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**The Rise of the Millennial Cohort:  
A Case Study of the Effects on  
San Francisco's  
Rental Housing Market**

**APPROVED BY  
SUPERVISING COMMITTEE:**

**Supervisor:**

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Jacob Wegmann

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Elizabeth Mueller

**The Rise of the Millennial Cohort:  
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San Francisco's  
Rental Housing Market**

**by**

**Jessica Christina Garcia, BA**

**Report**

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## **Dedication**

I would like to dedicate this report to my loved ones who have been encouraging and supportive of me in pursuing my graduate degree. Especially to my parents who have been an inspiration to me as I have seen them overcome adversity in their lives. With their guidance and teachings I have found my passion in fighting for an equitable society. Also to my partner who has given me strength and committed to going along on this journey with me. Lastly to my brothers who have kept me going in spirit.

Finally to all the residents of San Francisco, new and old, who continue to fight to keep their place in one of the best cities in the world. Without them there wouldn't be a city to fight for and I will continue to fight along with them.

## **Abstract**

# **The Rise of the Millennial Cohort: A Case Study of the Effects on San Francisco's Rental Housing Market**

Jessica Garcia, MSCRP

The University of Texas at Austin, 2015

Supervisor: Jacob Wegmann

This report studies the rise of the millennial cohort and the effects an influx of young people may be having on San Francisco's rental housing stock. This cohort is the largest since the Baby Boom generation. With delayed household formation in the wake of the economic recession, they are only now beginning to express their household preferences that have thus far proven to be unconventional compared to those of prior generations. Instead of buying homes in the suburbs, many are moving toward urban centers where they can live close to work and play. In the media, millennials have been stigmatized for causing gentrification as they move into once affordable working class neighborhoods. Many move to these neighborhoods for their cultural vibrancy but end up being blamed for displacing those who created it. San Francisco prior to the millennial trend had already had its own unique affordable housing challenges and has always been one of the most expensive cities in the country. However in recent years, housing costs have skyrocketed. There are many pieces to the puzzle but this report will research what possible pressures the millennial cohort may be having on San Francisco's most recent wave of gentrification. If the case is significant, it could provide insight in finding much needed solutions to San Francisco's affordable housing problem.

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## INTRODUCTION

“There is nowhere to go. I’m terrified,” was Patricia Kerman’s reaction to the eviction notice she received for the apartment she lived in for decades. Many longtime San Franciscans like Patricia are having the same experiences as they are being pushed out of their long time residences as real estate opportunist see the chances of bigger profits. In the past few years, both rents and home prices have skyrocketed. According to Rent Jungle, a real time data source for active rental listings, the average rent has increased 95 percent since 2009. As of December 2014, San Francisco topped the chart of the most expensive city for new renters, surpassing New York. The rapidly rising rents can be directly linked to the city’s rapidly growing tech industry. The flood of well-paying jobs in a desirable urban location is attracting higher paying young workers. More than 80 percent of tech companies’ workforces have an average age under 35 (Kloc, 2015). This boom in the industry has increased the median income by 20 percent. Real estate throughout the city is reacting to the changing demographics and it has thrown the city into hyper gentrification. While there are many factors that contribute to gentrification, this study will focus on the millennial cohort and what role they are playing in putting pressure on San Francisco’s rental housing market.

Young adults have the highest rate of migration among all age groups and in the past few years, San Francisco has had one of the highest in mover rates for young people among large US metropolitan areas (Rapino, Burd, & Benetsky, 2015). Much like the Baby Boomer generation before them, it is predicted that millennials will be the next cohort to dominate the housing market. For these reasons it is important for cities to acknowledge this demographic trend to better plan for their housing needs. In attempting to dissect what are the factors of gentrification in San Francisco, this study will examine the extent to which the millennial cohort is a contributing factor by looking at young adult residential locations in the region over time. Prior to this analysis, research has been done in identifying national trends of

affordability in cities and predictions for millennial cohort housing preferences. This is important prior to analyzing shifts in residential locations because it will help to better understand what is happening at the macro and micro level in San Francisco's affordability crisis. The research will also help isolate the trends connected to the millennial cohort. Based on the spatial analyses conducted, it appears there has been a trend of young people moving into San Francisco's central neighborhoods. This change in residential location pattern indicates the millennial cohort's housing preferences are likely a source of pressure for San Francisco's rental housing market. Looking at other US cities with similar trends, there are a few innovative solutions that San Francisco could adopt to help alleviate this problem as it develops in the future. I

## AFFORDABILITY IN US CITIES

*"It is a great irony of gentrification that the gentrifiers always end up displacing the people who made them want to live there." Joe Kloc*

### **Equitable Access**

#### RIGHT TO THE CITY: RESISTANCE TO GENTRIFICATION

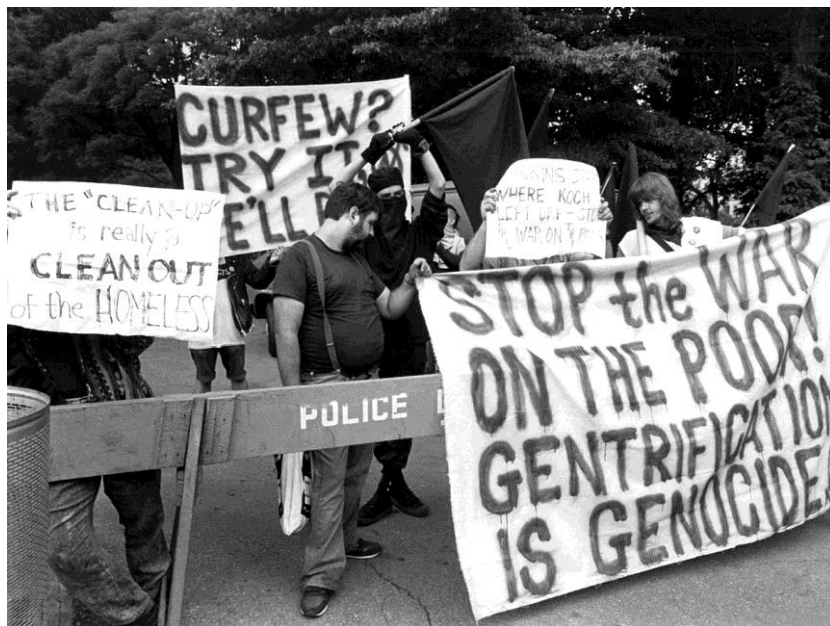
As urban centers grow, over reliance on the market for the production of housing has led to inequitable outcomes. For many, housing choices are determined by how much they are willing to pay and in the United States housing is the single largest expenditure (Quigley & Raphael, 2004). This makes housing affordability a very important national issue especially in urban centers where the cost of housing is rapidly increasing to the point that it is pricing out diverse demographic groups. Many argue that the issue concerns not only housing but a broader struggle for access to urban living. The struggle to stay in gentrified neighborhoods has empowered resistance movements in cities all over the country.

Ruth Glass first used the term gentrification in the early 1960's in her description of the changing working class quarters of London. She described,

*"One by one, many of the working class quarters have been invaded by the middle class - upper and lower ... Once this process of 'gentrification' starts in a district it goes on rapidly until all or most of the working class occupiers are displaced and the whole social character of the district is changed" (Schaffer & Smith, 1986)*

Prior to Glass's observation of London, there have been previous forms of gentrification in many nineteenth century cities during the redevelopment and rehabilitation of housing to improve living conditions. However, the difference between these experiences and contemporary gentrification is that it is now much more systematic and widespread with it now being an international process that is connected to larger economic, political, and social changes. (Schaffer & Smith, 1986) There are many modern definitions of the term gentrification but the Merriam-Webster dictionary defines it as "the process of renewal and rebuilding

accompanying the influx of middle-class or affluent people into deteriorating areas that often displaces poorer residents.” The evolution to this modern definition began during the Carter Administration when gentrification was lauded as the “major hope for reversing the economic and social decline that still dominates the inner cities” (Schaffer & Smith, 1986). At the time, the U.S. Department of Housing and Urban Development downplayed the negative effects of it and defined 2 percent as the unofficial acceptable rate of household turnover post redevelopment. It was acceptable that previous residents would be



*Image 1: Protestors at Tompkins Square. Source: NPR*

displaced through revitalization efforts in gentrifying neighborhoods at this rate. With these expected low rates of displacement, the need for anti-displacement policies were argued as unnecessary. However evidence now suggests that this number may have been as high as 23 percent in gentrifying neighborhoods as a result of revitalization (Schaffer & Smith, 1986). Displacement of lower to working class residents became a common issue in many cities across the country and resistance movements began to form. On August 6, 1988, gentrification was declared a “class war” at the Tompkins Square Park riot in New York City’s East

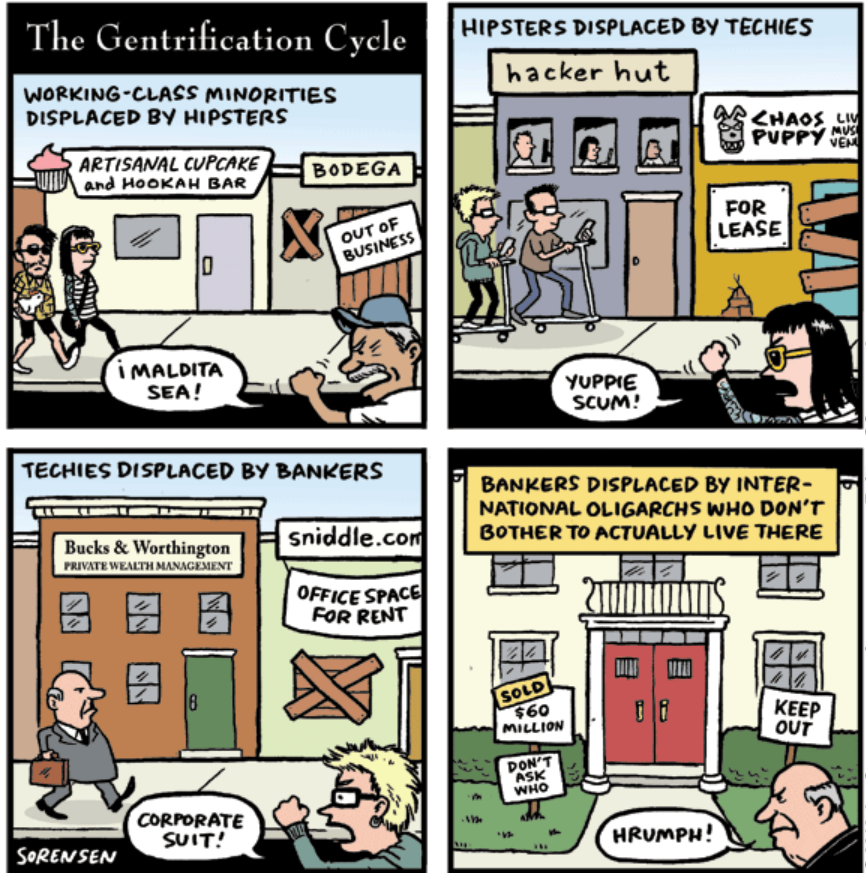


Figure 1: Cycle of Gentrification. Source: Jen Sorenson

the world. To protesters the issue isn't just the exclusion and displacement of the lower or middle income, it's the colonization of their neighborhoods instead of integration.

*"I think it means that there's this group of people who are losing power to another group of people. I think it really comes down — when we talk about incomes and higher rents and higher prices — I think what we're really talking about is power." (Martin, 2014)*

It's the loss of power of choice for those long time residents that have built the cultural character, developed the social contracts, and who have stuck it out in these neighborhoods through the good and the bad. Unfortunately for many longtime residents they are not given the opportunity to enjoy the "reversing economic and social decline" because of increasing unaffordability.

Village.  
Tensions grew so high that a bloody battle ensued between protesters and police that left more than 100 people injured. (L. Sullivan, 2014)  
Today, protests against gentrification can be seen in cities all over the country and



The question that can be raised is why is this important. Why is it necessary for cities to develop policies to mitigate displacement of lower to middle income populations, largely minorities, in central cities? David Harvey in his book called *Rebel Cities* argues that humans have a right to the city. He states,

*“The right to the city is far more than the individual liberty to access urban resources: it is a right to change ourselves by changing the city. It is, moreover, a common rather than an individual right since this transformation inevitably depends upon the exercise of a collective power to reshape the processes of urbanization. The freedom to make and remake our cities and ourselves is, I want to argue, one of the most precious yet most neglected of our human rights (p. 5).”*

Having the right to the city symbolizes many other “human rights” including the right to choose where you want to live and how you want to live. However, beyond having a right to the city, maintaining diversity in a city population is also good for the social and economic wellbeing of neighborhoods. Lisa Sturtevan, Vice President for research at the National Housing Conference stated this on an NPR discussion panel called “Gentrification: Progress Or Destruction?”

*“Cities do better when there's a diversity of family types, cities do better when there's a diversity of incomes. If you want a thriving economy, you need folks of all income levels to work in those jobs. If you want a thriving community you need folks who invest in schools and have children as well as the folks who are singles. So it is in the cities' best interest as well.” (Martin, 2014)*

It is in the city’s best interest to mitigate displacement in gentrifying neighborhoods. As more and more displacement happens, hot market cities are becoming more homogeneous and catering to higher income demographics groups. Historically there have been many factors hypothesized to explain causes of gentrification in hopes of identifying indicators of when and where neighborhoods will be affected including demographic change, housing market dynamics, urban amenities, and changes in economic base. (Smith, 1987) All can be used to determine the status of gentrification in neighborhoods. However housing market dynamics and the

affordability of housing is taking center stage in most of the gentrification discussions that are happening in cities all over the country.

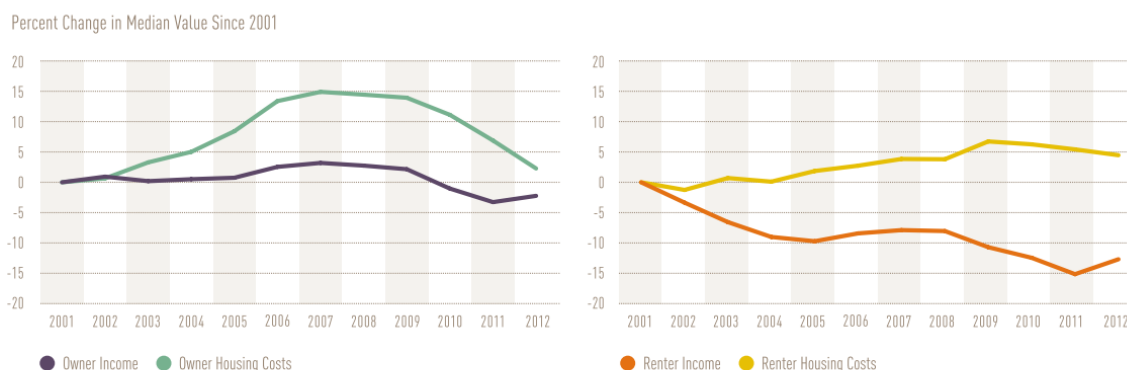
#### HOUSING INCREASINGLY UNAFFORDABLE IN US CITIES

##### *State of Rental Housing Stock*

Housing affordability and lack thereof can be caused by a number of different factors. Depending on the lens of the conversation it is a single term that can relate to the distribution of housing prices, housing quality, income, the ability to borrow, public policies that affect housing markets, conditions that affect the supply of new or rehabbed housing, and personal choice of how much housing is consumed relative to other goods (Quigley & Raphael, 2004). Historically, the U.S. through policy has made homeownership an affordable option for many households. However lower income groups, and specifically minority groups whom have been excluded from these policies, have relied heavily on the rental housing market as their source of affordable housing. Nearly three-quarters of renters have incomes that are below the median income. (Joint Center for Housing Studies of Harvard University, 2011) This is more relevant today as even more households along the income spectrum have exited owner-occupied housing due to the foreclosure crisis of the 2000's combined with drops in income levels. In rebounding from the Great Recession, the rental housing market now plays a vital role in providing affordable housing. However, the increased demand for rental housing is consuming available supply and causing higher and higher rental prices.

