



MEMORANDUM

Date: December 7, 2022
To: Interested Parties
From: Lisa Gibson, Environmental Review Officer
Wade Wietgreffe, Principal Environmental Planner
Jenny Delumo, Senior Environmental Planner
Elizabeth White, Senior Environmental Planner
Re: Environmental Justice Informational Analysis for the Housing Element 2022 Update
Case No: 2019-016230CWP

The Planning Department conducted an analysis of some environmental justice impacts that could result from implementation of the Housing Element 2022 Update. The department conducted the analysis based on an earlier draft of the update and used the findings and associated analysis to identify changes to some actions in the update that are incorporated in the draft for adoption. In addition, recommendations are identified in the report to further guide and inform the update's implementing actions and other department work in the future.

The environmental justice analysis finds that the Housing Element Update would advance racial and social equity over the next thirty years compared to the status quo. However, the update would not erase the existing disproportionate environmental justice impacts experienced by Black and American Indian communities and other communities of color. San Francisco must prioritize investing in communities with the highest environmental justice burden, open up housing opportunities in communities in the lowest environmental justice burden, and protect vulnerable populations in all communities.

This analysis is not a requirement of the Housing Element update. The analysis relies on data from the Housing Element Update's Environmental Impact Report (EIR) to assess racial and social equity impacts, but it is separate from the EIR, as outlined in the table below.

Scope	Environmental Justice Analysis	Environmental Impact Report
Impact Analysis	Identifies the environmental justice impacts from the update.	Identifies the physical environmental impacts from the update.
Economic or Social Impacts	Included. Uses available demographic information (e.g., race, ethnicity, income, and social vulnerability).	Excluded. CEQA prohibits treating economic or social effects as significant environmental effects, by themselves.
Racial and Social Context	Considers the historical context and systemic harm to Black, American Indian, and other communities of color from past government and private discriminatory actions to assess impacts.	Generally, does not consider the historical context and systemic harm to Black, American Indian, and other communities of color from past government and private discriminatory actions.

December 7, 2022

The department welcomes feedback on the environmental indicators used for the topics in this analysis and the identified recommendations. Comments may be provided to Elizabeth White and Jenny Delumo at elizabeth.white@sfgov.org and jenny.delumo@sfgov.org.

Enclosure: Housing Element 2022 Update Environmental Justice Informational Analysis (December 2022)

Housing Element 2022 Update – Environmental Justice Informational Analysis

DECEMBER 2022

Prepared as an informational analysis in support of the
San Francisco Planning Department's

Housing Element 2022 Update



**San Francisco
Planning**

Feedback on this report may be provided to Jenny Delumo at jenny.delumo@sfgov.org and Elizabeth White at elizabeth.white@sfgov.org.

Contents

Land Acknowledgement	4
Definitions	5
 Chapter 1: Introduction	 8
Purpose	8
Racial and Social Conditions in San Francisco	9
Research Questions	10
Approach to Analysis	10
Environmental Burden	10
Mapping	10
Racial and Social Equity Work in the Planning Department	12
Limitations	14
 Chapter 2: Housing Element 2022 Update	 16
Background on Development of the Housing Element 2022 Update	16
Housing Element 2022 Update	19
 Chapter 3: Analysis	 21
Introduction	21
Built Environment Resources (Historic Resources)	23
Context	23
Findings	23
Transportation	28
Context	28
Findings	28
Air Quality	37
Context	37
Findings	37
Noise	43

Context	43
Findings	43
Hazardous Materials	48
Context	48
Findings	48
Recreation and Open Space.....	52
Context	52
Findings	52
Sea Level Rise	59
Context	59
Findings	59
Chapter 4: Recommendations	62
Changes to Update Already Incorporated	62
Recommendations for Implementation.....	63
Report Preparers/Acknowledgements.....	65
Appendix A. Abbreviated History of Race and Social Inequity in San Francisco	66
Appendix B. Preservation – Environmental Justice Informational Analysis	67
Appendix C. Transportation – Environmental Justice Informational Analysis	68
Appendix D. Air Quality – Environmental Justice Informational Analysis	69
Appendix E. Noise – Environmental Justice Informational Analysis.....	70

Land Acknowledgement

The San Francisco Planning Department acknowledges that San Francisco is on the unceded ancestral homeland of the Ramaytush Ohlone who are the original inhabitants of the San Francisco Peninsula. As the indigenous stewards of this land and in accordance with their traditions, the Ramaytush Ohlone have never ceded, lost, nor forgotten their responsibilities as the caretakers of this place, as well as for all peoples who reside in their traditional territory. As guests, we recognize that we benefit from living and working on their traditional homeland. We wish to pay our respects by acknowledging the ancestors, elders, and relatives of the Ramaytush Ohlone community and by affirming their sovereign rights as First Peoples.

Definitions

2020 conditions – used to represent existing conditions.

2050 baseline conditions – a future scenario that assumes continuation of the plans and policies in the 2014 update to the Housing Element of the San Francisco General Plan, and implementation of housing and infrastructure projects currently proposed or already approved, but not yet implemented.

2050 with the housing element update – a future scenario that assumes implementation of the policies in the 2022 update to the Housing Element.

American Indian – terminology that has been commonly used by several local American Indian organizations, tribes, and community members. It is important to note, however, that whenever feasible, American Indian people traditionally prefer to be identified by their tribal affiliation name (i.e., Ramaytush Ohlone). California Native American tribe is also terminology used by the planning department to identify Native American tribes in California as defined in the California Environmental Quality Act (CEQA statute 21073).

Asian American – this term was created in the 1960s to unify all the different ethnic and cultural groups of Asian descent and is meant to form a unified political bloc for advocacy and collective action. In the 1980s and 1990s, this term was broadened to include Pacific Islanders, and the term Asian American and Pacific Islander (AAPI) is now more commonly used. This term captures many different ethnicities, so the report is specific when necessary and disaggregates data when necessary.

Black – to more fully capture the experiences of Black people in America, it is preferable to use Black instead of African American because it also includes people who are foreign born but US residents, people who are not of African descent, such as people from the Caribbean.

communities – a group of people who have shared identity, are linked through social ties, or may share common perspectives.

disenfranchised populations/communities and disinvested communities/populations – communities that have historically been excluded from certain processes (such as people with felonies not being able to vote) and contributes to their lack of decision-making power

environmental justice – the equitable distribution of environmental benefits and the elimination of environmental burdens to promote healthy communities where all San Franciscans can thrive. Government can foster environmental justice through processes that amend past injustices while enabling proactive, community-led solutions for the future. (draft definition from the planning department's environmental justice framework)

environmental justice communities – areas of San Francisco that have higher pollution and are predominately low-income

environmental justice communities burden – the level of cumulative environmental and socioeconomic vulnerability.

equity – full and equal access to opportunities, power and resources, whereby all people thrive and prosper regardless of demographics

Latino (a, e) – because the term Hispanic has been criticized for highlighting Spain, which colonized much of Latin America, some activists have preferred Latino instead (short for Latin American). Latinx is a term coined to remove the gender binaries of Latino and Latina. However, this term like many others is also imperfect and there isn't group consensus.

low-income communities – typically used to describe communities that have lower household incomes relative to the median household income for that city or jurisdiction.

marginalized communities or populations – communities that have faced systemic and intentional inequities and lack of investment, contributing to lower levels of opportunity.

people of color – an inclusive and unifying term for persons who do not identify as White, who have been historically and systemically disadvantaged by institutionalized and interpersonal racism. (SF Administrative Code, section 12A.19(a))

populations – people who are part of a certain category or group through a shared characteristic.

priority equity geographies – areas with a higher density of vulnerable populations as defined by the San Francisco Department of Health, including but not limited to people of color, seniors, youth, people with disabilities, linguistically isolated households, and people living in poverty or unemployed.

race – a social and political construct that artificially divides people into distinct groups based on characteristics such as physical appearance (particularly color), ancestral heritage, cultural affiliation, cultural history, ethnic classification, and the social, economic, and political needs of a society at a given period of time. Racial categories subsume ethnic groups. (SF Administrative Code, section 12A.19(a))

racial advantage (or privilege) – the unquestioned and unearned set of advantages, entitlements, benefits and choices bestowed on people solely because of their race (derived from Office of Racial Equity, Draft Citywide Racial Equity Framework, Phase 1: Internal Programs and Policies).

racial disparity – a condition where one racial group systemically and disproportionately experiences worse outcomes in comparison to another racial group or groups. (SF Administrative Code, section 12A.19(a)).

racial equity – the systematic fair treatment of all Races that results in equal outcomes, while recognizing the historical context and systemic harm done to specific racial groups (SF Administrative Code, section 12A.19(a)).

racism – racial prejudice and/or discrimination, which may be supported intentionally or unintentionally by institutional power and authority, used to the advantage of one or more Races and the disadvantage of one or more other Races. (SF Administrative Code, section 12A.19(a))

social equity – the systematic fair treatment of all social groups that results in equal outcomes, while recognizing the historical context and systemic harm done to specific social groups, such as along gender identity, sex, religion, and disability status.

underserved communities/populations – communities or populations that have experienced a decreased level of service or access.

Chapter 1: Introduction

Purpose

The San Francisco Planning Department (planning department) prepared this report to analyze the potential environmental justice impacts that could result from implementation of the policies in the proposed Housing Element 2022 Update (Housing Element Update or update) and inform decision-makers and the public about these impacts. The planning department used this report's analysis and recommendations to update Housing Element Update actions, as described in Chapter 4. This report also includes recommendations for implementation of the Housing Element Update to avoid or reduce the identified impacts. Although this is a final report, the department welcomes feedback on the approach used in this report. We will use feedback to inform future similar analyses.

The planning department's current definition of environmental justice is: "The equitable distribution of environmental benefits and the elimination of environmental burdens to promote healthy communities where all San Franciscans can thrive. Government can foster environmental justice through processes that amend past injustices while enabling proactive, community-led solutions for the future."¹ Thus, the report assesses if the update would advance the equitable distribution of environmental benefits and advance the elimination of environmental burdens using the approach described below.

This report was prepared to advance San Francisco Planning Commission [Resolution No. 20738](#), Centering Planning on Racial and Social Equity,² and to advance draft action 5.1.7 from the Housing Element Update, which states that the planning department should apply a racial and social equity assessment to applicable projects. This environmental justice report is not required by CEQA, or any other state law, including Senate Bill 1000. Although Senate Bill 1000 requires that cities and counties adopt policies in their General Plan to address environmental justice, this environmental justice analysis is not a requirement of the update.

The planning department analyzed physical environmental impacts resulting from implementation of the update in an environmental impact report (EIR) pursuant to the California Environmental Quality Act (CEQA).³ Although this environmental justice analysis is informed by the EIR for the Housing Element Update, it differs from the EIR, as described in the table below.

1 San Francisco Planning Department, *What Is Environmental Justice (EJ)?* Available: <https://sfplanning.org/project/environmental-justice-framework-and-general-plan-policies>

2 San Francisco Planning Commission, *Resolution 20738: Centering Planning on Racial and Social Equity*, June 11, 2020. Available: https://sfplanning.org/sites/default/files/documents/admin/R-20738_Centering_Planning_on_Racial_and_Social_Equity.pdf

3 San Francisco Planning Department, *Housing Element 2022 Update Environmental Impact Report*, November 2022. Available: <https://sfplanning.org/environmental-review-documents>

Table 1-1. Housing Element Update: Environmental Impact Report vs. Environmental Justice Analysis

<i>Scope</i>	<i>Environmental Impact Report</i>	<i>Environmental Justice Analysis</i>
Impact analysis	Identifies the physical environmental impacts from the update.	Identifies the environmental justice impacts from the update.
Economic or social Impacts	Excluded. CEQA prohibits treating economic or social effects as significant environmental effects, by themselves.	Included. Uses available demographic information (e.g., race, ethnicity, income, and social vulnerability).
Baseline conditions	Compares conditions in a future with the update to conditions without the update to assess impacts. Generally, does not consider the historical context and systemic harm to Black, American Indian, and other communities of color from past government and private discriminatory actions.	Compares conditions in the future with the update to conditions without the update AND considers the historical context and systemic harm to Black, American Indian, and other communities of color from past government and private discriminatory actions to assess impacts.

This report uses an environmental justice lens and bridges affirmatively furthering fair housing analysis for the year 2031, the last year of the update's eight-year regional housing need cycle, and the year 2050, the primary year studied in update's EIR.

Racial and Social Conditions in San Francisco

San Francisco has a long history of creating and/or enforcing laws, policies, and institutions that perpetuated racial inequity in our city, much of which is difficult to document due to historical erasure. The conditions that have created such racial inequity are also compounded by the intersection of race with class, gender, sexuality, immigration status, and other identities and experiences that have resulted in inequitable treatment or opportunities. As acknowledged in San Francisco Planning Commission Resolution [No. 20738](#) "using the power of zoning and land use, the city, its planning commission (commission) and department (department) and other government agencies, individuals, and private organizations have intentionally advanced policies aligned with white supremacy goals to segregate, displace, dispossess and extract wealth from Black communities, the American Indian community, and other communities of color."

Appendix A lists key dates of the history of racial and social inequity in San Francisco. This is not an exhaustive list but shows the many ways, both large and small, that land use decisions shaped the city and the lives of its residents. The list is presented to show the major events and decisions that established and perpetuated these inequities and provide context for the analysis in Chapter 3. The Housing Element Update's needs assessment provides additional context about the racial and economic disparities in the city and discrimination perpetuated through planning and housing policy.

Research Questions

The planning department prepared the analysis and recommendations in this report to answer the following questions:

- What racial and social disparities are found in the environmental conditions experienced by Black and American Indian communities, and other communities of color?
- How could implementation of the Housing Element Update improve, stabilize, or worsen the environmental conditions experienced by these communities over the next 30 years?
- How could the Housing Element Update and implementing actions be further strengthened to reduce inequities in environmental conditions?

Approach to Analysis

Environmental Burden

Some neighborhoods – particularly lower-income neighborhoods with more people of color – lack access to resources like affordable housing, convenient transportation, well-paying jobs, good schools, and safe parks. Many of these same neighborhoods are also exposed to more hazards like air pollution, industrial facilities, overcrowded housing, and crime. As described above, this is due to a long history of laws that segregated neighborhoods, excluded people based on race, ethnicity, income or other reasons, and to influence who has more access to resources. These trends can lead to wide disparities in health outcomes depending on a person's neighborhood, race, and income. For example, the Tenderloin neighborhood has a rate of severe and fatal traffic injuries nearly six times as high as the city overall.⁴ Other highly impacted neighborhoods include the neighborhoods that border the Tenderloin, including: South of Market, portions of Nob Hill, Japantown, Western Addition, Mission, and Hayes Valley. Another example of disparities are the rates of asthma and chronic obstructive pulmonary disease; hospitalizations are highest for Black/African Americans and are almost 10 times higher than for Whites. The rates are also higher in the Tenderloin, South of Market, and Bayview Hunters Point neighborhoods.

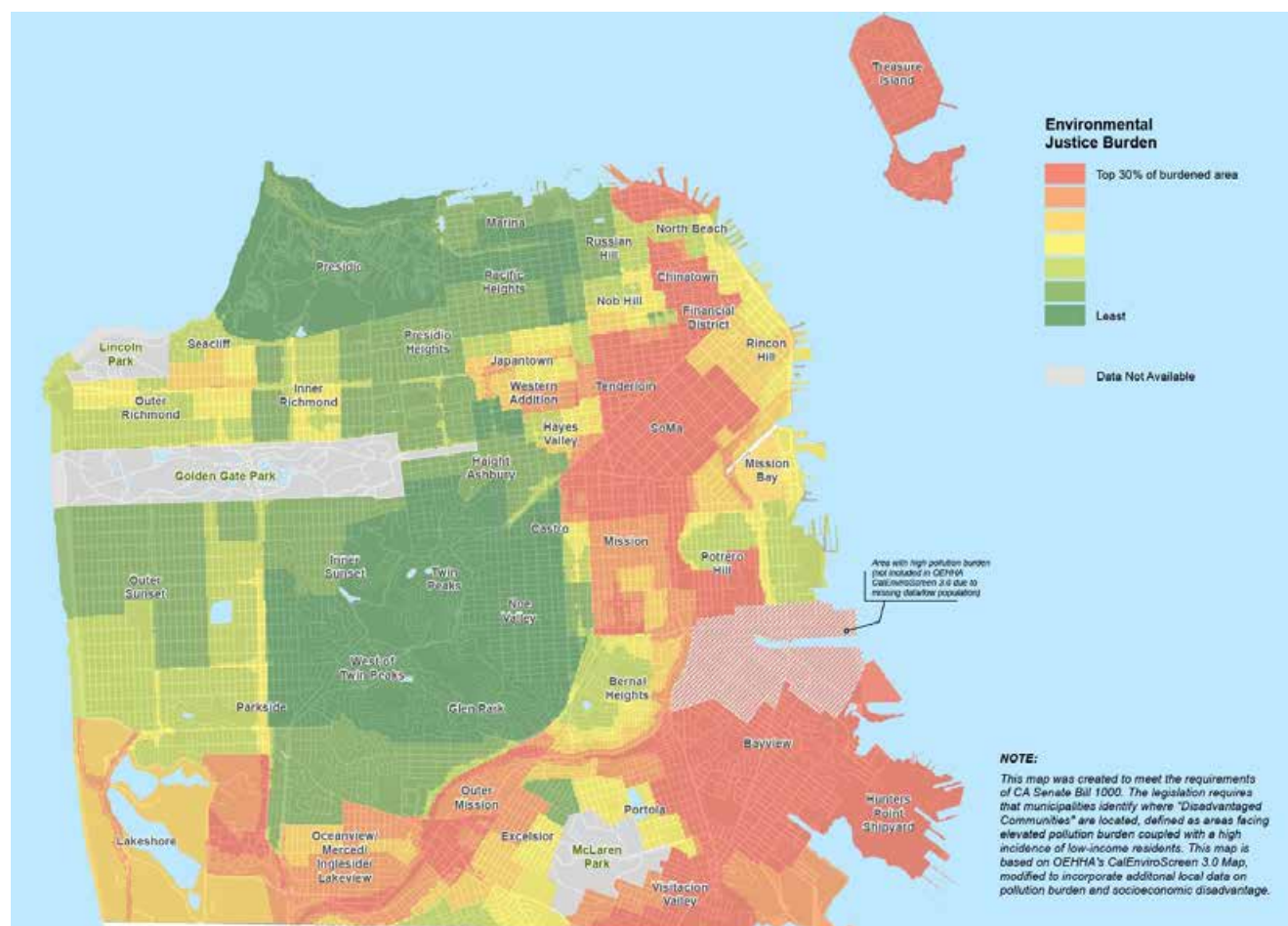
Mapping

The planning department is developing an environmental justice communities map to understand the level of environmental justice burden felt by San Francisco communities (see **Figure 2-1**). The planning department will use the environmental justice communities map to identify neighborhoods that the city should prioritize for policies and programs to address environmental justice. As such, it is the best

4 San Francisco Health Improvement Partnership, *Summary of Data Findings by Section*, 2022. Available: [Summary of Data Findings by Section – SFHIP](#)

available proxy for understanding where there is the greatest potential for environmental related equity impacts. The level of environmental burden in the map was determined by supplementing the data in CalEnviroScreen 3.0⁵ with household income, air pollution exposure levels, and areas of vulnerability, among other data sources. The draft final map was created through public engagement with communities and other city agencies.⁶

Figure 1-1. Environmental Justice Communities Map



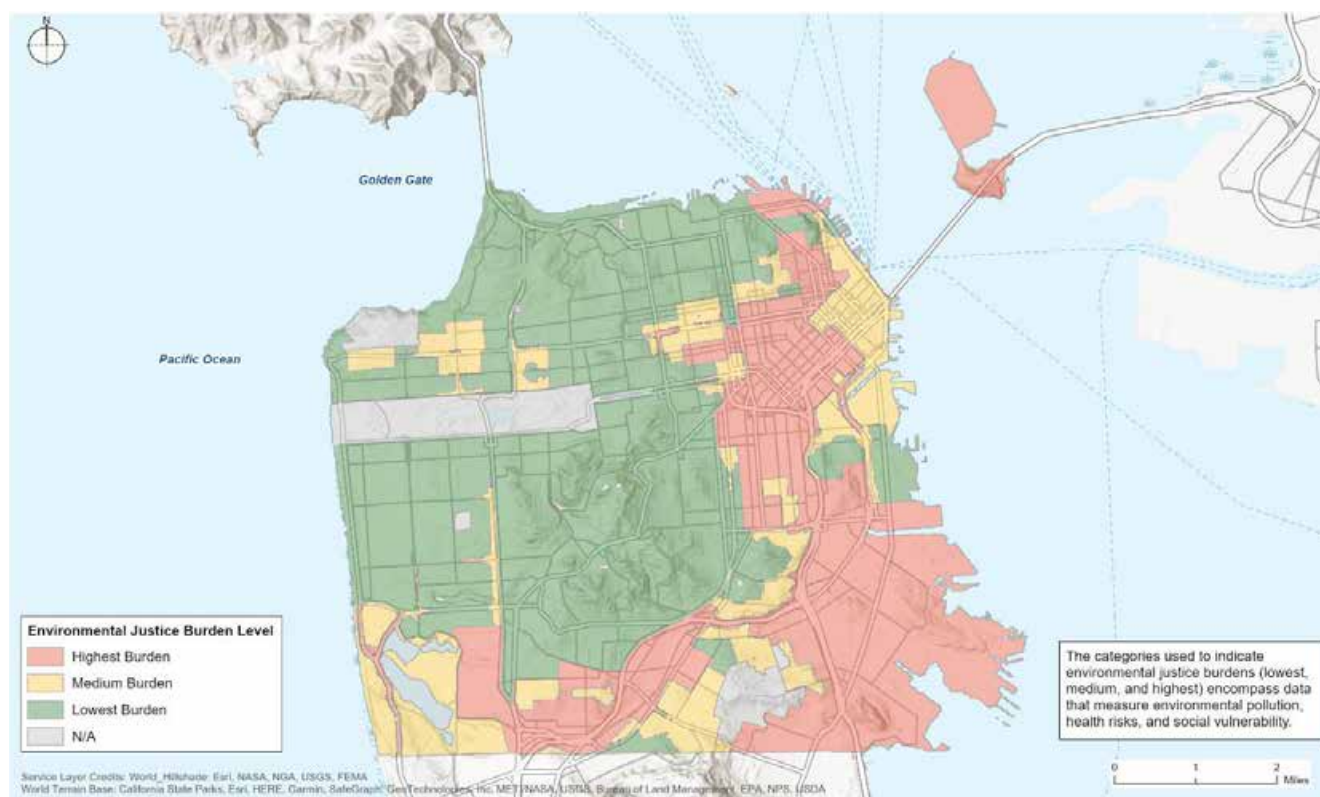
Source: SF Planning, 2022

The analysis in this report compares conditions for people living with different levels of environmental burden. The planning department identified three categories of environmental burden in the environmental justice communities map: Highest Burden, Medium Burden, and Lowest Burden.

5 CalEnviroScreen 3.0 is a tool created by State of California environmental agencies that maps California communities that are most affected by pollution and other health risks. The model includes two components representing pollution burden- exposure and environmental effects- and two components representing population characteristics- sensitive populations and socioeconomic factors. The tool can be found at <https://oehha.ca.gov/calenviroscreen/report/calenviroscreen-30>, accessed February 2022.

6 Further information about how the map was created and the underlying data used can be found here: <https://sfplanning.org/project/environmental-justice-framework-and-general-plan-policies>, accessed February 2022.

Figure 1-2. Environmental Justice Communities Map: Highest Burden, Medium Burden, Lowest Burden



Source: SF Planning, 2022

Race and socioeconomic status are significant determinants of environmental health.⁷ The planning department has identified environmental topic areas where there was potential for environmental justice impacts for this analysis. Examples include air quality, transportation, and noise. Chapter 3 includes a complete list of the topic areas. This report presents the existing conditions for those topic areas and identifies how conditions would change in the three environmental justice communities burden areas with implementation of the update. The planning department's analysis is supported by consultants working on the update EIR.

Racial and Social Equity Work in the Planning Department

In August 2019, the Board of Supervisors passed legislation creating a San Francisco Office of Racial Equity, which requires all city departments create racial equity action plans by 2020. In 2020, the Planning Commission passed [resolution no. 20738](#), Centering Planning on Racial and Social Equity, which focuses the department's work program and resource allocation on racial and social equity. That

⁷ Robert J. Brulle and David N. Pellow, *Environmental Justice: Human Health and Environmental Inequalities*. Annual Review of Public Health. 2006. Vol. 27:103-124.

same year, the San Francisco Historic Preservation Commission adopted [resolution no. 1127](#), Centering Preservation Planning on Racial and Social Equity.

The department's Racial and Social Equity Action Plan is a proactive strategy to comprehensively and intentionally address these issues internally and externally in our work. Phase 1 of the plan was adopted in 2019 and updated in 2020⁸. Phase 1 focuses on internal functions such as hiring, promotions, workforce development, staff capacity building, resource allocation, and contracting. Phase 2 of the plan focuses on the external functions of the department. This includes a community engagement process to develop goals, objectives, and actions that address community concerns and causes that prevent the department from advancing racial and social equity in our work. Key equity efforts include:

- The department prepared a draft Environmental Justice Framework which outlines a vision and goals to be incorporated into the city's General Plan. It also includes guidance to city agencies and other stakeholders on how they can address environmental justice in their work.
- Planning Commission Resolution No. 20738 directs staff to update to the General Plan with explicit prioritization of racial and social equity for American Indian communities, Black communities, and communities of color. The Commission further directed that subsequent amendments to the General Plan utilize a racial and social equity lens. All elements in the general plan currently being amended (Transportation Element, Community Safety Element, and Housing Element) will explicitly prioritize racial and social equity. As discussed in Chapter 2, the Housing Element Update is the first one that will center on racial and social equity. Towards this end, the proposed update includes a new goal tying together racial and social equity with housing and environmental justice, in addition to incorporating racial and social equity throughout other Housing Element Update policies.
- City agencies are working together to develop a coordinated COVID-19 pandemic strategies work program to provide immediate and on-going measures that will help the city promote housing access, job creation, walkable neighborhoods, and address impacts of systemic racism. The recovery work begins with the following five priorities: (1) center recovery on racial and social equity, (2) prioritize recovery towards just and vital San Francisco, (3) strengthen community engagement in implementation, (4) root action in data and analysis, and (5) coordinate strategies across agencies.
- Mission Action Plan 2020 (MAP2020) is a recent project that is deliberate about ensuring equitable outcomes and addressing disproportionate impacts for a specific population impacted by the housing affordability crisis due to gentrification and displacement. Other examples of recent projects that highlight equity and/or use a deliberate lens to address disproportionate impacts on specific groups include the SoMa Pilipinas Filipino Cultural Heritage District; the LGBTQ+ Cultural Heritage Strategy; Sustainable Chinatown; the Japantown Cultural Heritage & Economic Sustainability Strategy; and the Health Care Services Master Plan, among others.

⁸ San Francisco Planning Department, *Racial and Social Equity Plan: Phase 1*. The updated plan can be found here: https://sfplanning.org/sites/default/files/documents/equity/RSEAP_Phase1_Draft-Dec2020.pdf, accessed December 2022.

Limitations

The planning department acknowledges limitations to this report. This report relies heavily on data to address the questions herein, with no direct engagement with communities on this report (see Chapter 2 for more background). The planning department does not pretend that any data or equity impact report can fully account for the inequities that people face in their day-to-day-lives. The planning department hopes though that this report is a tool to better decision-making, including decisions that lead to environmental justice. The planning department also hopes that the learning from this process will improve the department's implementation of the update and for developing a racial and social equity/environmental justice impact analysis approach that will be applied to applicable projects.

Other limitations include:

- **Comprehensiveness of data:** Across every social indicator, when data is disaggregated by race, the legacy of centuries of racially discriminatory government policies is evident. As stated in the update, housing is a foundation for health and social and economic well-being. However, this report does not assess impacts across every social indicator using available data. This was primarily because of resources. The planning department does not have resources to comprehensively assess the update's impacts within state mandated Housing Element timelines across topics such as unemployment, life expectancy, criminal justice, and police violence.
- **Environmental justice communities map:** Most analysis in this report uses the draft final environmental justice communities map. The environmental justice communities map is static and reflects existing environmental justice burden. Additionally, and as noted above, the environmental justice communities map is informed by many of the environmental topics analyzed in this report. For example, the air pollutant exposure zone is a data source that informs both the environmental justice communities map and environmental justice air quality analysis. The department acknowledges there is some duplication between the environmental justice communities map and some of the topics studied in this report. However, this report adds value to the environmental justice communities framework in that this report:
 - Uses updated data;
 - Estimates how benefits and burdens could change in a future year (2050);
 - Covers some topics not considered in the criteria in creating the draft final environmental justice communities map; and
 - Assesses Housing Element Update environmental justice impacts and makes recommendations to the update.
- **EIR data:** The EIR identifies limitations in the data presented therein. Those limitations apply to this report to the extent this report relies on EIR data to assess racial and social equity impacts. For example, the modeling used to estimate future vehicle trips does not account for potential changes to travel behavior resulting from telecommuting changes, and major transportation

projects and policies (e.g., congestion pricing, expanded subways or a new Transbay tube). Thus, the vehicle trip results may overestimate future vehicle trips and associated impacts (e.g., air and noise pollution).

Chapter 2: Housing Element 2022 Update

Background on Development of the Housing Element 2022 Update

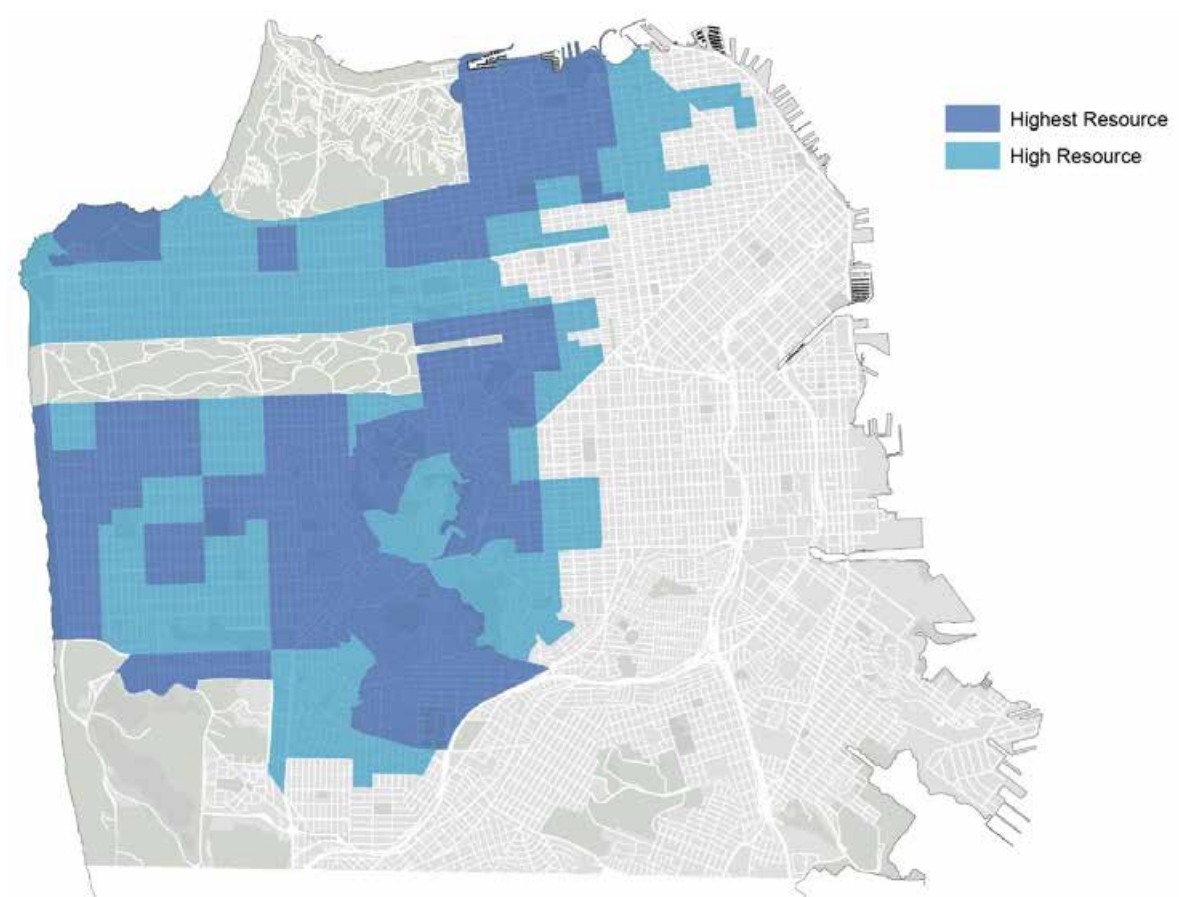
The San Francisco Planning Department (planning department) prepared an update to the Housing Element of the city's General Plan (Housing Element Update or update). The Housing Element Update is San Francisco's housing plan for the next eight years (2023-2030) and to meet future housing demand in San Francisco over the next 30 years. The update includes policies and programs that express the city's collective vision and values for the future of housing in San Francisco. The plan identifies priorities for decision makers, guide resource allocation for housing programs and services, and defines how and where the city should create new housing.

This is the city's first housing plan centered on racial and social equity. The plan calls for the city to acknowledge and redress past discriminatory government actions through programs and investments targeted for harmed communities. It also calls for increased accountability to Black and American Indian communities, and other communities of color. This environmental justice analysis is intended to support the identification, prioritization, and implementation of actions that will be most impactful in advancing equity.

A primary objective of the update is to produce an average of 5,000 housing units per year through 2050, or approximately 150,000 units. Housing Element Update objectives, policies and actions have been drafted to achieve this primary objective. The update would accomplish this primary objective by shifting the location of anticipated new housing units to well-resourced areas⁹ in San Francisco (see **Figure 2-1**) over the next 30 years. The planning department targeted well-resourced neighborhoods for this growth because those areas provide positive economic, health, and educational outcomes for their residents. By targeting additional growth, higher density, and below market rate housing in well-resourced neighborhoods, the planning department can increase racial and economic diversity and promote more equitable distribution of resources. The objectives, policies and action in the update are available to review at <https://www.sfhousingelement.org/>.





⁹ Well-resourced areas are defined as "High Resource/Highest Resource" by the California Fair Housing Task Force. More information is available at: [Well-resourced Neighborhoods | San Francisco Housing Element \(sfhousingelement.org\)](#)

Figure 2-1. Well-Resourced Areas



After developing the locations to target growth, the planning department conducted a community engagement process. **Figure 2-2** shows the three phases of the update community engagement process.

Figure 2-2. Housing Element Update Community Engagement Process

		Intent	Outreach	Outcome
	Learning from Past Efforts December 2019 - May 2020	Gather and summarize key policy ideas from past efforts related to housing and community development	Public announcement through an informational public hearing, website, email, and social media	Draft key policy ideas to share with the public for feedback
	Phase I Vetting Key Ideas with the Community May 2020 - February 2021	Ask the community to reflect on the draft key policy ideas and share their housing needs, challenges, and opportunities to inform the first draft of policy updates.	Website, video promotion, traditional media, phone, mail, social media, email blasts, presentations, listening sessions, surveys, and digital participation platform (Events modified for public health safety)	First draft of policy updates based on input shared by the community
	Phase II Refining Policies Together March 2021- March 2022	Ask the community to reflect on the draft policy updates	Two rounds of outreach including focus groups, public hearings, and digital participation platform (Events modified for public health safety)	Second and third drafts of policy updates based on input shared by the community
	Phase III Moving Towards Adoption April 2022 - December 2022	Seek approval of the Housing Element 2022 Update based on the third draft from elected officials and State Agency	Public hearings with the Planning Commission and the Board of Supervisors (Events subject to change due to the COVID-19 pandemic)	Adopted update to the Housing Element in compliance with State Law

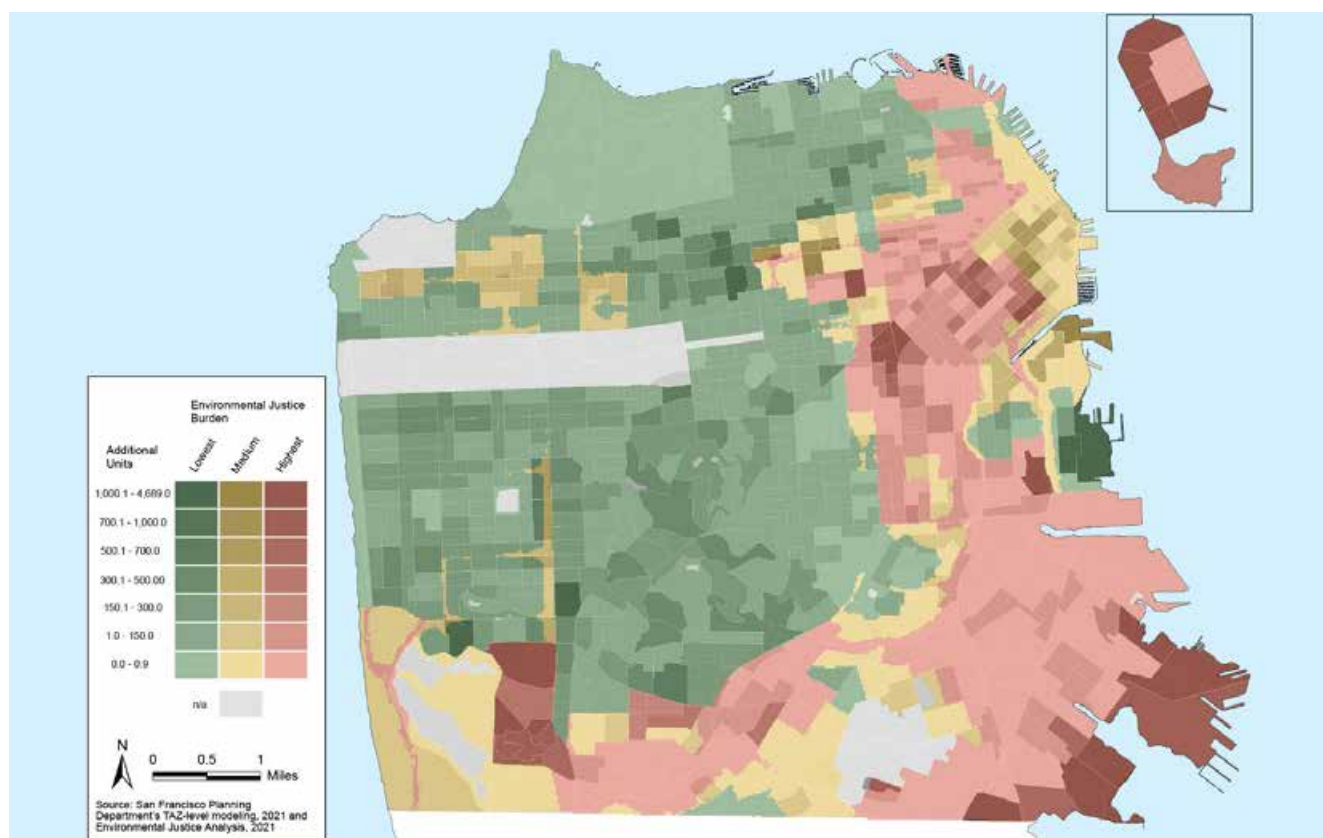
This analysis fits within Phase III of that process, as evaluation of equity impacts of the update was a common theme raised during community engagement. The planning department's overall goal was to hear from communities that it has not sufficiently engaged for past Housing Element updates and to elevate the impact of those voices in shaping policy. Groups of interest include communities of color, low-income communities, and immigrant residents, among other vulnerable or hard to reach communities. As an example, 92% of Phase 2 focus group participants were people of color and 51% earned less than \$50,000 household income. More information about how the planning department developed the update, including public engagement that they conducted, can be found here: <https://www.sfhousingelement.org/>

Issues raised during community engagement on the environmental justice map, Housing Element Update, and environmental impact report for the update informed the topics and indicators chosen for this analysis. However, there was no community engagement process specifically for this analysis.

