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# North Bay Fire Recovery: Building a More Resilient and Inclusive Economy

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## Acknowledgments

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## About the Institute

Since 1990, the Bay Area Council Economic Institute has been the leading think tank focused on the economic and policy issues facing the San Francisco/Silicon Valley Bay Area, one of the most dynamic regions in the United States and the world's leading center for technology and innovation. A valued forum for stakeholder engagement and a respected source of information and fact-based analysis, the Institute is a trusted partner and adviser to both business leaders and government officials. Through its economic and policy research and its many partnerships, the Institute addresses major factors impacting the competitiveness, economic development and quality of life of the region and the state, including infrastructure, globalization, science and technology, and health policy. It is guided by a Board of Trustees drawn from influential leaders in the corporate, academic, non-profit, and government sectors. The Institute is housed at and supported by the Bay Area Council, a public policy organization that includes hundreds of the region's largest employers and is committed to keeping the Bay Area the world's most competitive economy and best place to live. The Institute also supports and manages the Bay Area Science and Innovation Consortium (BASIC), a partnership of Northern California's leading scientific research laboratories and thinkers.

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# Introduction

In October 2017, devastating wildfires swept through the North Bay, burning more than 245,000 acres in total. Sonoma County was hit the hardest, with over 5,000 homes and many businesses destroyed. In the following months, countless community groups began the long, difficult, and ongoing task of rebuilding Sonoma and the surrounding counties. While the immediate post-disaster relief work has been completed, rebuilding the community will be a longer road ahead, and it will require ongoing research and planning as the climate continues to change.

Over the course of the past year and a half, the Economic Institute has held or attended dozens of meetings and convenings, developed a database of public and private sector data, and has provided policy technical assistance to a variety of public departments and officials. To ensure the public availability of that research and provide a foundation of knowledge and analysis, the Institute developed this report and associated appendices.

## Objective

Moving forward, it will be beneficial for the various rebuilding and resiliency efforts to have access to a broad and common set of data, analysis of these data, and technical policy expertise. Being able to share the same set of information about the impact of the fires, the needs of the community, and best practices for planning will be critical to the success of these multiple organizations in rebuilding Sonoma County.

**In that spirit, the primary objectives of this report are:**

1. to document and ensure the public availability of the conversations, research, and findings accumulated during the Institute's work; and
2. to provide a foundation of knowledge in the Institute's core study areas from which stakeholders can rely on and make informed decisions with.





# Housing and Affordability

## Impact of the Fires

### October 8, 2017

On the night of October 8th, the Tubbs Fire roared across 36,807 acres of land across Napa and Sonoma counties. The fire, which started northwest of Calistoga, reached Santa Rosa only three hours later in the early morning of October 9th, where it continued to burn until the following day. Over the course of those three days in October, the rampant fire—which was only amplified by excessive winds that had hit the area at over 50 miles per hour—killed at least 22 people and destroyed approximately 5,636 structures.

Of those 5,636 structures that burned down, over 2,000 structures were homes. The fire, which began on Bennett Lane in Calistoga, damaged and burned down several nearby properties, but the most significant damage occurred in the city of Santa Rosa and surrounding area, in places such as Santa Rosa’s Coffey Park, which was entirely burned down.

Today, the Tubbs Fire is California’s second most destructive fire in state history, behind only Butte County’s Camp Fire, which occurred in November 2018 and burned down four times the number of acres. The Tubbs Fire is also the third deadliest wildfire by number of deaths (CalFire, 2019).

The Tubbs, however, is part of a larger subset of devastating wildfires that occurred throughout the North Bay in October 2017, burning over 245,000 acres of land and hitting Sonoma County the hardest. In total, the North Bay fires burned down over 8,000 structures, killed over 40 people, and damaged over 200,000 structures (Vives and Winton, 2017). According to CalFire, over half of the state’s most destructive wildfires are fires that have occurred in the last 5 years. Four of these fires swept through Napa and Sonoma counties—bringing to light the fact that these natural disasters are becoming the new normal for California.

The October 2017 fires, and those that have preceded them, have had a lasting impact on the homes, businesses, and residents of Sonoma County and the surrounding region. In this chapter we analyze the effects of the fires on housing in Sonoma County in the context of the region’s broader housing market characteristics and challenges.

## Preexisting Housing Affordability Crisis

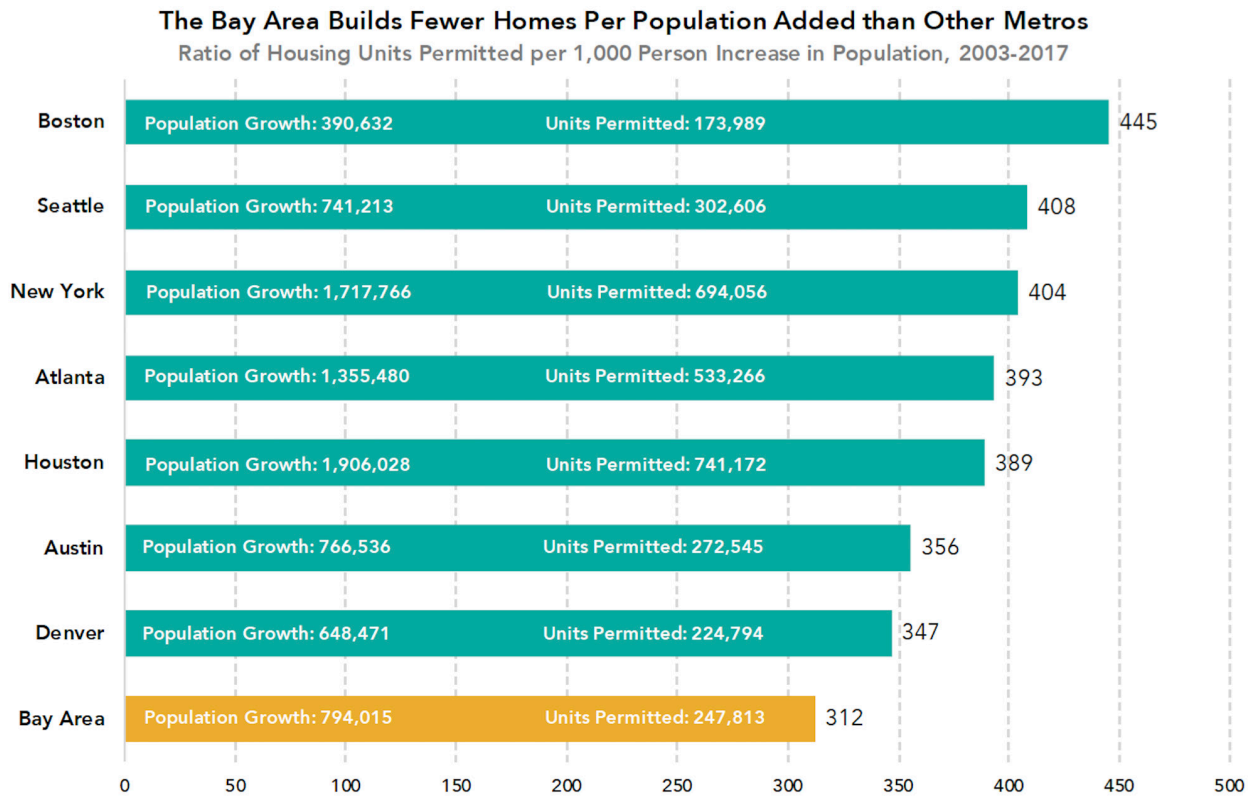
Understanding the true severity of the Tubbs Fire first requires understanding the state of the region and California’s housing affordability crisis prior to October 2017, which compounded the devastation of the fires and their long-term impacts. With a limited supply of housing to begin with, the North Bay was primed for a severe hit to affordability when disaster struck. The massive destruction of homes further reduced the tight housing supply, displacing residents and driving up sky-high rents.

### Before the Fires

For the past 70 years, California has been an increasingly unaffordable state to live in. Parts of the state, such as the Bay Area region, San Diego, and Los Angeles are notorious for their especially high

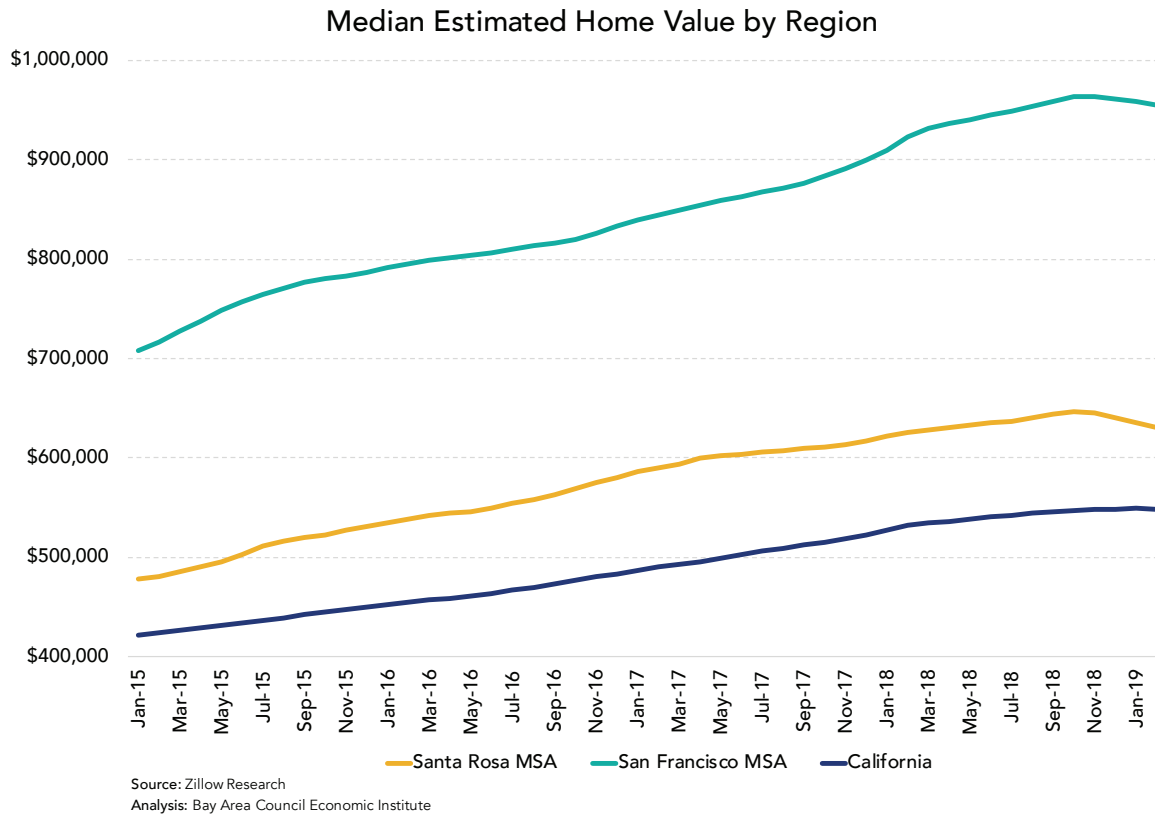
housing costs. While the Bay Area region, in particular, has generated significant economic activity, the region has in turn failed to supply adequate levels of housing to meet its growing demand—thus seeing a spike in home prices and rental unit costs since the recession compared to other metro areas. This jobs-housing imbalance is due to several factors:

- Compared to similar metro areas, the Bay Area builds and permits fewer homes;
- Development and construction costs are higher in California than in most states across the U.S.;
- Local and political resistance to building housing is paired with significant local control within the state, where communities on average view more housing as a cultural and financial threat; and
- Zoning, environmental, and other historic laws have made it difficult to build new housing, particularly affordable housing



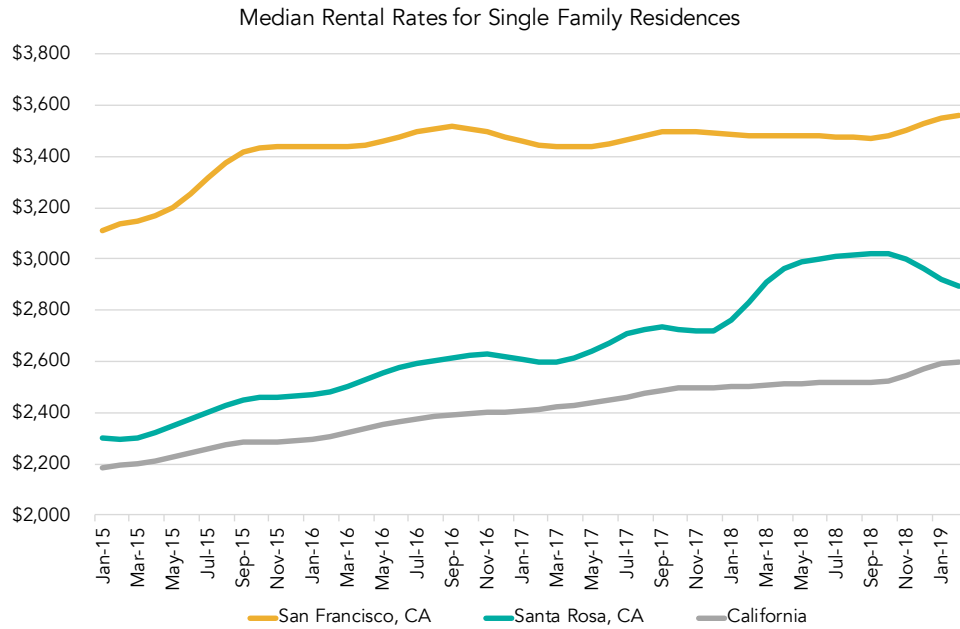
Note: "Bay Area" data represents only Alameda, Contra Costa, Marin, San Francisco, San Mateo, and Santa Clara counties. All other locations are metropolitan areas.  
Source: U.S. Census Bureau Building Permits Survey; U.S. Census Bureau Metropolitan and Micropolitan Statistical Area Datasets  
Analysis: Bay Area Council Economic Institute

As shown on the previous page, the Bay Area has permitted a smaller number of new housing units for every 1,000 people added to its population than its peer metros have. This failure to provide sufficient housing for those moving to the region has contributed to the steep escalation of home prices throughout the Bay Area. In the San Francisco metro area, which encompasses Alameda, Contra Costa, San Francisco, San Mateo, and Marin counties, the median value of a home has risen by nearly 40% just in the past four years—reaching almost \$1 million. In the Santa Rosa MSA, this increase was about 30%.



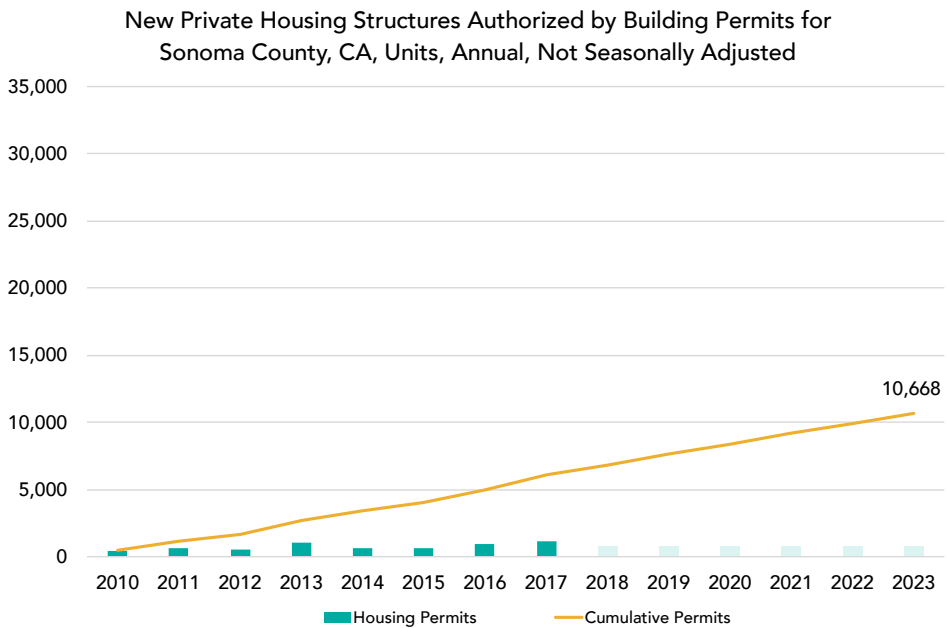
## A Crisis Made Suddenly Worse

With rapidly escalating home prices and an extremely limited housing supply even before the fires, the Sonoma County housing market did not have much room to accommodate a sudden shock. This put renters at particular risk. While most homeowners had some insurance to guarantee them a place to stay and an eventual rebuild of their homes, renters—especially lower-income residents—were displaced into a rental market with few options and high prices, with some having to leave the county entirely. Even with price gouging restrictions in place, a clear spike in rental prices occurred just after the fires in 2017, and prices have not fully returned to their pre-fire levels.



Source: Zillow Research  
 Analysis: Bay Area Council Economic Institute

Homeowners, too, have felt the impacts of the fires. Even homeowners with above average insurance plans continue to experience difficulty and delay in the rebuilding process. Perhaps more troubling, the sheer severity of the disasters has put a strain on insurance companies and customers, who fear their insurance coverage may dry up given the delays. Building enough housing units in Sonoma County has become an even more urgent necessity in the wake of the fires. Sonoma County has set as its housing goal to build 30,000 new units from 2018 to 2023. However, if current trends continue without a major increase in building activity, Sonoma County will have only added around 10,000 new housing units between 2010 and 2023.



Source: U.S. Census Bureau, American Community Survey  
 Analysis: Bay Area Council Economic Institute; **Note:** From 2018-2023, we used the average number of permits from 2010-2017 (762 units annually)



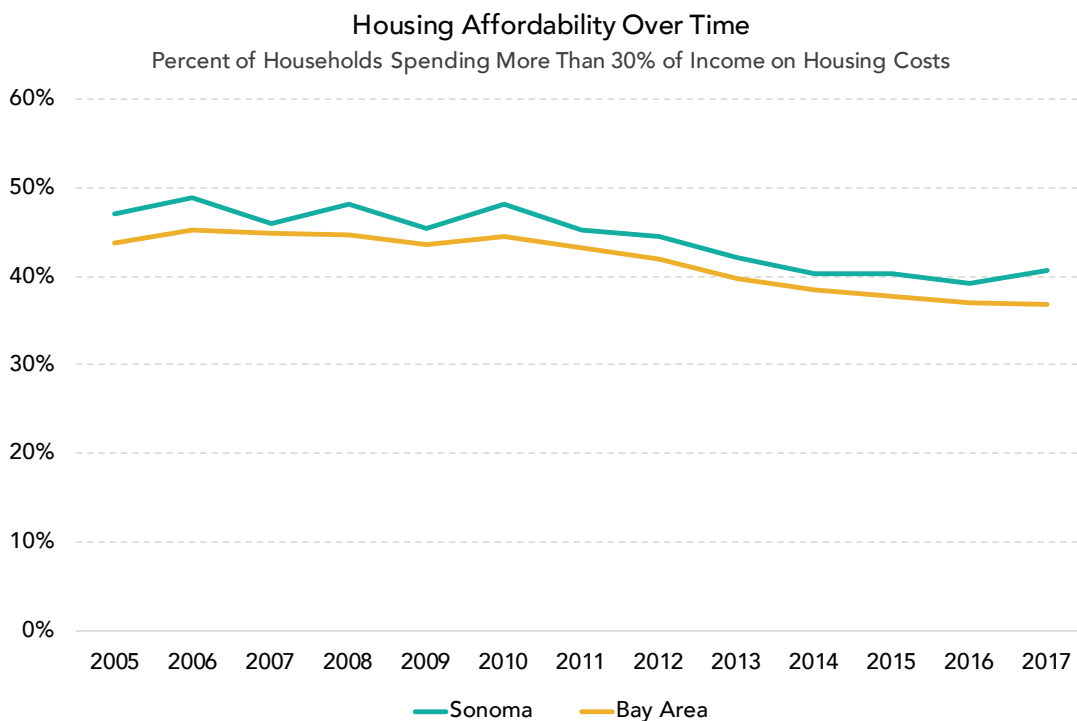
## Deep Dive on Affordability

With the preexisting housing crisis exacerbated by the fires, housing inaffordability persists to an intense degree in Sonoma County. While it is a challenge for all residents, it affects different geographic areas and demographic groups in the county differently. It threatens Sonoma’s economy as a whole and presents serious equity problems for the region. Many of the county’s workers cannot afford to live there, and the lack of affordable housing options pushes existing residents out and prevents new ones from being able to move in.