The U.S. Department of Housing and Urban Development defines housing affordability as a case where the percent of income a household spends on housing is at or below 30% (B. Sullivan, 2015). Percentages above 30% to 50% are considered a moderate rent burden and percentage above 50% are considered a severe rent burden (Joint Center for Housing Studies of Harvard University, 2011). Since the recession began housing affordability has largely been a rental issue as renter-housing costs are increasing well above renter income.

### Since the Recession, Affordability Has Improved for Homeowners But Not for Renters



Notes: Dollar values are adjusted for inflation using the CPI-U for All Items. Median renter housing costs exclude renters paying no cash rent. Source: JCHS tabulations of US Census Bureau, American Community Surveys.

**Figure 2: Rental Housing Affordability. Source: Joint Center for Housing Studies of Harvard University**

### RISING RENTS

Metro areas that saw the steepest rent increases in 2013's second quarter, from a year earlier:

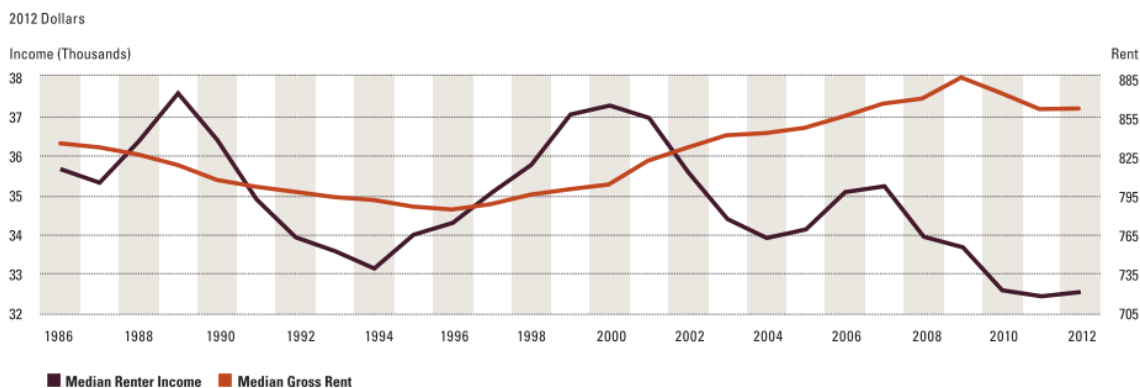
- San Francisco: **7.8%**
- Oakland, Calif.: **6.9%**
- Denver: **6.1%**
- Seattle: **6%**
- San Jose, Calif.: **5%**
- Portland, Ore.: **4.4%**
- Houston: **4.3%**
- Austin, Texas: **4.1%**
- West Palm Beach, Fla.: **4%**
- Fort Worth, Texas: **3.6%**

**Figure 3: Metro Areas with steepest rent increases. Source: MPF Research.**

However, rental affordability has historically not always been as much of an issue to a wide spectrum of income groups as it is today. In 1960, the percent of renters with a moderate burden was 24 percent. By 2000, this number jumped to 38 percent and in 2009 reached 49 percent. In addition, the percentage of those with severe rent burdens has increased from 12 percent in 1960 to 26 percent in 2009. (Joint Center for Housing Studies of Harvard University, 2011) This has been a significant issue for cities as renters are more likely to live in central cities. In 2013, many major cities in the country saw major spikes in rental costs.

Affordability in central cities is only expected to get worse. Before the recession, rises in rental prices were already an issue. For example between 1995 and 2002, the median rent prices increased 76 percent in San Francisco, 61 percent in Boston, 49 percent in San Diego, and 62 percent in Denver (Quigley & Raphael,

### Declining Incomes and Rising Rents Continue to Erode Affordability

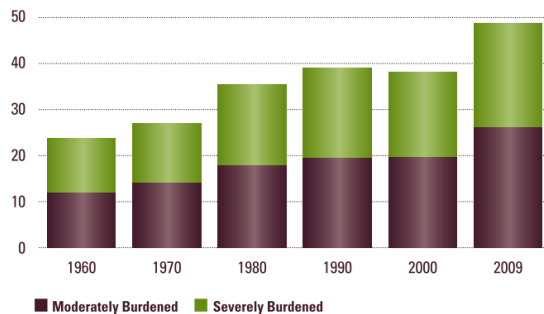


**Figure 4: Declines and Incomes while Rents Continue to Rise. Source: Joint Center for Housing Studies of Harvard University**

2004). During the recession, rental prices were not significantly affected compared to home prices. For cities where rent prices fell during the foreclosure crisis, they rebounded quickly after. This is largely due to the decline in homeownership rates and the shift in tenure to renting for many households. If homeownership rates remained at 2005 levels, projections of net renter household growth from 2005 to 2010 would have been just under 370,000. However due to the drop in rates, the renter household growth rose to nearly 4.0 million over this time period (Joint Center for Housing Studies of Harvard University, 2011). This shift in tenure has put enormous pressure on the country's rental housing stock. The rate of new renters annually between 2005 and 2013 has been double the pace of any decade since the 1960's (Joint Center for Housing Studies of Harvard University, 2013). Because of the rental resurgence across a now widening spectrum of socio-economic groups, housing affordability is no longer just an issue for lower or moderate-income households but increasingly for higher income households. This can be attributed to falling income levels and the pressure on the rental housing stock from higher income renters.

**The Share of Renters with Affordability Problems Has Doubled in the Last 50 Years**

Shares of Cost-Burdened Renter Households (Percent)



Notes: Rent includes tenant-paid utilities. Moderately (severely) cost-burdened renters pay 30–50% (more than 50%) of pre-tax household income for housing. Renters with zero or negative income are assumed to be severely burdened, while renters not paying cash rent are assumed to be unburdened. Source: Table A-8.

**Figure 5: Rent burden increases and is becoming more unaffordable.. Source: Joint Center for Housing Studies of Harvard University**

As higher income renters face increasing affordability challenges, this only intensifies the issue for lower income renters. In the HUD’s 2015 Worst Case Housing Needs Report to Congress, the report states households in 2013 with worst case housing needs have decreased since 2011. However, they are still 49 percent more numerous than in 2003, before the recession (B. Sullivan, 2015). Reports such as this one highlight the need for more affordable rental stock.

*Real Estate Owned Rental Properties and Ghost Apartments*

The growing rental market has been supplied through formerly owner-occupied single-family homes converted to rentals and through the construction of multifamily housing. In 2013, the number of new multifamily units intended for rental was at the highest level since 1998 (Joint Center for Housing Studies of Harvard University, 2014). However even though there have been drastic increases in rental housing stock, increases in the overall housing stock across tenures have slowed. For some, this can be attributed to the change in the market dynamics of rental housing.

One of the hottest trends in the financial sector since the foreclosure crisis is “REO-to-rental” (Dayen, 2013). As markets stabilized, hedge funds, private equity firms, and some of the biggest banks raised massive amounts of capital to buy up distressed or foreclosed homes. Many of these transactions were done in bulk and at bargain prices. Investors planned to sit on the properties until prices appreciated and in the meantime the strategy was to convert them to rentals. They used rental revenue streams to pay investors, some up to 10% annually. In some US cities,

significant numbers of such properties were purchased in this manner. As much as 42 percent of all homes that fell into foreclosure in Oakland, California between 2007 and 2011 have gone to investors (Dayen, 2013). Since the start of this trend, firms have found ways to securitize the rental revenue with bonds that can then be sold off to other investors. Blackstone, one of the biggest buyers in the market, spent \$7 billion on 40,000 properties and generated \$479 million in funds by selling these bonds to acquire more rental properties (DePillis, 2013). The latest estimates show that private equity firms and real estate investment trusts have purchased a total of 200,000 homes to rent out worth \$20 billion.

To some the investments are seen as something positive. Many of the properties are purchased in low-income communities that have seen little investment. Investors claim the result of this financial product is “it will ‘professionalize’ the burgeoning rental market, renovating homes that small-time landlords in low-income communities would rather just let rot” (DePillis, 2013). A leasing agent for Sullivan Management stated, “We want to bring in good, productive people and really change the area.” However, even with the best intentions of the investors, this is coming at a cost.

A notable critique is that these Wall Street investors are becoming massive landlords that are far removed from their tenants. This has implications for the affordability of the housing offered as the incentive is to maximize rent revenues. For many of the properties purchased in Oakland, the rental prices are higher than mortgage payments the foreclosed homeowners were paying (Glantz, 2012). About a third to half of the properties are all-cash offers, making it difficult for buyers with loan to keep up (DePillis, 2013). In many ways this is creating a distorted housing market away from homeownership toward renting. It also is causing speculation frenzy as investors are purchasing properties as quickly as possible in hot housing markets. REO rentals are also creating a “landlord-tenant culture, a sharecropper society. It’s kind of like medieval Europe, where a few large financial institutions

own everything, and we just rent from them” (DePillis, 2013). Representative Mark Takano in California has raised his concern to the House Financial Services Committee that the surplus of investors in rentals could be artificially raising rental prices (Panchuk, 2014). His fear, “If vacancy rates rise or renters are unable to pay their rent, Blackstone and others may be forced to sell off vast Risk also exists if rents get too depressed. In that case, investors would be forced to liquidate their properties quickly, which could destabilize the housing market (DePillis, 2013).

Another trend in real estate, luxury “ghost apartments”, is also becoming more and more present in cities all over the world. The worlds richest are buying apartments in central cities such as New York, London, San Francisco, and Vancouver, as second residences or as investments. For the wealthy from unstable countries, these apartments serve as a “security deposit in the sky” that functions as private insurance for their wealth (Johnston, 2015). These luxury apartment purchases are generating property taxes for cities even while their purchasers do not use many municipal services. However, these luxury apartments are doing little to fulfill the need for people who actually want to live in the urban core of these cities. The units are adding to the housing stock but if rented at all, they are rented at high rates that are out of reach to a majority of people except the very wealthy.

#### *Additional Pressures on Rental Housing*

The consequences of the foreclosure crisis have forced many households into renting. This coupled with new housing market dynamics such as REO rentals and luxury apartment investment are putting added pressure on affordable rental housing stock. In the foreseeable future another wave of pressure is expected in demographic shifts. The millennial cohort is delaying household formation, which is creating a pent up demand for housing. In addition, this cohort is largely renting and with their desire to live in urban cores it can be expected that they will be putting added pressure on housing in highly desirable cities. As their economic conditions improve and they begin forming their own households, they could be

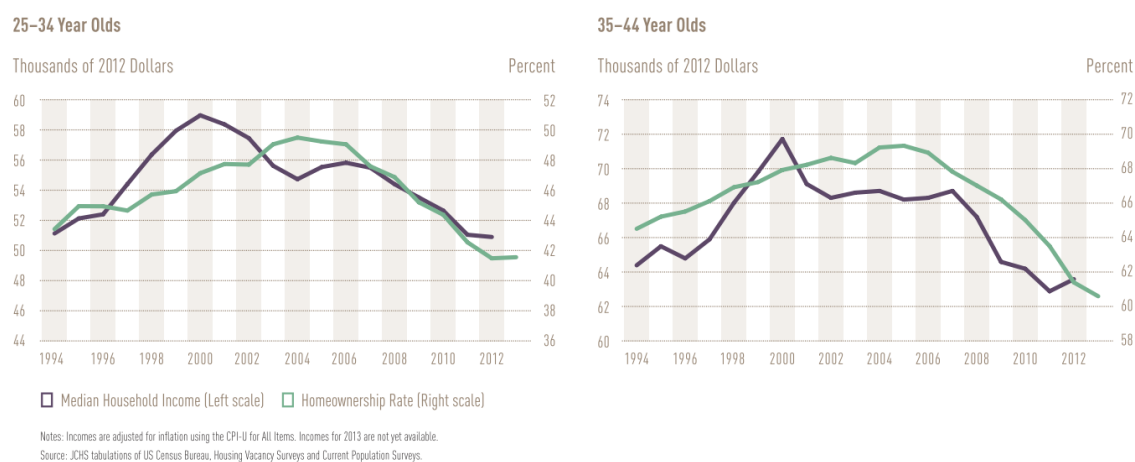
driving demand in the housing market in the years to come. In addition to the resurgence of the overall rental housing market across all age cohorts, demographic pressures of the millennial cohort will put additional pressure on an already shrinking affordable housing stock that will only intensify the affordability issue.



## MILLENNIALS DEFINING RESIDENTIAL PREFERENCES

The millennial cohort comprises the generation born between the 1980 and 2000. They are now the largest generation in history, surpassing the baby boomers, and are the most diverse in housing goals (Swanson, 2015). The housing characteristics of this cohort are largely influenced by the economic turmoil experienced during the recession and are already changing residential preferences. During the recession, millennial household formations were significantly less than for previous generations. This was largely due to few employment opportunities, delayed family formation, and the inability to buy a home (Rapino et al., 2015). As homeownership rates fell across all cohorts, the same happened for millennials.

**The Rise and Fall in Homeownership Among Younger Households Mirrors Income Trends**



**Figure 6: Young adults have lower median income and lower homeownership rates. Source: Joint Center for Housing Studies of Harvard University**

Many millennials have been holding off forming their own households by living with their parents or living with roommates. However as the economy is improving so is their financial situation and their pent up demand for housing is coming to fruition. In 2014, employment for millennials increased 60% faster than for other cohorts (Garrison, 2014). It is predicted that the number of millennial households will increase from 13.3 million in 2013 to 21.6 million by 2018 and will drive two thirds of the household formations over the next five years (Demand Institute, 2013; Shuster, 2014). RealtyTrac predicts, “the millennial generation is the key to a

sustained real estate recovery” (B2R Finance, 2014). What is clear from the swell in millennial headed households is that they are likely to dominate housing markets throughout the country and will dictate the type of housing supply.