Housing Element 2022 Update

As described in Chapter 1, the planning department took the Environmental Justice communities map and identify three categories of environmental burden (Highest Burden, Medium Burden, and Lowest Burden). **Figure 2-3** shows the amount and location of net new housing units under 2050 conditions with the update compared to 2020 conditions, and where those units would be located in relation to environmental justice communities.

Figure 2-3. Housing Growth in San Francisco Under the Housing Element 2022 Update in Relation to Environmental Justice Communities



If you compare the map of well-resourced neighborhoods to the environmental justice communities map, you can see that the update is targeting growth away from the environmental justice communities with the highest burden. This is intentional. Communities with the highest environmental justice burden tend to be in areas of the city where more housing production has occurred in the recent past and is anticipated to be concentrated without the update. One of the aims of the update is to advance equitable housing access by providing more housing (particularly affordable housing) in neighborhoods that have a lower environmental justice burden and are well resourced.

This is also reflected in **Table 2-1: Total Housing Units Under Existing 2020 Conditions, 2050 Baseline Conditions, and 2050 Conditions with the Housing Element Update in Relation to Environmental Justice Communities**. Table 2-1 shows that the update is directing more housing units to communities with the

lowest environmental justice burden. In 2050, without the update, there would be a nearly equal distribution of growth between the highest and lowest burden areas. With the update, in 2050 approximately 46% of units would be located in the lowest burden area and approximately 36% would be located in the highest burden area.

Table 2-1. Total Housing Units Under Existing 2020 Conditions, 2050 Baseline Conditions, and 2050 Conditions with the Housing Element Update

<i>Scenario</i>	<i>Highest Burden Areas</i>	<i>Medium Burden Areas</i>	<i>Lowest Burden Areas</i>	<i>Total</i>
2020 Existing Conditions				
Total Units	<u>136,904</u>	<u>76,576</u>	<u>192,716</u>	100%
(Rounded)	137,000	77,000	193,000	407,000
Percent of total	34%	19%	47%	100%
2050 without the Housing Element Update				
Total Units	<u>207,053</u>	<u>93,544</u>	<u>207,271</u>	100%
(Rounded)	207,000	94,000	207,000	508,000
Percent of total	41%	18%	41%	100%
2050 with the Housing Element Update				
Total Units	<u>201,797</u>	<u>94,935</u>	<u>261,014</u>	100%
(Rounded)	<u>202,000</u>	<u>95,000</u>	<u>261,000</u>	558,000
Percent of total	<u>36%</u>	<u>17%</u>	<u>47%</u>	100%

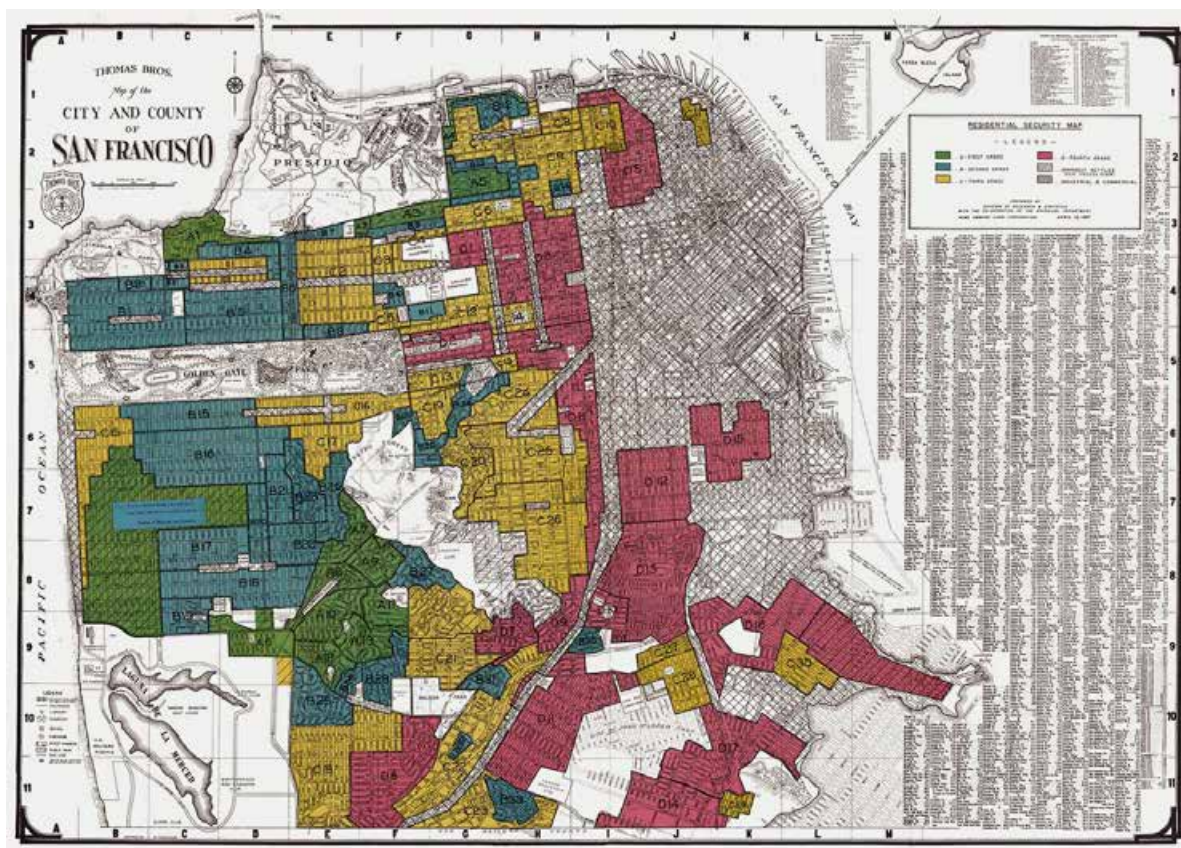
Chapter 3: Analysis

Introduction

Present conditions for communities of color are based on past decisions. This includes local, state, and federal laws and policies designed to dictate where Black and American Indian communities, and other communities of color can and cannot live and what resources and investments those communities have access to. The timeline in Appendix A provides numerous examples of these historic decisions, including redlining, racial covenants, and forced segregation and outmigration under the auspices of urban renewal.

Figure 3-1 shows a color-coded map of San Francisco created by Home Owners' Loan Corporation in the 1930s; green represents “best”, blue indicates “still desirable”, yellow is “definitely declining”, and red represents “hazardous. Although this map was created 90 years ago, San Franciscans still experience the ramifications of this delineation in their physical surroundings. This is why many communities with the highest environmental justice burden also have greater percentages of Black and American Indian communities, and other communities of color.

Figure 3-1. San Francisco Redlining Map from 1930s



Source: The University of Richmond's Mapping Inequality Project

This chapter presents data on how those decisions have shaped existing environmental conditions, how those conditions could look with a continuation of existing Housing Element policies, and analysis of how conditions could change under the update to the Housing Element of the city's General Plan (Housing Element Update or update). The analysis of impacts related to environmental conditions are presented under the following categories: historic resources, transportation, air quality, noise, hazardous materials, recreation and open space, and sea level rise. The results are presented in this chapter.

Each section below provides a brief context describing how past decisions and actions create the existing environmental conditions that San Franciscans experience today. Each section also includes findings for existing conditions as well as potential changes to conditions over the next thirty years with and without the update.

Built Environment Resources (Historic Resources)

Context

White and wealthy property owners have generally benefitted from the preservation of properties through government sponsored tax benefits and zoning that prohibits or restricts development and increased density in, and access to, wealthy neighborhoods. In contrast, government programs have historically harmed Black and American Indian communities, and other communities of color with repressive restrictions and displacement.¹⁰ For example, the Planning Department's first General Plan from 1945 identified neighborhoods that were predominately communities of color as "blighted" – including the Western Addition, South of Market, Chinatown, the Mission, and Bayview/Hunters Point. San Francisco's former Redevelopment Agency used this designation to justify the wholesale removal of Black communities and other communities of color through eminent domain. Given this history, these communities may be uncomfortable with additional relationships or review processes with local government agencies that come with identifying historic resources without protections of the communities themselves.

In 2020, the planning department began conducting a citywide survey, the San Francisco Cultural Resources Survey (SF Survey). This survey aims to document San Francisco's architectural and cultural heritage while elevating the need to acknowledge the intangible aspects of the city's culture and highlighting resources associated with marginalized social, racial, and ethnic groups.

Findings

Historically, the field of historic preservation focused on the physical appearance of properties, thereby valuing high architectural styles more than significant associations with people and events. Such an approach has historically ignored spaces important to communities of color and marginalized communities whose history may not be represented by high architectural styles. Less than 10% of San Francisco's local landmarks are designated for their cultural associations with Black, American Indian, Asian and Pacific Islander, Latino (a,e), or LGBTQ histories.¹¹

As shown in **Figure 3-2** and on **Table 3-1**, most known historic resources are concentrated in the northeast parts of San Francisco, including the highest environmental burden areas associated with the Northeast, Downtown, South of Market, and Mission planning districts, and in communities with the lowest environmental burden. Substantially fewer known historic resources are in communities with medium environmental burden. However, percentages of known historic resources in comparison to overall parcels are similar for both the highest and lowest burden areas.

10 For more information about environmental burdens specific to San Francisco, see <https://sfplanning.org/project/environmental-justice-framework-and-general-plan-policies>

11 San Francisco Historic Preservation Commission, *Resolution No. 1127 Centering Preservation Planning on Racial and Social Equity*, July 15, 2020. Available: https://sfplanning.org/sites/default/files/documents/admin/R-1127_HPC_Equity_Resolution.pdf

Figure 3-2. Historic Resources in San Francisco

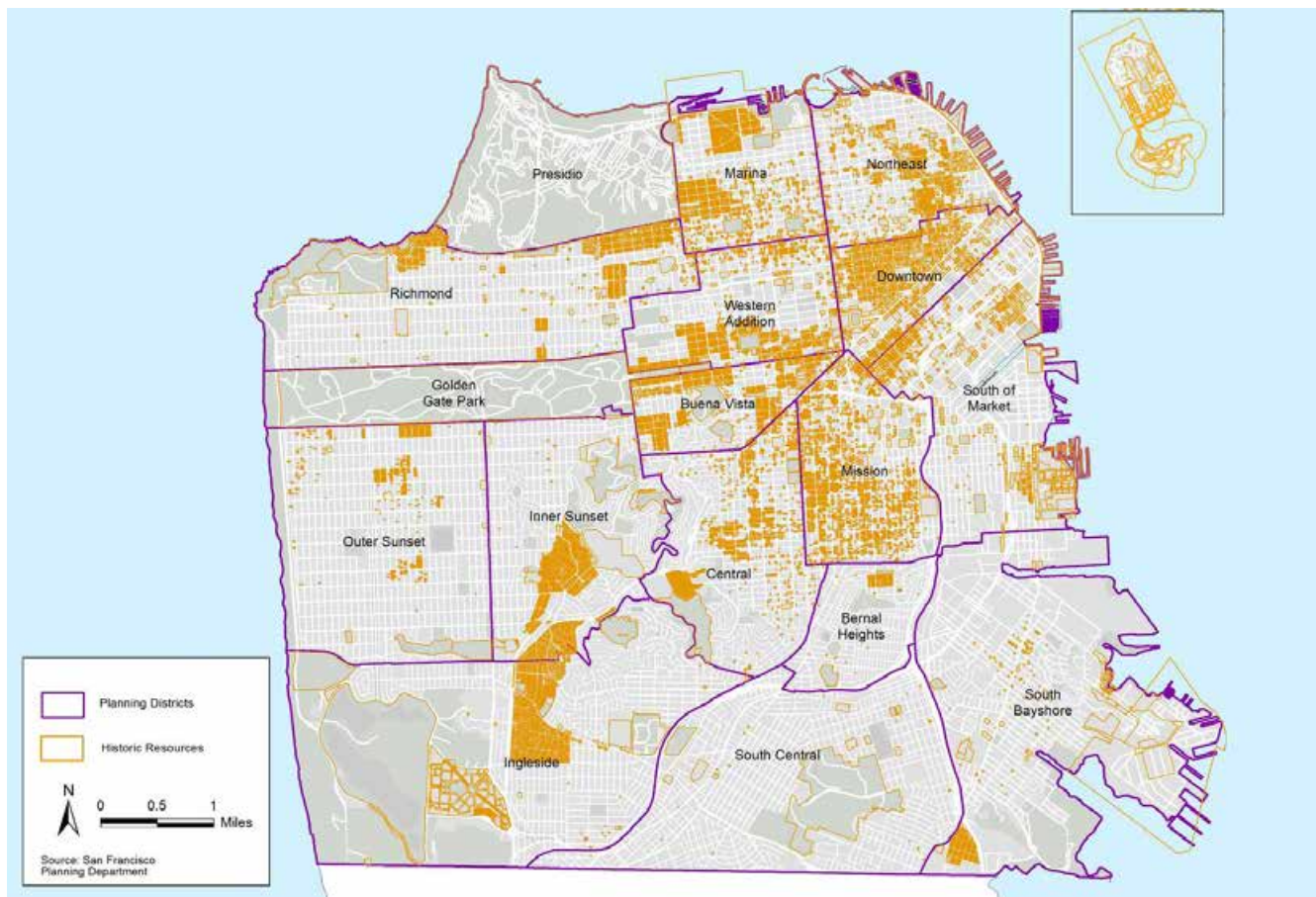


Table 3-1. Known Historic Resources across Environmental Justice Categories

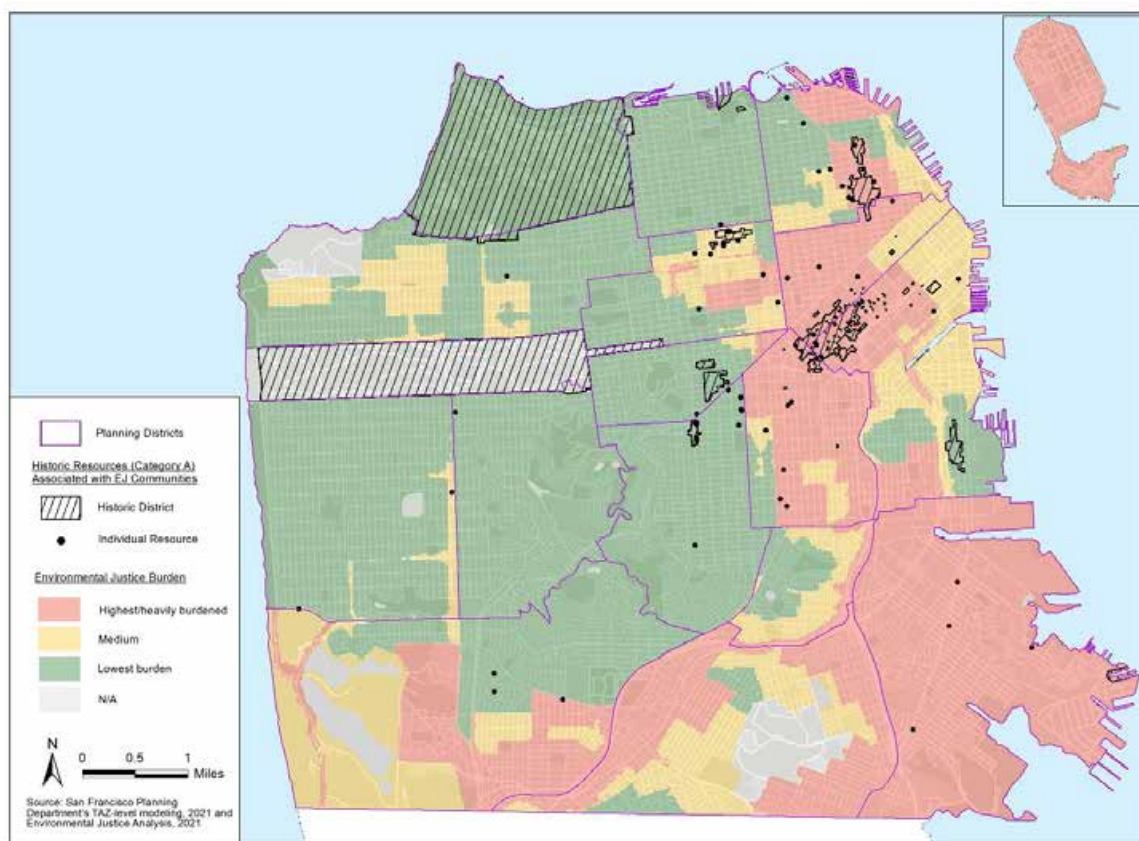
Historic Resource Status	Highest Burden Areas	Medium Burden Areas	Lowest Burden Areas	N/A	Total
Known (Category A)	6,361	2,077	13,313	41	21,792
Category A associated with EJ Communities	1,480	229	666	3	2378
Age-Eligible and not surveyed (Category B)	25,476	18,276	70,651	998	115,401
Not age-eligible or determined not historic (Category C)	6,708	2735	7,794	38	17,275
Total	38,545	23,088	91,758	1,077	154,468

As shown in above **Table 3-1**, approximately 13,300 historic (Category A) resources are located in the lowest burden areas, approximately 6,300 historic resources are located in the highest burden areas, and approximately 2,100 historic resources are located in medium burden areas. However, the percentage of historic resources within the highest and lowest burden areas compared with the total number of properties in each area is similar, with 16% in high burden areas (6,300 out of 38,500), and 14% in the lowest burden areas (13,300 out of 91,800). About 9% of properties in medium burden areas contain historic resources (2,100 out of 23,100). Many neighborhoods with few identified historic resources also correspond with neighborhoods that experience the highest environmental justice burden, such as Bayview and Ingleside.

The Housing Element Update would not substantially affect known historic resources associated with communities of color and marginalized communities, but it could affect potential historic resources associated with these communities in the lowest and medium burden environmental justice communities. Regulatory protection and designations for historic resources could elevate their importance to these communities but could also constrain future housing in some situations.

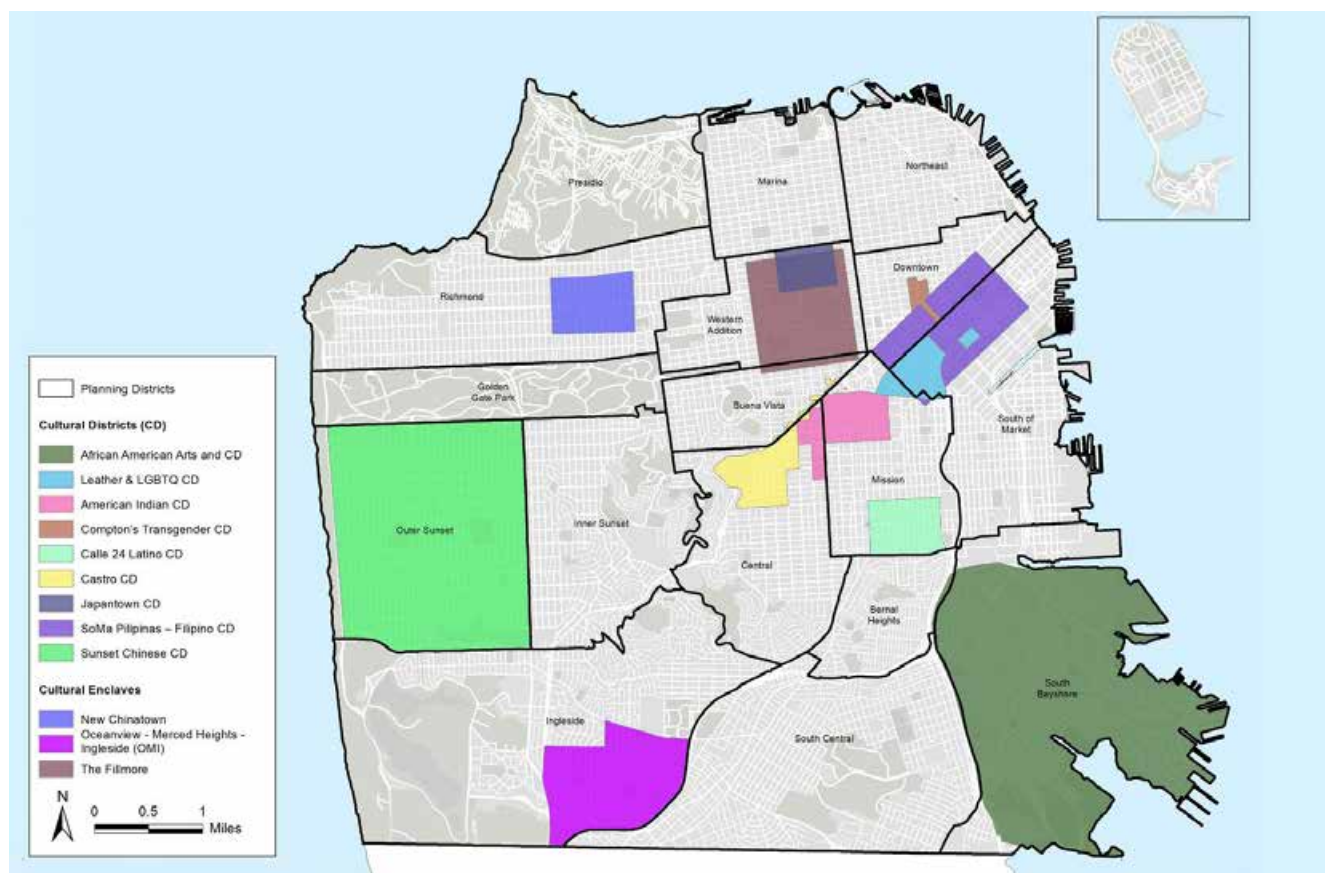
Figure 3-3 shows existing historic resources (Category A) that are associated or may be associated with American Indian, Black, Japanese, LGBTQ, Filipino, Latino (a,e), and Chinese American Communities in relation to Environmental Justice Burden Areas (2020).

Figure 3-3. Existing Historic Resources [Category A] Associated or May Be associated with American Indian, Black, Japanese, LGBTQ, Filipino, Latino (a,e), and Chinese American Communities in relation to Environmental Justice Burden Areas [2020]



As shown in **Figure 3.3**, known historic resources associated with American Indian, Black, Japanese, LGBTQ, Filipino, Latino (a,e), and Chinese American communities are generally distributed through medium and highest environmental justice burden areas. The lowest environmental burden areas generally have a lower concentration of known historic resources that have (or may have) association with Black, American Indian, Japanese, LGBTQ, Filipino, Latino (a,e), and Chinese American Communities. The city has yet to formally evaluate most properties in San Francisco, including many properties in areas that have known associations with communities of color and marginalized groups as shown in **Figure 3-4**.¹² To date, there are approximately 115,400 properties in San Francisco that are age-eligible (generally 45 years or older) and have not been formally evaluated by the city (see **Table 3-1** above).

Figure 3-4. Cultural District and Cultural Enclaves in San Francisco



¹² In 2022, Supervisors Walton and Chan proposed the Pacific Islander Cultural District within the Visitacion Valley and Sunnydale neighborhoods. This cultural district was recently adopted by the Board of Supervisors on November 15, 2022 and approved by Mayor London Breed on November 17, 2022. This cultural district is not included in Figure 3-4.

The Housing Element Update would shift and increase overall housing growth over the next 30 years to the lowest environmental justice burden areas. These areas do not have substantial concentrations of known historic resources that have or may have American Indian, Black, Japanese, LGBTQ, Filipino, Latino (a,e), and Chinese American associations. Although potential historic resources could be present in those areas, the housing element update would have a lesser impact to these resources than without the update. The Housing Element Update would also result in slightly less housing growth in communities with the highest environmental justice burden, such as Bayview (where the African American and Arts Cultural District is located), than without the update.

The Housing Element Update includes many policies to elevate cultural expression and invest in cultural anchors for communities harmed by past discriminatory actions. Cultural anchors may mean businesses, non-profits, community and cultural centers and spaces, and residential enclaves. The identification of cultural anchors and other properties associated with communities of color and marginalized communities as historic resources may lead to additional investments, qualify them for tax breaks or other preservation incentives¹³ (for example, historic building code or Mills Act), and add regulatory protections or processes to prevent harm to them (e.g., demolition), among other items. Such historic resource identification could also serve similar goals regarding preserving housing to avoid displacement as elevated in Housing Element Update policies.

However, the same regulatory protections and processes associated with historic resource designations that can protect and preserve cultural anchors and housing, could also constrain new housing in some situations. This is because any regulation related to the modification of historic resources could add process or requirements that could constrain new housing. Therefore, future historic resource designations could also conflict with racial and social equity goals of the Housing Element Update if such designations preclude housing growth that serve to foster racial and social inclusive neighborhoods in the lowest environmental burden areas and redirect such demand elsewhere. It is unclear if such conflicts would occur and further study is recommended. Potential reductions in housing growth under the update should be identified when future historic resource designations or new historic resource processes are proposed.

13 For information on preservation incentives, please see [Preservation Incentives | SF Planning](#).

Transportation

Context

The ability to have access to reliable, safe transportation options is essential to access opportunities, power, and resources. Local, state and federal officials have approved actions that affect transportation access and safety. Generally, people have access to travel further in a shorter amount of time than previously. However, some actions have:

- led to a built environment that made most people reliant on the car, which some people were not able to use (e.g., due to their age or disability) or afford due to often high upfront and ongoing cost of car ownership;
- limited access to employment opportunities in some areas;
- dispossessed, displaced, and divided some communities through transportation infrastructure (e.g., railroads, highways); and
- provided less safe streets and less frequent or reliable public transit service in low-income communities and communities of color.

The [San Francisco Planning Commission Resolution No. 20738](#) recognizes these discriminatory policies. The city's 2020-2024 Consolidated Plan and 2020-2021 Action Plan¹⁴ also acknowledges the barriers residents face in accessing reliable, safe, and affordable transportation and the challenges this can present.

Findings

Developed in 2017 by the San Francisco Department of Public Health, San Francisco's High Injury Network identifies street segments that have a high number of fatalities and severe injuries and could indicate greater potential for future traffic-related injuries. The highest environmental justice burden areas have disproportionately more high-injury network segments: 52% of the segments are in the highest burden areas versus 26% of the segments are in the lowest burden areas.

There are also more vehicle volumes per mile on the High Injury Network in the highest burden communities than in the lowest burden areas. That would continue to be the case in 30 years, with or without the Housing Element Update.

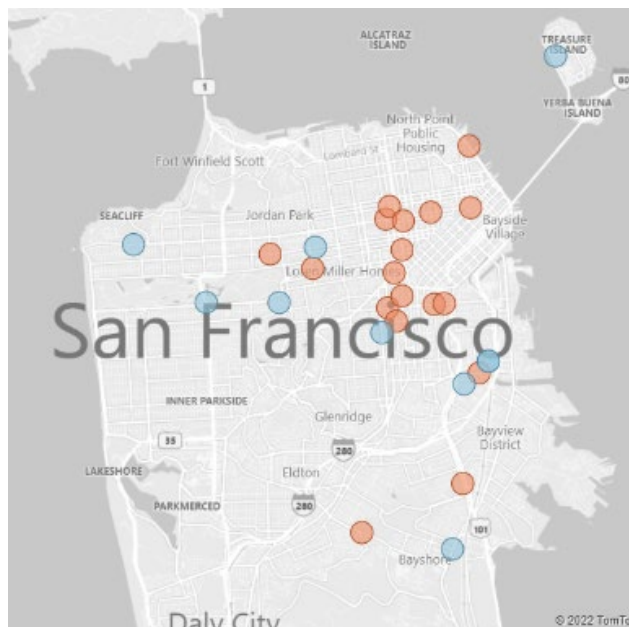
The High Injury Network identifies street segments in San Francisco that have a high number of fatalities and severe injuries. The High Injury Network is depicted on **Figure 3-5**, alongside a figure of traffic fatalities that occurred on the network in 2020 (see **Figure 3-6**).

14 City and County of San Francisco, *DRAFT 2020-2024 Consolidated Plan and 2020-2021 Action Plan*. <https://oewd.org/sites/default/files/Documents/Full%20Draft%202020-2024%20Consolidated%20Plan%20and%20Action%20Plan%20for%20Public%20Review.pdf>. Accessed December 2022.

Figure 3-5.
Existing High-Injury Network



Figure 3-6.
Traffic Fatalities on the High Injury Network (2020)



Source: Vision Zero High Injury Network (2017, 2020)

According to Vision Zero San Francisco, approximately 200 people or more are seriously injured on San Francisco's streets each year. Between 2006 and 2019, the number of traffic fatalities ranged from 20 to 41. In 2020, 30 fatalities occurred.¹⁵

Table 3-2 show how many miles are on the High Injury Network, the total number of High Injury Network miles across the different environmental justice burden areas, and the average daily vehicle volumes per mile on the High Injury Network¹⁶ by environmental justice burden area.

Table 3-2. Miles and Average Daily Vehicle Volumes Per Mile on the High Injury Network by Environmental Justice Burden Area (2020)

High Injury Network	Highest Burden Areas	Medium Burden Areas	Lowest Burden Areas	Total
Number of miles	110	39	54	203
Percentage of miles	52%	19%	26%	97% ¹
Average Daily vehicles per mile	159,100	164,500	166,400	

¹ Numbers do not add up to 100% because approximately 4% of the miles on the High Injury Network are within parks.

Source: Fehr & Peers, 2022; San Francisco Planning

¹⁵ Vision Zero San Francisco, <https://www.visionzerosf.org/about/how-are-we-doing/>. Accessed May 2020

¹⁶ Average daily vehicle volumes divided by the miles of High Injury Network segments.

Based on 2020 conditions, the number of daily vehicles traveling on High Injury Network segments is relatively similar across all environmental justice burden areas. However, 52% of all miles in the High Injury Network are within the highest environmental justice burden areas. Many of these miles are in the northeast and southeast areas of the city, including neighborhoods like the Fillmore, the Mission District, South of Market, the Tenderloin, and Downtown.

The location of street segments on the High Injury Network are assumed to remain the same for this analysis as the department cannot predict how they could change over the next 30 years. However, based upon where growth is projected, **Table 3-3** shows how vehicle volumes per mile would change with and without the Housing Element Update.

Table 3-3. Miles and Daily Vehicle Volumes Per Mile on the High Injury Network by Environmental Justice Burden Area (2050)

<i>High Injury Network</i>	<i>High Burden Areas</i>	<i>Medium Burden Areas</i>	<i>Low Burden Areas</i>
Number of miles	110	39	54
Percentage of miles ¹	52%	19%	26%
Existing average daily vehicles per mile	159,100	164,500	166,400
Average Daily vehicles per mile <i>without</i> the Housing Element Update	170,100	167,900	167,900
Average Daily vehicles per mile <i>with</i> the Housing Element Update	178,800	181,500	186,300

¹ Numbers do not add up to 100% because approximately 4% of the miles on the High Injury Network are within parks.

Source: Fehr & Peers, 2022; San Francisco Planning

Vehicle volumes per miles on the High Injury Network would increase for all environmental justice burden areas, with or without the Housing Element Update. The increase is more pronounced with the update than without the update for reasons described below. Vehicle volumes on the High Injury Network in the high environmental justice burden areas would increase by 12.4% with the update versus 6.9% without the update. However, the percent increase in vehicle volumes would be similar across all environmental justice burden areas with the update (*a 12.4% increase for the highest burden areas, 10.3% increase for medium burden areas, and 11.9% increase for the lowest burden areas*). In contrast, without the update, vehicle volumes across environmental justice burden areas would increase 6.9% in the highest burden areas, 2.1% in the medium burden areas, and 0.9% in the lowest burden areas.

A reason for a greater increase in vehicle volumes with the Housing Element Update is because it would result in 50,000 more housing units in 30 years than without the update. That means overall vehicle

volumes would be higher with the update than without the update, but those new vehicle volumes would be more equally distributed across environmental justice burden areas. Even though the update would result in a more equal distribution of new vehicle volumes, given half of all existing High Injury Network miles are in the highest burden areas, neighborhoods like the Fillmore, the Mission District, South of Market, the Tenderloin, and Downtown would still be inequitably burdened.

Access to jobs varies depending on an individual's mode of transportation and proximity to job clusters (e.g., downtown). People who drive or take transit and live within the highest environmental burden areas typically have greater access to jobs compared to those who live within the lowest environmental burden areas.

In 30 years, under the Housing Element Update, people in the highest environmental justice burden areas would be able to drive to about 117,000 more jobs in 30 minutes than people in the lowest environmental justice burden areas during the morning commute. If taking transit, people in the highest environmental justice burden areas would be able to get to around 144,000 more jobs in 30 minutes than people in lowest environmental justice burden areas. Individuals living in San Francisco's northeastern corner, which includes all burden levels, typically have greater access to jobs via transit, walking, or biking. For the rest of San Francisco, access to jobs via transit, walking, or biking would be generally similar with and without the update.

Existing job accessibility was analyzed by comparing how many jobs can be accessed within 30 minutes and 60 minutes by different travel methods (public transit, car, or walking and biking) during the AM peak period¹⁷ in relation to environmental justice burden areas, as shown in **Table 3-4**.

Table 3-4. Jobs Accessible Within 30 Minutes and 60 Minutes of Home by Environmental Justice Burden Areas [AM Peak, 2020]

		High Burden Areas	Medium Burden Areas	Low Burden Areas
By transit	30 minutes	301,600	267,100	173,300
	60 minutes	865,900	868,900	797,200
By car	30 minutes	1,097,700	1,084,200	933,600
	60 minutes	2,482,500	2,405,200	2,242,200
By walking or biking	30 minutes	208,500	185,300	75,100
	60 minutes	403,100	408,600	299,700

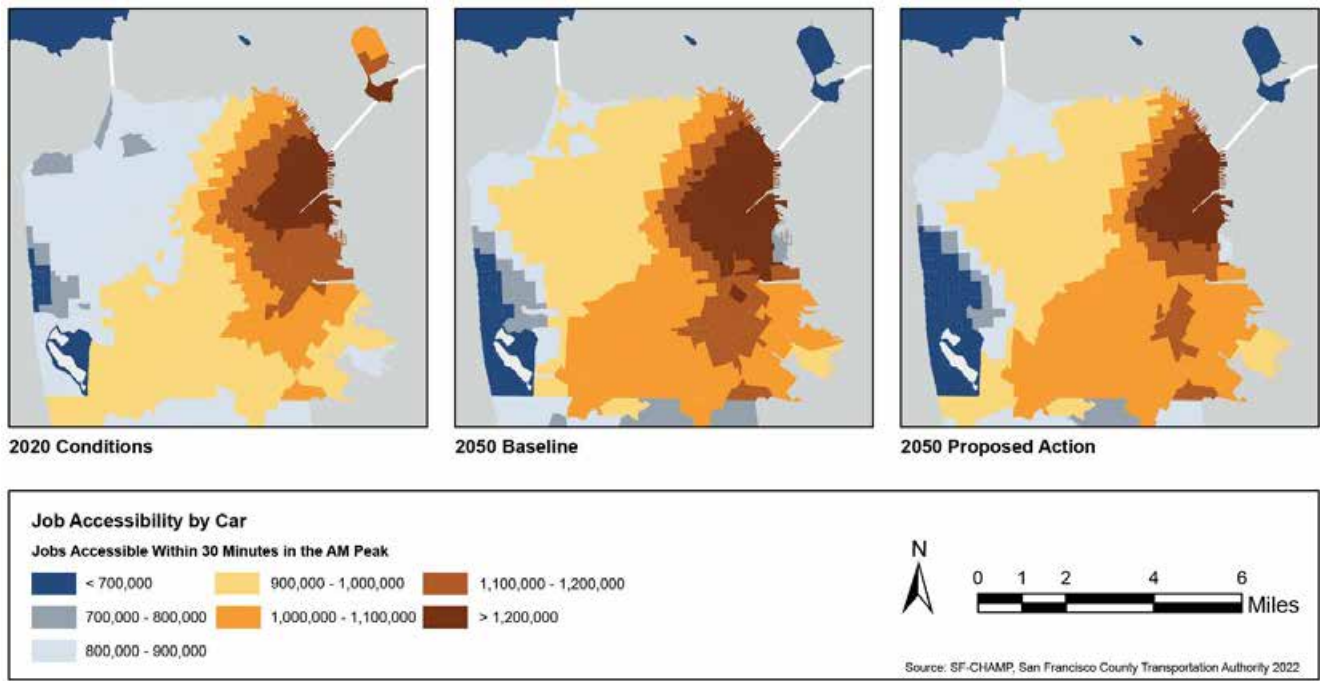
Source: Fehr & Peers, 2022

¹⁷ The AM peak period refers to the hours of the morning with the highest volume of travel. In San Francisco this is generally 7am to 9 am. Job accessibility data is also available for the midday peak period, but the department found no significant difference between AM peak and midday peak job accessibility.

During the AM peak period, highest environmental justice burden areas generally have access to more jobs than the lowest environmental justice burden areas. For example, if taking transit, people in the highest burden areas can travel to 128,300 more jobs within 30 minutes than people in the lowest burden areas (301,600 jobs compared to 173,300 jobs). This is because job centers in the Downtown, Financial District, and South of Market neighborhoods are in the highest burden areas.

Figures 3-7 through 3-9 show that high job accessibility is not true for all of the highest burden areas. Neighborhoods such as the Bayview, parts of the Outer Mission, and parts of Oceanview have less access to jobs than other high burden areas. The level of accessibility among neighborhoods in the highest burden areas also depends on the method of travel.

