still includes data from during the construction period for the BRT. In spite of this limitation, this analysis could provide meaningful insight into the pre- and post-construction trends around the project corridor.

Using ACS data, there are 5 metrics of interest that were analyzed across Oakland and the 11 selected neighborhoods between 2017 and 2022, summarized as follows:

- Racial/Ethnic Demographic Change
- Income Change by Race/Ethnicity
- Housing Unaffordability
- Homeownership Access
- Homelessness Risk

Racial/Ethnic Demographic Changes were tracked using ACS Table B03002 on "Hispanic or Latino Origin by Race." The total population and percentages of each of Black, Asian, Hispanic/Latinx, and White-identifying individuals was calculated for each neighborhood and Oakland as a whole for 2017 and 2022, with the percentage point changes between the two periods calculated as well. Income Change by Race/Ethnicity was tracked using ACS Table S1903 on "Median Income in the Past 12 Month." The Median household income for each of Black, Asian, Hispanic/Latinx, and White-identifying households was calculated for each neighborhood and Oakland as a whole for 2017 and 2022, including the percentage point change once again. Housing Unaffordability was tracked using ACS Table S1903, Table 25119 on "Median Household Income in the Past 12 Months," and Table B25064 on "Median Gross Rent." The median gross monthly rent for each neighborhood and Oakland as a whole was calculated and divided by the median household income for renters, outputting a Housing Unaffordability Index in the form of median rents as a percentage of median household incomes for each neighborhood and the city. For Housing Unaffordability, the decision was made to include 2012 ACS figures in order to provide a consistent source for data across time, as these calculations were not using the same Zillow rent data as the previous analyses from Just Cities and the UC Berkeley studio class. Percentage point changes in affordability between each time period were calculated as well.

Homeownership Access was tracked using ACS Table 25119 and the Zillow Home Value Index (ZHVI). Home values and incomes were used to calculate a Homeownership Access Index based on a set of assumptions. First, an affordable housing cost was assumed to be 30% or less of a household's income. Second, monthly owner costs were calculated based on a range from 10 to 20% down payments. Lastly, a 30-year, fixed rate mortgage at 5%, a property tax rate of 1.4% and an insurance rate of 0.35% were all assumed for these calculations. Monthly housing payments were calculated based on these assumptions, using a standard PITI (Principal, Interest, Tax, Insurance) formula. Final values for the Homeownership Access Index were expressed as the estimated percent of a household's monthly income required to pay for a median home if a household is making the median household income in that neighborhood.

Homelessness Risk was tracked using ACS Table 25074 on "Household Income by Gross Rent as a Percentage of Household Income in the Past 12 Months." Homelessness Risk was defined as the share of renters in a neighborhood who are severely rent burdened and either extremely low or very low income. "Severely Rent Burdened" is defined as households spending 50% or more of their household income on rent. "Extremely Low Income" households are those with household incomes of less than \$10,000. "Very Low Income" households are those with household incomes between \$10,000 and \$19,999.

Following calculations, the various metrics described above were tabulated for comparison across time and the different neighborhood geographies.

Findings

The quantitative data analysis for safety impacts and displacement and gentrification impacts revealed some interesting trends surrounding the construction of the BRT corridor. Pedestrian collisions have declined since construction of the BRT began, but the number of fatalities, injuries, and total collisions has returned to pre-construction levels by 2022 and even shows a potential trend of further increase.

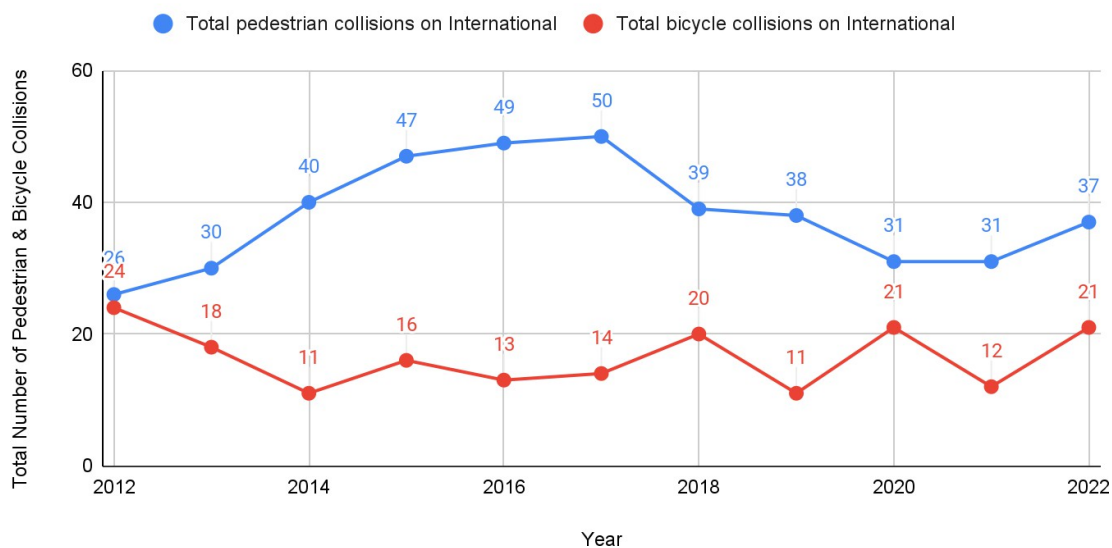
On displacement impacts, the data indicates significant shifts in neighborhood compositions, particularly affecting the Black population. The data also reveals varying levels of housing accessibility and affordability across neighborhoods. Despite rising incomes in some areas, housing affordability remains a challenge in several neighborhoods. Overall, the findings point to the complex interplay between the BRT project, traffic safety, and neighborhood demographics and socio-economic dynamics in Oakland. The following sections entail a more detailed breakdown of the findings.

Safety Impacts

The safety analysis has returned some interesting findings regarding the BRT Route, particularly the section along International Boulevard. Looking at the number of pedestrian-involved collisions from 2012 to 2022 (Figure 1), there was an apparent decrease in pedestrian collisions after 2017, coming down from a peak of 50 pedestrian-involved collisions in 2017 to a low of 31 collisions in 2020 and 2021. It is not clear, however, if crashes are beginning to trend upwards with 37 collisions in 2022. Meanwhile, bicycle-involved collisions have remained relatively constant during the same period.

A more pronounced trend is visible when looking at the total number of fatalities and injuries over time (Figure 2). There was a significant increase in fatalities and injuries in 2015, when construction began, with a notable decrease to pre-construction levels from 2017 to 2019. In 2020, when construction finished and the BRT service was open, the number of fatalities and injuries increased once again to 2015 levels and increased year over year to a record of 279 fatalities and injuries by 2022. It is not clear if this trend will continue, but there is a definite pattern of increases with the start of construction and service as well. A similar trend is apparent with the total number of collisions along International over the years (Figure 3).

Figure 1. Number of Pedestrian & Bicycle Collisions on the International Section of BRT Route (2012-2022)



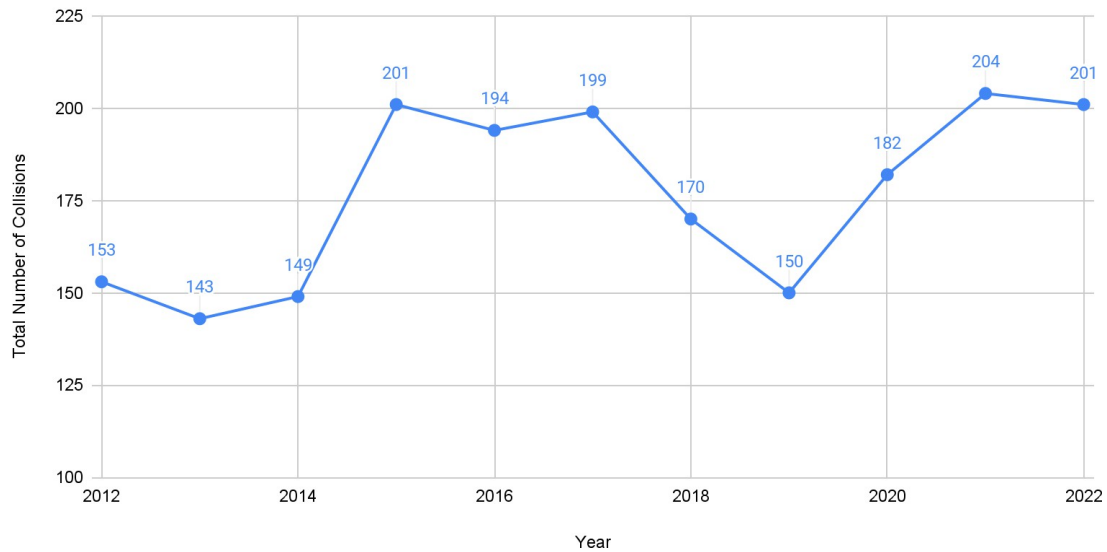
This figure shows the number of pedestrian (blue line) and bicycle (red line) collisions that have occurred along International Boulevard each year from 2012 to 2022. Source: Statewide Integrated Traffic Systems (SWITRS) collisions data for 2012 to 2022.

Figure 2. Number of Fatalities & Injuries for All Mode Types on the International Section of BRT Route (2012-2022)



This figure shows the total number of fatalities and injuries for all modes along International Boulevard each year from 2012 to 2022. Source: Statewide Integrated Traffic Systems (SWITRS) collisions data for 2012 to 2022.