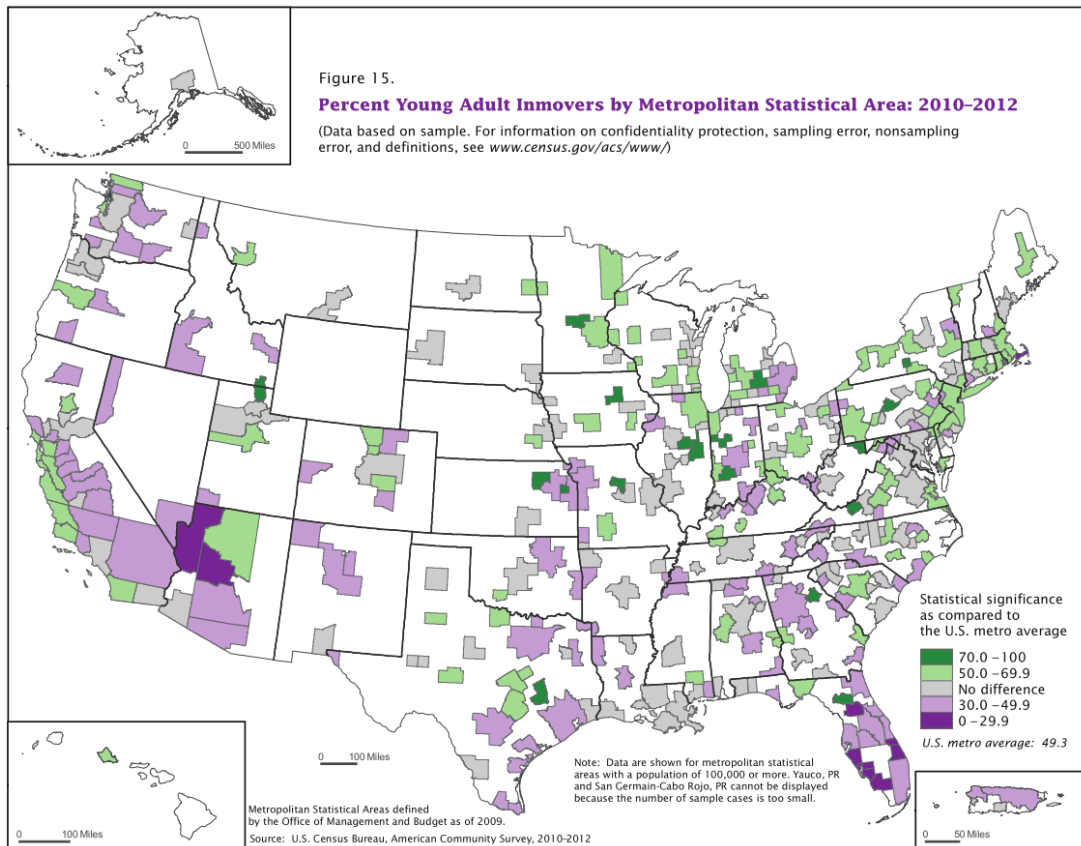
### Changing Residential Preferences

County, State	Metro Area	% Millennials of Total Population in 2013	% Change in Population of Millennials 2007-2013	April 2014 Median Home Price	April 2014 Unemployment Rate
Alexandria city, Virginia	Washington-Arlington-Alexandria, DC-VA-MD-WV	33.9%	80.7%	\$465,000	3.6%
Arlington County, Virginia	Washington-Arlington-Alexandria, DC-VA-MD-WV	39.5%	82.2%	\$505,000	3.2%
Davidson County, Tennessee	Nashville-Davidson--Murfreeseboro--Franklin, TN	29.4%	37.1%	\$160,000	4.7%
Denver County, Colorado	Denver-Aurora, CO	32.8%	57.5%	\$270,000	5.8%
Hudson County, New Jersey	New York-Northern New Jersey-Long Island, NY-NJ-PA	31.2%	44.3%	\$330,000	6.9%
Montgomery County, Tennessee	Clarksville, TN-KY	30.8%	46.3%	\$128,000	5.9%
Multnomah County, Oregon	Portland-Vancouver-Beaverton, OR-WA	28.2%	41.0%	\$270,000	6.1%
New York County, New York	New York-Northern New Jersey-Long Island, NY-NJ-PA	32.4%	42.8%	\$850,000	6.0%
Orleans Parish, Louisiana	New Orleans-Metairie-Kenner, LA	30.3%	71.2%	\$140,000	5.1%
San Francisco County, California	San Francisco-Oakland-Fremont, CA	31.8%	68.0%	\$950,000	4.4%

**Figure 7: Metropolitan areas with highest percentage of millennials. Source: B2R Finance**

There are many housing preferences that are different for this generation than previous ones. One trend seen in the post-recession years is the migration patterns of millennials. During and immediately after the recession, millennial migration patterns declined compared to previous generations but that is now changing with millennials in recent years having the highest rate of migrations compared to the other cohorts. Between the years 2009-2013, millennials made up 49 percent of in-movers to metropolitan areas larger than 100,000 (Rapino et al., 2015). Some of the highest in-mover rates of millennials were seen in metropolitan regions such as Salt Lake City, Denver, San Jose, San Francisco, and Austin. In addition to in movers, the number of millennials in metropolitan areas throughout the country has significantly increased.

In addition to being selective about location, Millennials are also selective with their housing preferences. Cultural Outreach Solutions identified the top housing trends that millennials seek. One identified trend is that they prefer living in urban settings where they are close to jobs and amenities. They also are willing to live in smaller homes and are conscious of being eco-friendly (Swanson, 2015). As households form, millennials are making the decision to rent or own. For many they are more hesitant to own after witnessing the aftermath of the recent housing crash and although they would like to own in the future, many are renting for the time being. For a generation that collectively holds over \$1 trillion in student debt, taking on a mortgage is seen by many as a burdensome responsibility. This has resulted



**Figure 8: Large percentage of young adults in metropolitan statistical areas (MSA). Source: ACS Report**

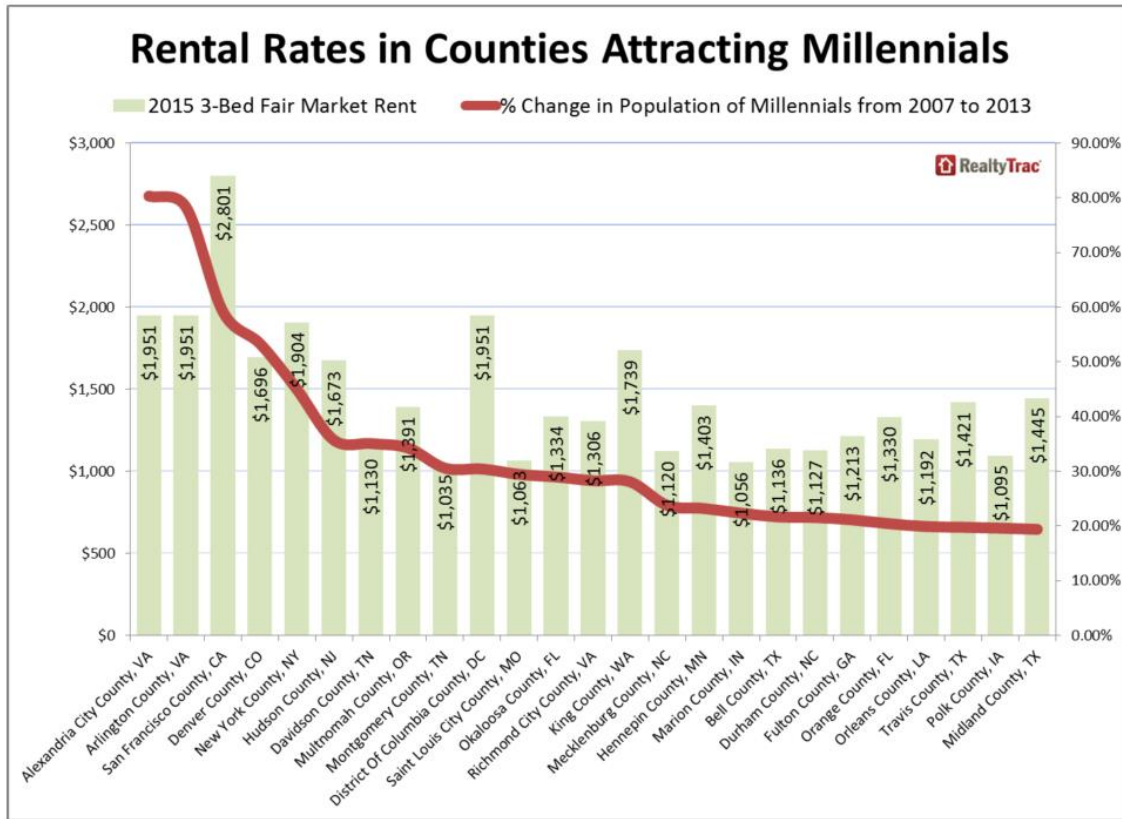


Figure 9: Rental rates in areas attracting millennials tend to be higher. Source: RealtyTrac

in a delay of homeownership, the largest decline compared to any other age group (Malcolm, 2013).

In many cities, the increase of millennials is driving up rents. Cities have seen rental increases anywhere from 15 to 71 percent over the past four years (B2R Finance, 2014). In 2013, it was believed that millennials would become “career renters” as renting appealed to them for its flexibility and required less responsibility to maintain a home. Also, for many of the millennials that moved into urban areas, renting allowed them the ability to live in urban areas. However, demand in urban areas is only exacerbating the already high degree of rental demand and lack of affordability. San Francisco was fourth in the nation with a 68 percent increase of millennials (B2R Finance, 2014). The city has one of the strongest markets for rent growth and saw an over 30 percent increase in rents across all household sizes. Not only are millennials moving to larger cities, they are

moving in greater numbers to the cities where housing is much less affordable. As homeownership delays for millennials continue, the increasing demand for rental housing may be a significant challenge in the availability of affordable housing in these rental markets.

## CASE STUDY: SAN FRANCISCO

Since the bounce back from the recession, rents and housing prices have increased dramatically in San Francisco. Skyrocketing rents fueled by investor frenzy speculation have caused rapid gentrification in many of its once largely working class neighborhoods. Many low to moderate-income households are being displaced to areas outside of the city because they are no longer able to afford their longtime neighborhoods. There are many economic factors that have contributed to this growing affordability issue; however, this case study will focus on the extent to which the millennial generation is affecting the dynamics of the housing market.

### **Context**

#### FROM GOLD RUSH TO TECH BOOMS

Since the Gold Rush, San Francisco has had a tradition of being a boom town. The area was first settled by the Ohlone people and was occupied by Spanish colonizers in 1769 before shifting to Mexican rule in 1821. The United States then annexed the city from Mexico in 1846. Two years later gold was first found in the California foothills and within months San Francisco became the central port and depot for the Gold Rush. Within a year the city's population grew from 1,000 to 25,000. The gold rush lasted from 1848 to 1855. During this time San Francisco grew as a financial hub for international investment connected to mining and trading of the Gold Rush. Later the Gold Rush helped create a robust manufacturing base by building a labor force that attracted people from all over the world. By 1880, San Francisco had the highest percentage of immigrants in the country. Early in its history San Francisco was established as a boom center that could react by generating the workforce and the resources needed to facilitate booming industries. "San Francisco barreled through the 20th century as a center of wealth, military power, progressive culture and high technology" (History.com Staff, 2009).

For many generations, San Francisco has been the home to many working class and immigrant families. They were also the ones who stayed during the white

flight from cities in the 1950's and 1960's. At the tail end of the 20<sup>th</sup> century a new type of technology, the Internet, was commercialized and this industry threatened the housing stability of working class households as San Francisco became the epicenter of this new booming economy. "In the 1990's San Francisco positioned itself as the metropolitan center of the internet economy, where financial investment would be matched with technology startups" (Philips, Flores, & Henderson, 2014). The growth of the industry in San Francisco brought in hundreds of millions of dollars that resulted in the first recent wave of gentrification in its neighborhoods. In 2000 alone, San Francisco collected \$544 million in property taxes, up 62 percent from 1990 (Philips et al., 2014). This booming industry increased private and public investment in the form of urban development and condo conversion as new tech millionaires looked for office space and housing. Landlords looked to capitalize on the growing wealth of new residents and in 2000 there was an historic high of 2,000 eviction cases.

Prior to the first tech boom, there were pockets of neighborhoods that had experienced decades of disinvestment. These pockets were then quickly bought up as new destinations for the incoming wealthy class of people and pricing out those who were living there. The "dotcom" boom eventually became a bust since investors were more interested in big ideas than solid business plans. The bust lasted from 2000 to 2003 and it did slow down this wave of gentrification but real estate investments had already created major shifts in the demographics of San Francisco's neighborhoods. Displacement continued with the second wave of gentrification during the housing bubble in the mid 2000's as many working class neighborhoods were affected by real estate speculation. Although not as drastic as the first tech boom, lower income to moderate income people could not afford inflating sales prices. The city is now undergoing another wave of gentrification in recent times with the second tech boom fueled by tech giants such as Google, Facebook, and Twitter.

## CURRENT SITUATION

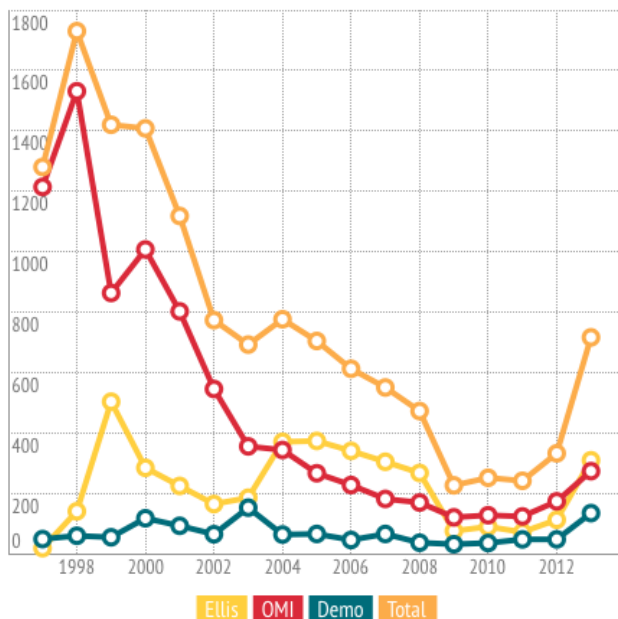
“Tech boom 2.0”, is creating an even larger income gap and has fueled skyrocketing home sales and rental prices. The composition of available housing is different than it was during the first tech boom and is putting pressures on available affordable housing stock that is much graver.

*“Well, to just see the difference, visually, between 1999 and now...there's a couple facets that change things/make it worse. Firstly, rental stock in San Francisco has not been replenished at levels to keep up with the rising population. There is essentially finite rental stock in San Francisco. In the first dot-com boom, the 'low hanging fruit' of housing was used by the incoming tech force. "Neighborhoods gentrified, and people were evicted on similar levels, but since rental stock that was converted into condos and housing at the time was not truly 'replaced' in a meaningful way, that means SF has less rental stock than the time. Each wave of evictions reduces the total amount of rental*

*available in the city. With a median housing price of \$1,000,000 in SF, it's fair to say that most middle to lower income folks here are renters.”(Hu, 2013)*

## No-Fault Evictions 1997-2013

Anti-Eviction Mapping Project - No-Fault Evictions 1997-2013



**Figure 10: No-Fault Evictions have increased in the past 3 years among the different types of exemptions. Source: Anti-Eviction Mapping Project**

With the first tech boom, many housing units were taken out of the rental market and converted to condos. Since then little has been built to replace those rental units, thus there are fewer rental housing units than there were during the first tech boom for incomers to pick from. Tech boom 2.0 is



now threatening the already diminished rental housing stock as more renters are being evicted for condo conversions. Although San Francisco has a rent stabilization program where buildings with two or more units built before 1979 are subject to rent control and no-fault eviction regulations, there are exemptions to these regulations. Originally the exemptions were enacted to protect the property rights of owners, they are now seen being used as tools to evict tenants to make way for those who are willing to pay increasing market prices. One of the most common tools used during the first tech boom and now the current one is evicting tenants through the Ellis Act. The act was enacted in 1986 and gave property owners the right to exit the rental business to convert their units to condos to then be individually sold. In 2013, Ellis Act Evictions rose 175 percent from the year before (Kloc, 2015). Between 1997 and 2014, almost 4,000 Ellis Act evictions were filed with the San Francisco Rent Board. (Anti-Eviction Mapping Project, n.d.)

