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RETHINKING THE AMERICAN DREAM FOR THE 21st CENTURY

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# RETHINKING THE AMERICAN DREAM FOR THE 21ST CENTURY

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## ABSTRACT

This research aims to redefine the "New American Dream" for the 21st century. In a new era where single-family homes no longer align with the preferences of this generation along with a large demographic shift to more dense urban living, it is time to rethink the role of the suburbs. Through investigation of California's housing trends, migratory shifts, and the opportunity for medium-density housing, this study will explore strategies to make suburban housing more affordable and aligned with current societal needs. As a final result, the suburbs will evolve to play a new role in equitable housing and resource availability in the hope of solving California's housing affordability crisis.

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## LIST OF ABBREVIATIONS

SF .....San Francisco

BA .....Bay Area

ST .....Street

SQ .....Square Footage

AVE .....Avenue

AMI.....Average Medium Income

BMR.....Below Market Rate

RIPP .....Residential Infill Pilot Program

# 1. INTRODUCTION

At a rally on October 13, Minister Victor Floyd led the crowd in prayer and dedications at a shrine of marigolds on San Francisco City Hall's steps. "Knock, knock," Floyd said. "Who's there?" the crowd responded. Floyd, wearing round glasses and a clerical collar that peeked out from under his political shirt, answered deadpan, "Nobody. Nobody's there in 60,000 homes in San Francisco."

The American dream was a simple one-a nuclear family in a single house with a big yard and a white picket fence. This aspiration influenced generations in terms of housing, consumerism, and culture. However, given the current economic conditions, there is a need for a paradigm shift in American housing. This shift should not only redefine one's perception of the American Dream but also address whether it provides an equitable and attainable goal for everyone. For decades, America, more than any country in the world, defined success in what we own. The ownership of land, homes, cars, and any other property allows Americans to reach the idealized 'success' depicted in the idea of the American Dream. The history of housing dynamics and economic patterns in America impacted a shift towards suburban living and resulted in a sprawled development. This has created an inefficiently built environment triggering a ripple effect of unaffordable housing for middle and lower-income individuals.

This lifestyle that has dominated the past seems to be on a downward trend as today's younger generations are looking for housing in denser urban environments causing a surge in city rents. Increased housing prices lead to higher vacancy rates and a shortage of attainable housing for middle- and lower-income individuals. Policymakers and urban planners are starting to look at the suburbs to remedy such a crisis. The idea of suburban living, which once was a major part of the American Dream, fails to provide millennials and young professionals with the

resources they are trending toward today. These include various housing options, walkable neighborhoods, and access to amenities in resource-dominated areas. In the past decade, and especially since the 2008 Housing Crisis, there has been an inadequate production of single-family housing, resulting in the abundance of multi-family development in the industry. However, this housing option was primarily located in the urban core of cities. Those fortunate enough to afford a lifestyle of convenience are gravitating towards the urban center and moving into mass-produced and expensive multi-family developments. These areas are attractive as they provide the desired resources and closer proximity to amenities. As a result, middle- and lower-income households are the first to relocate elsewhere. In lieu of today's housing conditions, "elsewhere," is the suburbs where resources and amenities tend to be scarce. The suburbs fail to provide access to resources and reasonable market-rate housing and rental prices for these individuals. Most of these individuals neither require nor can afford a detached single-family home, and they find themselves far from jobs, transportation, and amenities, making it an unappealing area to make a home. Now more than ever, it is important to rethink how Americans are housed in the suburbs to provide affordable housing options and more resource opportunities to these classes being relocated.

More than anywhere in the United States, the shifts in housing dynamics have dominated urban development in the San Francisco Bay Area. For decades California's population grew as people moved there to fill jobs during the tech boom with hopes to acquire wealth and new opportunities. This created a very challenging housing market that is unrealistic for most middle- and lower-income families. The housing market continues to be unmatched with availability, affordability, and income amounts. Following the 2008 Wall Street Financial Crash there was a huge decline in investment in single-family construction resulting in a housing condition that the

market has not recovered from. This steered California to lead the country in residential vacancy rates and the number of homeless individuals. As the Bay Area's residential migratory patterns continue to change, it is apparent that the housing market needs to better align with availability and income amounts. This needs to be done within the realms of reality Americans are living in now including housing that is desirable, equitable, environmentally friendly, efficient, and marketable to new generations. This research will explore a modern concept of what is idealized as the 'New American Dream' and how one can rethink suburban living to address the housing affordability crisis in California.

### 1.1. Problem Statement

This so-called American Dream is just a dream today. Due to the continuous affordability crisis across the nation along with unparalleled wage and housing prices, people are no longer able to afford housing. The costs for housing throughout America vastly outpace any median American wage making it impossible for the middle- and lower-income class to keep up. Those who once believed in the possibility of achieving the American dream are now struggling to afford a one-bedroom apartment. When housing costs and wages in the United States are compared side by side, the housing median has increased by 229% since 2020, in contrast, wages have only increased by 140% (Organizations, 2017). How are Americans able to keep up with paying their mortgages or rent when they aren't making enough to counteract the difference?

Not only has the affordability crisis played a huge role in the housing market, but housing trends laid the foundation. Historically, Americans have opted for the suburbs. It came as an opportunity for privacy, freedom, and ownership, but recent housing dynamics and migratory patterns have caused people to stay longer in urban settings as it provides a lifestyle that prioritizes ease and convenience. This is resulting in increased rental prices in denser urban areas

and continues to displace families who have lived there for generations. Landlords also continue to increase rental prices at a pace people are unable to keep up with. Owners can raise rent as they like because rent control is no longer in place, and by doing so subsequently increasing the number of vacant units in the San Francisco Bay Area.

As housing trends continue to be impacted by the current generation, the pace of home purchases has slowed compared to the past. From a broad perspective, this is making the suburbs a more affordable option but an unappealing one as well. The suburbs lack diverse demographics, access to amenities and resources, mixed-use zoning and development, and the social infrastructure that is found in the cities making it a lesser option than metropolitan areas. Modern households no longer prefer single-family detached homes due to their maintenance demands and high costs. However, the suburbs are filled with this type of housing requiring a reevaluation of how they can be appropriately utilized.

Tackling the enormous question of housing affordability needs to begin with understanding historical housing trends and reevaluating the use of what is available. Regions across the United States are investigating ways to address this issue, especially the San Francisco Bay Area. For decades, the Bay Area has been experiencing changes in housing trends and an influx of wealth and high-income households. Gaps in wealth and housing prices are more prevalent in this area than in any other region in the United States. According to San Francisco Planning, maintaining a middle-class life in California would cost someone over $300,000 a year, while over 10.9 million Americans spend over 50% of their income on housing alone (Peterson, Pappas, 2018). Not only is there an affordability crisis but the Bay Area, along with every metropolitan city in America, is experiencing a migratory shift in demographics as wealthier people are moving to the urban core and displacing middle- and low-income

individuals to the suburbs. The need to rethink the urban fringe or suburbia proves to be important in the first step of solving California's housing affordability crisis. Through research, the study will assess housing development and patterns along with the use of available housing to better understand ways to rethink and rehouse the suburbs in San Francisco's Bay Area to accommodate the diverse, multi-family, and affordable needs of American people today.

### 1.1.1. Research Questions

There is no denying that California is experiencing a housing affordability crisis, but what measures and actions will be taken to address the situation? Through research, the investigation will explore the idea of the American Dream and how it impacted housing and demographic shifts throughout history. It will address the influence of the 2008 Housing Crisis and contemporary housing trends in the nation, especially in California. The study will examine San Francisco's Bay Area housing and economic trends and the conditions of the market today, exploring vacancy rates and their potential, suburban conditions, and existing policies. Lastly, exploration will be conducted on how one can rethink San Francisco, California's suburbs in terms of the 21$^{st}$ century to provide equitable, resource-dominated, environmentally friendly, and most importantly, diverse, and affordable housing options for individuals looking for, arguably, the most important and basic human need: *housing*.

### 1.1.2. Proposed Outcomes

The expected outcomes of this research are a series of design principles and residential prototypes that should be implemented when rethinking housing in the suburbs while considering the vacancy rate of homes, new housing density options, viable rental and housing policies, and sustainable and resource-dominated community corridors. Planning and programming strategies

will provide a design prototype of the 21st century suburb to serve as an example for San Francisco's Bay Area as they continue to tackle their housing crisis.

## 1.2. Objective

Today, the American Dream is a distant ideal due to a nationwide affordability crisis marked by rising housing costs and stagnant wages. Rental and housing prices are ever-increasing as urbanization trends exacerbate the issue. San Francisco's Bay Area serves as a viable example of this issue and is actively working towards solutions to deal with such a crisis.

### 1.2.1. Aim

This research aims to achieve an understanding of how the American Dream impacted the contemporary housing trends and dynamics Americans see today and explore strategies to rethink housing in the suburbs for the 21st century to be more aligned with the current needs of Americans today.

### 1.2.2. Significance

The significance of this research lies in the desire to reshape a 'New American Dream' for the 21st century suburb. It is essential to develop comprehensive design strategies and planning to address the housing affordability crisis in the Bay area and for the future of suburban living.

# 2. BACKGROUND

## 2.1. Background

The traditional American Dream that defined generations of housing dynamics is undergoing a necessary shift due to the effects of an inefficient suburban development and the preferences of the younger population for living near the urban center. This shift has led to rising city rents, increased vacancy rates, and a shortage of affordable housing particularly in the San Francisco Bay Area. This background explores how America arrived at its current housing condition and the need for a 21st-century model of the 'New American Dream.'

## 2.2. Literature Review

### 2.2.1. History of Housing: How Americans Defined Dwelling

The evolution of housing traces its roots through the cultural values and economic lives of entire civilizations back to the simplest idea that shelter is a basic human need. Archeologists have found evidence of purposeful shelter as far back as 360,000 years that provided a simple residence to humans (Cooper-Hewitt Museum & Taylor, 1990). From the beginning, domestic shelters provided needs of survival, generally semipermanent, and a place of refuge from the elements and predators. With advancements in technology over the decades, these dwellings became more permanent, transformed into villages with courtyards in the center and a combination of work and living spaces that met the needs of everyone living there (Cooper-Hewitt Museum & Taylor, 1990). These villages turned into cities and became more densely populated as generations continued. Cities transitioned into accommodating more street frontage as there was an increased demand for commercial use which resulted in the long narrow lots and neatly arranged buildings seen today. By the end of the medieval period, residents had produced

the housing prototype that would define the 19th century. This was later known as the row house (Cooper-Hewitt Museum & Taylor, 1990).

Figure 1: St. Nichols Ave, New York

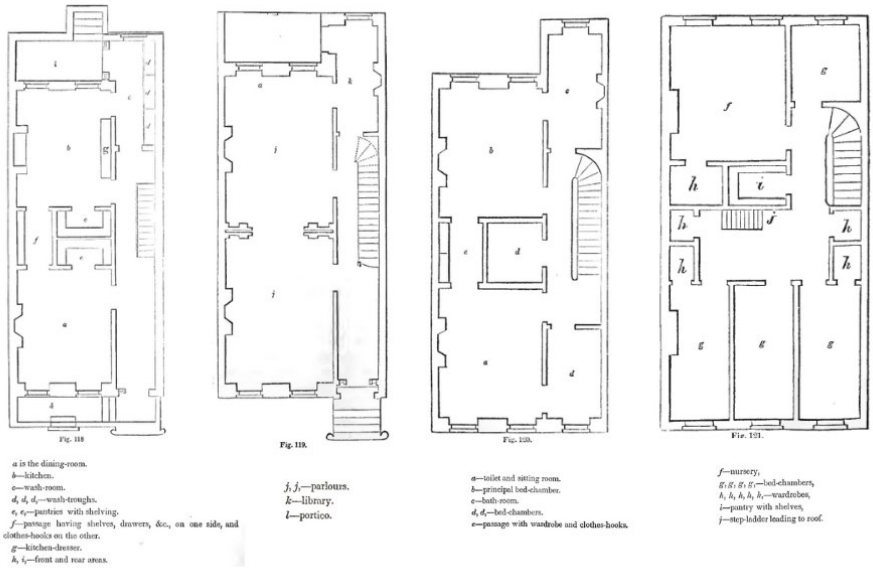

Note: This photo shows what the look of the 19th century rowhouse (Cooper-Hewitt Museum & Taylor, 1990).

During the Renaissance, homeowners transformed the use of a house with functional adjustments of separating work and home, as shown in Figure 2. With advancements in construction, this era progressed toward large windows, uniform facades, and aligned windows and doors. Moving into the industrial age, manufacturing services flourished, and the population began to rapidly increase. Central urban areas began to grow and become more densely populated, so residential sectors were forced to relocate to the city boundaries. With the invention of balloon frame construction and the availability of mass transportation options, the suburbs became more affordable to more and more middle-class residents (Glassman, 2018).

Today's housing is the product of many generations, various technological advancements, and economic conditions. Housing comes in various forms- single-family

detached units, high-rise apartments, row houses, and tenements. In the 21st century, new examples of housing are starting to appear to accommodate the changing demographics across the United States. The architectural history of housing will continue to shift, change, and grow, but for now, housing needs to address bigger questions including feasibility, affordability, and adaptability.

Figure 2: Rowhouse Floor Plan




Note: The rowhouse plan transformed the use of space in the 19th century separating both home and work (De Vries, 2020.)

### *2.2.1.1. The American Dream: The Widespread Shift to Suburbia*

*"The American dream is that dream of a land in which life should be better and richer and fuller for everyone, with opportunity for each according to ability or achievement."*

*-James Truslow Adam, 1931*

The American Suburban movement began around the mid-19th century after a sudden urgency for the middle class to escape the industrialized city and people became exposed to health risks. At this time cities were extremely overcrowded so the idea of achieving a more private and quiet living environment with quick access to the city when needed, seemed very

appetizing (Cooper-Hewitt Museum & Taylor, 1990). With the invention of the motor vehicle and more availability of rail systems, the middle- and upper class were granted the ability to leave the city, and a suburban housing shift became widespread across America (Glassman, 2018). This became known as urban sprawl or Suburbia.

Figure 3: Suburban Sprawl in Levittown

Note: This photo shows the widespread sprawl of suburbia in Levittown, also known as the first suburb (Sheidlower, 2020)

According to Cooper-Hewitt and Taylor, the 1980 census revealed that more than 100 million people, well over 40% of the nation's population, lived in the suburbs. The idea of suburbia became a physical achievement of success for many residents of the United States. It symbolized the fullest and most iconic image of American culture and evidence of a high standard of living. It is a manifestation of such fundamental characteristics including consumption, reliance upon the private automobile, upward mobility, an idealized nuclear family housing model, and a tendency toward racial and economic exclusiveness (Cooper-Hewitt Museum & Taylor, 1990). This shaped the suburbs into what they are today.

During the suburban sprawl, many economic factors impacted the availability of the suburbs making the costs of homeownership relatively low and affordable in comparison to housing costs in the cities. A few of these include per capita wealth, inexpensive land and transportation, construction techniques and materials, and the role of the government in public policies (Cooper-Hewitt Museum & Taylor, 1990). It can be concluded that the residential housing behavior of the American people during this time directly resulted in the impacts of market forces and government policies today.

#### *2.2.1.2. Quantifying Success: How Americans Define "Making It" in America*

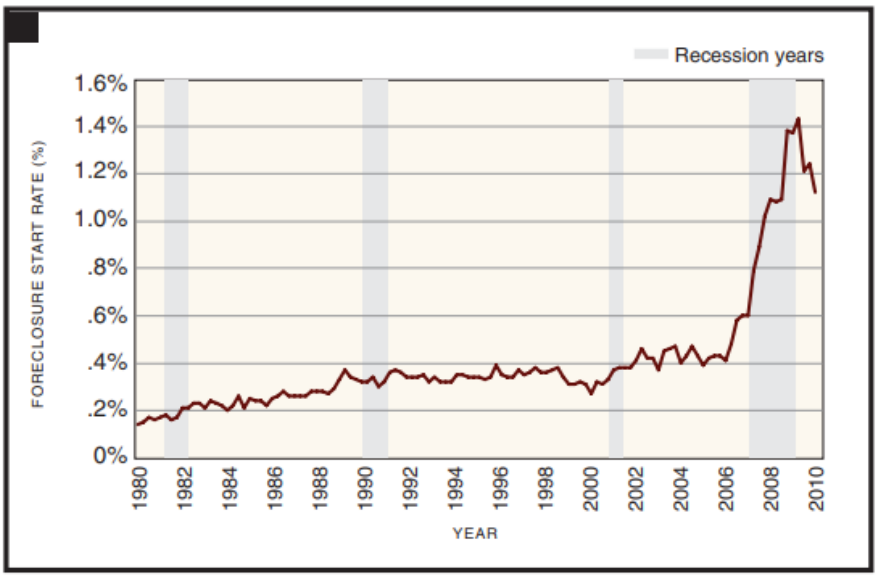
Almost every person in the world wants to be successful. The pursuit of success is part of who we are as individuals. Many though, see it as the basis of the American Dream, which promises that every person has an equal opportunity to achieve success and prosperity through hard work, determination, and initiative (Desjardins, 2018). Although the idea of success is different for everyone, it tends to be fixed in what we own as individuals. Nearly 75% of Americans say that owning a home is a more significant measure of achievement than having a successful career or even raising a family. Nearly ¾ of those survey respondents rated homeownership as the highest gauge of prosperity as well (Desjardins, 2018).

Americans tend to situate the suburbs as a landscape of potential success, mobility, and economic security. In the United States, individuals shape their beliefs around freedom and private property, seeking out places with privacy and social harmony (Hayden, 2004). The hard truth is this is not the reality of most today. Today, amid high levels of inflation and nationwide consumer debt, achieving the American Dream is harder than ever before. This is forcing Americans to develop a new definition of success that seems to be situated around a sense of belonging, freedom, flexibility, happiness, and work-life balance.

### *2.2.1.3. The Economic Crisis: How Housing Was Changed Forever*

To be fully aware of what happened during the Economic Collapse of 2008, understanding the housing boom and bust in the prior seven years is crucial. Beginning in the mid-1990s, there was a dramatic change in mortgage lending standards, which were a result of regulations designed to promote home ownership (Gwartney & Connors, 2009). During this time, borrowers were also encouraged to take out imprudent loans, allowing people to buy a house with little to no down payment. On the other side, lenders were encouraged to make risky loans while investment banks were allowed to irresponsibly leverage capital on mortgage-backed securities because regulations treated housing loans more favorably than other loans (Gwartney & Connors, 2009). The only opportunity people saw was the monetary value of a short-term financial gain. Almost everyone overlooked the rising housing prices and the obvious point that low down payment loans made to buyers with larger and larger mortgages relative to income were risky and they would soon lead to higher default rates (Gwartney & Connors, 2009).

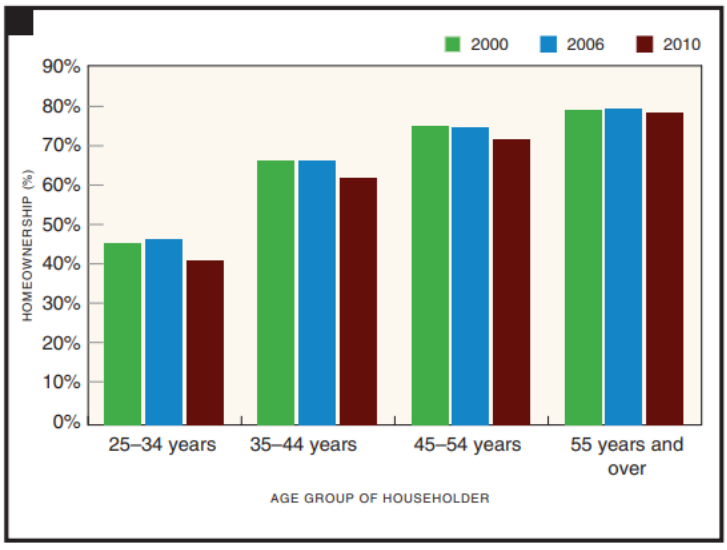
Figure 4: Foreclosure Rates During the Great Recession




Note: This graph shows how rates quadrupled during the Recession from 2007-2010 (Ellen, Dastrup, 2012).

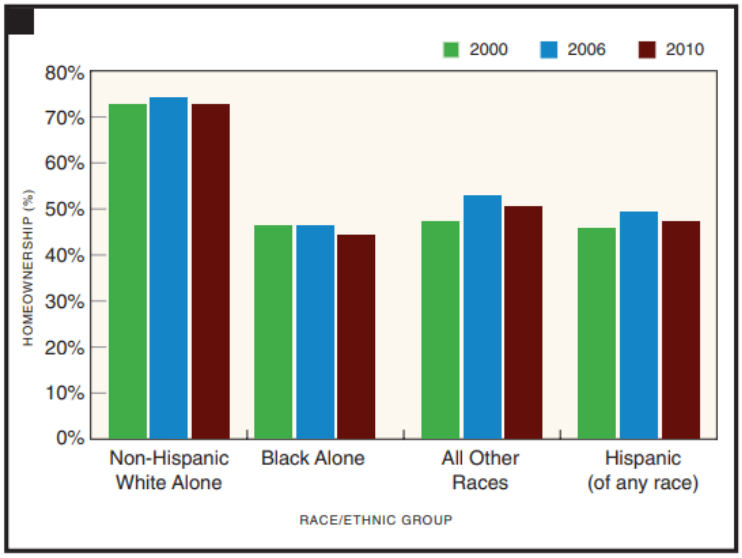
The combination of the housing crisis and labor market issues, as a result of the Great Recession, makes this downturn especially hard to recover from. During this time a growing number of households found it difficult to make their mortgage payments. Weakened household budgets and negative equity pushed many homeowners to default on their mortgages as they were unable to make their monthly payment and could not sell their home either. This caused housing prices to fall throughout the country impacting minority households the most. A recent study by the Pew Research Center found that median wealth fell by 66 percent from 2005 to 2009 among Hispanic households and 53 percent Black households, compared with just 16 percent among White households (Ellen, Dastrup, 2012). During this time subprime lending and increase in default rates were highest in minority neighborhoods. This caused significant reductions in homeownership rates following the crash impacting minority groups, especially Blacks and Latinos, and young adults compared to older adults (Ellen, Dastrup, 2012).