Figure 3. Number of Reported Collisions on the International Section of BRT Route (2012-2022)



This figure shows the total number of collisions for all modes along International Boulevard for each year from 2012 to 2022. Source: Statewide Integrated Traffic Systems (SWITRS) collisions data for 2012 to 2022.

Displacement Impacts

The analysis on racialized displacement through demographic changes, racial income changes, housing unaffordability and homeownership access, and homelessness risk offers some insights into the racialized impact of the BRT project on pre-existing displacement and gentrification trends in East Oakland.

The demographic changes in East Oakland neighborhoods reveal a complex pattern of shifts and trends over the past decade. It appears that the BRT project may have exacerbated pre-existing racialized displacement in a few neighborhoods (Frick, Brookfield, Reservoir Hill, and Clinton) and may have contributed to an increase in the Black populations in Eastmont and Coliseum neighborhoods as well (Table 4 & Figures 4 & 5). According to my analysis, many former Black and Asian American ethnic enclaves in East Oakland have seen major population declines among the dominant ethnic group. In the years leading up to, during, and after the BRT construction, there has been a continued decline in the proportion of Black residents in most neighborhoods from 2017 to 2022 except for Eastmont and Coliseum. Another notable trend beyond the BRT timeline is that the Black population in Frick has dropped over 50% since 2000, while the White population has more than doubled. Also, the Black population is declining while Latinx population is growing in several neighborhoods, like Brookfield and Sobrante (Table 8 & Figures 8 & 9). However, the Latinx population in the Fruitvale has experienced an increased rate of decline from 2017-2022 (-11%). Looking at incomes, white, Black, and Asian residents' incomes have increased significantly in Clinton since 2012 (Tables 5, 7, 9, and 11). White residents' incomes have also grown at an increasing rate in East Peralta and Durant since 2012. White residents' incomes continue to increase in the Fruitvale while others' have declined or stayed the same since 2012.

As a major public transportation system, the BRT project may have contributed to pre-existing conditions of gentrification, that is, people with more income/resources moving into neighborhoods. My analysis found that, from 2012 to 2017, housing unaffordability for East Oakland neighborhoods was worse than citywide, demonstrating that East Oakland residents experience more housing instability than other residents of Oakland. However, from 2017 to 2022, the housing affordability for several East Oakland neighborhoods improved as household incomes increased, but not for Black and Latinx households. The Fruitvale had the largest increase (+24%) in Housing Unaffordability from 2012 to 2022, suggesting potential impacts from the Fruitvale Transit Village, located between the Fruitvale BART station and the BRT corridor. East Peralta, Durant, and Clinton had the largest decreases in unaffordability (-14%, -12%, -11%) from 2012 to 2022, which may be from increases in the number of higher income residents in these neighborhoods, particularly East Peralta and Clinton, which are both in close proximity to

Lake Merritt and Downtown Oakland. Housing Unaffordability has more than doubled for Black residents in the Frick neighborhood (from 30% in 2012 to 78% in 2022). The Homeownership Access Rate (Table 14) and home values (Table 15 & Figure 12) more broadly have become more prohibitive for East Oakland residents from 2012 to 2022. The sharp increase in home values from 2012 to 2017 before a marginal increase from 2017 to 2022 signals the crisis around housing access that might otherwise be signaled through rents and the Housing Unaffordability Index were it not for the unavailability of Zillow's rent data.

An important note on housing unaffordability is that I opted to use self-reported rent data from the ACS in my analysis rather than the more market-based Zillow Rent Index that was used for the previous Just Cities EOMAP analysis. A major discrepancy in these sources is that median rents as reported through the ACS are much lower than the Zillow Rent Index for each neighborhood each year. This discrepancy may be explained by the fact that ACS rents are self-reported by people actively renting in a neighborhood, so it is likely influenced by long-term renters in rent-controlled or otherwise much cheaper than market-rate units. This leads to a likely underestimation of actual market-rates and housing unaffordability in most neighborhoods as compared to Zillow's rent data which more likely was an accurate reflection of market conditions for East Oakland residents in the previous Just Cities analysis. See Tables 12 and 13 to judge this discrepancy in more detail. Considering this limitation of my Housing Unaffordability Index calculation, the most useful takeaway from this updated analysis is the relative changes over time for ACS-based housing unaffordability.

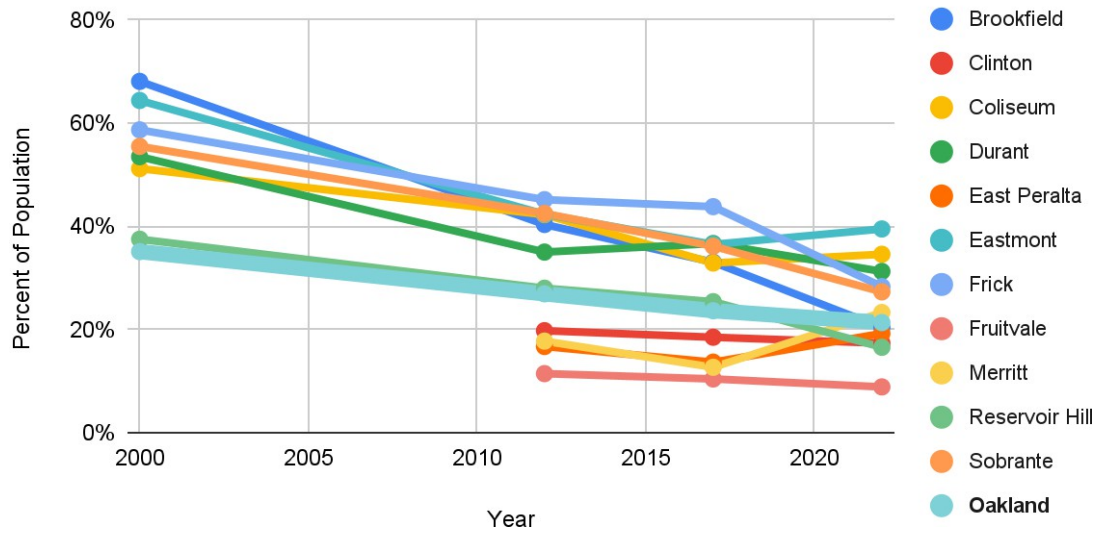
Homelessness Risk (Tables 16, 17, and 18) has more than halved in many neighborhoods and Oakland as a whole, but Fruitvale has actually seen a steady increase over time, while Frick's rate has remained relatively high. Coliseum, Clinton, and Eastmont also remain with Homelessness Risk rates exceeding the citywide figure, while the rest of the neighborhoods sit with much lower rates. While Homelessness Risk rates have reduced in many neighborhoods, this could suggest a state of advanced displacement for many of those residents previously at risk of homelessness. There is a possibility that they have either left the neighborhood since 2012 or 2017, or that they have even become homeless in East Oakland. There also stands the possibility that existing residents have escaped Homelessness Risk status by way of increased incomes, but that is also questionable given community knowledge of gentrification and an increase in higher income residents in several neighborhoods. It is important to note that Census and other quantitative data, by themselves, are inconclusive to connect the dots between displacement and specific factors like the BRT and other transportation systems and infrastructure.

Table 4. Black/African American Population Change 2000 - 2022								
	2000	2012	2017	2022	% Change 2000 - 2012	% Change 2012 - 2017	% Change 2017 - 2022	% Change 2000 - 2022
Brookfield	68.1% (1,473)	40.3% (1,043)	33.0% (738)	20.3% (516)	-27.7%	-7.3%	-12.7%	-47.7%
Clinton	-	19.7% (1,292)	18.4% (1,364)	17.3% (1,251)	-	-1.3%	-1.1%	-
Coliseum	51.2% (7,040)	42.2% (6,164)	32.8% (5,264)	34.5% (6,377)	-8.9%	-9.4%	1.7%	-16.6%
Durant	53.5% (1,799)	35.0% (1,588)	36.6% (1,520)	31.2% (1,465)	-18.5%	1.7%	-5.4%	-22.2%
East Peralta	-	16.7% (574)	13.6% (435)	19.2% (910)	-	-3.0%	5.6%	-
Eastmont	64.4% (2,437)	42.3% (1,482)	36.4% (1,208)	39.4% (1,610)	-22.0%	-5.9%	3.0%	-24.9%
Frick	58.7% (7,100)	45.1% (5,095)	43.8% (5,246)	28.3% (3,311)	-13.5%	-1.4%	-15.5%	-30.4%
Fruitvale	-	11.4% (506)	10.4% (482)	8.86% (438)	-	-1.0%	-1.5%	-
Merritt	-	17.7% (534)	12.6% (310)	23.2% (596)	-	-5.1%	10.6%	-
Reservoir Hill	37.5% (853)	28.0% (683)	25.3% (598)	16.5% (430)	-9.5%	-2.6%	-8.8%	-20.9%
Sobrante	55.5% (1,760)	42.4% (1,170)	36.1% (1,303)	27.3% (987)	-13.0%	-6.4%	-8.8%	-28.2%
Oakland	35.1% (140,139)	26.9% (105,767)	23.6% (98,681)	21.3% (93,447)	-8.2%	-3.3%	-2.3%	-13.8%

Source: American Community Survey (2000, 2008 -2012, 2013 - 2017, and 2018 - 2022), Table B03002