While housing affordability has improved over time for homeowners, it has remained relatively stable for renters over the past seven years, at around 60% of renters

burdened by housing costs, with housing cost burden defined as spending more than 30% of household income on housing costs. The overall percentage of Sonoma County residents who are housing cost burdened is higher than in any other county in the Bay Area—at 41%.

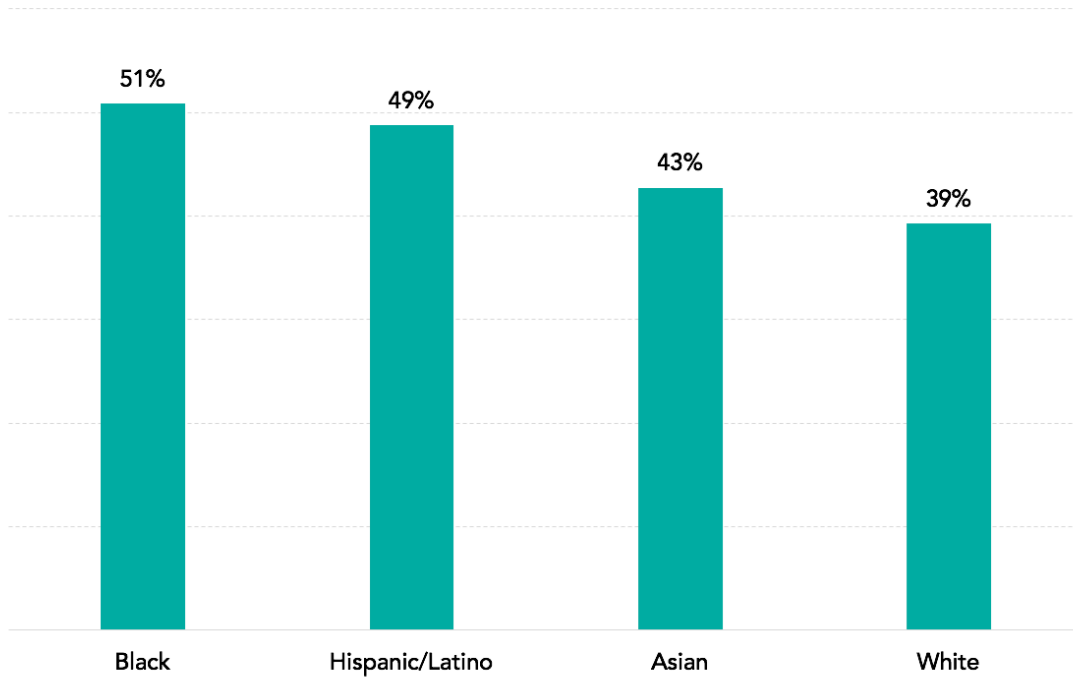
Though housing affordability is a challenge for many in Sonoma, the cost burden is not distributed equally across groups. A significantly higher percentage of black and Hispanic/Latino households are spending more than 30% of their income on housing costs than are Asian and white households.



Source: U.S. Census Bureau, American Community Survey  
Analysis: Bay Area Council Economic Institute

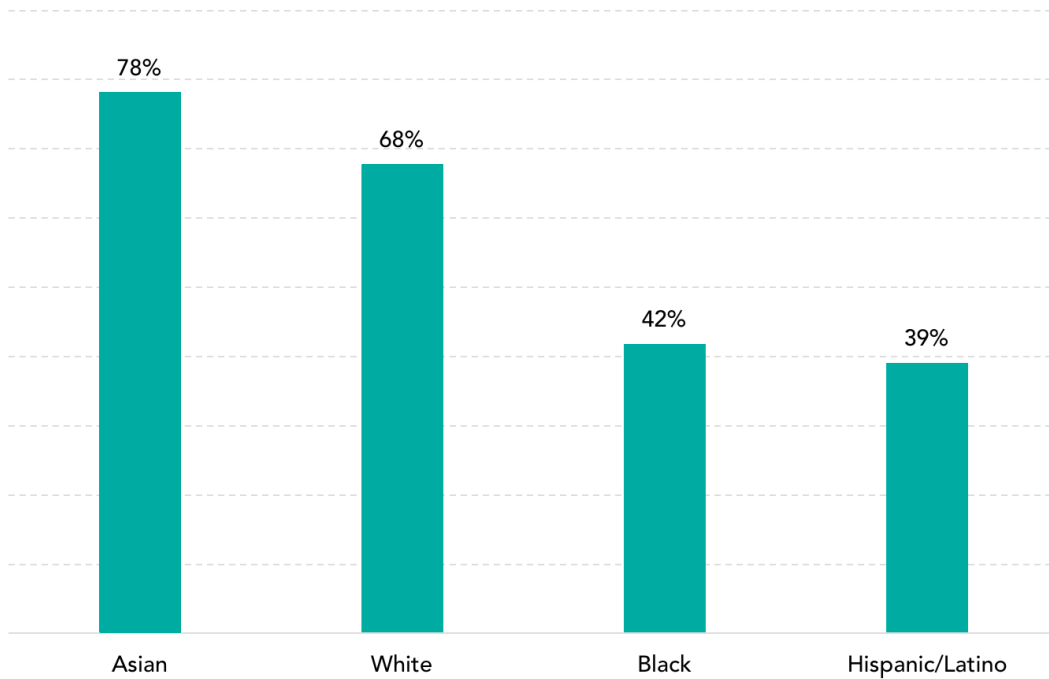
Not only are black and Hispanic/Latino residents of Sonoma County more likely to be housing cost burdened, they are also significantly less likely to own a home, making them much more vulnerable to housing pressures such as reductions in supply and spikes in price. Around 40% of Black and Hispanic/Latino residents own a home, whereas the homeownership rates for Asian and white residents are 78% and 68%, respectively. This sets up black and Hispanic/Latino residents to be disproportionately burdened by the effects of the fires.

### Housing Cost Burden for Sonoma County Residents, by Race



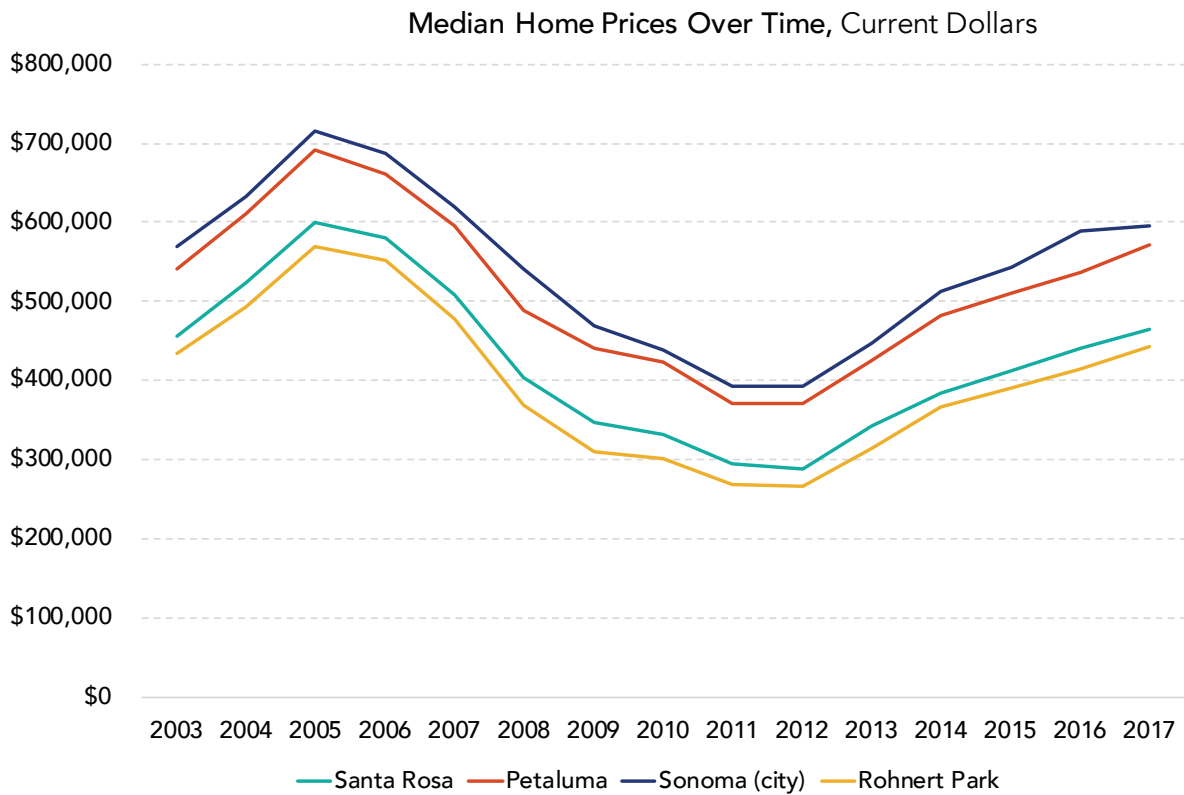
Source: U.S. Census Bureau, American Community Survey (2018)  
Analysis: Bay Area Council Economic Institute

### Home Ownership Rates of Sonoma County Residents, by Race



Source: U.S. Census Bureau, American Community Survey (2018)  
Analysis: Bay Area Council Economic Institute

Further compounding these problems is that homeownership is becoming an ever more unattainable goal for residents of Sonoma County. While prices (reflected in today's dollars) across the county have not yet returned to the 2005 peak, they are heading in that direction. The median home price in Santa Rosa rose by 61% just from 2012 to 2017, with the rate of increase only slowing slightly over time. Though Santa Rosa is still more affordable than some other parts of the Bay Area, such as San Francisco and the South Bay, this has become increasingly less so since 2012. In cities such as Petaluma and Sebastopol, the median home price has reached \$600,000 to \$700,000.



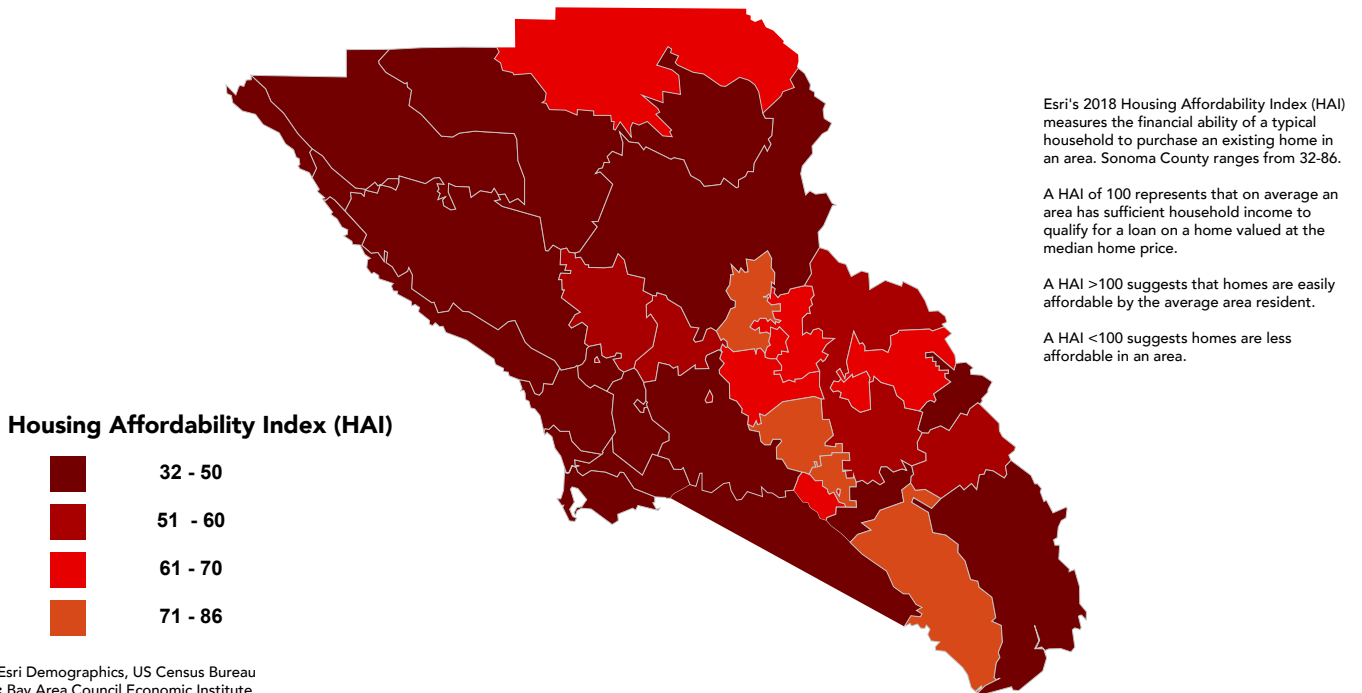
Source: Zillow Research  
 Analysis: Bay Area Council Economic Institute

## Housing Characteristics and Affordability by Geography

While residents throughout Sonoma County struggle with housing affordability, the extent to which affordability is a challenge varies by census tract. Esri Demographics creates a Housing Affordability Index, which measures the ability of a typical household to purchase an existing home in an area, based on how sufficient an area's average household income is to

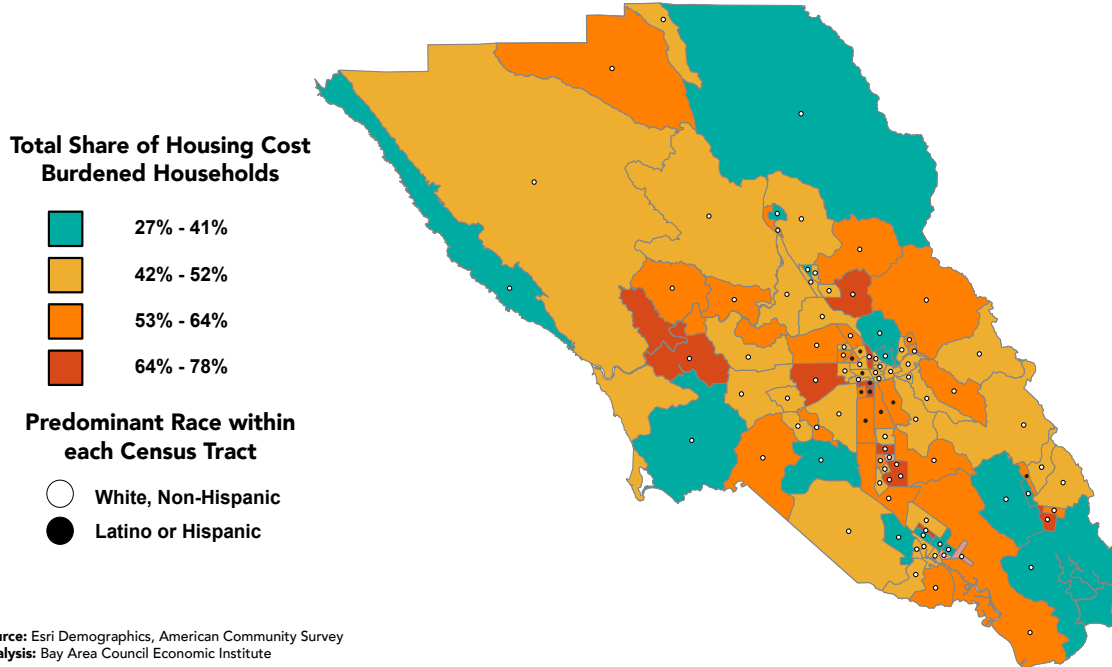
qualify for a loan on a home valued at the median price for the area. Residents of Santa Rosa score higher on the Housing Affordability Index, as do residents of Petaluma and others in the east and northeast of the county. Much of the western part of the county scores lower on the Housing Affordability Index. Even those areas that score higher on the index are still below a score of 100, which means that residents do not on average have a high enough household income to qualify for a loan for a median-priced home.

### 2018 Housing Affordability Index in Sonoma County - Zip Code



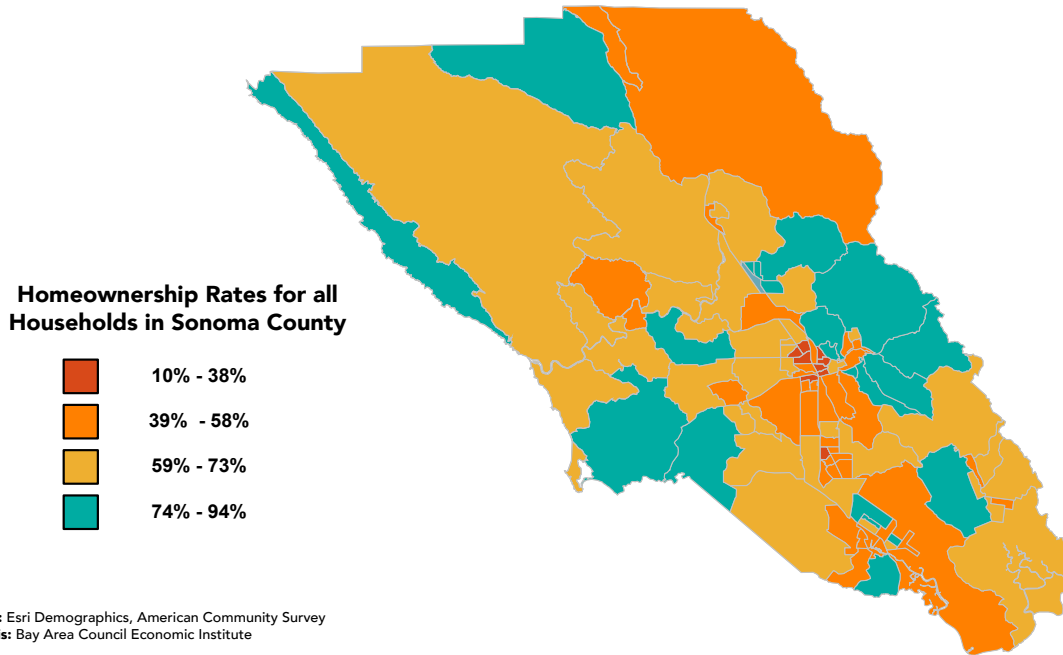
Housing cost burden, too, varies by geography as well as race. Higher rates of housing cost burden tend to cluster toward the center of the county, with some of the higher rates in the areas around Santa Rosa. Census tracts in which the predominant race is Hispanic/Latino tend to have a higher percentage of residents burdened by housing costs, with these percentages usually 42% or greater.

## Total Share of Housing Cost Burdened Households in Sonoma County



In many parts of Sonoma County, only about half of residents or fewer own a home. County residents who live in Santa Rosa are less likely to own a home, as are residents in parts of the southern and northeastern areas of the county. This makes them especially vulnerable to market-wide effects of a shock to the housing stock such as the fires, as supply becomes more restricted and rents may rise quickly. In addition to cost increases, Sonoma County has also seen a reduction in the building of new homes and housing units. The October 2017 fires only worsened the situation—with 2.5% of the county’s housing stock being lost in damage and destruction to the fires. When looking at the change in housing types over time, California Department of Finance data shows that Sonoma County (and Santa Rosa in particular) saw a loss of single-family homes between 2011-2018, with 616 fewer single-family homes in Santa Rosa and 2,686 fewer single-family homes across Sonoma County.