In addition to these exemptions, landlords are also using buyouts to get low rent tenants out of their units. The exemptions threaten the overall rental housing stock while the buyouts do not impose a cap on rents when units come back on the market. The combination of these methods is a significant threat to the affordability



**Image 2: Protestors outside a home whose residents are being displaced through the Ellis Act. Source: Causa Justa: Just Cause**

of rental housing. Highly compensated tech employees have driven up the median income 20 percent in the past few years and higher incomes mean they are able to afford increasing housing prices (Kloc, 2015). This is putting households earning low and even moderate incomes at a

disadvantage. The question remains if this boom will bust like the last one or whether the will industry sustain itself for a longer period. During the first boom

many of the tech innovators knew nothing about business and investors knew little about the internet. However, tech giants like Google, Facebook, and Twitter now have concrete business plans and also have support of city government. Mayor Ed Lee has worked hard to facilitate the tech industry with the promise of creating jobs after the economic downturn and building investment in deprived areas of the city.

### *The Twitter Tax Break*

In 2011, Twitter's headquarters was located in the SoMA district of San Francisco. Looking to expand the company's leaders made it known to the city leadership that payroll taxes that applied to them were going to force Twitter to relocate. Most of the large tech firms were located in Silicon Valley at the time. Twitter had expressed interest in a building in the Mid-Market district, which had been once a thriving theater district but was now a blighted corridor. The corridor also bordered the Tenderloin neighborhood, which has been a hub of social services for the homeless and largely filled with Single Room Occupancy housing. Newly elected Mayor Ed Lee offered Twitter a deal, which city officials saw as an opportunity to not only keep companies such as Twitter in the city but also to attract others like them. The deal was that if any company agreed to locate in a specified geographic area, centered around Mid-Market, then payroll taxes would be waived for all new jobs created for six years. This gave Twitter the incentive to stay and allowed them to almost double their work force. In the years to come, startups began to flock to the area to benefit from the payroll tax waivers. The city originally estimated the tax break for Twitter to be worth \$22 million; however, estimates from the Securities and Exchange Commission put that number at \$56 million. Since then many existing residents have become angered. The deal did generate jobs but did nothing to balance the jobs with new housing for the influx of tech workers. Capital improvements in commercial and residential properties along the Mid-Market corridor are making the area more desirable to employees of nearby companies and pricing out the residents and nonprofits that existed before. The

growing tension between the tech companies and existing residents is not only felt in this neighborhood but in the city as a whole as the industry continues to grow and housing becomes less and less affordable.

*A City at War*

*“You have moved into a city at war. People who have lived here a long time are in a constant state of intense stress over the possible, sometimes very real, loss of their homes...” (Redmond, 2015)*



**Image 3: Protestors in the Mission District rallying against increasing evictions and displacement tactics experienced among residents.**

Some residents claim the tax break was an epic failure of urban planning as it did not first make sure that enough housing was available for the jobs generated. Now landlords and real estate investors are trying to maximize their profits by forcing lower paying existing tenants out of their homes to make way for the higher paying tech workers. Some have accused

landlords of creating class warfare as the income inequality and housing prices continue to rise.

Existing residents feel pushed out of the homes and neighborhoods they created and feel a lack of compassion from the newcomers. Two recent incidents occurred that typify the tensions existing between newcomers and longtime residents. Intended as an effort to improve employee commutes, Google had hired private coaches to



**Image 4: Google bus stop protest. Stops are a symbol of gentrification to advocate and studies have shown an increase in evictions surrounding them throughout the city. Source: Causa Justa: Just Cause**



**Image 5: Captured image of argument between Dropbox employees and regular users of neighborhood soccer field. Dropbox employee showing permit reserving field. Source: Npr.org**

transport its employees living in San Francisco to its headquarters, about 35 miles away in Mountain View. Studies have shown significant increases in no-fault evictions within blocks of Google's bus stops (Anti-Eviction Mapping Project, n.d.) This has sparked many protests with housing activists blocking buses as a

way to gain attention to the issue.

Back in October of 2014, Dropbox employees made headlines. Neighborhood school children regularly played on a soccer field in the Mission District, when they were asked to leave by adults who had reservations for the field. They were unaware that the field could be reserved for a fee through the city's park and recreation department. When the adults, who happened to be wearing Dropbox shirts, tried to take over the field the children explained that they had always played on this field. An argument that ensued between community adults and the later confirmed Dropbox employees was caught on camera and went viral. It symbolized the growing tension and stereotype of tech workers not being sensitive to the existing communities they are moving to. However, the larger issue isn't about the existing communities vs newcomers. It is true the influx of tech workers is dramatically displacing existing tenants but the blame is not entirely on them.

*"The only real winner, of course, is the speculator who bought, cleared, and flipped the building. He screwed everyone – the TIC owners paid far too much for their modest flat, the longtime tenants found their lives ruined, the community was damaged ... and he took a million bucks to the bank...the landlords and speculators...love this crisis. They are the equivalent of storekeepers charging \$50 for a bottle of water after an earthquake. And when we tolerate them, we empower them." (Redmond, 2015)*

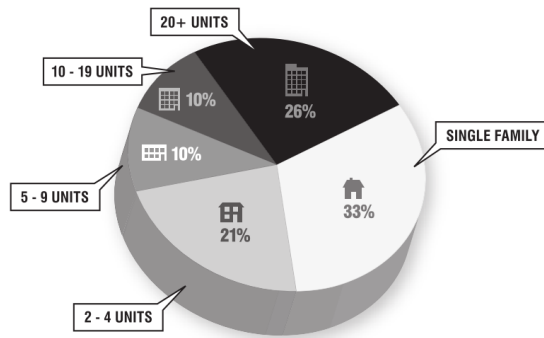
The conversation needs to be reverted back to the real issue. It is not just about the influx of high paid tech employees, opportunist landlords, or real estate speculation. The issue is the recipe that allowed for this market behavior to happen in the first place. It can be stemmed back to the past and current trends of development or lack thereof in San Francisco.

*Status of Existing Housing Stock*

San Francisco is roughly 47 square miles and for the most part completely developed from border to border

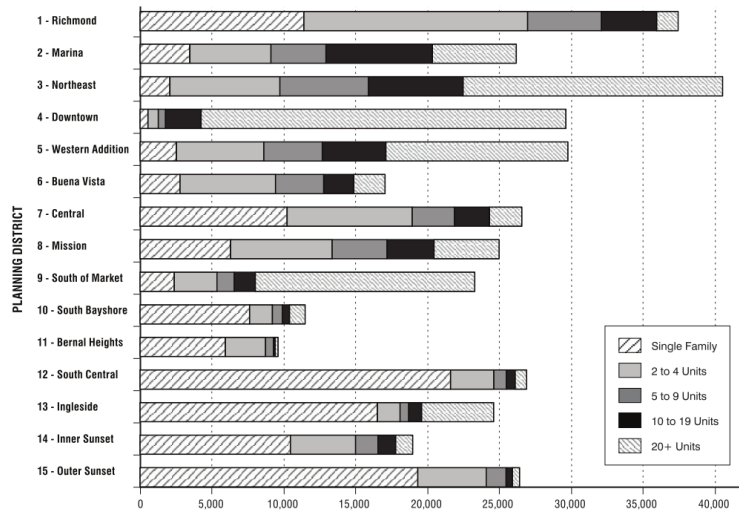
(Rosen & Sullivan, 2012). With the exemption of redevelopment areas such as the

**FIGURE 2.**  
San Francisco Housing Stock by Building Type, 2013



**Figure 11: Makeup of San Francisco's housing stock. Source: San Francisco Planning Department**

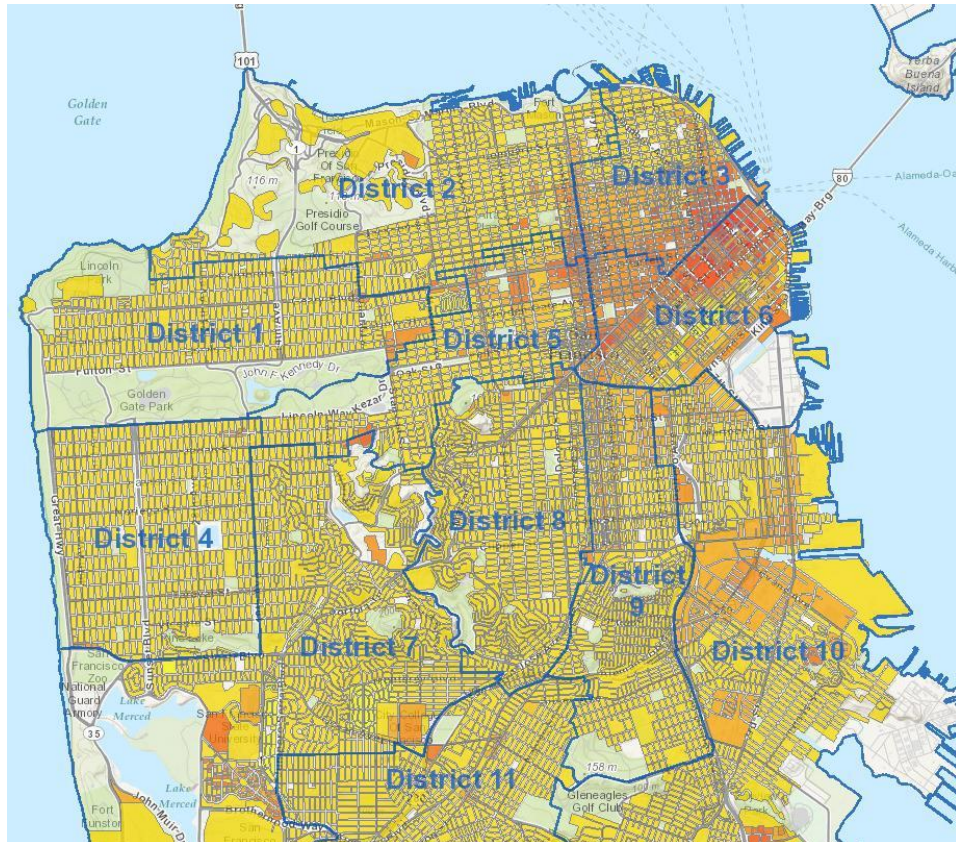
**FIGURE 9.**  
San Francisco Housing Stock by Planning District, 2013



**Figure 12: Housing Stock by neighborhood. Source: San Francisco Planning Department**

Eastern neighborhoods and industrial lands around Hunter's Point shipyards. For the most part development is very challenging as every project is

likely replacing something else. In addition, San Franciscans have tolerated only relatively low density development in attempts to fight “Manhattanization”. As a result development is highly restricted via tight zoning controls. Despite being the second densest large city in the country, San Francisco has a much lower density



**Figure 13: Areas with yellow have 40 feet height restrictions. Source: Business Insider**

housing stock than the densest, New York. Single-family housing comprises 33% of the total housing stock and many of San Francisco’s neighborhoods have low height restrictions (San Francisco Planning Department, 2014). Most of the city is under a 40 feet height restriction and even within that many areas don’t even reach those heights.

With the increasing number of new residents and low vacancy rates, development restrictions may be contributing to the problem. Easing them may well be an effective solution to the affordability crisis. Between the years 1994 and 2013, the city only added 32,950 new units. In 1990 the census reported a total

population of 723,959 and the 2013 ACS data shows that number is now 817,501. That means the city has increased in population by over 90,000 yet only 30,000 units were added to the housing stock. Although construction of new units has

## Housing Production Goals and Loss: San Francisco, 2007-2014

For the period of 2007-2014, San Francisco had a housing goal to produce 12,124 units for low-income residents (up to 80% AMI). We met 40% of the goal through building. At the same time, many affordable rental units were lost through no-fault evictions, which aren't counted in the official tally of affordable housing. When you consider loss of rent controlled units, our housing policy has met only 14% of our five year goal.



**Figure 14: Housing production versus losses. Many units have been removed from the rent control stock. Source: Anti-eviction Mapping Project**

significantly increased in recent years, the new units may be coming too late to slow gentrification and displacement of existing residents. This is assuming new construction is hitting all income groups. Reports have stated on average 39 percent of condos built since 2000 have absentee owners who purchased them for investment (Barmann, 2014). Therefore what is developed may not be adding to the affordable stock that has been lost.



### *Millennial Pressure on Affordable Housing Supply*

It is obvious the demand for affordable housing in San Francisco exists. There are many pressures at the micro level, such as the influence of the tech industry and local real estate speculation, however there are also a considerable number of pressures at the macro level. These include the resurgence in demand for rental housing, luxury apartment investments in urban cores, and changing demographics of households. Speculation as to what type of households millennials will form is an evolving process as their preferences are still being defined. What is clear is that the millennial cohort is likely to dominate the housing market in the next few years. The question is how big of a presence does this cohort currently have in San Francisco, and are they contributing additional pressure to the current affordability crisis? Moving forward in the future, the preferences of this cohort and their lifestyles could be used as an indicator to city officials of the type of housing that should be built to alleviate displacement pressures on other types of households.

## **Methodology of Research**

For my analysis, I am conducting spatial analyses. The first analysis will be a spatial analysis of demographic changes that have occurred as well as the severity of rental unaffordability. This will show if unaffordability is a citywide phenomenon or specific to certain parts of the city. Also an analysis will be done to define vulnerable populations in San Francisco that are susceptible to displacement and where they are located. The second analysis will be a spatial analysis of patterns in young adults' residential locations. This will determine if the millennial cohort is living in different locations than previous cohorts of young adults.

### LEVEL OF ANALYSIS

The city of San Francisco recognizes fifteen neighborhoods. Within these neighborhoods there are "micro-hoods" that vary demographically. For the first spatial analysis, I chose census tracts as the level of analysis in order to be representative of the micro-hoods within the larger defined neighborhoods. For the second spatial analysis census tracts were also used to be consistent with the first level of analysis. This is so a comparison can be made between changes in demographics, rental affordability, defined vulnerable populations, and location patterns of the millennial cohort. Keeping the level of analysis at the census tracts consistent allows an accurate comparative analysis.

### TIMEFRAME OF ANALYSIS

For the first spatial analysis, the years 2000 and 2012 were chosen. This time frame was used since it will accurately show the changes that have occurred since the first tech boom at the end of the 1990's. Isolating the analysis to just this period will be more accurate for comparing possible changes to the city that are connected to the millennial cohort. For the second analysis the years 1990 and 2013 were chosen. The year 1990 represents young adult residential locations for the prior cohort and will show an accurate comparative analysis to the patterns of the millennial cohort.

#### MILLENNIAL AGE GROUP

Although the ages of the millennial cohort spans a range of 20 years, I chose the age group 25-34. This is consistent with census data defined ranges. It is also most likely the current age range of the portion of the millennial cohort that is forming households and whose members are old enough to be independent of their parents.