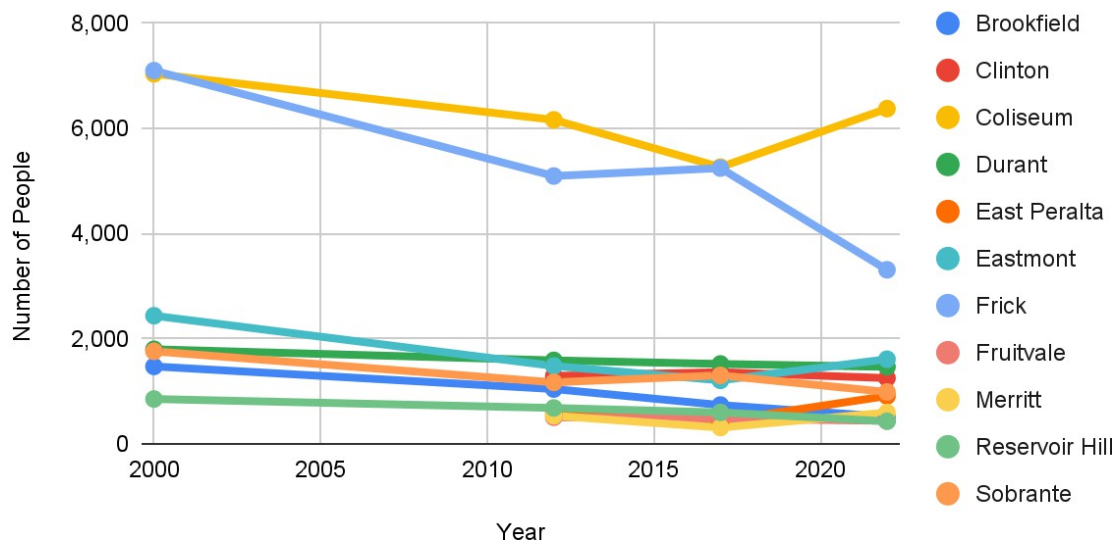
This table shows the percentage proportion and absolute number of Black residents across the 11 selected East Oakland neighborhoods and the City of Oakland as a whole over time from 2000 to 2012 to 2017 to 2022, with percentage point changes in the proportion from one period to the next and overall change from 2000 to 2022.

Figure 4. Black/African American Population Percent Change 2000 - 2022



This figure shows the percentage proportion of Black residents across the 11 selected East Oakland neighborhoods and the City of Oakland as a whole over time from 2000 to 2012 to 2017 to 2022. Source: American Community Survey (2000, 2008 -2012, 2013 - 2017, and 2018 - 2022), Table B03002

Figure 5. Black/African American Population Change 2000 - 2022



This figure shows the absolute number of Black residents across the 11 selected East Oakland neighborhoods over time from 2000 to 2012 to 2017 to 2022. Source: American Community Survey (2000, 2008 -2012, 2013 - 2017, and 2018 - 2022), Table B03002

Table 5. Black/African American Median Household Income Change 2012 - 2022						
	2012	2017	2022	% Change 2012 - 2017	% Change 2017 - 2022	% Change 2012 - 2022
Brookfield	\$62,452.53	\$34,734.51	\$48,068.00	-44.38%	38.39%	-23.03%
Clinton	\$40,227.30	\$55,148.98	\$89,237.99	37.09%	61.81%	121.83%
Coliseum	\$25,600.48	\$22,783.91	\$47,955.25	-11.00%	110.48%	87.32%
Durant	\$71,277.74	\$84,073.86	\$71,481.00	17.95%	-14.98%	0.29%
East Peralta	\$23,821.27	\$32,876.85	\$38,403.00	38.01%	16.81%	61.21%
Eastmont	\$33,679.71	\$31,194.96	\$50,064.00	-7.38%	60.49%	48.65%
Frick	\$61,104.98	\$50,121.43	\$39,148.08	-17.97%	-21.89%	-35.93%
Fruitvale	\$60,725.93	\$49,446.50	-	-18.57%	-	-
Merritt	\$49,075.16	-	\$61,250.00	-	-	24.81%
Reservoir Hill	\$47,359.73	\$79,413.46	\$59,784.00	67.68%	-24.72%	26.23%
Sobrante	\$50,220.02	\$52,320.28	\$69,464.00	4.18%	32.77%	38.32%
Oakland	\$43,474.90	\$46,552.26	\$58,521.00	7.08%	25.71%	34.61%

Source: American Community Survey (2008-2012, 2013 - 2017, and 2018 - 2022), Table S1903; 2022 Dollars

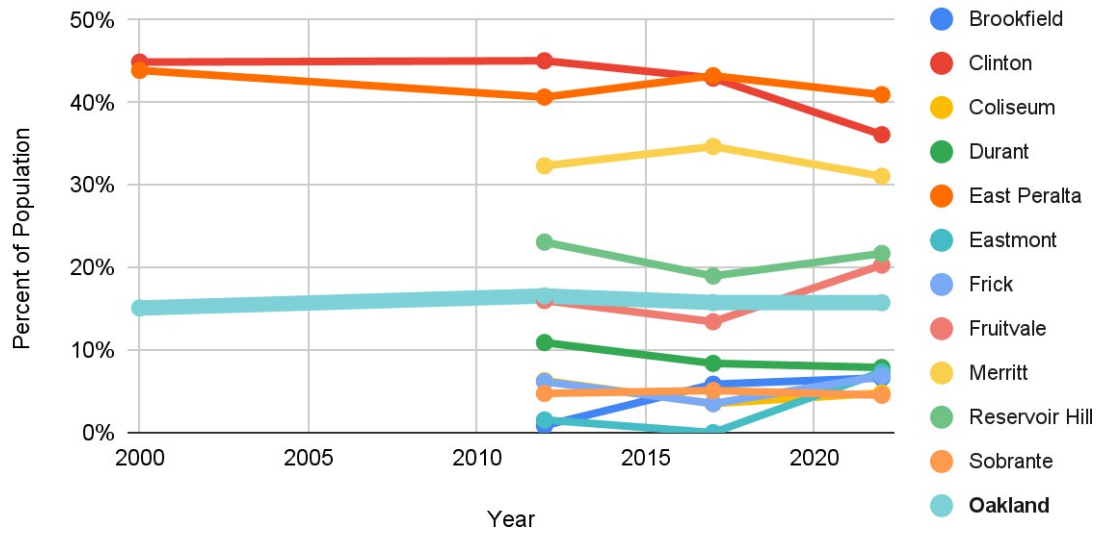
This table shows the median household income of Black residents across the 11 selected East Oakland neighborhoods and the City of Oakland as a whole over time from 2012 to 2017 to 2022, with percent changes in incomes from one period to the next and overall change from 2012 to 2022.

Table 6. Asian American Population Change 2000 - 2022								
	2000	2012	2017	2022	% Change 2000 - 2012	% Change 2012 - 2017	% Change 2017 - 2022	% Change 2000 - 2022
Brookfield	-	0.85% (22)	5.86% (131)	6.63% (168)	-	5.0%	0.8%	-
Clinton	44.9% (3,491)	45.0% (2,945)	42.9% (3,168)	36.1% (2,603)	0.2%	-2.1%	-6.9%	-8.8%
Coliseum	-	6.29% (918)	3.52% (564)	4.80% (887)	-	-2.8%	1.3%	-
Durant	-	10.9% (495)	8.39% (348)	7.89% (370)	-	-2.5%	-0.5%	-
East Peralta	43.9% (1,603)	40.6% (1,397)	43.2% (1,377)	40.9% (1,939)	-3.2%	2.6%	-2.3%	-2.9%
Eastmont	-	1.54% (54)	0% (0)	7.35% (300)	-	-1.5%	7.4%	-
Frick	-	6.18% (698)	3.52% (422)	6.85% (802)	-	-2.7%	3.3%	-
Fruitvale	-	16.0% (708)	13.4% (622)	20.3% (1,003)	-	-2.6%	6.9%	-
Merritt	-	32.3% (973)	34.6% (848)	31.0% (795)	-	2.3%	-3.6%	-
Reservoir Hill	-	23.0% (563)	18.9% (447)	21.7% (564)	-	-4.1%	2.7%	-
Sobrante	-	4.75% (131)	5.10% (184)	4.53% (164)	-	0.3%	-0.6%	-
Oakland	15.1% (60,393)	16.5% (65,087)	15.7% (65,831)	15.7% (68,934)	1.5%	-0.8%	0.0%	0.6%

Source: American Community Survey (2000, 2008 -2012, 2013 - 2017, and 2018 - 2022), Table B03002

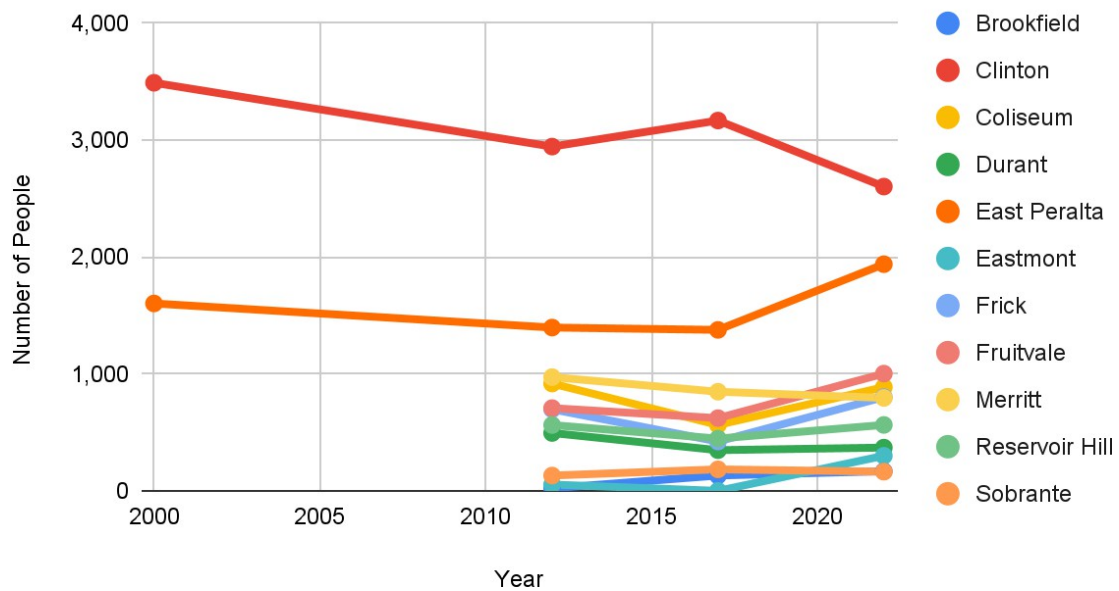
This table shows the percentage proportion and absolute number of Asian American residents across the 11 selected East Oakland neighborhoods and the City of Oakland as a whole over time from 2000 to 2012 to 2017 to 2022, with percentage point changes in the proportion from one period to the next and overall change from 2000 to 2022.