Figure 5: Homeownership Rates Based on Race




Note: Black and Hispanic households experienced greater declines in homeownership after the housing crash. All other races include people who reported Asian, Native Hawaiian or other Pacific Islander (Ellen, Dastrup, 2012).

Figure 6: Homeownership Rates Based on Age Group




Note: Homeownership rates declined more steeply for younger adults than older adults (Ellen, Dastrup, 2012).

### 2.2.2. The Contemporary Suburb: What Defines Suburban Conditions Today

In examining the contemporary landscape of suburban living today, new defining characteristics shape the conditions seen today. Many factors define the characteristics of a contemporary suburban experience. As the economy of housing continues to complicate affordability concerns, the suburbs may provide an opportunity for defining a new model of the American Dream.

#### *2.2.2.1. Characteristics of the Suburb*

The term suburb is defined as an affluent and middle-class area where Americans live in surroundings that are far from their workplaces, in homes that they own, and in the center of lawns that by urban standards elsewhere are enormous (Cooper-Hewitt Museum & Taylor, 1990). For generations, the suburbs have been defined by four distinguishing elements. The first is low population density (fewer than 10 persons per acre). This resulted in the privatization of

everyday life and an attraction to live in a fully detached house. Next, was a strong desire for home ownership. According to Copper-Hewitt Museum & Taylor, about 2/3 of Americans own their dwellings, which is double that of many European countries. In the early 2000s, 66% of Americans owned their homes. Today, 55% of people own their homes, still doubling the rate of many European countries. The third element is the socioeconomic disparity between cities and suburbs. When looking at the statistics, there is a widening gap between defining characteristics including employment, housing, living arrangements, and family structure in those who live in a city and those who live in the suburbs (Cooper-Hewitt Museum & Taylor, 1990). Historically, status and income were correlated with the suburbs but now this is starting to shift. Lastly is the length of the average commute to work. The length of the average commute to work is typically 9.2 miles or 30 minutes both ways (Cooper-Hewitt Museum & Taylor, 1990). Even though suburban housing dynamics are seeing a reverse in demographics, the distinguishing elements remain the same. What they aren't providing are resource dominated areas with density and affordable housing options that people need today.

#### *2.2.2.2. The Economics of Housing*

When it comes to the contradictions of housing, the driving force is economics. Private enterprises have created a tremendously productive and unequal housing system. Even though home ownership is the cherished goal of all Americans, conditions like racism and cultural demographics continue to shape housing dynamics today creating two main contradictions: Polarization and Privatization. Polarization is the increasing gap between well-off and badly-off. This leads to and is reinforced by the shift of typical public functions into the domain of private concern for those who can afford them and public neglect for those who cannot. Both polarization and privatization are directly reflected in the housing conditions around us and it

will continue to be more influenced by developments outside the housing sector than those within it (Cooper-Hewitt Museum & Taylor, 1990).

Cities are going to continue to see the wealthy gentrify neighborhoods, reclaim older housing, and displace poorer residents. That seems to be the trend of development today. Middle- and low-income classes will be forced to move, their commute will become longer and the housing they can afford will dwindle. This reverse in housing dynamics is rearranging the migratory patterns of certain demographic groups and cities. When the private sector allocates housing, demand determines who gets what where, and who must leave to make it all possible.

#### *2.2.2.3. Issues of Housing People in the Suburbs*

The concern with housing more people in the suburbs comes down to the allocation of resources that individuals are looking for. When someone opts to live in the city, they are granted easy access to public transportation, shorter commutes, the proximity of grocery stores, gyms, restaurants, shopping, and many more amenities that are limited in the suburbs. For middle- and lower-income individuals, living in the city allows them to spend less money on transportation, access job opportunities, and be part of a community. All of these factors can be achieved in the suburbs if planning is successfully implemented through community engagement, and adhering to design standards, policies, and guidelines.

The suburbs also propose many environmental concerns. From the beginning, the suburbia was designed to be environmentally unfriendly. The roads and intersections are expansive, and parking lots are too big. Both absorb solar radiation and create heat islands even in low-density suburbia. Single-family homes also tend to be the least efficient type of home (Ross, 2021). These homes tend to consume the most energy with heating, cooling, and electricity, which also increases the overall living costs of households as well.

One may think that the big yards of suburbs are beneficial for the environment, but ironically, they are just the opposite. Every year, American lawns consume 3 trillion gallons of water, 200 million gallons of gas from mowing, and 70 million pounds of pesticides (Ross, 2021). The single-family homes with private lawns take up a lot of space and have sprawled further and further away from the center (Ross, 2021). The sprawl continues to eat up the land available for wildlife and natural environments.

The lack of public transportation systems presents a huge challenge for housing people in the suburbs. Individuals who didn't own a personal vehicle while living in the city now face the issue of securing enough funds to buy one and cover fuel expenses for their daily commute to work. The contemporary suburb also exemplifies this idea of a non-walkable neighborhood. They are out of scale, car dominated areas that are detrimental to individuals' health. People who live in non-walkable neighborhoods tend to be 6 to 10 pounds heavier than those in more walkable communities (Ross, 2021). The utilization of cars is impacting the economic and health situations of families in these neighborhoods. Cars are the second largest expense for the average American household, which again imposes great economic burdens on these middle- and low-income families.

### 2.2.3. The Contemporary Housing Crisis: Housing Conditions in California

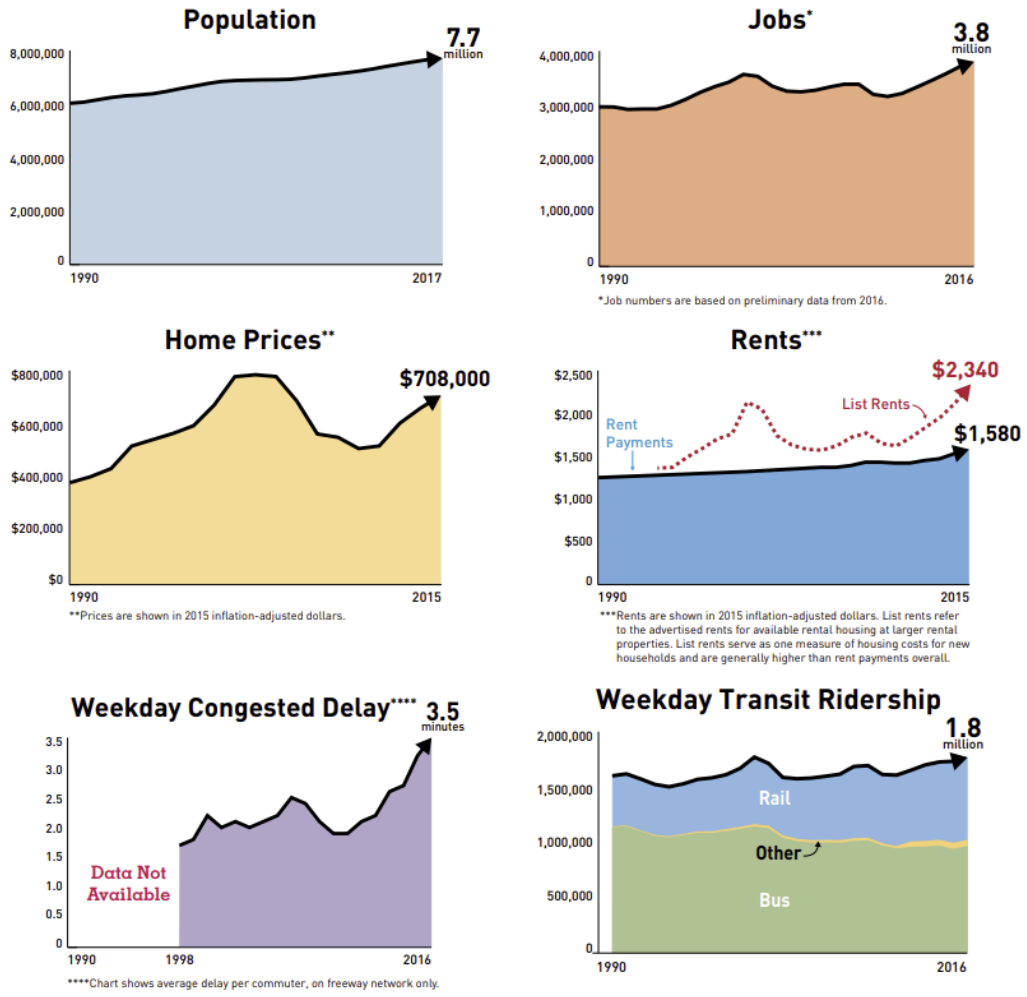
The status of the suburbs continues to change and evolve from generation to generation. This is a direct response to American culture, land values, and economical considerations. A person's initial attraction to the suburbs correlates with their preference of amenities and desire for privacy and security. The transportation industry also gave individuals the ability to get out of the city and live on the urban fringe. Over time, the scarcity of resources and lack of walkable corridors and defined commercial nodes have caused the suburbs to become less attractive to

higher-class individuals causing them to want to live in more dense and urban areas. Now middle- and lower-income individuals are forced to look for housing in the suburbs because it is the only housing that 'may' be attainable.

#### *2.2.3.1. History of Housing in the San Francisco Bay Area*

Since the 1800s, the San Francisco Bay Area has attracted individuals from around the world seeking education, innovation, and fortune. The Bay Area is located in an ideal climate and surrounded by beautiful landscapes. With over 7.7 million people residing in the 7,000 square-mile area, it has grown to be the fourth largest metropolitan region in the United States today (*The Bay Area Today | Plan Bay Area 2040 Final Plan*, n.d.). Over the years, the Bay Area has experienced a tech expansion in Silicon Valley causing record employment levels. This has brought wealth, prosperity, and a changing economy to the area but with it, significant challenges including adequate and affordable housing for people of all income levels. The movement of people and the success of the economy are causing the displacement of long-term residents.

Figure 7: Snapshot of the Bay Area




Note: These graphs provide information on the steady incline of the Bay Area's population, availability of jobs, home prices, and rents (The Bay Area Today | Plan Bay Area 2040 Final Plan, n.d.)

The Bay Area's future will continue to bring major challenges as California starts to address infrastructure, housing, and affordability issues. Over the past decade, housing costs and resident displacement have plagued the Bay Area in San Francisco. These development patterns have resulted in new forms of racial and class segregation. Since then, California's housing dynamics have shifted away from mainly suburban-family developments towards urban high-density multi-family developments (Organizations, 2017). Much of this new housing being developed in today's real estate market is very expensive and out of reach for lower-income and

even middle-income households. Ironically, much of the affordable housing is now found further out in the urban fringe, far away from the city core. This leads to increased transportation commutes and availability of resources while also adding to greenhouse gas emissions.

Federal policies played a hefty hand in the demand for housing and the historical housing trends. Starting in 1974, the federal government began to turn away from production-oriented housing assistance policies, and in 1980 support started being directed more towards the mortgage market (Marti & Cohen, 2021). Postwar suburban expansion came with a regional development of primarily single-family homes. These tract homes were supported by various government subsidies including Federal Housing Administration loans, government fund highway construction to make the suburbs accessible, and income tax subsidies through Federal mortgage interest deductions. In California specifically, property tax limits were also made possible through Proposition 13 (Marti & Cohen, 2021).

California's suburbs started to develop starter homes that were relatively inexpensive homes that provided lower- and middle-class families the opportunity to be first time home buyers. Over time, these single-family homes progressively got larger, and families spent less time at home. Houses today are on average over 1,000 square feet larger than in 1975 (Marti & Cohen, 2021). Various economic barriers implemented by real estate agencies used zoning requirements like minimum lot and unit sizes or prohibitions on multi-family apartments to restrict housing typologies that working class individuals can afford.

#### *2.2.3.2. The Shift of Housing Dynamics*

People's attraction to the suburbs directly correlates to the availability of resources and their changing preference for amenities (Glassman, 2018). Recent housing dynamics have shown a shift in the way people think about where they live and why. The new generation of renters and

homeowners are starting to value living in urban areas causing them to leave the suburbs. These urban areas provide more resources and are more attractive in terms of commuting time, affordability, and density (Glassman, 2018). Historically, the suburbs have been more affordable than cities because of the high demand for city living, but after every middle and higher class moved to pursue the "American Dream," land and home values rose exponentially. Now, due to trends of the new generation, individuals are staying longer and settling in more urban environments. There is less of a rush to get married, and people are living by themselves well into their 30s. More and more people aren't purchasing homes as fast because suburbia has proven to not provide the needed resources and is unable to be accommodating for those who aren't looking to purchase a single-family home.

In 1950, the percentage of people who lived in urban areas was 30%. Today, it is 50% and expected to reach 70% by 2050 (Glassman, 2018). In the United States, downtowns are seeing the largest growth they have seen since World War II. People are gravitating towards a lifestyle of appeal and convenience which they can get when they live closer to the urban core. Over the next 20 years, it is projected that 80% of new households will be singles and couples without children (Glassman, 2018). These homebuyers and renters won't see the need for a big house or yard anymore and the demand for urban housing will only continue to increase.

#### *2.2.3.3. The State's Affordability Crisis*

California's affordability crisis has been decades in the making. The housing median difference between housing prices and income levels has increased by 229% since 2020, in contrast, wages have only increased by 140% (*The Bay Area Today | Plan Bay Area 2040 Final Plan*, n.d.). The crisis is loaded with many components, but it is clear that there is simply not enough available housing, whether market-rate or affordable, to compare with the growing

number of residents and jobs. Figure 8 compares housing prices and income in California over 30 years.

Figure 8: California Housing Prices Vs Median Household Income


Note: This graph shows a comparison of household earnings by income level and housing prices in California over 30 years. There is a large discrepancy between housing prices and income amounts (Peterson, Pappas, 2018). Infographic by Madeline Hursey.

The region's booming economy has contributed to the widening income gap between high- and low-income households, which has further exacerbated the housing crisis. In table 1 the number of households in the Bay Area increased by 20% from 1990 to 2015, with the majority of the growth among households earning $150,000 or more annually, with the remaining growth among households earning less than $35,000 a year. Over 25 years, there was a net decrease in the number of households earning between $35,000 and $149,999 in the Bay

Area from 64% to 52% of total households (*The Bay Area Today | Plan Bay Area 2040 Final Plan*, n.d.). These conditions are proving to have significant implications for the Bay Area housing market. As the number of higher-income households increases, the demand for housing has remained very strong at the upper end of the market, but it leaves it more difficult for low and middle-wage households to compete for market-rate housing as there is such a large pool bidding against the limited housing supply.

Figure 9: Number of Households by Income in the Bay Area

| Bay Area Household Income* | 1990 | | 2015 | | Change from 1990 to 2015 | |
|---|---|---|---|---|---|---|
| | Number of Households | Percent of 1990 Total** | Number of Households | Percent of 2015 Total** | Growth/ (Decline) in Households | Percent of Household Growth |
| Less than $35,000 | 446,000 | 20% | 550,000 | 20% | 104,000 | +23% |
| $35,000 to $74,999 | 645,000 | 29% | 625,000 | 23% | (20,000) | -4% |
| $75,000 to $149,999 | 785,000 | 35% | 793,000 | 29% | 8,000 | +2% |
| $150,000 or more | 375,000 | 17% | 741,000 | 27% | 366,000 | +80% |
| **Total Households** | **2,251,000** | | **2,709,000** | | **458,000** | **+20%** |

* Income shown in inflation-adjusted 2015 dollars.
** Values may not sum due to rounding.

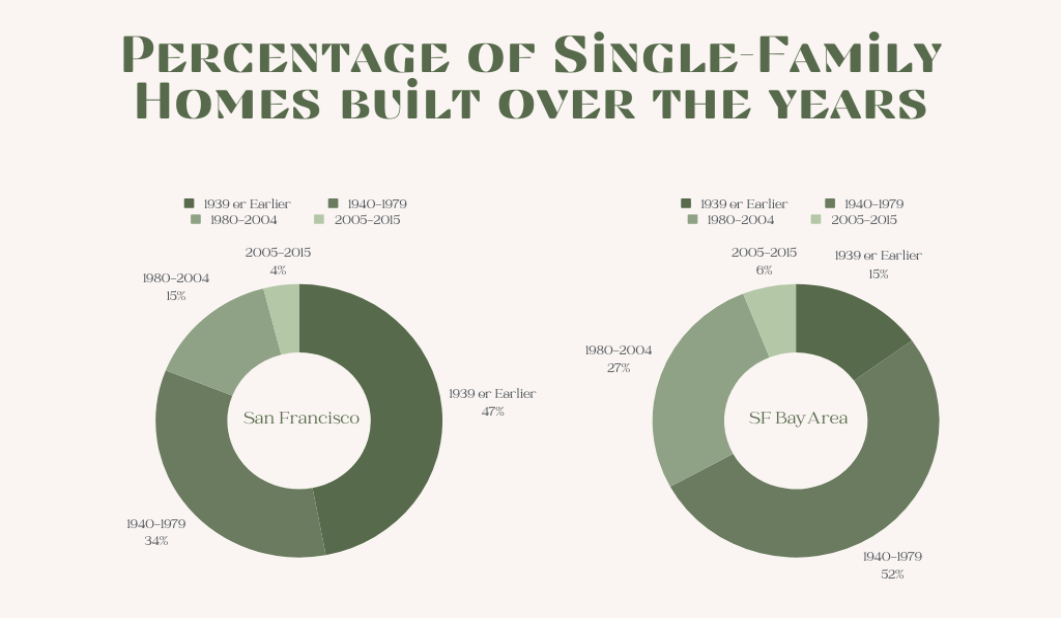
Note: This graph shows a comparison of household earnings by income level in the Bay Area over 25 years from 1990 to 2015 (The Bay Area Today | Plan Bay Area 2040 Final Plan, n.d.).

### *2.2.3.4. The Decline in Single-Family Housing*

A factor that is often overlooked when trying to understand California's affordability crisis is the dramatic drop in single-family housing sales and production in California as well. In April 2023, there were a total of 267,880 single-family homes sold, which reflected a 38.5% decrease from April 2022. San Francisco's Bay Area has also seen a massive decline in the development of single-family housing over the past few decades. This decline in housing construction first started to lag in the mid-1970s but became especially evident during the crash

of 2008 (*The Bay Area Today | Plan Bay Area 2040 Final Plan*, n.d.). Single-family and townhouse production declined to a point the state has not yet recovered, thus eliminating a source of homes in the suburbs that were once affordable to middle-income individuals. In California, single-family production is down about 40% of the statewide total compared to 70%-80% of all homes built through the decades until the crash (Organizations, 2017). The mismatch between employment growth relative to housing supply is significant as well. Overall, the Bay Area has added nearly two jobs for every housing unit built since 1990 creating a production deficit in housing that is affecting available affordable housing to lower- and middle-income classes (Organizations, 2017) . These factors are resulting in a regional housing scarcity far below historic levels paired with changing geographic and migratory patterns of individuals looking for housing.

Figure 10: Percentage of Single-Family Homes Built Over the Years




Note: This graph shows the historical decline in single-family home production. In 1939 or earlier, both San Francisco and the Bay Area saw around 50% of total housing being built as Single-Family homes. Since then, production has significantly declined (Peterson, Pappas, 2018). Infographic by Madeline Hursey.

The current housing reality is that the once "inexpensive home" is no longer viable or desirable. The housing available is unattractive to consumers, no longer environmentally friendly, and unmarketable to future generations (Organizations, 2017). Not only is the underproduction of single-family homes and affordability issues adding to the housing crisis, but it is also accompanied by Californians' current desire to live in more urban places. This massive shift to living in the urban core of cities is going to cause developers to put up new multi-family homes and mixed-use buildings in low-income and working-class neighborhoods already struggling with urban gentrification and displacement.

The impacts of urban gentrification and displacement are not a new topic to city planners and developers. It has become increasingly immoral and unavoidable. As the migration patterns of the upper and middle class are looking to live in urban neighborhoods, California is seeing a new re-segregation of metropolitan areas (Organizations, 2017). Working-class people who once lived in these neighborhoods are being pushed to the suburbs. These people are being forced to commute long distances to jobs in the urban core, lose proximity to amenities, and are seeing an increase in affordability concerns.

Californians want more urban living, but the urban cities cannot concentrate enough housing for the demand in existing working-class and inner-city neighborhoods. That causes too many problems in itself, so it is time to rethink suburbia. Investigating the potential of the suburbs for more multi-family housing options, accessible amenities, and transportation will enable a denser and more affordable living option that people are looking for.

As housing insecurity grows in the Bay Area, the government's central focus lies in efforts to incentivize housing development and rethink housing policies. It is important to examine historical development patterns and shifts to better envision and propose impactful

housing policies as well. Now, more than ever, shifting development and housing patterns in the Bay Area is crucial in order to solve this area's affordability and housing crisis. Understanding these patterns will inform new housing development policies to appropriately address these ongoing crises.