## Findings

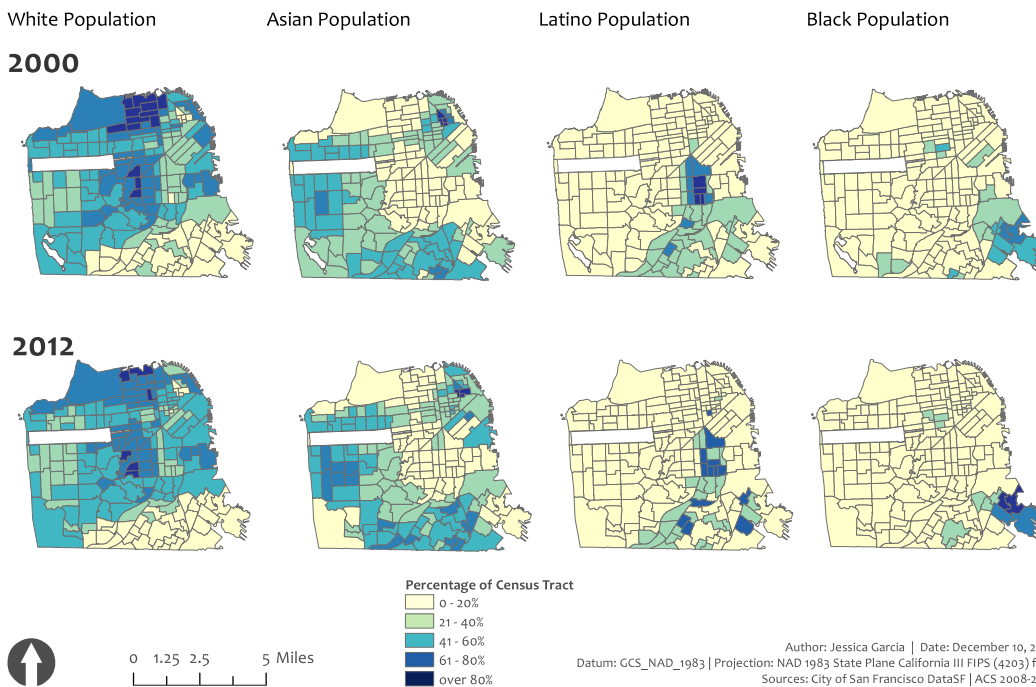
### SPATIAL ANALYSIS#1: SHIFTS IN DEMOGRAPHICS AND VULNERABLE POPULATIONS

#### Map 1: Racial Distribution

Between the years 2000 and 2012, a significant shift in the location of minority racial groups occurred. The white population is generally the same in terms of spatial locations, however some areas were more highly concentrated in 2012 than in 2000. The Asian racial group does not have many spatial changes

#### City of San Francisco

#### Racial Distribution by Census Tract

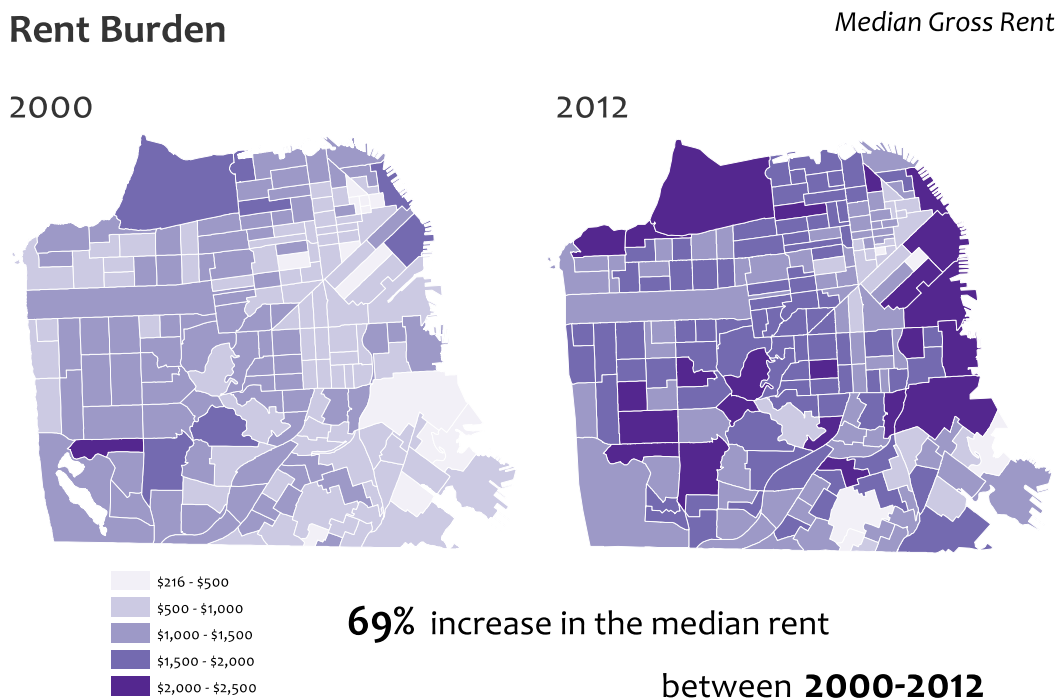


**Map 1: Racial Distribution by Census Tract. Decreases in the Latino and Black population can be observed between the years 2000-2012, as well as locational shifts.**

except for a few areas with higher concentrations in 2012 compared to 2000. The Latino and Black racial groups saw the more significant changes. There are less census tracts with a high percentage of these racial groups in 2012 compared to 2000.

*Map 2 & 3: Rent Burden*

The rent burden has significantly increased throughout the city between the year 2000 and 2012. The median gross rent increased 69% during this time period. The highest rents in 2012 are concentrated along the eastern waterfront with a few exemptions of pockets throughout the city. The areas with the highest rents in 2012 are mostly undergoing redevelopment projects. For affordability, the US Department of Housing and Urban Development uses the definition of 30% of



Author: Jessica Garcia | Date: December 10, 2014  
Datum: GCS\_NAD\_1983 | Projection: NAD 1983 State Plane California III FIPS (4203) feet  
Sources: City of San Francisco DataSF | Census 2000 | ACS 2008-2012

**Map 2: Changes in Median Gross Rent. There has been an overall increase in median rent with some areas seeing larger increases than others.**

income or below as the threshold for housing costs to be deemed affordable. By looking at the percentage of income spent towards rent, you can see that the majority of census tracts whose residents spent the greatest percentage of household income on rent do not coincide with where the highest rents are found. They are concentrated along the outer rim to the southwest with a few census tracts in the downtown core. Overall, in 2000 there were significantly fewer census tracts

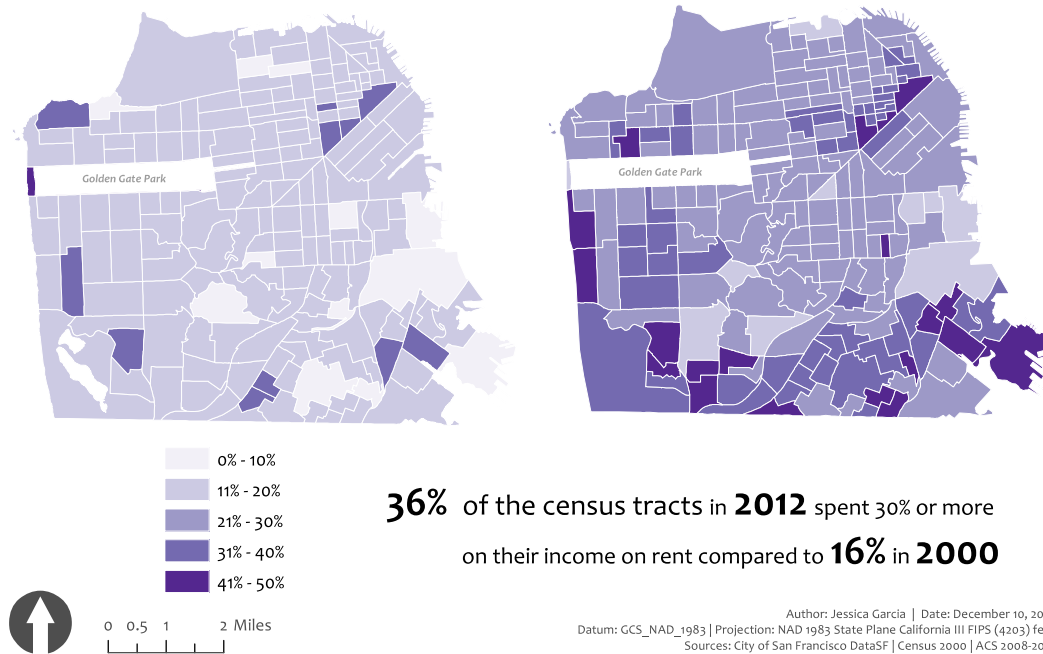
spending more than 30 percent of their income on rent compared to 2012. In the year 2000, residents in 16% of census tracts spent more than 30% of income on rent compared to 36% of census tracts in 2012. The city overall saw an increase in rent burden.

## Rent Burden

Percentage of Income Towards Rent

2000

2012



**Map 3: Percentage of Income Spent on Rent. The city collectively has seen an increase in income spent on rent signifying a decrease in affordability.**

### Map 4: Vulnerable Populations

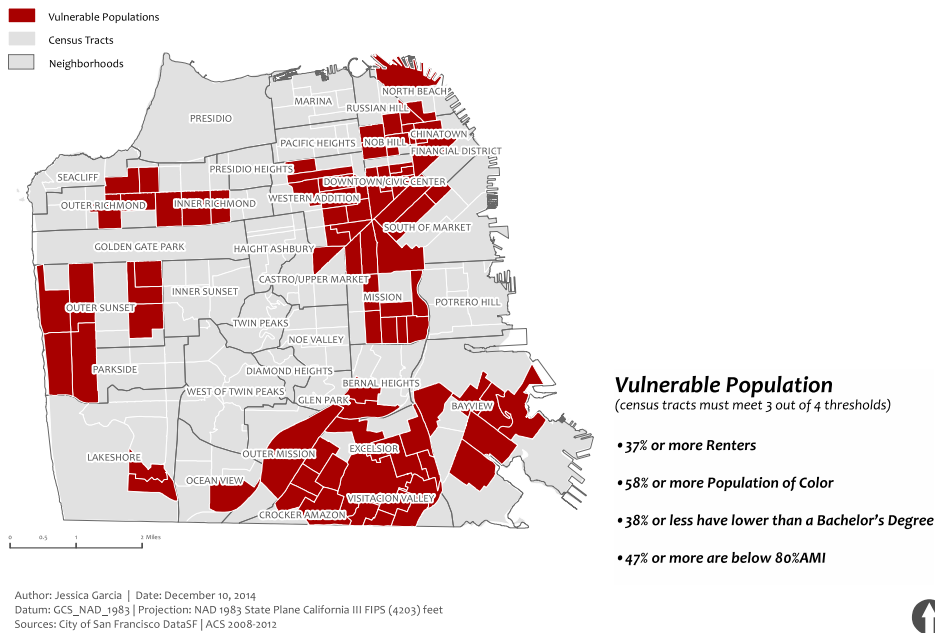
In 2014 a report was released from the group Causa Justa: Just Cause (CJJC). The report did an analysis of the entire Bay Area and identified which communities were undergoing different stages of gentrification. In their analysis they used an index score to define vulnerable populations as having certain characteristics at the census tract level. For this analysis, I adopted the definition CJJC used and applied it

just to the city of San Francisco. A vulnerable population is defined as having three out of the four following thresholds:

- 37% or more of the census tract consists of renter households
- 58% or more of the census tract’s population are people of color (i.e., other than white non-Hispanic)
- 48% or more of the census tract’s adults aged 25 and greater have less than a Bachelor’s degree
- 47% or more of the population earn less than 80% of the household area median income (HAMI). The amount of the HAMI was determined using the HUD income limits for the year 2012. For 80% HAMI, the amount was \$82,400.

I then made an index of all the census tracts with a score of three or higher and

### Neighborhoods with Vulnerable Populations



**Map 4: Vulnerable population census tracts exist in multiple neighborhoods of the city. Many of which are areas undergoing redevelopment projects or gentrification.**

defined them as vulnerable population census tracts. Many of them lay to the south

and the west of the city. Those central to the downtown core are located in areas that are undergoing or have undergone gentrification.

## SPATIAL ANALYSIS #2: YOUNG ADULT RESIDENTIAL LOCATION SHIFTS

### *Location Quotient Analysis*

To determine if Millennials are putting added pressure on San Francisco's housing market, an analysis must first be done to confirm that this is applicable to the city. Not only is it important to know the total population of millennials but also to measure if the city has a higher ratio of the population compared to other surrounding areas. Are millennials forming households everywhere or to a greater degree in the city? Markus Moos from the University of Waterloo in Canada has researched this question in Canadian cities. To do so he conducted a location quotient analysis of millennials in cities over a time period of 20 years. His study looks at not just the urban center but also the region as a whole. To calculate the location quotient he measures the proportion of young adults (25-34 years old) in each census tract in relation to the proportion of young adults in the entire region. The location quotient ratio for each census tract is mapped to determine if there has been an influx of millennials to the urban center compared to previous young adult cohorts. The higher the ratio, the higher the share of young adults those tracts have compared to other tracts. If an influx to the city can be determined, it would be consistent with the national trends of millennials moving to urban centers. This is significant because this generation has delayed household formation and homeownership, which is creating an additional demand to rental housing. For San Francisco this could be adding significant additional pressure to the already shrinking available and affordable rental housing stock. It also could influence the city's response to future development when determining housing needs.

For this analysis, the region was defined by the boundaries of the San Jose-San Francisco-Oakland Combined Statistical Area (CSA). This boundary encompasses



the largest cities in the region and their surrounding suburbs that accurately would show how populations throughout the region are shifting.

This CSA includes the following counties<sup>1</sup>:

- Alameda
- Contra Costa
- San Francisco
- San Mateo
- Marin
- Santa Clara
- Sonoma
- Solano
- Santa Cruz
- Napa

I then gathered 1990 Decennial census data and American Community Survey 5 Years 2009-2013 data for each census tract in these counties. The location quotient (LQ) was calculated using the following equation:

$$\text{Location Quotient (LQ)} = \frac{\frac{\text{Proportion of Young Adults in Census Tract}}{\text{Total Population in Census Tract}}}{\frac{\text{Proportion of Young Adults in CSA}}{\text{Total Population in CSA}}}$$

Following the quotient spatial analysis, I isolated the census tracts just in San Francisco and then conducted a comparative analysis. This was done to determine if there is a significant relationship between census tracts with the highest location

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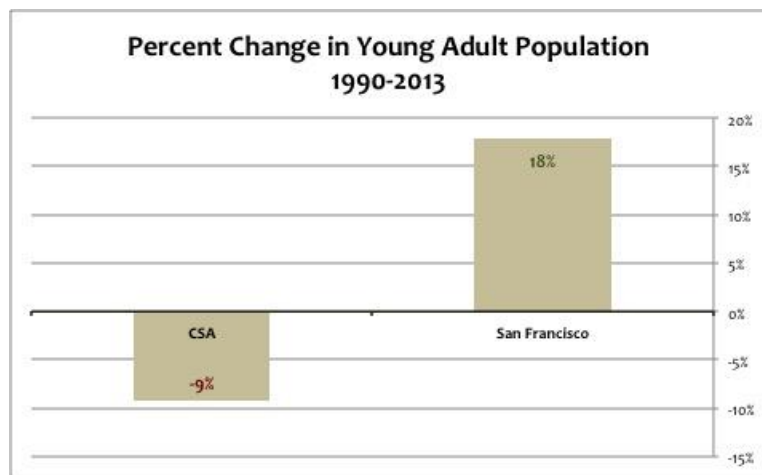
<sup>1</sup> For the purposes of this study, San Benito and San Joaquin counties were determined to not be significant and were thus not calculated based on their small population sizes in comparison to the rest of the counties.

quotient of young adults and census tracts with high rent burdens and vulnerable populations. Following a spatial analysis, I created a summary of findings comparing demographic characteristics of the census tracts with the highest proportion to the city as a whole. Since the census data collected did not allow the isolation of data to age groups, those with a high proportion of young adults were considered to be representative of the cohort. For these reasons I chose census tracts with a LQ of 2 or higher as being significant census tracts of young adults. I then isolated these tracts to compare them to other rents, rent affordability, and vulnerable population tracts.