Figure 6. Asian American Population Percent Change 2000 - 2022



This figure shows the percentage proportion of Asian American residents across the 11 selected East Oakland neighborhoods and the City of Oakland as a whole over time from 2000 to 2012 to 2017 to 2022. Source: American Community Survey (2000, 2008 -2012, 2013 - 2017, and 2018 - 2022), Table B03002

Figure 7. Asian American Population Change 2000 - 2022



This figure shows the absolute number of Asian American residents across the 11 selected East Oakland neighborhoods over time from 2000 to 2012 to 2017 to 2022. Source: American Community Survey (2000, 2008 -2012, 2013 - 2017, and 2018 - 2022), Table B03002

Table 7. Asian American Median Household Income Change 2012 - 2022						
	2012	2017	2022	% Change 2012 - 2017	% Change 2017 - 2022	% Change 2012 - 2022
Brookfield	-	\$111,927.9 3	-	-	-	-
Clinton	\$27,895.56	\$43,515.39	\$67,400.22	55.99%	54.89%	141.62%
Coliseum	\$50,115.91	\$21,691.02	\$77,059.69	-56.72%	255.26%	53.76%
Durant	\$54,635.73	\$95,239.08	\$148,750.0 0	74.32%	56.19%	172.26%
East Peralta	\$21,596.05	\$21,860.91	\$44,028.00	1.23%	101.40%	103.87%
Eastmont	\$230,314.0 0	-	-	-	-	-
Frick	\$62,742.60	\$168,892.2 2	\$135,509.6 4	169.18%	-19.77%	115.98%
Fruitvale	\$127,844.7 2	\$103,838.7 4	\$68,542.00	-18.78%	-33.99%	-46.39%
Merritt	\$22,223.67	\$26,357.58	-	18.60%	-	-
Reservoir Hill	\$81,205.65	\$69,978.28	\$93,654.00	-13.83%	33.83%	15.33%
Sobrante	\$57,884.25	\$55,750.27	\$60,625.00	-3.69%	8.74%	4.73%
Oakland	\$56,111.76	\$61,636.27	\$86,720.00	9.85%	40.70%	54.55%

Source: American Community Survey (2008-2012, 2013 - 2017, and 2018 - 2022), Table S1903; 2022 Dollars

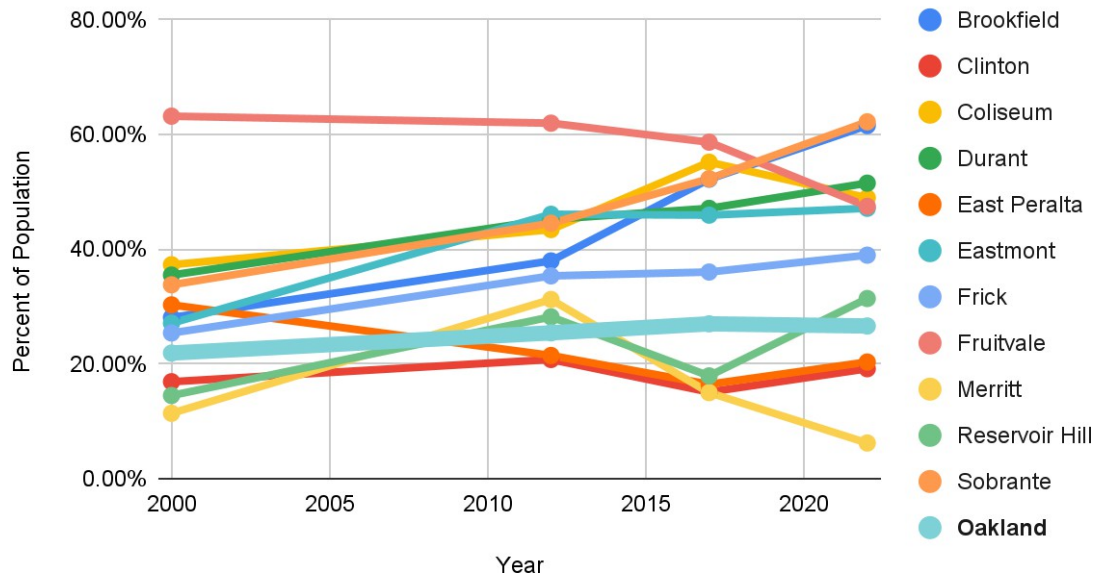
This table shows the median household income of Asian American residents across the 11 selected East Oakland neighborhoods and the City of Oakland as a whole over time from 2012 to 2017 to 2022, with percent changes in incomes from one period to the next and overall change from 2012 to 2022.

Table 8. Latinx Population Change 2000 - 2022								
	2000	2012	2017	2022	% Change 2000 - 2012	% Change 2012 - 2017	% Change 2017 - 2022	% Change 2000 - 2022
Brookfield	28.1% (607)	37.9% (981)	52.2% (1,166)	61.5% (1,559)	9.9%	14.3%	9.4%	33.5%
Clinton	16.9% (1,310)	20.7% (1,358)	15.1% (1,114)	19.1% (1,382)	3.9%	-5.7%	4.1%	2.3%
Coliseum	37.3% (5,125)	43.4% (6,335)	55.1% (8,833)	48.9% (9,033)	6.1%	11.8%	-6.2%	11.7%
Durant	35.5% (1,195)	45.2% (2,051)	47.1% (1,954)	51.5% (2,415)	9.7%	1.9%	4.4%	16.0%
East Peralta	30.3% (1,107)	21.4% (738)	16.4% (524)	20.3% (963)	-8.8%	-5.0%	3.9%	-10.0%
Eastmont	27.1% (1,026)	46.0% (1,613)	45.9% (1,521)	47.1% (1,922)	19.0%	-0.1%	1.2%	20.0%
Frick	25.4% (3,071)	35.3% (3,988)	36.0% (4,314)	38.9% (4,557)	10.0%	0.7%	2.9%	13.6%
Fruitvale	63.2% (2,720)	61.9% (2,741)	58.6% (2,716)	47.4% (2,345)	-1.2%	-3.3%	-11.2%	-15.7%
Merritt	11.4% (331)	31.2% (940)	15.0% (367)	6.21% (159)	19.8%	-16.2%	-8.8%	-5.2%
Reservoir Hill	14.5% (331)	28.2% (688)	17.9% (422)	31.4% (816)	13.7%	-10.3%	13.5%	16.9%
Sobrante	33.8% (1,072)	44.5% (1,226)	52.2% (1,885)	62.2% (2,249)	10.7%	7.8%	9.9%	28.4%
Oakland	21.9% (87,467)	25.4% (99,882)	26.9% (112,690)	26.6% (116,550)	3.5%	1.6%	-0.4%	4.7%

Source: American Community Survey (2000, 2008 -2012, 2013 - 2017, and 2018 - 2022), Table B03002

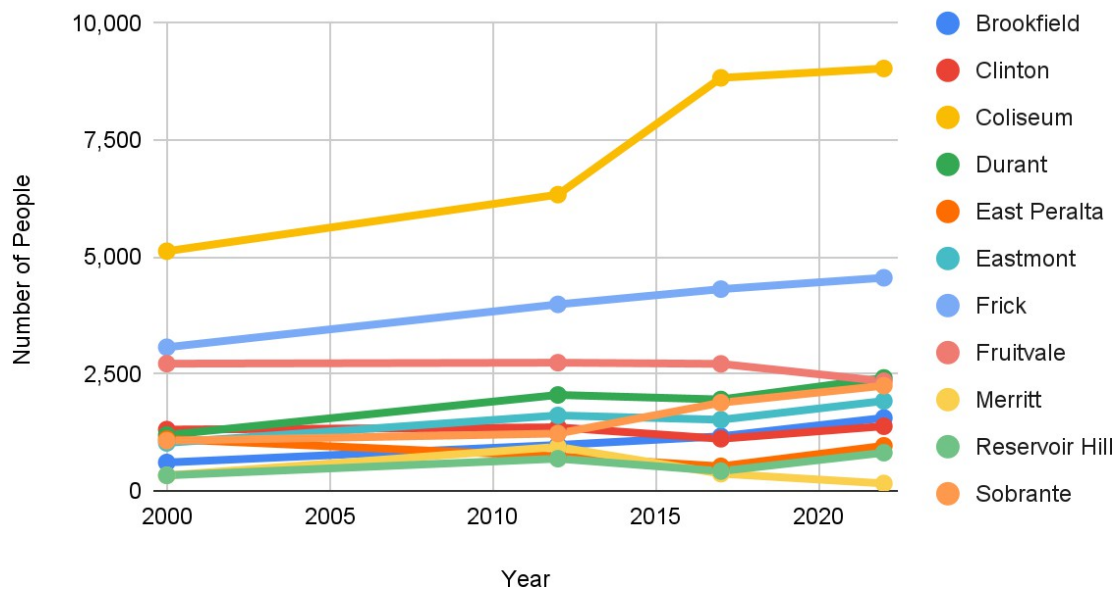
This table shows the percentage proportion and absolute number of Latinx residents across the 11 selected East Oakland neighborhoods and the City of Oakland as a whole over time from 2000 to 2012 to 2017 to 2022, with percentage point changes in the proportion from one period to the next and overall change from 2000 to 2022.