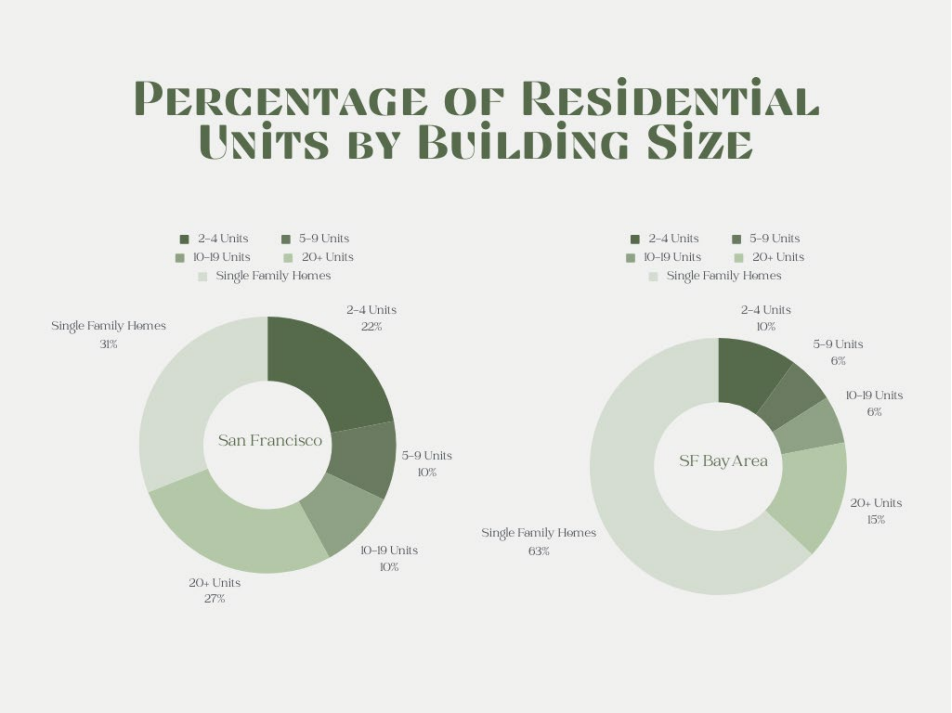
### 2.2.4. San Francisco Bay Area Housing Needs

Amidst the prevalent housing affordability crisis, the Bay Area housing prices have been accelerating at an alarming rate since the 1990s. The addition of the intensified wage gap and employment base has also added to the economic stresses of residents in the area and housing production has not been able to keep up. Much of the policy debate around housing questions whether more market-rate housing should be built and whether resources should be expanded to build more affordable units (Peterson, Pappas, 2018). Understanding the area's housing stock, what it lacks, and how it serves will open room for better ways to rethink the contemporary suburb.

#### *2.2.4.1. The Bay Area's Housing Stock*

In recent decades the area has undergone many important housing changes. To begin with, the area's housing stock continues to provide a diverse mix of building types and forms of tenure (Peterson, Pappas, 2018). The majority of the residential units that are renter-occupied are also protected under the City's Rental Control Ordinance or are targeted towards low-income households. Therefore, those who have been able to secure a deed-restricted affordable unit or have resided in their rent-controlled units for many years face relatively low housing cost burdens. However, the older rental stock has been experiencing strong market pressures from rising housing costs as individuals/families who have recently moved into those units have a higher income.

Figure 11: Percentage of Residential Units by Building Size

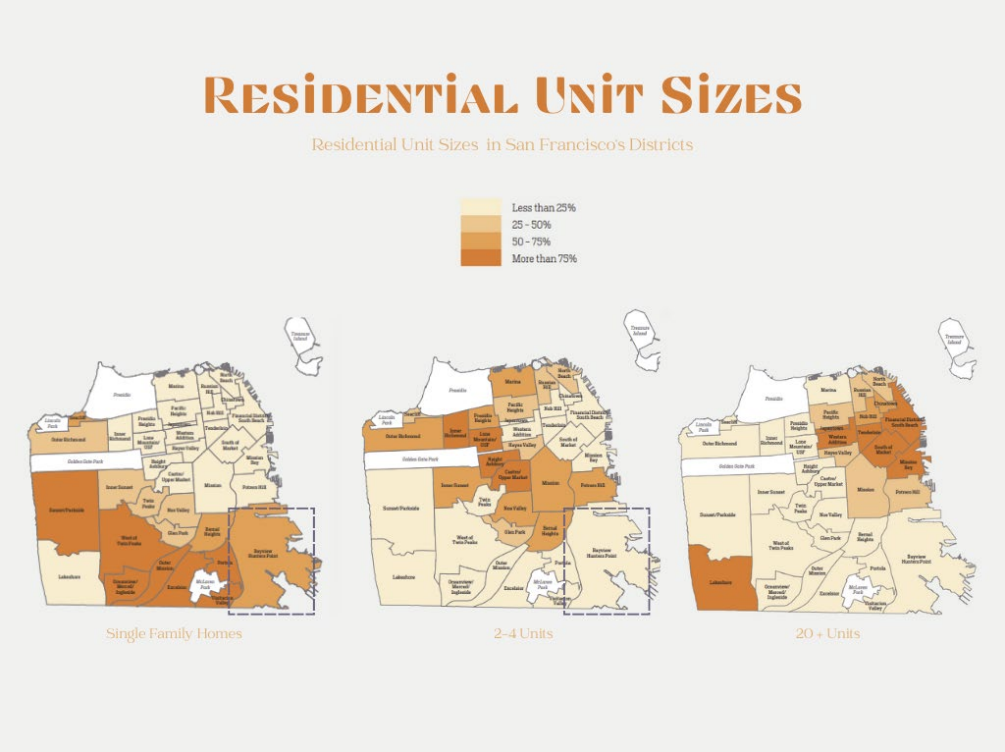



Note: These graphics compare San Francisco and the Bay Area's residential units by building size. Single-family homes dominate both regions (Peterson, Pappas, 2018). Infographic by Madeline Hursey.

Most of the Bay Area region is dominated by single-family homes. In Figure 10, the chart shows that 31% of all housing units in San Francisco and 63% of all housing units in the Bay Area are single-family units. Most of this housing type is situated in the western and southern neighborhoods of San Francisco and outer Bay Area cities (Peterson, Pappas, 2018). Buildings with a higher density of individuals, 20+ units, are located in the northeastern part of San Francisco, also referred to as the urban core of the city. For reference, figure 11 shows the distribution of residential unit sizes across San Francisco. According to the San Francisco Planning Department in Table 2, buildings with more than five units contain 52% of the city's units while occupying only 19% of the land. Single-family homes provide 27% of the city's units while occupying 62% of its residential land (Peterson, Pappas, 2018). This shows a clear

connection between the density of housing and land use. Providing denser housing options allows the opportunity to house more on a smaller area of land, allowing housing costs to decrease accordingly.

Figure 12: Residential Unit Sizes




Note: This graph shows the distribution of residential unit sizes across San Francisco. Most of the single-family homes are situated in the southwestern districts. Residential buildings with 2-4 units surround the urban core and buildings with 20+ units are mainly located in the central districts (The Bay Area Today | Plan Bay Area 2040 Final Plan, n.d.). Infographic by Madeline Hursey.

Lately, the production of housing has not matched the region's employment growth or growth of higher-income households. Occupancy changes in the older housing stock have been driven by the significant growth of high-wage jobs (Peterson, Pappas, 2018). The Bay Area has seen a large influx of high-income households, but a loss of middle- and low-income households. Additionally, the area has also seen a loss of its African American population and households

with children and other key demographics. A combination of all these previous factors impacts the availability of housing stock in the Bay Area.

Figure 13: Number of Residential Units and Land Area per Unit by Building Size

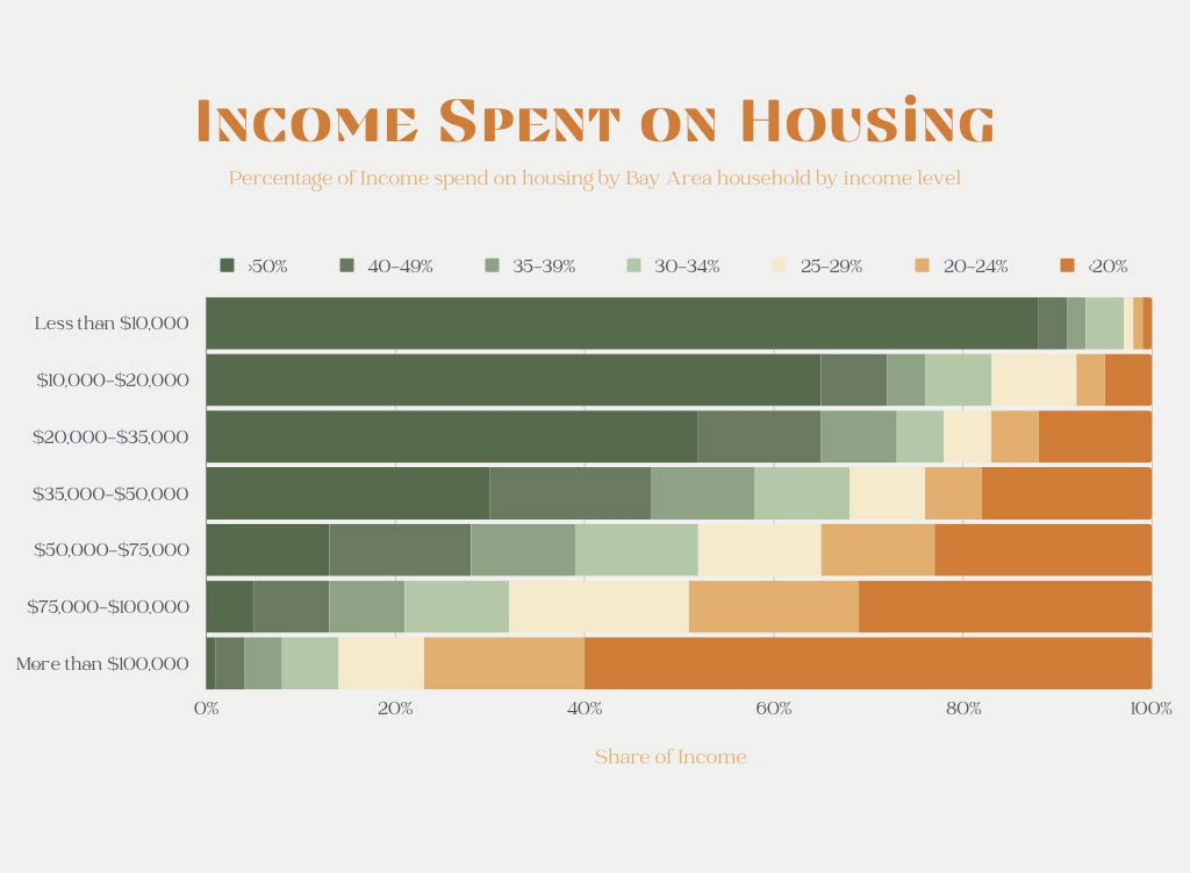
| Building Size | Units | % of Total | Total Land Area (in acres) | % of Total |
|---|---|---|---|---|
| 20+ Units | 115,888 | 32% | 973 | 10% |
| 5-19 Units | 72,663 | 20% | 871 | 9% |
| 2-4 Units | 77,529 | 21% | 2,016 | 20% |
| Single Family | 96,099 | 27% | 6,334 | 62% |
| TOTAL | 362,179 | 100% | 10,195 | 100% |

Note: This table shows a comparison of building size and total land area they use. Single-family homes make up 27% of the total units and cover 62% of the total land area (Peterson, Pappas, 2018).

Overall, a high percentage of the area's rental stock is subject to rent control and provides affordable options for low and moderate incomes with established tenures. A housing tenure is a financial arrangement and ownership structure under which someone has the right to live in a house or apartment. More than 60% of renters living in housing are subject to the city's rent control ordinance (Peterson, Pappas, 2018). On the other hand, rent-controlled units are subject to disproportionately higher incomes than in the past. The Bay Area has gained many high-income households but the number of low- and moderate-income households has dropped causing housing burdens to worsen for all but high-income individuals. The majority of homeowners earn more than 120% of Annual Median Income, while the majority of renters earn less than 120% of AMI (Peterson, Pappas, 2018). This shows the frightening disparity between income levels in the Bay Area and how it is reflected in the prices of rent-controlled units. Extremely low-income individuals, those earning less than 30-50% of the AMI, continue to face overwhelming cost burdens spending over 50% or more of their income on housing alone (Peterson, Pappas, 2018). Figures 12 and 13 show the income spent on housing by Bay Area

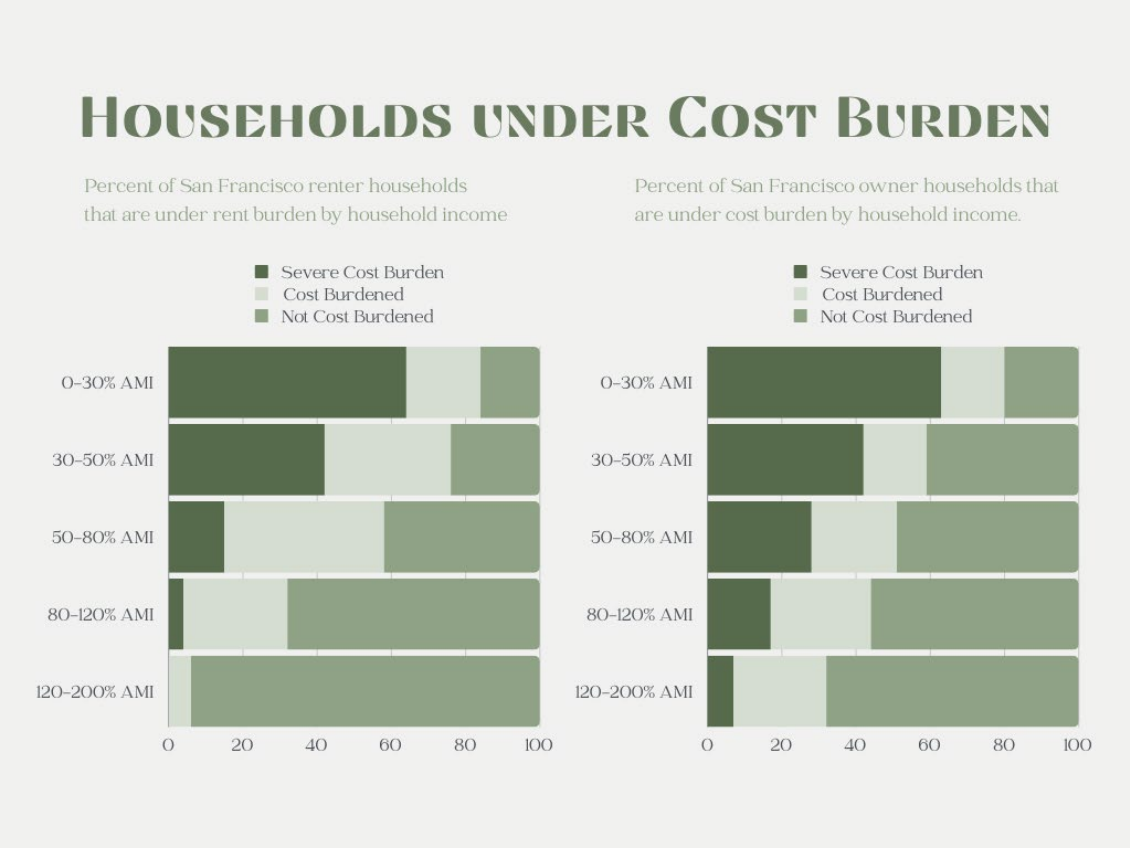
households and which of those households, according to the percentage of AMI, are under cost burden.

Figure 14: Income Spent on Housing




Note: This graph shows the share of income spent on housing by Bay Area households in 2015 by income level. A large majority of incomes under $35,000 are spending over 50% of their household income on housing (The Bay Area Today | Plan Bay Area 2040 Final Plan, n.d.). Infographic by Madeline Hursey.

Figure 15: Percentage of Households Under Cost Burden




Note: These graphs show a comparison of renter and owner households that are under cost burden by household income. The lower the AMI percentage, the more cost burden the household is (Peterson, Pappas, 2018). Infographic by Madeline Hursey.

### *2.2.4.2. State of the Bay Area's Rental Market*

To put prices in perspective to better understand, as of June 2023, the median rent for all property types in the Bay Area is $4,295. The range of rental prices spans from $2,150 to $10,000 +. The Bay Area has a median rent of $3,600 for houses and an average rent price for a 3-bedroom apartment of $4,995 per month (Peterson, Pappas, 2018). There are many factors influencing the market including inflation, a decreasing population, rising mortgage rates, and higher rents. Inflation is also affecting affordability and the demand on the lower ends of the market.

According to San Francisco Planning, maintaining a middle-class life in California would cost someone over $300,000 a year. The median price of a home in the Bay area increased 65% spanning five years from 2013-2018, reaching around $1.2 million and over 10.9 million Americans spend over 50% of their income on housing alone (Peterson, Pappas 2018). Recently, financial support for affordable housing has been pulled back by the state and federal governments. There is a limited supply of both market-rate and affordable housing causing rents and home prices to rise rapidly. Today, California currently ranks 49$^{th}$ in the nation in terms of the number of housing units per capita. The Bay Area is experiencing one of the most severe housing crises of any of the nation's large metro areas (Peterson, Pappas 2018).

### 2.2.5. Rethinking Housing in the Suburbs

#### *2.2.5.1. Using What Exists*

The solution doesn't have to be developing thousands of acres of land. Using what is available in terms of already developed land, existing sites, and empty buildings is a great way to start. Considering the vacancy rate of the Bay Area will provide concrete data on what is available and where to begin. According to county supervisor Dean Preston, more than 4,000 people are sleeping on the streets without any form of shelter every night in San Francisco while over 60,000 homes sit empty. "It is devastating to realize for every person sleeping on the streets tonight, there are 14 vacant homes in our city," said Dean Preston. The number of homes vacant increased 52% in two years from 40,000 in 2019 to over 60,000 in 2021 (Brousseau, Malamut, 2022). This places San Francisco Bay Area's residential vacancy rate at 15%, by far the highest rate among major cities in the country, which is at roughly 10%. In addition to the highest residential vacancy rate, the Bay Area also has the highest share of vacant seasonal and vacation units with over 10,000 homes (Brousseau, Malamut, 2022).

Quite a few homes are for rent as well but continue to remain vacant. These vacancies increased by 142% in the last two years as well. Landlords are holding out on renting their units because they are waiting for the housing market to improve so they can rent at higher costs (Brousseau, Malamut, 2022). Generally, housing supply is a primary contributor to affordability, but a large number of vacant units in a city can also severely impact affordability by restricting the supply even more.

Rethinking housing can easily begin with using what is already available. Various policies and taxes could potentially incentivize landlords and owners to get their properties back on the market and available. This will also start to address environmental concerns about developing more land and housing by using what is already built. Some of these housing options are located in the urban core and surrounding suburbs which will also reduce commute times and greenhouse gas emissions from car transportation. More information on policy implications will be discussed further in subsequent sections. Understanding the vacancy rate and housing supply is only a small factor in the housing crisis, and more tactics will have to be considered as well, including providing multiple housing options.

#### *2.2.5.2. A More Urban Suburbia: Bringing Density to the Area*

Urbanizing the suburbs is not the same as transforming suburbs into big cities. The idea is to think human-scale, walkable, and transit-accessible. These types of communities are what many people want to see today. Increasing the density of suburbs will occur in degrees. Moving from single-family tract house landscapes to townhomes, duplexes, triplexes, and condominium clusters is a great way to start. Concentrating this type of increased density around town centers that connect with common corridors, commercial areas, and parks will give these neighborhoods an urban sort of feel (Organizations, 2017). It is time to start discussing what smart densification

of suburbs will look like. How can sustainable, equitable, and affordable housing options meet the needs of lower- and middle-class individuals looking for housing? These considerations will help to tackle the big picture housing crisis that California is experiencing.

The Bay Area housing market desires denser, human-scale, small-city suburbs situated around the larger metropolitan cities in the area. This is not suggesting that every single-family residential lot be turned into a denser housing opportunity but thinking about how these areas can be turned into smaller communities. These small-city suburbs need to provide both residential and employment opportunities and be connected by efficient regional transportation as well. Planning is crucial as the process of rethinking and densifying the suburbs begins. These places are existing communities. A California state bill recently passed in the legislature known as AB73 and SB540 provide incentives for this kind of carefully planned growth and development supported by infrastructure and mandated minimum levels of affordability (Organizations, 2017). To be able to create this type of transition in suburban communities, people must be on board with the commitment to change. This will require organizing and political leadership within these communities. This will have to come with an acceptance of rezoning some areas, increased heights and density of buildings and people, and more neighborhood activity. This change will transform the past single-family suburbia into a 21st-century regional urban suburbia designed to fit the contemporary housing needs in California.

### *2.2.5.3. Providing Multiple Housing Choices*

Before World War II, suburbs across the country saw an array of housing, not just single-family homes. These housing types included townhomes, duplexes, triplexes, and fourplexes. Today, they are collectively known as the Missing Middle housing (Marti & Cohen, 2021). This type of housing is a time-proven, economical, and equitable way to provide more housing choices in walkable places. They are called missing middle because they sit in the middle of the spectrum of housing between detached single-family homes and midrise to high-rise apartment buildings.

Figure 16: Missing Middle Housing


Note: This figure explains where missing middle housing falls in the spectrum of housing options. Missing middle housing includes duplexes, fourplexes, courtyard buildings, cottage courts, townhouses, multiplex, and triplex units (Missing Middle Housing, 2023).

Historically, these types of buildings were beloved by many families and individuals who lived in them, but around the mid-1940s, they became illegal to build in most suburban areas. Today, young couples, single individuals, and professionals, are looking for ways to live in walkable neighborhoods, but without the cost and maintenance burden of detached single-family homes. This would help solve the issue the Bay Area's suburbs are seeing currently. The majority of the Bay area is single-family zoning situated in unwalkable neighborhoods and far

away from public transportation and resources (Missing Middle Housing, 2023). Incorporating the idea of missing middle housing with slowly densifying the suburbs to create human-scale neighborhoods that people want.

#### *2.2.5.4. Urban Design Tactics for Retrofitting the Suburbs*

Since The Great Recession, underperforming suburbs provide a great opportunity to rethink these types of areas. There are many tactics in which these types of upgrades can be incorporated but there are a few important ones to really consider. To begin with, there is an immediate need to address the problem of vacant buildings and homes in the Bay Area. Turning these areas into more sustainable and resource friendly buildings and homes will start to transform the use of the suburbs. This will also begin to revive local communities in the area, making them more human scale and livable.