## Homeownership Rates for All Households in Sonoma County



## Impediments to Increasing Supply

Rebuilding after the North Bay fires and building more housing in general to address Sonoma County’s housing affordability crisis is largely tied to the decision process of developers, as well as the controversial nature of building housing in California. Developer costs are highly sensitive to permit costs, home and rental prices, land costs, design costs, environmental impacts, construction costs and a number of other financial and political factors—determining how much, if any at all, should be built. Ultimately, the lower the cost to develop, the more developers are incentivized to build.

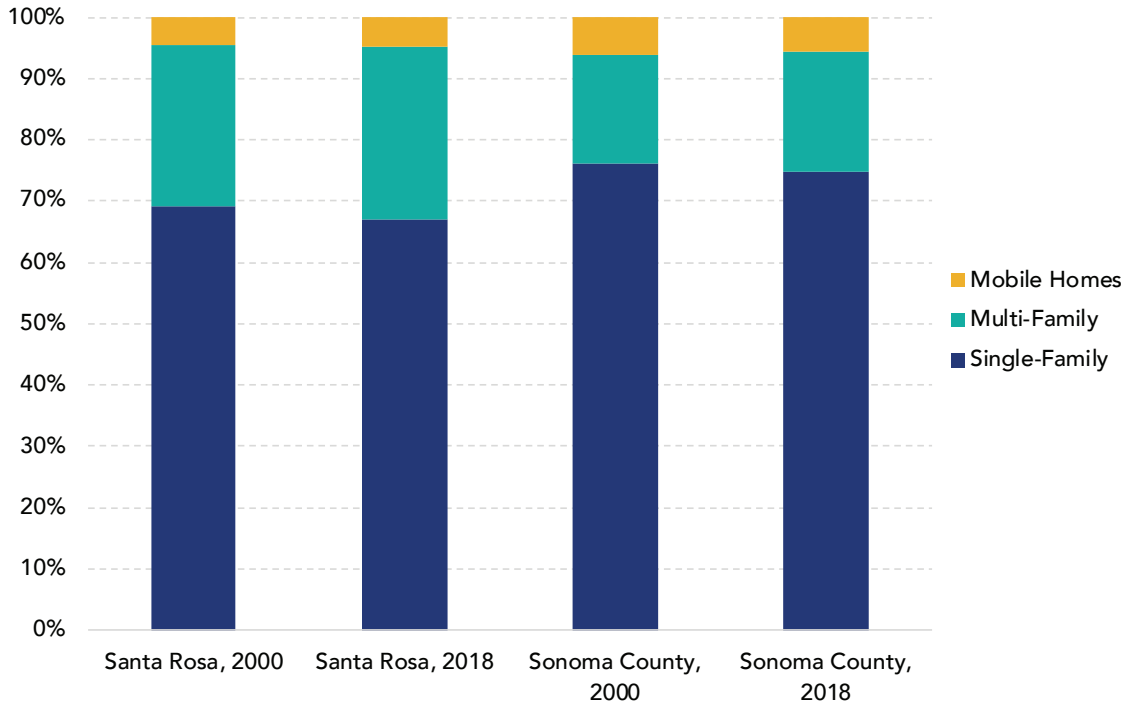
The political and social climate of building housing is shaped by a region’s perception of new housing as well as the role that density and diversity play in different rural and urban neighborhoods. The more controversy around the topic of building housing, the less policy change is feasible. Together, the more resistant a

neighborhood is to building new housing, the more costly it is for developers to build new housing (Economic Forensics and Analytics, Inc., 2018).

According to ACS and Zillow Research data, home and rental prices have been on the rise in cities across Sonoma County since 2003, but median household income has fallen between 2003-2016. Much like across the rest of the Bay Area, this increase in costs is closely tied to the increase in demand for housing across the region.

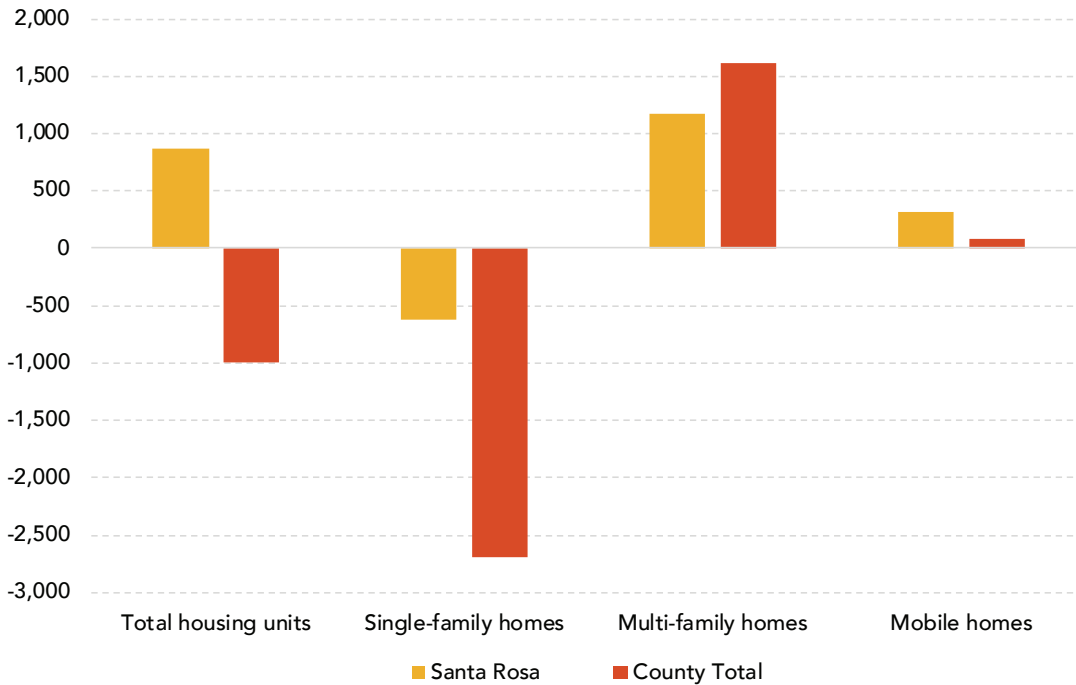
Understanding the barriers to building in Sonoma County also requires understanding the attitude of the county and surrounding region toward housing—one that in Sonoma County has predominately been focused on single-family homes. Data that compares the housing mix in 2000 and 2018 emphasizes this trend. The distribution of housing between multi-family and single-family units has hardly changed from 2000 to 2018.

Housing Mix Comparison, Santa Rosa and Sonoma County (2000 and 2018)



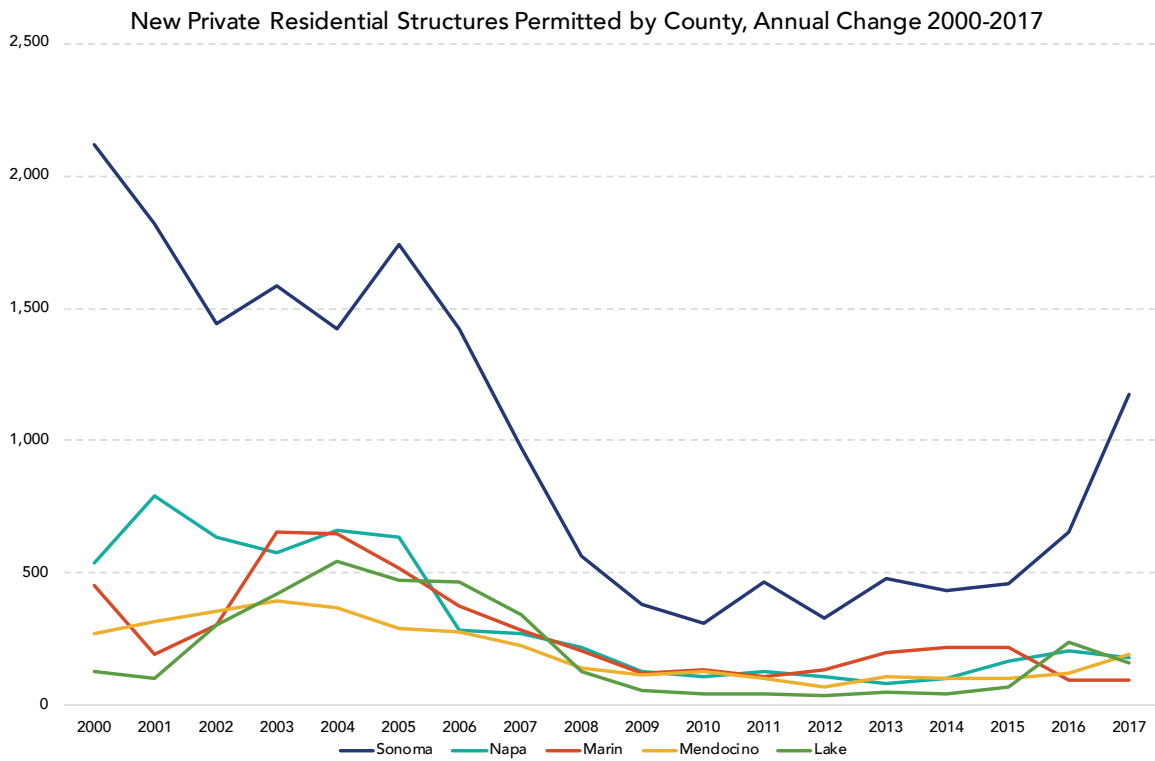
Source: California Department of Finance  
 Analysis: Bay Area Council Economic Institute

Change in Housing Categories, 2011-2018



Source: California Department of Finance  
 Analysis: Bay Area Council Economic Institute

This change in Santa Rosa is particularly significant, as its population is the largest in Sonoma County. Smaller cities, such as Petaluma and Rohnert Park, while not seeing net losses, did not see significant surpluses in the building of new homes over the 7-year period. Data on the permitting of new private residential structures across counties tells a similar story, with fewer permits of new private residential structures in Sonoma, Napa, Marin, Mendocino, and Lake counties between 2000 and 2017. Compared to Napa, Marin, Mendocino, and Lake counties, however, Sonoma County has seen an uptick in building permits since 2015, but the County still has a long way to go in reaching its goals.



**Source:** FRED  
**Analysis:** Bay Area Council Economic Institute





# The Economy of Sonoma County

## State of Sonoma's Economy

In the aftermath of the fires, Sonoma County lost several homes, businesses, and lives—all resulting in an economic loss for the county and surrounding area. Today, while the rebuilding effort has taken flight, much is still needed to recuperate from the events of 2017—from rebuilding the County's workforce to supporting the financial impact the fires have had on households and individuals.

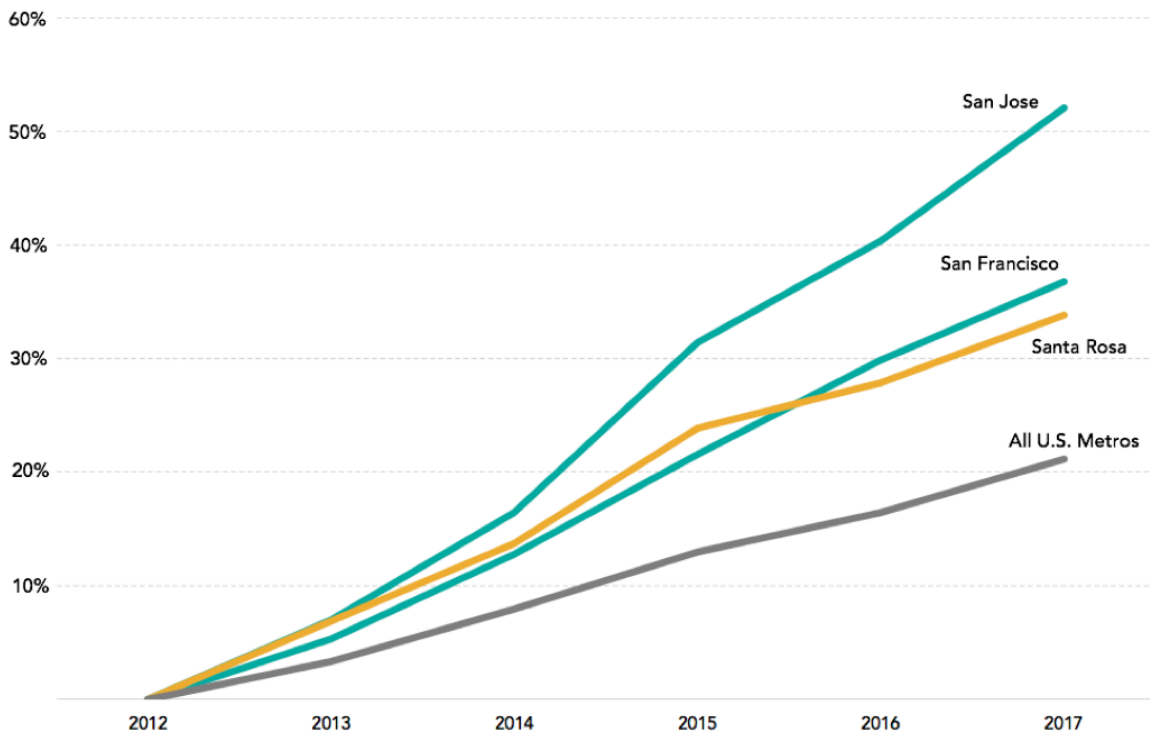
The following chapter will present an overview of Sonoma County's economy, using several economic indicators to understand the economic status of the County prior to and post the 2017 fires. Where possible, this chapter also makes comparisons between Sonoma and the nine-county Bay Area region. Lastly, this chapter will conclude by analyzing the economic status of Sonoma County residents by race, as well as attempt to understand what the impact of the fires was according to one's demographics.



## GDP growth

First, it is important to understand the state of Sonoma County's economy prior to the 2017 fires and as it compares with the rest of the region. In 2017, the Santa Rosa metro area's GDP growth hovered just below that of San Francisco's. In 2015 and prior, Santa Rosa's GDP growth was marginally higher than San Francisco's. Still, three major metros (San Francisco, San Jose, and Santa Rosa) across the Bay Area have a noticeably higher GDP growth than the average for U.S. metros. This signals the strong economic growth present within these metros across the region.

**Indexed GDP Growth by Metro Area, 2012-2017**

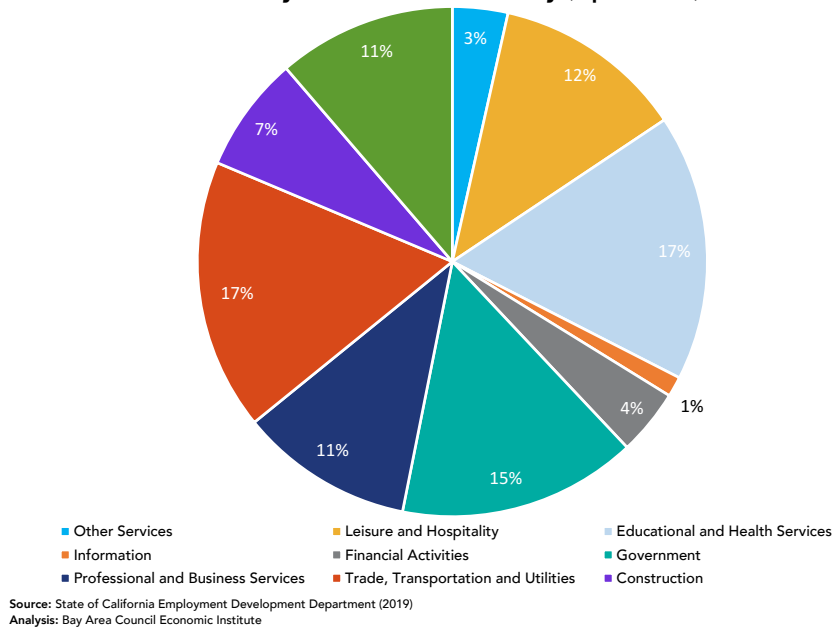


Source: U.S. Bureau of Economic Analysis  
Analysis: Bay Area Council Economic Institute

## Dominant industries

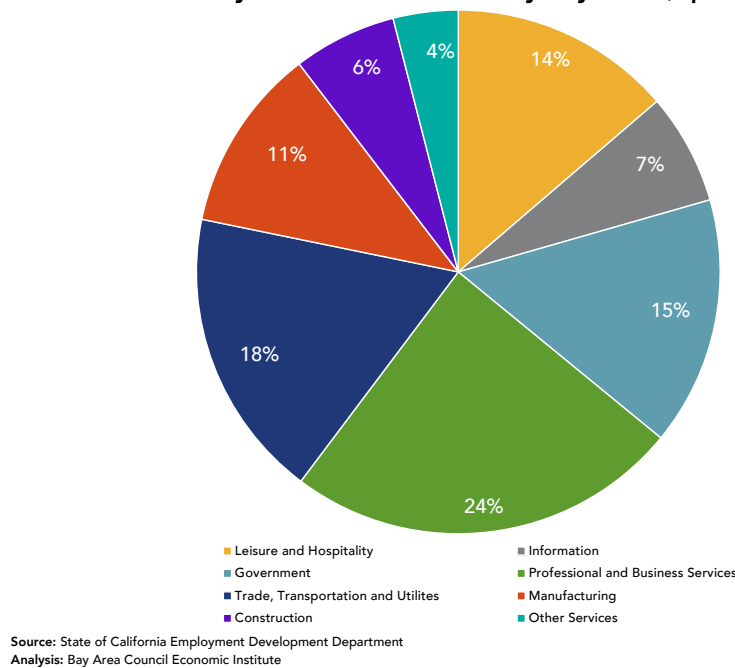
Sonoma County's seven largest industries include Information, Professional and Business Services, Manufacturing, Leisure and Hospitality, Financial Activities, Trade, Transportation and Utilities, Educational and Health Services, Government, and Construction with its three largest industries being Trade, Transportation and Utilities, Government, and Educational and Health Services.

**Industry Mix in Sonoma County (April 2019)**

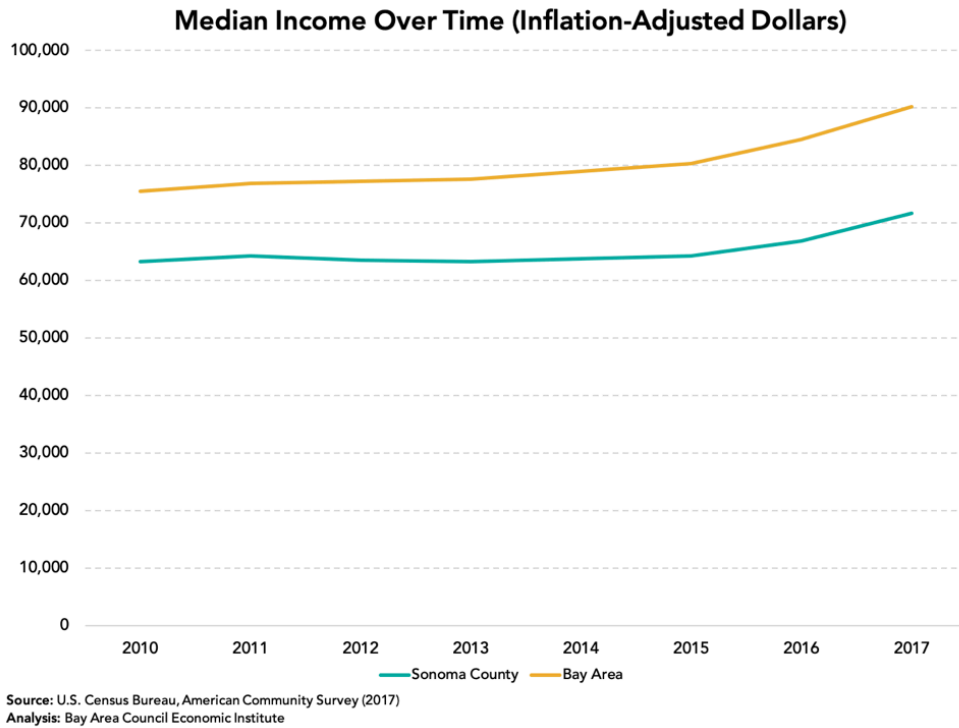


Compared to the nine-county Bay Area as a whole, Sonoma County has a larger share of employees in the Trade, Transportation and Utilities industry. Despite being known for its tourist and agricultural industries, Sonoma does not have a substantially higher percentage of workers in Manufacturing or Leisure and Hospitality. While the Bay Area's industry mix is still very diverse, it does have a significantly larger share of jobs in the Professional and Business Services industry.