Figure 8. Latinx Population Percent Change 2000 - 2022



This figure shows the percentage proportion of Latinx residents across the 11 selected East Oakland neighborhoods and the City of Oakland as a whole over time from 2000 to 2012 to 2017 to 2022. Source: American Community Survey (2000, 2008 -2012, 2013 - 2017, and 2018 - 2022), Table B03002

Figure 9. Latinx Population Change 2000 - 2022



This figure shows the absolute number of Latinx residents across the 11 selected East Oakland neighborhoods over time from 2000 to 2012 to 2017 to 2022. Source: American Community Survey (2000, 2008 -2012, 2013 - 2017, and 2018 - 2022), Table B03002

Table 9. Latinx Median Household Income Change 2000 - 2022								
	2000	2012	2017	2022	% Change 2000 - 2012	% Change 2012 - 2017	% Change 2017 - 2022	% Change 2000 - 2022
Brookfield	\$80,959. 63	\$78,860. 11	\$80,763. 06	\$73,636. 00	-2.6%	2.4%	-8.8%	-9.0%
Clinton	\$57,542. 63	\$33,179. 96	\$61,529. 76	\$43,747. 80	-42.3%	85.4%	-28.9%	-24.0%
Coliseum	\$68,326. 13	\$45,887. 39	\$57,955. 70	\$73,926. 45	-32.8%	26.3%	27.6%	8.2%
Durant	\$85,050. 94	\$63,568. 86	\$72,000. 88	-	-25.3%	13.3%	-	-
East Peralta	\$71,624. 59	\$34,949. 85	\$42,739. 42	\$54,688. 00	-51.2%	22.3%	28.0%	-23.6%
Eastmont	\$65,316. 91	\$53,053. 02	\$58,524. 11	\$71,029. 00	-18.8%	10.3%	21.4%	8.7%
Frick	\$77,401. 42	\$55,005. 41	\$66,148. 89	\$71,834. 91	-28.9%	20.3%	8.6%	-7.2%
Fruitvale	\$68,593. 82	\$62,646. 02	\$45,927. 42	\$63,000. 00	-8.7%	-26.7%	37.2%	-8.2%
Merritt	\$55,336. 48	\$38,130. 15	\$42,764. 71	\$65,972. 00	-31.1%	12.2%	54.3%	19.2%
Reservoir Hill	\$59,296. 21	\$39,368. 04	-	-	-33.6%	-	-	-
Sobrante	\$88,439. 00	\$52,486. 17	\$76,185. 73	\$82,778. 00	-40.7%	45.2%	8.7%	-6.4%
Oakland	\$66,499. 96	\$55,140. 56	\$64,613. 58	\$76,090. 00	-17.1%	17.2%	17.8%	14.4%

Source: American Community Survey (2000, 2008-2012, 2013 - 2017, and 2018 - 2022), Table S1903; 2022 Dollars

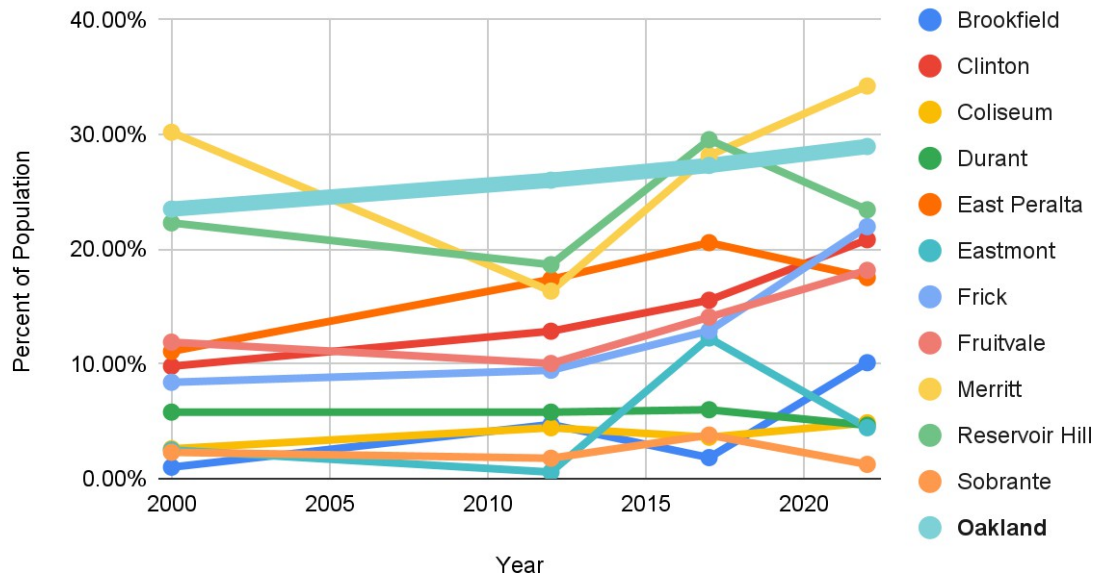
This table shows the median household income of Latinx residents across the 11 selected East Oakland neighborhoods and the City of Oakland as a whole over time from 2000 to 2012 to 2017 to 2022, with percent changes in incomes from one period to the next and overall change from 2000 to 2022.

Table 10. White Population Change 2000 - 2022								
	2000	2012	2017	2022	% Change 2000 - 2012	% Change 2012 - 2017	% Change 2017 - 2022	% Change 2000 - 2022
Brookfield	1.0% (21)	4.72% (122)	1.83% (41)	10.1% (256)	3.7%	-2.9%	8.3%	9.1%
Clinton	9.8% (762)	12.8% (840)	15.5% (1,147)	20.8% (1,502)	3.1%	2.7%	5.3%	11.0%
Coliseum	2.6% (353)	4.43% (647)	3.61% (578)	4.86% (897)	1.8%	-0.8%	1.3%	2.3%
Durant	5.8% (194)	5.79% (263)	6.00% (249)	4.65% (218)	0.0%	0.2%	-1.4%	-1.1%
East Peralta	11.1% (404)	17.3% (597)	20.5% (655)	17.5% (830)	6.3%	3.2%	-3.0%	6.4%
Eastmont	2.5% (93)	0.57% (20)	12.2% (406)	4.43% (181)	-1.9%	11.7%	-7.8%	1.9%
Frick	8.4% (1,018)	9.45% (1,066)	12.8% (1,543)	21.9% (2,569)	1.1%	3.4%	9.1%	13.6%
Fruitvale	11.9% (513)	10.0% (444)	14.0% (652)	18.1% (897)	-1.9%	4.0%	4.1%	6.3%
Merritt	30.2% (875)	16.3% (492)	28.1% (689)	34.2% (876)	-13.8%	11.8%	6.1%	4.0%
Reservoir Hill	22.3% (507)	18.6% (455)	29.5% (696)	23.4% (609)	-3.6%	10.9%	-6.1%	1.1%
Sobrante	2.3% (74)	1.77% (49)	3.80% (137)	1.24% (45)	-0.5%	2.0%	-2.6%	-1.1%
Oakland	23.5% (93,953)	26.0% (102,225)	27.3% (113,985)	28.9% (126,780)	2.5%	1.3%	1.7%	5.5%

Source: American Community Survey (2000, 2008 -2012, 2013 - 2017, and 2018 - 2022), Table B03002

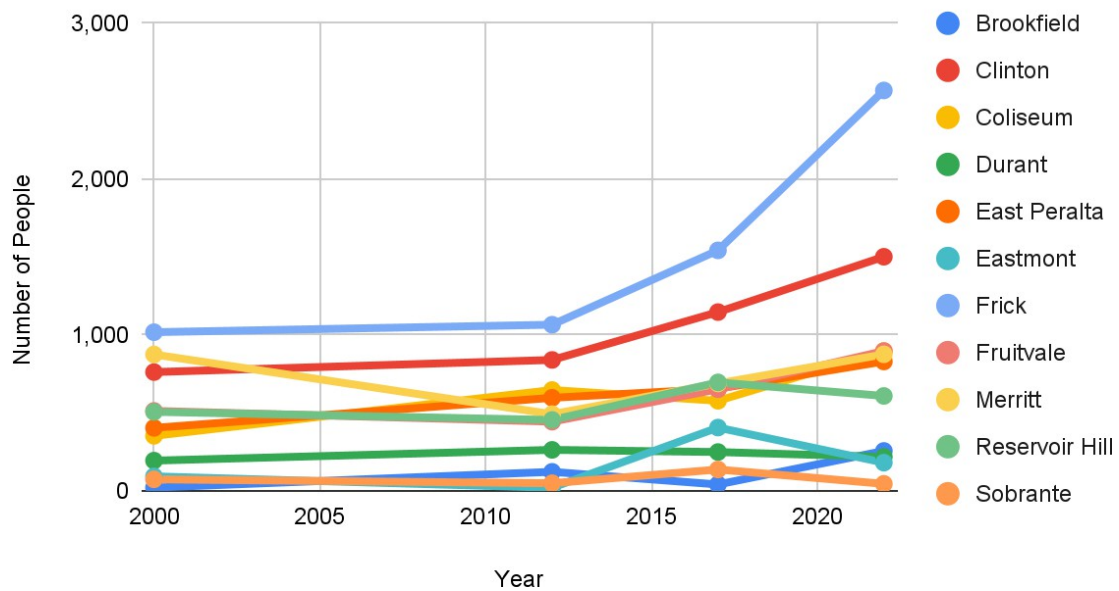
This table shows the percentage proportion and absolute number of white residents across the 11 selected East Oakland neighborhoods and the City of Oakland as a whole over time from 2000 to 2012 to 2017 to 2022, with percentage point changes in the proportion from one period to the next and overall change from 2000 to 2022.