*Map 5, 6, &7: Young Adults Changing Residential Location*

In conducting the location quotient analysis. It appears there is a significant change between the residential locations of young adults in 1990 compared to 2013 throughout the CSA. In 1990, the LQ of the census tracts ranged from 0 to 3. In 2013, the LQ of the census tracts ranged from 0 to 5. Spatially, the census tracts with the higher LQ's in 1990 are distributed throughout the region without any significant concentrations or spatial patterns.

Looking at the anchor cities in the CSA, neither San Francisco nor Oakland had any census tracts with a LQ over 3 and San Jose did not have any above 2. Even within those numbers a majority of the census tracts had a LQ of 1 or under. This changed



**Figure 15: The CSA saw a decrease in the young adult population while during the same time period San Francisco stay a significant increase. This indicates movement of young adults towards San Francisco.**

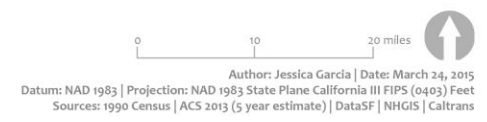
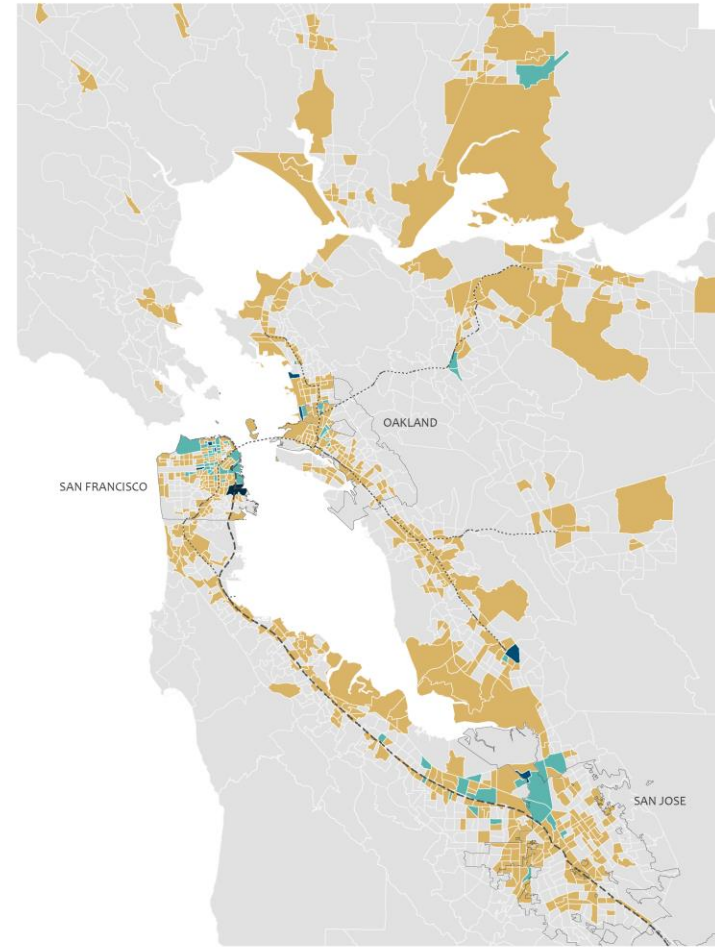
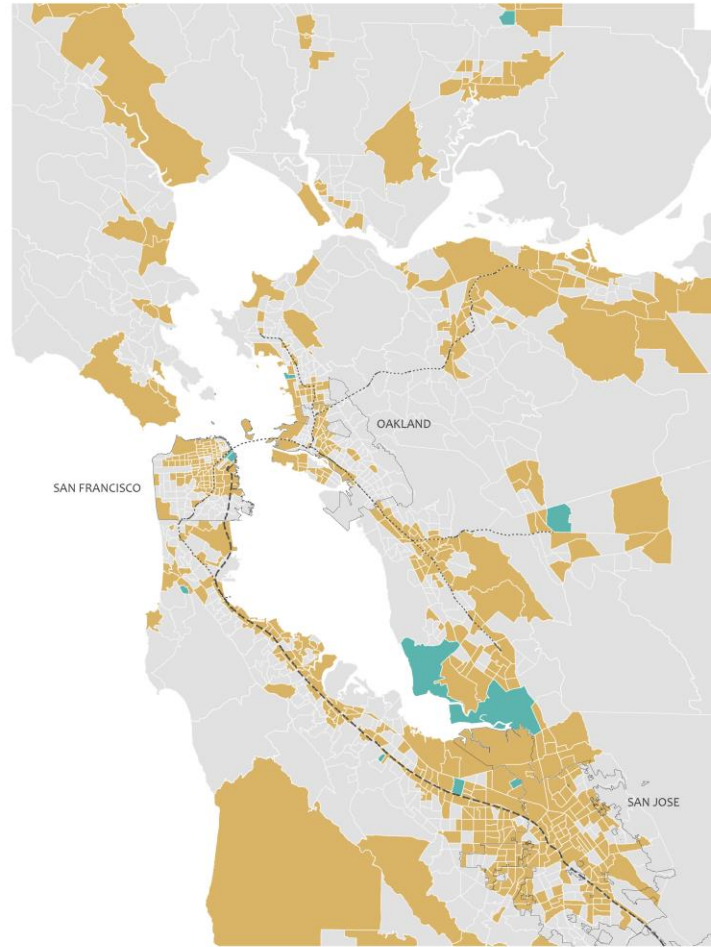
for census tracts in 2013. By 2013, there was a significant increase in tracts having higher LQ than 1990 and the spatial distribution of the tracts have changed. While the anchor cities experienced increasing LQ's in their census tracts, the surrounding cities experienced decreasing LQ's. This is further supported when looking at the overall population change in the CSA and San Francisco. In the CSA the young adult population decreased overall by 9% while it increased 18% in San Francisco. Even though the overall population decreased, this indicates that young adults are now more concentrated in or near urban cores. The shifting in locations also sees a concentration around the major regional transit routes, BART and Caltrain. In San Francisco there are higher concentrations of young adults along the city's Muni Metro lines.

# San Francisco Bay Area

## Young Adults' Changing Residential Location

1990

2013

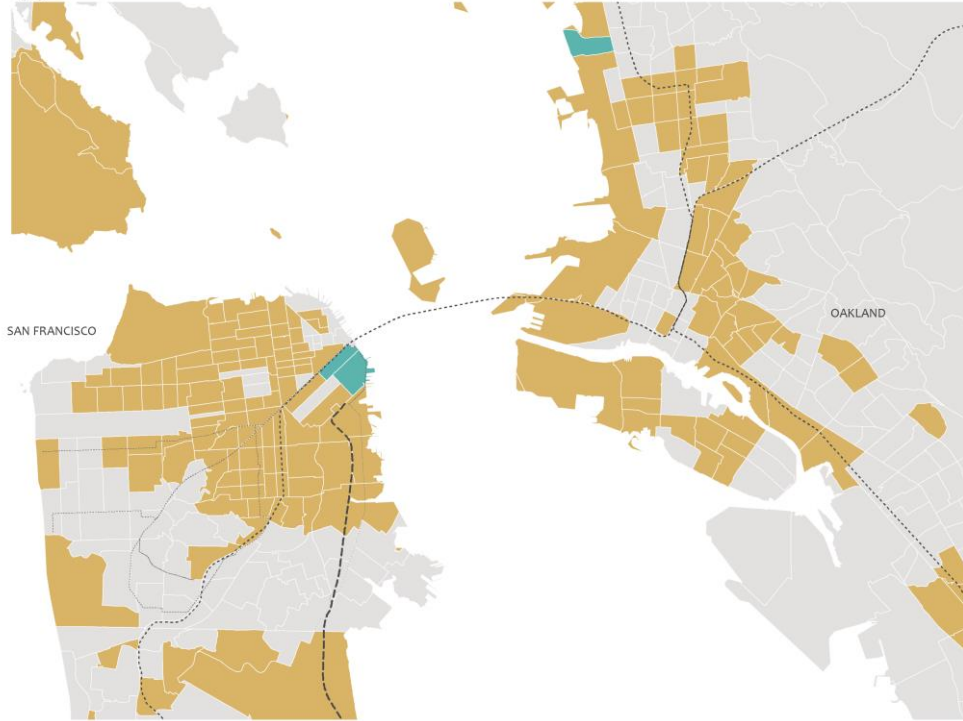


**Map 5: Regional analysis of young adult residential location shows movement towards urban cores.**

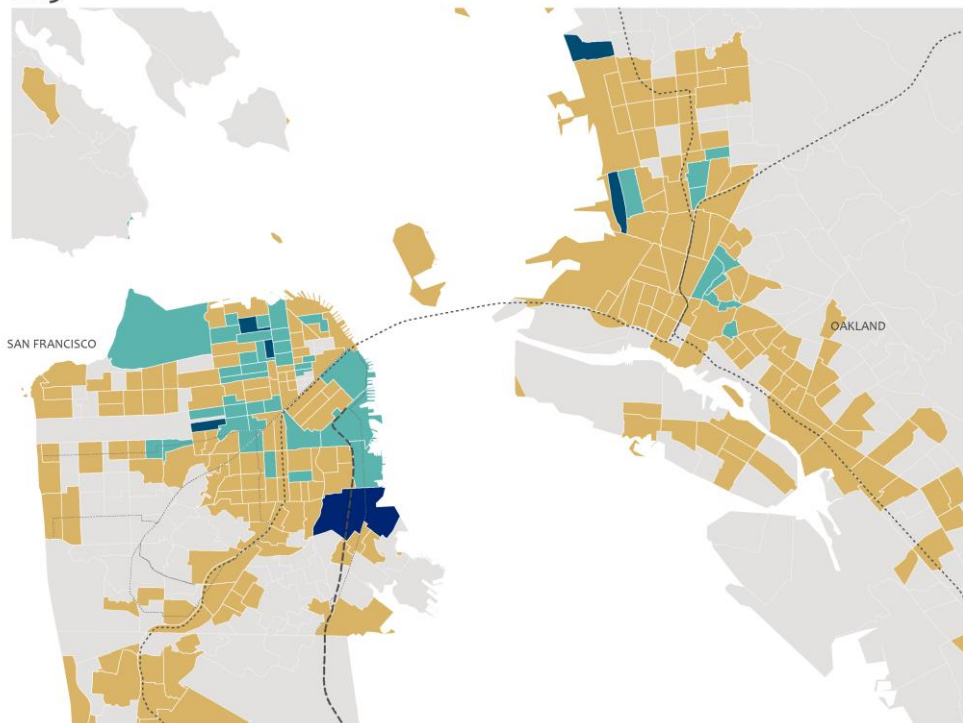
# San Francisco-Oakland

Young Adults' Changing Residential Location

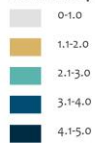
1990



2013



**LOCATION QUOTIENT**



**TRANSIT ROUTES**



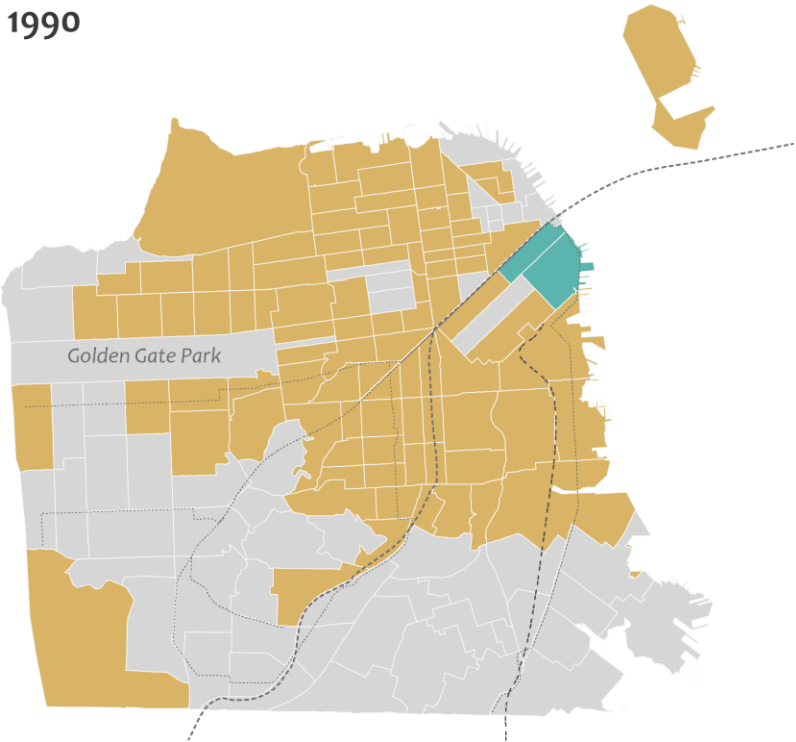
Author: Jessica Garcia | Date: March 24, 2015  
 Datum: NAD 1983 | Projection: NAD 1983 State Plane California III FIPS (0403) Feet  
 Sources: Census 1990 | ACS 2013 (5 year estimate) | DataSF | NHGIS | Caltrans