These strategies for rethinking the suburbs fall into three categories: re-inhabitation, redevelopment, and regreening. Re-inhabitation is the adaptive reuse of existing structures for more community-serving purposes (Dunham-Jones, 2011). This can also include retrofitting of existing housing in the area as well. Redevelopment is replacing existing structures and/or building on existing parking lots with a compact, walkable, and connected mix of uses and public spaces. These spaces tend to be less auto dependent and focus on facilitating community engagement. Lastly, regreening is the revitalization of land as parks, community gardens, or reconstructed wetlands. All of these strategies provide communities with a useful range of approaches to rethinking suburbia in the 21$^{st}$ century (Dunham-Jones, 2011).

Diving deeper into the three strategies, many tactics can make sure those goals are obtained. Below are more detailed tactics for rethinking the suburbs:

- Reuse the Box

- Provide Environmental Repair
- Revise zoning codes and public work standards
- Improve connectivity for drivers, bicyclists, and pedestrians
- Consider future connectivity and adaptability
- Use appropriate street types and real sidewalks
- Keep block size walkable
- Use shallow Liner buildings
- Diversity housing choice and price
- Add new units to existing subdivisions
- Invest in quality architecture

#### *2.2.5.5. The Limits of Density*

The new multi-family market rate development happening in the core of cities is unfortunately not necessarily affordable to middle-income households and certainly not affordable for lower-income households. The cost of land plays a huge role in the price of construction rendering it far too expensive to be naturally affordable to middle- and lower-income renters or buyers. These larger multi-family buildings are usually more expensive to build as well. Structures over five stories require more expensive construction techniques to adhere to fire and safety codes and have to use concrete and steel structures as opposed to wood-frame construction, a more inexpensive option (Marti & Cohen, 2021).

### 2.2.6. Existing Bay Area's Policies

Although an obvious response to a shortage of housing and an affordability crisis sounds like it should be "build more," this will not result in the socio-economic and diverse communities that are seen laying the foundation for the future of the suburbs. This kind of issue needs to be

addressed with an “all-of-the-above” attitude. One policy or plan is not going to fix everything, but there is no more important issue to be tackled for California today.

#### *2.2.6.1. Vacancy Tax*

Starting on January 1, 2024, Proposition M will levy a tax on vacant residential units in buildings with three or more units if they are kept empty for more than 182 days. The tax will vary on the square footage of the property and the number of years it has been vacant. Currently, this proposition excludes single-family homes and duplexes in order to provoke opposition from the real estate industry. Cities like Oakland and Vancouver have enacted the same proposition and included a tax on single-family homes and duplexes and saw a decrease in vacancy rates (Brousseau, Malamut, 2022). Money generated from the tax will go towards affordable housing and rental subsidies. Proposition M is estimated to impact approximately 4,000 units so far. It does allow for additional time to fill vacant units before the tax applies, including repairs, new construction, natural disasters, or the death of the owner. Data shows that around landlords of 175 units will lower their rents to avoid paying tax and another 80 would sell. The tax would range from $2,500 to $5,000 per vacant unit to a maximum of $20,000 in later years. It is estimated that this tax will generate an annual revenue of $20-37 million, with the tax continuing until December 31, 2053. This revenue will fund rent subsidies and affordable housing Brousseau, Malamut, 2022).

#### *2.2.6.2. Zoning Policies*

A few zoning policies within the Bay Area include inclusionary zoning and restricted residential zoning. The inclusionary zoning policies require developers to include a percentage of affordable housing in units in new residential developments. The San Francisco Inclusionary Housing Program has been in effect since 2002 and requires developments of 10 or more units to

pay an Affordable Housing fee or meet the inclusionary requirement by providing a percentage of the units as below market rate (BMR) units so that they become affordable to residents (San Francisco Planning, 2023). Currently, there are around 5,000 inclusionary housing units throughout the Bay Area.

The Housing Element is a law adopted by every city and county in California. California expects each city to maintain a current general plan and update its housing element every eight years (San Francisco Planning, 2023). The Housing Element law mandates that local governments must adopt plans and regulatory systems that provide opportunities for housing development with extra consideration on racial and social equity (San Francisco Planning, 2023). The 2022 Housing Element update recognized housing as a right, increasing housing affordability for low-income households and communities of color, opening small and midrise multifamily buildings, and special attention to rezoning to provide increased opportunity to all neighborhoods (San Francisco Planning, 2023).

#### *2.2.6.3. Housing and Rental Subsidies*

Under the Housing Element, many policies ensure access to affordable and stable housing options. The Housing Element is made up of 42 policies (San Francisco Planning, 2023). Figure 15 lists the most applicable policies for affordable housing and increasing access to housing choices.

Figure 17: Housing Element Policies

| Housing Element Policies | | |
|---|---|---|
| **Policy** | **Related Objectives** | **Implementing Program Areas** |
| **Policy 1:** Minimize no-fault and at-fault evictions for all tenants, and expand direct rental assistance as a renter stabilization strategy | **Objective 1.A:** Ensure housing Stability and Healthy Homes | 1: Affordable Housing Resources and Equitable Access |
| | **Objective 1.B:** Advance Equitable Housing Access | 2. Stabilizing Tenants and Rental Housing |
| | **Objective 3.C:** Eliminate community displacement within areas vulnerable to displacement | 3. Preventing and Eliminating Homelessness |
| **Policy 3:** Acquire and rehabilitate privately-owned housing as permanently affordable to better serve residents and areas vulnerable to displacement with unmet affordable housing needs | **Objective 1.A:** Ensure housing Stability and Healthy Homes | 2. Stabilizing Tenants and Rental Housing |
| | **Objective 1.B:** Advance Equitable Housing Access | |
| | **Objective 4.A**: Substantially expand the amount of permanently affordable housing for extremely low to moderate-income households | |
| **Policy 4:** Facilitate the legalization of unauthorized dwelling units while improving their safety and habitability | **Objective 4.B**: Exapnd small and mid-rise multi-family housing production to serve our workforce, prioritizing middle-income households | 2. Stabilizing Tenants and Rental Housing |
| **Policy 5:** Improve access to the available Affordable Rental and Homeownership units especially for disproportionately underserved racial and social groups | **Objective 1.B:** Advance Equitable Housing Access | 1: Affordable Housing Resources and Equitable Access |
| | **Objective 3.A:** Build intergenerational wealth for American Indian, Black, and other communities of color | 5: Redressing and Preventing Discrimination |
| **Policy 11:** Establish and sustain homeownership programs and expand affordable housing access for American Indian, Black, Japanese, Filipino, and other communities to redress harm directly caused by past discriminatory government actions including redlining and urban renewal. | **Objective 2.B:** Offer reparations for communities directly harmed by past discriminatory government action and bring back their displaced people | 4. Centering equity community and cultural heritage |
| | **Objective 3.A:** Build intergenerational wealth for American Indian, Black, and other communities of color | |
| | **Objective 3.C**: Eliminate community displacement within areas vulnerable to displacement | |
| **Policy 17:** Expand investments in Priority Equity Geographies to advance equitable access to resources while ensuring community stability | **Objective 3.A:** Build intergenerational wealth for American Indian, Black, and other communities of color | 4. Centering equity community and cultural heritage |
| | **Objective 5.A:** Connect people to jobs and their neighborhood with numerous, equitable, and healthy transportation and mobility options | 9. Healthy, connected, and resilient housing a |
| **Policy 11:** Enable low and moderate-income households to live and prosper in well-resourced neighborhoods by increasing the number of permanently affordable housing units in those neighborhoods | **Objective 3.B:** Create a sense of belonging for all communities of color within well-resourced neighborhoods through expanded housing choice | 1: Affordable Housing Resources and Equitable Access |
| | **Objective 4.A**: Substantially expand the amount of permanently affordable housing for extremely low to moderate-income households | |
| **Policy 20:** Increase mid-rise and small multi-family housing types by adopting zoning changes or density bonus programs in well-resourced neighborhoods and adjacent to lower-density areas near transit. | **Objective 3.B:** Create a sense of belonging for all communities of color within well-resourced neighborhoods through expanded housing choice | 7. Expanding Housing Choices |
| | **Objective 4.B**: Exapnd small and mid-rise multi-family housing production to serve our workforce, prioritizing middle-income households | |
| | **Objective 5.A:** Connect people to jobs and their neighborhood with numerous, equitable, and healthy transportation and mobility options | |
| **Policy 25:** Reduce governmental constraints on development in well-resourced neighborhoods to enable small and mid-rise multi-family buildings providing improved housing choice and affordability | **Objective 4.B**: Exapnd small and mid-rise multi-family housing production to serve our workforce, prioritizing middle-income households | 8. Reducing constraints on housing development, maintenance, and improvement |

Note: These policies from the Housing Element are the most applicable to expanding housing choices and access to affordable housing (San Francisco Planning, 2023)

## 2.3. Gap Identification

Some of the gaps that exist in this research include comprehensive information on the financing models that can provide affordability. The background provides basic information on housing and rental policies that the Bay Area has adopted recently, but it does not dive into where this money comes from and how these types of policies are enacted.

This research also does not dive into the integration of sustainable and technological techniques for the future of housing in the suburbs. The research touches briefly on the environmental impact of urban sprawl but does not discuss strategies of sustainable principles within housing itself. The concluding work will address specific community preferences and equitable urban development to produce new housing strategies.

## 2.4. Project Type

This project will comprehensively address the idea of rehousing the American dream for the 21st century by rethinking suburban development through a new master plan and urban infill housing prototype on a specific site in the San Francisco Bay Area. This housing prototype will be applied to various residential lots throughout the master plan of the district. The project will focus on providing residents of the area with an equitable, affordable, and contemporary vision for the suburbs.

## 2.5. Project Issues

This project aims to resolve many issues on the site revolving around urban planning, housing, and the lack of a walkable neighborhood and access to resources. The site, which is located in the San Francisco Bay Area, deals with a housing affordability crisis that is amplified as the demographics of the neighborhood's residents continue to change. Those who can afford to live in the city are moving more in that direction to be closer to resource preferences and jobs.

They are seeing no need for the housing that is available in the suburbs anymore. As they migrate into the core, they are gentrifying existing neighborhoods and displacing middle- and lower-income classes, who are then forced to move to the suburbs. The current conditions of the suburbs fail to provide adequate resources and housing options that individuals are looking for.

# 3. METHODOLOGY

## 3.1. Research Approach

The approach taken through research and design will focus on solving the issue of rehousing the American Dream for the 21st Century. It will explore solutions for redesigning the suburbs to better suit the modern housing demographics in San Francisco's suburbs. Using many types of research methods including a rigorous site selection process, interviews, qualitative and quantitative research, and data, a site will be chosen in an area that best suits the parameters this research is looking to address. By analyzing case studies, comparing data, and gathering research-based conclusions, the goal is to develop a new master plan for a selected district with the addition of an infill housing prototype to serve as a model for areas in need of missing middle housing.

### 3.1.1. Research Methods

While approaching my research question, it was important to understand the history of housing trends and how the United States arrived at the housing conditions we see today. Gathering resources including books, articles, peer-reviewed sources, and case studies assisted in the research of important topics and events that influenced housing conditions. On October 23rd, 2023, an interview was conducted with Phil Carlson, an Associate Architect at Stantec in Minneapolis, Minnesota regarding topics to be applied in Results. Lastly, Conclusions were drawn from qualitative research to provide further support for the research questions and problems.

Three case studies were gathered, studied, and compared to further the understanding of rethinking housing in the suburbs. The selected case studies illustrate two examples of infill housing in suburban communities that address the need for affordable and equitable housing

solutions. The projects provide insight into financing models, housing and site layouts, and design considerations. Additionally, one case study will look at urban planning in a city's suburbs and the redevelopment of a corridor to provide resources, diverse housing choices, and improvement to street conditions.

Site selection was based on regions in the United States experiencing a housing crisis and having a substantial housing history influenced by the region's demographics, culture, and economics. A specific site within the region was decided by researching the neighborhood's characteristics and housing history. Special interest was taken in the breakdown of zoning, demographics, median income, vacancy rates, and poverty levels. These factors assisted on the decision of the site along with considerations of the target audience and suburban neighborhood this research is looking to address.

Multiple maps were studied of San Francisco to better understand condition of the suburbs, zoning, codes, transportation, districts, and nodes. Interest was directed towards existing commercial corridors, regions with residential zoning, areas with limited access to transportation and resources, and neighborhoods with inequitable housing conditions.

### 3.1.2. Ethical Considerations and Research Limitations

Ethical considerations of this type of project involve a range of factors including affordability, equitability, and community preservation. Projects of this scope prioritize affordability and diverse access to housing that will benefit a large range of residents of lower income levels, but it presents issues that contribute to gentrification and changes in the socio-economic infrastructure of the community. The project will do its best to mitigate these issues by engaging the community, introducing appropriate financial models, and preserving the community's existing infrastructure as much as possible.

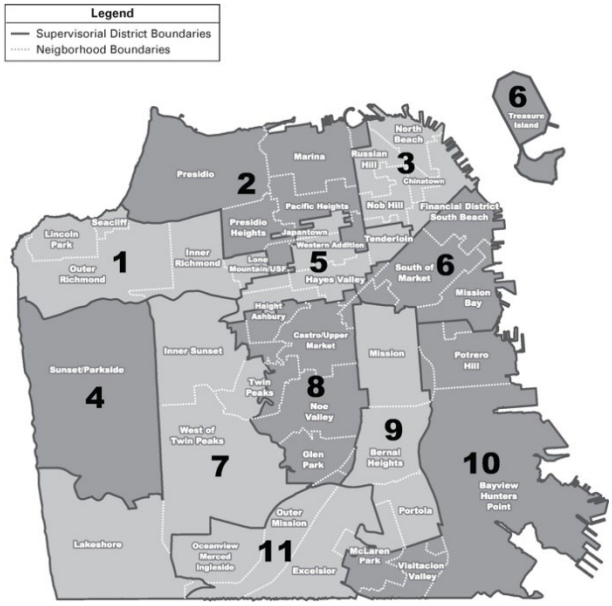
### 3.2. Project Location-San Francisco Bay Area

This project will focus on San Francisco's Bay Area, which is a region in Northern California comprised of three major cities: San Francisco, Oakland, and San Jose. This area is home to over 7.753 million people in 7,000 square miles. This area is experiencing the largest housing crisis in the United States, with off-the-chart housing and rental prices and the highest vacancy rate in America with over 60,000 vacant homes today (Brousseau, Malamut, 2022).

Figure 18: Map of San Francisco Bay Area

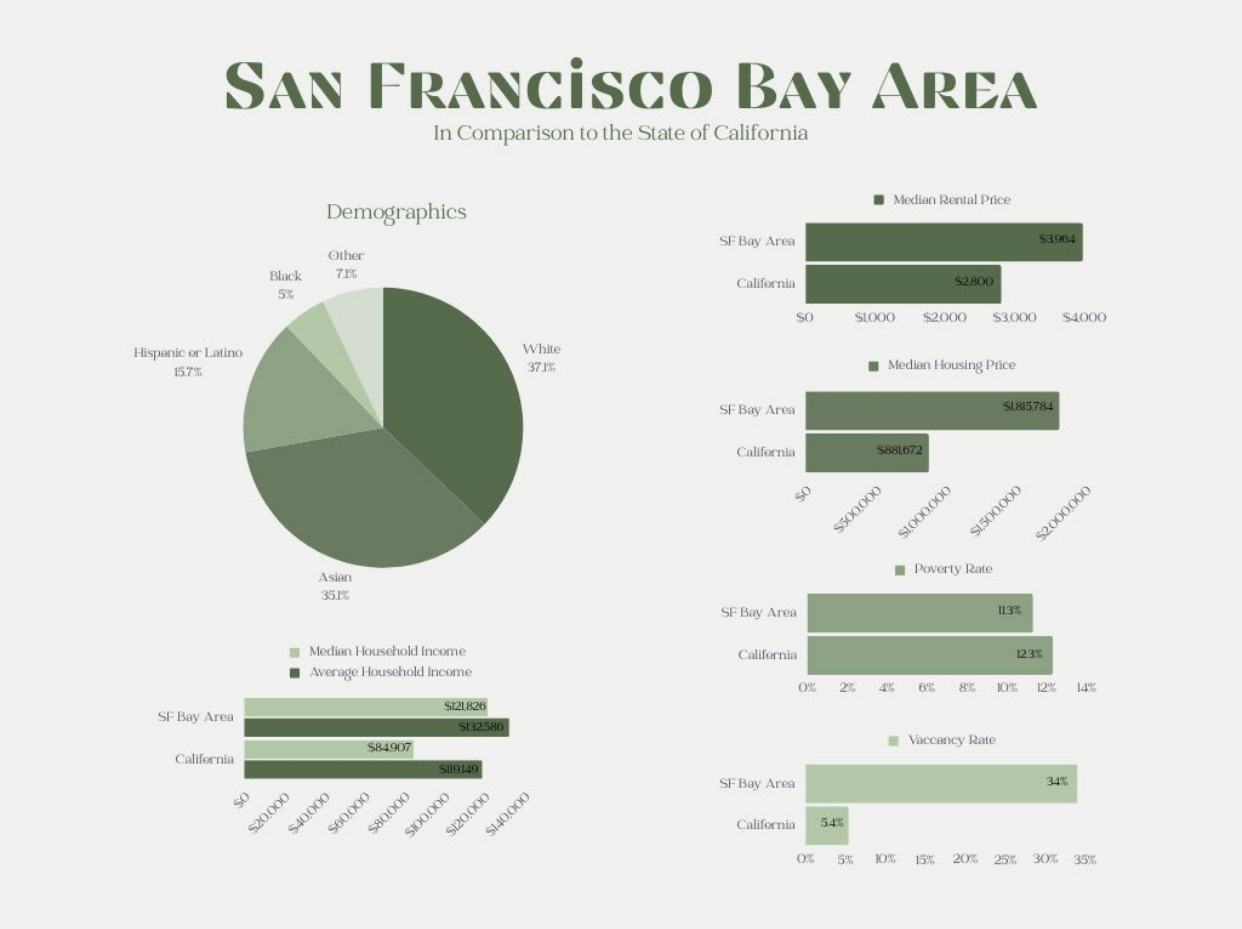

Note: This map shows the nine-county area of the Bay Area. Take note of where San Francisco is located (The Bay Area Today | Plan Bay Area 2040 Final Plan, n.d.).1

Figure 19: Map of San Francisco Districts




Note: San Francisco is made up of 11 districts. Take note of District Ten as it is integral to the project Location (The Bay Area Today | Plan Bay Area 2040 Final Plan, n.d.).

Figure 20: Information on San Francisco Bay Area




Note: This graphic compares demographics and general information between the SF Bay Area and the state of California. (Stats about all US Cities, City Data,.nd). Infographic by Madeline Hursey

San Francisco is made up of eleven districts that are each further broken into sub-districts and neighborhoods. Each of the districts offers unique qualities to the Bay Area, including various housing options, different commercial and retail choices, and plenty of fun things to do. Figure 15 is a graphic providing San Francisco's general information.

The Bay Area demographic breakdown shows that 37.1% of the population is White, 35.1% are Asian, 15.7% are Hispanic or Latino, 5% are Black, and 7.1% fall in the other category. According to the chart, the median household income for the Bay Area is $121,826 and for the state of California, it is $84,907. The average household income for the Bay Area is

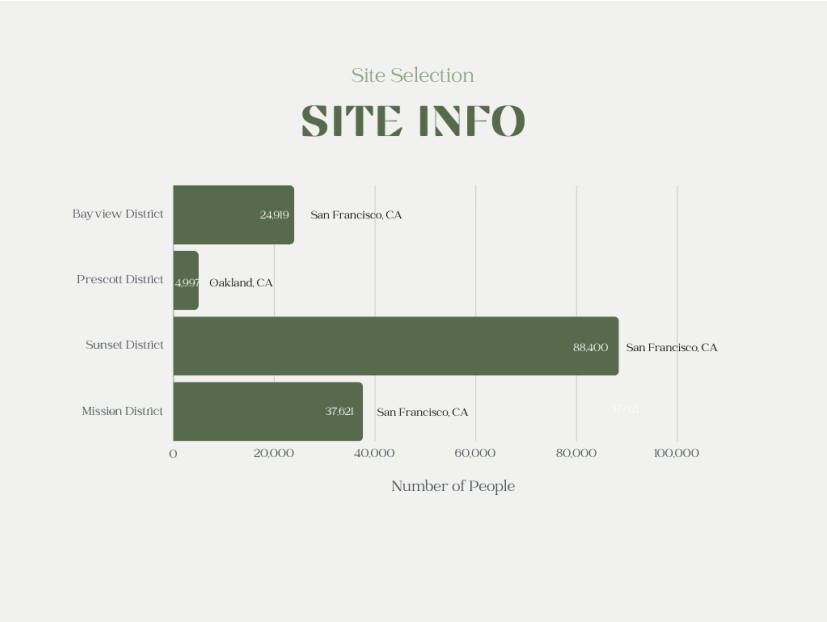
$132,586 and for the state of California, it is $119,149 (Stats about all US Cities, City Data,.nd). This shows the widening wage gap and how prevalent it is not just in the state of California, but the SF Bay Area specifically. The median rental price per month in the Bay Area is $3,964 and $2,800 for California. The median housing price for the Bay Area comes in at $1,815,784 and is $881,672 for California. The poverty rate is 11.3% for the Bay Area and 12.3% for the state of California. Lastly, the Bay Area's vacancy rate comes in at a shocking 34%, while California's is 5.4% (Stats about all US Cities, City Data,.nd).

### 3.3. Site Selection

Four districts in San Francisco's Bay Area were selected as potential sites for my research. These sites are all located within a district that represents the textbook definition of a 'suburb' in San Francisco. These areas are experiencing an influx of lower- and middle-class households as a result of being displaced from the urban core. These districts are also suffering from increasing rental and housing prices and are in need of equitable and diverse housing choices to accommodate the new households entering. These four districts also lack sustainable transportation choices and walkable scale neighborhood plans.