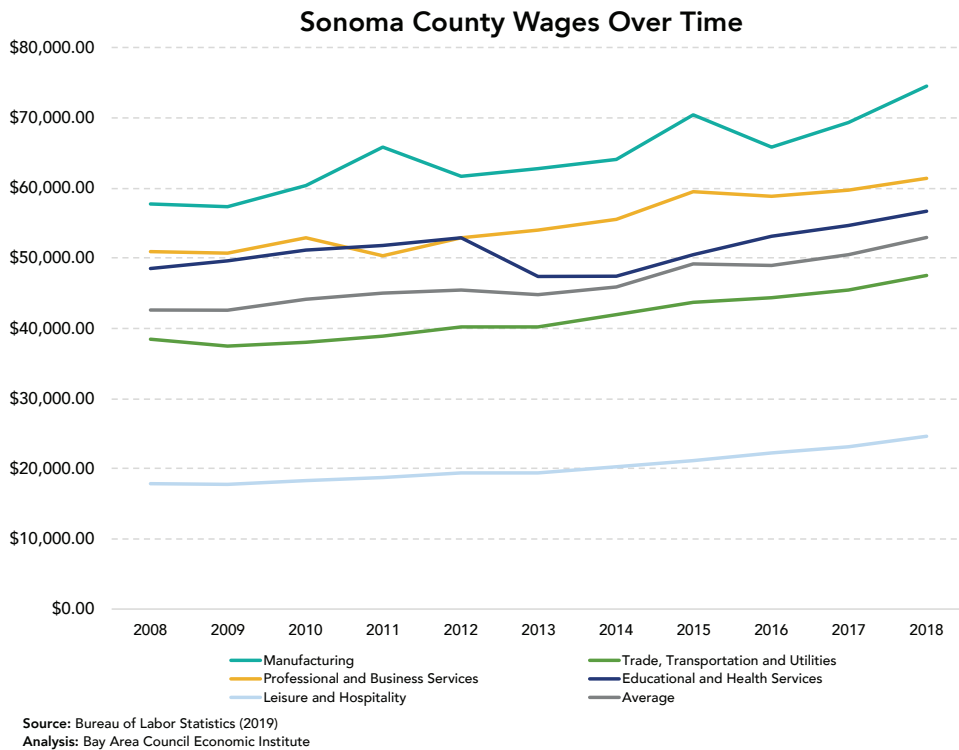
**Industry Mix in the Nine-County Bay Area (April 2019)**



## Income, wages, and employment

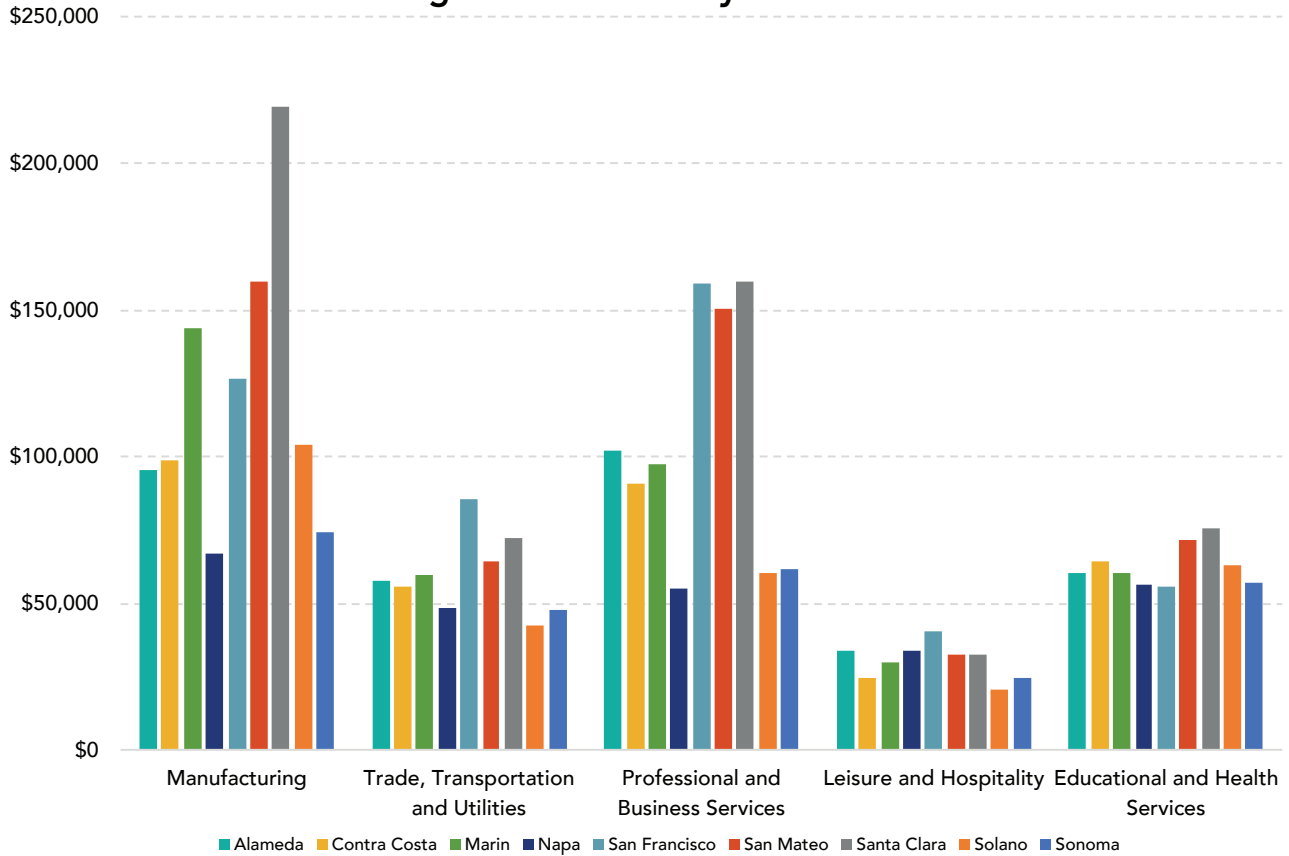


The economic vitality of the Bay Area is reflected in this chart, which shows at least a \$20,000 gap in median incomes in 2017.



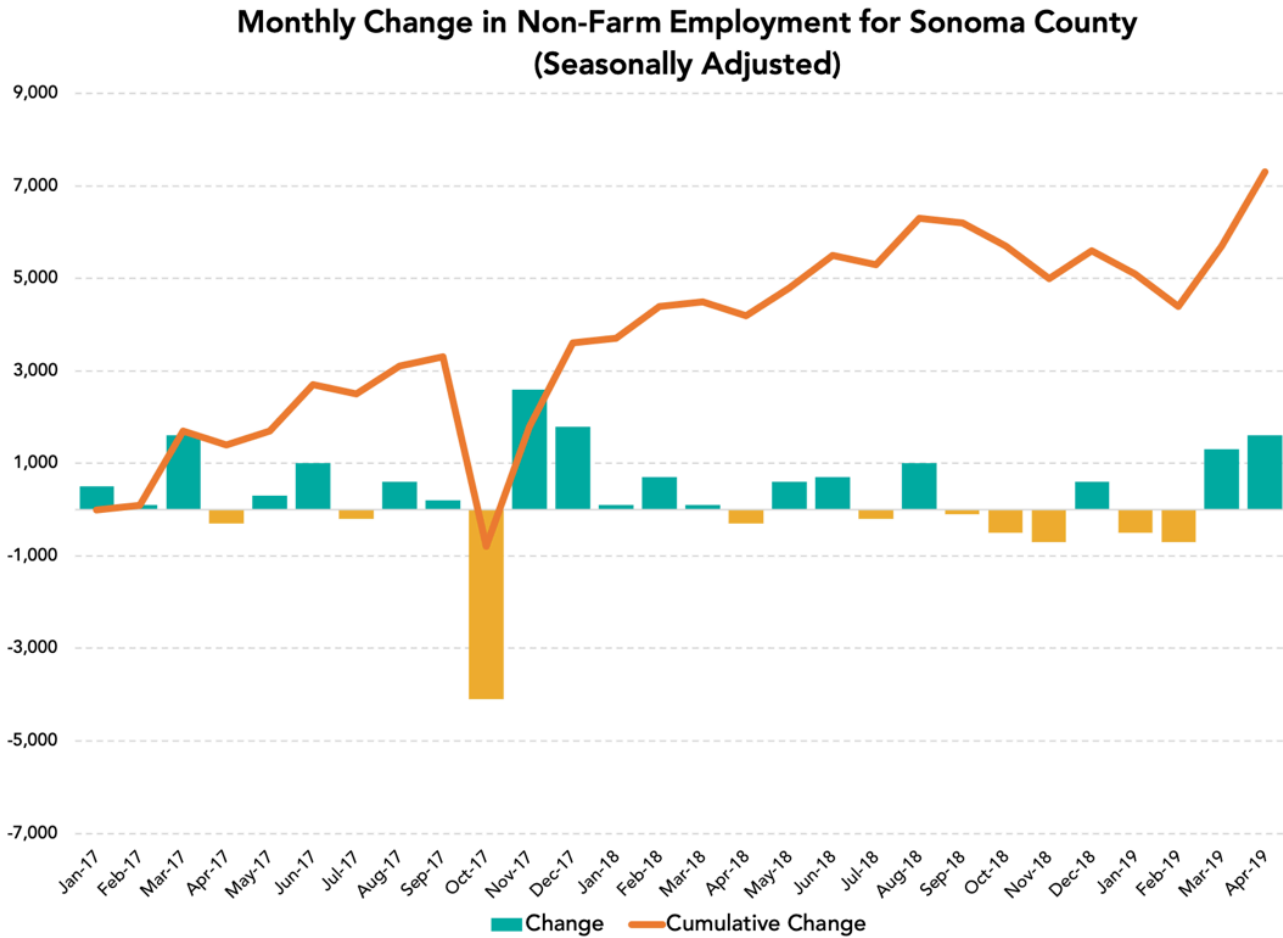
On average, wages are highest for workers in Santa Clara County—the center of Silicon Valley. This is particularly the case for workers in the Manufacturing industry. Conversely, wages are on average the lowest for workers in Napa, Sonoma, and Solano counties. Wages are especially low for Sonoma County workers in the Leisure and Hospitality industry—where wages are the lowest overall.

### Wages Across the Bay Area in 2018



Source: Bureau of Labor Statistics (2018)  
 Analysis: Bay Area Council Economic Institute

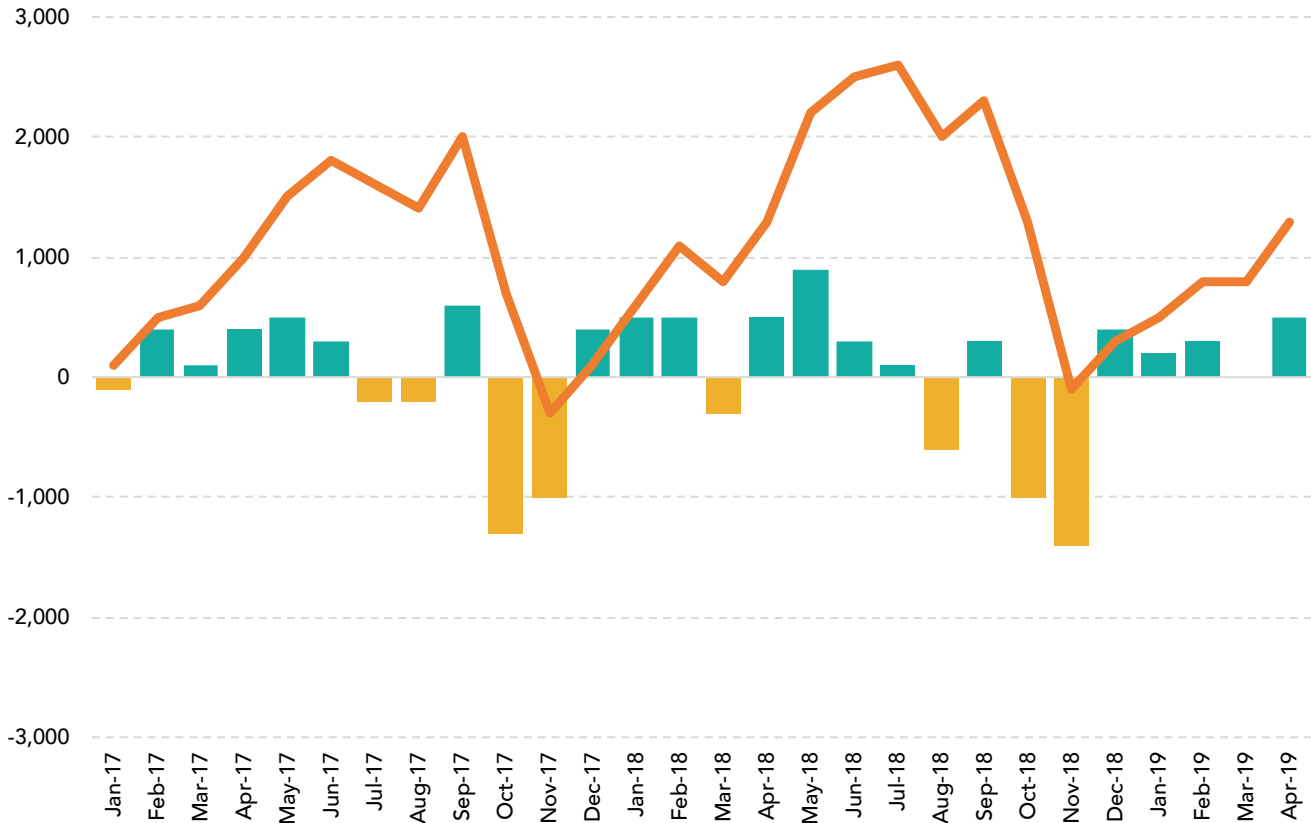
## Impact of the Fires on Employment



Source: California Employment Development Department  
 Analysis: Bay Area Council Economic Institute

As expected, non-farm employment during the month of the fires (October 2017) incurred a net loss of over 4,000 employees. Previously to the fires, monthly change was largely in the positive, but in the months following, employment increases over time were not as strong—possibly indicating the County’s difficulty in rebounding.

### Monthly Change in Total Farm Employment for Sonoma County

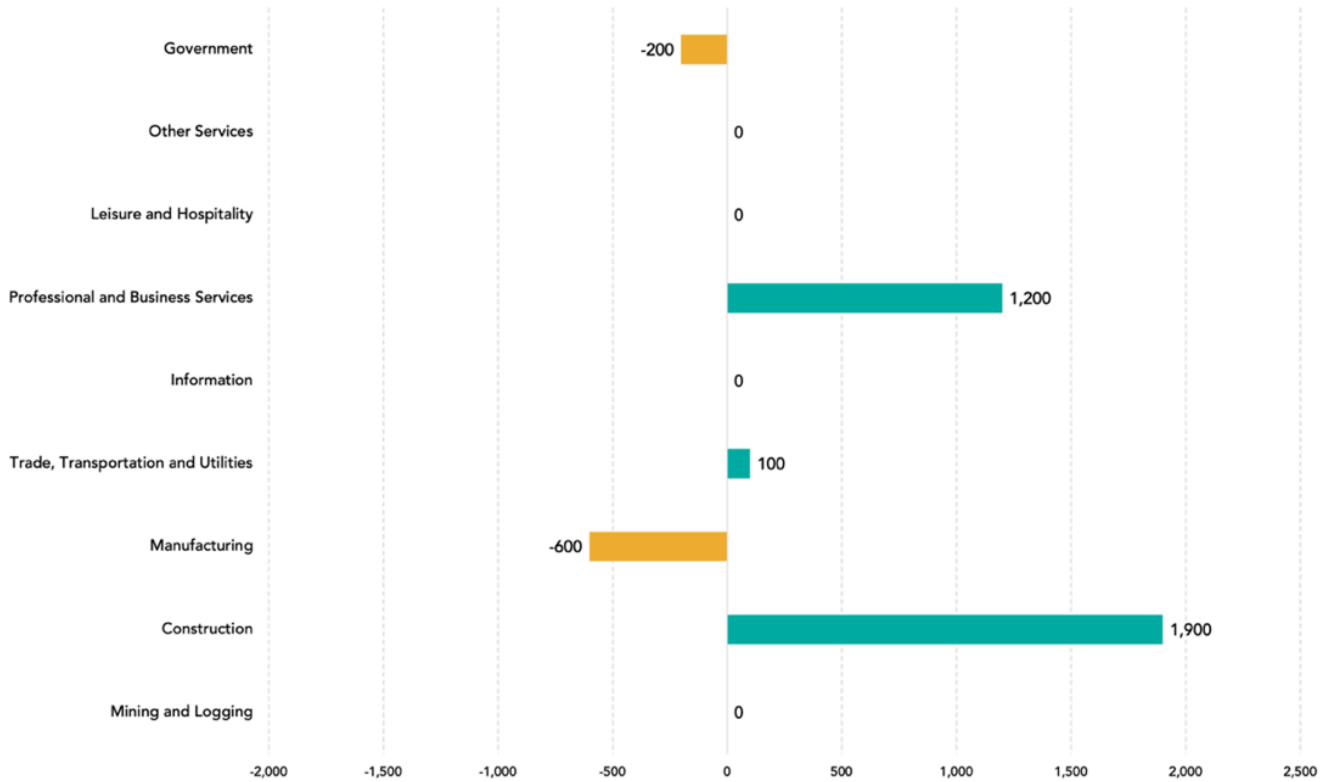


Source: California Employment Development Department  
 Analysis: Bay Area Council Economic Institute

Change Cumulative Change

Unlike the data on non-farm employment, farm employment growth was exceptionally strong, outside of the months following the fires, and again during the winter months in 2018. This might be more correlated with the lack of seasonal adjustment in the data, rather than the effect of the fires. That being said, the agricultural industry was certainly affected as several farms and farmers experienced damage.