Figure 3-7. Jobs Accessible Within 30 Minutes by Car by Environmental Justice Burden Areas (AM Peak)



Note: 2050 Baseline refers to conditions in 30 years without the Housing Element Update

Figure 3-8. Jobs Accessible Within 30 Minutes by Transit by Environmental Justice Burden Areas (AM Peak)

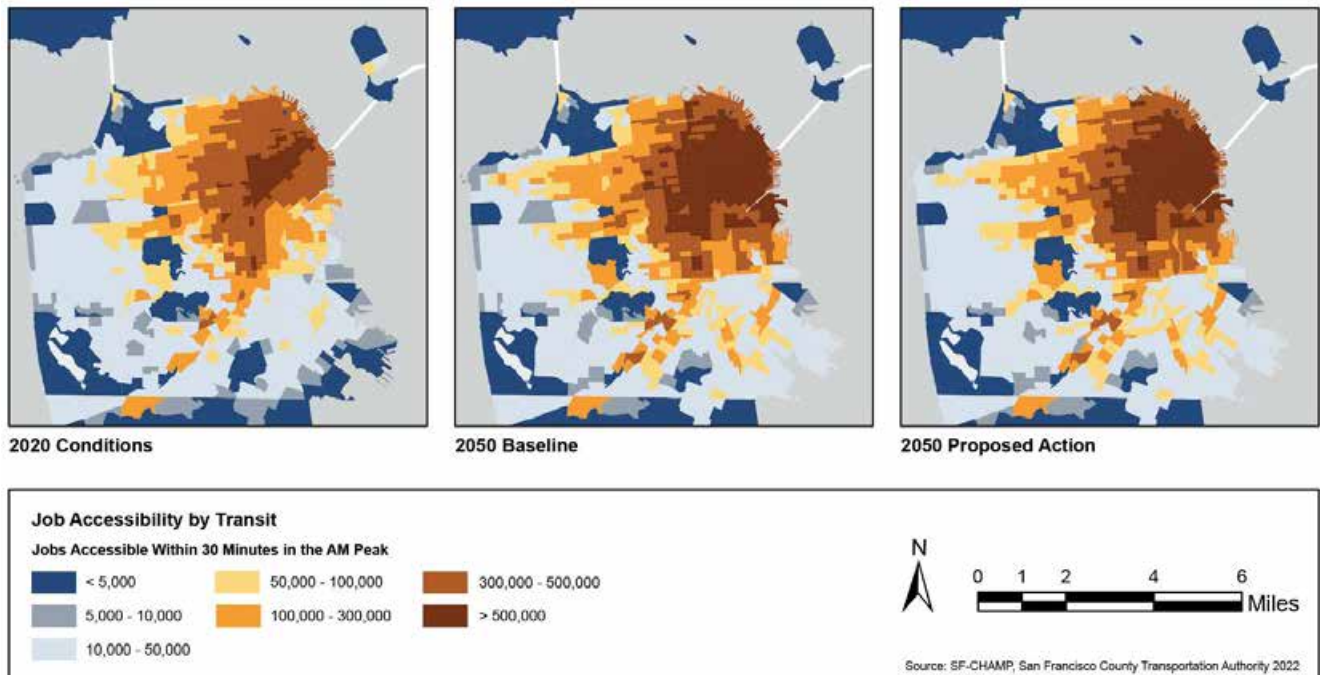
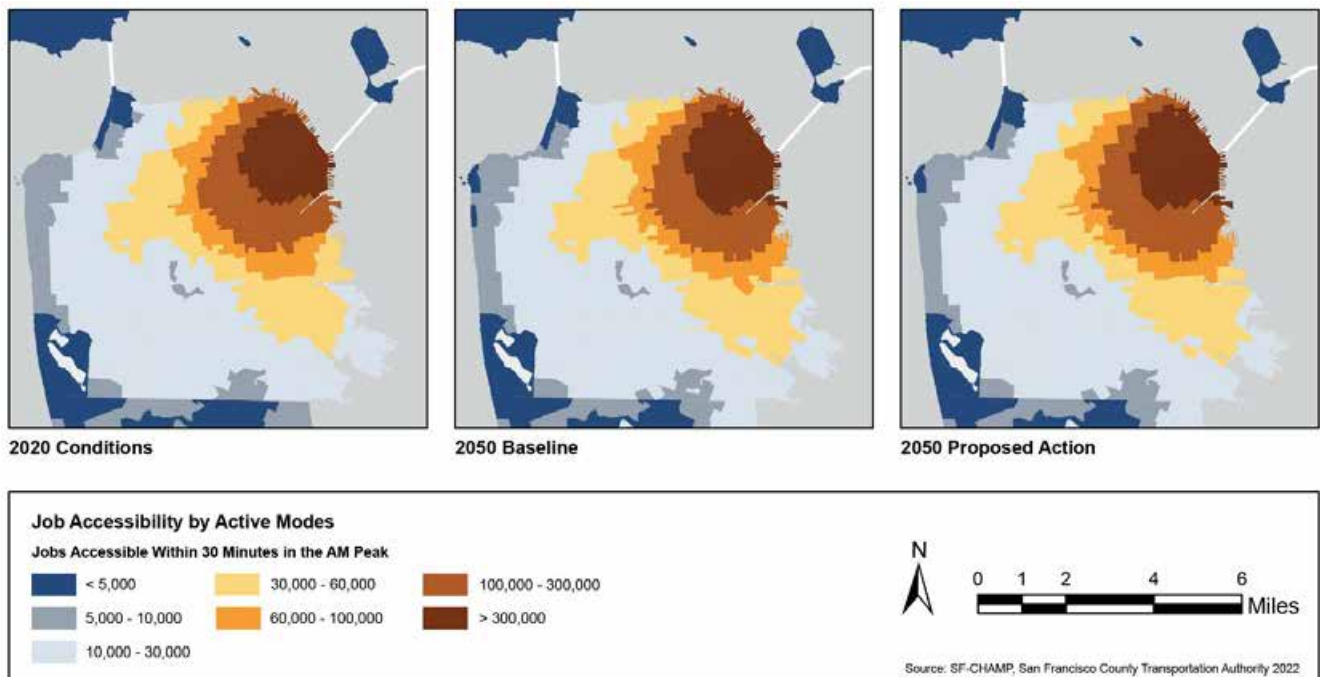


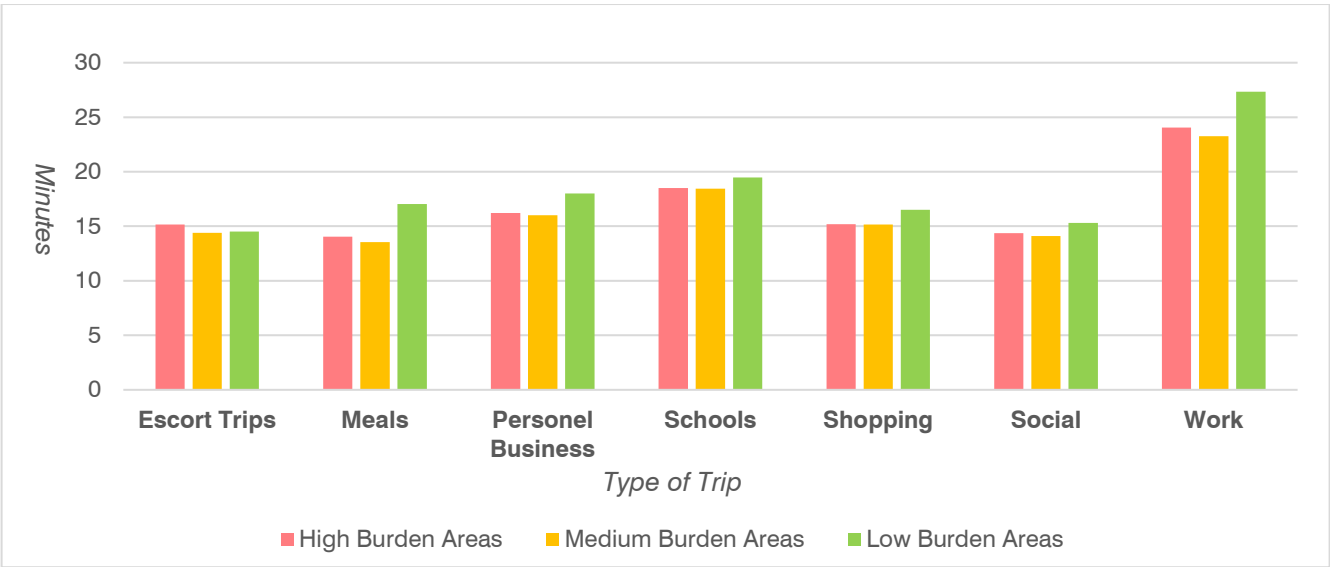
Figure 3-9. Jobs Accessible Within 30 Minutes by Walking and Biking by Environmental Justice Burden Areas (AM Peak)



As shown in **Figures 3-7 through 3-9**, in general, there is less access to jobs by car and transit with the Housing Element Update than without the update. The primary reason is that the Housing Element Update locates more people in the western neighborhoods, which are farther from the densest jobs centers. Accessibility to jobs would be very low in some neighborhoods with the highest environmental justice burden. For example, Treasure Island, Visitation Valley, and parts of Bayview. Access to jobs by walking and biking would remain generally the same with or without the update. Neither future scenario assumes projects studied as part of ConnectSF, such as the five-minute transit network and build out of subway lines along Geary Boulevard and 19th Avenue or other streets.

In addition to jobs, the analysis considers travel times to school, work, grocery shopping, and other key places. These travel times are show in **Figure 3-10**.

Figure 3-10. One-Way Average Travel Times by Environmental Justice Burden Area (2020)



Source: Fehr & Peers, 2022

In general, the highest burden environmental justice communities are located in areas with strong transportation networks and more walkable neighborhoods in terms of access to a variety of uses, as they are located downtown and almost entirely east of Divisadero. Except for escort trips,¹⁸ the highest burden and moderate burden areas have lower average travel times compared to lowest burden zones, which tend to be located in areas with more single-family homes, less robust transit services, and farther from the central business district. Again, the average travel times for all highest environmental justice burden communities may not reflect the travel times for individual neighborhoods within those areas, like Treasure Island, Visitation Valley, or Excelsior.

¹⁸ Escort trips, which includes picking up / dropping off other people. This includes trips such as walking a child to school, driving a relative to a doctor's appointment, or dropping a family member off at work.

Table 3-5 shows travel times to key places 30 years from now, with and without the Housing Element Update.

Table 3-5. One-Way Average Travel Times (minutes) by Environmental Justice Burden Area (2050)

Type of Trip	Scenario	High Burden Areas	Medium Burden Areas	Low Burden Areas
Escort Trips	2020	15:15	14:40	14:52
	Without Housing Element Update	15:50	14:58	15:29
	With Housing Element Update	15:43	15:03	15:13
Meals	2020	14:05	13:56	17:05
	Without Housing Element Update	15:05	13:37	17:59
	With Housing Element Update	15:01	14:18	18:05
Personal Business	2020	16:21	16:02	18:02
	Without Housing Element Update	17:16	15:36	18:56
	With Housing Element Update	17:09	16:04	18:54
Schools	2020	15:50	18:45	19:46
	Without Housing Element Update	19:17	17:49	20:17
	With Housing Element Update	19:21	18:19	20:11
Shopping	2020	15:20	15:16	16:52
	Without Housing Element Update	15:57	15:01	17:27
	With Housing Element Update	15:53	15:29	17:33
Social	2020	14:38	14:11	15:30
	Without Housing Element Update	15:55	14:18	16:19
	With Housing Element Update	15:51	14:28	16:13
Work	2020	24:04	23:25	27:33
	Without Housing Element Update	25:09	22:16	28:20
	With Housing Element Update	25:22	23:13	29:11

Source: Fehr & Peers, 2022

Overall, travel times to key places would increase for the highest and lowest burden areas, with or without the Housing Element Update. Implementation of the update would increase travel times across

all trip purposes except for escort trips. However, the change in these travel times is less than one minute for all trip purposes, and less than 30 seconds on average.

In addition, the highest burden environmental justice communities would have an overall decrease in travel times across most trip purposes under the Housing Element Update. This indicates that these areas have more robust transit access and more walkable and bikeable locations.

Air Quality

Context

Many factors contribute to poor air quality including emissions from sources such as power plants, vehicles, particularly diesel trucks, and stationary equipment from industrial uses. Epidemiologic studies have demonstrated that people who live near freeways and high-traffic roadways have poorer health outcomes, including increased occurrences of asthma symptoms and respiratory infections as well as decreased pulmonary function and lung development in children.¹⁹

Government and non-governmental actions such as redlining and racial covenants excluded American Indian, Black, and other communities of color from living in neighborhoods with better air quality. Instead, people of color often had no choice but to live in neighborhoods with poor air quality and where federal, state, and local officials have located and continue to locate high-emitting sources of pollution, such as highways and power plants. The government has taken actions to improve air quality, such as requirements for cleaner engines in vehicles and decommissioning power plants in San Francisco, but disparities in exposure to poor air quality and associated health impacts persist. The planning commission [resolution 20738](#) recognizes these discriminatory policies as it relates to air quality.

Findings

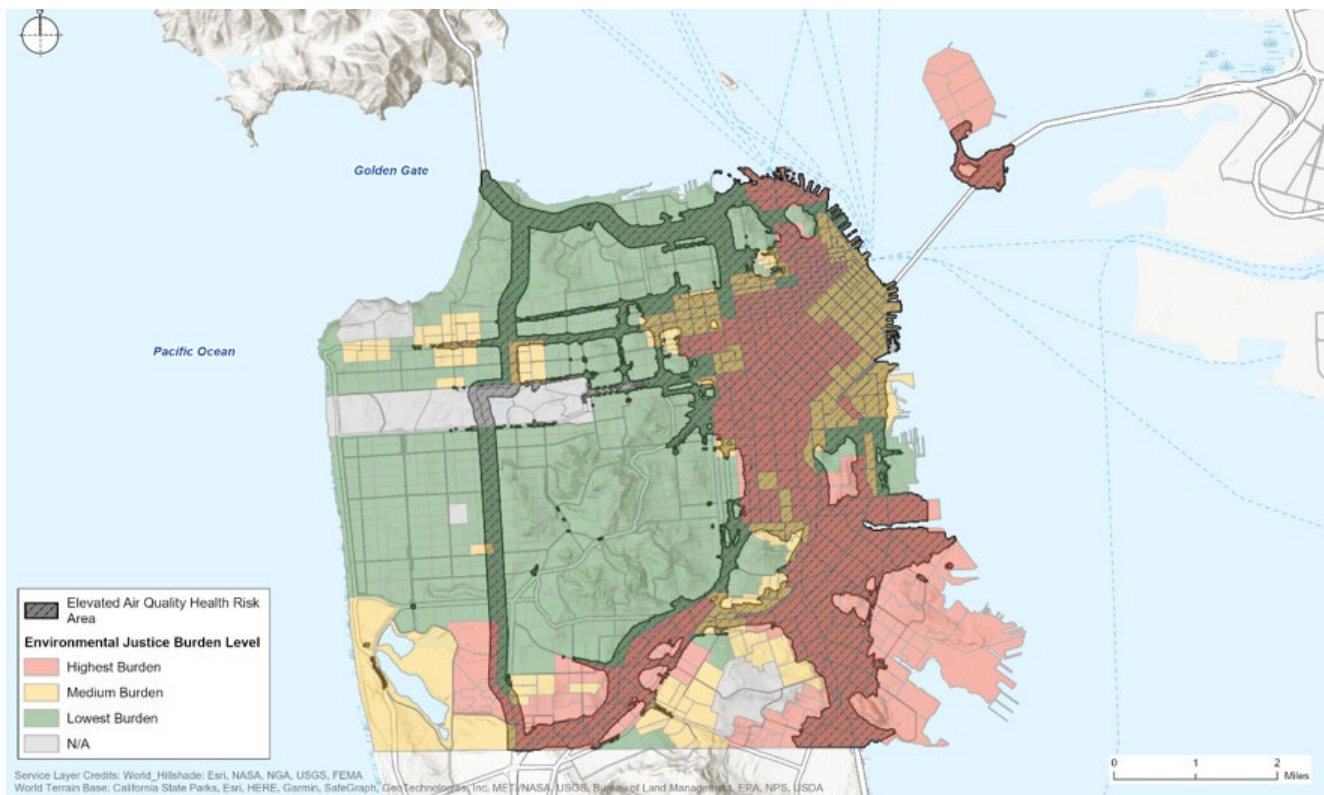
In San Francisco, housing units located in areas with the highest environmental justice burden are also often exposed to elevated health risk from poor air quality: about half of all existing housing units. These units are predominately located in the eastern portions of the city, but also elsewhere along major roadways and near other sources of air pollution. The remaining half of all residents live in housing units that are not exposed to elevated health risk.

The analysis identifies the number of existing housing units in areas with elevated health risk²⁰. If a location is in an area with elevated health risk, it generally means there is the likelihood of detrimental health effects. As shown in **Figure 3-11**, elevated health risk areas are predominately located on the east side of the city and along freeways, and heavily trafficked roads.

19 San Francisco Department of Public Health, *Assessment and Mitigation of Air Pollutant Health Effect from Intra-urban Roadways: Guidance for Land Use Planning and Environmental Review*, May 6, 2008, https://www.gsweventcenter.com/Draft_SEIR_References/2008_0501_SFDPH.pdf

20 Elevated health risk areas align with the criteria used to create the air pollutant exposure zone. Please see Appendix D for more information about the criteria used to identify areas of elevated health risk.

Figure 3-11. Elevated Health Risk Areas by Environmental Justice Burden Areas (2020)



Just under half of the city's housing units are in elevated health risk areas (49.5%), as shown in **Table 3-6**. The percentage of housing units that are exposed to elevated health risk is disproportionately higher in the highest burden areas than in the lowest burden areas (25.5% in the highest burden areas, 12.1% in medium burden areas, and 11.9% in the lowest burden areas).

Table 3-6. Total Units and Percent of Existing Housing Units by Elevated Health Risk Area and Environmental Justice Burden Area

2020	High Burden Areas		Medium Burden Areas		Low Burden Areas		TOTAL
	Within Elevated Air Quality Health Risk Area	Outside Elevated Air Quality Health Risk Area	Within Elevated Air Quality Health Risk Area	Outside Elevated Air Quality Health Risk Area	Within Elevated Air Quality Health Risk Area	Outside Elevated Air Quality Health Risk Area	
# of units	103,883	33,070	49,362	27,040	48,439	144,953	406,747
% of units	25.5%	8.1%	12.1%	6.6%	11.9%	35.6%	100%¹

¹Numbers may not add up to 100% due to rounding

Source: Ramboll, 2022

A likely reason for the disproportionate impact described above is that the average number of vehicles on roadways in the highest burden areas²¹ is substantially higher than the number of vehicles on roadways in the lowest burden areas, as shown in **Table 3-7**, and emissions from vehicles is a major factor in air quality. Industrial sources of pollution (e.g., diesel combustion sources) are another key contributor to air quality, and these sources are predominately located in the highest environmental justice burden areas on the east and southeast sides of the city.

Table 3-7. Miles and Daily Average Vehicle Per Mile on All Roadways

2020	Highest Burden Areas	Medium Burden Areas	Lowest Burden Areas
Average Daily Vehicles Per Mile	64,700	54,300	36,500

Source: Fehr & Peers, 2022

Over the next 30 years, the housing units located in the highest environmental justice burden areas would continue to also be exposed to elevated health risk from poor air quality: 18% of total units with the Housing Element Update and 21% of total units without the update. The housing units located in the lowest environmental justice burden areas would continue to have the lowest exposure to elevated health risk: 41% of total units with the update and 36% of total units without the update. Due to increasingly stringent vehicle emissions standards and technological improvements, more residents would live in housing units that are not exposed to elevated health risk than existing conditions: 70% of total housing units with the update, and 67% without the update.

The update would improve the air quality conditions for residents in approximately 50,000 new housing units compared to without the update by shifting and adding new units into the lowest environmental justice burden areas and generally into areas outside of elevated health risk. As shown in **Figures 3-12 and 3-13**, in 30 years, the areas of the city with elevated health risk would be generally the same as they are now. This would be the case with or without the update.

21 Table 3-7 shows average daily vehicle volumes divided by the total miles of all roadways in the city. This differs from the information in Tables 3-2 and 3-3, which show average daily vehicle volumes divided by miles of High Injury Network roadway segments.

Figure 3-12. Elevated Health Risk by Environmental Justice Burden Areas Without the Update

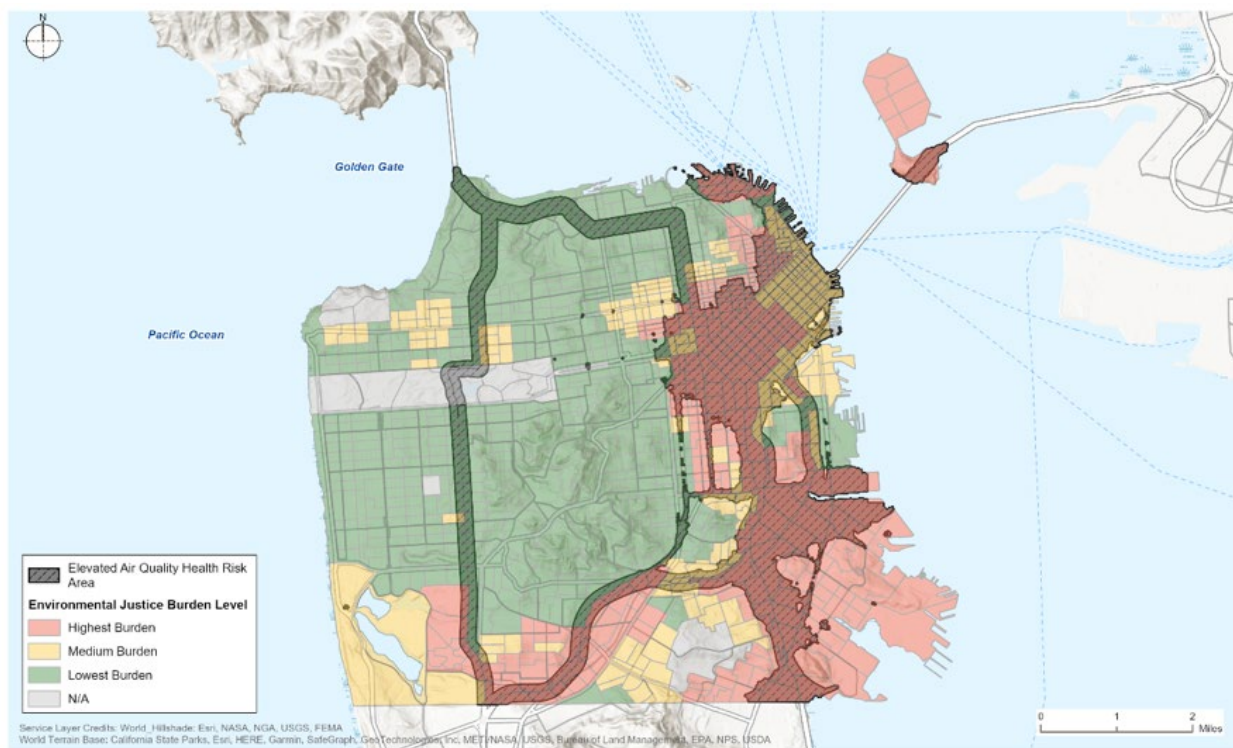
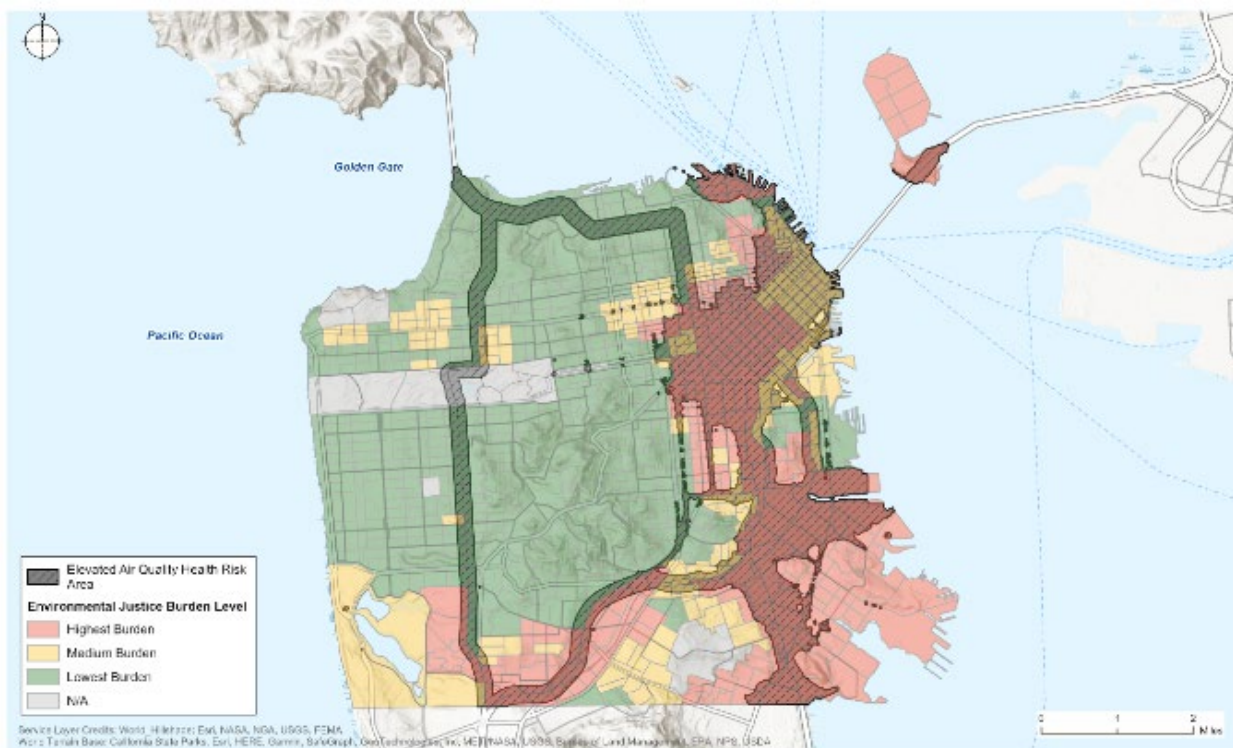


Figure 3-13. Elevated Health Risk by Environmental Justice Burden Areas With the Housing Element Update



The highest environmental justice burden areas would continue to be disproportionately exposed to poor air quality conditions with or without the Housing Element Update. As shown in **Table 3-8**, about 18% of the housing units located in the highest environmental justice burden areas would continue to also be exposed to elevated health risk from poor air quality with the update, which is slightly less than it would be without the update (21%). The housing units located in the lowest environmental justice burden areas would continue to have the lowest exposure to elevated health risk (230,084 units, or 41% of total units, with the update and 184,787 units, or 36% of total units, without the update).

Table 3-8. Total Units and Percent of Existing Housing Units by Elevated Health Risk Area and Environmental Justice Burden Area

		High Burden Areas		Medium Burden Areas		Low Burden Areas		TOTAL
		Within Elevated Air Quality Health Risk Area	Outside Elevated Air Quality Health Risk Area	Within Elevated Air Quality Health Risk Area	Outside Elevated Air Quality Health Risk Area	Within Elevated Air Quality Health Risk Area	Outside Elevated Air Quality Health Risk Area	
2020	#	103,883	33,070	49,362	27,040	48,439	144,953	406,747
	%	25.5%	8.1%	12.1%	6.6%	11.9%	35.6%	100% ¹
Without the Housing Element Update	#	104,330	102,794	40,013	53,333	23,172	184,787	508,429
	%	20.5%	20.2%	7.9%	10.5%	4.6%	36.3%	100% ¹
With the Housing Element Update	#	101,168	100,696	37,000	57,909	31,442	230,084	558,299
	%	18.1%	18.0%	6.6%	10.4%	5.6%	41.2%	100% ¹

Similar to existing conditions, a major reason the disproportionate impact on the highest burden environmental justice areas would be due to the number of vehicles on roadways in the highest burden areas would be greater than those in the lowest burden areas. **Table 3-9** shows that with the update there would be 30,100 more vehicles per mile in the highest burden environmental justice areas than the lowest burden areas and without the update there would be 32,500 more vehicles per mile in the highest burden environmental justice areas than the lowest burden areas.

Table 3-9. Miles and Daily Average Vehicles Per Mile on all Roadways

Year	High Burden Areas	Medium Burden Areas	Low Burden Areas
Daily Average Vehicles Per Mile (2020)	64,700	54,300	36,500
Daily Average Vehicles Per Mile <i>without</i> the Housing Element Update	71,900	59,100	39,400
Daily Average Vehicles Per Mile <i>with</i> the Housing Element Update	74,800	63,100	44,700

Source: Fehr & Peers, 2022

With the Housing Element Update, the overall percentage of housing units in elevated health risk areas would decrease and 50,000 new units would be added to the areas of the city with the lowest environmental justice burden and fewer elevated air quality exposure areas. Due to increasingly stringent vehicle emissions standards and technological improvements, more residents would live in housing units that are not exposed to elevated health risk than existing conditions (70% of total housing units, or 388,689 units, with the update, and 67%, or 340,914 units, without the update). However, the disparity in exposure to poor air quality and associated health impacts in the highest burden environmental justice areas would persist.

Noise

Context

Noise is commonly defined as sound that is loud, unpleasant, unexpected, or otherwise undesirable. Noise is an environmental stressor. Elevated noise levels²² can result in significant health impacts. The effects can include sleep disturbance, decreased performance on complex cognitive tasks, decreased mental health, hearing impairment, physiological effects such as hypertension and heart disease.²³

Vehicle traffic and continuous mechanical noise contribute to unhealthy ambient noise levels. Thus, areas with higher traffic levels and industrial or commercial uses tend to have higher ambient noise levels. Like with air quality, government and non-governmental policies like redlining, racial covenants historically limited residential options for American Indian, Asian American, Black, and Latino(a, e) and other communities of color. Additionally, government policies also located uses associated with higher noise levels near these communities of color. Thus, these communities often live in areas with high noise levels resulting in disproportionate health impacts for those communities.²⁴ The planning commission [resolution 20738](#) recognizes these discriminatory policies as it relates to environmental stressors.

Findings

Freeways like 280 and 101, heavily trafficked roads like Bayshore Boulevard, Geary, and Park Presidio, and heavy industrial land uses, like manufacturing, are major noise sources in San Francisco. Approximately 18% of all existing housing units are exposed to elevated noise levels. Given major noise sources are predominately found on the east side of the city, communities with the highest environmental justice burden are disproportionately exposed to elevated noise levels: 8% in the highest burden areas versus 5% in the lowest burden areas. Most residents live in housing units that are not exposed to elevated noise levels: 82% of all existing housing units.

Like elevated health risk areas, elevated noise exposure areas²⁵ are located along freeways, heavily trafficked roads, and industrial uses in San Francisco. Those locations are predominately on the east side of the city as shown by the concentration of elevated noise exposure areas in **Figure 3-14**.

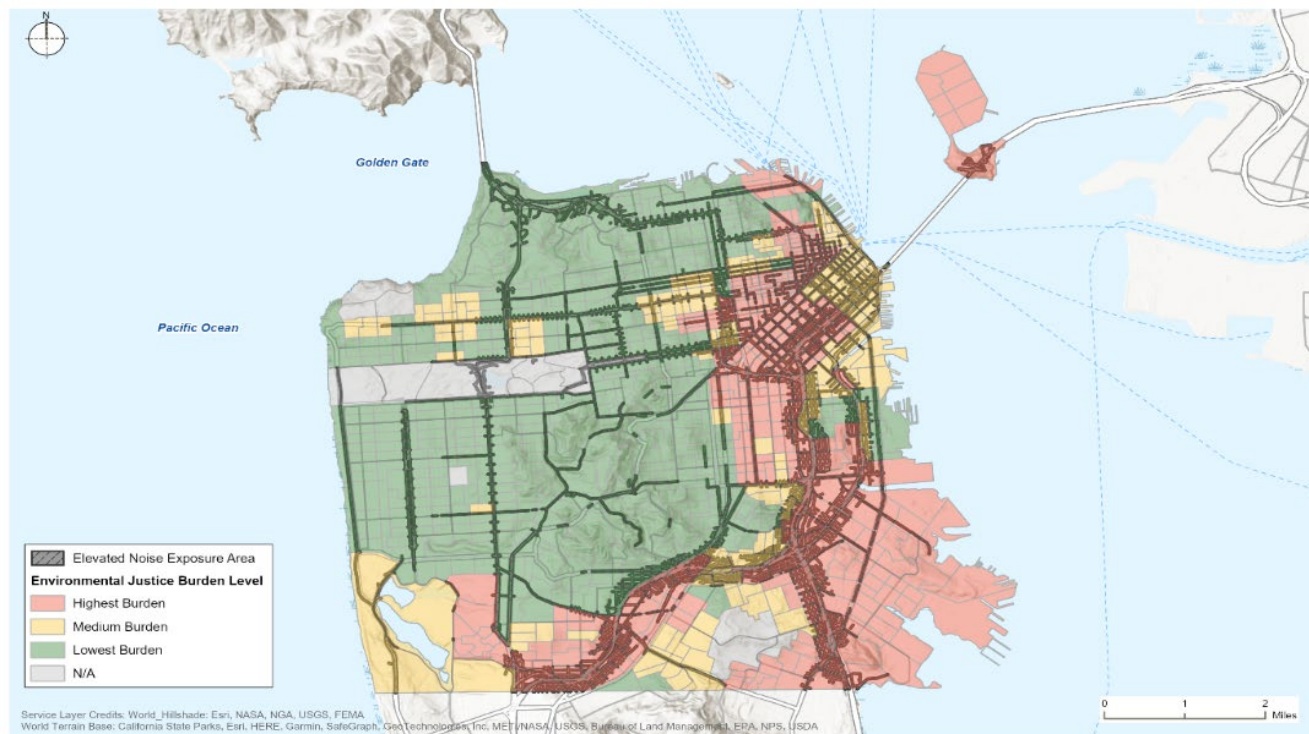
22 Road segments with modeled noise levels greater than or equal to 70 decibels were considered elevated. A 20-meter buffer was applied to road segments with elevated noise to identify elevated noise areas. See Appendix E for more information about how elevated noise was modeled.

23 World Health Organization, *Guidelines for Community Noise*, April 1999, Chapter 3, p. 46. Available: <https://docs.wind-watch.org/WHO-Communitynoise.pdf>

24 Joan A. Casey, Rachel Morello-Frosch, Daniel J. Mennitt, Kurt Fristrup, Elizabeth L. Ogburn, and Peter James. *Race/Ethnicity, Socioeconomic Status, Residential Segregation, and Spatial Variation in Noise Exposure in the Contiguous United States*. Environmental Health Perspectives. 2017. 125:7 CID: 077017

25 Elevated noise is defined as 70 decibels or higher as a 24-hour exposure level of 70 decibels is identified as the level of environmental noise which will prevent any measurable hearing loss over a lifetime.

Figure 3-14. Elevated Noise Exposure by Environmental Justice Burden Areas (2020)



As shown below in **Table 3-10**, most San Franciscans live outside of an elevated noise exposure area (82% of housing units). Roughly 18% of existing housing units (73,700 units) are in an area with elevated noise levels. While the percentage of units in an elevated noise exposure area is relatively low, there is a disproportionate number in the areas of highest environmental justice burden (8% versus 4.7% in medium burden areas and 5.4% in the lowest burden areas).

Table 3-10. Total Units and Percent of Existing Housing Units by Elevated Noise Exposure Area and Environmental Justice Burden Area

2020	High Burden Areas		Medium Burden Areas		Low Burden Areas		TOTAL
	Within Elevated Noise Exposure Area	Outside Elevated Noise Exposure Area	Within Elevated Noise Exposure Area	Outside Elevated Noise Exposure Area	Within Elevated Noise Exposure Area	Outside Elevated Noise Exposure Area	
#	32,421	104,533	19,308	57,093	22,005	171,387	406,747
%	8.0%	25.7%	4.7%	14.0%	5.4%	42.1%	100%

Source: Ramboll, 2022

Over the next 30 years, the housing units located in the highest environmental justice burden areas would continue to be exposed to elevated noise levels: 8% of total units with the Housing Element Update and 9% of total units without the update. The housing units located in the lowest environmental justice burden areas would continue to have the lowest exposure to elevated noise levels: 41% of total units with the update and 36% of total units without the update. Overall, most residents would continue to live in housing units that are not exposed to elevated noise levels: approximately 81% of total housing units with and without the update. The update would improve environmental noise conditions for residents in approximately 50,000 new housing units than without the update by shifting and adding new units into the lowest environmental justice burden areas and generally into areas without elevated noise levels.

As shown below in **Figures 3-15 and 3-16**, in 30 years the areas of the city with elevated noise would be generally the same as they are under existing conditions. With and without the Housing Element Update, the areas with elevated noise would continue to be located primarily on the east side of the city and heavily trafficked streets. However, the update would improve environmental noise conditions for residents in approximately 50,000 new housing units than without the update by shifting and adding new units into the lowest environmental justice burden areas and generally into areas without elevated noise levels. Further, it is assumed that residents in new housing units (regardless of where they are built) would comply with building codes that require noise attenuation to achieve acceptable indoor noise environments.