Figure 10. White Population Percent Change 2000 - 2022



This figure shows the percentage proportion of white residents across the 11 selected East Oakland neighborhoods and the City of Oakland as a whole over time from 2000 to 2012 to 2017 to 2022. Source: American Community Survey (2000, 2008 -2012, 2013 - 2017, and 2018 - 2022), Table B03002

Figure 11. White Population Change 2000 - 2022



This figure shows the absolute number of white residents across the 11 selected East Oakland neighborhoods over time from 2000 to 2012 to 2017 to 2022. Source: American Community Survey (2000, 2008 -2012, 2013 - 2017, and 2018 - 2022), Table B03002

Table 11. White Median Household Income Change 2000 - 2022								
	2000	2012	2017	2022	% Change 2000 - 2012	% Change 2012 - 2017	% Change 2017 - 2022	% Change 2000 - 2022
Brookfield	\$150,04 9.12	\$162,54 0.30	-	\$247,96 3.00	8.3%	-	-	65.3%
Clinton	\$71,125. 51	\$57,812. 80	\$77,527. 15	\$89,830. 43	-18.7%	34.1%	15.9%	26.3%
Coliseum	\$34,302. 58	\$54,505. 67	\$94,615. 19	\$81,413. 07	58.9%	73.6%	-14.0%	137.3%
Durant	\$60,017. 61	\$64,429. 67	\$134,33 7.83	\$179,37 5.00	7.4%	108.5%	33.5%	198.9%
East Peralta	\$55,584. 88	\$73,359. 08	\$91,799. 46	\$118,21 4.00	32.0%	25.1%	28.8%	112.7%
Eastmont	\$35,493. 56	-	\$61,485. 78	-	-	-	-	-
Frick	\$95,755. 04	\$94,233. 02	\$130,96 8.85	\$116,47 6.38	-1.6%	39.0%	-11.1%	21.6%
Fruitvale	\$54,442. 67	\$73,362. 80	\$94,809. 28	\$104,79 2.00	34.8%	29.2%	10.5%	92.5%
Merritt	\$63,426. 09	\$33,667. 31	\$77,097. 10	\$69,612. 00	-46.9%	129.0%	-9.7%	9.8%
Reservoir Hill	\$91,479. 98	\$65,469. 10	\$104,44 0.70	\$112,32 1.00	-28.4%	59.5%	7.5%	22.8%
Sobrante	\$71,801. 53	\$116,67 2.73	\$63,994. 76	\$74,500. 00	62.5%	-45.2%	16.4%	3.8%
Oakland	\$98,430. 78	\$101,65 9.32	\$123,31 3.47	\$148,52 5.00	3.3%	21.3%	20.4%	50.9%

Source: American Community Survey (2000, 2008-2012, 2013 - 2017, and 2018 - 2022), Table S1903; 2022 Dollars

This table shows the median household income of white residents across the 11 selected East Oakland neighborhoods and the City of Oakland as a whole over time from 2000 to 2012 to 2017 to 2022, with percent changes in incomes from one period to the next and overall change from 2000 to 2022.

Table 12. Previous Just Cities EOMAP Analysis on Housing Unaffordability Rate 2011 - 2018: Median Rent to Median Renter Household Income				
	2011	2013	2018	Change in Unaffordability (2011-2018)
Brookfield	45.2%	49.2%	84.3%	39.1%
Clinton	64.5%	69.1%	57.6%	-6.9%
Coliseum	88.9%	96.4%	142.6%	53.7%
Durant	69.5%	75.8%	62.6%	-6.9%
East Peralta	100.3%	109.2%	90.6%	-9.7%
Eastmont	67.0%	70.8%	77.6%	10.6%
Frick	43.7%	44.0%	83.9%	40.2%
Fruitvale	33.4%	37.1%	88.7%	55.3%
Merritt	58.2%	59.7%	78.2%	20.0%
Reservoir Hill	51.3%	54.0%	86.7%	35.4%
Sobrante Park	55.2%	61.5%	79.8%	24.6%
City of Oakland	43.8%	48.0%	64.8%	21.0%
Source: Zillow ZRI; ACS 2009-2013 and 2014-2018				
Note: Change in Unaffordability denotes percentage point change				

This table shows the percentage ratio of the median rent to median household income for renters in each of the 11 selected East Oakland neighborhoods and the City of Oakland as a whole over time from 2011 to 2013 to 2018, with the percentage point change in this ratio (Housing Unaffordability Index) from 2011 to 2018. Note that the Zillow Rent Index is used for rent data in this table.

Table 13. Preliminary Analysis of Housing Unaffordability Rate 2012 - 2022: Median Rent to Median Renter Household Income						
	2012	2017	2022	Change in Unaffordability (2012-2017)	Change in Unaffordability (2017-2022)	Change in Unaffordability (2012-2022)
Brookfield	27.9%	60.8%	30.0%	32.9%	-30.8%	2.1%
Clinton	38.4%	46.0%	27.5%	7.6%	-18.4%	-10.9%
Coliseum	49.7%	45.6%	40.7%	-4.1%	-4.9%	-9.0%
Durant	42.9%	24.8%	30.8%	-18.1%	5.9%	-12.2%
East Peralta	42.4%	30.5%	28.7%	-11.8%	-1.8%	-13.7%
Eastmont	51.0%	47.7%	41.5%	-3.3%	-6.1%	-9.5%
Frick	42.6%	51.9%	46.3%	9.3%	-5.6%	3.7%
Fruitvale	20.1%	38.9%	43.5%	18.9%	4.6%	23.5%
Merritt	28.2%	27.0%	33.1%	-1.2%	6.1%	4.9%

Table 13. Preliminary Analysis of Housing Unaffordability Rate 2012 - 2022: Median Rent to Median Renter Household Income						
	2012	2017	2022	Change in Unaffordability (2012-2017)	Change in Unaffordability (2017-2022)	Change in Unaffordability (2012-2022)
Brookfield	27.9%	60.8%	30.0%	32.9%	-30.8%	2.1%
Clinton	38.4%	46.0%	27.5%	7.6%	-18.4%	-10.9%
Reservoir Hill	36.5%	33.5%	-	-3.1%	-	-
Sobrante Park	39.5%	36.2%	36.6%	-3.3%	0.4%	-2.9%
Oakland	29.9%	28.0%	32.4%	-1.9%	4.5%	2.6%
Source: ACS (2008-2012, 2013-2017, and 2018-2022) Tables B25119 & B25064						
Note: Change in Unaffordability denotes percentage point change						

This table shows the percentage ratio of the median rent to median household income for renters in each of the 11 selected East Oakland neighborhoods and the City of Oakland as a whole over time from 2012 to 2017 to 2022, with percentage point changes in this ratio (Housing Unaffordability Index) from one period to the next and overall change from 2012 to 2022. Note that ACS rent data is used for this table.

Table 14. 2022 Homeownership Access Rate						
	Median Home Values	Renter Median Household Income	Affordable Monthly Owner Cost	Estimated Monthly owner housing costs based on median home value	Estimated Annual Income needed to afford monthly housing payments	% of Monthly Income to Pay for Estimated Monthly Owner Costs if Making Median Household Income
Brookfield	\$543,476.37	\$70,658.00	\$1,766.45	\$2,968-\$3,339	\$118,722-\$133,562	50.4%-56.7%
Clinton	\$756,646.60	\$66,141.50	\$1,653.54	\$4,132-\$4,649	\$165,289-\$185,950	75.0%-84.3%
Coliseum	\$512,827.00	\$41,506.33	\$1,037.66	\$2,801-\$3,151	\$112,027-\$126,030	81.0%-91.1%
Durant	\$646,308.00	\$71,250.00	\$1,781.25	\$3,530-\$3,971	\$141,186-\$158,834	59.4%-66.9%
East Peralta	\$724,492.00	\$54,625.00	\$1,365.63	\$3,957-\$4,451	\$158,265-\$178,048	86.9%-97.8%
Eastmont	\$550,930.66	\$54,676.00	\$1,366.90	\$3,009-\$3,385	\$120,351-\$135,394	66.0%-74.3%
Frick	\$736,821.55	\$54,763.50	\$1,369.09	\$4,024-\$4,527	\$160,958-\$181,078	88.2%-99.2%
Fruitvale	\$654,650.01	\$48,870.00	\$1,221.75	\$3,575-\$4,022	\$143,008-\$160,884	87.8%-98.8%
Merritt	\$702,879.00	\$62,602.00	\$1,565.05	\$3,839-\$4,318	\$153,544-\$172,737	73.6%-82.8%
Reservoir Hill	\$739,864.55	-	-	\$4,041-\$4,546	\$161,623-\$181,826	-
Sobrate Park	\$565,288.27	\$63,063.00	\$1,576.58	\$3,087-\$3,473	\$123,487-\$138,923	58.7%-66.1%
City of Oakland	\$860,476.00	\$68,434.00	\$1,710.85	\$4,699-\$5,287	\$187,971-\$211,467	82.4%-92.7%

Source: 2018-2022 ACS Median Household Income Estimates; Zillow ZHVI September 2022; 2022 dollars

Note: Homeownership access rate and monthly owner costs were calculated using the PITI and the following assumptions: Affordable monthly owner costs is defined as 30% or less of income; monthly owner costs are calculated using a 20% downpayment and a 10% downpayment, to demonstrate the broadest possible range. Other assumptions include a 30 year fixed rate loan of 5%, 1.4% for property taxes, 0.35% for insurance, and no mortgage insurance.