**Map 6: Both San Francisco and Oakland saw increases in young adults**

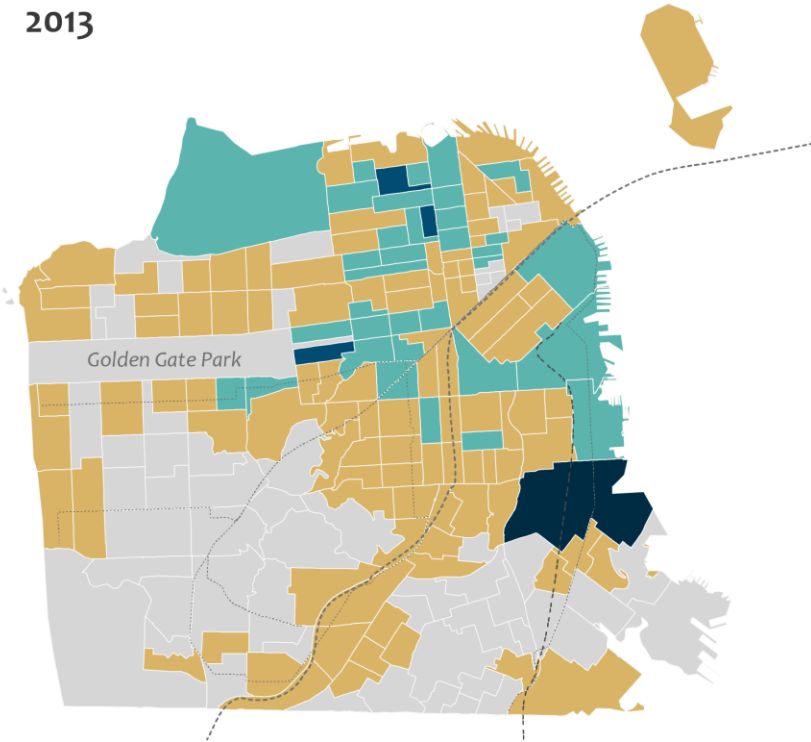
# San Francisco

## Young Adult Changing Residential Location

1990



2013



LOCATION QUOTIENT	TRANSIT ROUTES
<span style="display:inline-block; width:10px; height:10px; background-color:lightgrey;"></span> 0-1.0	<span style="display:inline-block; width:10px; border-bottom:1px dashed black;"></span> Caltrain
<span style="display:inline-block; width:10px; height:10px; background-color:orange;"></span> 1.1-2.0	<span style="display:inline-block; width:10px; border-bottom:1px dashed black;"></span> Bay Area Rapid Transit (BART)
<span style="display:inline-block; width:10px; height:10px; background-color:teal;"></span> 2.1-3.0	<span style="display:inline-block; width:10px; border-bottom:1px dotted black;"></span> SFMTA Muni Metro
<span style="display:inline-block; width:10px; height:10px; background-color:darkblue;"></span> 3.1-4.0	
<span style="display:inline-block; width:10px; height:10px; background-color:navy;"></span> 4.1-5.0	



Author: Jessica Garcia | Date: March 24, 2015  
 Datum: NAD 1983 | Projection: NAD 1983 State Plane California III FIPS (0403) Feet  
 Sources: Census 1990 and ACS 2013 (5 year estimates) | DataSF | NHGIS

**Map 7: San Francisco has seen an increase in the young adult population especially in neighborhoods surrounding downtown. The darkest in color to the south of downtown is located in a neighborhood that is undergoing encroaching redevelopment and also introduced a new street car line between time periods of analysis.**

Map 8, 9, &10: Millennial Cohort

In Map 8 the census tracts with a LQ of 2 or higher are isolated. In comparing the years, there is a significant change in the number of census tracts with an LQ of 2 or higher. In 1990 there were only 2 in the city as a whole. In 2013, there were a total of 40 census tracts with an LQ of 2 or over. Unlike in 1990, the LQ's ranged much higher to

5. In comparing the tracts with a LQ of 2 or higher there were some notable findings. The median rent for the LQ $\geq$ 2 tracts was higher than the median rent for the city as a whole. Of all the LQ $\geq$ 2, 80% of them had a median rent higher than the overall median rent. However, only 15% of them were

**SUMMARY OF FINDINGS**

\* SF=City Wide, LQ $\geq$ 2.0=High Concentration of Young Adults

	SF	LQ $\geq$ 2.0	%
<b>Total Census Tracts</b>	195	40	21%

**Rental Affordability**

	SF	LQ $\geq$ 2.0
<b>Median Rent</b>	\$ 1,488	\$ 1,689

	SF Total		LQ $\geq$ 2.0		Difference
	Total	%	Total	%	
Above Median	118	61%	32	80%	19%
Below Median	77	39%	8	20%	-19%
30% of More to Rent	82	42%	6	15%	-27%

**Household Typology**

	SF	LQ $\geq$ 2.0	Difference
Average HH Size	2.4	1.87	-0.53
% Family Households	47%	28%	-19%
% Non-Family Households	53%	72%	19%
% HH with no under 18	80%	90%	10%
2Bedroom or more	62%	44%	-18%
1Bedroom or less	37%	55%	18%

	SF	%	LQ $\geq$ 2.0	%
Total 1 Bedroom	153,082	40%	49,607	55%
Total 2 Bedroom or more	225,104	60%	40,571	45%
Total Units	378,186		90,178	24%

**Displacement Impact**

	SF	LQ $\geq$ 2.0
Vulnerable Population Tracts	58	5
Total Tracts	195	40
Percentage	30%	13%

**Figure 16: Summary of Findings in comparing census tracts with a high concentration of young adults to the city as a whole.**

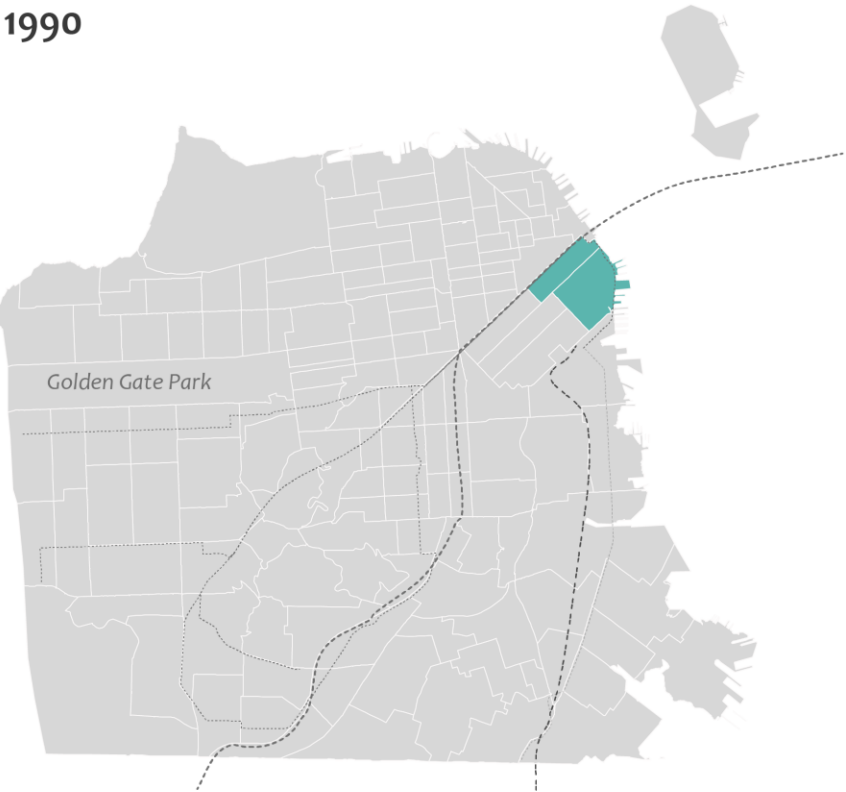
paying more than 30% of their income on rent. This would indicate that census tracts with high proportions of young adults are paying higher rents but are able to afford these costs based on their income. In looking at the average household sizes, these census tracts have smaller households with 1.87 compared to 2.4 in the city as a whole. A larger percentage are also non-family households with over 50% living in one bedroom or less. This is consistent with the housing typology of the census tracts with 55% of the units in the tracts with a  $LQ \geq 2$  being one bedrooms. Of the 58 vulnerable population census tracts, only 5 were also tracts with a high proportion of young adults, making up only 13% of the  $LQ \geq 2$  census tracts.



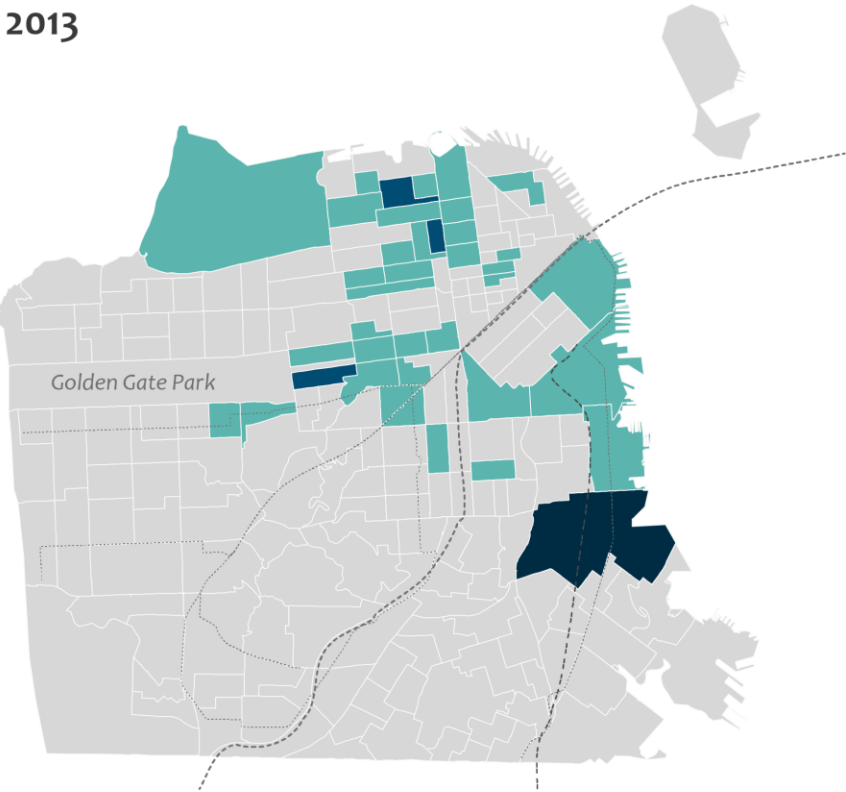
# San Francisco

## Increases in Concentration of Young Adults

1990



2013



**LOCATION QUOTIENT**

- 2.1-3.0
- 3.1-4.0
- 4.1-5.0

**TRANSIT ROUTES**

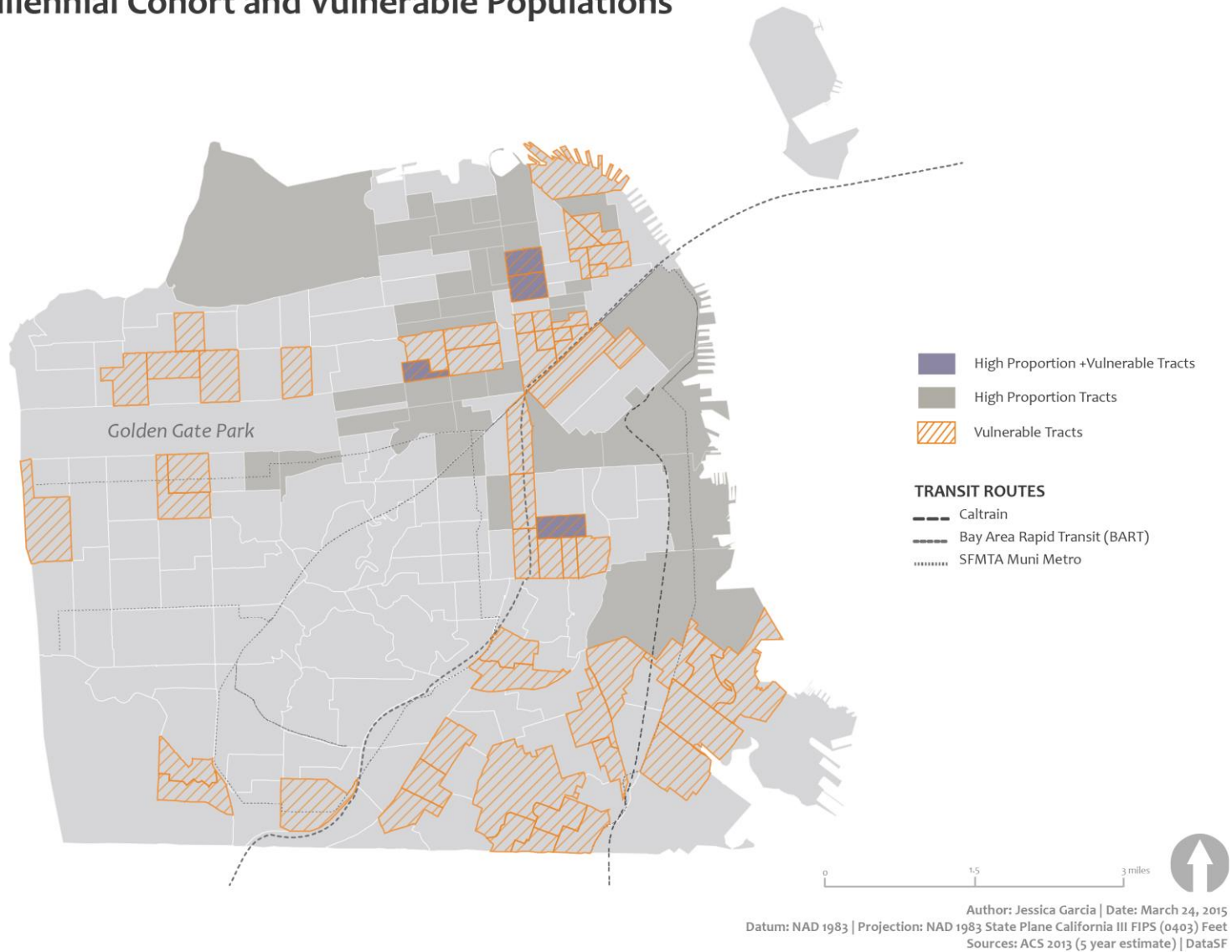
- Caltrain
- Bay Area Rapid Transit (BART)
- SFMTA Muni Metro



Author: Jessica Garcia | Date: March 24, 2015  
 Datum: NAD 1983 | Projection: NAD 1983 State Plane California III FIPS (0403) Feet  
 Sources: 1990 Census | ACS 2013 (5 year estimate) | DataSF | NHGIS