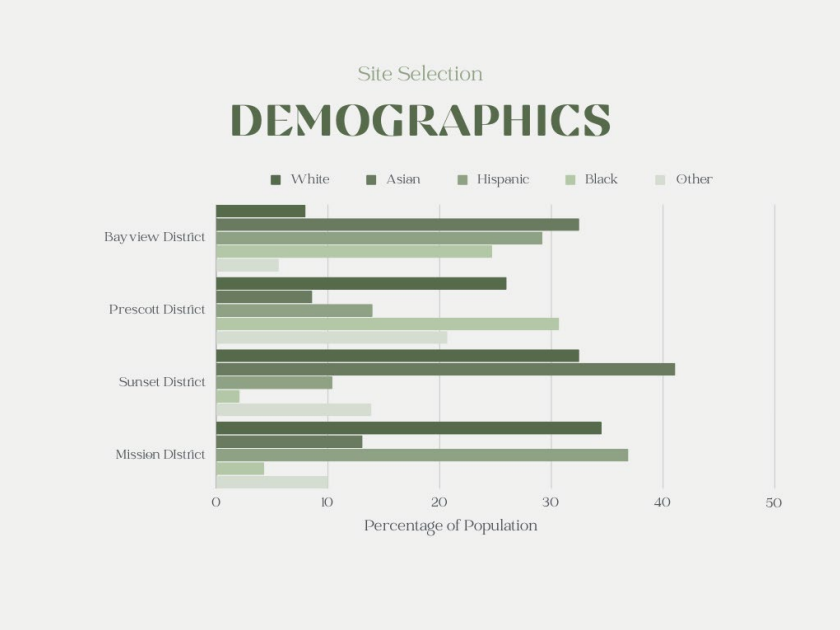
The four districts include The Bernal Heights District in San Francisco, the Mission District in San Francisco, the Prescott District in Oakland, and the Sunset District in San Francisco. A further breakdown of the site's information, demographics, zoning, median household income, vacancy, and poverty level rates follow:

Figure 21: Site Selection Site Info



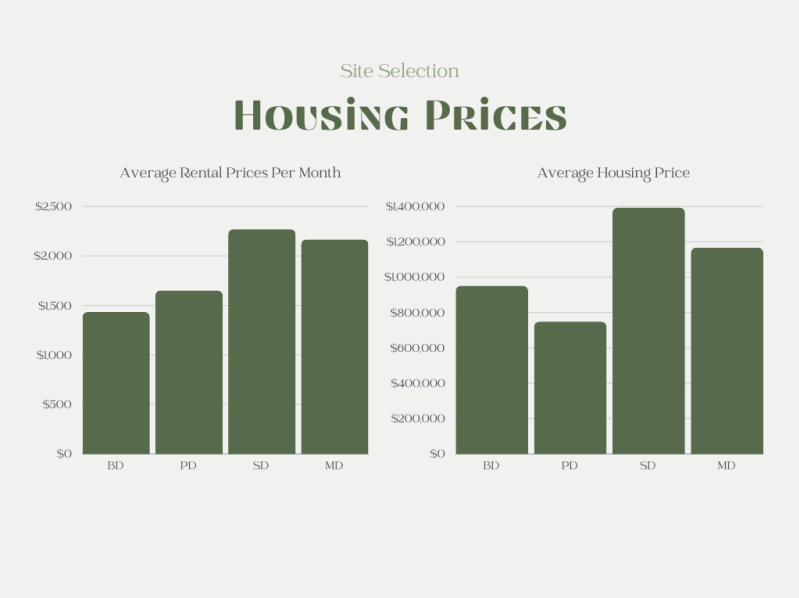

Note: This graph shows the district and neighborhood breakdown of each site and compares the population of the district. (Stats about all US Cities, City Data, nd). Infographic by Madeline Hursey

Figure 22: Site Selection Demographics



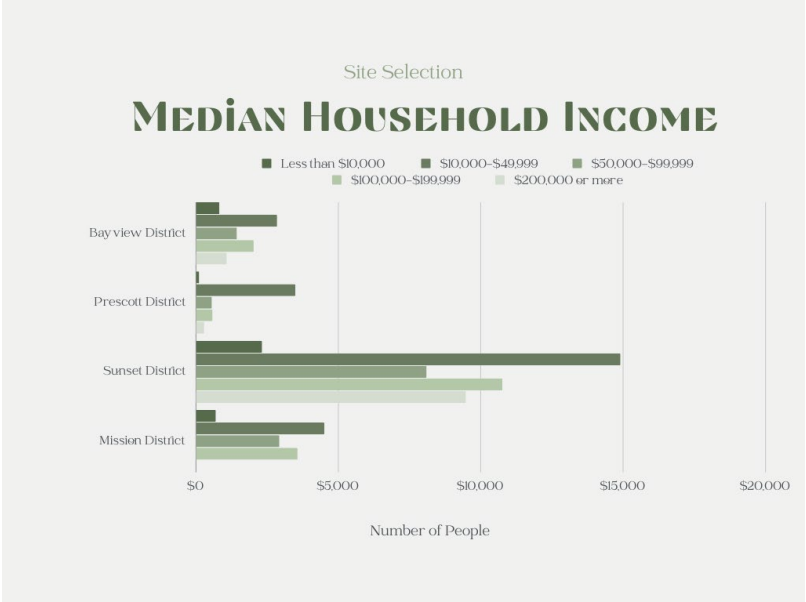

Note: This graph compares the demographics of each site by percentage of the population (Stats about all US Cities, City Data, nd). Infographic by Madeline Hursey.

Figure 23: Site Selection Housing Prices



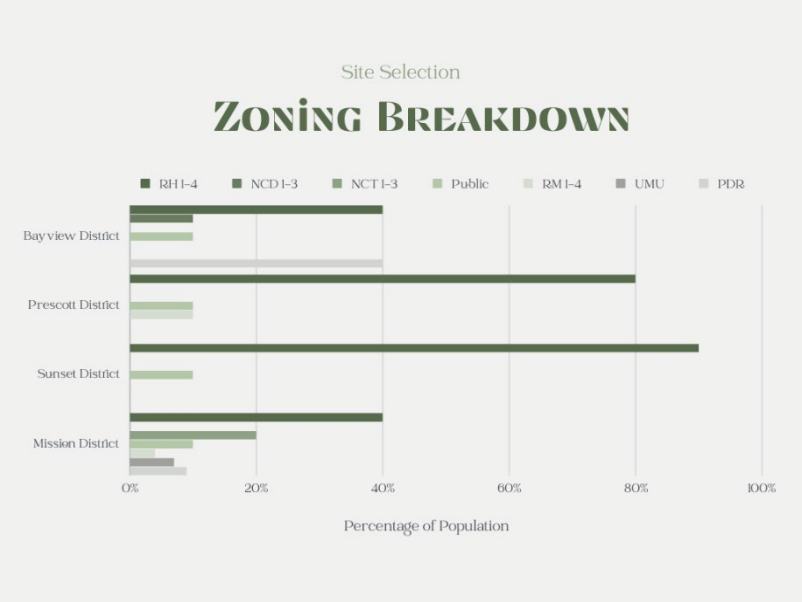

Note: This graph compares the average housing and rental prices in the respective sites (Stats about all US Cities, City Data, nd). Infographic by Madeline Hursey.

Figure 9: Site Selection Median Household Income



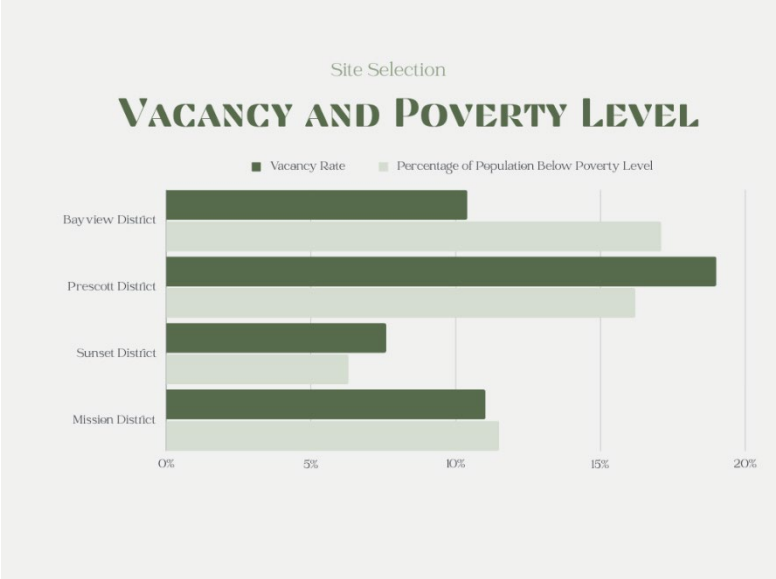

Note: This graph compares the Median Household Income of the four selected sites. The Median was used to look at the wage gap in the area (Stats about all US Cities, City Data, nd). Infographic by Madeline Hursey.

Figure 25: Site Selection Zoning Breakdown




Note: This graph compares the breakdown of zoning within the districts where these sites are located (Stats about all US Cities, City Data, nd). Infographic by Madeline Hursey.

Figure 26: Site Selection Vacancy and Poverty Levels




Note: This graph compares the vacancy rate along with the poverty levels on each site (Stats about all US Cities, City Data, nd). Infographic by Madeline Hursey.

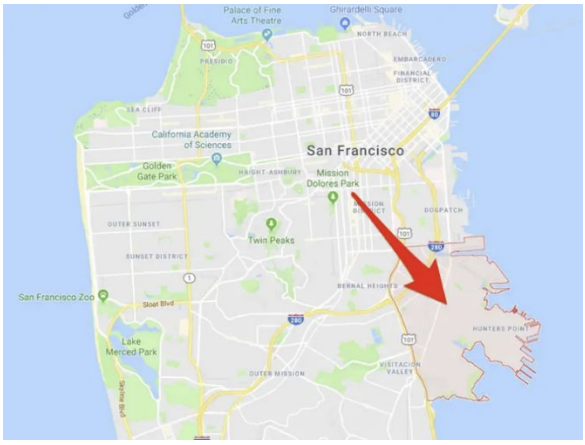
Breaking down the factors of each site helped decide on which district would provide the best location for a new urban master plan and region for missing middle housing. Ultimately, the Bayview District provides the best potential for rethinking suburban conditions for the 21st Century. This district met all the necessary criteria for my intended subjects of research. The site provides comprehensive and suitable neighborhood conditions for my proposed study area highlighting specific aspects to address that were introduced in the problem statement and objective.

## 3.4. Project Site- Bayview District

### 3.4.1. Site Information

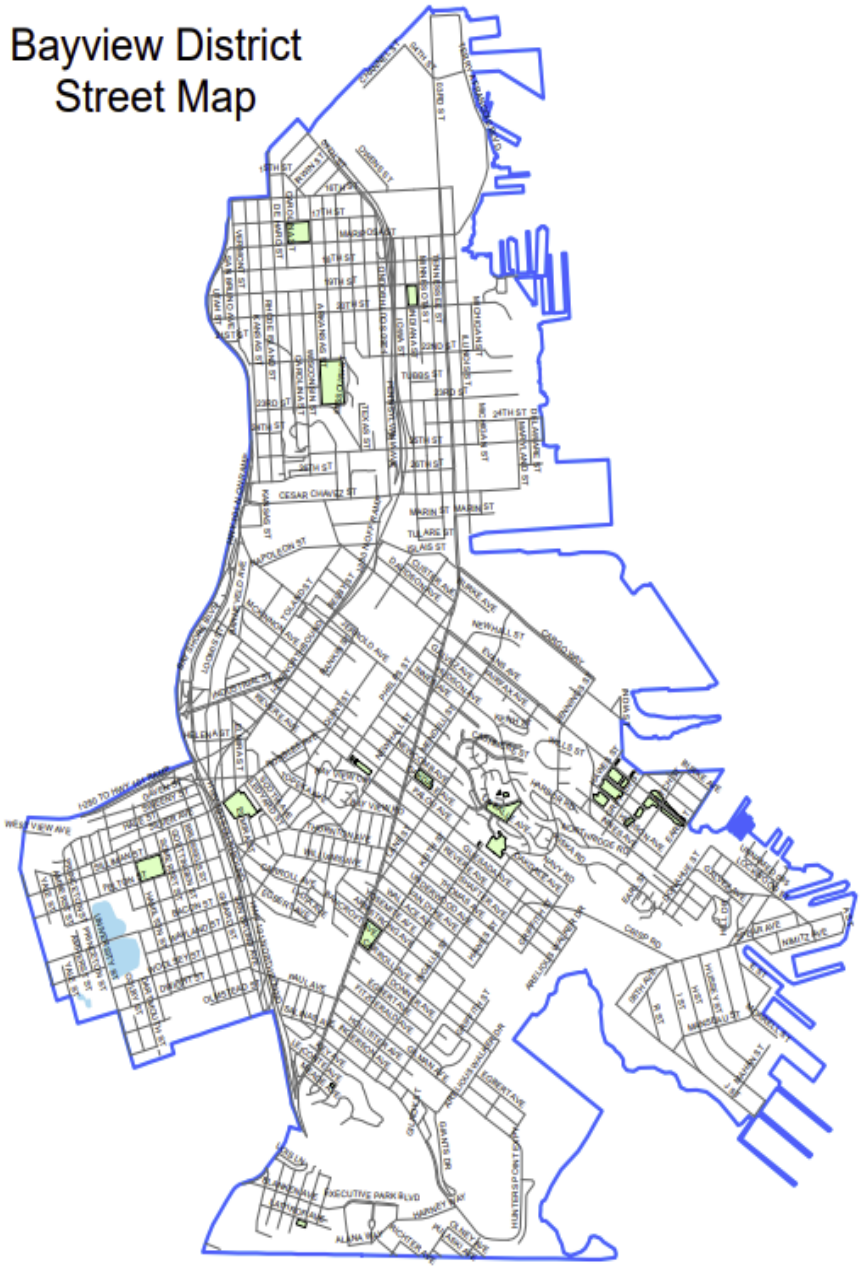
The proposed site for the urban master plan portion of the project will be the Bayview District in San Francisco, California. The project will investigate Revere Street, Quesada Avenue, 3rd Street, and various residential blocks on either side of the site. Upon further investigation, specific sites within the Bayview District with housing units deemed unsalvageable will be chosen for infill housing prototypes. This will provide more diverse and dense housing options in the area.

Figure 27: District Breakdown of San Francisco



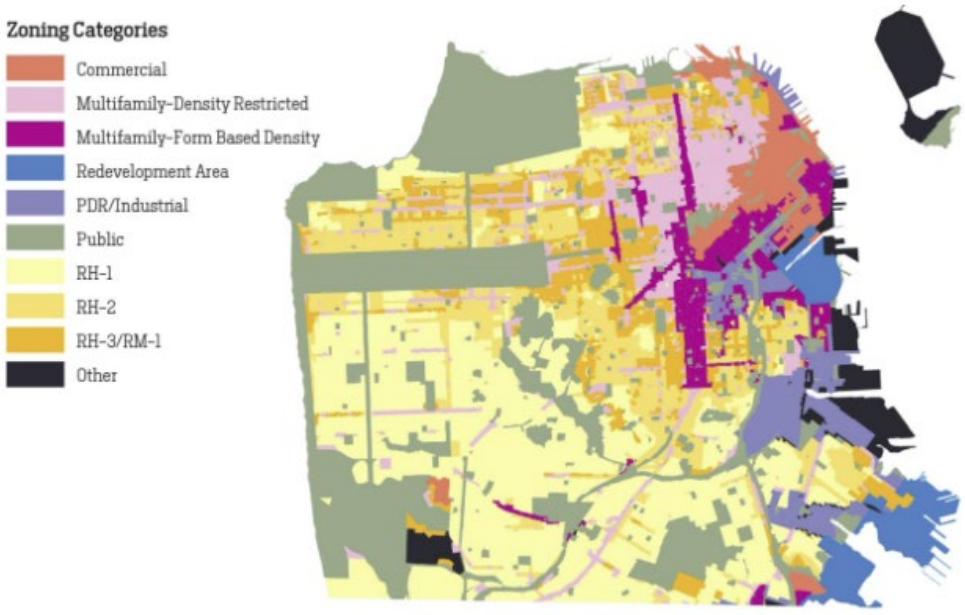

Note: The Bayview District is located in outlined area on the map (Stats about all US Cities, City Data, nd).

Figure 28: Bayview District Street Map



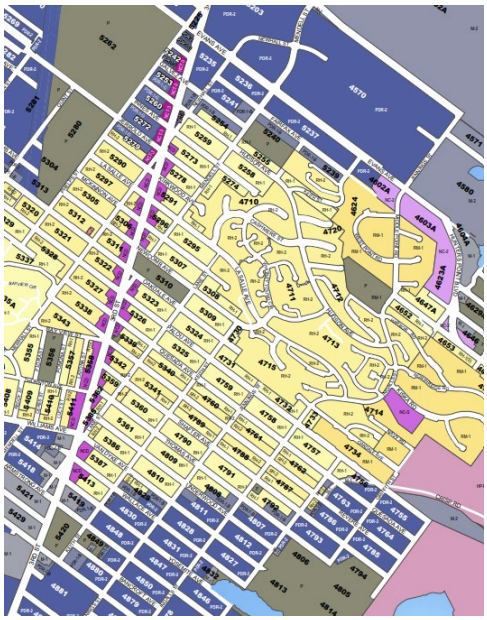

Note: (Stats about all US Cities, City Data, nd).

Figure 29: Zoning Breakdown of San Francisco




Note: The Bayview District is made up of mainly Residential, Redevelopment, Industrial, and public zoning (The Bay Area Today | Plan Bay Area 2040 Final Plan, n.d.)

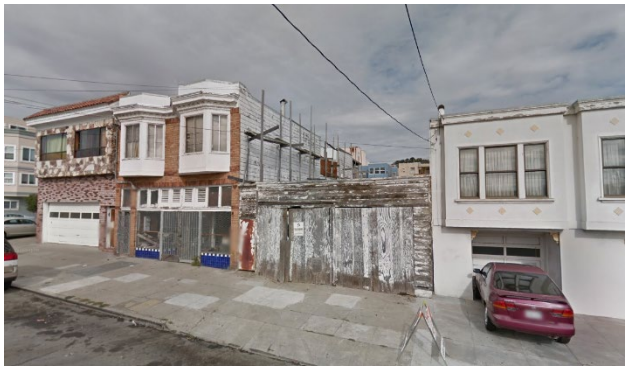
Figure 30: Zoning of Bayview District



Note: (Peterson, Pappas 2018).

The majority of the Bayview district comprises residential zoning, while other areas are zoned under redevelopment, industrial, and public. My proposed urban plan site will look closely at the residential zoned areas of Revere Street, Quesada Avenue, Palou Avenue, and their connection to 3rd Street which is the district's commercial corridor. The existing conditions of these streets present areas for improvement related to housing options, green space, transportation, and resource allocation. The residential streets lack vegetation, are congested with personal vehicles, and lack a distinct community identity or designated spaces for residents to engage with the outdoors or with one another. Figures 30-31, show photos of the existing conditions of streets and housing within the Bayview District.

Figure 31:Existing Housing Conditions of Revere Street.



Note: Many of the housing along Revere Street is deserted (Google. (n.d.). Google maps). Standing south looking north.

Figure 32: Existing Street Conditions on Revere St.

Note: Revere Street's conditions lack vegetation and are cramped with cars (Google. (n.d.). Google maps). Standing southing looking northwest.

Figure 33: Conditions of 3rd Street

Note: 3rd Street lacks vegetation, pedestrian and cyclist lanes, and planning organization. (Google. (n.d.). Google maps). Standing southwest looking northeast.

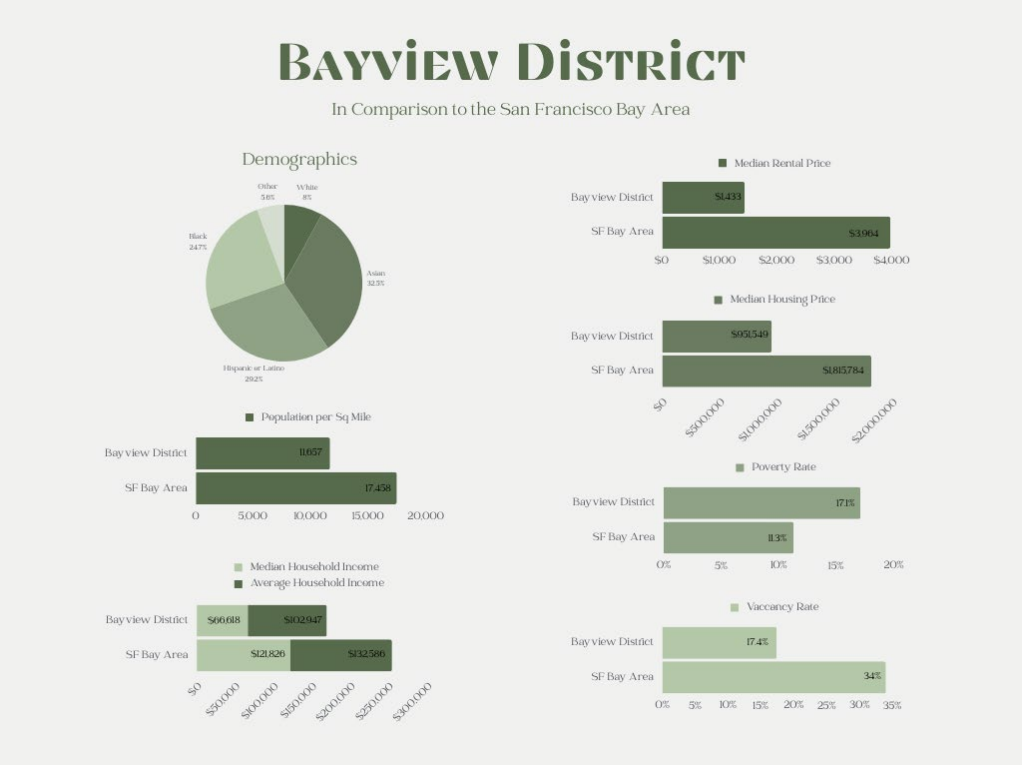
Figure 34: Parking Conditions on Quesada

Note: Most cars are parked two deep on the streets presenting safety and cramped conditions (Google. (n.d.). Google maps). Standing southeast looking northwest.