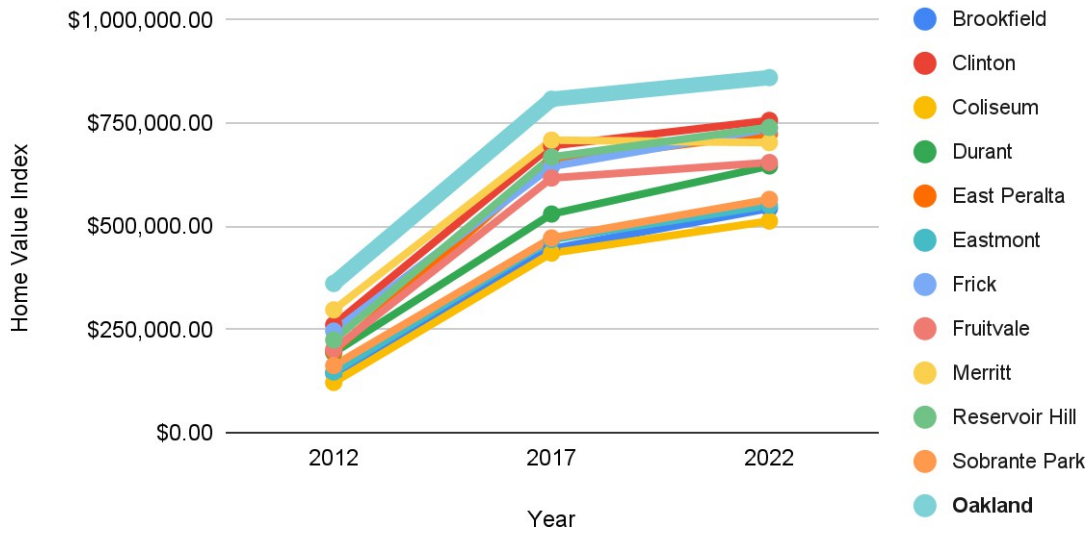
This table shows the constituent inputs and calculated percentage ratio between the expected median monthly homeowner costs to median household income for renters (Homeownership Access Rate) in each of the 11 selected East Oakland neighborhoods and the City of Oakland as a whole in 2022.

Table 15. Home Values Over Time - Zillow Home Value Index (ZHVI)						
	2012	2017	2022	Percent Change in Home Values (2012-2017)	Percent Change in Home Values (2017-2022)	Percent Change in Home Values (2012-2022)
Brookfield	\$143,651.3 2	\$445,588.6 0	\$543,476.3 7	210.19%	21.97%	278.33%
Clinton	\$261,149.9 2	\$695,224.3 3	\$756,646.6 0	166.22%	8.83%	189.74%
Coliseum	\$121,789.2 5	\$435,160.7 6	\$512,827.0 0	257.31%	17.85%	321.08%
Durant	\$193,697.1 0	\$529,771.4 0	\$646,308.0 0	173.51%	22.00%	233.67%
East Peralta	\$197,264.4 0	\$658,261.7 5	\$724,492.0 0	233.70%	10.06%	267.27%
Eastmont	\$147,060.7 2	\$467,974.9 2	\$550,930.6 6	218.22%	17.73%	274.63%
Frick	\$246,197.7 8	\$645,091.5 9	\$736,821.5 5	162.02%	14.22%	199.28%
Fruitvale	\$201,876.4 6	\$617,122.6 4	\$654,650.0 1	205.69%	6.08%	224.28%
Merritt	\$297,575.4 3	\$708,903.7 6	\$702,879.0 0	138.23%	-0.85%	136.20%
Reservoir Hill	\$224,663.6 7	\$667,921.5 8	\$739,864.5 5	197.30%	10.77%	229.32%
Sobrante Park	\$162,653.5 1	\$471,773.7 7	\$565,288.2 7	190.05%	19.82%	247.54%
Oakland	\$361,512.6 8	\$808,014.6 7	\$860,476.0 0	123.51%	6.49%	138.02%

Source: Zillow Home Value Index (ZHVI); 2022 dollars

This table shows Home Value Index (courtesy of Zillow) in each of the 11 selected East Oakland neighborhoods and the City of Oakland as a whole from 2012 to 2017 to 2022, with percent changes in home values from one period to the next and overall change from 2012 to 2022.

Figure 12. Home Values Over Time - Zillow Home Value Index (ZHVI) (2012-2022)



This figure shows the Home Value Index (courtesy of Zillow) in each of the 11 selected East Oakland neighborhoods and the City of Oakland as a whole from 2012 to 2017 to 2022. Source: Zillow Home Value Index (ZHVI); 2022 dollars

Table 16. East Oakland Neighborhoods Homelessness Risk 2012												
Share of Renters at Risk for Homelessness	Brookfield	Clinton	Coliseum	Durant	Eastmont	EastPeralta	Frick	Fruitvale	Meritt	Reservoir Hill	Sobrate	City of Oakland
		31.72%	28.93%	42.95%	41.97%	24.96%	36.38%	26.57%	11.63%	31.41%	24.59%	33.33%
<p>Note: Homelessness risk was defined by the neighborhood's share of renters who are rent burdened and either extremely low or very low income. "Rent Burdened" is defined as households spending 35% or more of household income on rent. "Extremely Low Income" households are those with household incomes of less than \$10,000. "Very Low Income" households are those with household incomes between \$10,000 and \$19,999.</p> <p>Source: American Community Survey (2008-2012) Table B25074</p>												

Table 17. East Oakland Neighborhoods Homelessness Risk 2017												
Share of Renters at Risk for Homelessness	Brookfield	Clinton	Coliseum	Durant	Eastmont	EastPeralta	Frick	Fruitvale	Meritt	Reservoir Hill	Sobrate	City of Oakland
		21.17%	17.55%	25.17%	6.20%	30.38%	13.48%	17.56%	9.95%	16.70%	16.18%	22.18%
<p>Note: Homelessness risk was defined by the neighborhood's share of renters who are severely rent burdened and either extremely low or very low income. "Severely Rent Burdened" is defined as households spending 50% or more of household income on rent. "Extremely Low Income" households are those with household incomes of less than \$10,000. "Very Low Income" households are those with household incomes between \$10,000 and \$19,999.</p> <p>Source: American Community Survey (2013-2017) Table B25074</p>												

Table 18. East Oakland Neighborhoods Homelessness Risk 2022												
Share of Renters at Risk for Homelessness	Brookfield	Clinton	Coliseum	Durant	Eastmont	EastPeralta	Frick	Fruitvale	Meritt	Reservoir Hill	Sobrate	City of Oakland
		7.02%	16.05%	12.02%	5.90%	14.40%	9.12%	22.43%	20.60%	8.42%	6.46%	6.26%
<p>Note: Homelessness risk was defined by the neighborhood's share of renters who are severely rent burdened and either extremely low or very low income. "Severely Rent Burdened" is defined as households spending 50% or more of household income on rent. "Extremely Low Income" households are those with household incomes of less than \$10,000. "Very Low Income" households are those with household incomes between \$10,000 and \$19,999.</p> <p>Source: American Community Survey (2018-2022) Table B25074</p>												

These tables show the Homelessness Risk Rate in each of the 11 selected East Oakland neighborhoods and the City of Oakland as a whole in 2012, 2017, and 2022.

Conclusion & Recommendations

The findings of this analysis point to many existing trends and concerns voiced by the East Oakland community. The clear trends of high and increasing collision rates on the corridor as well as continued and possibly exacerbated patterns of gentrification and racialized displacement in many neighborhoods confirms much of what the community has expressed in previous interviews and discussions. The community has also expressed support for various actions in the past to help confront these problematic trends. Embedded and operationalized community involvement, like the CAC, in transportation planning is a core recommendation of this research, along with community-engaged solutions to improve traffic safety and strong anti-displacement measures and policies. In order to bolster the evidence to support these recommendations, further research is needed to close the gaps in this analysis and expand beyond its limitations.

Community Governance as Preventative Measure for Adverse Impacts

The CAC for this project has proved to be a valuable partnership for grounding and guiding the analysis of the International Boulevard BRT's impacts on surrounding communities. Community-engaged research and planning can lead to solutions and outcomes that are tailored to the needs of communities most vulnerable to project impacts rather than efforts led solely by technocratic interests like traditional economic development and regional transportation access. The engagement associated with EOMAP has also been a great example of countering traditional approaches and narratives around transportation projects. Community involvement on EOMAP and this project questions the role of transportation as fueling broader economic development purposes instead of catering to the daily mobility of low-income communities of color. With the BRT aiming to connect people more quickly to Downtown Oakland and Downtown San Leandro, it fell short and often compromised in serving the needs of local riders along International, increasing walking distance to stops for many residents, reducing traffic safety through poor design choices, and destabilizing many small businesses on the corridor through construction impacts and poor administration of mitigation funds.