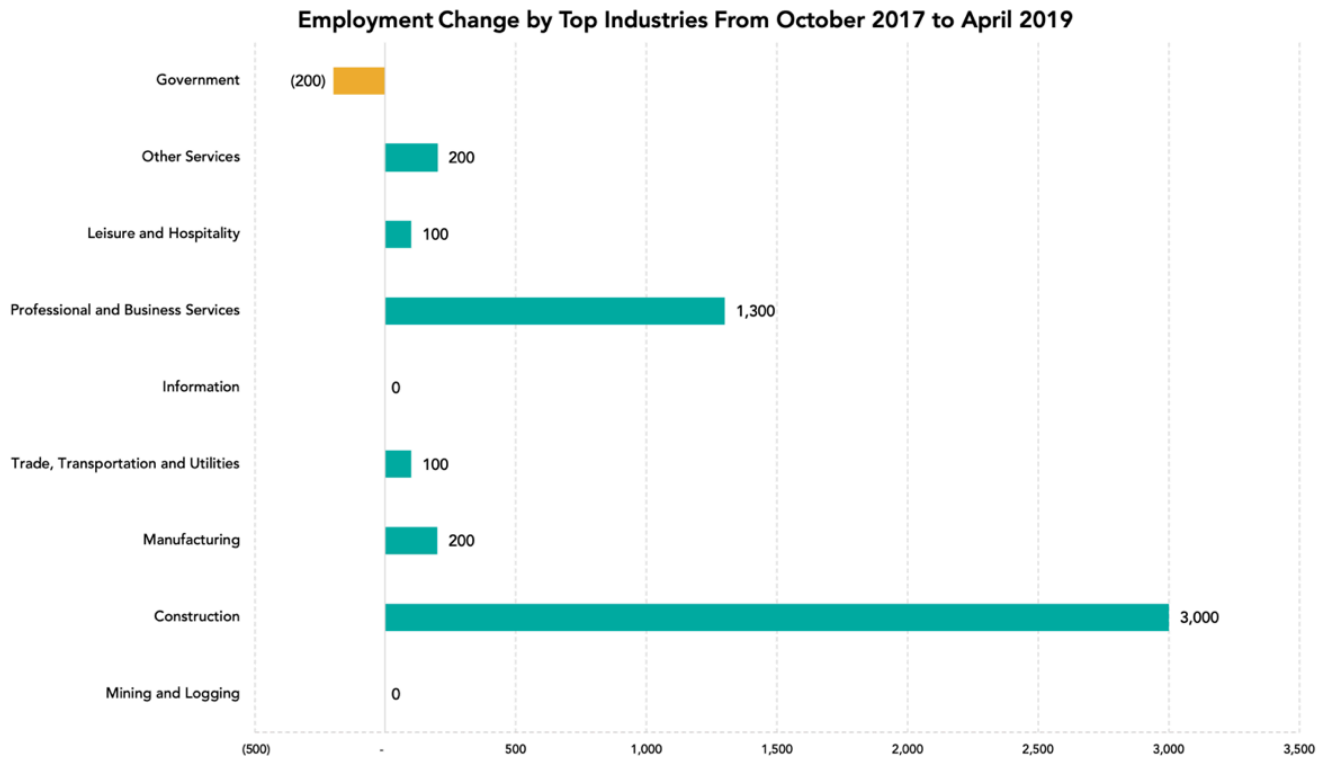
Employment Change by Top Industries from October 2017 to April 2018



Source: California Employment Development Department  
Analysis: Bay Area Council Economic Institute

While individual monthly data on the major industries in Sonoma County do not show a significant difference in the percentage breakdown over time, the above and below charts more clearly depict how employment figures changed between the month of the fires and the six months following. The notable increase in the Construction industry is most likely tied to the County's rebuilding effort; the same can be said for the uptick in Professional and Business Services, as the County required more individuals to be involved in several aspects of the restoration process.





Source: California Employment Development Department  
 Analysis: Bay Area Council Economic Institute

When looking a year out, employment change in Sonoma’s top industries show significant improvements, again most notably in the Professional and Business Services and Construction industries. Unlike in the six months after the fires, data from a year out from the fires showcases growth in every major industry aside from Mining and Logging, Information, and Government.

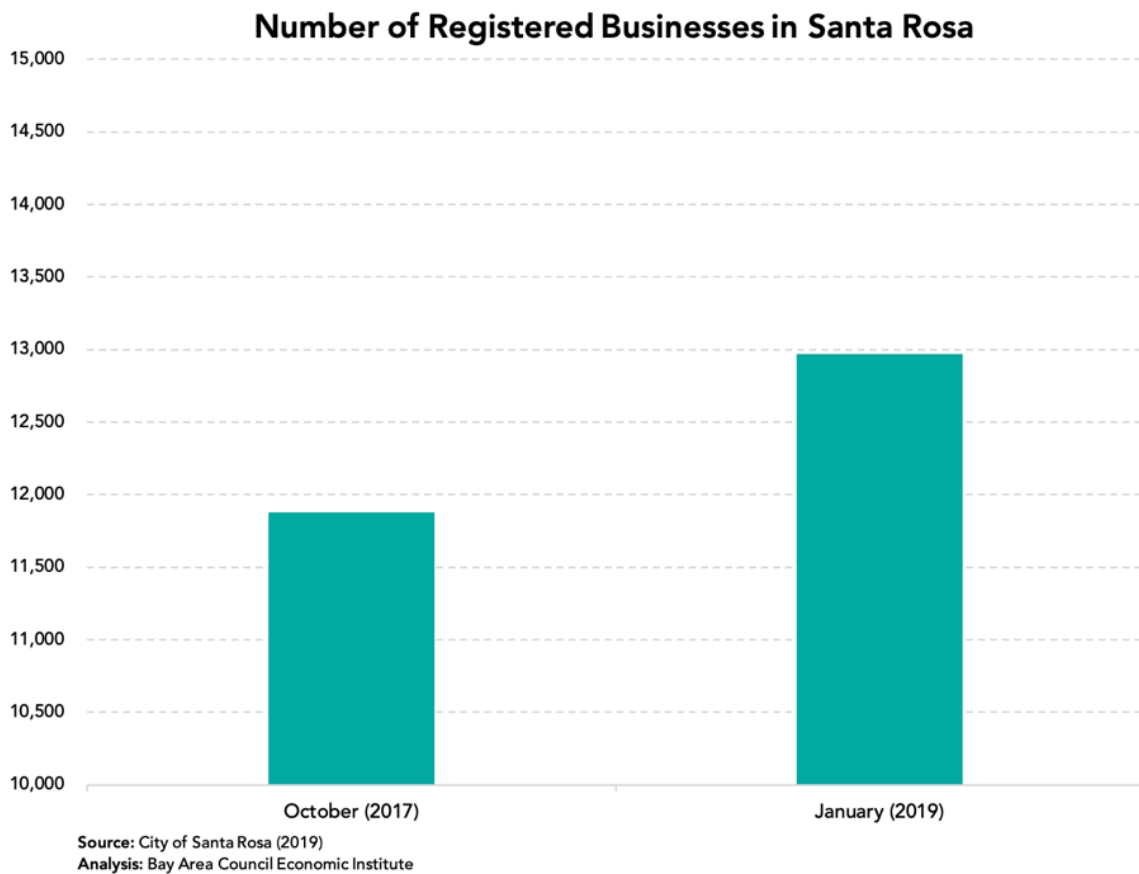
The annual change in employment in Sonoma County over a four-year period paints a fuller picture. Construction and real estate represented the largest growth percentages in employment, while educational services saw the largest decline in employment at a loss of 2.15% annually.

<b>2014 to 2018 Annual Change in Employment</b>	<b>CAGR</b>
Construction	9.93%
Real Estate	9.51%
Management of companies and enterprises	4.96%
Public administrative and waste services	4.47%
Arts, entertainment, and recreation	3.71%
Manufacturing	3.34%
Health care and social assistance	3.02%
<b>Total Private Employment</b>	<b>2.71%</b>
Agriculture	2.42%
Other services, except public administration	1.69%
Accommodation and food services	1.58%
Professional and technical services	1.42%
Finance and insurance	0.82%
Retail trade	0.64%
Information	-0.22%
Wholesale trade	-0.65%
Educational services	-2.15%

**Data Source:** Bureau of Labor Statistics, Quarterly Census of Employment and Wages  
**Analysis:** Bay Area Council Economic Institute

## Business Dynamics

Another indicator for tracking the economic recovery of Sonoma is through accessing business license data or understanding the number of registered businesses over time. The number of registered businesses in Santa Rosa in January 2019 is significantly larger than during the month of the fires.



## Commute Flows

The industry mix and employment data align well with the data on who works in the County and where in the Bay Area Sonoma County residents work. An overwhelming majority of Sonoma County residents work in Sonoma, with less than 10% traveling outside

of the County to work around the region. This might be given the diverse array of industries present in Sonoma, allowing for individuals of diverse backgrounds to both live and work there. On the contrary, a little over 10% of Sonoma County residents work in four counties where the average salary is the highest in the Bay Area (Marin, San Francisco, San Mateo, and Santa Clara).

### Where Sonoma County Residents Work (2017)

<u>By County</u>	<u>Count</u>	<u>Share</u>
Sonoma	178,725	84.8%
Marin	14,919	7.1%
San Francisco	7,105	3.4%
Napa	4,371	2.1%
Alameda	1,928	0.9%
San Mateo	1,119	0.5%
Santa Clara	935	0.4%
Contra Costa	904	0.4%
Solano	677	0.3%
Sacramento	192	0.1%

Likewise, a majority of individuals who work in Sonoma also live in the County.

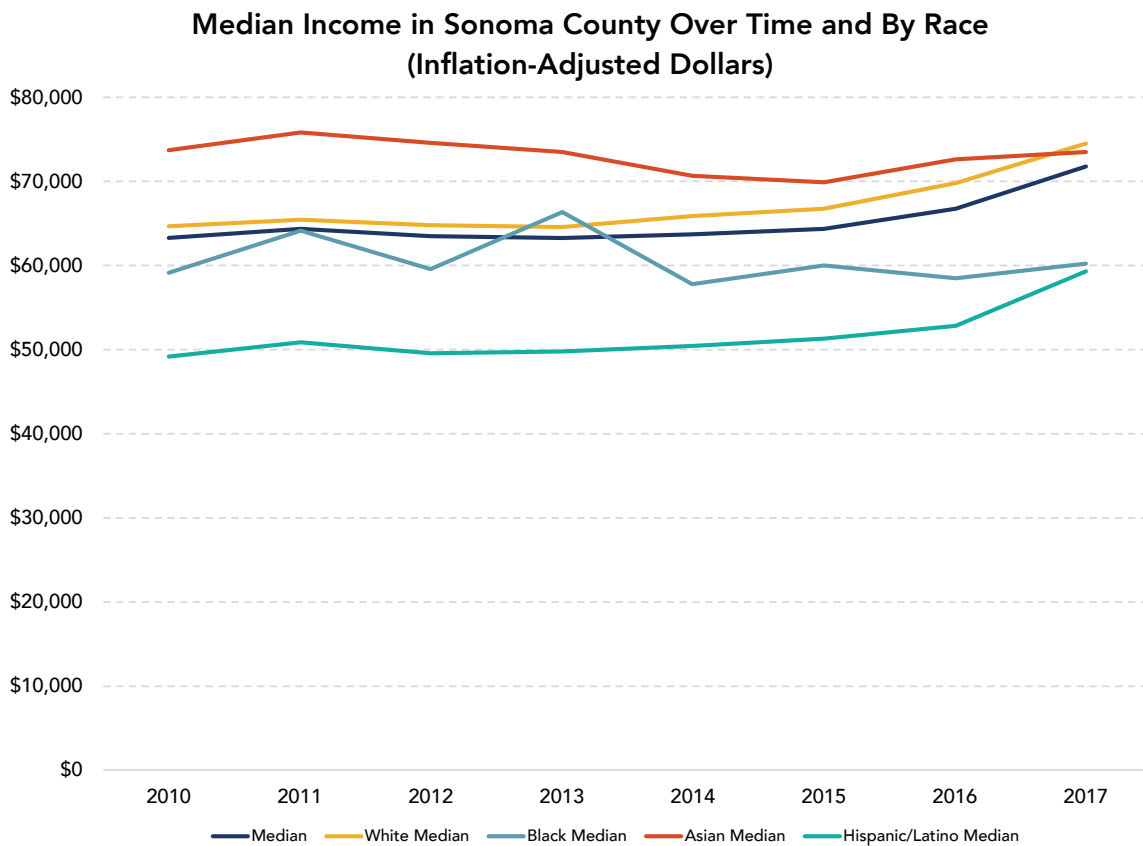
### Where Sonoma County Workers Live (2017)

<u>By County</u>	<u>Count</u>	<u>Share</u>
Sonoma	206,278	92.36%
Marin	4,652	2.08%
Napa	3,149	1.41%
Solano	3,009	1.35%
Contra Costa	1,106	0.50%
San Francisco	990	0.44%
Sacramento	852	0.38%
Alameda	852	0.38%
Santa Clara	479	0.21%
San Mateo	306	0.14%

## Understanding economic impact through an equity lens

Understanding the economic impact of the fires on Sonoma County requires considering the economic effects that natural disasters have on equity. The charts below help set the stage for demographic comparisons.

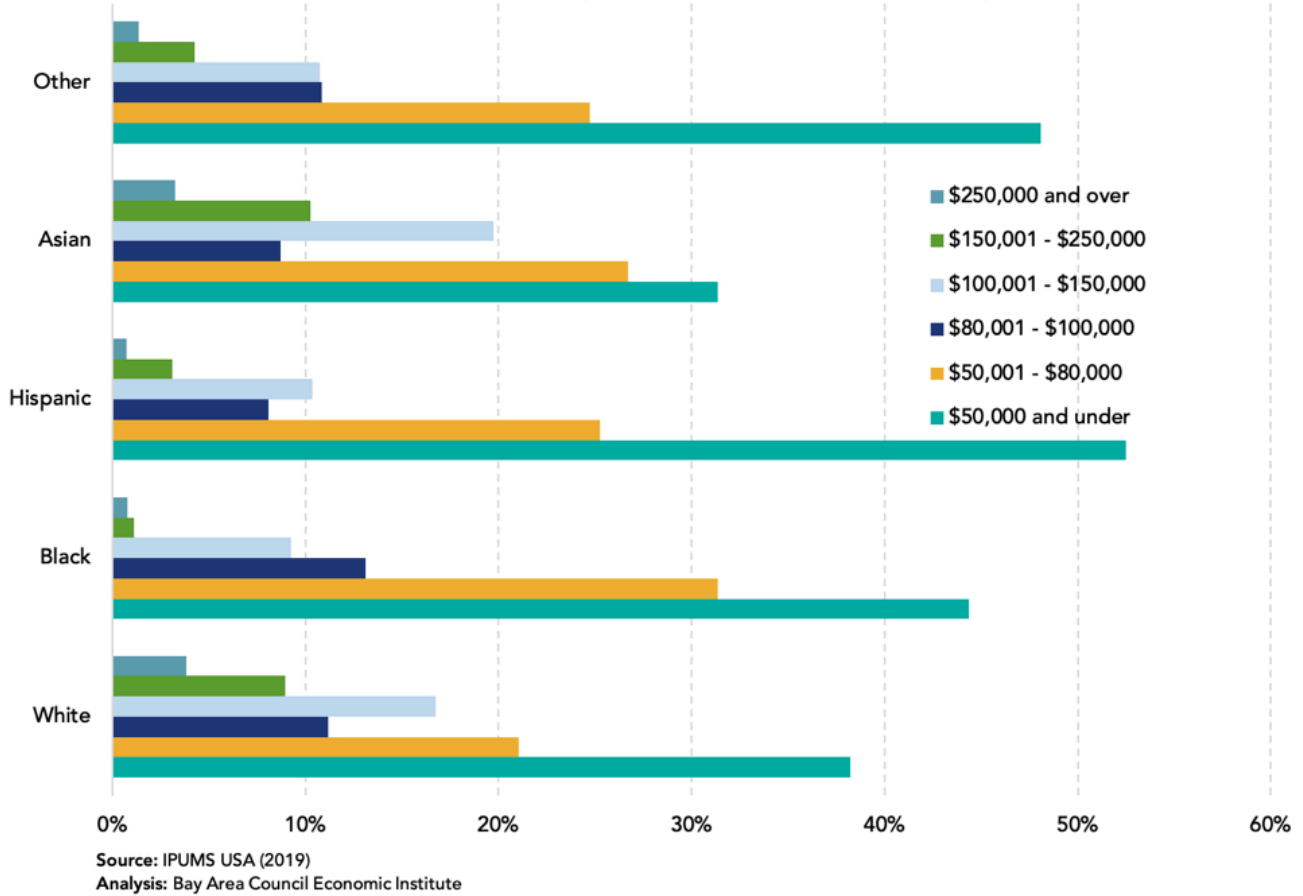
### Income and wages



Source: U.S. Census Bureau, American Community Survey (2017)  
Analysis: Bay Area Council Economic Institute

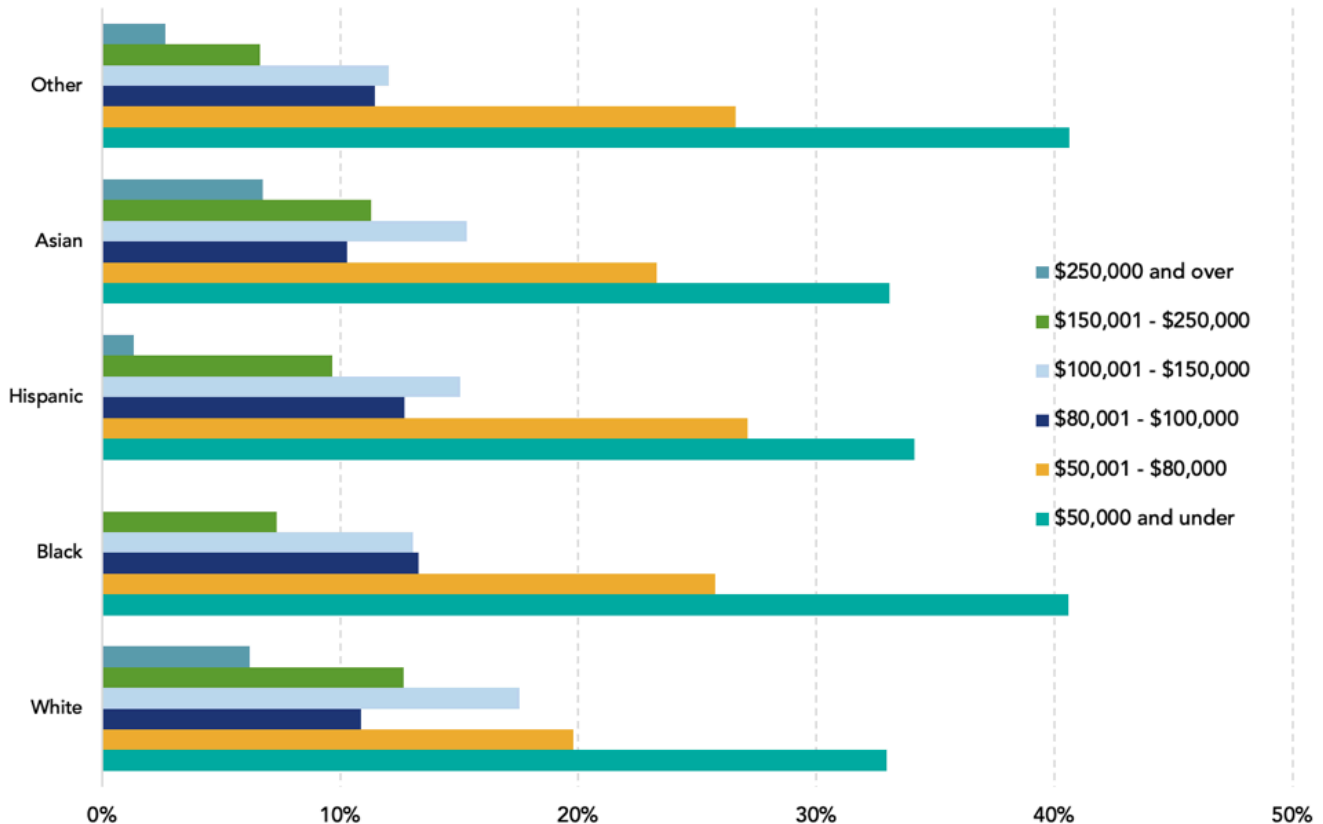
We begin by looking at how income and wages effect individuals differently based on their demographics. Over a 7-year period, the median income of Asian individuals was overwhelmingly larger than the white, black, and Hispanic/Latino median. While the median income for white and black individuals wavered within a \$10,000 range, the median income for Hispanic/Latino individuals has historically been the lowest, despite seeing an uptick from 2016 to 2017.