#### *3.4.1.1. Overview of the Bayview District*

The Bayview District is located on the southeast side of the city and sits right on the waterfront. It is known to be one of the sunniest districts in San Francisco. Its diverse demographics give rise to vibrant neighborhoods and a unique sense of community. Bayview is about 2.50 square miles and has a population of around 23,979 people (Stats about all US Cities, City Data, nd). Figure 33 provides key data for the Bayview District in comparison to the Bay Area.

Figure 35: Information on Bayview District




Note: This graph compares the average housing and rental prices in the respective sites (Stats about all US Cities, City Data, nd). Infographic by Madeline Hursey.

### *3.4.1.2. Bayview Population Trends*

Figure 36: 1887 Map of San Francisco


Note: (Sanborn Fire Insurance Map from San Francisco, 1887)

Figure 37: Hunters Point Dry Dock in Bayview in 1867

Note: (Chen, 2020).

The Bayview District is one of San Francisco's oldest and most historic communities. Before settlers, Bayview was occupied by grasslands, rolling hills, and marshlands. Over time, the landscape was entirely transformed by Spanish explorers, native inhabitants, and cattle herds (Verplanck, 2023). During the California Gold Rush in the mid-nineteenth century, the land known today as the Bayview District was subdivided into housing and commercial parcels and sold off to American and European Settlers. This area quickly transformed into one of the most ethically diverse communities in the area. In 1866, the District established its industrial nature as it began construction of the Dry Dock at Hunters Point (Verplanck, 2023). This quickly became grounds for shipbuilding during World War I.

During the Second World War, the Dock was sold to the U.S. Navy and became one of the most industrialized zones on the West Coast. During this period, Bayview saw an influx of African-American workers looking to take jobs in the naval shipyard. From 1940 to 1945, the Black population grew by over 600% in the Bay Area and were forced to make important political and social moves during the war (Chen, 2020). Even though these workers received a relatively high-paying job at the shipyard, restrictive housing contracts racially prohibited

African Americans from moving into predominately white neighborhoods resulting in the district demographics seen today. Landlords and owners refused to rent or sell to African Americans leaving very little housing stock for this specific population to choose from (Chen, 2020).

After the war, Bayview began to experience a shift in the economy that exacerbated inequities and targeted racial classes in the process. Poverty, unequal access to resources and homes, and economic disinvestment became detrimental to the region. In the decades following the war, residents of Bayview invested time into an action plan for improved economic and social conditions. In response to the rising unemployment, economic disinvestment, and deteriorating housing, residents organized many social movements to bring the community together. In 1954, the Hunter Point Project Committee was founded to petition public officials for better housing conditions and increased community amenities (Chen, 2020). Through direct action, the community slowly started to see improvements take place.

Redevelopment of the District began to make way in the early 2000s. Public officials, city planners, and developers took advantage of the potential brownfield sites around the area in hopes of reconciling the land and bringing job opportunities, resources, amenities, and housing to the area. Soon after the city adopted a redevelopment plan for the Hunter's Point Dry Dock, and the environmental improvement began, the Navy encountered much more contamination of toxins and volatile organic compounds than expected (Chen, 2020). The challenges have so far delayed the redevelopment of the area leaving little to no resources and opportunities for the residents. As gentrification of the inner city continues to be the biggest reason for a decline in the Black and Minority population, Bayview questions whether the development will bring the economic benefits and inclusion they want to see in their community. As of right now, the district is experiencing an increase in middle and lower-income households as they are being

displaced from the city. The current housing conditions of the area lack various housing options, affordable prices, and access to resources and amenities (Chen 2020).

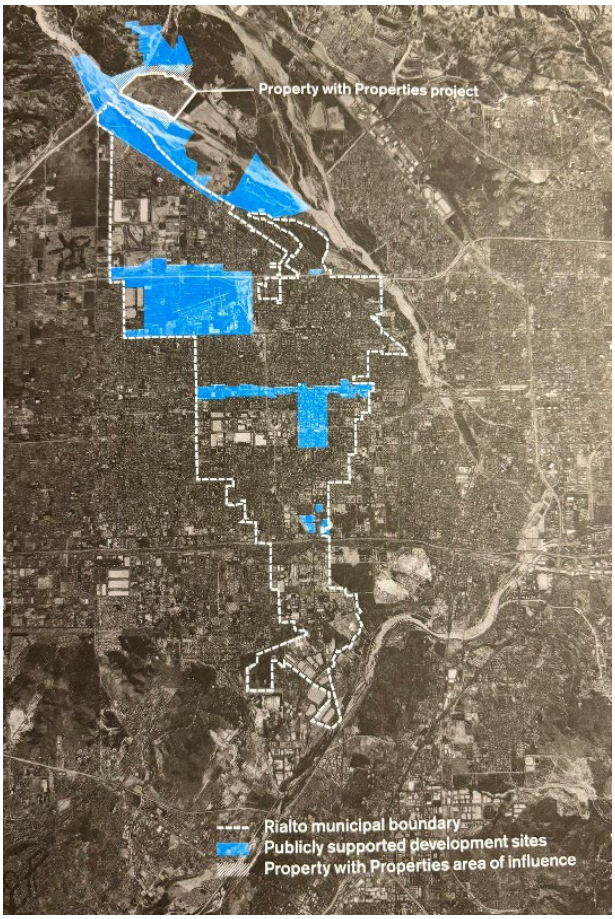
## 3.5. Case Studies

The chosen case studies will provide two examples of infill housing in suburban communities in need of affordable and equitable housing options and one example of urban planning in a city's suburb that provides resources, housing options, and community corridors for residents in the area.

### 3.5.1. MOMA-Foreclosed: Property with Properties

In early 2008, Rialto, California began to experience a dramatic impact from the foreclosure crisis. The city saw some of the largest increases in housing prices and the effect on the growing population was staggering. This city was chosen by Zago Architects for the foreclosed study for this project because of its economic conditions, poverty levels, housing demographics, and the means of transportation relative to the rest of the region. This research studies the aftermath of the foreclosure crisis in 2008 specific to Rialto to provide solutions for its suburbs. Using the Buell Hypothesis, a research report prepared by the Buell Center at Columbia University, Zago Architecture will tackle the Rialto housing situation and develop strategies and solutions for the future of its suburbs (*Foreclosed*, 2012).

Figure 38: Map of Rialto California Suburban Subdivisions




Note: (Foreclosed, 2012)

Fourteen percent of Rialto lived below the poverty line in 2009 (*Foreclosed*, 2012). The northwestern corner of the city is made up of mainly single-family homes. This area also coincides with the largest percentage of single-family houses where residents rely on their houses for access to credit. The site chosen for the project sits right outside of the city limits and is known as Rosena Rach. It is the largest residential subdivision and has been under planning since 2004 but was brought to a halt in 2008 after the financial downturn. At one end of the site, only 10% of the available land has identical large-scale houses, while the other end has acres and acres of unbuilt lots running along curved roads with little to no vegetation. Upon completion, this region of land would be joined to Rialto, but for now, it sits rather empty (*Foreclosed*, 2012).

Figure 39: The Effect of Boundary Relaxation on a Suburban Development


Note: The relaxed boundaries create more overlaps for more shared resources and new possibilities for homeownership, landscape, building edges, and housing types (Foreclosed, 2012).

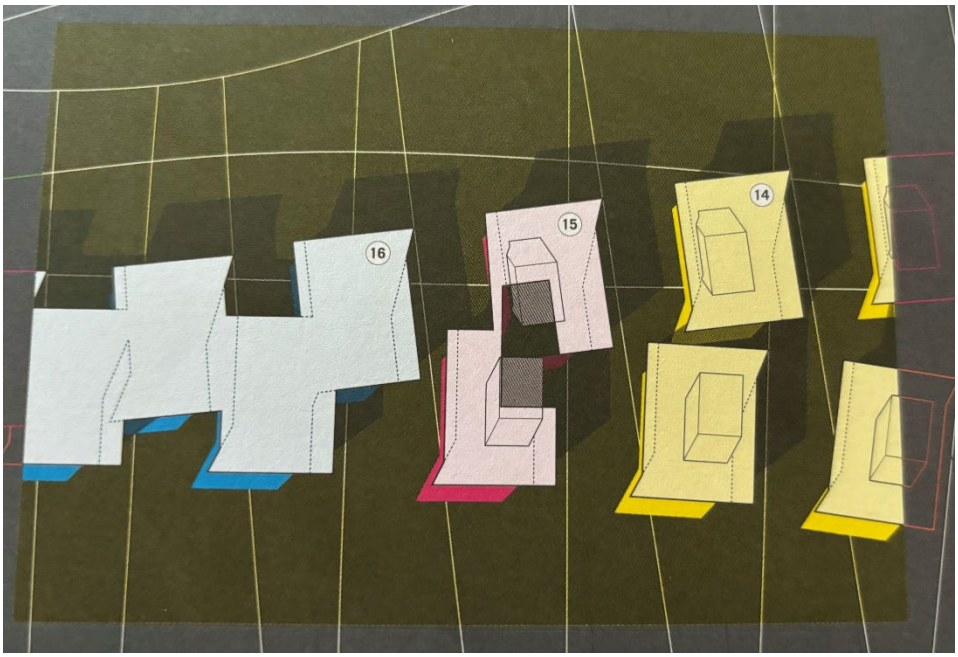
The Property with Properties proposal by Zago Architecture, led by Principal Architect Andrew Zago was based on the notion that the suburbs are, "Ok. They have their problems, particularly today, but a proposal for a viable future lies in understanding the attraction of the social, economic, and spatial arrangements and creating a new form of architecture and suburban from that," said Andrew Zago (*Foreclosed*, 2012). Their team set out to relax the boundaries of the curbs and create a richer mix of uses, housing types, living situations, and landscapes that differ from the surrounding homes with a driveway and a patch of lawn. Their inspiration spurred from a metaphor of "misregistration," a term referring to a printing-process error that leads to blurred images. Zago's team redesigned suburban parcels to manipulate both housing types and the property divisions so the development of unexpected diversity of landscape and a series of variations can occur (*Foreclosed*, 2012).

Figure 40: Rendering of Proposed Duplex Home

Note: (Foreclosed, 2012)

The homes shifted from single-family houses to duplexes and row houses intending to merge the indoors and outdoors. The overall planning of the site changed by narrowing the roads providing more circulation and adding more paths for pedestrian and cyclist movement throughout. They stressed working with the natural landscape and encouraging seasonal wildlife and rivers to move freely through the site's natural channels. As the development occurred, the misregistration goal of the site began to create much visual variety with many new possibilities for living, retail, and amenities. In short, the Zago team describes it, as "a suburb with a richly patterned environment and lifestyle…we are giving the property more properties (*Foreclosed*, 2012)."

Figure 41: Property with Properties Housing Typologies




Note: The housing typologies include single-family homes, duplexes, and townhomes with blurred property lines (Foreclosed, 2012).

The proposal presents three different home types as well that resulted in a sixty percent net gain of units from 2,406 single-family homes in the original development to a mix of single-family homes, duplexes, and townhouses totaling 3,864. Single-family homes make up 52% of the subdivisions. They are available either privately owned, rented, or purchased as a building through the land bank CDC. Attached and separated duplexes make up 26% of the subdivision. In this case, the original house is duplicated and offset resulting in a diverse variety of duplex

Figure 42: Diagram of Circulation within the Project


Note: The blurred boundaries allowed shared streets, sidewalks, and public space within the suburban subdivision (Foreclosed, 2012).

types. Lastly, townhouses make up 22% of the subdivision and are created by the offsetting and duplicating of houses resulting in a continuous line of units (*Foreclosed*, 2012).

The misregistration of boundaries in this proposal provides insight into what the future of suburbs could look like. This blending of vegetation, paths, home types, and ownership and zoning could create new opportunities for residents in the area. The net gain of adding medium-density houses to an area provides more housing options and lower costs to those seeking ownership or even rental properties. This proposal provides a great study into the future of the suburbs and the feasibility of this type of development.

### 3.5.2. Tacoma Residential Infill Housing Pilot Program

In 2015, Tacoma City Council adopted the Residential Infill Pilot Program (RIPP). This program was designed to encourage innovative residential infill developments that focus on building high-quality homes and improving the neighborhood layout and continuity to address the affordability needs of residents in the area (Barnett, Affordable Housing). The goal of the program was to provide a group of successful, well-regarded examples of innovative residential infill to serve as prototypes for future infill design standards. The program wanted to provide homeowners and renters with means of security and income at affordable prices. They also wanted to increase the choice of housing that meets the needs of current lifestyles, young families, retired, and multi-generation. Lastly, this program will increase the density of neighborhoods to better utilize existing infrastructure and community resources to support public transit and neighborhood services (Barnett, Affordable Housing).

The RIPP allows four housing types-Two-family, small multi-family, cottages, and planned infill with a maximum of six developments per type in each of the city's five council districts. The intention is to mix the developments with R-1 and 2 zoning to provide overall community continuity (Barnett, Affordable Housing). Projects under the RIPP require a

Conditional Use Permit (CUP) and are expected to meet specific criteria, including responsiveness to neighborhood patterns, pedestrian-friendly design, de-emphasized parking, scale sensitivity, provision of usable outdoor space, and sustainability features. The goal is for these housing types to offer diverse options to Tacoma's residents addressing housing needs while maintaining compatibility with neighborhood aesthetics and infrastructure (Barnett, Affordable Housing).

The permits of the housing types have specific standards to meet:

**Two-Family Housing**

- Eligible Zones: R-2
- Minimum Lot Size: 6,000 Sq ft
- Allows duplex or two attached townhouses
- Each unit directly accessed from the street
- Conversion of an existing single-family home is allowed

**Small Multi-Family Housing**

- Eligible Zone: R-2, R-3
- Minium Lot size: 7,000 Sq. Ft.
- Up to six dwellings on a single site
- Buildings designed to fit neighborhood patterns
- Shared primary entrance, rear parking, and obscured street view

**Cottage Housing**

- Eligible Zones: All Residential Zones
- Minimum Lot size: 7,000 Sq. Ft.
- Cluster of small dwellings around a common open space

- Maximum units double the base zone's density
- Allows various housing types, and common open space based on unit count

**Planned Infill Housing**

- Eligible Zones: All residential Zones
- Minimum Lot Size: R-3, 3,500 Sq. Ft.
- Density-based development with flexibility
- Allows various housing types, encourages affordability
- Buildings oriented to the street, rear parking, and obscured street view

Figure 43: Examples of Residential Infill Types


Note: The Pilot Program is looking at infill housing types including Accessory Dwelling Units, Two-Family, Multi-Family, and Cottage Housing (Barnett, Affordable Housing).

As further planning occurred, on December 1, 2015, the Tacoma City Council Amended Ordinance Number 29336, which approved the proposed project amendments to the Tacoma Municipal Code (Barnett, Affordable Housing). Proposed residential infill changes to the area were finalized in Phase 3. These include:

**Residential Infill/Affordable Building Proposals**

- Detached Accessory Dwelling Units in single-family zones
- Small lot updates

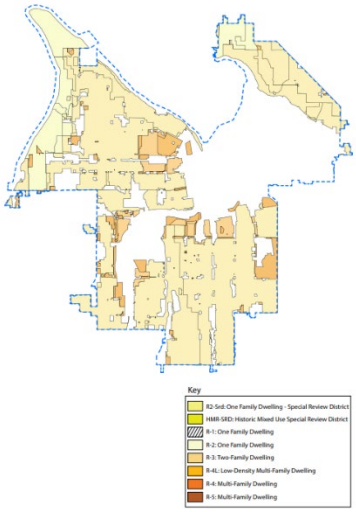
- Duplex, townhouse and/or great houses in single-family areas
- Cottage housing
- Permit process and timeline enhancements

**Affordable Housing Incentives and/or Inclusionary Approaches**

- Create an Affordable Housing Incentives code section
- Integrate affordable housing into existing bonus programs
- Update Planned Residential Districts code to provide an affordable housing bonus
- Require the inclusion of some affordable units for approval of residential upzones

The project itself is located throughout the residential zoning in the city of Tacoma, Washington. Tacoma's residential zoning is spread across an array of R-1 to R-5 and Historic Mixed Residential and Special Review Districts (HMR-SRD). The Planning Commission proposed this project with the intention of bringing Missing Middle housing and housing infill strategies to these zones to provide more affordable housing options to the residents in these neighborhoods (Barnett, Affordable Housing).

Figure 44: Zones that allow for Planning Residential Infill in Tacoma, Washington




Note: (Barnett, Affordable Housing)

Figure 45: Tacoma's Residential Zones

**R-zoned Parcels**
**(Excluding Larger Non-Residential)**

| Zoning | Total Acreage | Average Single Family Use Sq. Ft. |
|---|---|---|
| R1 | 1,385 | 11,796 |
| R2 | 9,990 | 7,667 |
| R2-SRD | 581 | 5,479 |
| R3 | 524 | 5,938 |
| R4 | 214 | 4,168 |
| R4L | 399 | 6,205 |
| HMR-SRD | 122 | 5,479 |
| R5 | 3 | 6,718 [4] |

Note: The majority of Tacoma is zoned in R-1 and R-2 parcels. (Barnett, Affordable Housing)

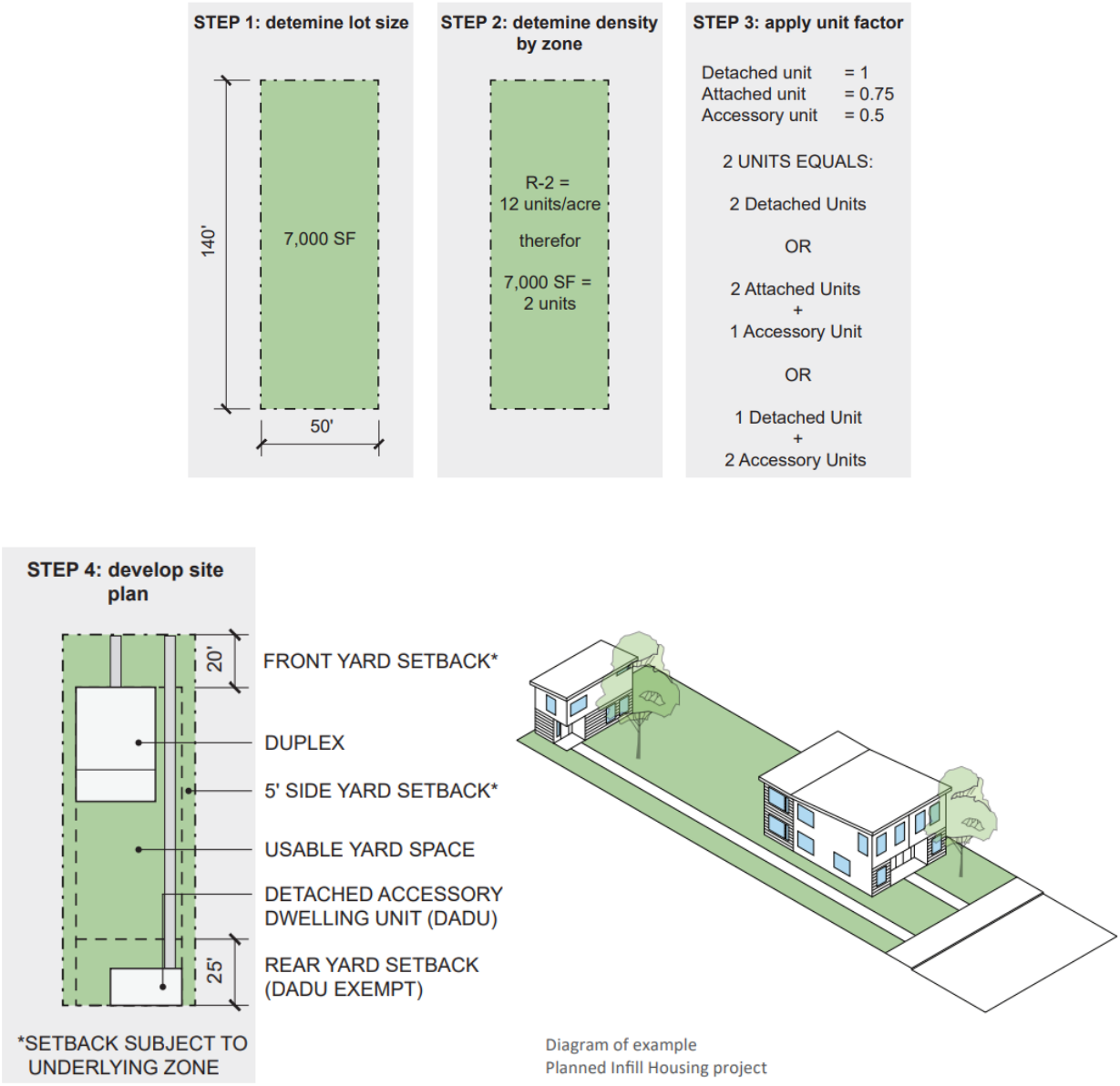
The Planning Commission decided on various specific residential sites within Tacoma they wanted to address based on lot size flexibility and density bonuses. A large portion of the proposed project focuses on housing incentives and bonuses. The purpose of the infill development was to provide affordable housing for households earning 80% or less than Tacoma's median household income (Barnett, Affordable Housing). To meet the needs of lower-income households, necessary financial and regulatory incentives need to be provided. The commission established requirements for incentives including fee reductions, subsidies, city reviews, and program requirements for housing affordability. These incentives aim to ease the financial burden for developers participating in the program in exchange for providing affordable housing units (Barnett, Affordable Housing).