In order to remedy such impacts on the BRT and prevent further impacts from similar projects, like the proposed BRT improvements on San Pablo Avenue, planners and policymakers need to meaningfully engage with communities in a consistent and lasting manner to guide problem-setting, analysis, and solutions that serve to prevent adverse impacts from transportation infrastructure projects. Establishing committees, programs, and other partnerships will enable such engagement as a standing practice in cities like Oakland. Engaging in community partnership and shared power, such as that which was done for the Oakland Sustainable Neighborhoods Initiative (OSNI) and its stipend Community Planning Leaders program. These partnerships formed plans for Oakland's

competitive State grants for affordable housing and transportation and the development of the BRT Business Mitigation program. While results haven't necessarily been perfect, these plans and programs were strengthened by sharing power with community members, and these and future initiatives stand to benefit from community governance.

Safety Considerations and Redesigns

The findings around traffic safety from this analysis reflect some understood concerns from the community around the BRT's impacts on traffic safety during and after construction. The rise in crashes along International at the beginning of construction and in the years following the start of operation of the BRT service signal some clear flare-ups in the rate of traffic violence due to the BRT. These patterns confirm community concerns about traffic safety along the BRT corridor, validating the perceived increase in collisions, fatalities, and injuries that have affected nearby communities. The impact of this traffic violence should not be taken lightly, so there is an urgent need to consider actionable solutions to increase safety and reverse the trend of traffic violence on International. Recognizing this need, there are some recommendations I can offer with regards to safety.

Planners and community members should discuss and seriously consider how to implement, and adjust as needed, the recommendations from Traffic Violence Rapid Response's 2022 design recommendations. Their recommendations are based on thorough observations of dangerous driving behaviors along International, noting the greatest risk points for fatal or severe crashes. The recommendations are also practically implementable in the short-term, suggesting the use of quick-build methods to treat risk points efficiently before more lives are lost. Targeting such dangers as bus lane speeding, which can lead to blind spot crashes near crosswalks and median stations, has the potential to greatly decrease the risk of collisions along the corridor. This and other dangerous behaviors can be treated with elements like vertical separation and more clearly visible striping and signage to prevent confusing road users as well as naturally encouraging more cautious driving behaviors. There is still more analysis that can be done to clarify traffic safety patterns and better inform recommendations, like adjusting crash rates for varying traffic volumes over time, but offering these design recommendations for community consideration is a prudent first step in addressing the concerning trend of traffic violence along the International Boulevard BRT corridor.

Anti-displacement Measures and Policies

The continuing patterns of population decline in Black, Asian, and Latinx ethnic enclaves, rising white populations and household incomes in many neighborhoods, and persisting housing unaffordability for East Oakland residents are concerning trends that, while maybe not significantly exacerbated by the BRT project alone, appear to be worsening.

And no matter how pronounced gentrification and displacement patterns are in various East Oakland neighborhoods, each long-term East Oakland resident and family that is displaced bears the harm and trauma of planning practices that don't consider the value of individual and community stability and wellbeing in low income communities of color like those in many parts of East Oakland. Recognizing the role that major transportation infrastructure projects like the BRT can play in destabilizing these communities is an important step in building a holistic practice for building stable communities with a sense of agency regarding their long-term prosperity. In the interest of achieving these outcomes, I have some recommendations to offer on community involvement and anti-displacement measures.

First, pulling from EOMAP's community-based recommendations, OakDOT and other transportation agencies should OakDOT integrate access to anti-displacement resources into their engagement strategies. Actively connecting existing East Oakland and similar communities' residents to housing, food, and other basic needs resources will help bridge disconnects between transportation planning and housing, recognizing that residents have multitude of needs that intersect and can be addressed more fully through engagement efforts.

I would extend the previous recommendation to suggest that conversations around housing should be in tandem with conversations about transportation access and specific transportation projects like the BRT. CAC meetings for this project and general sentiments from the community throughout the BRT planning process pointed out concerns about gentrification and displacement that are tied to ideas of mobility justice. When questioning for whom the BRT is meant to serve, there is an implicit understanding that the service could attract a new group of riders that will inevitably seek housing and resources in East Oakland, compromising the stability, culture, and character of existing East Oakland communities. While it is likely to soon to reliably judge the influence of the BRT project on pre-existing trends of gentrification and displacement in East Oakland communities, discussions should be had and, eventually, actions taken to implement meaningful anti-displacement protections for existing East Oakland residents. Further discussion is needed with CAC members and the community at-large for this project to identify and clarify such actions, but some examples and ideas can inform those recommendations, like the Unity Council and Black Cultural Zone's affordable housing development initiatives, as well as the range of cooperative land ownership schemes that could suggest a means for communities to take preservation into their own hands.

Meanwhile, developing government policies and structures to tie transportation funding to affordable housing, like California's Sustainable Growth Council's Affordable Housing and Sustainable Communities (AHSC) grant program, has the potential to address

housing needs in concert with transportation needs more holistically. Beyond site-level funding like AHSC, other programs and policies can be established or enhanced to increase community capacity for stability and self-determination around major infrastructure projects, as with the Transformative Climate Communities grant program. In considering these different transportation and affordable housing funding schemes, it is still just as important to base discussions and actions in community, incorporating community oversight and ownership of projects throughout program, plan, and project development. Acknowledging this need, I would like to highlight that the CAC for this project still has much to offer in the ways of community ideas and decision-making that could pave the way for achieving such programs and even more possibilities for community ownership, preservation, and general anti-displacement.

Limitations & Future Research

While the research documented in this report strived to accurately capture safety and displacement impacts that are connected to the construction of the International Boulevard BRT corridor, there are several limitations to the research as it exists currently. Future research should be conducted to build upon what has been completed for this report and fill in any gaps left by its limitations.

A major limitation of this report is the lack of ground-truthing beyond what was apparent from previous interviews for the Just Cities and studio reports and the few CAC meetings completed thus far for this research. It is difficult to draw meaningful conclusions from the quantitative findings without community-based qualitative data to reinforce potential connections. This report exists as part of a broader research project, which does include efforts to do qualitative analysis with community members. Looking towards those efforts and potential future research on the BRT in East Oakland, there are some threads that should be investigated further.

Continued work with the CAC to guide qualitative research efforts is imperative to the quality and direction of this research. The CAC was carefully selected in an attempt to fully represent various communities across East Oakland, as well as provide points of contact for further research efforts beyond the CACs involvement in determining the scope of the research. Each member of the CAC can assist with outreach to community members and other stakeholders for various interviews, listening sessions, and more to enrich the knowledge surrounding the impacts of the BRT project on varying East Oakland communities. Partnering with CAC members on these efforts will be instrumental in furthering this research.

With respect to the role of the CAC members in this research, one thread that could also be investigated further to evaluate connections between housing costs and the BRT project, is the perspective of landlords that own and manage properties near the BRT

corridor. An important inquiry for the landlord community is how the BRT may have influenced their decisions about how much rent to collect. The East Bay Rental Housing Association (EBRHA) may be a useful contact to initiate engagement for interviews and other conversations with East Oakland landlords.

Another set of groups that should be contacted to enrich existing qualitative data on demographic and socioeconomic changes across East Oakland neighborhoods are both newer East Oakland residents and past East Oakland residents who have been displaced by housing costs and other financial pressures. Newer East Oakland residents, especially those who are using the BRT, should be engaged to investigate the question of how the presence of the BRT played into their residential location choice, choosing to live in East Oakland. Surveying new residents, especially in the growing higher income neighborhoods, could enable more holistic conclusions about the housing market impacts of the BRT. Speaking to displaced residents will further complete this picture, though it will be a complex effort involving the identification of community and cultural centers that displaced residents may still frequent, as well as social networks that can connect researchers to and point to the current locations of previous East Oakland residents. Understanding the causes for their displacement or relocation would be a key element in confirming potential displacement impacts of the BRT project. Overall, qualitative research by way of the CAC as well as tapping into networks of landlords, new residents, and displaced residents will greatly aid the quality and utility of this research in drawing concrete conclusions around the BRT's safety and displacement impacts.

Another significant limitation of the current research is a lack of isolated data on demographics, socioeconomics, and housing for periods before, during, and after construction of the BRT. Using ACS 5-Year Estimates is useful for analyzing patterns at the census tract-level, but given the timeline of the project and current research efforts, it is difficult to isolate data for time periods during and after construction. The 2022 ACS data included survey data from 2018 through 2020, which were all years where active construction on the BRT was taking place. Similarly, the 2017 ACS data contained data for 2015 through 2017, also construction years. Ideally, future research would examine datasets containing estimates that are isolated to periods strictly before, during, and after construction, but if the most useful data is still ACS 5-Year Estimates, then a comparison of the 2024, 2019, and 2014 ACS data would provide a better picture of each time period in isolation from each other (2024 ACS data will likely be released in late 2025).

To conclude, this report and my analysis of the BRT project's safety and displacement impacts on East Oakland neighborhoods is just one step in a much larger process of community-based research and planning efforts on transportation infrastructure projects. There is still much to investigate within and beyond safety and displacement impacts of

the BRT, and there is so much more to be learned from and co-created with the CAC members and East Oakland communities as a whole. I hope that the partnerships that have been started for this project will become a long-lasting connection that guides future research, plans, and projects, with community involvement and ownership of this research being more fully achieved as time goes on. It has been a privilege to work alongside staff and community members to tackle these complex planning issues in the mission for just cities and communities.

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