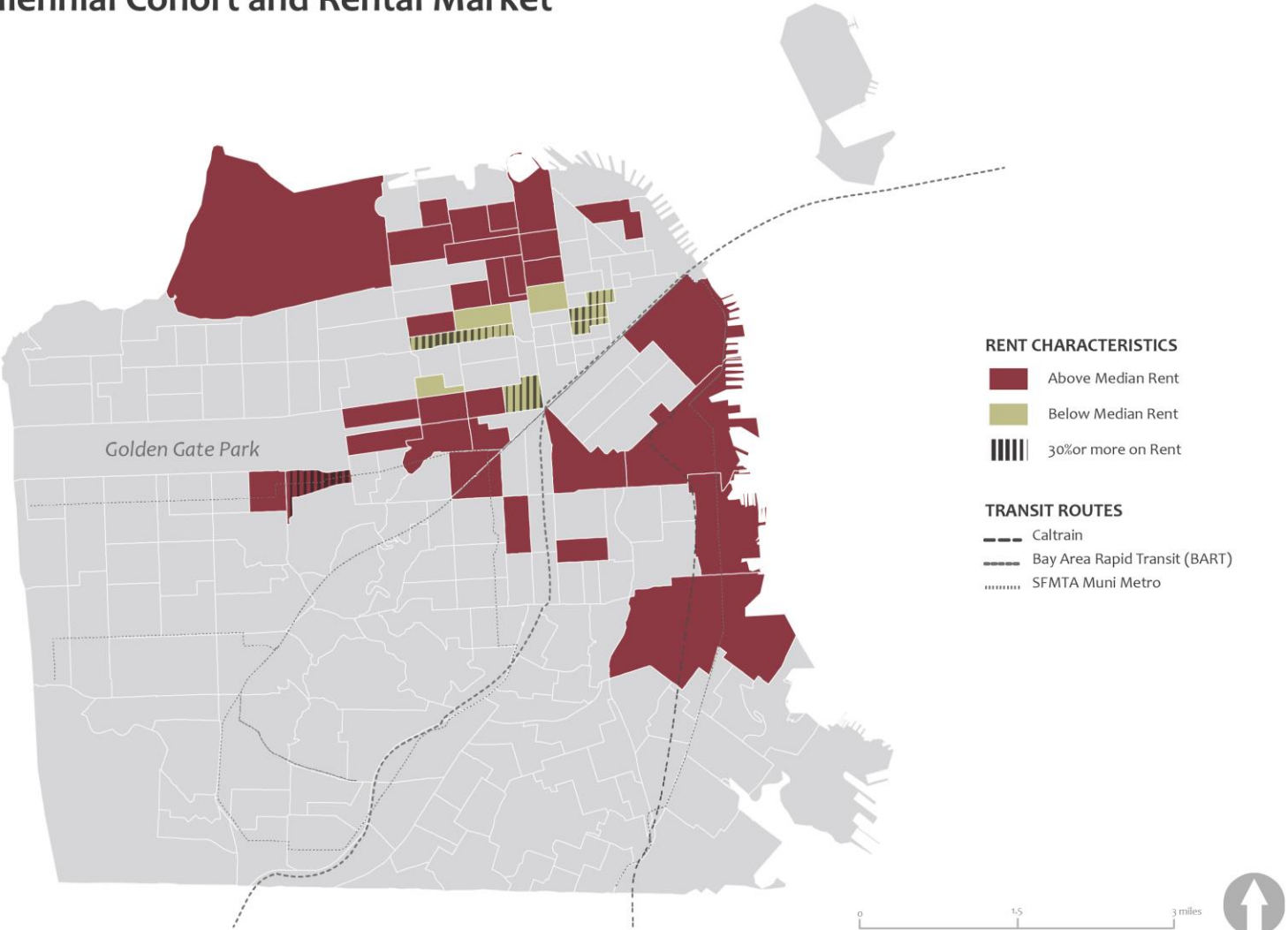
**Map 8: When isolating tracts with the highest concentrations of young adults, it can be observed that there has been a significant increase.**

# Millennial Cohort and Vulnerable Populations



**Map 9: In comparing census tracts with a high concentration of young adults to identified vulnerable populations susceptible to displacement, high concentrated tracts are not within vulnerable tracts. However many do border vulnerable tracts.**

# Millennial Cohort and Rental Market

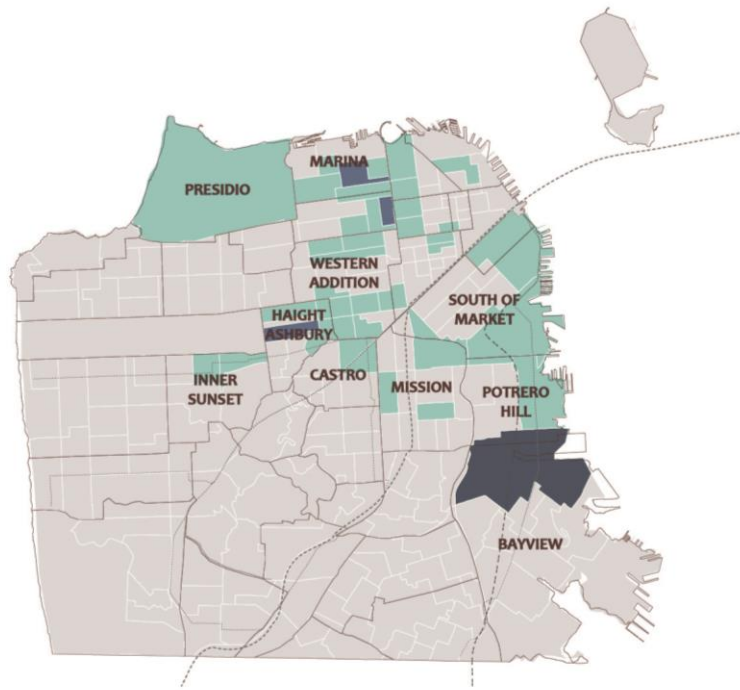


Author: Jessica Garcia | Date: March 24, 2015  
 Datum: NAD 1983 | Projection: NAD 1983 State Plane California III FIPS (0403) Feet  
 Sources: ACS 2013 (5 year estimate) | DataSF

**Map 10: Of the tracts with the highest concentrations of young adults, a majority of them are in tracts paying above the median rent yet also pay 30 percent or less on rent. Only a few tracts are in areas with below median rents and almost all of these are rent burdened.**

## OBSERVATION OF FINDINGS

In looking at some of the neighborhoods that saw the greatest change, there is an overall trend that may be attracting millennials. Considering millennial household preference of being near work and play, close to good transit, walking distance to community amenities, and central to downtown, may explain why young adults have gravitated towards the neighborhoods they are concentrated in now.



**Figure 17: Neighborhoods that have seen the largest increases in young adults.**

The most concentrated tract is located in the Bayview neighborhood bordering Potrero Hill. The neighborhoods to the north, Potrero Hill and South of Market, along the waterfront and to the west, Mission and Castro, also saw a significant increase in young adults. Most of these areas along the waterfront were low density and industrial, mostly cut off from downtown. This changed in 2007 when the Third Street Light Rail Project was completed. Since then these neighborhoods are within easy access to downtown. San Francisco also made efforts to increase development along this corridor. In 2009, it enacted the Eastern Neighborhoods (EN) Program (San Francisco Planning Department, 2011). The program included a transportation implementation study and the city also amended its general plan to rezone industrial areas for more dense residential and mixed use

development. The corridor along the Third Street Rail now contains many of the amenities millennials seek in choosing a residential location. Recent improvements in the area and the introduction of the light rail has likely attracted them. The Mission is largely targeted for gentrification as well with having two regional transit stops that make it very accessible to downtown. The dangers are that most of the housing stock in these neighborhoods includes subsidized and unsubsidized affordable housing for many low to middle income households. Bayview and Potrero Hill are the sites for two of the city's largest public housing projects. Bayview as well has historically been an African American neighborhood dating back to WWII. As millennials continue to be attracted to the new amenities in this area of the city they are likely now or will be the drivers of gentrification. With the Bayview having the highest concentration, what has previously happened in other neighborhoods in other parts of the city with high concentrations, may be an indicator of what is to come.

What may happen in the Bayview, has already begun in the corridor leading from downtown to the Western Addition. Similar to Bayview and Potrero Hill, the Western Addition is also a neighborhood with public housing projects, an African American population, and affordable unsubsidized housing. However in recent years, development along this corridor has brought in many amenities attractive to millennials, including shops, cafes, nightlife, and well served transportation to downtown. As a result, these amenities have made the neighborhood more valuable and are likely attracting millennials who can afford more for housing than those who have historically lived there.

For the most part many of the neighborhoods highlighted are close to downtown either in distance or within quick access by public transportation. However it also appears to be a trend that affordable unsubsidized housing may be the initial factor that attracts them. For example the Inner Sunset. The Inner Sunset isn't considered close to downtown, however its proximity to a street car line and

plenty of amenities may be enough for millennials who want the urban lifestyle but cannot afford the more downtown neighborhoods. This trend may also explain why many of the census tracts with high concentrations of young adults are surrounded by census tracts with vulnerable populations. For example the Bayview census tracts to the south of the high concentrated census tract all contain vulnerable populations, the same can be said for the Mission and the Western Addition. It may be that where millennials are now concentrated were once vulnerable populations that have now been displaced. This trend would be significant to further analyze to see how millennials are displacing vulnerable populations to mitigate the displacement of other demographic groups. Especially minority groups such as Latino and African Americans who are increasingly shrinking in the city's population. Looking at the rent analysis of millennials, almost all of the highly concentrated census tracts are paying above median rents yet almost all are still paying an affordable rent. This indicates their strength economically to keep up with increasing housing costs and inadvertently displacing others.

The Presidio and Marina aren't considered close to downtown and are probably the worst served by transit among the neighborhoods but amenities attracting millennials exist and have attracted a more affluent population. With the exception of the Presidio and Marina, all the neighborhoods at one time had something in common. At one point they had some of the cheapest rents in proximity to downtown and are easily accessible to downtown by transportation. Whether the amenities came first or after millennials moved there, their existence is likely attracting more. A key danger to affordable rental housing with this trend is that millennials are likely consuming the most affordable housing in the city's most well transit served neighborhoods that are rich with community amenities.

## DISCUSSION

### 2020 HOUSING GOALS

In 2014, San Francisco's Mayor Edwin Lee released a report of findings and recommendations for the city's future housing plans. The working group that created the report was a combination of tenant and housing advocates, affordable and market rate developers, realtors and property owners, and city staff. The Mayor announced his bold plan of constructing 30,000 new and rehabilitated units throughout the city by 2020 (Housing Work Group 2014, 2014). He plans to meet this goal with strategies that include the preservation and construction of affordable housing, as well as expand subsidies to higher income groups. There is great emphasis on affordable units to very low to upper middle-income households with families. However there is little that addresses the trend of the millennial cohort. Various policy think tanks and city supervisors have started to weigh in on strategies that will not only increase much-needed units but may also coincidentally meet the needs of the millennial cohort. From the data analysis there are some key findings in the type of housing millennials are living in.

### ADDRESSING THE MILLENNIALS NEED FOR HOUSING

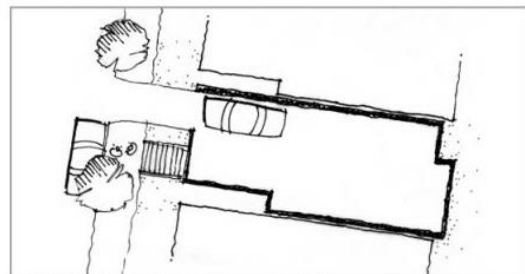
#### *Household Typology*

Based on national trends, millennials are willing to pay a premium for locations central to cultural hubs in cities. Based on the analysis, the behavior of millennials in San Francisco is the same. From these findings it is also clear that the millennial cohort has a household typology of living in smaller households, smaller bedroom sizes, and non-family households compared to the city as a whole. This observation could be an approach to meeting the needs of the households while also mitigating the pressures they are placing on existing households. For example, if millennials prefer to live alone but there are not any one bedrooms available in a neighbors they chose, they may opt for a two bedroom if they can afford to do so. The implications of this is that the unit would then not be available to a family who

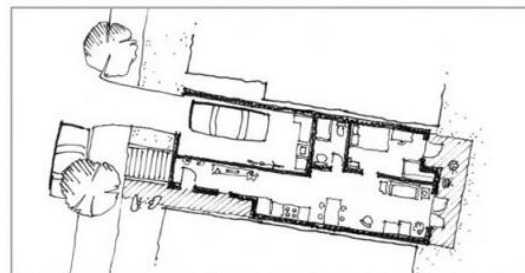
may actually need the second bedroom. Meeting the needs of millennial households could be done through more targeted development. For example building smaller units that are catered to the preferences of the millennial cohort would alleviate pressures they are placing on other housing types. Smaller housing solutions could also be constructed in various parts of the city so they are less disruptive to the existing communities. There are two types of housing currently being experimented with in other cities in addressing millennial housing needs.

### *In-law Units*

An in-law unit is a secondary unit in a self-contained dwelling on the same lot as an existing residential building. It is estimated there are currently between 20,000 and 30,000 in-law units in San Francisco with approximately only 10 percent of them built with proper permits (SPUR, 2006). Many of these are built in garages or basements in single family homes throughout the city. Policy think tanks such as San Francisco Planning & Urban Research (SPUR) along with city supervisors are pushing for relaxing zoning ordinances to make the construction of in-law/secondary units easier. City supervisors passed legislation in April of 2014 relaxing laws regarding in-laws in order to bring them out of the shadows for proper permitting (Lagos, 2014). By issuing proper permits to those units that exist illegally means they would be protected under rent control and therefore a preserved affordable housing stock. These units also cannot be over 750 square feet (Poole, 2014) There are many overall benefits to this type of housing but they could be a viable solution to addressing the needs of the millennial cohort. The



The typical ground floor of a San Francisco building is home to an automobile and junk.



What a ground floor could become—garage, storage, and a garden apartment. This design solution never changes the exterior of the building, has minimal impact on the neighbors, and provides much needed housing.

**Figure 18: Sample of layout for in-law unit prior and post construction**



additional units are also less disruptive to existing communities than larger developments and can exist throughout the city instead of concentrating new units to certain areas.

### *Micro Units*

In 2012, city supervisors passed legislation that allows for the construction of units as low as 220 square feet (San Francisco Housing Action Coalition, n.d.). These are generally referred to as micro units or “efficiency units”. For now the city has capped the number of these types of units at 325 as they begin to study the effects they will have on the market. Cities such as Washington D.C., Boston, New York, Seattle, and Portland are experimenting with these units as a creative solution to their housing needs. For Millennials, “proximity to a city’s cultural hubs make the sacrifice of space worthwhile” (Mondon, 2015). They are willing to sacrifice space for the location of being close to amenities. As it stands now, many of San Francisco’s housing goals are geared toward “family sized units.” This is in response to the recent trend of families moving out of the city, however the construction of these units does not necessarily mean that families will live there. For example, unrelated adults occupy many of multi-bedroom housing units (SPUR, 2007). Micro units then have the potential to alleviate the pressure on family units while meeting the needs of those unrelated adults who wish to live alone. However the promise may not be for affordable housing. Many of these units in other cities are rented at market price, out of reach for those with lower incomes. Therefore, the true benefit of these units is they are a creative way to increase housing units that are attractive to millennials and support their lifestyles. These developments are also becoming more innovative by decreasing personal living space and increasing community amenities. The city’s development support of this housing type may be a creative and flexible housing solution to meet the demands of the millennial cohort.

## CONCLUSION

Many cities have and will continue to face phases of gentrification in their neighborhoods. San Francisco is no exception to this trend and in the past few years is experiencing a loss of affordability so extreme that some have dubbed it *hyper-gentrification*. Boom and bust economies are part of San Francisco's history but as gentrification of its diverse neighborhoods begin to turn it into a homogenous city, interventions must take place to preserve what makes the city unique. There are many macroeconomic factors at play that are putting pressure on San Francisco's housing supply and diminishing its affordability to diverse economic groups. However, there are micro economic solutions that city leaders could choose to implement to protect the city's communities. It is evident that the millennial cohort is placing an additional pressure on the rental housing market and will likely dominate national household choice in the years to come. In reacting to this demographic shift, San Francisco could adopt creative unconventional solutions that cater to this cohort. By doing so strategically, it has the potential to create a city where the very communities that established the cultural hubs that millennials seek can continue to exist there and coexist harmoniously with the newcomers.

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## VITA

Jessica Christina Garcia was born in Turlock, California. After completing her work at Buhach Colony High School in Atwater, California in 2004, she entered San Francisco State University in San Francisco, California. She received the degree of Bachelor of Arts in Urban Studies with a minor in Raza Studies in 2008. During the following years, she worked in the housing and community development field. In August 2013, she entered Graduate School at the University of Texas at Austin in the School of Architecture's Community and Regional Planning Master's program.

Permanent address: [jessica.garcia@utexas.edu](mailto:jessica.garcia@utexas.edu)

This report was typed by the author.