### Household Income by Race in Sonoma County (2010)



Household income presents a more rounded picture, again, however showcasing that Asian households predominately have larger household incomes, with over 10% having a household income over \$150,000. Unlike in the median income chart, however, the household income for black households that make between \$80,000 and \$100,000 is larger than that of white households.

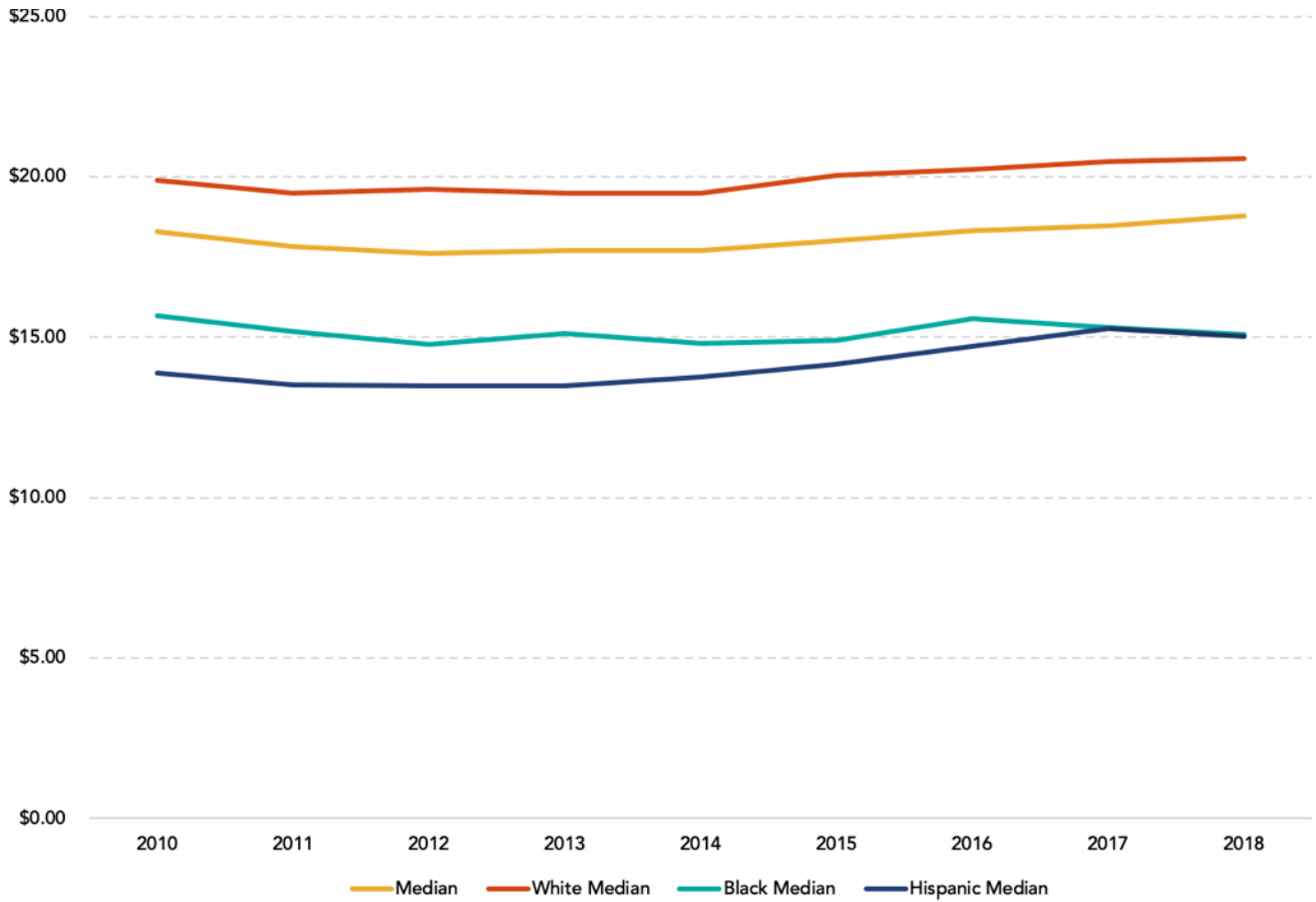
### Household Income by Race in Sonoma County (2017)



Source: IPUMS USA (2019)  
 Analysis: Bay Area Council Economic Institute

Compared to the 2010 data, the 2017 data on household income showed positive changes, particularly for Hispanic households which overall had larger household incomes in this year. To some degree, the same can be said for black households— however no black households had a household income in the highest income bracket in 2017.

### Median Hourly Wages by Race



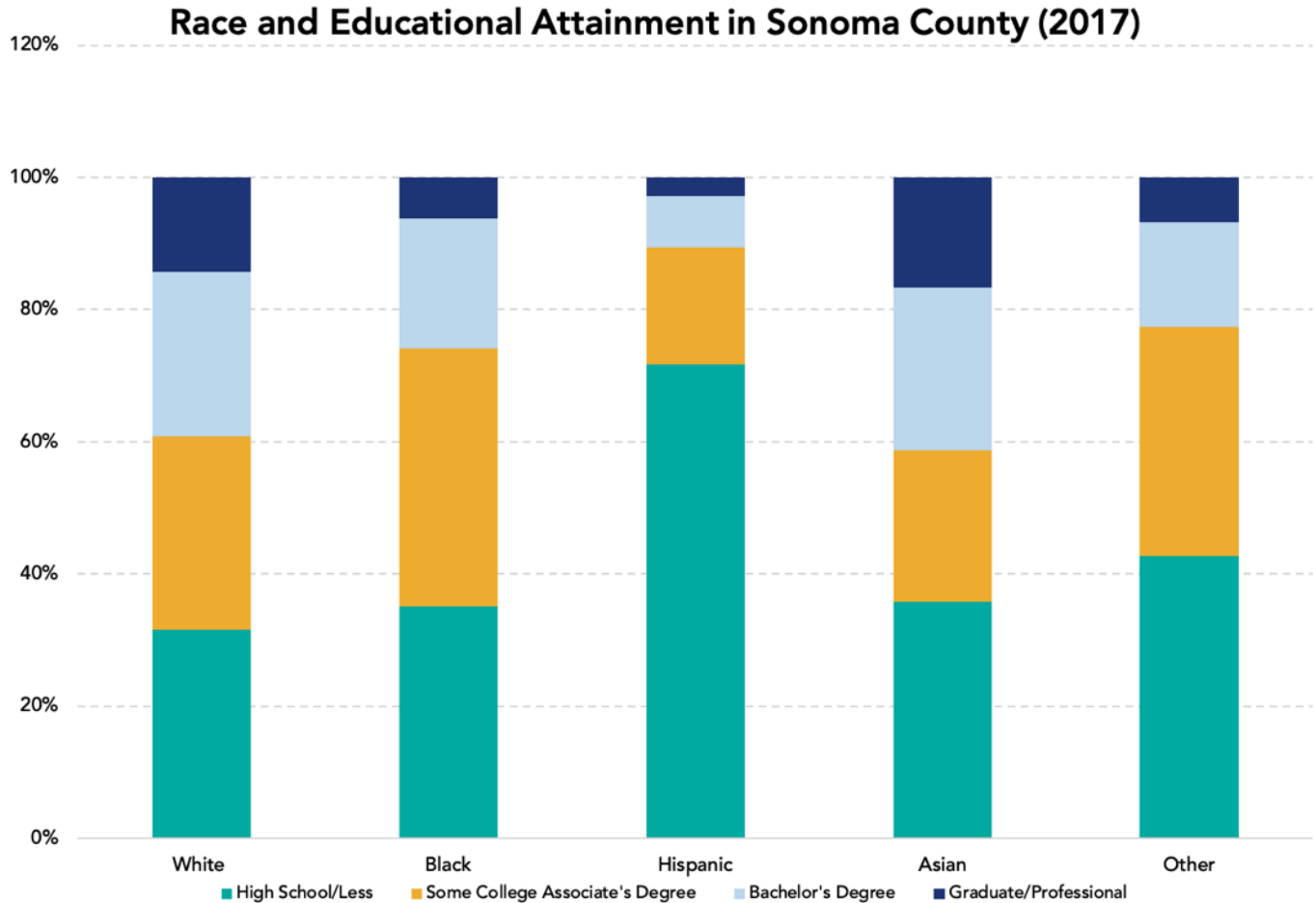
Source: Economic Policy Institute (2019)  
Analysis: Bay Area Council Economic Institute

This chart tracks median hourly wages over time, indicating that the Hispanic median has predominately been lower than the other medians present. Note that this data in particular does not include an Asian median.



## Other important equity factors

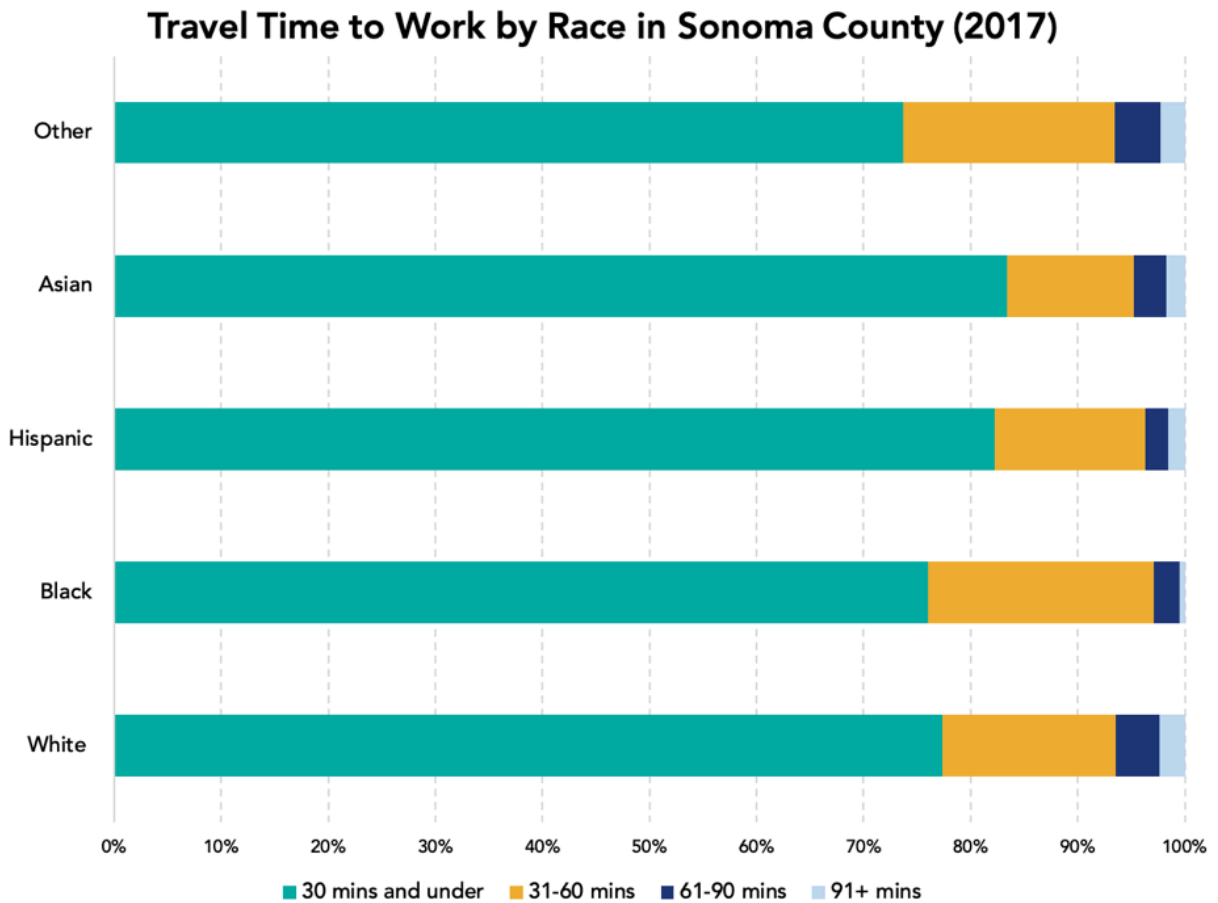
### Educational attainment



Wage and income data are strongly reflected by data on educational attainment, which shows that in 2017, Asians had a higher percentage of Graduate/Professional degrees than the other demographics. Roughly 24% of Asian individuals obtained a bachelor's degree, similar to the percentage of white individuals. Conversely, as the median income and household income data above reflected, Hispanic individuals on the whole have significantly fewer years of education than white, black, and Asian individuals; over 70% of Hispanic individuals had a high school degree or less.

### Commute times

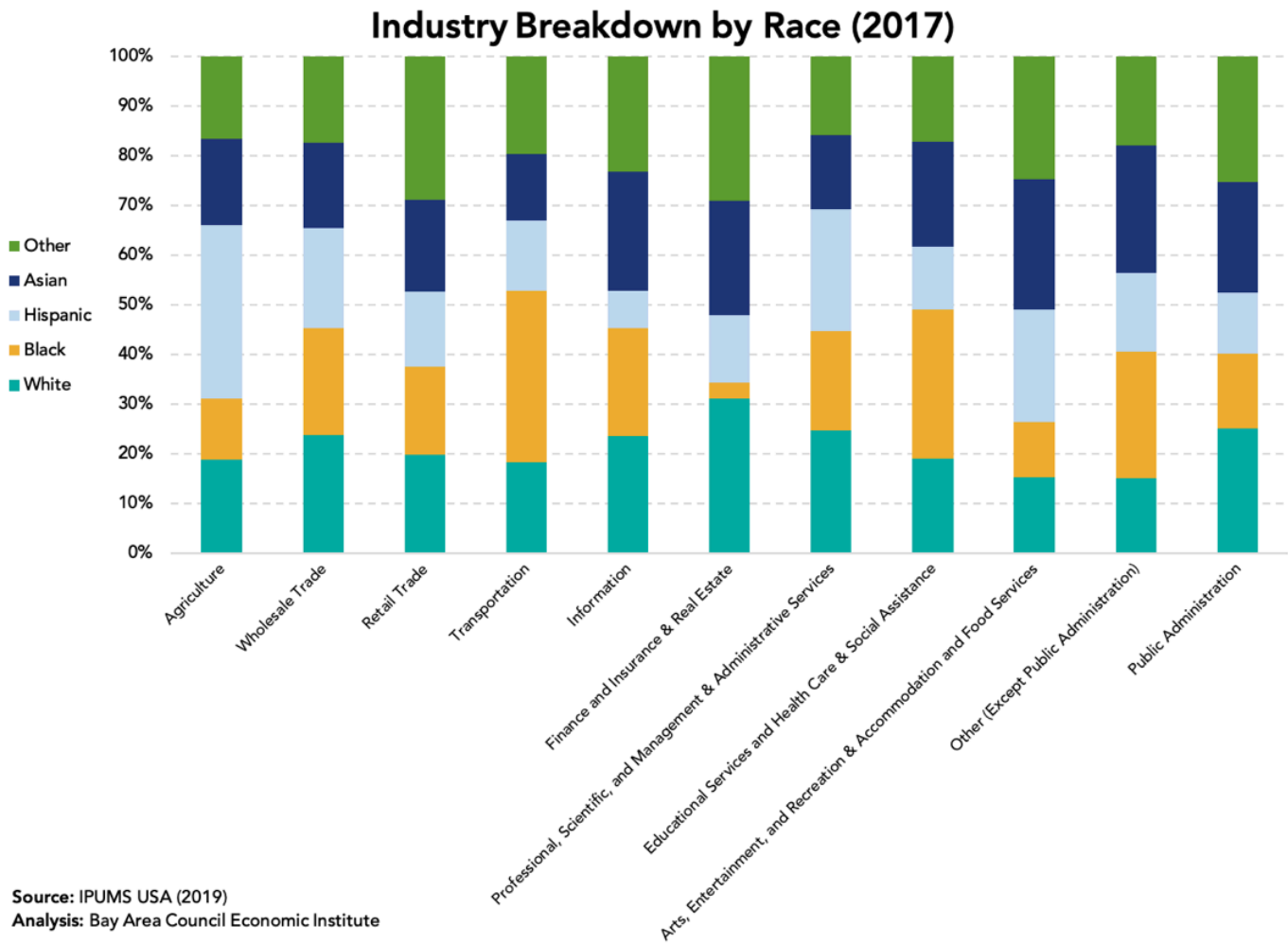
Previously, this chapter noted that a majority of residents in Sonoma County work in Sonoma, and in turn, that many workers in Sonoma County live there as well. Likewise, previous data in this chapter showed that the County has a fairly diverse set of industries. The chart below tells us there is not a significant difference in travel time by race for workers in Sonoma County.



Source: IPUMS USA (2019)  
Analysis: Bay Area Council Economic Institute

## Industry

On the other hand, there are some significant differences present in the demographic differences of industry workers in Sonoma County. In 2017, 34% percent of Hispanic individuals were found working in the Agriculture industry, compared to 3% of Hispanic individuals who worked in the Financial and Insurance & Real Estate industry. Asian individuals were spread across relatively equally, where their highest participation was found in the Educational Services and Health Care & Social Assistance industry at 26%. White and black individuals were largely found in the Educational Services and Health Care & Social Assistance industry with 23% and 37%, respectively.





# 3

## The Health of Sonoma County

### Introduction

The fires had devastating health impacts on the county, including the loss of life. Countless others were treated for a variety of health reasons including for burns and smoke inhalation. The catastrophic fires will likely have long lasting impacts on the overall health of Sonoma County, which health departments, city officials and residents of Sonoma County will need to monitor over time.

The following chapter will take a deeper dive into the overall health of Sonoma County. Using several health indicators, this chapter will make comparisons between Sonoma County and the rest of California where applicable to assess the overall health of the county. There will also be comparisons between gender, race and other available demographic information. Lastly, this chapter will attempt to understand potential future health impacts from the fires and set a baseline for health indicators for future analysis.

### Physical Health

Physical health encompasses the wellbeing of an individual from a physical perspective. With modern medicines and treatments, physical health has improved dramatically in recent times. However, many populations still suffer from poor physical health, which is often a symptom of environmental, socio-economic, and other external factors. We will take a deeper look into how Sonoma County is impacted by these physical health indicators.

## Leading Cause of Death

Age-adjusted rates are used to compare the death rates and hospitalizations of different diseases in Sonoma County and the entire state of California. Age-adjusted rates standardize the population to make fairer comparisons between groups with different age distributions. The age-adjusted rates for cancer, lung cancer, suicide, and drug induced deaths in Sonoma

County significantly exceeds California. Cancer is the leading cause of death in Sonoma County with an age-adjusted rate of 140.2 deaths per 100,000 people from 2015-2017. The age-adjusted death rates for lung cancer, suicide, and drug induced deaths are, 29.3, 12.4, and 14.4 deaths per 100,000 population respectively from 2015-2017.

Cause of Death - Physical and Behavioral Health - 2017			
Disease	2015-2017 Average Deaths	Age-Adjusted Death Rate (Sonoma County)	Age-Adjusted Death Rate (California)
All Cancers	978.3	140.2	137.4
Lung Cancer	204.3	29.3	27.5
Coronary Heart Disease	517.3	72.9	87.4
Chronic Lower Respiratory Disease	208.3	29.7	32.0
Suicide	69.0	12.4	10.4
Drug Induced Death	78.0	14.4	12.7

**Source:** California Department of Public Health, California Comprehensive Master Death Files, [2015-2017] Compiled, August 2018.

**Analysis:** Bay Area Council Economic Institute **Notes:** Rates are per 100,000 population

## Asthma / COPD

During the fires, a tremendous amount of smoke and other carcinogens polluted the air of Sonoma County and the rest of the Bay Area. Air quality is measured on a scale of 0-500, broken into six categories based upon ranges. The higher the level on the AQI, the greater the level of air pollution and the greater the health concern. The table below breaks down the different levels of the AQI and their respective impacts.