Some of the program requirements for this infill project include a 50-year affordability requirement, a minimum of 20 units for program qualification, income restriction for rental and ownership eligibility, maximum rent and purchase price limits, comparable size/location/appearance of affordable units to market-rate ones, and opportunity for Affordable Housing Incentive Programs. The resale of these units is restricted to eligible low-income households (Barnett, Affordable Housing).

The Pilot Program has an application process to discuss the project idea with potential applicants. This period is to make sure the application and site are eligible for the scope and intent of the project. Topics including design, site, permits, a public input will be discussed to set the foundation of the project. The next step would include calculating the number of units allowed on the proposed site. This is done by determining the lot size, then the density by zone, and then applying the unit factor and developing the site plan (Barnett, Affordable Housing).

Figure 47 shows the steps of how this is done. Each project will present different numbers impacting the overall plan of the infill project.

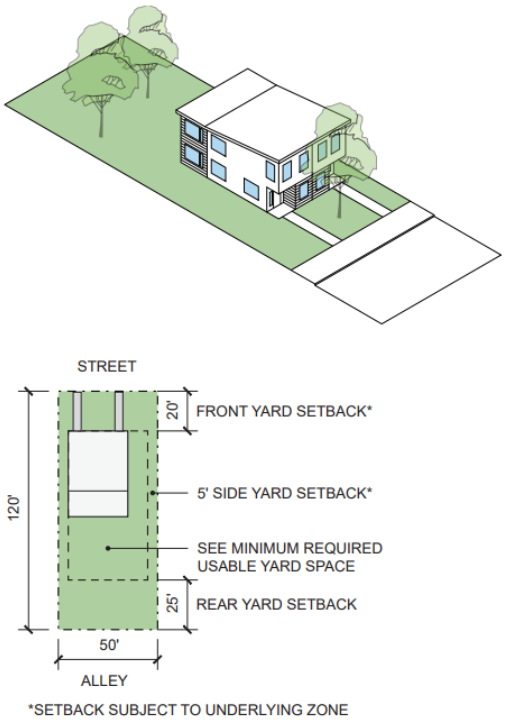
Figure 46: Steps to Determine the Number of Units Allowed on Proposed Site




Note: (Barnett, Affordable Housing)

RIPP has completed many of these projects so far to support the various housing options. One example to point out is their Two-Family Housing Projects. Under the Pilot Program, two-family or townhouse development will be reviewed in the single-family zoning district R-2. Some of the requirements for this project scope are a maximum of two dwelling units, a minimum lot size of 6,000 SF, and parking in the rear yard. Some of the design criteria include, the development must respond to the context of the neighborhood through massing, scale, materials, landscaping, and building placement. Careful consideration will be given to the appearance of the façade from the street and neighboring properties (Barnett, Affordable Housing).

Figure 47: Example Two-Family Infill Pilot Project




Note: There are requirements on how these developments will respond to the site conditions and match the existing infrastructure (Barnett, Affordable Housing).

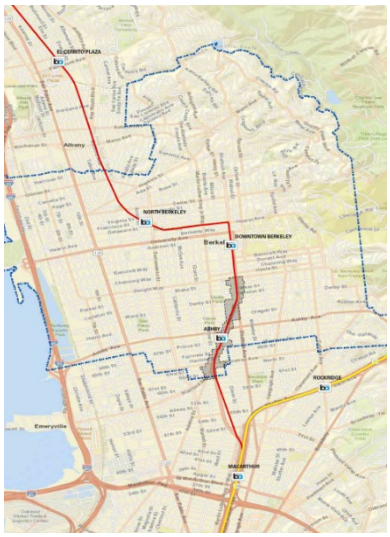
Tacoma's Residential Infill Pilot Program serves as a great example of providing a community with various infill housing projects to promote affordability and access to neighborhood resources. This example presents design proposals that directly respond to community needs and ensure that these projects fit into the existing infrastructure and character of the neighborhood.

### 3.5.3. The Adeline Corridor

In 2015, The City of Berkeley began a planning process for the Adeline Corridor. This project was intended to serve a culturally and economically diverse area with a significant historical background revolving around Black and Japanese communities (Adeline corridor specific plan. City of Berkeley). The project goals were to preserve the legacy of the city by mitigating losses due to displacement, a changing economy, and eroding neighborhood characteristics. This plan outlines a 20-year vision and framework for community development along Adeline Street in the city of Berkeley, California. The plan intends to collaborate with decision-makers, community members, and stakeholders to develop a project that serves to provide for the community and its intended vision (Adeline corridor specific plan. City of Berkeley).

The Adeline Corridor Specific Plan Area is located in the southern part of the city of Berkeley. It is the connecting roadway between Berkely's Downtown and the City of Oakland. The project area is about 86 acres including a wide array of commercial, civic, cultural, and residential zoned land. The majority of the land is characterized by residential neighborhoods with a mix of single-family and small multi-family developments. The plan addresses local planning strategies and acknowledges topics such as affordable housing and economic opportunity (Adeline corridor-specific plan. City of Berkeley).

Figure 48: A Map of Berkeley, California




Note: (Adeline corridor specific plan. City of Berkeley)

Figure 49: Site of the Adeline Corridor


Note: (Adeline corridor specific plan. City of Berkeley)

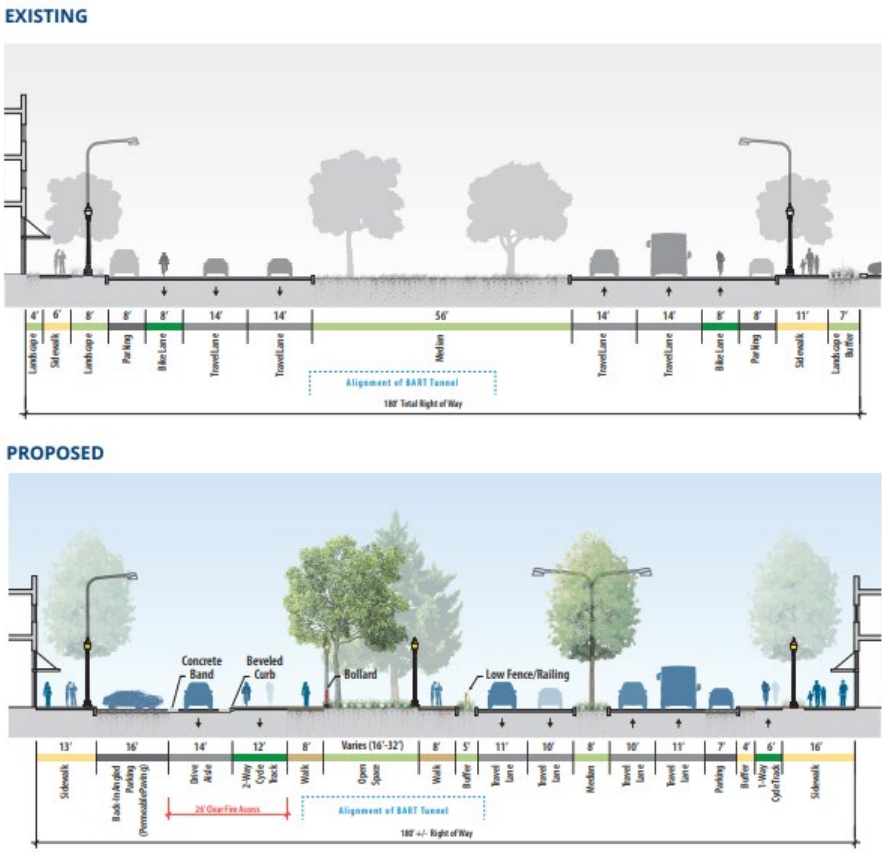
The vision of the Adeline Corridor Specific Plan serves as an example of equitable development. The future of this development hopes to provide greater economic opportunity, safer streets, more housing choices, and a greener, healthier environment (Adeline corridor specific plan. City of Berkeley). The plan will preserve existing affordable housing while promoting equitable development of new affordable and market-rate housing for all income levels. The corridor will feature new economic opportunities through business, art organizations, community markets, merchants, and access to walkable, bikeable, and green public spaces (Adeline corridor specific plan. City of Berkeley). This corridor plan will take planned initiatives, investment, community involvement, and time, but it will provide Berkely with a new sense of community that is equitable for all.

The development plan is embedded with five "big ideas" to help achieve the intended goals. Each of the ideas corresponds with specific projects along the corridor. The first one is affordable housing. The plan's goal is to ensure that a minimum of 50% of the new housing units developed along the corridor are income-restricted housing. Approximately 1,450 new housing units will be constructed during the next 20 years to target low- and medium-income levels (Adeline corridor specific plan. City of Berkeley). The second "big idea" is the Ashby Bart Station. The plan addresses ideas to redevelop the existing Ashby Bart Station into a neighborhood center with high-density, mixed-use buildings, and commercial and public spaces. The third is creating a Business Improvement District. This intervention will gather fees from business and property owners to support improvement, events, infrastructure, and maintenance of the corridor (Adeline corridor specific plan. City of Berkeley). The fourth idea is Street Re-Design. The plan outlines goals to repurpose large areas of pavement as public open space, readdress street conditions, walkability, and improve the safety of pedestrians and cyclists.

Lastly, the final big idea is Community Assets and Resources. The plan addresses ideas to support capital improvements like flea markets, farmer's markets, festivals, and community and cultural events (Adeline corridor specific plan. City of Berkeley).

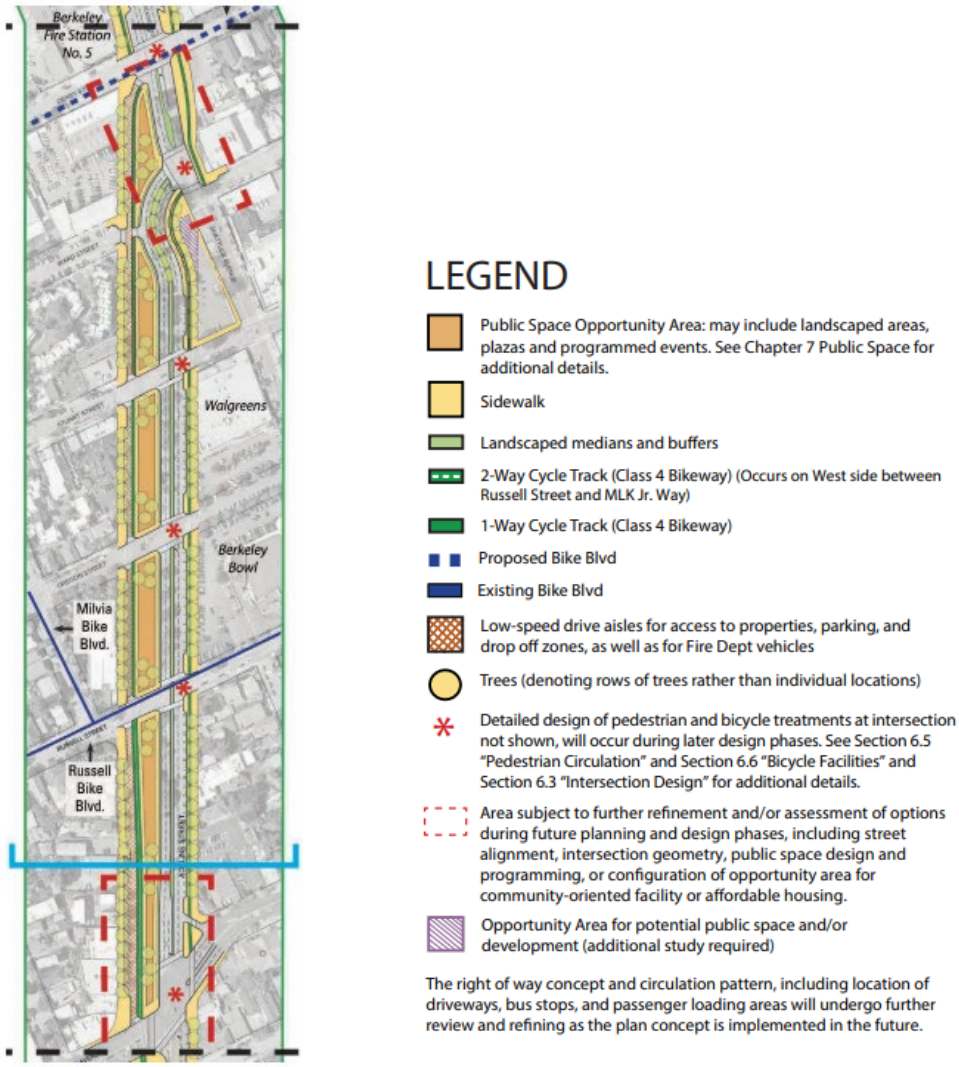
A large part of the plan focuses on the street conditions with goals to improve walkability, safety, and access to public transportation. The plan breaks down the corridor into sections addressing the current street conditions and proposed solutions for the future of the corridor.

Figure 50: North End of the Adeline Corridor Existing and Proposed Street Section




Note: The proposed street section gives room for more green space, public transportation, better circulation, and safety (Adeline corridor specific plan. City of Berkeley).

Figure 51: Long-Term Design Concept for North End of Adeline Corridor




Note: The proposed design concept introduces more public space, bike lanes, and vegetation to the area (Adeline corridor specific plan. City of Berkeley).

This case study provided valuable insight into what a corridor design can bring to a community. This type of development project can bring density to suburban areas and to neighborhoods that need better access to public transportation, more housing options, and

resources. The Adeline Corridor proposed design provides an adaptable and realistic design solution for the future of Berkeley.

### 3.5.4. Case Studies Comparison

Figure 53 compares the three selected case studies on project type, project information and objectives, and their applicability to this thesis project. Each of the studies presented valuable information regarding medium-density housing and site planning that will apply to the proposed design solution for my site. The selection of case studies was determined by assessing their relevance to the scope, scale, and objectives of my project. They will be great examples to reference when entering the design and solution phase.

Figure 52: Case Studies Comparison

| Case Studies Comparison | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Project Type | Location | Objectives | Methodology | Key Characteristics | Pros | Cons | Applicability |
| **MOMA-Foreclosed Property with Properties** | Medium Density Housing Infill Project | Located in Rialto, California northern residential subdivisions | This proposal intends to provide suburban properties with properties after the foreclosure crisis in 2008. Using the method of misregistration, the team manipulated property divisions and housing types to produce a diverse landscape in the suburban subdivision. | The Zago team used an economic and development model that distinguishes the conditions and characteristics of the site, what happened during the crisis, and what should have happened. | The relaxation of suburban boundaries creates this interesting overlay of landscapes, opportunities, resources, and aesthetic variations that bring interest to this suburban community. | This proposal takes a new spin on what ownership and zoning could look like in the suburbs which can increase the path to home owning and renting. This also provides new ways for maintaining circulation and ecological features. | One concern with this proposal is the potential loosening of property boundaries. People naturally seek what only belongs to them, so gaining support in this direction will take commitment to make sure this is successful. | This case study provides me with insight into feasible financing models for infill housing projects and the reality of the American Dream today. The layout and design provide great ideas for consideration as well. |
| **Tacoma Residential Infill Pilot Program** | Medium Density Housing Infill Project | Located in Tacoma, Washington at various sites in residential zoning that were eligible for infill housing | This project was to provide various housing options throughout the residential zoning in Tacoma, Washington. Its goals were to present affordable and equitable housing options to communities and bring more density and resources to these neighborhoods. | This infill project is a program that is available to developers looking to provide more housing options to a specific neighborhood. The project introduces a series of steps to make this possible that address the current conditions, allowable units, and the requirements for the housing project | The project provides multiple approaches to four different types of housing. The plan addresses the consideration of neighborhood infrastructure, scale, massing, and design appearance. | The infill housing will increase the housing supply in the proposed neighborhoods making them more walkable and resourceful to residents in the area. | This project may present community concerns about the changing character of their neighborhoods and increased density. | This infill project presents great proposals to address multiple housing options in a suburban community. The approach to the process and design integration into the neighborhood is great. I appreciated their ideas on brining only a few new developments to the area at a time. |
| **The Adeline Corridor Specific Plan** | Urban Corridor Plan | Located in Berkeley, California along Adeline Street that connects downtown Berkeley to Oakland, California | This plan was to redevelop a corridor over a 20 year period to preserve the legacy of the city, prevent displacement, stimulate the economy, and provide more housing options that fit the needs of residents in the community. | A 20-year plan lays out the goals and initiatives it will take to redevelop this area. The plan intends to collaborate with decision-makers, community members, and stakeholders to develop a project that serves the community's intended vision. | This corridor plan proposes unique street conditions intended to improve walkability, safety, and circulation of public transportation and vehicles. | This project spurs community development and will foster economic growth in the area. The goals for affordable housing will provide more housing options as well. | Gentrification concerns create the biggest downfall of the project. Implementation of such a large-scale urban plan may lead to displacement of current residents and a change to the socioeconomic character of the neighborhood. | This corridor plan helped me better understand this type of project's impact on a community and how to address site conditions at a larger neighborhood scale. I liked their ideas for the proposed street conditions while incorporating affordable housing. |

Note: This graph compares the three selected case studies, their objectives, and their relevance to my research. Graph by Madeline Hursey.

## 3.6. Site Program

### 3.6.1. Program of Urban Interventions

Figure 53: Urban Intervention Site Program

| Urban Intervention Site Program | | | |
|---|---|---|---|
| **Bayview District** | Location | Planning Issue | Proposed Improvement |
| **Street Improvment** | Revere Street<br>Quesada Avenue<br>3rd Street | Residential streets lack vegetation, pedestrian and cyclist lanes, public transportation stops, and connectivity. | Addition of crosswalks, pedestrian and cyclist lanes, improvement of circulation and parking areas. Minimize car use and street parking. Promote walking and use of public transportation |
| **Green Space** | Revere Street<br>Quesada Avenue<br>3rd Street | Lack of public green space integrated into the neighborhood landscape and on the roadways. Lack of greenspace that residents can engage with, sit, and enjoy the outdoors. Very little biodiversity and a lot of concrete surfaces. | The addition of public green space throughout the residential neighborhoods creates a green network. Improve a network of walking and running paths for pedestrian use. |
| **Rezoning** | 3rd Street<br>Palou Street<br>Shafter Avenue | The existing zoning is mainly single-family residential providing no diversity of housing choices to the new and incoming demographics. | Rezoning the appropriate streets for increased residential density in the neighborhood and allow for more housing options on 3rd street. |
| **Public Transportation** | Revere Street<br>Quesada Avenue<br>3rd Street | Lack of public transportation available in the area. Bus and tram stops need improvement and have better connectivity to streets and users. | Improved bus and train public transportation to make commuting more available to residents in the suburban areas. |
| **Public/Community Space** | Revere Street<br>Quesada Avenue<br>3rd Street | Lack of public and community space, access to social infrastructure, and neighborhood connectivity among homes and outdoor spaces. | More public gathering space among the residential streets to form a sense of community identity and neighborhood continuity. |
| **Diverse Housing Options** | Revere Street<br>Quesada Avenue<br>3rd Street | Lack of affordable housing options in the area. The majority of homes on these streets are single-family residential and don't adhere to the needs and wants of individuals living there today. There is a lack of missing middle housing including duplexes, townhomes, and triplexes. | Provide the district with more housing types including duplexes, triplexes, and townhomes that adhere to the affordable and equitable needs of residents in the area. The intention is to fit the neighborhood's massing, aesthetic, and appearance of adjacent homes. |
| **Infrastructure/Resources** | Revere Street<br>Quesada Avenue<br>3rd Street | Lack of community resources such as local employment, healthcare services, education, public buildings and spaces, and local food shops | Incorporate resources such as sites for grocery, medical, gym, entertainment, jobs, |
| **Vibrant Neighborhoods** | Bayview District | Bayview lacks a sense of identity and cohesive culture integrated into the neighborhoods. | Create walkable neighborhoods with the connection of public and private spaces, more access to resources, and a sense of community identity. Increase social cohesion between residents of the community. |

Note: This graph breaks the site down into various planning issues that the neighborhood sees and proposed improvements. Infographic by Madeline Hursey.

The primary objective of the Bayview district urban master plan is to enhance the residents' access to resources, amenities, public transportation, green space, and housing choices

within the community. The intention is to convert this residential suburb into a contemporary version fostering a more walkable, human-scale, and community-centered environment. This program intends to deliver the desired urban sense to suburban residential areas and reshape what the suburbs will look like for the 21st century. Figure 54 breaks down the urban interventions the site program will consist of.