Figure 3-15. Elevated Noise Exposure by Environmental Justice Burden Areas Without the Update

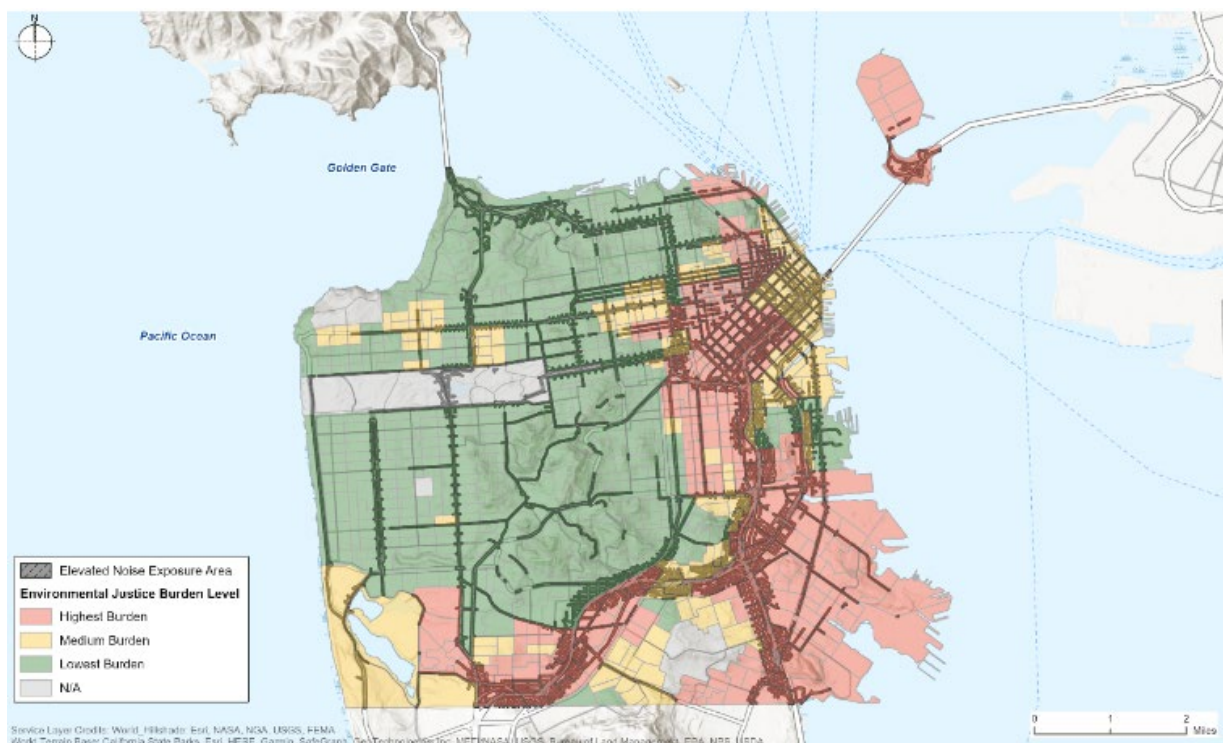


Figure 3-16. Elevated Noise Exposure by Environmental Justice Burden Areas With the Update

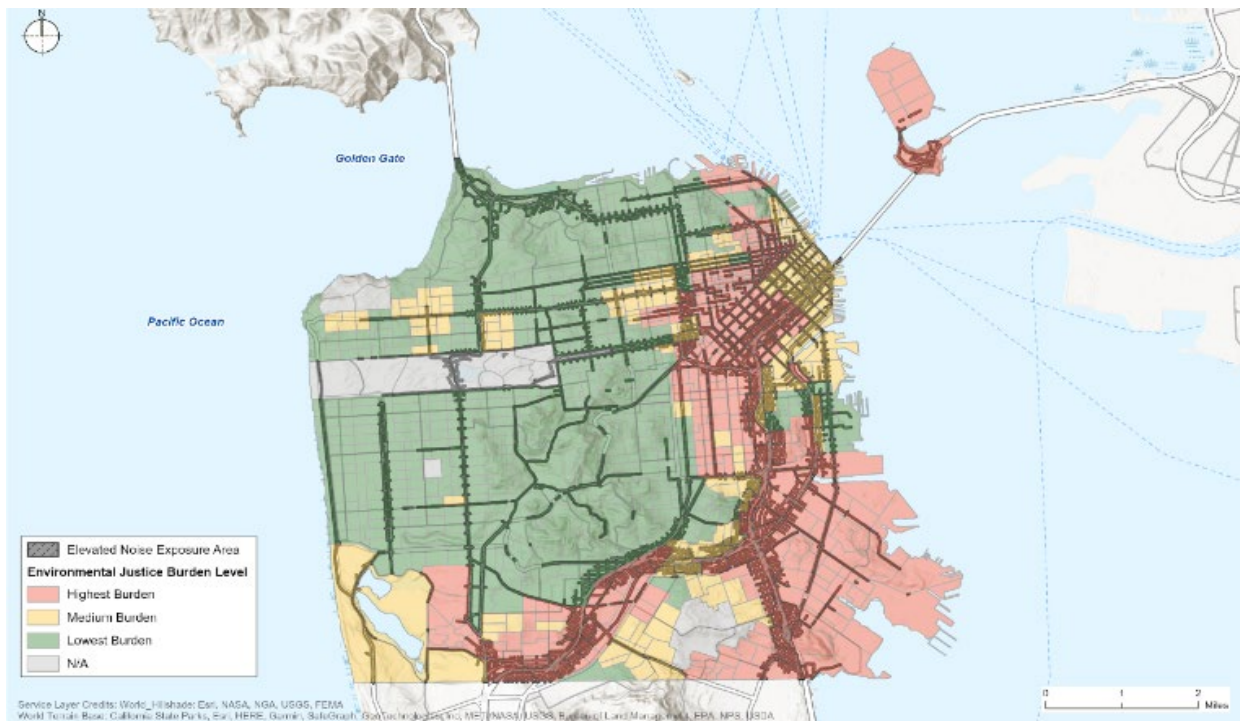


Table 3-11 shows how many units and the percentage of units that would live within and outside of elevated noise exposure areas, broken out by environmental justice burden area.

Table 3-11. Total and Percent of Existing and Future Housing Units by Elevated Noise Exposure Area and Environmental Justice Burden Area

Scenario		High Burden Areas		Medium Burden Areas		Low Burden Areas		Total
		Within Elevated Noise Exposure Area	Outside Elevated Noise Exposure Area	Within Elevated Noise Exposure Area	Outside Elevated Noise Exposure Area	Within Elevated Noise Exposure Area	Outside Elevated Noise Exposure Area	
2020	#	32,421	104,533	19,308	57,093	22,005	171,387	406,747
	%	8.0%	25.7%	4.7%	14.0%	5.4%	42.1%	100%
Without the Housing Element Update	#	46,846	160,278	26,321	67,025	24,701	183,258	508,429
	%	9.2%	31.5%	5.2%	13.2%	4.9%	36.0%	100%
With the Housing Element Update	#	46,046	155,818	25,753	69,157	32,922	228,603	558,299
	%	8.2%	27.9%	4.6%	12.4%	5.9%	40.9%	100%

Percentages may not add up 100 percent due to rounding.

Source: Ramboll, 2022

Over the next 30 years, with or without the Housing Element Update, 80% or more of the city's housing units would be located outside an elevated noise area. However, the total number of housing units located in an elevated noise exposure area would increase from 73,700 units (18.1%) in 2020 to 104,721 units (18.8%) with the update and 97,868 units (19.2%) without the update.

The percentage of housing units within an elevated noise exposure area and in the highest environmental justice burden area would increase with the Housing Element Update (*from 8% to 8.2%*) and without it (*from 8% to 9.2%*). The number of units in the lowest environmental justice burden areas and elevated noise exposure areas would increase as well. Disproportionately more units in the highest burden environmental justice areas would be exposed to elevated noise than those in the lowest environmental justice areas with the Update (*46,046 units in the highest burden areas versus 32,922 units in the lowest burden areas*). However, this disparity would be greater without the update (*46,846 units in the highest burden areas versus 24,701 units in the lowest burden areas*). This implies the update would not erase existing inequities in noise exposure but would not exacerbate them either, as the update would direct housing growth to areas of the city with a lower environmental justice burden.

Hazardous Materials

Context

Decisions about land use – where to build housing, where to locate jobs and what types of jobs, which sites are designated as industrial uses, and what types of businesses can operate in these sites – have substantial and lasting effects on the health of a community for generations. It is not the only factor that determines this, but an important one. Government and non-governmental actions, such as redlining, gave communities of color no choice in where they could live and resulted in communities of color frequently establishing near sources of pollution, such as industrial land uses, freeways, and other hazardous sites. These inequities persist as decisions about where to continue locating or expanding sources of pollution have disproportionately impacted communities of color.²⁶ Compared to White households, Black and Latino (a,e) households are more likely to live in areas with environmental hazards, even when controlling for income.²⁷ Additionally, some communities distrust the government sector and the private sector regarding hazardous materials due to these sectors' decisions to locate hazardous sites in their communities and actions and allegations regarding the clean-up of some hazardous sites. An example is some communities distrust regarding the cleanup of the Hunters Point Naval Shipyard, which is located in the historically black Bayview-Hunters Point neighborhood.

Findings

Hazardous material sites, such as gas stations, dry cleaning stores, and automobile repair shops are located across San Francisco. Approximately 34% of hazardous materials sites are located in areas with the highest environmental justice burden and 47% are located in areas with the lowest environmental justice burden. However, most of San Francisco's freeways, current and former heavy industrial and military land uses, and areas underlain by bay fill are predominately located in San Francisco's eastside. The eastside generally has a larger concentration of communities with the highest environmental burden meaning these communities can be disproportionately exposed to hazardous substances in soil, soil vapor, and groundwater at or near these former and existing uses.

Figure 3-17 shows the location of hazardous material sites in San Francisco in relation to the three environmental justice burden categories (highest, medium, and lowest burden).

26 Scientific American. *Past Racist "Redlining" Practices Increased Climate Burden on Minority Neighborhoods*. January 21, 2020. Available: https://www.scientificamerican.com/article/past-racist-redlining-practices-increased-climate-burden-on-minority-neighborhoods/?gclid=Cj0KCQiA4aacBhCUARIsAI55maG5NnFVbiXFCePpJdCW_nSpkv0WuaDcRrI84Um6AXHbAvWXR7glvJMaAkU0EALw_wcB. Accessed December 2022.

27 Crowder, K., & Downey, L. (2010). Inter-neighborhood migration, race, and environmental hazards: modeling micro-level processes of environmental inequality. *AJS; American journal of sociology*, 115(4), 1110.

Figure 3-17. Known Hazardous Materials Sites (aka Maher/Cortese sites) in San Francisco by Environmental Justice Burden Areas

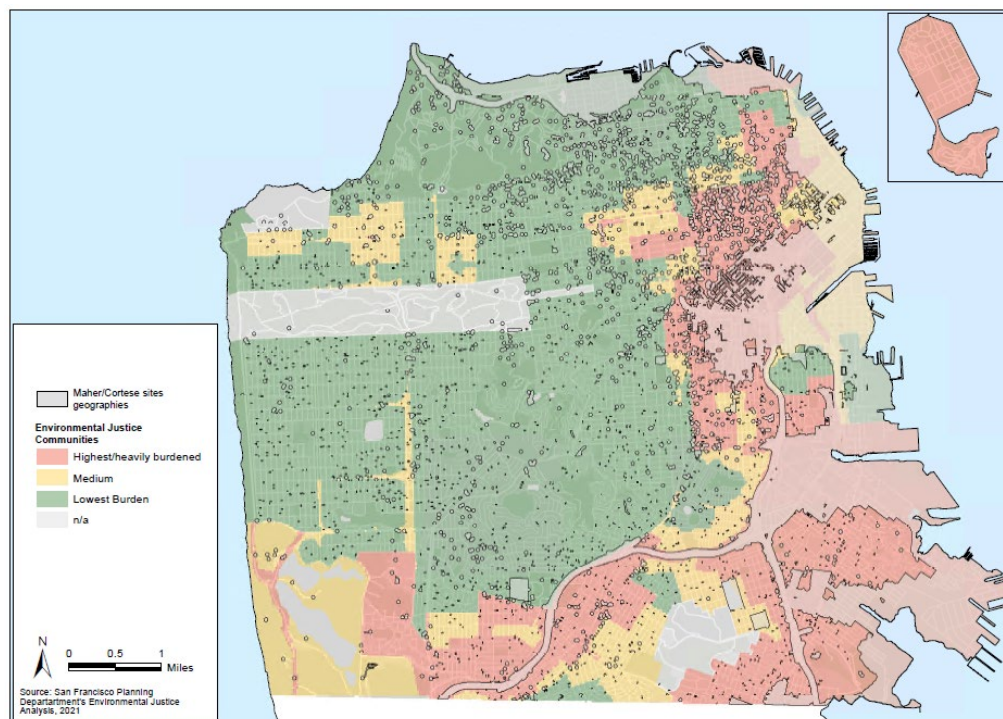


Table 3-12 identifies the number of hazardous material sites in relation to the environmental burden categories. As shown in Table 3-12, around 44% of hazardous material sites are in the highest environmental justice burden areas.

Table 3-12. Existing Hazardous Materials Site in Relation to Environmental Justice Communities (2020)

	Highest Burden Areas	Medium Burden Areas	Lowest Burden Areas	Total
2020 Existing Conditions				
Number of hazardous materials sites	1,172	393	1,077	2,653
Percentage of hazardous material sites in San Francisco	44.2%	14.8%	40.6%	100%

Percentages may not add up 100 percent due to rounding.

This data does not show the relative contamination among these sites. The largest contaminated sites are located on the east side of the city, including Treasure Island. For example, the Southeast Water Pollution Control Plant, and various industrial and manufacturing facilities are on the east side of the city, and so were former power plants and military bases. This data also does not show the challenges

communities of color and low-income communities have faced in getting their neighborhoods cleaned up and limiting new polluting sources. The Hunters Point Naval Shipyard cleanup is an example of these difficulties. For example, employees at a contractor to the United States Navy were alleged to have misrepresented and falsified data regarding the presence of radiological materials on the site, eroding trust from some communities in that process.²⁸

Over the next 30 years, the Housing Element Update would not change the disproportionate exposure to hazardous substances that communities with the highest environmental burden may continue to experience. The update would encourage new housing units in areas that do not typically have the heaviest industrial or contaminating uses (e.g., production, distribution, and repair or industrial zoning districts), compared to without the update. However, similar to without the update, new housing units could be developed on hazardous sites after the sites are cleaned up.

As noted above, most of San Francisco's freeways and current and former heavy industrial and military land uses are predominately located in San Francisco's eastside and in areas with the highest environmental burden. The data used for this analysis has limitations including that it does not distinguish between intensity of hazardous material sites found across San Francisco and does not provide background information for why a site is located on the Maher map.

The Housing Element Update would result in 50,000 more units in 2050 with the update compared to without it. As shown in **Table 3-13** below, approximately 70,100 units of the 102,000 units projected to occur without the update would occur in areas of San Francisco that experience the highest environmental burden. In contrast, approximately 64,900 units of the 150,000 units projected to occur in 2050 with the update would occur in areas that experience the highest environmental burden.

28 United States Attorney's Office, Press Release: *United States Joins Lawsuits Against Tetra Tech EC Inc. Alleging False Claims In Connection With Shipyard Cleanup*, October 26, 2018.

Table 3-13. Net New Housing Units and Percentage of the San Francisco Population located on a Hazardous Materials Site in Relation to Environmental Justice Communities

	High Burden Areas	Medium Burden Areas	Low Burden Areas	Total
2020 Existing conditions				
Number of hazardous materials sites	1,172	393	1,077	2,653
Percentage of hazardous material sites in San Francisco	44.2%	14.8%	40.6%	100%
2050 Baseline Conditions				
Net new units under 2050 Baseline Conditions	70,149	16,968	14,555	102,000
% of SF Population under 2050 Baseline Conditions	40.7%	18.4%	40.7%	100
2050 with Housing Element Update				
Net new units under 2050 Proposed Action	64,893	18,359	68,298	150,000
% of SF Population under 2050 Proposed Action	36.1%	17.0%	46.7%	100%

Note: Totals percentages and units may not add up 100 percent due to rounding.

While the location of hazardous material sites and potential for hazardous materials would not change with or without the update, the update shifts and adds more units to western and northern areas of San Francisco that typically have not had the heaviest industrial and military land uses. To the extent new housing projects are located on hazardous materials sites, projects would be subject to federal, state, and local regulations for cleanup. As acknowledged above though, some communities distrust the ability of the government and private sectors to implement these regulations and clean up hazardous materials sites safely.

Recreation and Open Space

Context

Open space and recreational resources²⁹ are essential to healthy, livable places. Access to these resources provides numerous benefits, such as improved physiological and mental wellbeing, and opportunities to connect with nature and community. Conversely, high rates of childhood obesity and illness often correspond to fewer acres of usable open space.³⁰ Non-white neighborhoods and areas of lower socioeconomic status are less likely to have access to open space and recreational resources.³¹ Policies have led to this inequity, including the lack of investment in open spaces and recreational resources in some communities. Design choices have also discouraged access by all people to some public open spaces, such as the removal of seating, fenced perimeters, and heightened security presences. The planning commission resolution [no. 20738](#) recognizes these discriminatory policies.

Findings

In 2017, San Francisco became the first city in the United States where all residents have access to a park within a 10-minute walk.³² However, the quality and type of these recreational resources is not equal across the city.

Figure 3-18 shows existing recreation and open space in San Francisco. The San Francisco Controller's Office and the San Francisco Recreation and Parks Department established objective and measurable park maintenance standards; the Controller's Office examines how well the city's parks meet those standards. According to the San Francisco Park

Figure 3-18. Existing Recreation and Open Space in San Francisco



Source: Recreation and Open Space Element, page 9

29 This recreation and open space analysis does not address San Francisco Public Works, Port, Privately-Owned, Publicly Accessible Open spaces, or shared schoolyards spaces open to the public.

30 San Francisco Planning Department, *Recreation and Open Space Element of the General Plan*, January 2019. Available: https://generalplan.sfplanning.org/Recreation_OpenSpace_Element_ADOPTED.pdf

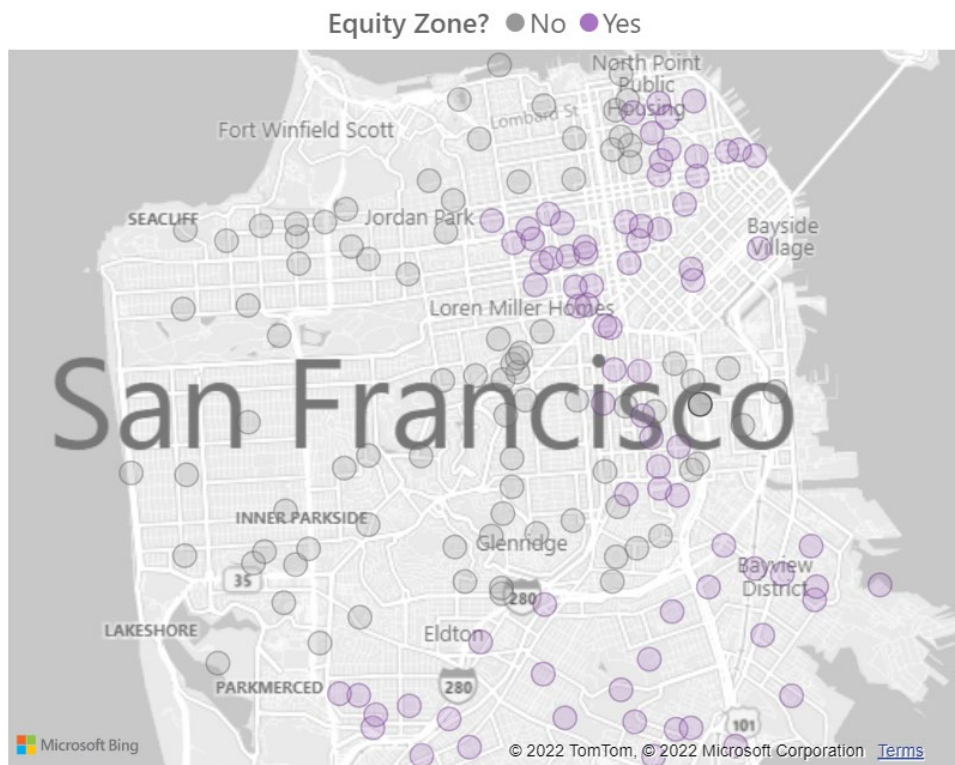
31 Jennings, V., et al. (2017). Emerging issues in urban ecology: Implications for research, social justice, human health, and well-being. Available: [Emerging issues in urban ecology: implications for research, social justice, human health, and well-being | US Forest Service Research and Development \(usda.gov\)](#)

32 Office of the Mayor. *News Releases: San Francisco Becomes First City in Nation Where All Residents Live Within a 10-Minute Walk to a Park*. May 16, 2017. Available: <https://sfmayor.org/article/san-francisco-becomes-first-city-nation-where-all-residents-live-within-10-minute-walk-park#:~:text=Mayor%20Edwin%20M.%20Lee%20and,within%20a%2010%2Dminute%20walk>

Maintenance Scores³³ reporting, the 2019 evaluation found that all high-scoring parks are located in the northern half of the city which follows the trend from the previous three years of reporting. In contrast, half of the lowest scoring parks are in the southern half of the city.

In 2016, the Recreation and Parks Department designated equity zones in the city³⁴ and identified parks that serve these areas (see **Figure 3-19**). As a group, the equity zones parks have an average score of 91%, which is one percentage point lower than the non-equity zones parks (92%).³⁵ See **Figure 3-20** and **Table 3-14** for park maintenance score information by supervisor district.

Figure 3-19. San Francisco Recreation and Parks Serving Equity Zones (Fiscal Year 2019)



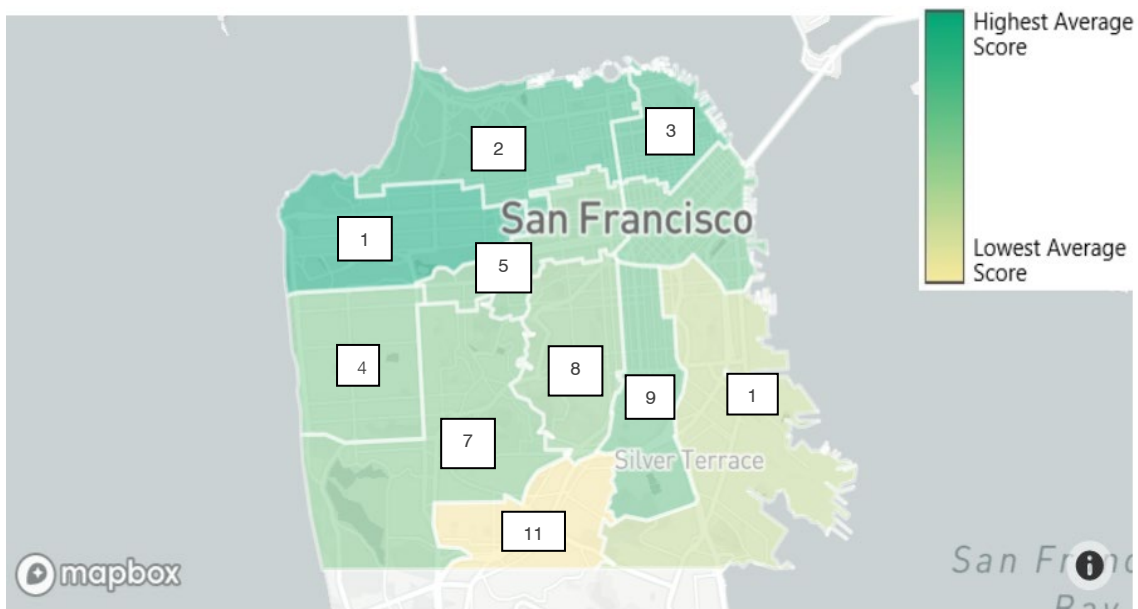
Source: <https://sfgov.maps.arcgis.com/apps/MapSeries/index.html?appid=04937b03318a44ae81d90c240de4e3d1>

33 San Francisco Office of the Controller. San Francisco Park Maintenance Scores. Available: <https://sfgov.maps.arcgis.com/apps/MapSeries/index.html?appid=04937b03318a44ae81d90c240de4e3d1>

34 Recreation and Parks used Cal-EPA population characteristic data to identify the census tracts with the highest incidence of age (mostly youth and seniors), asthma, low birth weight, low education, linguistic isolation, poverty, and unemployment.

35 Recreation and Park Commission. *Equity Metrics Building a New Lens*. October 2016. Available: <https://sfrecpark.org/DocumentCenter/View/6450/Item-9-Equity-Metrics-Presentation?bidId=>

Figure 3-20. Average Park Maintenance Score by Supervisor District (2019)



Note: This figure does not reflect the San Francisco’s 2022 supervisorial redistricting.

Source: San Francisco Park Maintenance Scores (arcgis.com)

Table 3-14. Park Maintenance Scores by Supervisor District (2019)

<i>Supervisor District</i>	<i>Average Score</i>	<i>Lowest Score in District</i>	<i>Highest Score in District</i>	<i>Number of Parks</i>
1	95	87	99	12
2	94	88	99	16
3	94	80	99	17
4	91	86	97	9
5	92	77	98	16
6	92	82	99	8
7	91	86	95	11
8	91	81	98	21
9	92	84	97	21
10	89	79	98	22
11	88	83	93	11

Many of the parks serving equity zones are located in San Francisco's eastside and are in areas with the highest environmental burden. San Francisco's eastside has a lack of large open spaces³⁶ and the eastside generally has a larger concentration of communities with the highest environmental justice burden. Furthermore, eastern neighborhoods typically have the tallest buildings and highest density neighborhoods in the city; taller buildings can cast more shadow on recreation and open spaces and higher density can mean a larger demand for recreation and open space. Conversely, the western and northern areas are typically in the lowest environmental justice burden areas, are less dense, have more and larger recreational and open spaces, including private rear-yard open spaces, and have shorter buildings.

San Francisco has made progress to improve the quality of recreational facilities by developing equity metrics to measure the distribution of the department's services and resources in equity zones. An audit of this progress found that Recreation and Parks complied with requirements related to its strategic planning and equity metrics and analysis.³⁷ The audit also made recommendations for the improvement of strategic planning and equity metrics and analysis. The audit found that Recreation and Park's equity metrics may miss deficiencies within the equity zones. This is because the metrics group all equity zones together; however, different areas of the city may have different levels and types of park equity needs.

These recommendations included measuring and analyzing park equity data at a neighborhood level to identify deficiencies in its resources distribution to communities in the equity zone.

Recreation and open spaces offer a wide range of benefits, but especially for children. Four out of 41 neighborhoods in San Francisco have a 20% or greater share of their population that are under 18 years of age as shown in **Figure 3-21**. The Bayview Hunters Point and Sunset/Parkside neighborhoods have the greatest number of children (0 to 18 years old) in San Francisco.³⁸ Bayview Hunters Point neighborhood is in the highest environmental justice burden area and is also in the Recreation and Parks department equity zone; the neighborhood has 5% of the city's overall

Figure 3-21. San Francisco neighborhoods by the under 18 share of their population

Neighborhood	Share of population under 18	Population under 18
Seacliff	21.2%	517
Bayview Hunters Point	21.1%	9,079
Presidio	20.6%	761
Visitacion Valley	19.5%	3,607
Glen Park	18.2%	1,512
West of Twin Peaks	17.8%	6,706
Bernal Heights	16.9%	3,984
Presidio Heights	16.7%	1,759
Outer Mission	16.6%	3,714
Excelsior	16.1%	6,044
Portola	15.7%	2,486
Noe Valley	15.4%	3,523
Oceanview/Merced/Ingleside	15.2%	3,922
Sunset/Parkside	15.0%	11,404
Outer Richmond	14.2%	6,367

Source: San Francisco Chronicle

36 City and County of San Francisco, Recreation and Open Space Element of the General Plan, April 2014. Available: https://generalplan.sfplanning.org/Recreation_OpenSpace_Element_ADOPTED.pdf

37 City and County of San Francisco, Office of the Controller and City Services Auditor, Recreation and Parks Equity Performance Audit Draft Report, October 2021. Source: https://sfcontroller.org/sites/default/files/Documents/Auditing/Rec%20and%20Park%20Equity%20Performance%20Audit%20Draft%20Report_10.05.21_FINAL.pdf

38 San Francisco Chronicle. *San Francisco is the most childless major city in the U.S. These maps show which neighborhood have the fewest kids*. May 24, 2022. Source: [San Francisco is the most childless major city in the U.S. These maps show which neighborhoods have the fewest kids \(sfchronicle.com\)](https://www.sfchronicle.com/bayarea/article/san-francisco-is-the-most-childless-major-city-in-the-u-s-17444441.php)

population, and 8% of the city's children live in this neighborhood (9,100). The Sunset/Parkside neighborhood is in the lowest environmental justice burden areas and outside the Recreation and Parks department equity zone; the neighborhood has 9% of the city's overall population and 10% of the city's children live in this neighborhood (11,500).

The Housing Element Update shifts and adds new units into the lowest environmental justice burden areas; these are generally some of the lowest density areas, areas with the lowest height limits, and where more and larger recreational and open spaces exist. San Francisco has made progress to improve the quality of recreation and open space across San Francisco. However, areas with the highest environmental justice burden would continue to generally have some of the highest density areas, areas with the tallest buildings, and lack larger recreation and open spaces.

As shown in **Figure 3-22**, existing housing density is highest in the northeast part of San Francisco and generally lowest in the western and southern parts of San Francisco. The update would increase density in the northern and western parts of San Francisco by 2050 as shown in **Figure 3-23**. Even with the update, the eastern portion of the city, specifically the northeast corner, would continue to be the densest part of San Francisco over the next thirty years.

The update would result in small to midrise buildings in areas with generally the lowest environmental burden. It is possible that rear yard open space as a whole may decrease over the next thirty years with the update. The construction of small to midrise buildings may shadow existing open spaces in these areas. However, even with the update, the eastern part of the city would continue to have the tallest heights in San Francisco. See **Figures 3-24 and 3-25** for a comparison of existing heights over 40 feet to heights over 40 feet with the update.

While the update would shift and increase housing growth to areas with less environmental burden, areas with the highest environmental burden would continue to have a lack of large open space. Proportionally, there is more acreage of open space in the western and northern portions of the city compared to the eastern portion of the city.³⁹ San Francisco Recreation and Parks Department has indicated that these facilities in the western and northern portion of the city already experience high levels of demand and that increased demand over the next 30 years with the update would exceed the existing capacity of these recreational facilities. To address ongoing and projected demand for recreation facilities, the Recreation and Parks Department continually acquires new parks land as needed and regularly renovate existing recreational facilities and parks. The Recreation and Parks Department would acquire new park land and renovate existing facilities, regardless of the update, to address changing recreational trends and anticipated increases in demand from population growth. The Recreation and Parks Department has plans to establish 66 new recreational facilities throughout the city, six of which would be located in the western portion of the city and within 0.25 mile of future growth projected as a result of the proposed action. The remaining planned recreational facilities are in the eastern portion of the city.

39 San Francisco Planning Department, Housing Element 2022 Update Draft Environmental Impact Report, April 2022. Source: https://sfplanning.org/environmental-review-documents?title=Housing+Element+2022&field_environmental_review_categ_target_id=All&items_per_page=10

Figure 3-22. San Francisco Housing Unit Density in 2020



Figure 3-23. San Francisco Housing Unit Density with the Housing Element Update in 2050

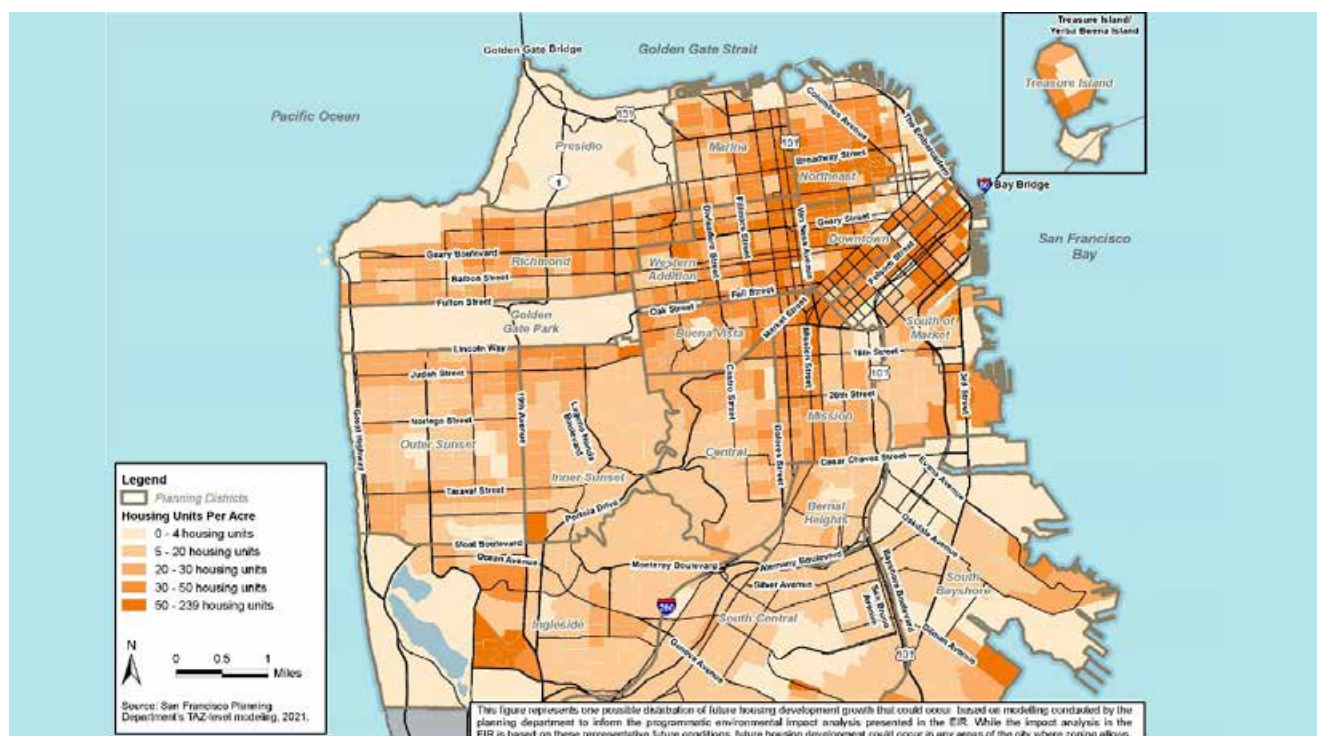


Figure 3-24. Existing height limits over 40 feet

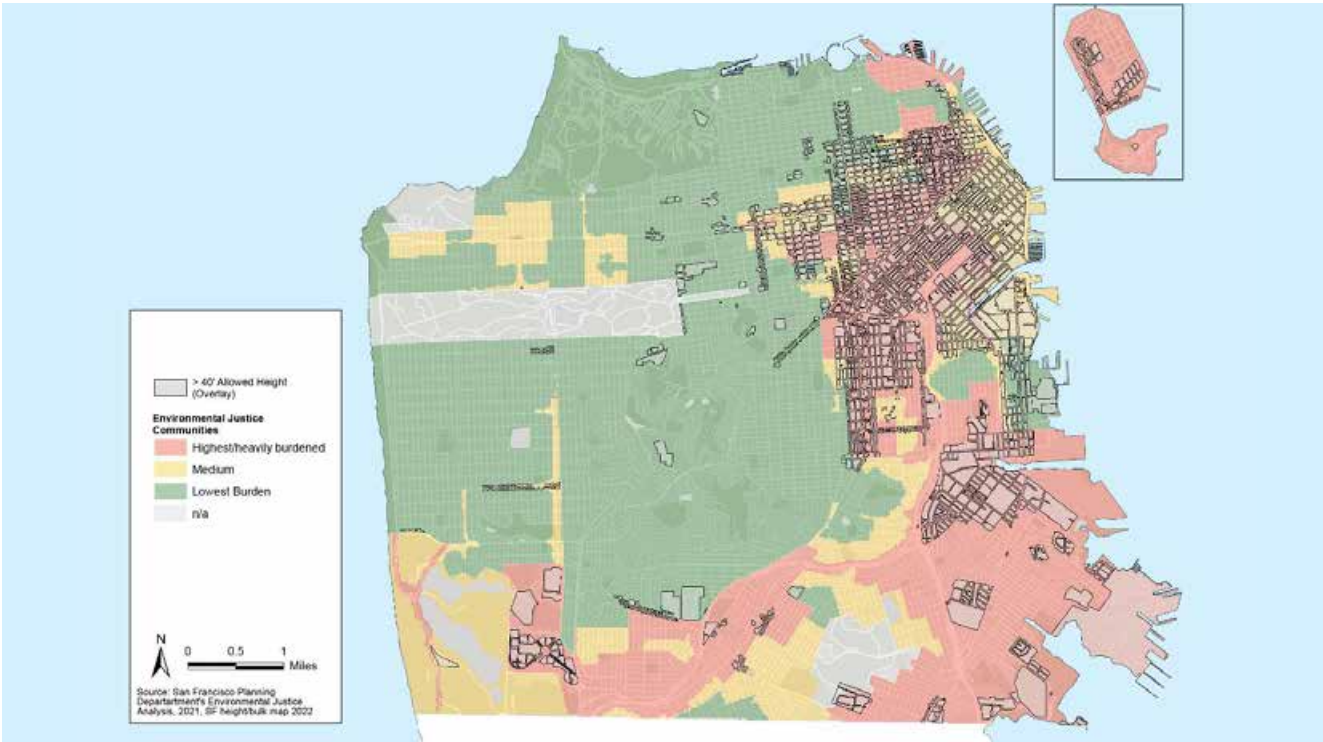
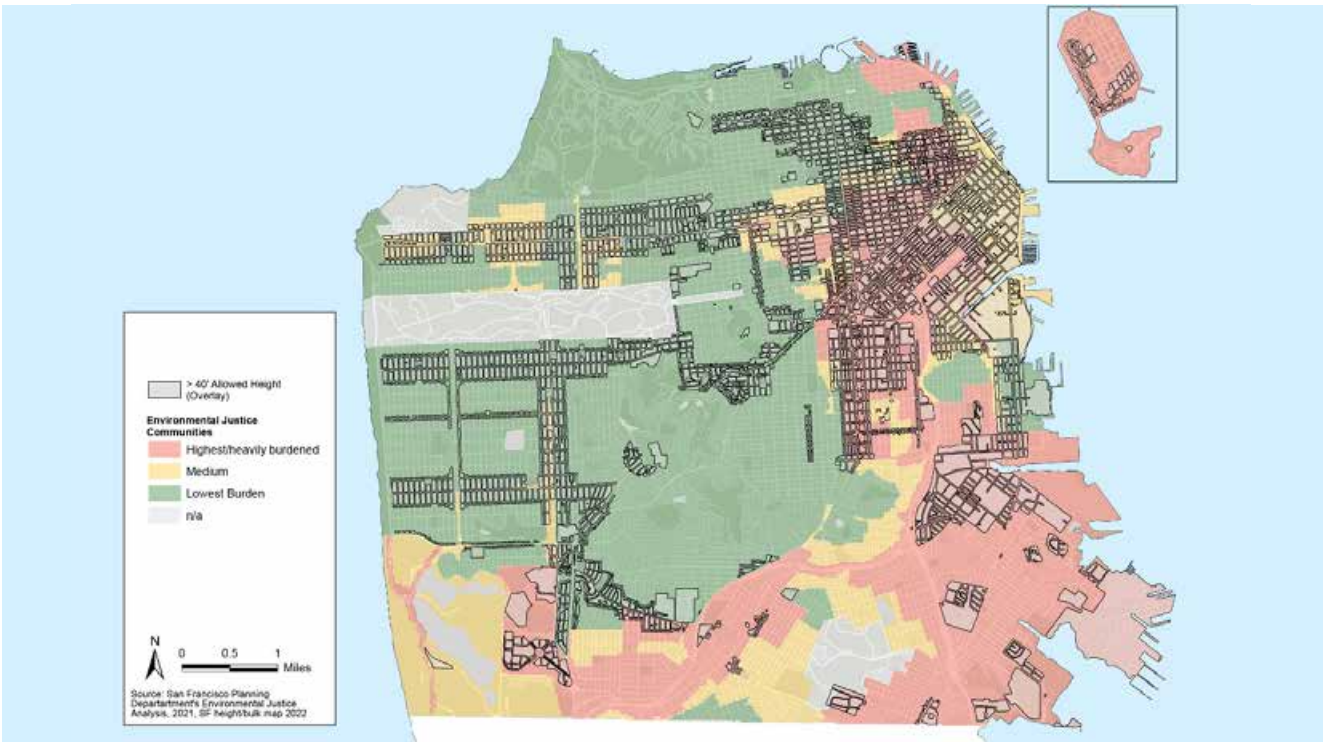


Figure 3-25. Height limits over 40 feet with the update



Sea Level Rise

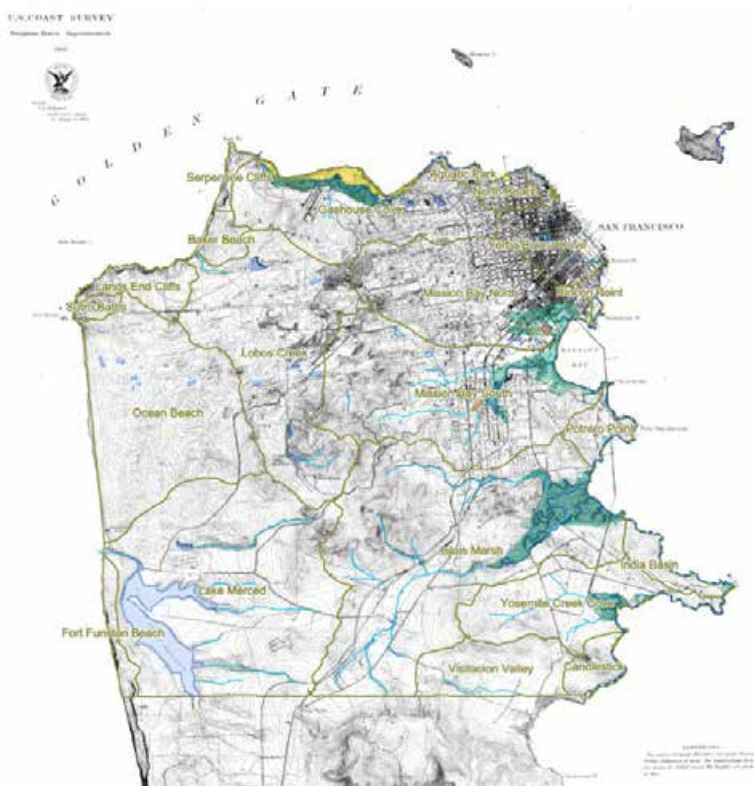
Context

Gases that trap heat in the atmosphere are referred to as greenhouse gases; these gases capture heat radiated from the sun as it is reflected back into the atmosphere. The accumulation of greenhouse gases from human activities contributes to global climate change. By the end of this century, global heating will cause sea levels around San Francisco Bay to rise three to six feet or more.⁴⁰

Findings

Areas along San Francisco bay shoreline are most affected by sea level rise; portions of Mission Bay and Islais Creek already experience the impacts of sea level rise during rainfall and coastal storm surge events. Generally, communities with the highest environmental justice burden are disproportionately exposed to sea level rise and the physical hazards that can occur, such as if contaminated materials are exposed due to sea level rise. Conversely, the northern and western areas of San Francisco are typically in the lowest burden areas and not as directly affected by sea level rise.