Level	Air Quality Index Level of Health Concern	Numerical Value	Meaning
1	Good	0-50	Air quality is considered satisfactory, and air pollution poses little or no risk.
2	Moderate	51-100	Air quality is acceptable; however, for some pollutants there may be a moderate health concern for a very small number of people who are unusually sensitive to air pollution.
3	Unhealthy for Sensitive Groups	101-150	Members of sensitive groups may experience health effects. The general public is not likely to be affected.
4	Unhealthy	151-200	Everyone may begin to experience health effects; members of sensitive groups may experience more serious health effects.
5	Very Unhealthy	201-300	Health alert; everyone may experience more serious health effects
6	Hazardous	301-500	Health warnings of emergency conditions. The entire population is more likely to be affected

In the wake of the fires, the Environmental Protection Agency’s (EPA) air quality index (AQI) for the nine-county Bay Area was 160, which is classified as “Unhealthy” – higher than Beijing’s reading of 122 on that same day. In parts of Santa Rosa, near the epicenter of the fires, the air quality reached level 5 with an AQI greater than 201, which is classified as ‘Very Unhealthy’. Constant and prolonged exposure to the poor air quality can worsen respiratory issues and trigger asthma attacks. There were high readings of PM2.5, a particulate that penetrates and lodges deep into the lungs, which can have short-term and long-term adverse health impacts. The long-term effects of the polluted air will take time to observe completely, but preliminary analysis has shown an increase in the prevalence and severity of these respiratory issues.

### Asthma

	Sonoma County	California
Prevalence	16.3%	14.8%
Rate of Emergency Department Visits	41.6	46.9
Rate of Hospitalizations	3.8	4.7
Death Rate	5.9	9.6

**Source:** California Health Interview Survey (CHIS); California Department of Public Health (2018)

**Analysis:** Bay Area Council Economic Institute **Notes:** Deaths are for the years 2014-2016, Rates are per 100,000 people. Death rates are per 1,000,000 people.

### Cardiovascular Disease

Cardiovascular disease refers to a set of health conditions that involve narrowed or blocked blood vessels that can lead to a heart attack or stroke. Additionally, diseases that affect the heart’s rhythm (arrhythmia), muscle and valves are also considered forms of cardiovascular disease. Cardiovascular disease is the leading cause of death in the United States. It is also the second leading cause of death in Sonoma County, behind cancer.

### Cardiovascular Disease

	Sonoma County	California	Males	Females
Deaths	901	62,800	N/A	N/A
Death Rate	125.8	141.8	167.8	95.4

**Source:** CDC Wonder API ; UCD codes: [I00-I02,I05-I09,I11,I13,I20-I25,I26-I28,I30-I51]

**Analysis:** Bay Area Council Economic Institute **Notes:** Rates are per 100,000 population

## Cancer

Cancer of all types is a leading cause of death in Sonoma County. Approximately 145 deaths per 100,000 residents can be attributed to cancer in Sonoma County. Across the United States, the incidence rate of cancer has remained stable, meanwhile, the overall mortality rate has been steadily decreasing. In wake of the fires, the long-term impacts such as cancer incidence rates will take several years to truly gauge the severity.

From a national context, cancer is one of the leading causes of death. Most notably, males suffer significantly higher mortality rates from cancer than women. This can be attributed to engagement in risky behavior,

biological differences, access to medical care and other complex factors such as air pollution. By the Census definition of race, Black or African American individuals have the highest rate of cancer mortality nationally. In 2017, white individuals in Sonoma County experienced the highest level of cancer mortality with 145 deaths per 100,000 people, which was higher than the California average of 143.6 deaths per 100,000 people. Asian or Pacific Islander individuals had the second highest rates of cancer mortality with 93.9 deaths per 100,000 people. Cancer greatly affects people who are 65+ years of age more than any other age group.

Cancer		
	Sonoma County	California
Incidence Rate	427.9	381.6
Death Rate (Male)	152.0	159.5
Death Rate (Female)	132.6	120.2
Death Rate	145.0	140.0

**Source:** California Cancer Registry (2016), CDC Wonder API; UCD code: [C00-C97]

**Analysis:** Bay Area Council Economic Institute **Notes:** Rates are per 100,000 people

## Obesity

Obesity is an ongoing epidemic across the United States, and often results in several other co-morbidities. Obesity occurs when the body mass index (BMI) of an individual is greater than 30, and reflects that the weight of an individual is significantly higher than what is considered a healthy weight given the individual's height. There are many factors that contribute to

obesity including, lack of exercise, poor diet, stress, and genetics. Obesity is an underlying risk factor for diabetes (Type 2, specifically), heart attack, stroke and some cancers. The percentage Californians who are obese is higher than the percentage of Sonoma County residents who are obese. This indicates that residents in Sonoma County are generally healthier.

Adult Obesity		
	Sonoma County	California
Prevalence	20.0%	23.0%

**Source:** Behavioral Risk Factor Surveillance System (BRFSS) 2018

**Analysis:** Bay Area Council Economic Institute

## Diabetes

Diabetes is a disease caused by the inability of the body to produce or use insulin effectively thus resulting in high sugar (glucose) blood levels. Insulin allows the blood sugar to enter cells that make up the muscles and tissues to be used for energy. This is also the main source of fuel for the brain. Excess glucose can lead to serious health problems such as heart attack, stroke, etc.

There are two types of diabetes that affect individuals. Type 1 diabetes is an auto-immune disease where an individual's body is unable to produce insulin. Thus, individuals with type 1 diabetes must take insulin their entire lives to survive. 85+ year olds have exponentially higher rates of mortality from diabetes than any other age group.

Diabetes			
	Sonoma County	Males	Females
Prevalence	6.0%	6.6%	6.4%
Incidence Rate	5.2	N/A	N/A
Death Rate	61.8	90.9	51.4

**Source:** CDC Wonder API ; Behavioral Risk Factor Surveillance System (BRFSS)

**Analysis:** Bay Area Council Economic Institute **Notes:** Rates are per 100,000 population. Incidence rate is per 1,000 population

## Behavioral Health

The adverse health effects of the fires are not only felt physically, but psychologically as well. The devastating impacts have taken a toll on many residents of the County in a variety of ways that have short-term and long-term impacts. Mental health includes emotional, behavioral and social well-being. This ranges from grieving for family and friends who lost their lives, facing the realities of the loss of their residence and belongings, increased anxiety of another fire and resulting coping complications such as substance abuse. Behavioral health is a critical factor in the overall recovery and health of the County.

## Psychological Distress

There have been tremendous psychological impacts on Sonoma County residents, particularly those who were directly affected by the fires. These impacts on people's lives, or risk factors, can be physical injury, damage to property, loss of property or place of employment, and loss of a relative or friend. While most stress symptoms are temporary, some have longer lasting symptoms that adversely affect a person's livelihood. Post-Traumatic Stress Syndrome (PTSD) is commonly present in individuals after a disaster such as a wildfire. PTSD has several risk factors and symptoms that are unique to each individual's trauma. PTSD symptoms include feeling helpless or hopeless, loss of appetite, excessive smoking, drinking, drug use and prescription medications, difficulty readjusting to work or school and several other signs of emotional distress.



## Suicide

Suicide			
	Sonoma County	Males	Females
Deaths	69	N/A	N/A
Death Rate	12.4	19.1	N/A

**Source:** CDC Wonder API 2017 UCD codes: X60-X84, Y87.0.

**Analysis:** Bay Area Council Economic Institute **Notes:** Rates are per 100,000 population

Suicide is an ever-present issue in the United States, and is now the tenth leading of cause of death in the nation. In 2017, over 47,000 Americans took their own lives. There were 69 deaths by suicide in Sonoma County in 2017. The death rate by suicide greatly exceeds the average death rate in California with a rate of 12.4 deaths per 100,000 in Sonoma County and 10.5 deaths per 100,000 in California.

Nationally, men are more significantly likely to commit suicide than females. This may be attributed to a variety of factors beyond gender differences including psychological and cultural differences. This finding is ever-present in Sonoma County as the death rate by suicide for males is drastically higher than the death rates for females. The suicide mortality rates for males in Sonoma County is 19.1, whereas the suicide mortality rate for females in Sonoma County is too low to be accounted for.

## Excessive Drinking / Impaired Driving

Excessive Drinking		
	Sonoma County	California
% of adults reporting binge or heavy drinking	19%	18%
DUI Incidents	2,612	266,388
Alcohol Impaired Traffic Deaths (%)	37%	30%

**Source:** Behavioral Risk Factor Surveillance System (BRFSS) 2018

**Analysis:** Bay Area Council Economic Institute

In wake of the fires, many individuals have turned to alcohol and other substances to cope with the devastating impacts from the fire. In 2017, 19% of adults in Sonoma County reported binge or heavy drinking, which is slightly higher than the percentage of Californians. However, Sonoma County suffered from a higher percentage of alcohol impaired traffic

deaths than California. Thirty-seven percent of all traffic related deaths were due to alcohol impairment. Sonoma County has focused on addressing this issue with the Alcohol & Other Drug Prevention Strategic Plan (2015-2020) to improve health outcomes related to substance abuse.

## Opiates and Other-Drug Use

### Opioids

	Sonoma County	California
Prescriptions	346,619	19,808,224
Rate of Emergency Department Visits	45.4	21.4
Rate of Hospitalizations	5.7	8.3
Death Rate	6.7	5.5

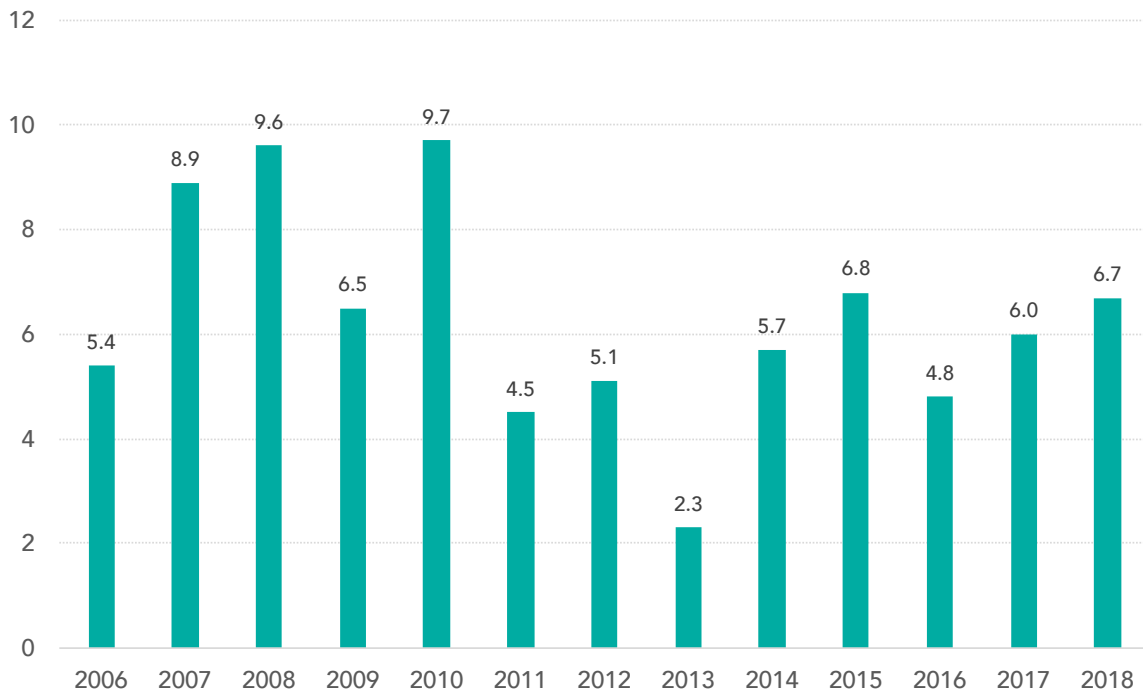
**Source:** California Health Interview Survey (CHIS); California Department of Public Health (2018)

**Analysis:** Bay Area Council Economic Institute

There is currently an opioid epidemic in the United States. This epidemic affects all ages, genders, races/ethnicities across all income levels. The death rates from opioids has steadily been increasing in recent years. As of 2018, there were 346,619 prescriptions for opioid medications in Sonoma County. There were 41 deaths attributed to opioid use of any kind in 2017. The death rate from opioids exceeds the death rate of Californians,

which is a cause for concern. Especially in wake of the fires, which may have exacerbated this problem as individuals turn to opioids to cope with the devastating impacts from the fires. The death rates have fluctuated since 2006, but there has been a steady increase from 2016 to 2018. In 2018 the death rate from opioids spiked from 6.0 to 6.7 deaths per 100,000 people, though any link to the fires is unknown.

**Overdose Death Rates - Per 100k Residents - Sonoma County**



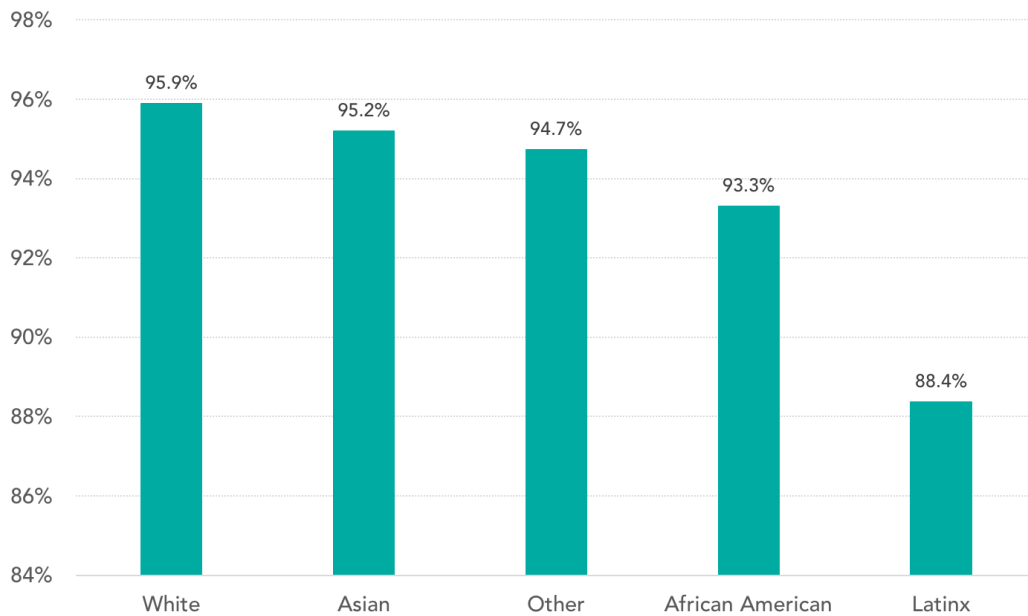
**Source:** CDPH Vital Statistics Multiple Cause of Death and California Comprehensive Death Files, Annual Not Seasonally Adjusted  
**Analysis:** Bay Area Council Economic Institute

## Access to Healthcare

A key indicator of the health of the county is the access to healthcare. Access to healthcare impacts the overall physical health, mental health and quality of life of residents. The access to quality, comprehensive

healthcare serves a primary factor in raising health awareness, preventing and managing disease, reducing premature death rates, and maintaining overall health. Having access to healthcare allows individuals to enter the health care system and find local providers to meet their healthcare needs.

**Health Insurance Coverage Rates by Race - Sonoma County**



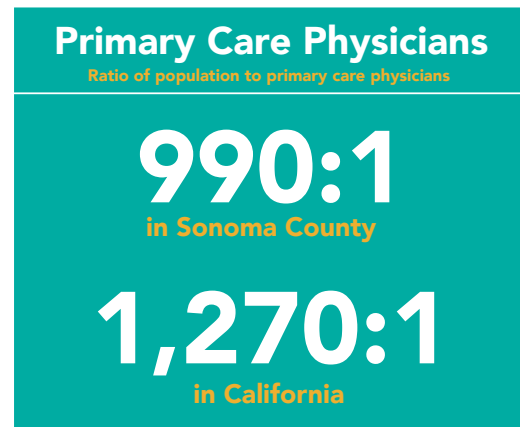
Source: American Community Survey (2017)

Analysis: Bay Area Council Economic Institute Notes: Other includes multi-race and American Indian and Alaskan Native.

According to the American Community Survey, 93% of Sonoma County’s population had health insurance coverage of any kind in 2017. By race, Asian and White populations had the highest levels of health insurance coverage. Black or African Americans, Latinos and other ethnicities experienced lower levels of health insurance coverage in Sonoma County.

## Primary Care Physicians

Sonoma County has significantly greater access to primary care physicians than Californians as a whole. This is a positive reflection for the overall health of Sonoma County.



## Mental Health Providers

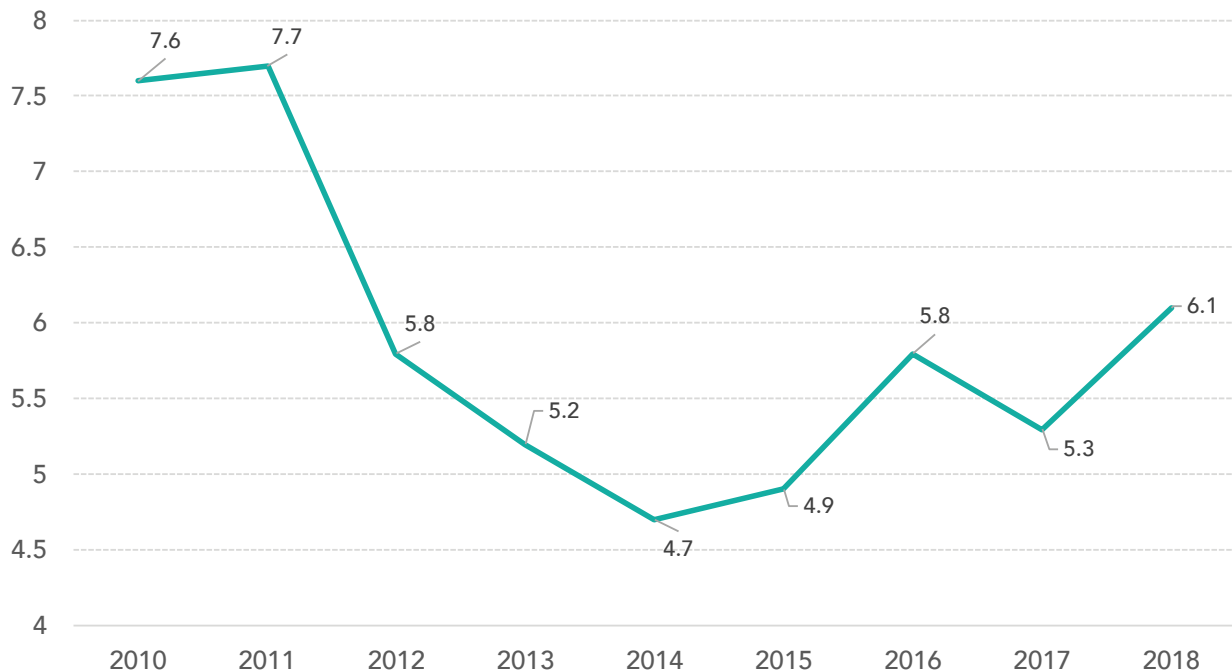
Sonoma County has significantly greater access to mental healthcare providers than Californians as a whole. This is crucial as adverse psychological effects from the fires have and will continue to have long-lasting impacts on the mental health of all affected individuals in the county.



## Crime in Sonoma County

The last set of indicators to measure the community safety and health of Sonoma County is crime—more specifically, interpersonal violence, which includes child neglect and domestic violence, and neighborhood crime rates. These indicators have short-term and long-term implications for the health of Sonoma County.