### 3.6.2. Program of Infill Housing

The goal of this infill housing is to provide the Bayview district with more diverse housing types, sizes, and options. This initiative will improve affordability, develop vacant and unsalvageable housing lots, and bring density to these neighborhoods. This type of housing will

Figure 54: Infill Housing Program-Duplex

| Infill Housing Program- Duplex | | | |
|---|---|---|---|
| **1311 Quesada Avenue** | Information | Square Footage | Proposed Improvement |
| **Housing Type** | Four Duplex housing options connected by a shared yard. One duplex will front Quesada Avenue and one will front Revere Avenue. | Each Duplex will be around 1,400 Square Feet with around 3,000 Square Feet of green space connecting. | There will be four duplex housing options proposed, two on each side of the site with underground parking options connected with shared green space. |
| **Site** | 1311 Quesada Avenue<br>Parcel: 4761024<br>Parcel: 4761026 | The entire site is 9,260 SF. The building area will cover 5,500 SF, leaving 3,760 SF of shareable greenspace between the duplexes. | The site will be reworked to hold 4 duplexes and shareable greenspace with vegetation, and private patio and balcony seating areas. |
| **Duplex Bedrooms** | 2-Bedroom Duplex<br>2-Bedroom Duplex<br>2-Bedroom Duplex<br>1-Bedroom Duplex | 150 Square Foot Bedrooms in every duplex with the addition of closet | The entire site will house 6 2-bedroom units and 2 1-bedroom units to provide diverse options. |
| **Duplex Bathrooms** | 1-Bed Duplex= 1.5 Bath<br>2-Bed Duplex= 2 Bath | Full Bath= 77 SF<br>Half Bath= 36 SF | These duplex bathrooms will be adjacent to bedrooms with toilet, shower/tub, sink, and linen storage. One bathroom will have access to laundry. |
| **Kitchen/Dining** | 1-Bed Duplex<br>2-Bed Duplex | 225 SF or more depending on duplex type. | The kitchen and dining will have a full-service kitchen with an island and room for a dining area. |
| **Living Room** | 1-Bed Duplex<br>2-Bed Duplex | 256 SF of living Space | The living space will allow room for furniture flexibility. |
| **Patio/Balcony** | 1-Bed Duplex<br>2-Bed Duplex | 150 SF or more of patio and balcony space depending on duplex type. | The patio/balcony space will be a private outdoor space connected to living quarters. |
| **Parking** | 1-Bed Duplex= 1 Car<br>2-Bed Duplex= 2 Car | 1 Car Garage= 190 SF<br>2 Car Garage= 380 SF | Underground parking option with front street access |
| **Mechanical/Storage** | 1-Bed Duplex<br>2-Bed Duplex | 200 SF | |

Note: This is the proposed program for the duplex infill housing at 1311 Quesada Avenue. Infographic by Madeline Hursey.

promote community engagement, provide accessible and quality housing options, and help rehouse the 21st-century idea of the American Dream. This proposed program will continue to be devised and redesigned as the process continues and then a final program will be decided as a housing infill prototype to apply throughout the Bayview district. Those sites will be incorporated into the Master Plan portion of the project.

# 4. RESULTS AND CONCLUSIONS

## 4.1. Final Project Description

Situated within San Francisco's Bayview neighborhood, this district faces a suburban environment marked by escalating housing costs and a surge of individuals displaced from the inner city. Plagued by under-resourcing, it lacks vital community amenities like green spaces and efficient public transportation. This solution presented at four different scales, seeks to reimagine the American dream at the levels of neighborhood, street, superblock, and housing to better align with the preferences of this generation.

## 4.2. The American Dream at Four Scales

This project addresses the American Dream at four scales relying on addressing multiple goals at each level. These goals include: Resource dominated, access to public transportation, less car congestion, affordable housing options, more green space, better circulation, walkability, and relating to the human scale. These goals will further implement the wants and needs consumers and residents are trending toward today. With these goals in mind, a new "American Dream" can begin to be molded.

### 4.2.1. Informational Maps

Figure 55: Bayview Existing Figure Ground Map

Note: Situated in the southern region of San Francisco, the Bayview District predominantly comprises low-income residents and is currently experiencing an influx of individuals displaced from the inner city. Graphic by Madeline Hursey.

Figure 56: Proposed Zoning Figure Ground Map

Note: The Bayview District is primarily zoned single-family. To reconsider the effects of a growing population, the proposed zoning will transition to Mixed Use and R-3. Graphic by Madeline Hursey.

Figure 57: Proposed Transit Routes Figure Ground Map

Note: To enhance public transit accessibility, new tram and bus routes will be introduced across the district. Additionally, bus routes will be aligned with the streets within the Superblock Layout. Graphic by Madeline Hursey.

Figure 58: Proposed Green Space Figure Ground Map

Note: Green spaces will be integrated throughout the district, spanning the 3rd Street commercial corridor and alternating streets to complement the superblock layout. Graphic by Madeline Hursey.

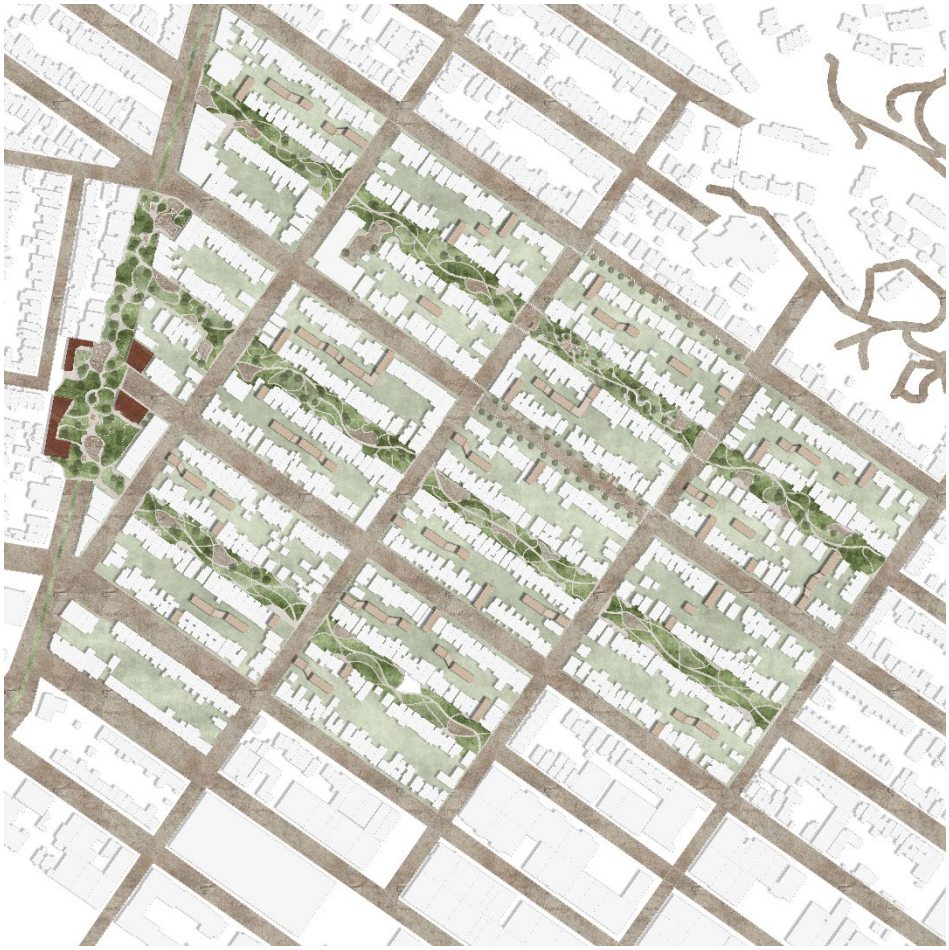
Figure 59: Proposed  Proximity and Resources Figure Ground Map

Note: Numerous new resources and amenities will be proposed for the area to bolster support for the 3rd street corridor. The proximity map indicates walking distances of 5-10 minutes. Graphic by Madeline Hursey.

### 4.2.2. Neighborhood Scale

This is the largest of the four scales that are proposed. This scale is looking at the Bayview District as a whole by creating a new master plan for what the suburban conditions in this location could look like in the future. Within the master plan, the proposal looked a the potential of the 3rd Street commercial corridor and how it could be seeded with resources and amenities that the community needs. I proposed green corridors for every other block to bring more green space to the area and foster community engagement. I also designed an infill housing prototype that starts to adapt to certain block conditions and is adaptable to the site situation. Lastly, I proposed new vehicular circulation by creating one and two-way streets with more parking while also considering new public transportation routes.

Figure 60: Proposed Urban Master Plan for the Bayview District



Note: This masterplan is the 1st scale of solving the New American Dream. Graphic by Madeline Hursey.

### 4.2.3. Street Scale

The next scale is the Street Scale. This is the 2nd largest scale relating to the American Dream. This scale was broken down into three street sections situated throughout the neighborhood. Two street conditions have been introduced on alternate blocks. The first, displayed in Figure 62, is the housing green street, which entails converting the entire neighborhood street situated between two housing blocks into greenspace featuring various

amenities and community areas. This green space incorporates walking and biking paths as well as multi-sport courts.

Figure 61: Housing and street Section

Note: This section cuts through the housing and street sections in the neighborhood showing the use of greenspace and one-way streets. Graphic by Madeline Hursey.

The second street condition involves a one-way street with parking spaces in front of the existing neighborhood street. Additional parking can be found in underground garages accessible from the roadway. Green strips, walkways, and bike lanes accompany the street. Figure 63 shows the green street section through the existing neighborhood street.

Figure 62: Green street Section

Note: This section shows the green street running parallel to the housing system and underground parking. Graphic by Madeline Hursey.

Figure 63: Green street Rendering

Note: This graphic shows the green space and housing system that will be incorporated throughout the neighborhood. Graphic by Madeline Hursey.

The 3rd Street green corridor serves as the primary access point and transit link to downtown San Francisco. To foster a cohesive connection and gathering hub for the district, all vehicular and public transit routes will be situated beneath the corridor. This area will be seeded with resources, amenities, ample greenery, and shared community spaces. Multi-sport courts, playgrounds, sandboxes, seating areas, and walking paths will define the exterior space surrounding four proposed community buildings. These new structures will accommodate a food market, public laundry facilities, a gym, and other amenities tailored to the community's needs. The objective is to establish a 10-minute city within this neighborhood, ensuring residents can access their necessities within a short walking distance.

Figure 64: 3rd Street Green Corridor

Note: This green corridor will be seeded with resources and amenities with all transportation submerged underground. Graphic by Madeline Hursey.

Figure 65: 3rd Street Green Corridor Section

Note: This section shows the submerged public and vehicular traffic. Graphic by Madeline Hursey.

Figure 68: 3rd Street Green Corridor Rendering

Note: This graphic shows the ample greenspace, walking and biking paths, and proposed buildings to the corridor. Graphic by Madeline Hursey.

### 4.2.4. Superbock Scale

The 3rd scale is the superblock scale. The proposed superblock introduces a human-scale housing and street layout, ensuring equitable access to green spaces for all residents in the neighborhoods. This block comprises two one-way streets running east and west, and two two-way streets facilitating efficient circulation from north to south. To alleviate the current congestion, street parking, and underground parking garages are incorporated. The housing system integrates seamlessly through exiting housing backyards and relocating previous spaces to the front of homes to encourage community interaction.

Figure 69: Superblock Isometric

Note: This isometric graphic shows the housing system relating to the superblock context and green street. Graphic by Madeline Hursey.

### 4.2.5. Individual Housing Scale

The last and smallest scale is the Individual housing scale. The proposed housing system includes three-unit types of varying sizes, designed to adapt to resident's diverse needs. The housing is adaptable to the specific blocks, utilizing abandoned housing lots and backyards to create connections between streets within the neighborhood. This design offers a medium-density solution for individuals who don't require a single-family detached home.

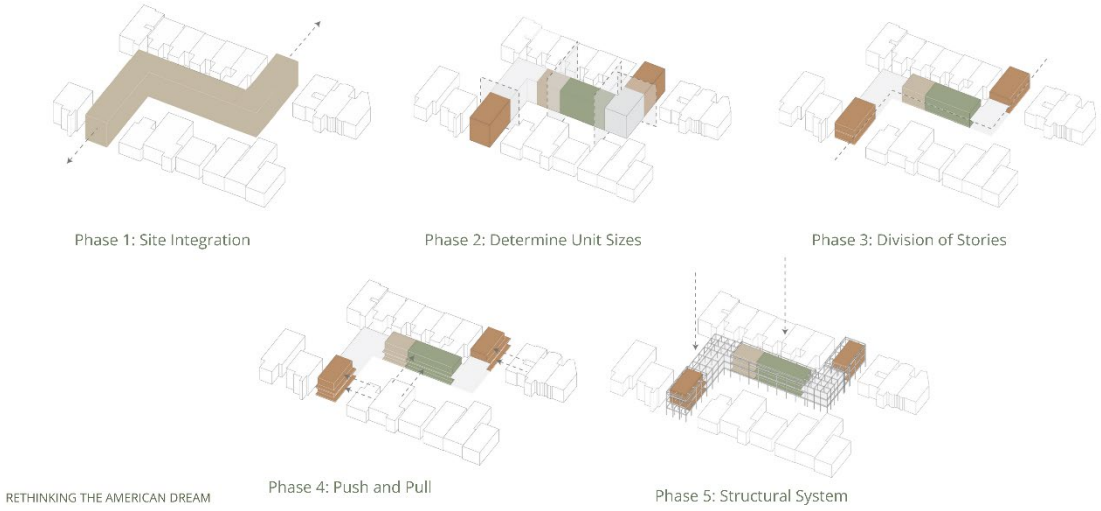
Figure 70: Housing Rendering 1

Note: This graphic shows the front view of the housing system being integrated into the existing neighborhood. Graphic by Madeline Hursey.

Figure 71: Housing Rendering 2

Note: This graphic shows the backyard view of the housing system. Graphic by Madeline Hursey.

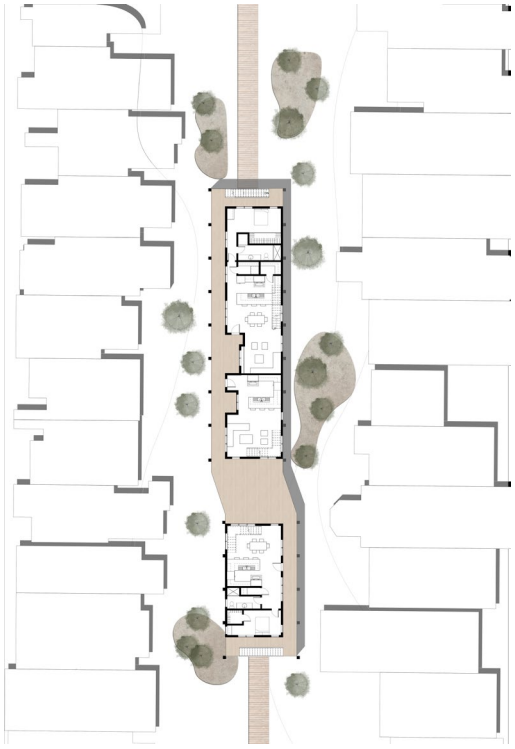
Figure 72: Housing Process




Note: This graphic shows the design phases of the housing system. Graphic by Madeline Hursey.

The process of the housing structure was done in five phases. In Phase 1, the housing system was strategically integrated into the site, occupying the backyards of existing houses and open lots. Three unit sizes were carefully chosen to ensure adaptability to the unique conditions of each block. In phase 2, the unit sizes were designed to be flexible, adjusting to the unique conditions of each block, and were complemented by an exterior deck space between each building. In phase 3, the housing units were divided into two stores and elevated 10 feet above the ground to minimize disruption to the houses' backyards. In phase 4. The housing units were set back by 5 feet on one side to establish a balcony and walkway, ensuring access to all units across the entire housing system. In phase 5, a heavy timber structure was incorporated to support both design and structural considerations. The dynamic façade will be attached to this structure, offering privacy and shading.

Figure 73: First Level Floor Plan

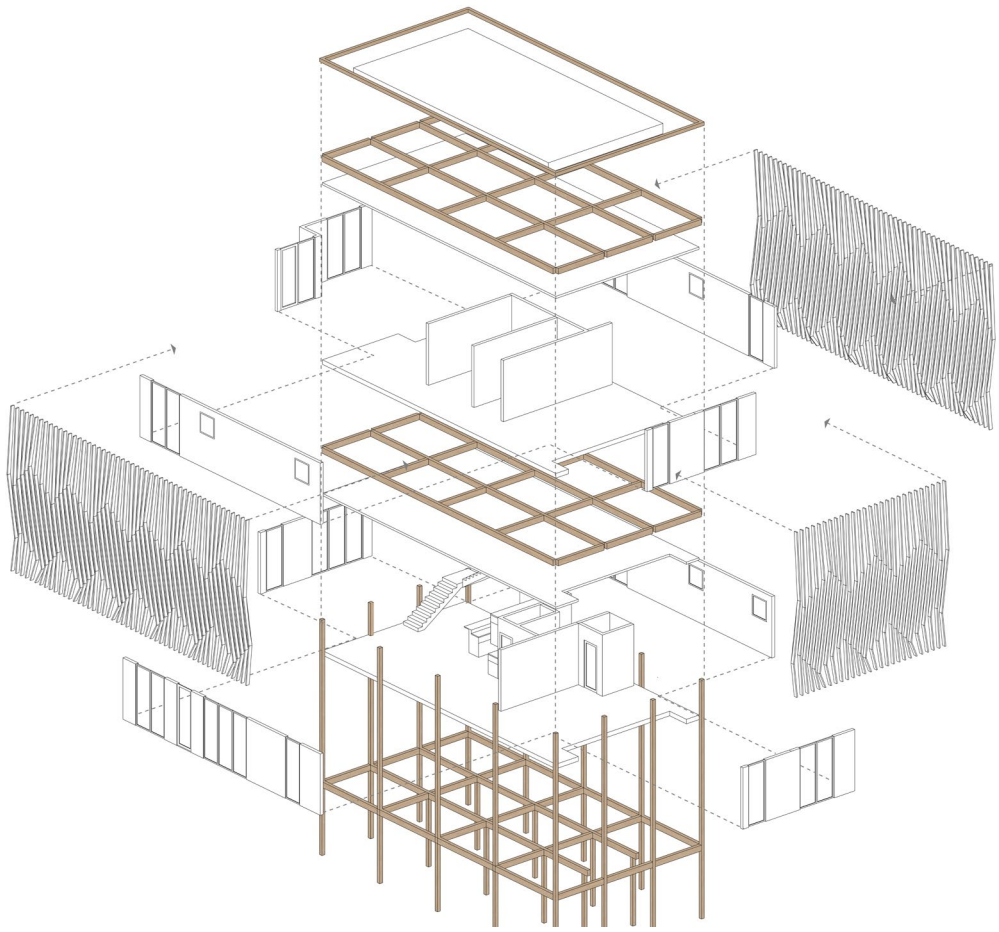


Note: Graphic by Madeline Hursey.

Figure 74: First Level Floor Plan

Note: Graphic by Madeline Hursey.

Figure 75: Structural Diagram

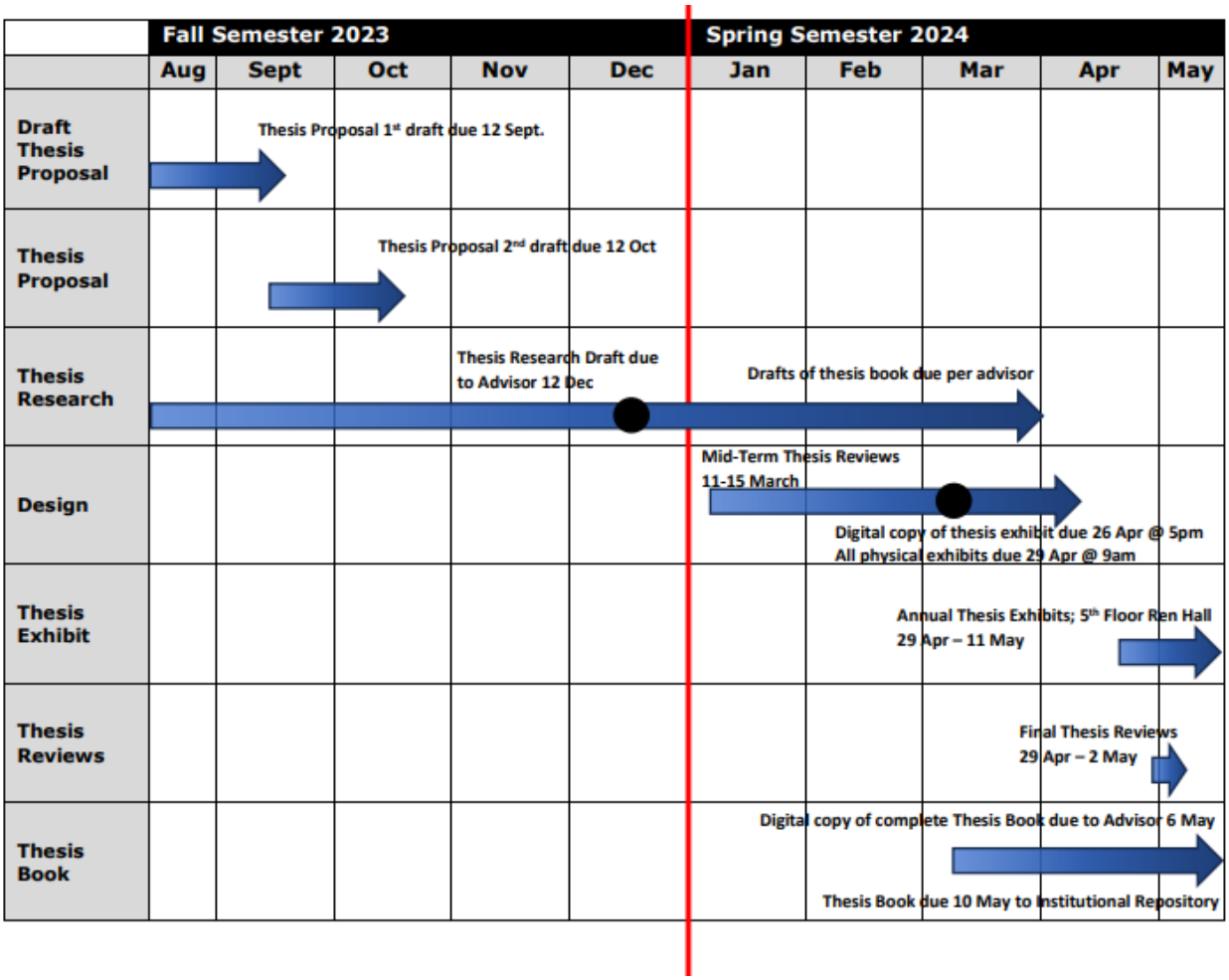


Note: Graphic by Madeline Hursey.

In conclusion, looking at the new American at 4 different scales provides solutions for this San Francisco suburb. Relating all these scales to the human scale while keeping the goals of resource availability multiple housing choices and access to green space and public transportation served to be very important throughout my entire project. This proposed new American dream has adapted to align with the needs of this generation with the hopes of solving the housing affordability crisis in San Francisco.

## TIMELINE/WORK PLAN

Figure 76: Thesis Schedule 2023-2024



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