Figure 3-26. San Francisco Historic Watershed Map



Source: San Francisco Watershed Mapping Project

Historically, Mission Bay and Islais Creek contained tidal creeks and marshes as these areas are downstream of large watersheds (see **Figure 3-26**). As identified in the planning department's Sea-Level Rise Vulnerability and Consequences Assessment, portions of Mission Bay and Islais Creek experience flooding from both precipitation and coastal storm surge. Over time with higher sea level rise projections, potential flooding will occur more often in these areas as well as across a wider area of the San Francisco.

Sea-level rise will exacerbate other existing stressors associated with soil pollution and other contamination. Along San Francisco's Bay shoreline, the historical filling of former wetlands, as well as military and industrial land uses, mean many neighborhoods are at risk of flooding, soil liquefaction and settlement during earthquakes, and environmental

40 San Francisco Planning. *Sea Level Rise Adaptation*. Source: [Sea Level Rise Adaptation | SF Planning](#)

contamination. These concurrent hazards may exacerbate one another, such as when contaminated materials are mobilized during a flood event or when rising groundwater expands liquefaction areas. These physical hazards have potential public health and safety consequences. Neighborhoods like Bayview and Hunters Point, where many of these factors exist, already experience disproportionate contamination burdens among other health disparities. The planning commission [resolution 20738](#) recognizes these discriminatory policies as it relates to environmental stressors.

Over the next 30 years, the Housing Element Update would not change the disproportionate sea level rise impacts that communities with the highest environmental justice burden experience and would continue to experience. The update would improve conditions for residents in approximately 50,000 new housing units than without the update by shifting and adding new units into the lowest environmental justice burden areas and generally into areas not anticipated to be substantially affected by sea level rise.

As shown in **Figure 3-27**, the areas of San Francisco most vulnerable to sea level rise by year 2100 are primarily located in the northern and eastern parts of the city, areas that also typically experience greater environmental burdens.

Figure 3-27. Sea Level Rise Vulnerability Zone by Year 2100



Source: <https://sfplanning.org/sea-level-rise-action-plan#vulnerability-zone>

San Francisco is planning, developing, and implementing plans and projects to reduce the city's vulnerability to sea level rise; these projects include addressing coastal erosion at Ocean Beach, seismic safety and flooding at the Embarcadero seawall, and Islais Creek Adaptation Strategy that will develop a

long-range vision for Islais Creek. Over the past several decades, many of San Francisco's largest planned or approved development plans have been sited along or near the southeastern shorelines. These projects are designed to take projected sea level rise into account; an example of this is Mission Rock, which is constructing elevated neighborhood blocks that consider sea level rise projected for year 2100. **Figure 3-28** shows the sea level rise vulnerability zone and waterfront projects incorporating adaptive management into their project design.

Figure 3-28. Sea Level Rise Vulnerability Zone and Waterfront Projects incorporating adaptive management



Source: [Sea Level Rise Vulnerability and Consequences Assessment presentation](#) (slide 8), May 2019

The Housing Element Update would site more housing units in San Francisco's western and northern neighborhoods, areas typically less vulnerable to sea level rise as well as the physical hazards that occur when contaminated materials are mobilized due to sea level rise and flooding. However, unlike planned Waterfront development or updated housing element policy, the communities with the highest environmental burden do not have the option to redesign or plan for where units are located around sea level rise. Environmental burdens associated with hazardous materials and soil contamination could compound as sea levels rise.

Chapter 4: Recommendations

As described in Chapters 1 and 2, the department has a mandate to center race and equity in its work and this mandate is reflected in the policies of the Housing Element Update and this environmental justice analysis. The department welcomes feedback on the environmental indicators used for the topics in this analysis and the identified recommendations. This feedback will inform the work under Phase 2 of the department's racial and social equity plan. The Phase 2 plan includes a community engagement process to develop goals, objectives, and actions that address community concerns and causes that prevent the department from advancing racial and social equity in our work.

The department based the findings and associated analysis herein on draft 3 of the Housing Element 2022 Update (March 2022). Using the findings and associated analysis, the department identifies:

- 1) recommendations to some goals, policies, and actions of the update that the department incorporated into the version considered for Planning Commission adoption in December 2022 (see below);
- 2) recommendations for implementation of the update to avoid or reduce the identified impacts (see below); and
- 3) no recommendations to most of the goals, policies, and actions of the update. For example, the department has no recommendations for addressing direct and indirect displacement impacts from the update prioritizing actions and investments in priority equity geographies and communities with the highest environmental justice burden. This is because the update includes many policies and associated actions to protect these communities from this concentration of investment and to allow these communities to thrive. This includes policies and associated actions related to housing preservation, tenant protection, and housing and cultural stabilization strategies, including policies 1, 2, 3, 9, 12, 33, 36, and 42. In addition, the update includes policies and associated actions to apply a racial and social equity tool to investments, and implement anti-displacement measures in parallel with investments, including policies 10, 17, and 21.

Changes to Update Already Incorporated

Change 1: The department changed the following actions to explicitly identify environmental justice communities (high burden ones) as a priority for actions and investments to address the disproportionate negative effects these communities encounter: 9.3.2 (formerly 17b), 9.4.3 (formerly 37a), 9.3.6 (formerly 38b), 9.3.7 (formerly 38c), 9.1.1 (formerly 39a), 9.1.2 (formerly 39b), 9.1.3 (formerly 39c), 9.1.4 (formerly 39d), 9.2.13 (formerly 40a), 9.2.1 (formerly 40b), 9.2.2 (formerly 40c), and 4.1.9 (formerly 40e) (action numbers and letters reflect the December 2022 update). These changes include incentivizing community-serving businesses to address disparities that the communities with the highest burden environmental justice face related to accessing resources, and to improve transit and streets for

these communities and low-income households to access such resources in a safer, more reliable, affordable, and accessible manner.

Change 2: The update centers American Indian, Black, Japanese, and Filipino communities, and other communities directly harmed by past discriminatory actions for many cultural related items, including historic resources. Like change 1, the department changed the following actions to strengthen language so that these communities' voices and perspectives are centered in historic resource identification and preservation: 4.5.10 (formerly 42j), and 4.5.11 (formerly 42k). In addition, the department added action 4.5.12 to ensure that effects on housing are considered in relation to promoting the communities with the highest environmental justice burden when considering historic resource designations and new historic resources processes.

Recommendations for Implementation

The following identifies recommendations for implementation of the Housing Element Update over the next 30 years. Although these recommendations are not for adoption as part of the update, staff intends to use these recommendations to further guide and inform the update's implementing actions and other department work in the future.

Recommendation 1: The housing element update includes a robust set of 300+ implementation actions that will advance environmental justice. This recommendation is to prioritize the implementation of those actions that have the greatest potential to advance environmental justice, including aggressively prioritizing those actions and associated investments that result in housing preservation, tenant protection, and housing and cultural stabilization strategies in neighborhoods subject to rezoning programs, and prior to adoption of rezoning programs. Further, the city should prioritize those actions that invest disproportionately in the highest burden environmental justice communities, lower-income communities, and communities of color to address the disproportionate negative effects these communities encounter. This may include reparations to repair past harm in historically disadvantaged communities (e.g., Hunters Point, Treasure Island) and American Indian, Black, Japanese, and Filipino communities, and other communities directly harmed by past discriminatory actions (e.g., action 4.1.3). Although residential population will grow in well-resourced neighborhoods due to new rezoning programs, these neighborhoods are identified by the State of California as those that provide strong economic, health, and educational outcomes for its residents. Thus, the city should both maintain the well-resourced status for these neighborhoods and expand the well-resourced status to other neighborhoods. This aligns with the department's definition of environmental justice.

Recommendation 2: The city should monitor and report whether the update is advancing environmental justice (like action 4.1.1 (formerly 14a)). The city should modify actions or priorities that are not advancing environmental justice, while assessing whether enough time has passed to evaluate change in outcomes and considering the correlation of certain actions to outcomes.

Recommendation 3: The planning department should use the findings and associated analysis from this report to inform other work in the department. This includes future updates to other general plan

elements, establishment of equity impact analysis guidelines, the citywide historic resource survey, and historic resource designation and engaging the environmental justice communities in these efforts.

For example, in support of the Housing Element Update and the citywide historic resource survey, the Planning Department has developed the following recommendations to better understand both the benefits and burdens of identifying historic resources within communities:

- Further analyze the historic resource identification process and criteria used to evaluate historic resources with an environmental justice lens, and update criteria based on the results of this analysis.
- Further analyze existing identified historic resources and their associations to better understand the historic disparity in how resources are identified and evaluate the status of historic resources associated with discriminatory actions.
- Continue to prioritize diversifying the perspectives and voices when identifying historic resources as part of the SF Survey.
- Address the legacy of exclusion of historic preservation by meeting with communities, prioritizing Black, American Indian, Japanese, LGBTQ, Filipino, Latino (a,e), Chinese American, and Pacific Islander communities, and find opportunities to expand historic preservation opportunities to these communities and educate larger audiences.
- Preserve a greater diversity of resources through traditional means of protection, but also explore alternate means of documentation and celebration of culturally significant resources.
- Continue to review local legislative procedures associated with historic resources that may create bureaucratic and financial burdens that limit housing development in communities with the highest environmental justice burden.
- Evaluate if the recognition of historic resources is useful to stabilize communities with the highest environmental justice burden.

Recommendation 4: The city should continue improvement in the development of environmental justice metrics as well as transparency in resource allocation to improve the quality and type of resources and opportunities (e.g., transportation, recreation facilities, and open spaces) in communities with the highest environmental burden.

Recommendation 5: The city should refine how hazardous material sites are categorized, to reflect the level of contamination more accurately; this information should also be made available on a publicly facing platform, in addition to providing information for why a site is located on the Maher map. This information could assist decision makers as well as inform members of the public in prioritizing resources and efforts to address existing contamination in communities with the highest environmental burden.

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Appendix A.

Abbreviated History of Race and Social Inequity in San Francisco

Appendix A. Abbreviated History of Race and Social Inequity in San Francisco

Date/Period	Event
Prior to 1769	The most prominent tribe in San Francisco is the Ramaytush Ohlone, the original inhabitants of the San Francisco Peninsula.
1769	European explorers arrive in California under the leadership of Don Gaspar de Portola, governor of Las Californias (New Spain). The San Francisco Bay Area's American Indian population at the time is estimated at 7,000-10,000 people.
1790-1822	The mission system, established in 1776, expands. American Indian tribes are forcibly moved to San Francisco's missions from as far north as Point Reyes, Marin, Sonoma and Napa Valleys, and the Sacramento Valley. The Spanish colonial government focuses on converting the area's indigenous residents to Catholicism and assimilating them into Spanish culture.
1833	The Mexican government secularizes former Spanish missions, granting the land to a number of Californios, Mexican settlers and soldiers, and naturalized Mexican citizens of European and American ancestry. They establish "ranchos" throughout Alta California.
1852	California enacts the 1852 Fugitive Slave Law, which reinforces the existence of Antebellum slavery in the state into the 1860s.
1854	The federal government establishes an Indian policy for California, and in subsequent actions, federal, state, and city authorities decimate the local indigenous population, including the Ohlone populations who inhabited San Francisco and the South Bay Area, spending in excess of \$1.4 million in the process.
1870-1890	San Francisco enacts multiple ordinances discriminating against Chinese immigrants: <ul style="list-style-type: none"> • The 1870 Cubic Air Ordinance requires 500 cubic feet of air for every occupant of a room used for lodging. • The 1880 Laundry Ordinance targets the Chinese population using appeals of public safety to limit where they could live and work. • The 1890 Birmingham Ordinance prohibits all Chinese people, regardless of citizenship, to live in one area of San Francisco.
1880-now	Across the United States, racially restrictive covenants and deed restrictions in Homeowner Association (HOA) bylaws prohibit the sale or lease of homes to specific racial groups. The bylaws also restrict HOA membership by race. As an example, Presidio Terrace was marketed as a gated community for Caucasians. Racial covenants are still in some property deeds today.



Appendix A. Abbreviated History of Race and Social Inequity in San Francisco

1934-1937	<p>Congress and President Roosevelt create the Federal Housing Administration that insured bank mortgages that covered 80 percent of the purchase price, had a term of twenty years, and were fully amortized. The Federal Housing Administration appraisal standard includes a white-only racial segregation requirement.</p> <p>To guide the work of appraisers, the Federal Housing Administration publishes an Underwriting Manual, which gave the following instruction: “If a neighborhood is to retain stability it is necessary that properties shall continue to be occupied by the same social and racial classes.”</p> <p>The Federal Housing Administration preferred mortgages in areas where highways or boulevards separated Black families from white families. The manual states that, “....natural or artificially established barriers will prove effective in protecting a neighborhood and the locations within it from adverse influences, including the prevention of the infiltration of lower-class occupancy, and inharmonious racial groups.”</p> <p>In the late 1930s, Home Owner’s Loan Corporation publishes redlining maps. These maps are a reflection of government and private actions, like federally insured mortgages and covenants, that explicitly blocked American Indians, Blacks, and people of color from loans for homeownership and maintenance, and access to neighborhoods with good services and jobs; these policies led to cycles of disinvestment, segregation and poverty concentration among these communities.</p>
1940s	<p>Black migrants arrive in San Francisco from Louisiana, Texas, and Oklahoma, giving the city’s Black community a distinctly southern aspect, and settle in established Black neighborhoods, like the Western Addition and Hunters Point. By 1946, San Francisco’s Black population increases by 600%.</p>
1942-1945	<p>Following Japan’s attack on Pearl Harbor, President F.D. Roosevelt issues an Executive Order authorizing the creation of military zones and the incarceration of 120,000 Japanese and Italian Americans in internment camps. In San Francisco, the Presidio’s General John L. DeWitt issued a series of Civilian Exclusion Orders expelling “all persons of Japanese ancestry, including aliens and non-aliens” from West Coast “military zones”, including San Francisco.</p>
1942-1945	<p>San Francisco’s Japanese American residents are declared “enemy aliens.” San Francisco aides the federal government in the forced eviction and internment of thousands of people of Japanese ancestry. Japanese Americans are forced to register and move to barbed wired internment camps throughout the Western U.S. Japanese American residents lose their homes, businesses, and belongings and San Francisco’s Japantown becomes a ghost town. Without charges, hearings, or trials, many Japanese families remain in the camps until 1945.</p>
1945	<p>The planning department’s first General Plan identifies neighborhoods that predominately have residents of color as “blighted” – including the Western Addition, South of Market, Chinatown, the Mission, and Bayview/Hunters Point. The Redevelopment Agency used this designation to justify the wholesale removal of Black communities and other communities of color through eminent domain.</p>



Appendix A. Abbreviated History of Race and Social Inequity in San Francisco

1946	In San Francisco's Portola neighborhood, a handbill placed in mailboxes states, "The master deed of this rear states that only members of the white Caucasian race are allowed to reside in the district except as servants. These restrictions have been Violated."
1948	California State Senator Gerald O'Gara deems the Fillmore district as "blighted."
1948	The U.S. Supreme Court repudiated its 1926 decision to support racial covenants in <i>Shelley v. Kramer</i> . The decision rules that restrictive covenants excluding person on the basis of race are ineffective and unenforceable and unconstitutional under the Equal Protection Clause.
1949	As a result of <i>Shelley v. Kramer</i> , the Federal Housing Administration can no longer support mortgages with racial covenants, although circumvention of the rule continued.
1951	The U.S. Supreme Court rules that a racial restrictive covenant cannot be enforced by a suit for damages in the case of <i>Barrows v. Jackson</i> .
1951	California's Community Redevelopment Law contains a clause prohibiting discrimination in redevelopment or urban renewal projects.
1952	The Truman Administration institutes a "racial equity formula" that required local housing authorities that practiced segregation to build separate housing projects for house low-income black families in proportion to their need.
1953	The California State Supreme Court rules that public housing facilities may not be restricted on the basis of race in <i>Banks v. San Francisco Housing Authority</i> .
1957	San Francisco Giants Baseball Player Willie Mays denied opportunity to purchase home at 175 Miraloma Drive in San Francisco's West of Twin Peaks neighborhood.
1958	San Francisco Assistant District Attorney (and future Senior Judge of the U.S Court of Appeals for the 9 th Circuit) Cecil Poole has cross burned on the lawn of his Ingleside Terrace home.
1959	A 1959 Civil Rights Inventory of San Francisco surveys and presents the opinions of San Francisco Real Estate Board Members at the time. Summaries of these opinions include: <ul style="list-style-type: none"> ▪ Minority families, especially Blacks, face many problems in dealing with realtors- problems that do not arise for their white counterparts ▪ Most brokers will not sell to a nonwhite unless the same race already lives in the neighborhood. ▪ Many devices and evasions are used to keep all white neighborhoods intact. ▪ Brokers who restrict sales to minorities believe the following 1) Whites do not want non-whites in their neighborhoods, 2. Selling to non-whites endangers a broker's reputation and profits and 3. Nonwhite residents depreciate property values.
1959	California's Hawkins Act makes discrimination illegal in all publicly assisted housing. This law includes loans insured by the Federal Housing Administration or guaranteed by the Veterans Administration
1974	The federal government passes the Equal Credit Opportunity Act and creates the Housing Choice Voucher Program, both designed to create additional housing for low-income people.



Appendix A. Abbreviated History of Race and Social Inequity in San Francisco

1974	The Equal Credit Opportunity Act made it illegal for creditors to discriminate against potential applicants on the basis of race, color, religion, national origin, sex, marital status, age, officially ending the practice of redlining
1975	Under federal law, the Home Mortgage Disclosure Act requires home lenders to maintain and submit documentation to federal agencies regarding their lending practices, and ensure that lenders would be specifically monitored regarding the geographic areas of the people to which they provide loans
1978	California's Proposition 13 amends the California Constitution requiring properties be taxed at no more than 1% of their value and limited annual increases of assessed values to the inflation rate of 2%. The new tax implications disincentivized local governments from building residential properties.
1979	San Francisco's 1979 Rent Control Ordinance created limits on how much landlords could increase rent for units built before June 13, 1979. It also established rules for when landlords can lawfully evict and created the Rent Arbitration Board to enforce the law.
1995	The Costa-Hawkins Rental Housing Act places restrictions on city rents control ordinances as well as prohibiting any form of rent control on single family dwellings, condominiums, and newly constructed apartments. The law also prohibited vacancy control.
2000s	In the early 2000s, people of color were more likely to receive subprime housing loans than White borrowers. These predatory lending practices led to the foreclosure crisis and recession starting around 2008, disproportionately impacting Black, Latino (a,e), American Indian, and low-income people; at the national level, middle-income Black and Latino (a,e) households lost nearly one-half of their wealth due to foreclosures and job losses. The cumulative impacts of these and other policies have resulted in the persistent outmigration and displacement of communities of color: the American Indian community in San Francisco experienced a decline from 0.5% of the population in 2006 to 0.1% today; while the Black community in San Francisco decreased from 11% of the City's population in 1990 to 5% in 2018.
2010-2016	During 2010-2016, San Francisco experienced a massive out-migration of low-income and working-class residents, which disproportionately affected Latino (a,e) and Black residents. Many low- and moderate-income residents who left the city moved to the Sacramento region and the Central Valley. Higher-income residents who left the city tended to move to other large metropolitan areas, particularly in the northeast. For every person in the top income category (annual household income of \$200,000 or more) who left the Bay Area between 2010 and 2016, six moderate-income residents (annual household income of \$100,000 or less) moved out.



Appendix B.

Preservation – Environmental Justice Informational Analysis



Memorandum to FILE

Date: December 6, 2022
Case No: 2019-016230CWP
To: File
From: Jenny Delumo, Senior Environmental Planner,
Justin Greving, Senior Preservation Planner,
Michelle Taylor, Senior Preservation Planner;
Elizabeth White, Senior Environmental Planner
Reviewed by: Allison Vanderslice, Cultural Resources Team Manager
Wade Wietgreffe, Principal Environmental Planner
Re: San Francisco Housing Element 2022 Update, Racial and Social Equity
Analysis of Built Environment Resources (Historic Resources)

Introduction

Present conditions for communities of color are based on past decisions. This includes local, state, and federal laws and policies designed to dictate where Black and American Indian communities, and other communities of color can and cannot live and what resources and investments those communities have access to. Numerous examples of these historic decisions include redlining, racial covenants, and forced segregation and outmigration under the auspices of urban renewal. San Franciscans still experience the ramifications of these decisions in their physical surroundings.

This memorandum presents data on how such decisions have shaped existing environmental conditions in relationship to historic resources, how those conditions could look with a continuation of existing Housing Element policies, and how conditions could change under the current update to the Housing Element of the city's General Plan (Housing Element Update or Update).

For the purposes of this memorandum, the San Francisco Planning Department is focusing on built-environment resources due to the history and complexity of historic preservation in San Francisco as it relates to racial and social equity and housing development. Built-environment resources generally refer to above-ground constructed and landscape features that support an understanding and acknowledgement of human history through historical, social cultural, aesthetic/design, or construction qualities.¹

¹ San Francisco Planning Department, *Housing Element 2022 Update Environmental Impact Report*, Section 4.2 Cultural Resources, November 2022. Available: <https://sfplanning.org/environmental-review-documents>

This section attempts to answer three questions:

- 1) How does the San Francisco Planning Department identify built environment historic resources?
- 2) What are the locations of a) all known historic resources, b) which of the known historic resources have association with communities of color and marginalized communities, and c) potential historic resources associated with communities of color and other marginalized communities²?
- 3) How would the Housing Element Update a) affect all known or potential historic resources associated with communities of color and marginalized communities, and b) be affected by the identification of historic resources?

Background

People in positions of power have historically determined which sites, structures, or objects are important and thus worthy of preserving. In San Francisco, that has included the California Office of Historic Preservation, San Francisco Board of Supervisors, San Francisco Historic Preservation Commission (HPC), San Francisco Planning Commission, San Francisco Planning Department (planning department) staff, historical and preservation societies, and neighborhood community groups, which historically have represented predominately white and wealthy San Franciscans. The HPC has acknowledged that local landmarking or preservation of structures has generally “highlight[ed] only structures traditionally owned by white, wealthy landowners and has favored policies catering to white and wealthy established residents.”³ Furthermore, preservation has generally focused on the physical appearance of properties, thereby valuing high architectural styles more than significant associations with people and events. Such an approach has historically ignored spaces important to social, racial, and ethnic groups whose history may not be represented by high architectural styles. For example, the HPC determined that as of July 2020 “less than 10% of San Francisco’s local landmarks are designated for their cultural associations with Black, American Indian, Asian and Pacific Islander, Latin-x, or Lesbian, Gay, Bisexual, Transgender, Queer (LGBTQ) histories.”⁴

Further, white and wealthy property owners have generally benefitted from the preservation of properties through government sponsored tax benefits and zoning that prohibits or restricts development and increased density in, and access to, wealthy neighborhoods. Whereas, within marginalized communities, government programs have historically harmed Black and American Indian communities, and other communities of color with repressive restrictions, and displacement.⁵ As an example, the Planning Department’s first General Plan (1945) identified neighborhoods that were predominately communities of color as “blighted” – including the Western Addition, South of Market, Chinatown, the Mission, and Bayview/Hunter’s Point. San Francisco’s former Redevelopment Agency used this designation to justify the wholesale removal of Black communities and other communities of color through eminent domain. Given this history, these communities may be uncomfortable with additional relationships or review

² Marginalized communities or populations are defined as communities that have faced systematic and intentional inequities and lack of investment, contributing to lower levels of opportunity. For the purpose of the analysis in this report, communities of color and marginalized communities refers to American Indian, Black, Japanese, LGBTQ, Filipino, Chinese, or Latino (a,e)/ groups. In this report, environmental justice (EJ) communities may be used interchangeably with communities of color and marginalized communities.

³ Historic Preservation Commission Resolution No. 1127 Centering Preservation Planning on Racial and Social Equity, July 15, 2020.

⁴ https://sfplanning.org/sites/default/files/documents/admin/R-1127_HPC_Equity_Resolution.pdf

⁵ Ibid

⁶ For more information about environmental burdens specific to San Francisco, see <https://sfplanning.org/project/environmental-justice-framework-and-general-plan-policies>.

processes with local government agencies that comes with identifying historic resources.

The HPC recognizes these discriminatory policies, and the planning department's efforts to dismantle them.⁶ For example, the resolution states:

Understanding that less than 10% of San Francisco's landmarks are designated for their cultural associations with American Indian, African American, Asian and Pacific Islander, Latin-x, or LGBTQ histories, the HPC has worked to increase the representation of these communities in the registry, such that approximately 40% of the landmark designations now under review or identified in the Department's landmark work plan [as of July 2020] are associated with communities of color and other marginalized communities.

To address this legacy of exclusion and meet underrepresented communities where they are, San Francisco has made efforts to expand historic preservation opportunities available to larger audiences. The City of San Francisco (the city) acknowledges that in addition to diversifying the types of properties that are found to be historically and culturally important, the city also must diversify the perspectives and voices identifying historic resources. For example, since 2010, the HPC has committed to increasing the number of local landmarks associated with culturally significant events and people, such as the Japanese YWCA/Issei Women's Building at 1830 Sutter Street (Landmark No. 291) and the Castro Camera and Harvey Milk's residence at 573 and 575 Castro Street (Landmark No. 227).

The city has committed not only to preserve a greater diversity of properties through traditional means of protection but also to explore alternate means of documentation and celebration of culturally significant historic resources. To that end, the city has embraced multiple means of recognizing the importance of cultural places in collaboration with San Francisco's diverse communities. Such efforts underway include the Legacy Business Registry⁷ and Cultural District Incentives.⁸

Additionally, the planning department is conducting a citywide survey, the San Francisco Cultural Resources Survey (SF Survey), which aims to document San Francisco's architectural heritage while elevating the need to acknowledge the intangible aspects of the city's culture.⁹ In consultation with community members, the survey will evaluate age-eligible properties (properties that have buildings, structures, landscapes or sites that are 45-years or older) for not just architecture, but also cultural and social associations. The results of SF Survey, which is scheduled for completion in 2026/2027, will help guide the planning department's decision-making for future historic designations, and other heritage-based work.

⁶ Historic Preservation Commission Resolution No. 1127 Centering Preservation Planning on Racial and Social Equity, July 15, 2020.

https://sfplanning.org/sites/default/files/documents/admin/R-1127_HPC_Equity_Resolution.pdf

⁷ For more information, see <https://sfplanning.org/project/legacy-business-registry>.

⁸ For more information about Cultural Enclaves, see the Housing Element 2022 Update EIR, section 4.3 Built-Environment Historical Resources.

⁹ For more information, see <https://sfplanning.org/project/citywide-cultural-resources-survey>.

Analysis

Question 1: How does the San Francisco Planning Department identify built-environment historic resources?

Question 1 Finding: Built-environment resources are identified through a variety of ways: some are already identified through listing on the National and California registers while others may be identified as part of the environmental review process. Other built-environment resources may be identified through department-led efforts or through a community process.

As summarized in the Housing Element Update Environmental Impact Report (EIR), built-environment historic resources refer to culturally and/or historically significant buildings, structures, objects, sites, and districts that have historical, Native American, architectural, cultural, or scientific importance. Historic resources are those listed in or eligible for listing in the California Register of Historical Resources (California Register), listed in a local historic resource register, identified as significant in a qualifying local survey, or are otherwise deemed important by a California Environmental Quality Act (CEQA) lead agency, such as the planning department.¹⁰

If the historic status of a property is unknown, then for the purposes of CEQA review, the planning department evaluates the property to determine whether it is a historic resource and if the proposed project has the potential to impact historic resources. Additionally, identification of historic resources may occur through department-led efforts, such as the SF Survey, or might be spearheaded by members of a community or group through a formal resource nomination. As explained in the Housing Element Update EIR's section 4.2. Cultural Resources:

The department's efforts to identify built-environment historic resources in San Francisco that meet CEQA criteria are ongoing. The primary tools and the types of investigations that the department uses to determine the status of built-environment resources include the following: past historic resource surveys; evaluations completed as part of the environmental review process; and historic register nominations and designations initiated by the city, other agencies, or community members. Some of these efforts have occurred for an individual parcel, while others have addressed the built fabric of entire neighborhoods. Others have considered a particular property type or historic theme that applies to resources citywide. The findings of these efforts inform the department as well as decision makers about the presence of historic resources throughout the city and how they might be affected by proposed projects.¹¹

¹⁰ See Housing Element 2022 Update EIR section 4.2: Cultural Resources.

¹¹ Ibid. For a detailed explanation of each evaluation method used to identify historic resources, see section 4.2 of the Housing Element 2022 Update EIR.

Question 2: What are the locations of a) all known historic resources, b) which of the known historic resources have association with communities of color and marginalized communities, and c) potential historic resources associated with communities of color and other marginalized communities?

Question 2a Finding: Most known historic resources are in the in the lowest and highest burden environmental justice communities; substantially fewer known historic resources are in the medium burden environmental justice communities.¹² However, percentages of known historic resources in comparison to overall parcels are similar for both the high and low burden areas.

The uneven distribution of historic resources can be seen in *Figure 1, CEQA Identified Historic Resources (Category A Properties)*, and *Table 1, Properties in San Francisco, by Historic Resource Status*. Figure 1 shows planning department identified or known historic resources (Category A). Table 1 shows that there are 154,468 properties in San Francisco. The planning department has identified 21,792 historic resources, which consists of properties eligible or listed in the National Register of Historic Places (National Register) or California Register, are on local lists, or are designated local landmarks (Category A). Of the remaining properties, 115,401 are old enough to qualify as historic resources, but they have not been surveyed (Category B), and 17,275 properties are either not old enough to qualify as historic resources or the planning department has determined they are not historic resources (Category C).

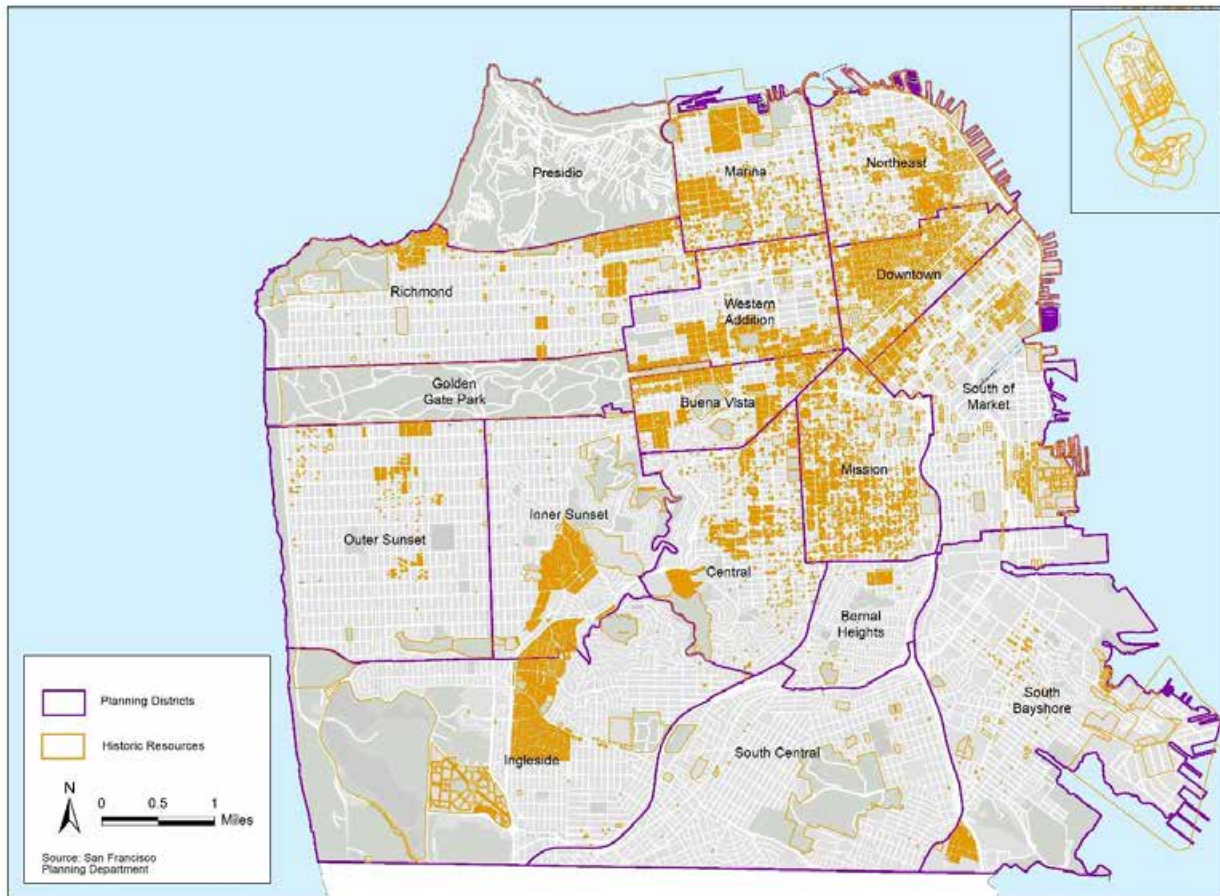
Table 1. Properties in San Francisco, by Historic Resource Status¹³

Historic Resource Status	High Burden Areas	Medium Burden Areas	Low Burden Areas	N/A	Total
Known (Category A)	6,361	2,077	13,313	41	21,792
Category A associated with EJ Communities	1,480	229	666	3	2378
Age-Eligible and not surveyed (Category B)	25,476	18,276	70,651	998	115,401
Not age-eligible or determined not historic (Category C)	6,708	2735	7,794	38	17,275
Total	38,545	23,088	91,758	1,077	154,468

¹²Environmental Justice Communities Burden is the level of cumulative environmental and socioeconomic vulnerability.

¹³Properties identified as N/A are parcels that are not classified as high, medium, or low burden areas such as public parks and waterfront piers.

Figure 1: CEQA Identified Historic Resources (Category A Properties)



The planning department and others, such as local preservation groups, have conducted multiple historic resource surveys and identified many historic resources in neighborhoods in the northeast, including those in high burden areas associated with the Northeast, Downtown, South of Market, and Mission planning districts¹⁴. The identification of historic resources is in part due to historic surveys undertaken for area plan efforts, such as the Downtown Area Plan or Mission Area Plan.¹⁵ The planning department and others have conducted fewer historic resource surveys and identified fewer historic resources in large portions of the south, southwest, and northwest parts of San Francisco. Additionally, most locally designated landmarks in San Francisco date to the earliest period in the post-1850 Gold Rush era of San Francisco. This partially explains the unbalanced geographic distribution of identified historic resources, as the northeast parts of the city contain the oldest built environment from the post Gold Rush era of San Francisco. These identification efforts also indicate biases from those in power in excluding potential resources associated with the recent past.

Substantial concentrations of known historic resources are in the low burden environmental justice communities such as the Haight Ashbury neighborhood (within the Buena Vista planning district), and

¹⁴ San Francisco is divided into 18 planning districts; this unit of measurement is used in various aspects of the planning process.

¹⁵ For information on San Francisco Planning Department's area plans to the General Plan, see <https://sfplanning.org/project/san-francisco-general-plan#elements-and-area-plans>.

Marina, Pacific Heights and Presidio Heights neighborhoods (within the Marina and Richmond planning districts) (see Figure 2 for distribution of Environmental Justice Burden Areas). As explained in more detail in Finding 2 below, large portions of South of Market (SoMa) and the Mission, which are located in medium and high burden areas of the city, include historic resources that are associated with the contributions from communities of color and marginalized communities (see Table 1, Figure 2, and findings below). While there may be pockets within different neighborhoods that contain large concentrations of historic resources, the overall concentration of historic resources, when broken down by environmental justice burden areas, is only slightly more concentrated in the high burden areas when compared with the low burden areas (16%, or 6,300 out of 38,500 versus 14%, or 13,300 out of 23,100). However, it is notable that the medium burden areas contain a substantially lower percentage of identified resources with only 9% (2,100 out of 23,100) of properties identified as containing historic resources.

Many areas with few identified historic resources also correspond with planning districts in the highest burden environmental justice communities, such as the Bayview and South Bayshore planning districts.¹⁶

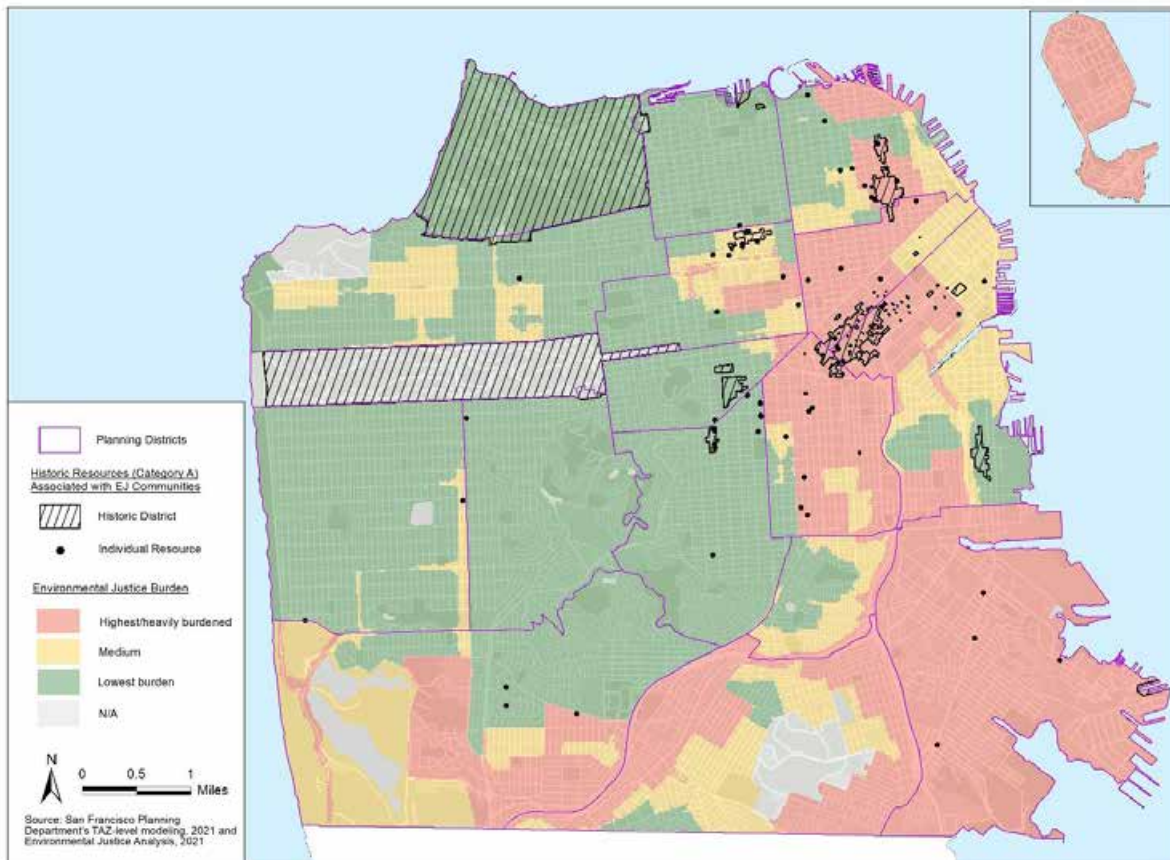
Question 2b Finding: Most of the known historic resources that have (or may have) associations with communities of color or marginalized communities are located in medium and high burden Environmental Justice Communities.

Figure 2, Existing Historic Resources (Category A) Associated or May Be associated with American Indian, Black, Japanese, LGBTQ, Filipino, Latino (a,e), and Chinese American Communities in relation to Environmental Justice Burden Areas (2020,) identifies which individual historic resources (category A) properties that have (or may have) significant association with American Indian, Black, Japanese, LGBTQ, Filipino, Chinese, or Latino (a,e)/ groups.¹⁷ Additionally, the figure shows historic districts with associations with these communities from those listed in or found eligible for listing in the National and California registers as well as local designation. These historic resources represent a small fraction of the entire historic resources within the city. The identified resources are then overlayed on a figure illustrating the low, medium, and high burden Environmental Justice Communities. Most of the known historic resources associated with communities of color and marginalized communities are located in medium and high burden Environmental Justice communities.

¹⁶ Although the Bayview-Hunters Point Area B historic context statement was adopted in 2010, the results of the survey have never been finalized.

¹⁷ The planning department has not yet identified which individual California Register-eligible properties have associations with these groups.

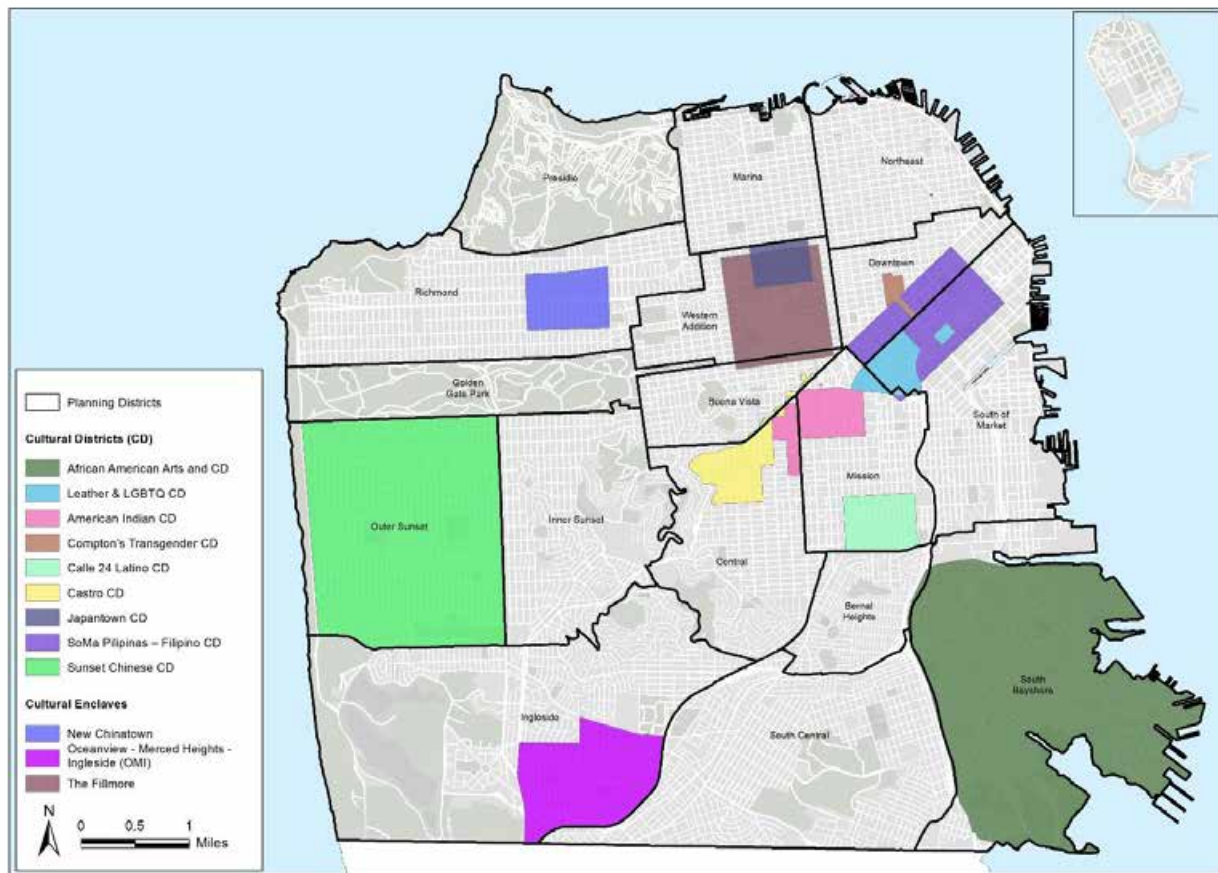
Figure 2: Existing Historic Resources (Category A) Associated or May Be associated with American Indian, Black, Japanese, LGBTQ, Filipino, Latino (a,e), and Chinese American Communities in relation to Environmental Justice Burden Areas (2020)



Question 2c Finding: Most of the potential historic resources associated with communities of color and marginalized communities are dispersed throughout the city.

The city has identified areas and neighborhoods associated with distinct groups through the development of cultural historic context statements and establishment of cultural districts (see Figure 3). As shown in *Figure 3, Cultural Districts and Enclaves (2020)*, these cultural groups are dispersed throughout the city, and include the Calle 24 Cultural District in the Mission, the Leather & LGBTQ Cultural District in SoMa, and the Sunset Chinese Cultural District in the Sunset, among others.

Figure 3: Cultural Districts and Cultural Enclaves (2020)



The Cultural District Incentive, formalized in 2018, is a multi-agency supported program which provides public funding and other available resources to formally designated cultural districts. Each cultural district develops a Cultural History, Housing, and Economic Sustainability Strategies Report. The Mayor's Office of Housing and Community Development provides allocated funds from the city's hotel tax to support cultural districts.¹⁸ There are currently ten cultural districts.¹⁹ The vision of these districts is to preserve, strengthen and promote cultural communities, and its goals are to support legacy businesses, nonprofits, and traditions. The planning department is also actively identifying cultural enclaves, or areas of the city with previous or in-progress historic context statements and historically associated with communities of color and other marginalized communities.²⁰ Lastly, the city has established the San Francisco Legacy Business Registry, an inventory of San Francisco businesses 30 years or older that have demonstrated a historic connection and significance to their neighborhoods. The planning department does not consider these cultural districts, cultural enclaves, or legacy businesses as known historic resources, by themselves. However, individual properties within cultural districts or enclaves or locations containing legacy

¹⁸ Housing Element 2022 Update EIR, section 4.2 Cultural Resources. See also <https://sf.gov/information/cultural-districts-program>.

¹⁹ In 2022, Supervisors Walton and Chan proposed the Pacific Islander Cultural District within the Visitacion Valley and Sunnydale neighborhoods. This cultural district was adopted by the Board of Supervisors on November 15, 2022 and approved by Mayor London Breed on November 17, 2022. This cultural district is the tenth cultural district and is not included in the above cultural district map.

²⁰ For more information about Cultural Enclaves, see the Housing Element 2022 Update EIR, section 4.2 Cultural Resources.

businesses are and can become known historic resources.

As shown in Figure 1, Table 1, and discussed in the 1a findings, the city has not yet formally evaluated the majority of properties in San Francisco, including in areas associated with communities of color and marginalized communities. Per the above Table 1, there are currently 115,401 properties in San Francisco that are age eligible and would be surveyed by the city as part of the SF Survey.²¹ It therefore stands to reason that the city has not yet identified all potential historic resources associated with communities of color or marginalized communities. As such, the planning department anticipates that potential historic resources associated with these groups will be dispersed throughout the city, with potential higher concentrations of such resources within cultural districts or enclaves.

Question 3: How would the Housing Element Update a) affect all known or potential historic resources associated with communities of color and marginalized communities and b) be affected by the identification of historic resources?

Question 3a Finding: The Housing Element Update would not substantially affect known historic resources that have or may have associations with communities of color and marginalized communities, but it could affect potential historic resources associated with these groups.

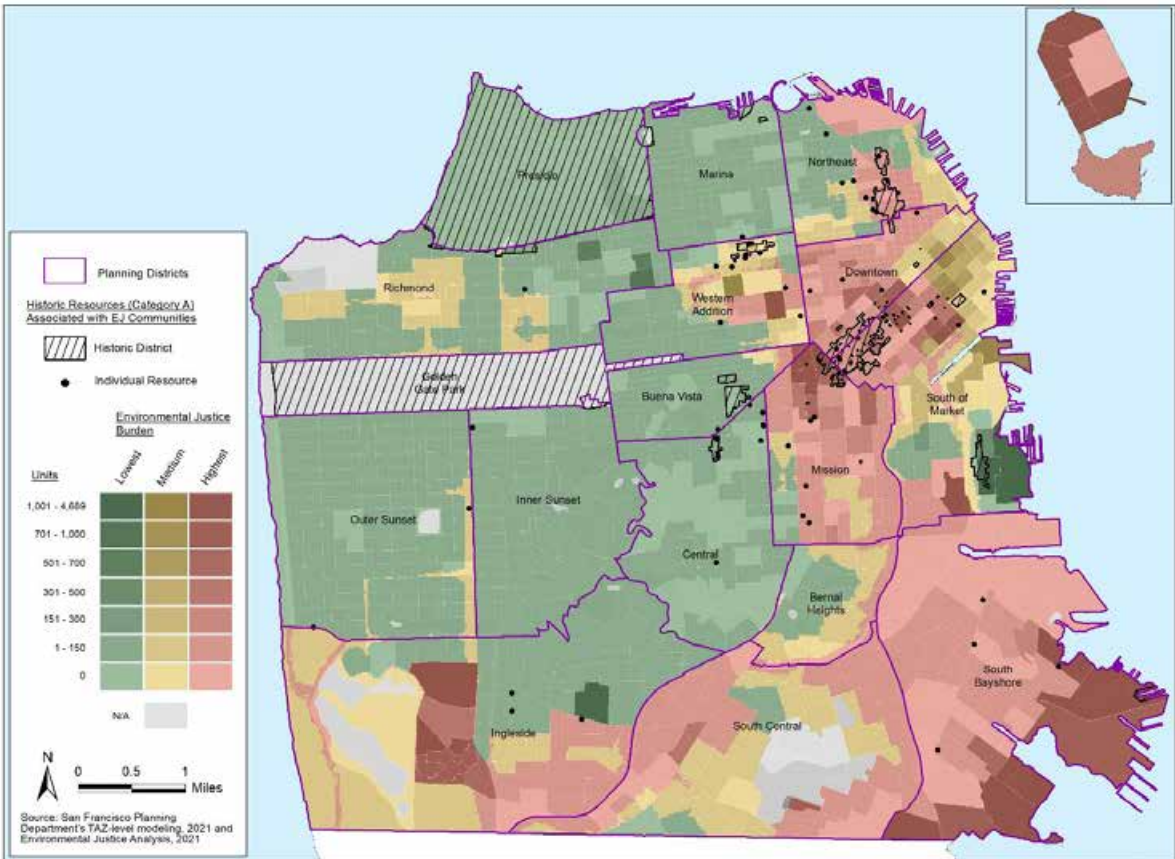
Figure 4, *Existing Historic Resources (Category A) Associated or May Be associated with American Indian, Black, Japanese, LGBTQ, Filipino, Latino (a,e), and Chinese American Communities in relation to Environmental Justice Burden Areas (2050 without the update)* and Figure 5, *Existing Historic Resources (Category A) Associated or May Be associated with American Indian, Black, Japanese, LGBTQ, Filipino, Latino (a,e), and Chinese American Communities in relation to Environmental Justice Burden Areas (Housing Element 2022 Update,)* shows all known historic resources, including highlighting known historic resources associated with American Indian, Black, Japanese, LGBTQ, Filipino, Latino (a,e), and Chinese American Communities. These figures also break down the areas of low, medium, and high environmental justice burden, and housing growth between 2020 and 2050 with and without the update to the Housing Element.

The Housing Element update would shift overall housing growth over the next 30 years to the lowest environmental burden areas; generally, these areas have a lower concentration of known historic resources associated or likely associated with American Indian, Black, Japanese, LGBTQ, Filipino, Latino (a,e), and Chinese American Communities. In those areas that would experience the greatest increase in housing growth under the Housing Element Update, primarily the west side of the city, the planning department generally has not identified known historic resources that have or may association with American Indian, Black, Japanese, LGBTQ, Filipino, Latino (a,e), and Chinese American Communities. Because the Housing Element Update would shift some of the housing production goals towards the west side of the city, i.e. the lowest burden areas, the areas of the city with the lowest concentration of known historic resources

²¹ The San Francisco Cultural Resources Survey (SF Survey) is a historic context-based, multi-year cultural resources survey lead by the department that will result in the identification, documentation, and evaluation of sites and places of cultural and architectural importance across San Francisco. SF Survey aims to document San Francisco's architectural heritage while elevating the need to acknowledge the intangible aspects of the city's culture. This effort will be conducted through broad-scale, context-based research and make evaluations in consultation with community members for properties and assets with cultural and social associations. The results of SF Survey will help guide the department's decision making for future designations and other work. As of 2022, SF Survey is proposed for completion by 2026/2027. For more information about the SF Survey, see the Housing Element 2022 Update EIR, 4.2 Cultural Resources, 38-43.

that have associations or possible associations with American Indian, Black, Japanese, LGBTQ, Filipino, Latino (a,e), and Chinese American Communities appears to be relatively unaffected (see Figure 5).

Figure 4: Existing Historic Resources (Category A) Associated or May Be associated with American Indian, Black, Japanese, LGBTQ, Filipino, Latino (a,e), and Chinese American Communities in relation to Environmental Justice Burden Areas (2050 without the update)



San Francisco Housing Element 2022 Update
Case No. 2019-016230ENV

Figure X.X-XX
Housing Growth under 2050 Baseline Conditions,
EJ Communities, and Category A Historic Resources

Figure 5: Existing Historic Resources (Category A) Associated or May Be associated with American Indian, Black, Japanese, LGBTQ, Filipino, Latino (a,e), and Chinese American Communities in relation to Environmental Justice Burden Areas (Housing Element 2022 Update)

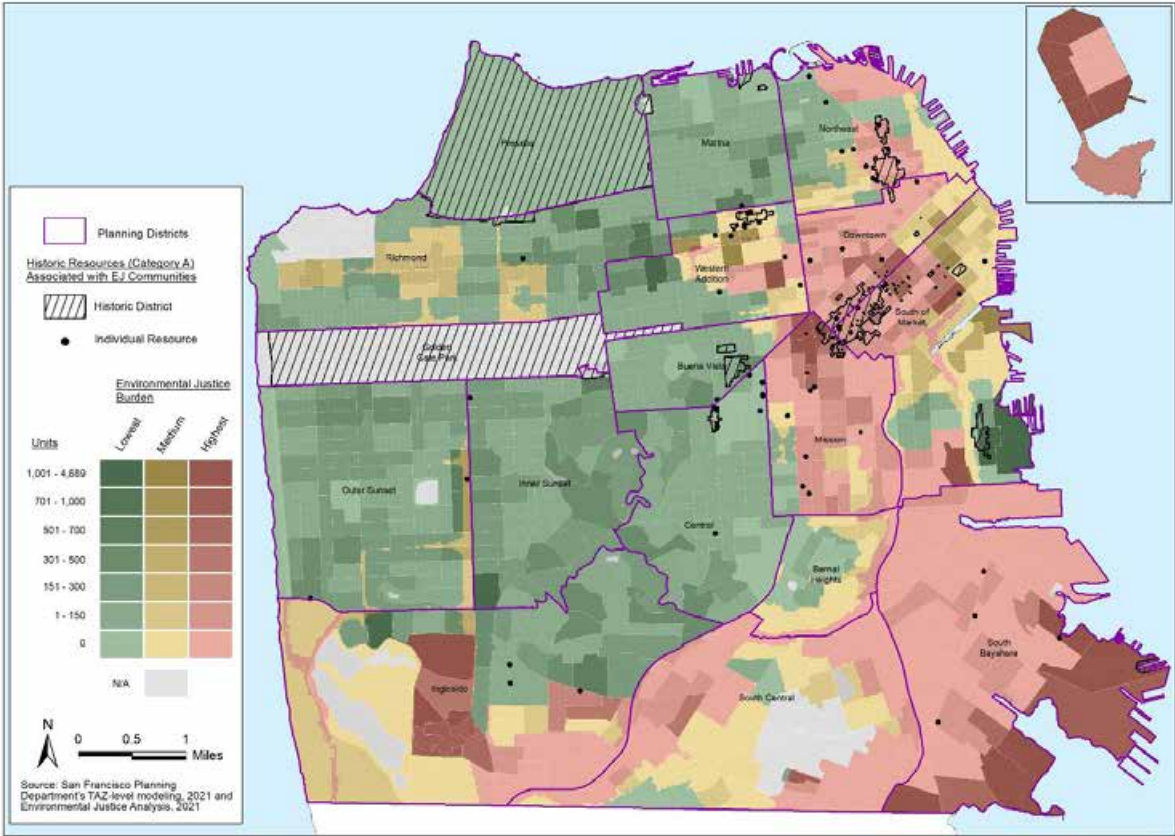
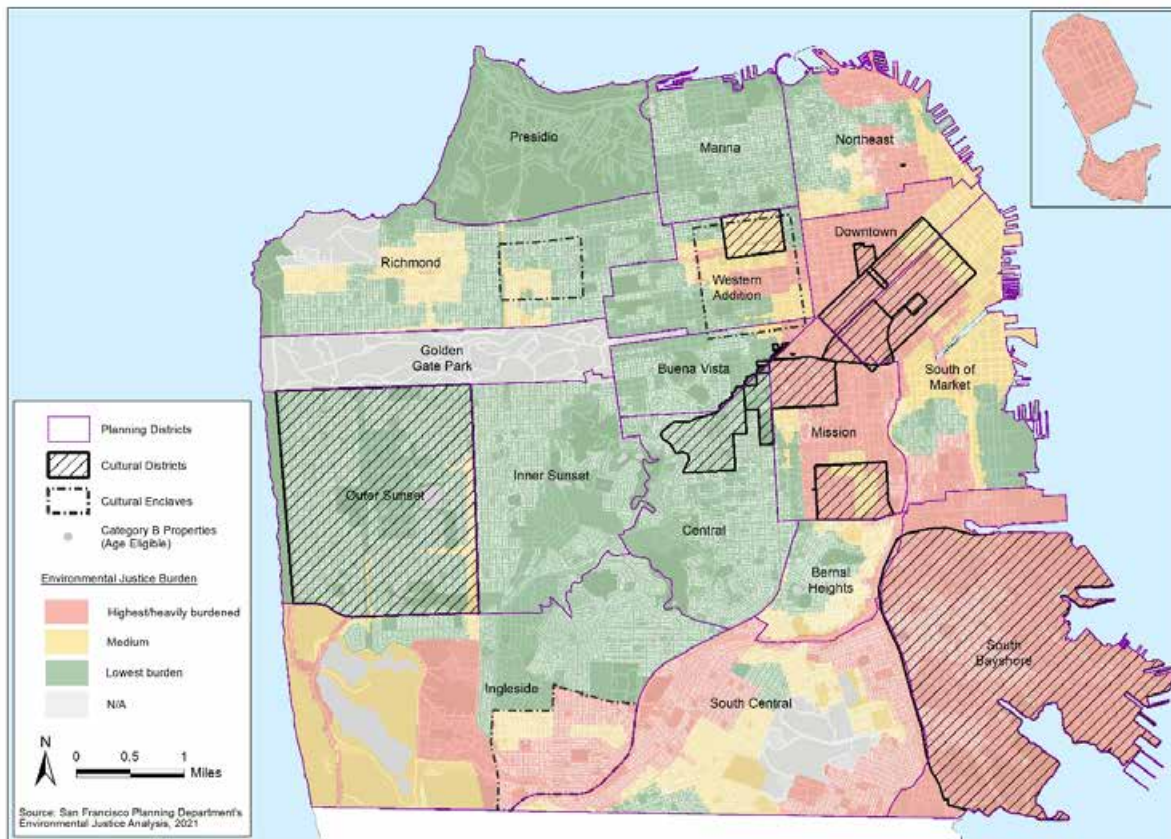


Figure 6, *Age-Eligible Historic Resources (Category B), Cultural Districts, and Enclaves* identifies age-eligible resources (Category B properties), while also highlighting San Francisco's cultural districts and enclaves.

Figure 6: Age-Eligible Historic Resources (Category B), Cultural Districts, and Enclaves



As shown in Table 1 and Figure 6, there are more age-eligible properties (Category B) than any other category. This is especially evident outside of the northeast portions of San Francisco. Thus, housing growth targeted outside the northeast portions, regardless of whether the update occurs, will overlap with planning districts that have high concentrations of age-eligible properties as shown in Figure 6. That is the case with or without the Housing Element 2022 Update. Thus, the Housing Element Update may affect yet-to-be-identified historic resources that may have associations with American Indian, Black, Japanese, LGBTQ, Filipino, Latino (a,e), and Chinese American Communities.

The Housing Element Update would target substantial housing growth in cultural districts and enclaves identified in the Richmond, Inner Sunset, and Outer Sunset planning districts and moderate growth in the Western Addition Planning District, which includes the Japantown Cultural District. The Housing Element Update would result in slightly less housing growth in the South Bayshore planning district, which includes the African American and Arts Cultural District, and is in the highest burden area.

Question 3b Finding: The Housing Element Update targets housing growth to areas in lower environmental justice communities without substantial concentrations of historic resources that have or may have associations with American Indian, Black, Japanese, LGBTQ, Filipino, Latino (a,e), and Chinese American communities, although potential historic resources associated with these communities are likely present in those areas. Future historic resource identifications in these areas could advance and/or conflict with the racial and social equity goals of the Housing Element Update. It is unclear if such conflicts would occur.

The question of how the Housing Element Update would be affected by historic resources is complex. Data is incomplete, but the planning department is attempting to answer the question here briefly.

The Housing Element Update includes many policies to elevate cultural expression and invest in cultural anchors for communities harmed by past discriminatory actions. Cultural anchors may mean businesses, non-profits, community and cultural centers and spaces, and residential enclaves. The identification of cultural anchors and other properties associated with marginalized communities as historic resources may lead to additional investments, qualify them for tax breaks or other preservation incentives²² (e.g., historic building code or Mills Act), and add regulatory protections or processes to prevent harm to them (e.g., demolition), among other items. Future historic resource designations could protect, preserve, and honor cultural anchors for specific cultural or ethnic groups that have been discriminated against, displaced, and oppressed. In turn, these anchors could stabilize these communities. Such historic resource identification therefore could serve similar goals regarding preserving housing to avoid displacement as elevated in Housing Element Update policies.

Conversely, the same regulatory protections and processes associated with historic resource designations that can protect and preserve cultural anchors could also constrain new housing in some situations, which may conflict with goals around fostering racial and social inclusive neighborhoods. This is because any regulation that adds process or requirements could constrain new housing.

Historic resources are broadly defined under state laws. As discussed above, under CEQA, historic resources are those listed in, or determined to be eligible for listing in, the California register or local register, or if a CEQA lead agency (like the planning department) determines a resource is historic based on substantial evidence. However, both the National and California registers allow for community-based nominations of individual properties and districts to those registers, with the result that the city is not the only entity that plays a role in identifying historic resources in San Francisco.²³

The presence of a historic resource does not prevent a residential project from moving forward by law. But it could do so in effect. For example, the presence of a historic resource could substantially increase the CEQA review process, such as requiring an Environmental Impact Report (EIR) and/or mitigation measures that require sponsors to explore potential feasible ways to avoid or reduce the

²² For information on preservation incentives, see [Preservation Incentives | SF Planning](#).

²³ A resource listed in or formally determined eligible for listing in the National Register automatically is listed in the California Register and therefore meets CEQA's definition of a historical resource. See section 4.2 Cultural Resources, Regulator Framework in the Housing Element 2022 Update EIR for an overview of National and California registers.

project impact to the historic resource.²⁴ Some property owners may determine it is infeasible to go through this process and/or to change their project to avoid or reduce the project impacts to historic resources. Additionally, California Senate Bill 35 (2017) and California Senate Bill 9 (2021) are bills aimed at adding housing, but their applicability is excluded to some projects containing or impacting some types of historic resources, such as those formerly listed on the National or California registers. Therefore, the formal identification of historic resources could limit the applicability of such legislation for some housing projects.

The Housing Element 2022 Update would shift and add overall housing growth over the next 30 years to the lowest environmental burden areas (see Figure 5). Generally, the lowest environmental burden areas have a similar concentration of known historic resources as the highest environmental burden areas (Table 1 and Findings 2). Additionally, known historic resources associated or likely associated with communities of color and marginalized communities are primarily in the highest burden areas, and are slightly less likely to be impacted by the Housing Element Update (see Figure 5). However, based on the above analysis, the planning department's determination is that potential historic resources (Category B) associated with communities of color and marginalized communities would be distributed across the city, and therefore, could be impacted by future development resulting from the Housing Element Update. It is unclear the effect such historic resource evaluations could have on housing growth in the lowest environmental burden areas based on the projections for the Housing Element Update.

In summary, future historic resource designations could advance racial and social equity goals of the Housing Element Update if such designations protect and preserve cultural anchors or housing for specific cultural or ethnic groups that have been discriminated against, displaced, and oppressed. Conversely, future historic resource designations could conflict with racial and social equity goals of the Housing Element Update if such designations preclude housing growth that serve to foster racial and social inclusive neighborhoods in the lowest environmental burden areas and redirect such demand elsewhere. It is unclear if such conflicts would occur.

Recommendations to the Housing Element 2022 Update

The department based the findings and associated analysis herein on draft 3 of the Housing Element 2022 Update (March 2022). The department released draft 4 of the update in October 2022. The department used the findings and associated analysis to identify recommendations to draft 4 of the update, as described below. This includes changes that the department incorporated into the update considered for Planning Commission adoption in December 2022.

Based on the above analysis, recommendations include the following edits to Housing Element Update actions 4.5.10 (formerly 42j) and 4.5.11 (formerly 42k) and the addition of a new action, action 4.5.12. Edits are shown in ~~strike through~~ and underline to the Housing Element Update actions:

Action 42j (4.5.10). Complete the Citywide Cultural Resources Survey, including the citywide historic context statement, with ongoing community engagement to identify important individual historic or cultural resources and districts, prioritizing engagement with American Indian, Black, Japanese, Filipino, and other communities directly harmed by discriminatory government actions.

²⁴ See section 4.2, Housing Element 2022 Update EIR for example of such mitigation measures.

Action 42k (4.5.11). Complete the Heritage Conservation Element of the General Plan in order to bring clarity and accountability to the City's role in sustaining both the tangible and intangible aspects of San Francisco's cultural heritage, prioritizing engagement with American Indian, Black, Japanese, and Filipino communities, and other communities directly harmed by past discriminatory actions during completion of the element.

Proposed new action (4.5.12): Consider the effects on housing in balance with the Department's racial and social equity goals from any recommendation of approval, disapproval, or modification of landmark designations or historic district designations, or approval of substantive new review processes or requirements for historic resources.

Recommendations for Implementation

The following identifies recommendations for implementation of the Housing Element Update over the next 30 years. No further revisions to the actions are recommended; instead, these recommendations are intended to further guide and inform the implementing actions in the future.

Recommendation Built Environment-1: *Assess process and criteria for existing known historic resources and potential new historic resources.*

As discussed above in existing conditions, historic resources have not been identified equitably. The planning department is moving towards improving standards and processes for identifying resources more equitably. In the past, historic preservation efforts have been focused on "tangible cultural resources" – buildings, sites, objects, etc. – in a manner that generally valued high architectural styles more than resources associated with events, people, or communities.

The city is conducting a citywide survey, SF Survey, which aims to document San Francisco's architectural heritage while elevating the need to acknowledge the intangible aspects of the city's culture. In consultation with community members, the survey will evaluate age-eligible properties (category B) for not just architecture, but also cultural and social associations. The results of SF Survey, which is scheduled for completion in 2026/2027, will help guide the planning department's decision-making for future designations and other heritage-based work. Through SF Survey, the planning department is auditing the process and criteria it and its consultants use to evaluate historic resources with a racial and social equity lens. This audit, combined with robust community engagement and diverse thematic and cultural historic context statements, is shifting the planning department's process and criteria in the identification of new historic resources. The information gathered through these processes will also assist the department to re-assess whether existing resources reflect updated process and criteria, and update existing resources designations, as necessary.

In support of the Housing 2022 Element Update and the citywide historic resource survey, the planning department has developed the following recommendations to better understand both the

benefits and burdens of identifying historic resources within communities:

- Further analyze the historic resource identification process and criteria used to evaluate historic resources with an environmental justice lens, and update criteria based on the results of this analysis.
- Further analyze existing identified historic resources and their associations to better understand the historic disparity in how resources are identified and evaluate the status of historic resources associated with discriminatory actions.
- Continue to prioritize diversifying the perspectives and voices when identifying historic resources as part of the SF Survey.
- Address the legacy of exclusion of historic preservation by meeting with communities, prioritizing Black, American Indian, Japanese, LGBTQ, Filipino, Latino (a,e), Chinese American, and Pacific Islander communities, and find opportunities to expand historic preservation opportunities to these communities and educate larger audiences.
- Preserve a greater diversity of resources through traditional means of protection, but also explore alternate means of documentation and celebration of culturally significant resources.
- Continue to review local legislative procedures associated with historic resources that may create bureaucratic and financial burdens that limit housing development in communities with the highest environmental justice burden.
- Evaluate if the recognition of historic resources is useful to stabilize communities with the highest environmental justice burden.

These recommendations aim to continue the planning department's work in prioritizing the diversity of perspectives and voices in identifying potential new historic resources and centering racial and social equity in such identification pursuant to HPC Resolution 1127. These recommendations will also assess if existing historic resources reflect updated process and criteria. These recommendations will likely take many years to fully implement, specifically as SF Survey is not aimed to conclude until 2026/2027, and may require changes to both planning department policies and procedures and to CEQA.

Appendix C.

Transportation – Environmental Justice Informational Analysis

Memorandum

Date: April 7, 2022

To: Jenny Delumo, Liz White, and Wade Wietgreffe, San Francisco Planning Department

From: Kevin Zamzow-Pollock, Teresa Whinery, and Taylor McAdam, Fehr & Peers

Subject: San Francisco Housing Element Transportation Equity Analysis

SF20-1097

The purpose of this memorandum is to compare transportation-related outcomes for the three Environmental Justice (EJ) burden geographies defined by the San Francisco Planning Department (Planning): lowest burden medium burden, and highest burden. The data analysis is based on outputs from the Housing Element 2022 Update model runs using the San Francisco County Transportation Authority's (SFCTA) SF-CHAMP model.¹

The memorandum presents draft results for the following topic areas:

- Vehicle Volumes
- Safety
- Accessibility
- Travel Time

Vehicle Volumes

Table 1: Daily Vehicle Volumes Per Mile - All San Francisco Roads

EJ Geography	<i>2020</i>	<i>2050 Baseline</i>	<i>2050 Proposed Action</i>	<i>% Change: 2020 to 2050 Baseline</i>	<i>% Change: 2020 to 2050 Proposed Action</i>
<i>Highest Burden Area</i>	64,700	71,900	74,800	11.1%	15.6%
<i>Medium Burden Area</i>	54,300	59,100	63,100	8.8%	16.2%
<i>Lowest Burden Area</i>	36,500	39,400	44,700	7.9%	22.4%

Note: Daily vehicle volumes are normalized by the sum of bi-directional center-line miles in each EJ geography.

¹ The Housing Element 2022 Update transportation consultant team post-processed the SF CHAMP modeling outputs and documented their process and findings in the *San Francisco Housing Element 2022 Update: Transportation Model Results Report* (February 2022).

The vehicle volumes per road mile are greatest within the highest burden area under all scenarios. This metric sees the most growth in the highest burden area between 2020 and 2050 Baseline, but the least growth between 2020 and the 2050 Proposed Action.

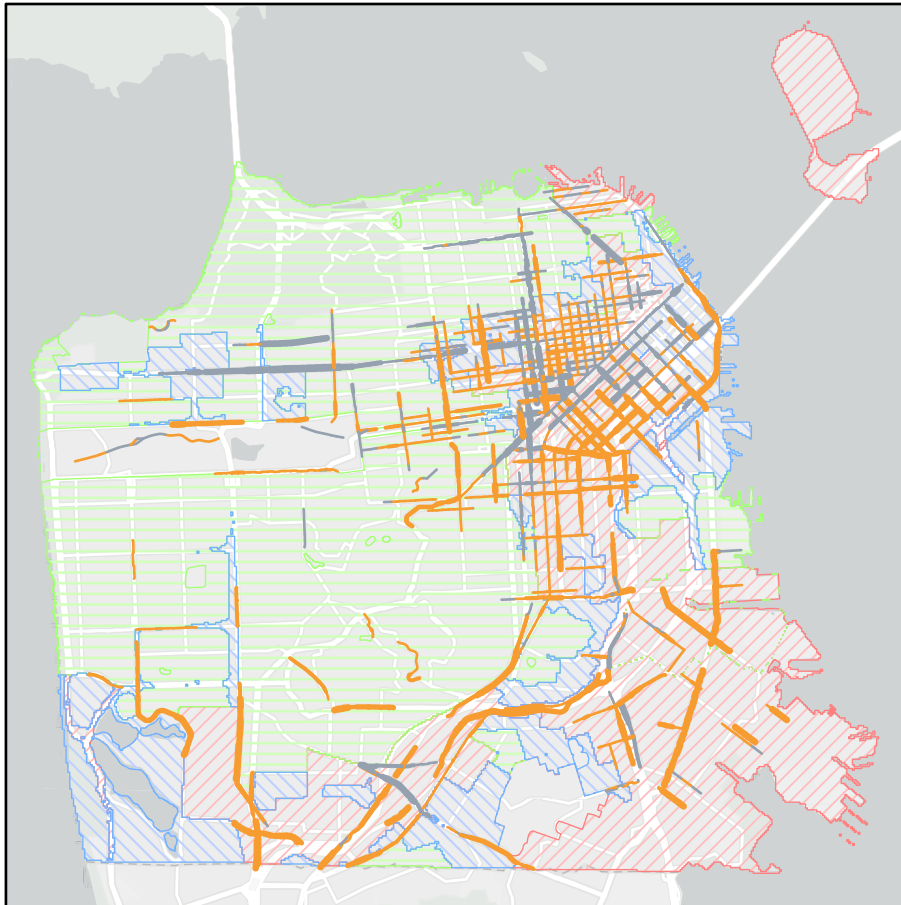
Safety

Vehicle volumes on the High Injury Network are used as a proxy for understanding the safety outcomes for the different EJ geographies. Vehicle volumes per road mile are greatest in the highest burden area under the 2050 Baseline but lowest under the 2050 Proposed Action. The growth between 2020 and 2050 Proposed Action is still highest in the highest burden area, but similar to the growth rate in the lowest burden area.

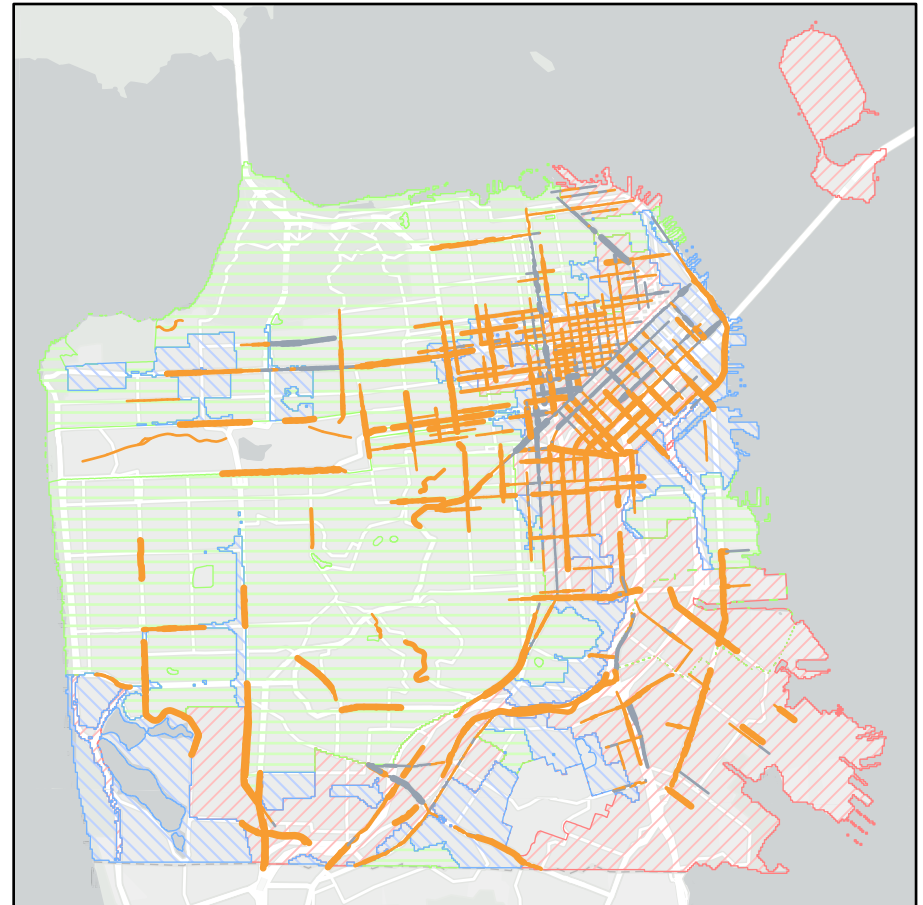
Table 2: Daily Vehicle Volumes Per Mile - Only High Injury Network Roads

EJ Geography	<i>2020</i>	<i>2050 Baseline</i>	<i>2050 Proposed Action</i>	<i>% Change: 2020 to 2050 Baseline</i>	<i>% Change: 2020 to 2050 Proposed Action</i>
<i>Highest Burden Area</i>	159,100	170,100	178,800	6.9%	12.4%
<i>Medium Burden Area</i>	164,500	167,900	181,500	2.1%	10.3%
<i>Lowest Burden Area</i>	166,400	167,900	186,300	0.9%	11.9%

Figure 1 shows the change in volume across the full High Injury Network.



2020 Conditions to 2050 Baseline



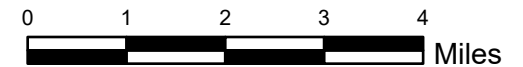
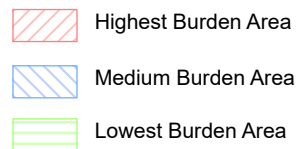
2020 Conditions to 2050 Proposed Action

Vehicle Volume on SF High Injury Network

Change in Daily Vehicle Volume



Environmental Justice Burden Geographies



Source: SF-CHAMP, San Francisco County Transportation Authority 2022

Accessibility

Accessibility measures the number of things you can get to in a set amount of time. This analysis focused on access to jobs during the busiest AM commute period and the midday period.

Table 3: Jobs Accessible Within 30 Minutes (AM Period)

	2020 Conditions	2050 Baseline	2050 Proposed Action	% Change 2020 to 2050 Baseline	% Change 2020 to Proposed Action	% Change 2050 Baseline to Proposed Action
By Transit	234,100	303,800	280,500	30%	20%	-8%
<i>Highest Burden Area</i>	301,600	347,500	342,100	15%	13%	-2%
<i>Medium Burden Area</i>	267,100	394,800	376,900	48%	41%	-5%
<i>Lowest Burden Area</i>	173,300	219,600	198,100	27%	14%	-10%
By Car	1,017,200	1,060,700	1,004,800	4%	-1%	-5%
<i>Highest Burden Area</i>	1,097,700	1,093,700	1,051,200	0%	-4%	-4%
<i>Medium Burden Area</i>	1,084,200	1,163,900	1,100,400	7%	1%	-5%
<i>Lowest Burden Area</i>	933,600	981,500	934,200	5%	0%	-5%
By Walking or Biking	140,700	161,600	143,900	15%	2%	-11%
<i>Highest Burden Area</i>	208,500	211,600	206,300	1%	-1%	-3%
<i>Medium Burden Area</i>	185,300	240,400	220,100	30%	19%	-8%
<i>Lowest Burden Area</i>	75,100	76,400	68,100	2%	-9%	-11%

Table 4: Jobs Accessible Within 60 Minutes (AM Period)

	2020 Conditions	2050 Baseline	2050 Proposed Action	% Change 2020 to 2050 Baseline	% Change 2020 to Proposed Action	% Change 2050 Baseline to Proposed Action
By Transit	833,800	1,021,900	1,002,400	23%	20%	-2%
<i>Highest Burden Area</i>	865,900	1,048,000	1,041,900	21%	20%	-1%
<i>Medium Burden Area</i>	868,900	1,092,600	1,076,100	26%	24%	-2%
<i>Lowest Burden Area</i>	797,200	964,200	945,100	21%	19%	-2%
By Car	2,353,700	2,468,500	2,371,400	5%	1%	-4%
<i>Highest Burden Area</i>	2,482,500	2,488,600	2,414,400	0%	-3%	-3%
<i>Medium Burden Area</i>	2,405,200	2,576,600	2,477,800	7%	3%	-4%
<i>Lowest Burden Area</i>	2,242,200	2,400,000	2,299,600	7%	3%	-4%
By Walking or Biking	355,000	401,200	375,100	13%	6%	-7%
<i>Highest Burden Area</i>	403,100	423,600	416,300	5%	3%	-2%
<i>Medium Burden Area</i>	408,600	499,500	478,800	22%	17%	-4%
<i>Lowest Burden Area</i>	299,700	334,700	305,500	12%	2%	-9%

Access to jobs increases between 2020 and 2050 Baseline for all modes and all EJ zones except for a small decrease in 30-minute car access for the highest burden area. Between 2020 and 2050 Proposed Action, all zones gain access to more jobs by transit while the lowest burden area and highest burden area both lose 30-minute access by car and walking/biking. The highest burden area also loses 60-minute access by car. In general, there is less access under 2050 Proposed Action than under 2050 Baseline, but the highest burden area loses the least ground by all modes compared to the medium and lowest burden areas. The 2050 Proposed Action offers less jobs access than the 2050 Baseline because the Proposed Action locates more people in the western neighborhoods which are farther from the densest jobs centers.

Figures 2-4 show the difference in jobs accessible within 30 minutes across the city in the AM period by each mode.

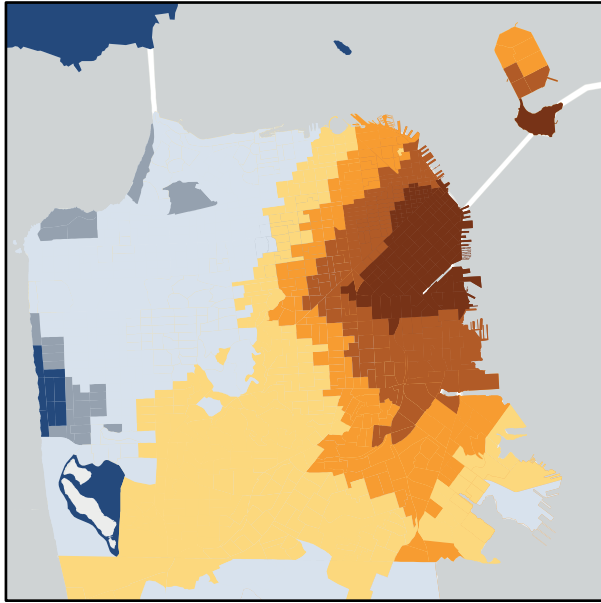
The same trends generally hold during the midday period. As in the AM period, the highest burden area loses less access than the medium and low burden areas with implementation of the Proposed Action as compared to the 2050 Baseline. Jobs accessibility by car is one notable difference between the midday and AM accessibility results. The 60-minute jobs accessibility by car improves with the Proposed Action as compared to the 2050 Baseline – this is true for all EJ geographies. The 30-minute jobs accessibility also improves with the Proposed Action as compared to the 2050 Baseline for the highest and lowest burden areas. These patterns are illustrated in Tables 5 and 6, below.

Table 5: Jobs Accessible Within 30 Minutes (Midday Period)

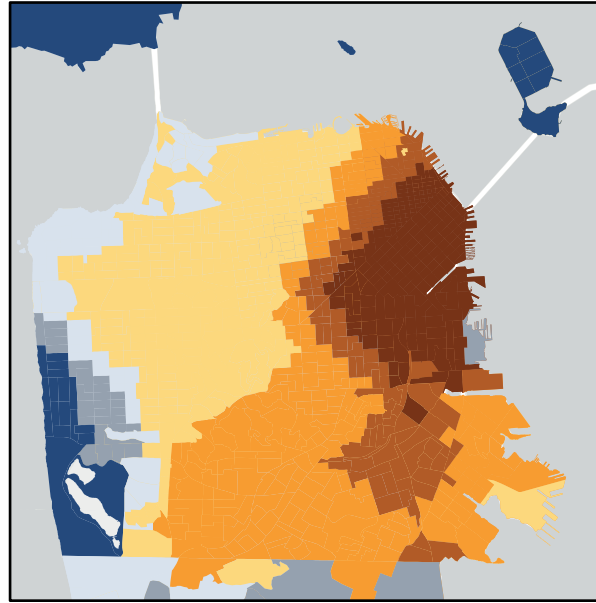
	2020 Conditions	2050 Baseline	2050 Proposed Action	% Change 2020 to 2050 Baseline	% Change 2020 to Proposed Action	% Change 2050 Baseline to Proposed Action
By Transit	217,000	268,600	250,500	24%	15%	-7%
<i>Highest Burden Area</i>	293,400	325,300	321,300	11%	10%	-1%
<i>Medium Burden Area</i>	258,600	352,300	340,300	36%	32%	-3%
<i>Lowest Burden Area</i>	146,600	174,600	163,400	19%	11%	-6%
By Car	1,026,000	1,061,100	1,056,000	3%	3%	0%
<i>Highest Burden Area</i>	1,106,300	1,100,100	1,111,300	-1%	0%	1%
<i>Medium Burden Area</i>	1,090,600	1,161,700	1,145,700	7%	5%	-1%
<i>Lowest Burden Area</i>	943,600	977,200	980,800	4%	4%	0%
By Walking or Biking	140,700	161,600	143,900	15%	2%	-11%
<i>Highest Burden Area</i>	208,500	211,600	206,300	1%	-1%	-3%
<i>Medium Burden Area</i>	185,300	240,400	220,100	30%	19%	-8%
<i>Lowest Burden Area</i>	75,100	76,400	68,100	2%	-9%	-11%

Table 6: Jobs Accessible Within 60 Minutes (Midday Period)

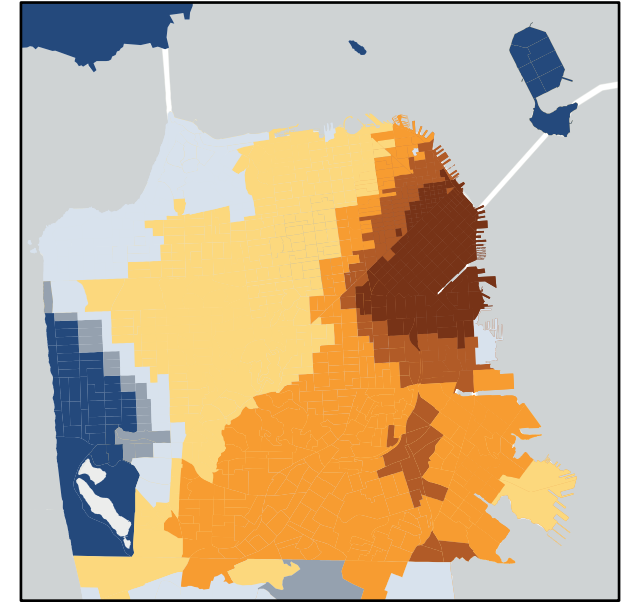
	2020 Conditions	2050 Baseline	2050 Proposed Action	% Change 2020 to 2050 Baseline	% Change 2020 to Proposed Action	% Change 2050 Baseline to Proposed Action
By Transit	820,800	985,400	972,200	20%	18%	-1%
<i>Highest Burden Area</i>	862,400	1,018,600	1,016,000	18%	18%	0%
<i>Medium Burden Area</i>	864,500	1,052,200	1,040,500	22%	20%	-1%
<i>Lowest Burden Area</i>	774,000	922,200	913,700	19%	18%	-1%
By Car	2,585,500	2,645,500	2,688,700	2%	4%	2%
<i>Highest Burden Area</i>	2,759,500	2,704,600	2,775,800	-2%	1%	3%
<i>Medium Burden Area</i>	2,642,800	2,747,100	2,795,900	4%	6%	2%
<i>Lowest Burden Area</i>	2,439,700	2,541,200	2,582,700	4%	6%	2%
By Walking or Biking	355,000	401,200	375,100	13%	6%	-7%
<i>Highest Burden Area</i>	403,100	423,600	416,300	5%	3%	-2%
<i>Medium Burden Area</i>	408,600	499,500	478,800	22%	17%	-4%
<i>Lowest Burden Area</i>	299,700	334,700	305,500	12%	2%	-9%



2020 Conditions



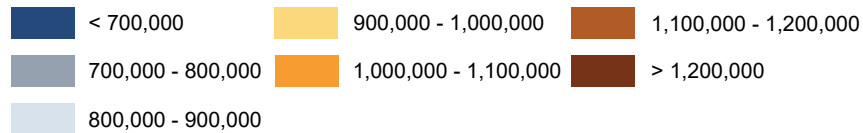
2050 Baseline



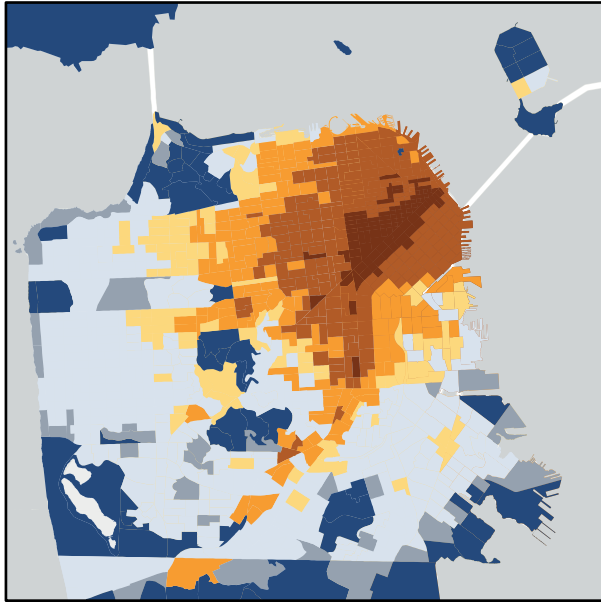
2050 Proposed Action

Job Accessibility by Car

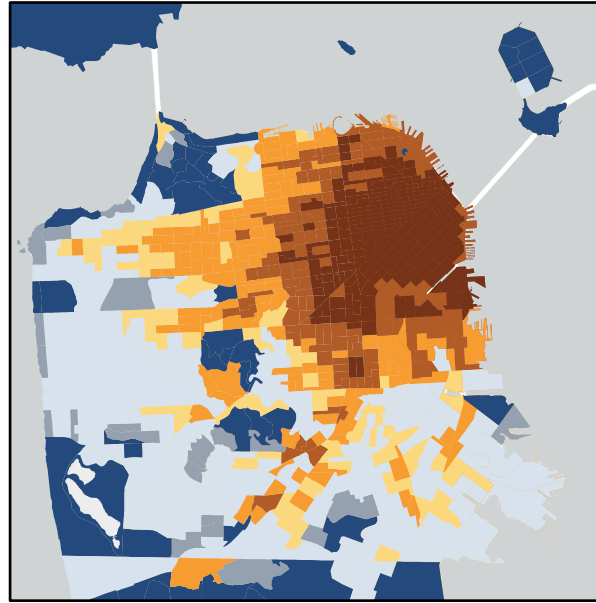
Jobs Accessible Within 30 Minutes in the AM Peak



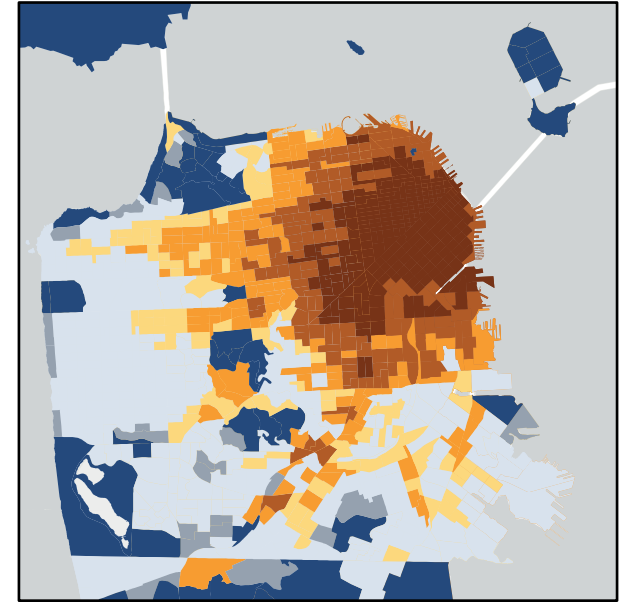
Source: SF-CHAMP, San Francisco County Transportation Authority 2022



2020 Conditions



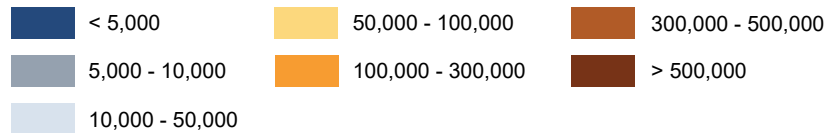
2050 Baseline



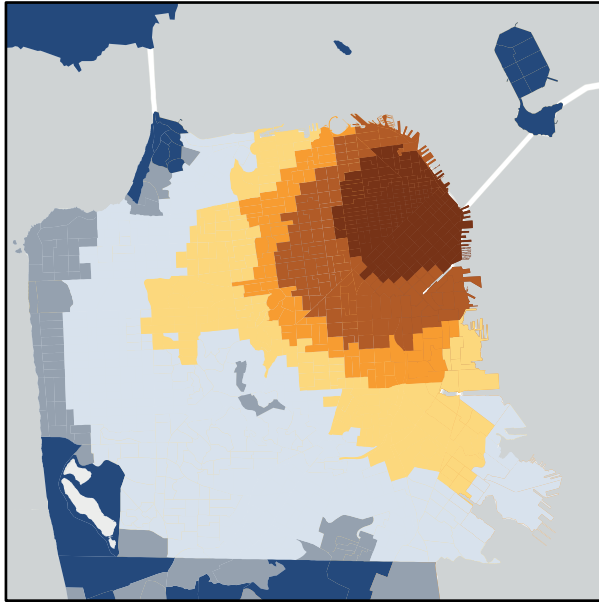
2050 Proposed Action

Job Accessibility by Transit

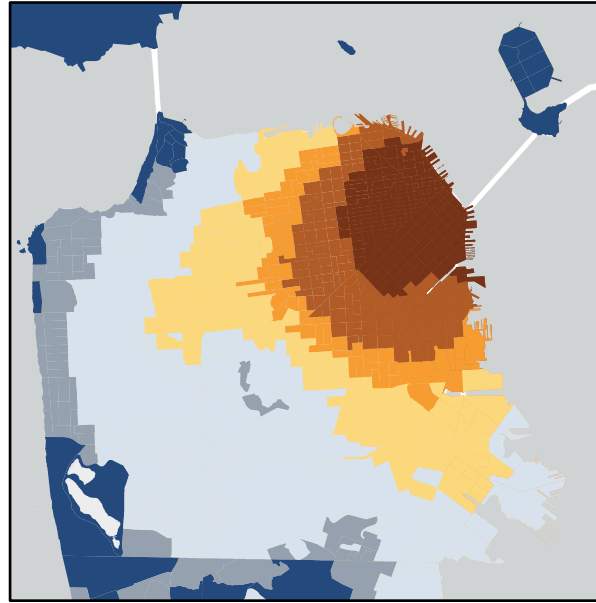
Jobs Accessible Within 30 Minutes in the AM Peak



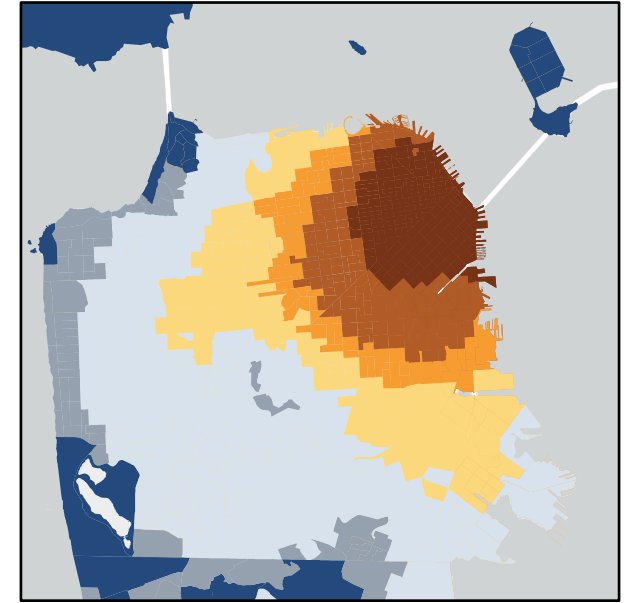
Source: SF-CHAMP, San Francisco County Transportation Authority 2022



2020 Conditions



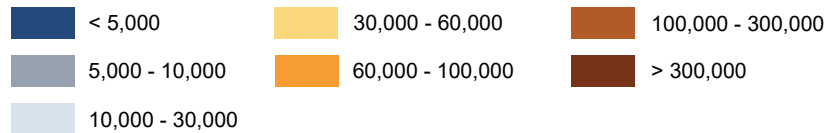
2050 Baseline



2050 Proposed Action

Job Accessibility by Active Modes

Jobs Accessible Within 30 Minutes in the AM Peak



Source: SF-CHAMP, San Francisco County Transportation Authority 2022

Travel Times

Travel times are an indication of how long it takes to get someplace and can be evaluated for different types of trips. SF-CHAMP divides travel activities across seven trip purposes:

- **Escort trips**, which includes picking up / dropping off other people. This includes trips such as walking a child to school, driving a relative to a doctor's appointment, or dropping a family member off at work.
- **Meals**, which includes travel to procure food or beverage away from home. This includes stops at a coffee shop on the way to work and traveling to a restaurant or bar.
- **Personal business**, which includes non-shopping errands and activities. This can include travel to doctor appointments, haircuts, banks, and other services.
- **School**, which includes travel to and from school, including K-12, community college, and university.
- **Shopping**, which includes all shopping trips for groceries, clothing, household necessities, and all other material goods.
- **Social**, which includes recreation, visits to friends and family, and group activities.
- **Work**, which includes all commutes to all job types.

The tables below show the average one-way travel times for the different types of activities that San Franciscans engage in, as calculated by the SF-CHAMP model, and in relation to income level. The numbers shown are averages, which means they skew towards longer trips. The averages include trips by all modes, allowing them to reflect disparities that may occur due to differences in auto access as well as differences in neighborhood walkability. The results of the analysis show that low-income households spend more time travelling in order to complete their daily business, across both the Baseline and Proposed Action. This reflects that lower income households may be more likely to live in areas of the city with fewer resources, and also that they are more transit reliant.

The Proposed Action increases travel times across all trip purposes except for escorting others; however, the change in these travel times is less than one minute for all trip purposes, and less than 30 seconds on average. For lower income households, the effect is lessened; they see less of an increase than higher income households. As a note, the 200% of poverty line threshold falls within the Extremely Low Income category for one-person households (<30% of SF Area Median Income), and the Very Low Income category for all other households (30% to 50% of SF Area Median Income).

Figure 5 shows the average one-way travel times from residential locations under the Proposed Action for three activities: school trips, shop trips, and work trips.

In addition, SF-CHAMP is able to capture changes in overall travel patterns due to the proposed land use changes. As discussed in the Transportation section of the Draft EIR, travel times on

certain transit lines and for vehicles will increase from point to point. However, over time, people generally change their travel patterns based on achieving a given purpose, rather than travelling to a precise location. In the future, individuals may on average choose to shop at locations closer to home to help reduce the time they spend traveling or will shift recreational activity to locations that are closer to home.

Table 7: Change in Travel Times by Income: 2050 Proposed Action vs. 2050 Baseline

2020 One-Way Average Travel Times			
	Households above 200% of Poverty Line	Households below 200% of Poverty Line	All Trips
Purpose			
Escorting Someone Else	14:33	16:39	15:00
Meals and Eating Out	15:01	17:06	15:27
Personal Business	16:21	19:29	17:03
School (K-12 and Higher Ed)	18:04	21:30	19:11
Shopping	15:26	17:57	16:01
Social Activities and Visits	14:17	17:32	14:57
Work	25:37	26:12	25:40
All Trips	19:12	19:35	19:16
2050 Baseline One-Way Average Travel Times			
	Households above 200% of Poverty Line	Households below 200% of Poverty Line	All Trips
Purpose			
Escorting Someone Else	15:11	17:05	15:33
Meals and Eating Out	15:39	17:16	15:58
Personal Business	17:01	19:50	17:37
School (K-12 and Higher Ed)	18:21	21:39	19:21
Shopping	15:51	18:10	16:22
Recreation and Social Activities	15:11	18:20	15:47
Work	25:55	26:08	25:56
All Trips	19:33	19:53	19:36

2050 Proposed Action One-Way Average Travel Times			
	Households above 200% of Poverty Line	Households below 200% of Poverty Line	All Trips
Purpose			
Escorting Someone Else	15:03	16:55	15:24
Meals and Eating Out	16:01	17:33	16:18
Personal Business	17:14	19:52	17:46
School (K-12 and Higher Ed)	18:28	22:05	19:31
Shopping	16:05	18:22	16:34
Social Activities and Visits	15:13	18:21	15:48
Work	26:51	26:43	26:51
All Trips	19:56	20:03	19:57
Change from 2050 Baseline to Proposed Action in One-Way Average Travel Times			
	Households above 200% of Poverty Line	Households below 200% of Poverty Line	All Trips
Purpose			
Escorting Someone Else	(00:08)	(00:10)	(00:09)
Meals and Eating Out	00:22	00:17	00:20
Personal Business	00:13	00:02	00:09
School (K-12 and Higher Ed)	00:08	00:26	00:10
Shopping	00:14	00:13	00:12
Social Activities and Visits	00:03	00:01	00:01
Work	00:57	00:34	00:55
All Trips	00:23	00:10	00:21

Table 8: Change in Travel Times by EJ Geography: 2050 Proposed Action vs. 2050 Baseline

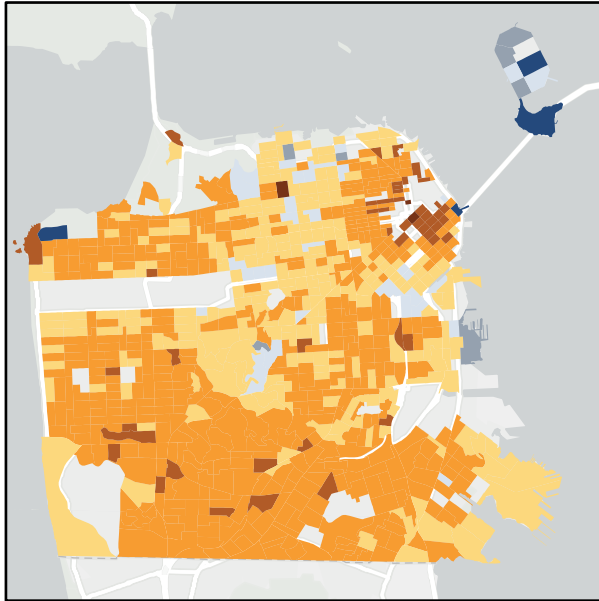
2020 One-Way Average Travel Times				
	High Burden Area	Medium Burden Area	Low Burden Area	All Trips
Purpose				
Escorting Someone Else	15:15	14:40	14:52	15:00
Meals and Eating Out	14:05	13:56	17:05	15:27
Personal Business	16:21	16:02	18:02	17:03
School (K-12 and Higher Ed)	18:50	18:45	19:46	19:11
Shopping	15:20	15:16	16:52	16:01
Social Activities and Visits	14:38	14:11	15:30	14:57
Work	24:04	23:25	27:33	25:40
All Trips	18:08	18:12	20:36	19:16
2050 Baseline One-Way Average Travel Times				
	High Burden Area	Medium Burden Area	Low Burden Area	All Trips
Purpose				
Escorting Someone Else	15:50	14:58	15:29	15:33
Meals and Eating Out	15:05	13:37	17:59	15:58
Personal Business	17:16	15:36	18:56	17:37
School (K-12 and Higher Ed)	19:17	17:49	20:17	19:21
Shopping	15:57	15:01	17:27	16:22
Social Activities and Visits	15:55	14:18	16:19	15:47
Work	25:09	22:16	28:20	25:56
All Trips	19:01	17:36	21:11	19:36
2050 Proposed Action One Way Travel Times				
	High Burden Area	Medium Burden Area	Low Burden Area	All Trips
Purpose				
Escorting Someone Else	15:43	15:03	15:13	15:24
Meals and Eating Out	15:01	14:18	18:05	16:18
Personal Business	17:09	16:04	18:54	17:46
School (K-12 and Higher Ed)	19:21	18:19	20:11	19:31
Shopping	15:53	15:29	17:33	16:34
Social Activities and Visits	15:51	14:28	16:13	15:48
Work	25:22	23:13	29:11	26:51
All Trips	19:01	18:07	21:25	19:57

Change from 2050 Baseline to Proposed Action in One-Way Average Travel Times				
	High Burden Area	Medium Burden Area	Low Burden Area	All Trips
Purpose				
Escorting Someone Else	(00:07)	00:05	(00:17)	(00:09)
Meals and Eating Out	(00:04)	00:41	00:06	00:20
Personal Business	(00:08)	00:28	00:01	00:09
School (K-12 and Higher Ed)	00:04	00:31	(00:05)	00:10
Shopping	(00:04)	00:28	00:07	00:12
Social Activities and Visits	(00:04)	00:10	(00:05)	00:01
Work	00:14	00:58	00:51	00:55
All Trips	00:00	00:31	00:14	00:21

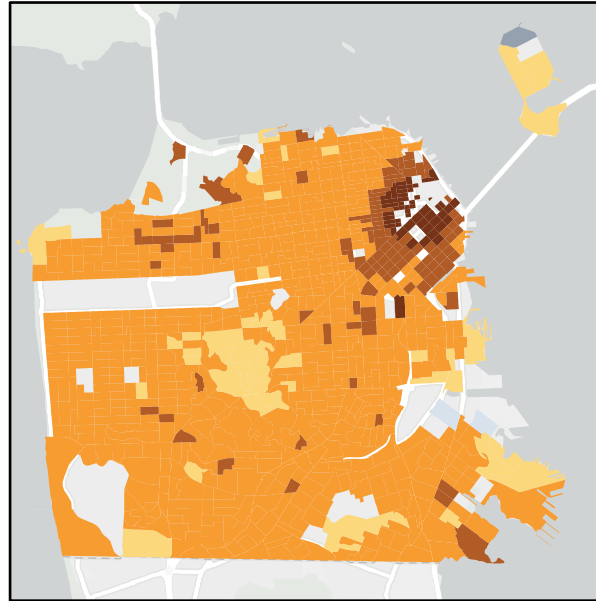
The second set of tables shows travel times by household location in zones based on varying level of environmental justice burden. In general, the highest burden zones are located in areas with strong transportation networks and more walkable neighborhoods, as they are located downtown and almost entirely east of Divisadero. Highest burden and moderate burden areas have lower average travel times compared to lowest burden zones, which tend to be located in areas with more single-family homes and less robust transit services, as well as areas farther from the central business district.

In addition, the highest burden area sees an overall decrease in travel times across most trip purposes under the Proposed Action. This indicates that these zones are less susceptible to increases in traffic congestion under the Proposed Action, likely due to having more robust transit access and more walkable and bikeable locations.

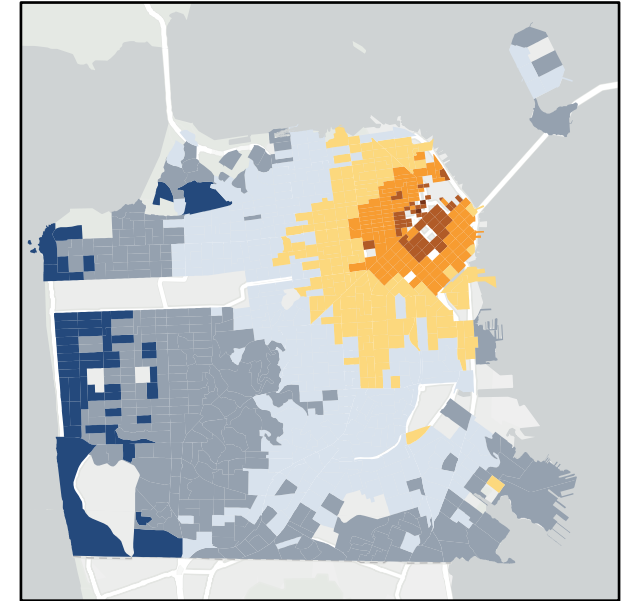
These tables also do not show the regional benefits in access and travel times; San Francisco is the densest and most transit-rich city in the Bay Area and locating additional households in San Francisco results in reduced travel times on a regional level. Furthermore, these additional households have more transportation options available to reach school, work, and shopping locations.



School Trips



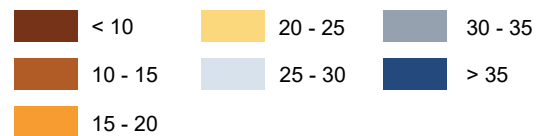
Shop Trips



Work Trips

Travel Time by Trip Type under the Proposed Action

Minutes of Travel Time



Source: SF-CHAMP, San Francisco County Transportation Authority 2022

Table 9: Average Travel Times by Income and Home Location (2050 Proposed Action)

	Highest Burden Area	Lowest Burden Area
School	19:21	20:11
Households above 200% PL	18:10	19:12
Households below 200% PL	21:21	23:58
Shopping	15:53	17:33
Households above 200% PL	15:19	17:00
Households below 200% PL	17:22	20:21
Work	25:22	29:11
Households above 200% PL	25:21	29:10
Households below 200% PL	25:33	29:26
Grand Total (across all trip types)	22:03	25:34

This final table shows how home location affects travel times for the lowest income households. The Proposed Action locates more lower income housing in areas of the city with medium to low scores in the environmental justice index compared to current conditions. While this table shows travel times under the 2050 Proposed Action conditions only, the trend is the same across all scenarios: very low income households located in areas of least environmental burden have the highest travel times of all households in the city. This reflects lower levels of auto access combined with a less dense urban environment, and increased distance from the densest and most walkable areas of the city. This trend illustrates that providing housing affordable to very low income families in high opportunity areas with less pollution may result in longer travel times, and more time spent in transit, for those families. Transportation burdens and travel times are merely one aspect of the City's policy outcomes, and as shown above, may not convey the full costs or benefits of the Proposed Action.

Appendix D.

Air Quality – Environmental Justice Informational Analysis

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MEMO

Project name **San Francisco Housing Element 2022 Update**
 Project no. **1690017135**
 To **San Francisco Planning Department**
San Francisco, California
 From **Taylor Vencill**
Michael Keinath
Cullen Williams-Freier
 Subject **San Francisco Housing Element 2022 Update - Racial and Social Equity Analysis of Air Quality**

September 28, 2022

1 Introduction

At the request of ICF International, Ramboll US Consulting, Inc. (Ramboll) conducted a racial and social equity analysis of air quality utilizing the citywide health risk assessment (HRA) results completed for the San Francisco Housing Element 2022 Update (referred to hereafter as “housing element update” or “proposed action”).

This technical memorandum presents a summary of the methodology utilized and provides the results of the air quality racial and social equity analysis.

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2 Methodology

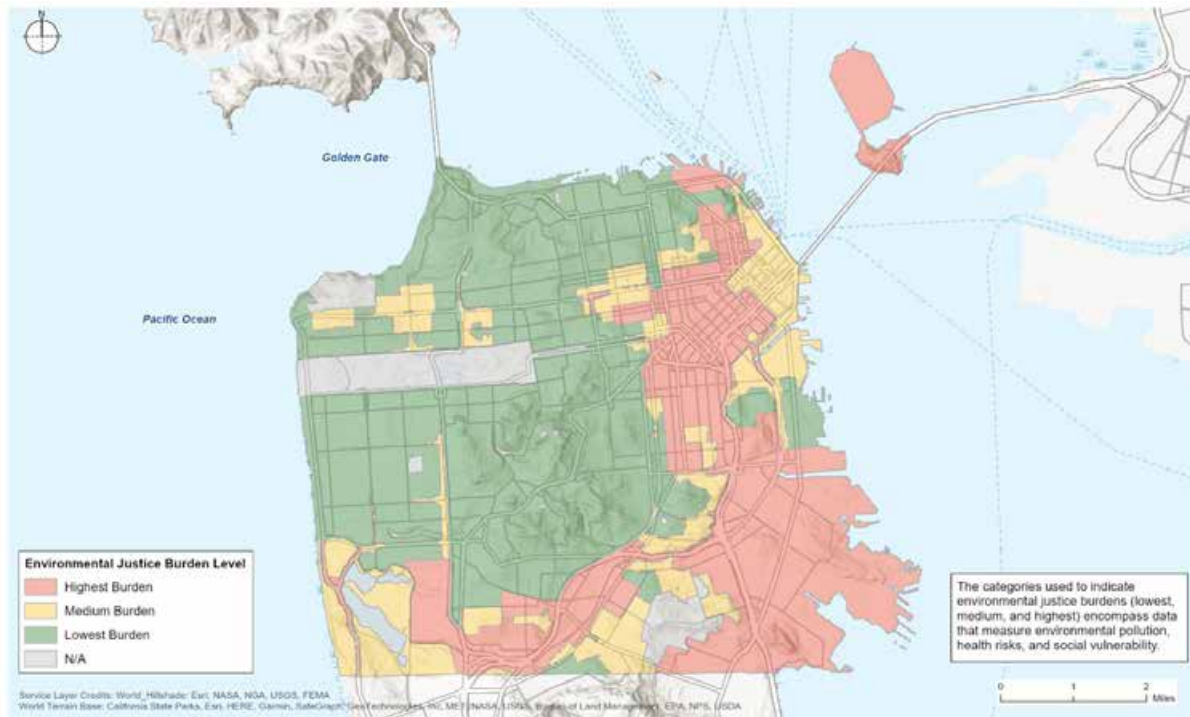
The San Francisco Planning Department used computer modeling to project the likelihood and pattern of development under the Housing Element 2022 Update. The output of this specific computer model provided the total number of housing units and jobs by transportation analysis zone, or TAZ. San Francisco is split into 981 TAZs - these zones vary in size from single city blocks in San Francisco's downcore core, to multiple blocks in outer neighborhoods, and in some cases, even larger zones in historically industrial areas such as the Hunters Point Shipyard area. As a result of this modeling, each TAZ contains housing unit counts for the following scenarios: 2020, 2050 Baseline, and Proposed Action 2050.

The categories used to indicate environmental justice burdens (lowest, medium, and highest) encompass data that measure environmental pollution, health risks, and social vulnerability. These burden levels are shown in Figure 2-1.¹

¹ Source: San Francisco Planning Department, Environmental Justice Communities Map, February 2022

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Figure 2-1. Environmental Justice Burden Areas: Highest Burden, Medium Burden, and Lowest Burden Areas

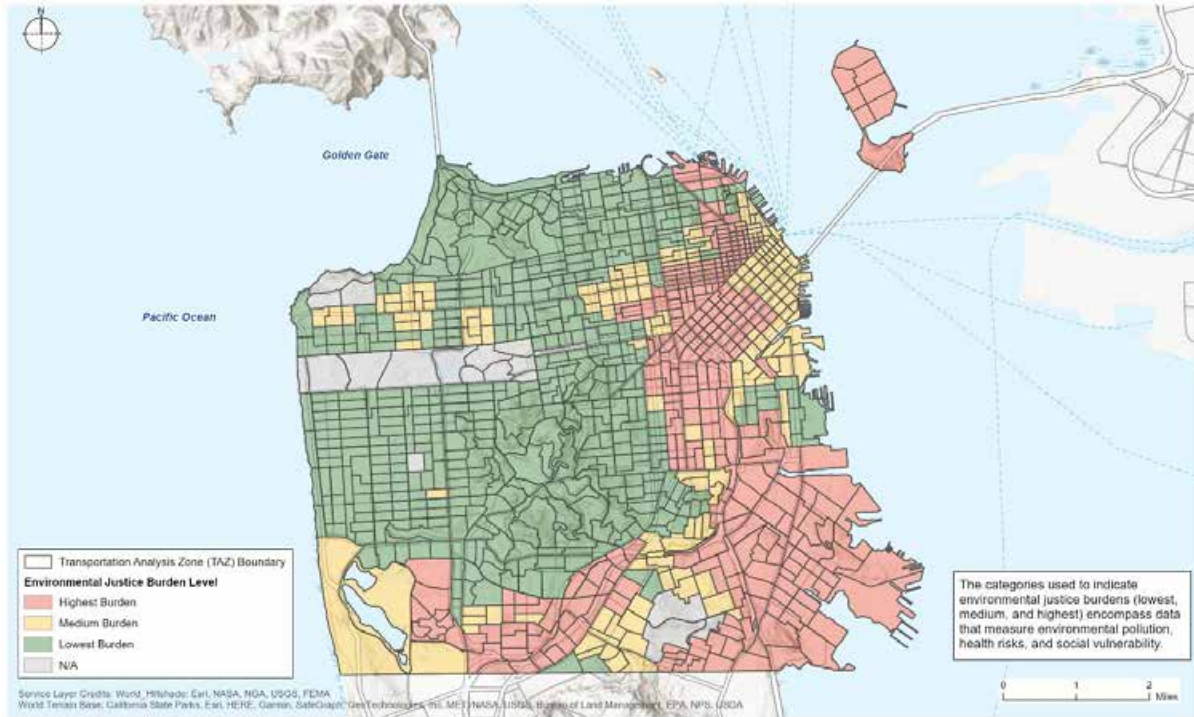


To determine the number of housing units located in areas of elevated air quality health risk within each environmental justice burden area, the following steps were taken.

Step 1. The transportation analysis zones were aligned with environmental justice burden areas to designate a burden level to each zone: lowest, medium, and highest. Designations were done based on a majority area approach within each TAZ. For example, if a given TAZ was 70% highest burden, 20% medium burden, and 10% lowest burden, the full TAZ area was assigned an environmental justice burden level of "highest". Resulting designations are shown in Figure 2-2.

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Figure 2-2. Transportation Analysis Zones Mapped to Environmental Justice Burden Areas



Step 2. Modeled cancer risk and $PM_{2.5}$ concentrations from roadway sources for 2020, 2050 Baseline, and Proposed Action 2050 were combined with modeled impacts from existing known sources of air pollution including permitted stationary sources, Caltrain passenger diesel locomotives, ships and harbor craft, and ferry boats. Modeled cancer risk and $PM_{2.5}$ concentrations from all sources other than on-road vehicles are reflective of the modeling performed under the 2020 San Francisco Citywide HRA, and do not reflect any changes in these emission sources that may occur in future years. Resulting total modeled cancer risk and $PM_{2.5}$ concentrations are shown in Appendix B of the Health Risk Assessment Results for Roadway Modeling memorandum (herein referred to as the "Roadway Modeling Memorandum"). Total $PM_{2.5}$ concentrations also incorporate a background concentration of $7.8 \mu g/m^3$, consistent with the 2020 San Francisco Citywide HRA.

Utilizing these total modeled cancer risk and $PM_{2.5}$ concentrations, 20-meter (m) buffers were generated around each receptor point modeled, within San Francisco Planning Districts². Areas of elevated air quality health risk were then identified utilizing the following criteria which align with the criteria the city uses to create the *air pollutant exposure zone*, pursuant to Health Code Article 38:

1. Cancer risk of 100 in a million or greater or $PM_{2.5}$ concentration of $10 \mu g/m^3$ or greater.
2. Cancer risk of 90 in a million or greater or $PM_{2.5}$ concentration of $9 \mu g/m^3$ or greater within health risk vulnerable zip codes (94102, 94103, 94110, 94124, and 94134).

² Planning Districts are grouping of census tracts and are used in various areas of the Planning process, mainly for analysis.

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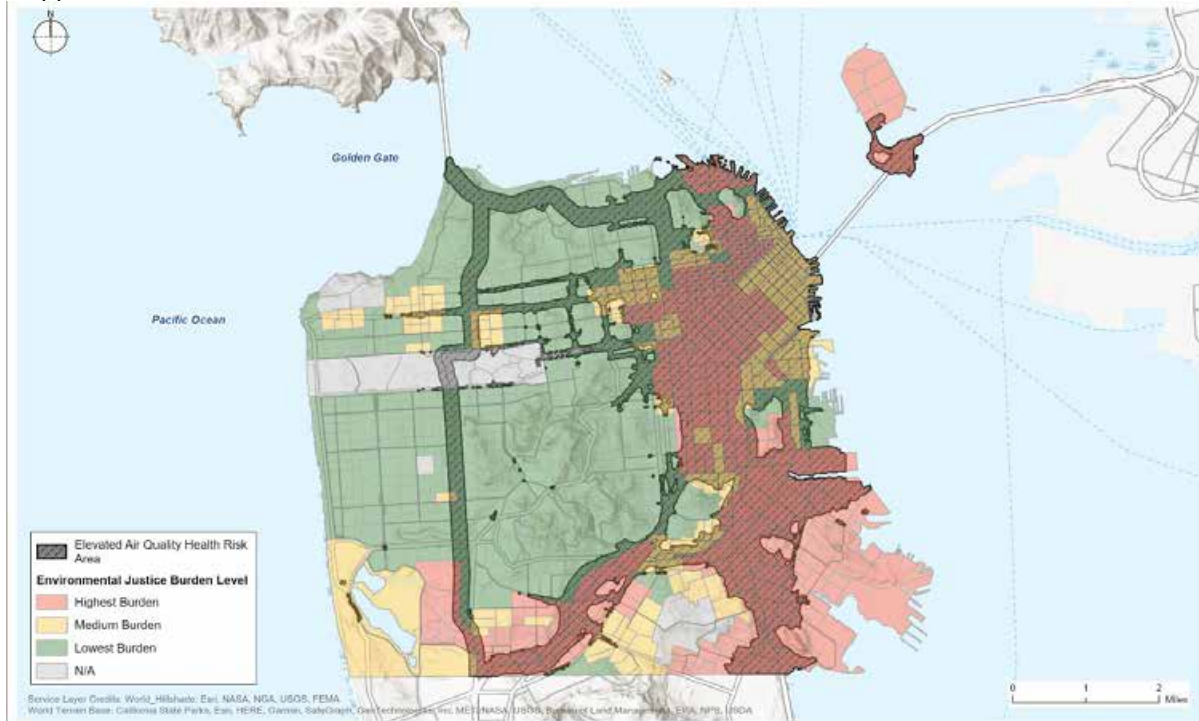
3. Areas located within 500 feet of a major freeway (I-280, I-80, U.S. 101, and U.S. 1).³

Step 3. Areas of elevated health risk were then overlaid on the mapped TAZs to determine what fraction of each TAZ overlaps with an elevated health risk area. Utilizing this fraction, housing unit counts within elevated health risk areas were then calculated and summed over the following environmental justice burden areas: highest burden, medium burden, and lowest burden. For example, if a TAZ designed as the highest burden level has 700 total units and 30 percent of the TAZ is located in an area of elevated air quality health risk, then 210 units ($210 \text{ units} = 0.30 \times 700 \text{ units}$) would be assigned as within an elevated air quality health risk area, within the highest burden environmental justice area. The remaining 490 units ($490 \text{ units} = 0.70 \times 700$) would be assigned as outside an elevated air quality health risk area, within the highest burden environmental justice area.

3 Results

The overlap of elevated air quality health risk areas and the transportation analysis zones, as mapped to Environmental Justice burden areas, is shown in Figures 3-1a through 3-1c below (for 2020, 2050 Baseline, and Proposed Action 2050, respectively). Resulting housing unit counts in each of the three Environmental Justice areas are shown in Table 3-1, and in Table 3-2 by percent. Table 3-3 summarizes the percent of housing units within elevated air quality health risk areas for each scenario.

Figure 3-1a. 2020, Overlap of Elevated Air Quality Health Risk Areas and Transportation Analysis Zones Mapped to Environmental Justice Burden Areas



³ For purposes of determining the 500 foot area around freeways, the freeway line segments were first buffered as follows: I-280, I-80, U.S. 101 were buffered 100 feet in each direction to represent an average roadway width of 200 feet; U.S. 1 was buffered 50 feet in each direction to represent an average roadway width of 100 feet. A 500 foot distance was then evaluated from these buffered areas to represent the distance from the edge of roadways.

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Figure 3-1b. 2050 Baseline, Overlap of Elevated Air Quality Health Risk Areas and Transportation Analysis Zones Mapped to Environmental Justice Burden Areas

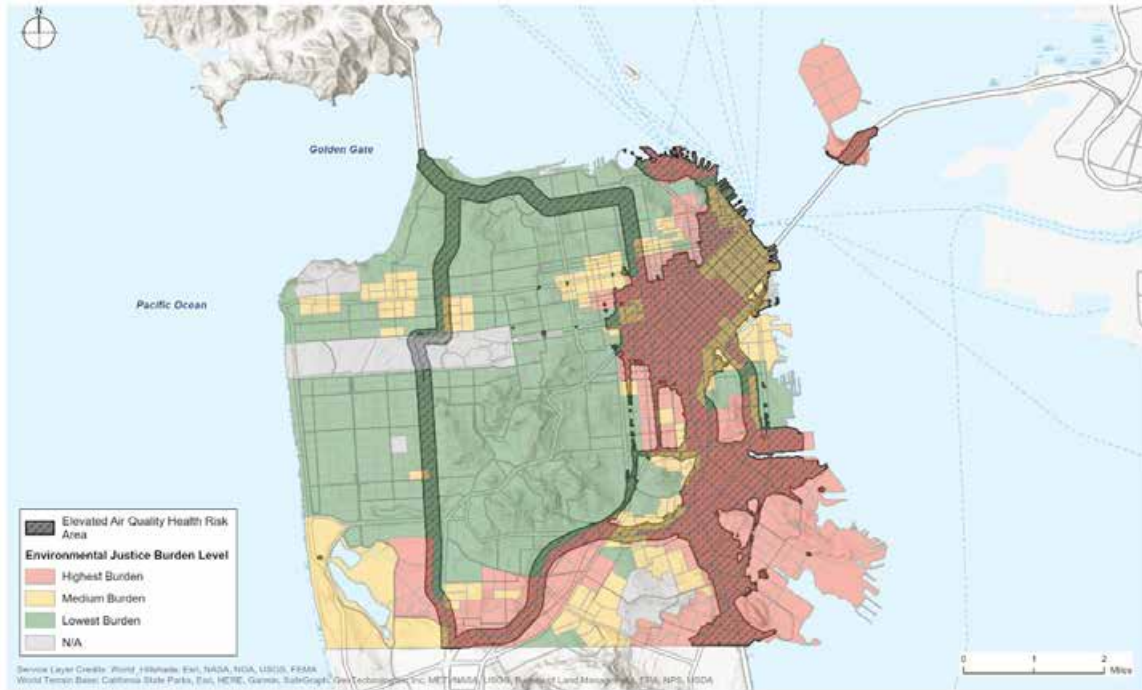
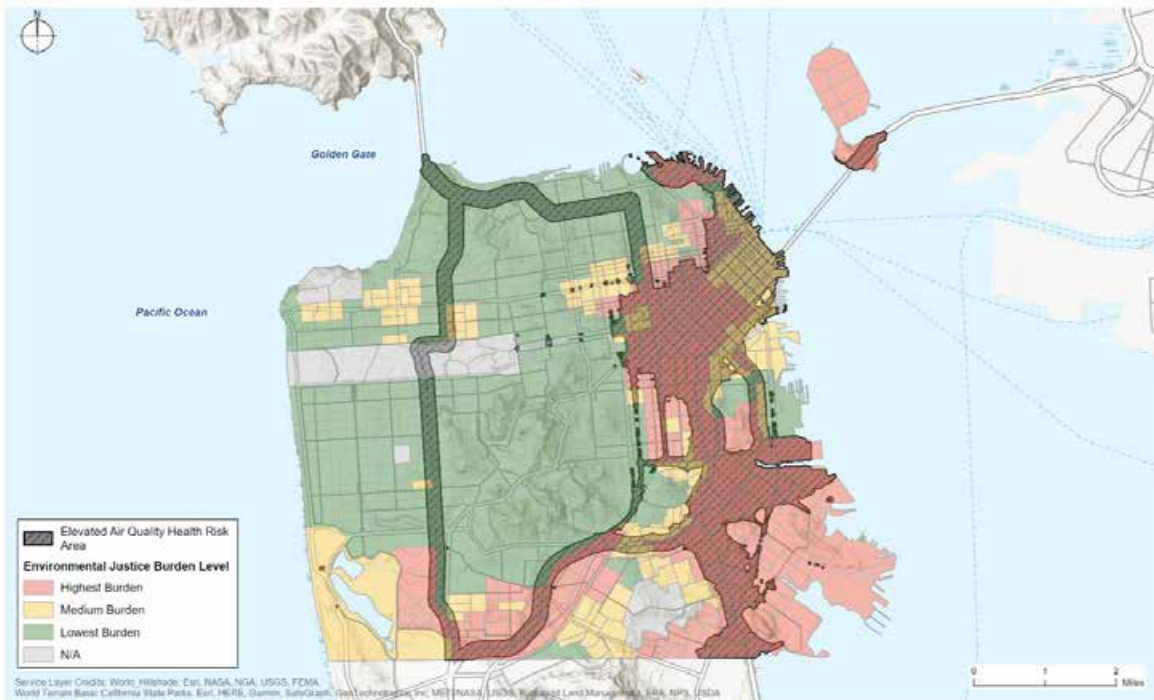


Figure 3-1c. Proposed Action 2050, Overlap of Elevated Air Quality Health Risk Areas and Transportation Analysis Zones Mapped Environmental Justice Burden Areas



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Table 3-1. Housing Units within Elevated Air Quality Health Risk Area, by Environmental Justice Burden Area

Modeled Scenario	Highest Burden		Medium Burden		Lowest Burden		TOTAL
	Within Elevated Air Quality Health Risk Area	Outside Elevated Air Quality Health Risk Area	Within Elevated Air Quality Health Risk Area	Outside Elevated Air Quality Health Risk Area	Within Elevated Air Quality Health Risk Area	Outside Elevated Air Quality Health Risk Area	
2020	103,883	33,070	49,362	27,040	48,439	144,953	406,747
2050 Baseline	104,330	102,794	40,013	53,333	23,172	184,787	508,429
Proposed Action 2050	101,168	100,696	37,000	57,909	31,442	230,084	558,299

Table 3-2. Percent of Housing Units in with Elevated Air Quality Health Risk Area, by Environmental Justice Burden Area

Modeled Scenario	Highest Burden		Medium Burden		Lowest Burden	
	Within Elevated Air Quality Health Risk Area	Outside Elevated Air Quality Health Risk Area	Within Elevated Air Quality Health Risk Area	Outside Elevated Air Quality Health Risk Area	Within Elevated Air Quality Health Risk Area	Outside Elevated Air Quality Health Risk Area
2020	25.5%	8.1%	12.1%	6.6%	11.9%	35.6%
2050 Baseline	20.5%	20.2%	7.9%	10.5%	4.6%	36.3%
Proposed Action 2050	18.1%	18.0%	6.6%	10.4%	5.6%	41.2%

Table 3-3. Percent of Housing Units within Elevated Health Risk Area

Modeled Scenario	% of units in San Francisco within Elevated Air Quality Health Risk Area	% of units in San Francisco outside Elevated Air Quality Health Risk Area
2020	49.6%	50.4%
2050 Baseline	32.9%	67.1%
Proposed Action 2050	30.4%	69.6%

Appendix E.

Noise – Environmental Justice Informational Analysis

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MEMO

Project name **San Francisco Housing Element 2022 Update**
 Project no. **1690017135**
 To **San Francisco Planning Department**
San Francisco, California
 From **Taylor Vencill**
Michael Keinath
Cullen Williams-Freier
 Subject **San Francisco Housing Element 2022 Update – Racial
 and Social Equity Analysis of Noise Exposure**

1 Introduction

September 28, 2022

At the request of ICF International, Ramboll US Consulting, Inc. (Ramboll) conducted a racial and social equity analysis of noise exposure in San Francisco, utilizing noise traffic model results completed for the San Francisco Housing Element 2022 Update (referred to hereafter as “housing element update” or “proposed action”).

Ramboll
 2200 Powell Street
 Suite 700
 Emeryville, CA 94608
 USA

This technical memorandum presents a summary of the methodology utilized and provides the results of the noise exposure racial and social equity analysis.

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2 Methodology

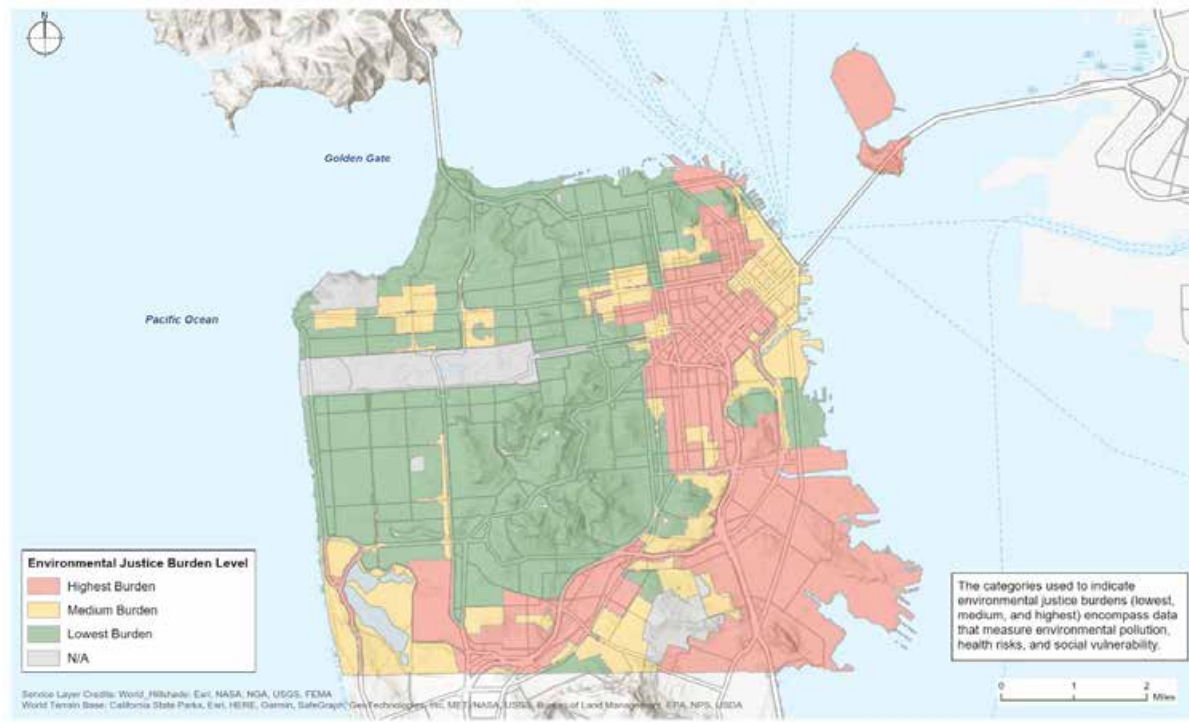
The San Francisco Planning Department used computer modeling to project the likelihood and pattern of development under the Housing Element 2022 Update. The output of this specific computer model provided the total number of housing units and jobs by transportation analysis zone, or TAZ. San Francisco is split into 981 TAZs - these zones vary in size from single city blocks in San Francisco's downcore core, to multiple blocks in outer neighborhoods, and in some cases, even larger zones in historically industrial areas such as the Hunters Point Shipyard area. As a result of this modeling, each TAZ contains housing unit counts for the following scenarios: 2020, 2050 Baseline, and Proposed Action 2050.

The categories used to indicate environmental justice burdens (lowest, medium, and highest) encompass data that measure environmental pollution, health risks, and social vulnerability. These burden levels are shown in Figure 2-1.¹

¹ Source: San Francisco Planning Department, Environmental Justice Communities Map, February 2022

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Figure 2-1. Environmental Justice Burden Areas: Highest Burden, Medium Burden, and Lowest Burden Areas

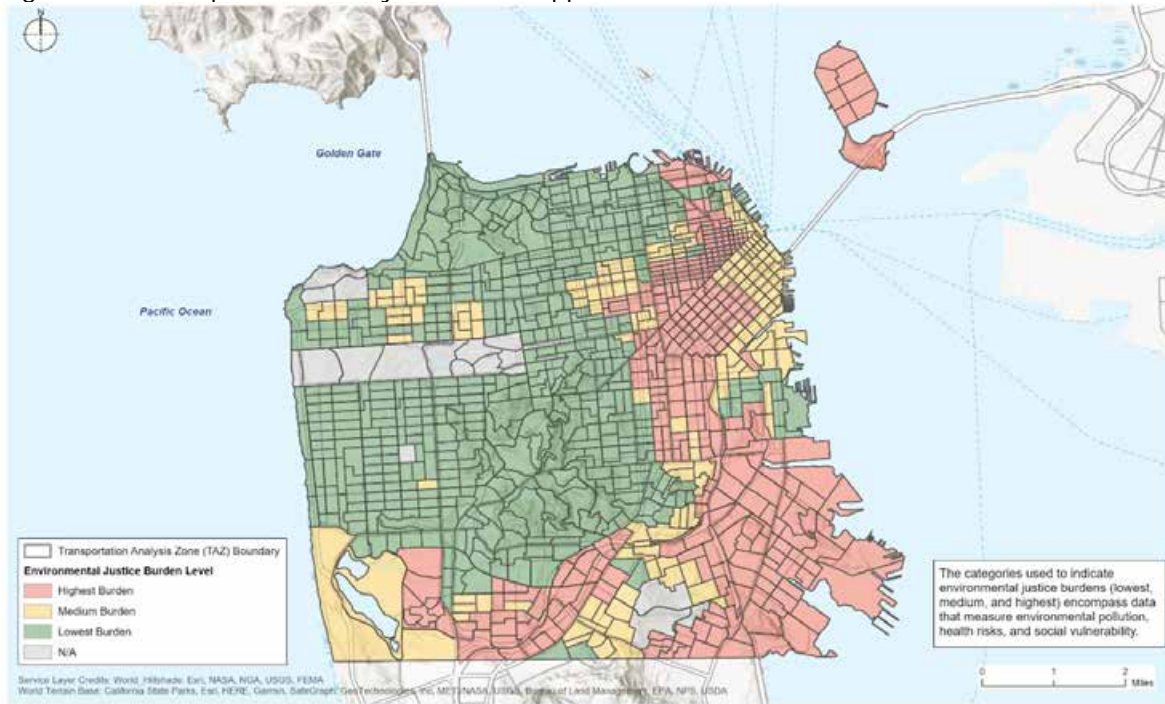


To determine the number of housing units located in areas of elevated noise exposure within each environmental justice burden area, the following steps were taken.

Step 1. The transportation analysis zones were aligned with environmental justice burden areas to designate a burden level to each zone: lowest, medium, and highest. Designations were done based on a majority area approach within each TAZ. For example, if a given TAZ was 70% highest burden, 20% medium burden, and 10% lowest burden, the full TAZ area was assigned an environmental justice burden level of “highest”. Resulting designations are shown in Figure 2-2.

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Figure 2-2. Transportation Analysis Zones Mapped to Environmental Justice Burden Areas



Step 2. ICF Consulting provided a dataset containing modeled traffic noise levels for roads within the city of San Francisco for 2020, 2050 Baseline, and Proposed Action 2050. The results of the modeling done by ICF assigned each analyzed road segment with a decibel (dB) level.

Road segments with modeled noise levels greater than or equal to 70 dB were considered elevated.² Elevated road segments were then buffered by 20 meters to determine an elevated noise exposure area across the city. Elevated road segments were buffered by 20 meters consistent with the methodology the department uses for determining areas with elevated levels of air pollution. Additionally, a 20-meter buffer would adequately capture residential units that are adjacent to elevated road segments.

Step 3. Areas of elevated noise exposure were then overlayed on the TAZs to determine what fraction of each TAZ overlaps with an elevated noise area. Utilizing this fraction, housing unit counts within elevated noise exposure areas were then calculated and summed over the following environmental justice burden areas: highest burden, medium burden, and lowest burden. For example, if a TAZ designed as the highest burden level has 700 total units and 30 percent of the TAZ is located in an area of elevated noise exposure, then 210 units ($210 \text{ units} = 0.30 \times 700 \text{ units}$) would be assigned as within an elevated noise exposure area, within the highest burden environmental justice area. The remaining 490 units ($490 \text{ units} = 0.70 \times 700$) would be assigned as outside an elevated noise exposure area, within the highest burden environmental justice area.

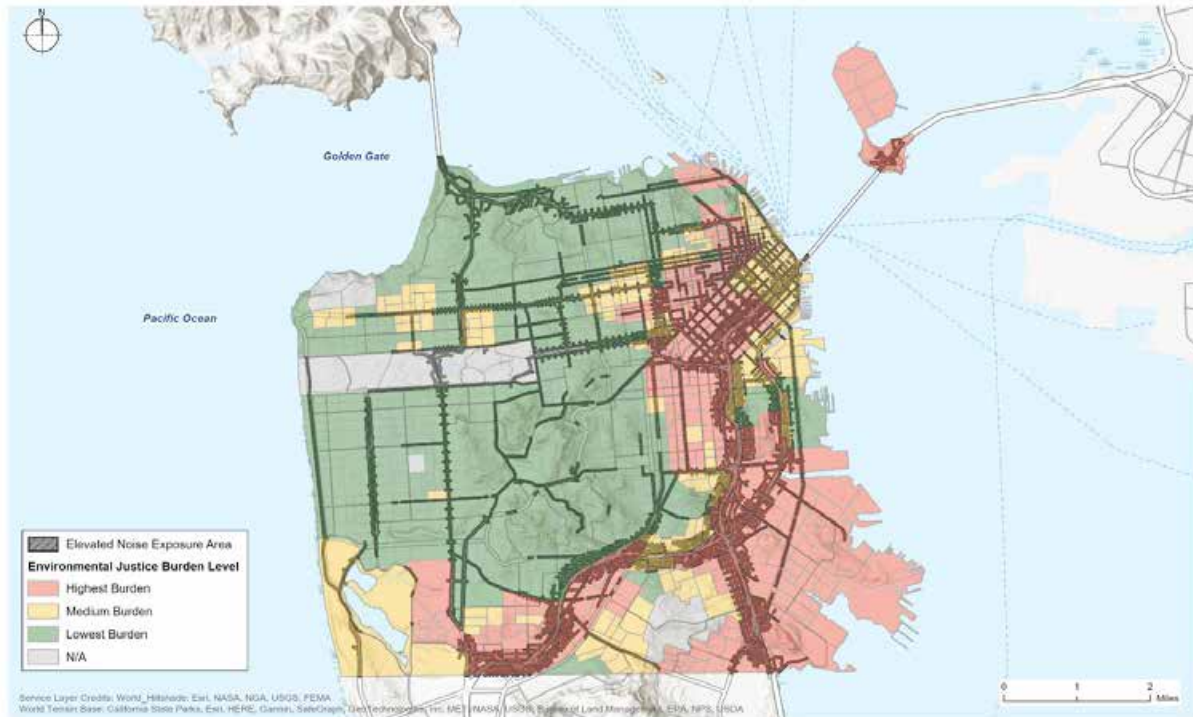
² U.S. Environmental Protection Agency, *Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety*, March 1974. A 24-hour exposure level of 70 decibels is identified as the level of environmental noise which will prevent any measurable hearing loss over a lifetime.

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3 Results

The overlap of elevated noise exposure areas and the transportation analysis zones, as mapped to Environmental Justice burden areas, is shown in Figures 3-1a through 3-1c below (for 2020, 2050 Baseline, and Proposed Action 2050, respectively). Resulting housing unit counts in each of the three Environmental Justice burden areas are shown in Table 3-1, and in Table 3-2 by percent. Table 3-3 summarizes the percent of housing units within elevated noise exposure areas for each scenario.

Figure 3-1a. 2020, Overlap of Elevated Noise Exposure Areas and Environmental Justice Burden Areas



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Figure 3-1b. 2050 Baseline, Overlap of Elevated Noise Exposure Areas and Transportation Analysis Zones Mapped to Environmental Justice Burden Areas

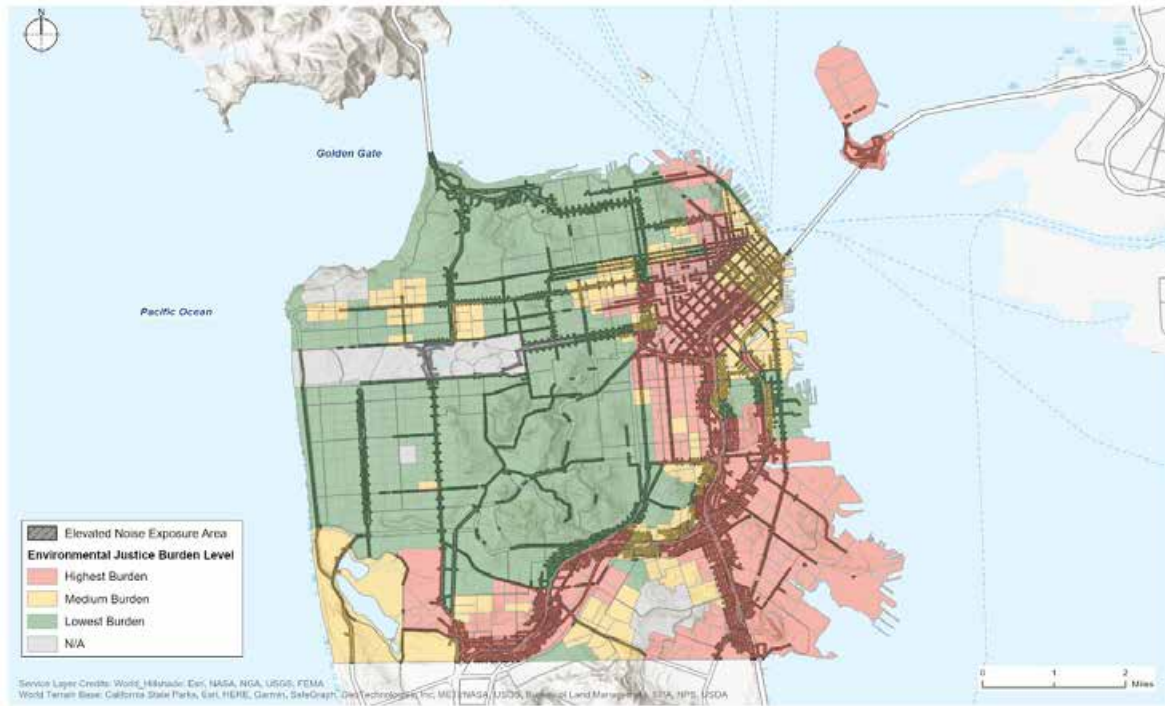
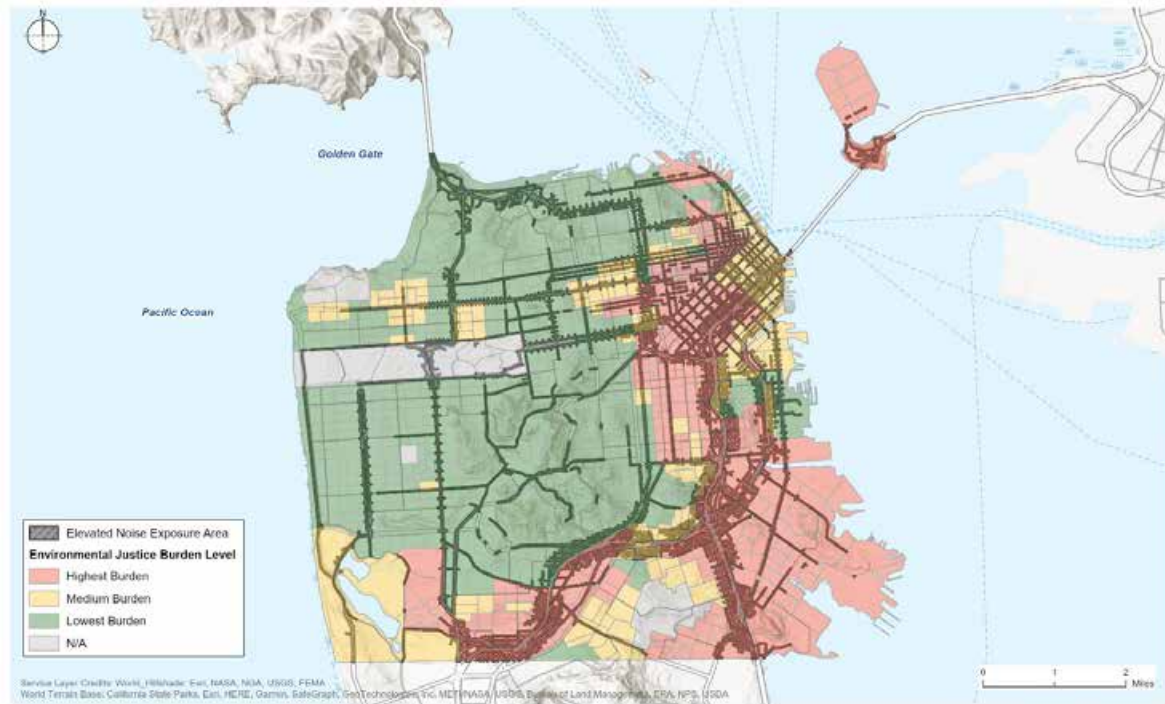


Figure 3-1c. Proposed Action 2050, Overlap of Elevated Noise Exposure Areas and Transportation Analysis Zones Mapped to Environmental Justice Burden Areas



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Table 3-1. Housing Units within Elevated Noise Exposure Area, by Environmental Justice Burden Area

Modeled Scenario	Highest Burden		Medium Burden		Lowest Burden		TOTAL
	Within Elevated Noise Exposure Area	Outside Elevated Noise Exposure Area	Within Elevated Noise Exposure Area	Outside Elevated Noise Exposure Area	Within Elevated Noise Exposure Area	Outside Elevated Noise Exposure Area	
2020	32,421	104,533	19,308	57,093	22,005	171,387	406,747
2050 Baseline	46,846	160,278	26,321	67,025	24,701	183,258	508,429
Proposed Action 2050	46,046	155,818	25,753	69,157	32,922	228,603	558,299

Table 3-2. Percent of Housing Units within Elevated Noise Exposure Area, by Environmental Justice Burden Area

Modeled Scenario	Highest Burden		Medium Burden		Lowest Burden	
	Within Elevated Noise Exposure Area	Outside Elevated Noise Exposure Area	Within Elevated Noise Exposure Area	Outside Elevated Noise Exposure Area	Within Elevated Noise Exposure Area	Outside Elevated Noise Exposure Area
2020	8.0%	25.7%	4.7%	14.0%	5.4%	42.1%
2050 Baseline	9.2%	31.5%	5.2%	13.2%	4.9%	36.0%
Proposed Action 2050	8.2%	27.9%	4.6%	12.4%	5.9%	40.9%

Table 3-3. Percent of Housing Units within Elevated Noise Exposure Area

Modeled Scenario	% of units in San Francisco within Elevated Noise Exposure Area	% of units in San Francisco outside Elevated Noise Exposure Area
2020	18.1%	81.9%
2050 Baseline	19.2%	80.8%
Proposed Action 2050	18.8%	81.2%