**Substantiated Child Abuse/Neglect Rates - Per 1000 Children**



**Source:** Webster, D., Lee, S., Dawson, W., Magruder, J., Exel, M., Cuccaro-Alamin, S., Putnam-Hornstein, E., Wiegmann, W., Saika, G., Chambers, J., Min, S., Hammond, I., Sandoval, A., Yee, H., Flamson, T., Hunt, J., Ensele, P., Lee, H., Casillas, E., & Gonzalez, A. (2019). CCWIP reports. Retrieved 8/16/2019, from University of California at Berkeley California Child Welfare Indicators Project website. URL: <[http://cssr.berkeley.edu/ucb\\_childwelfare](http://cssr.berkeley.edu/ucb_childwelfare)>

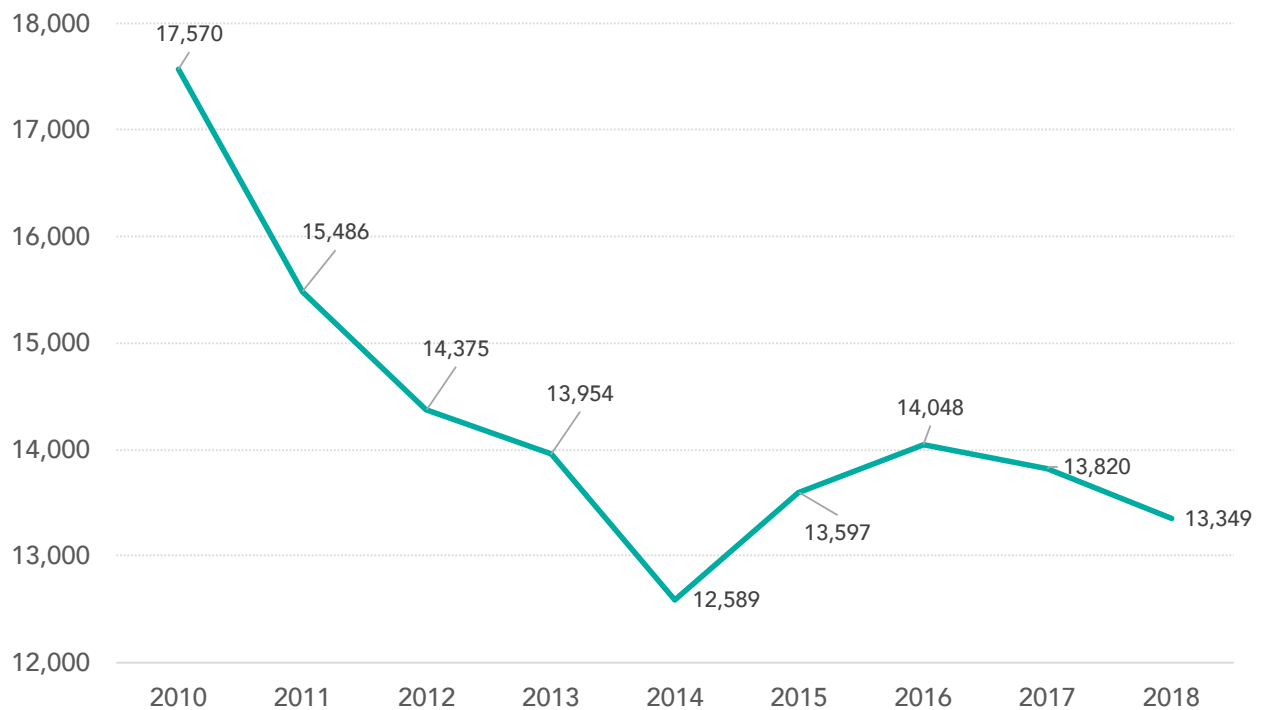
**Analysis:** Bay Area Council Economic Institute

Substantiated child abuse and neglect rates have fluctuated in Sonoma County since 2010. In 2014, Sonoma County had the lowest rate of 4.7 substantiations per 1000 children. However, in 2018, substantiations have increased to 6.1 per 1000 children from 5.3 per 1000 children in 2017.

Domestic violence also is a major health concern of interpersonal violence. According to the California Dept. of Justice Criminal Justice Statistics Center, there were 1,640 domestic violence related calls for assistance in 2018. This is a decrease from the 1,791 calls reported in 2017, where the rate per 1,000 people was 5.2. This rate in 2017 was significantly lower than the rate for Californians of 6.4 calls per 1,000 people.

## Neighborhood Crime Statistics

**Substantiated Sheriff Incidences in Sonoma County**



**Source:** Sonoma County Sheriff's Office

**Analysis:** Bay Area Council Economic Institute

**Notes:** Incident reports are generated after either of two events 1) a citizen has reported an event/crime and a deputy has substantiated a report is necessary or 2) a deputy has witnessed an event/crime in progress.

There has been a decrease in substantiated sheriff incidences in Sonoma County since 2016. Incident reports are generated after either of two events:

1. A citizen has reported an event/crime and a deputy has substantiated a report or,
2. A deputy has witnessed an event/crime in progress.

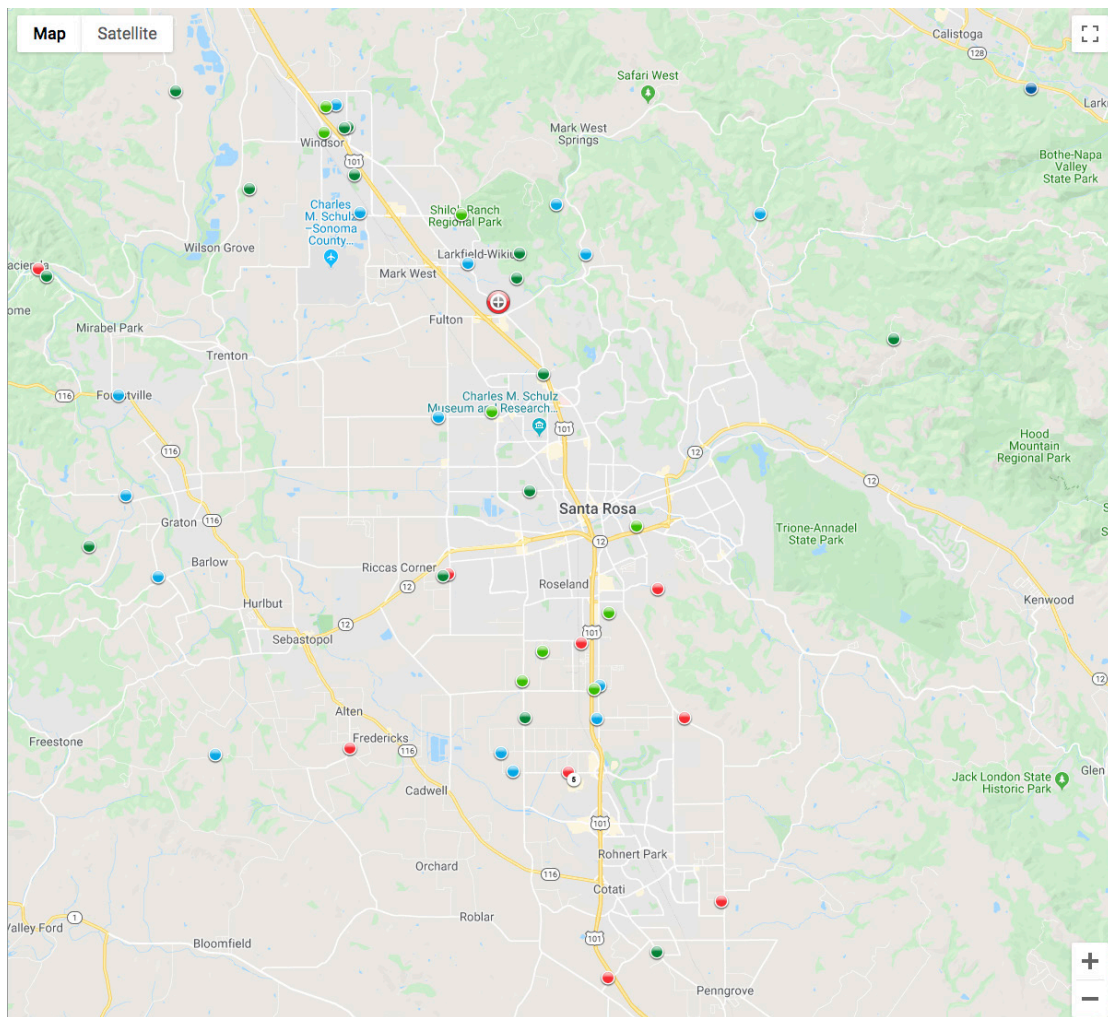
Overall crime has diminished dramatically since 2010, where the crime rate was the highest with 17,570 substantiations. In 2018, there were 13,349 sheriff incidences in Sonoma County.

## Community Crime Map

The Sonoma County Sheriff's Office has created an interactive community crime map to represent the wide spectrum of law activity in Sonoma County. This extends from serious crimes such as homicide, armed assault, etc. to information only reports. The crime reports are geocoded to the nearest intersection to protect the

identities of the victims. This map helps the public form a better understanding of the crime activity in their area in order to make more informed decisions. This community crime map is provided online by the Sonoma County Sheriff's Office courtesy of LexisNexis.

### Example: Sonoma County Community Crime Map





# 4

## SCTA Transportation Analysis Zones

### Introduction

In Sonoma County, plans for rebuilding homes in areas affected by the fires, along with new and future housing developments will have a significant impact on transportation within the County. The Sonoma County Transportation Authority developed a model to analyze the traffic impacts in different transportation analysis zones (TAZ) across the county. This model utilizes housing permit data from the 2007-2014 housing elements (contained within the 2007-2014 General Plans) for all cities in Sonoma County. We worked with Chris Barney to update the data used in the SCTA TAZ model to incorporate the 2015-2023 housing elements for different jurisdictions across Sonoma County. To accomplish this, we explored the following methodology.

### Methodology

#### 1. Compiled the housing permit data for 2015-2023 from the Housing Elements from the following cities:

- Santa Rosa
- Petaluma
- Rohnert Park
- Sebastopol
- Cloverdale
- Cotati

- Healdsburg
- Windsor
- Unincorporated County

The housing permit data includes information on the location of the project, projected units, type of housing (single family residence, apartments etc), income levels (low income etc) and other economic indicators.

#### 2. Geocoded the housing element addresses

Utilizing the Geographic Information System (GIS), we geocoded the addresses of each permitted housing project for 2015-2023 in Sonoma County to construct a map for analysis purposes.

#### 3. Joined the geocoded addresses with the SCTA TAZ shapefile by spatial location

After constructing the 2015-2023 housing elements map, we proceeded to overlay the map onto the Transportation Analysis Zone map with the Sonoma County shapefile provided by SCTA.

- In GIS, we joined the geocoded points on the map to each respective Transportation Analysis Zone.
- This join file created a new field and placed the housing element projects into their respective TAZ for analysis.
- SQL Query was used to verify each TAZ.

#### 4. Comparison of projects/units from the Housing Element to the Pipeline.

- This focused on comparing projects in the housing elements to the pipeline (projects from the 2007-2014 housing elements) for each TAZ. Since the housing element projects are current, we compared the TAZs containing both 2015-2023 Housing Element Projects and Pipeline projects.
- However, the pipeline projects cover additional cities, towns, and unincorporated areas of Sonoma County that are not captured within this analysis.
- The average difference in projects was 6 projects per TAZ. There was an average difference of 79 additional units per TAZ for the 2015-2023 housing elements in comparison to the pipeline projects.
- Differences (in projects or units) were highlighted in the excel file provided to SCTA. Additional notes were provided within the excel file to assist SCTA with their model.

#### Planned Project Issues:

There were some projects (listed below) in the 2015-2023 housing elements that had multiple addresses/parcel numbers but only one measure of the overall units in the project. We proceeded to weight the addresses based upon their size in acres. The following projects were weighted:

##### Petaluma

- Corona Road Subdivision
- North McDowell Commons
- Casa Grande Road
- Baywood LLC
- Ravenscroft TR
- Orciuoli TR
- Cedar Grove Property
- Iris Asset LLC

- Schram Property
- Haystack Mixed Use Project
- Lind Menary Lind
- South Petaluma Properties
- Royal Petroleum
- Husary Property
- Soernsen Property
- Davidson Homes
- Maria Drive Apartments
- Addison Ranch

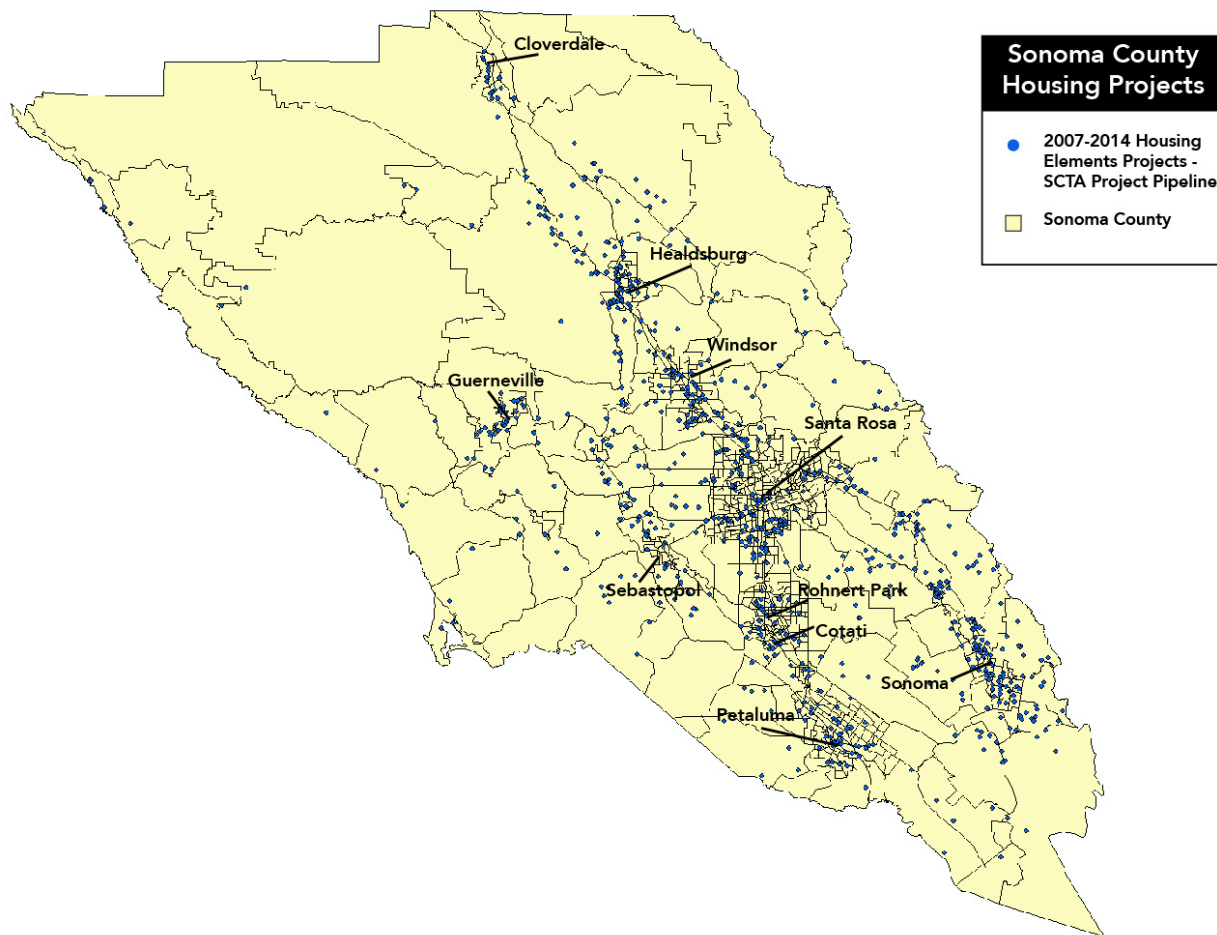
##### Windsor

- Windsor Rd @ Highway
- Oak Park St.
- Old Redwood Highway

##### Santa Rosa:

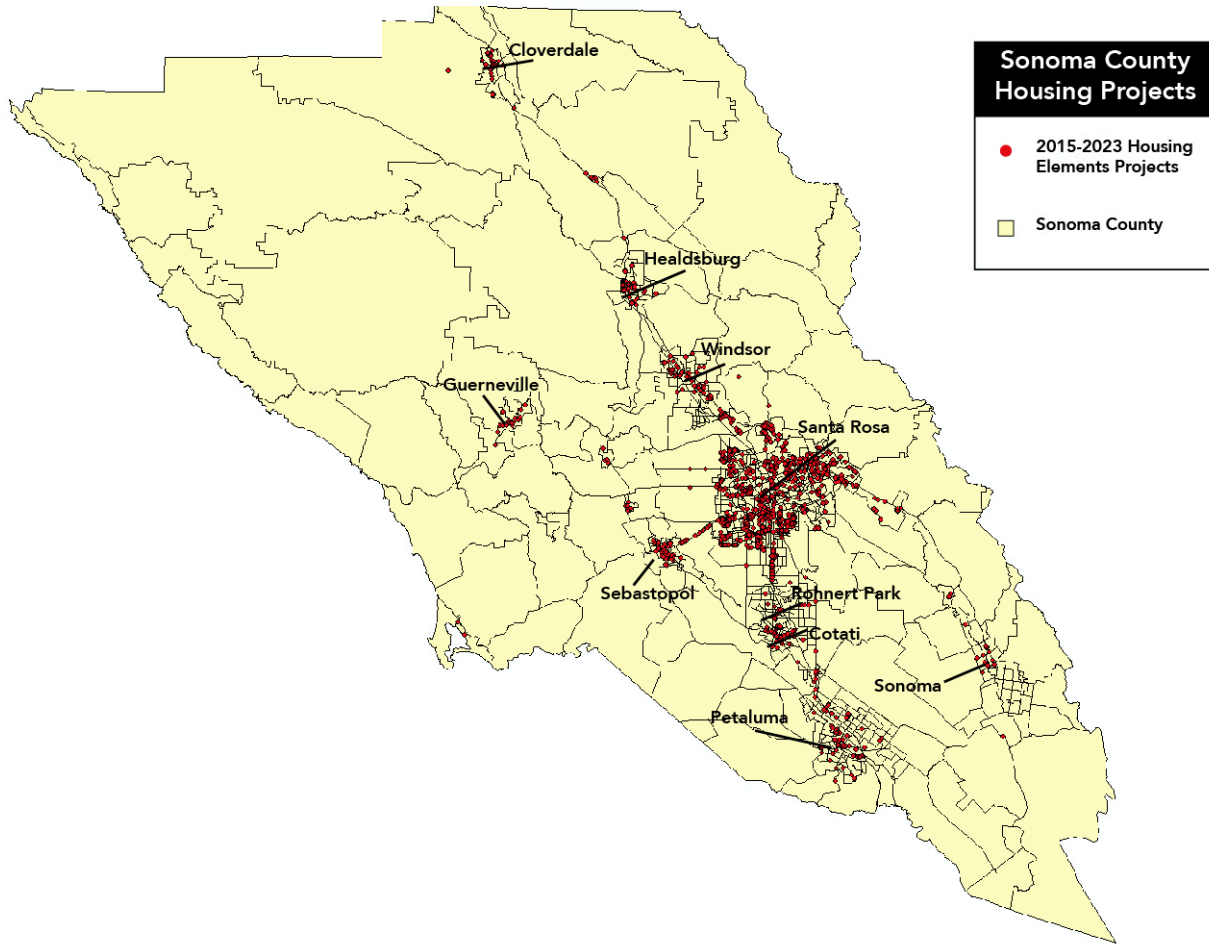
There was an issue with Tapian Way project addresses in Santa Rosa. Regardless of how granular we were while geocoding, the addresses continued to map to New Mexico. These projects are generally 1 unit each, so they aren't a significant factor in units, but it is something to note for the SCTA TAZ model.





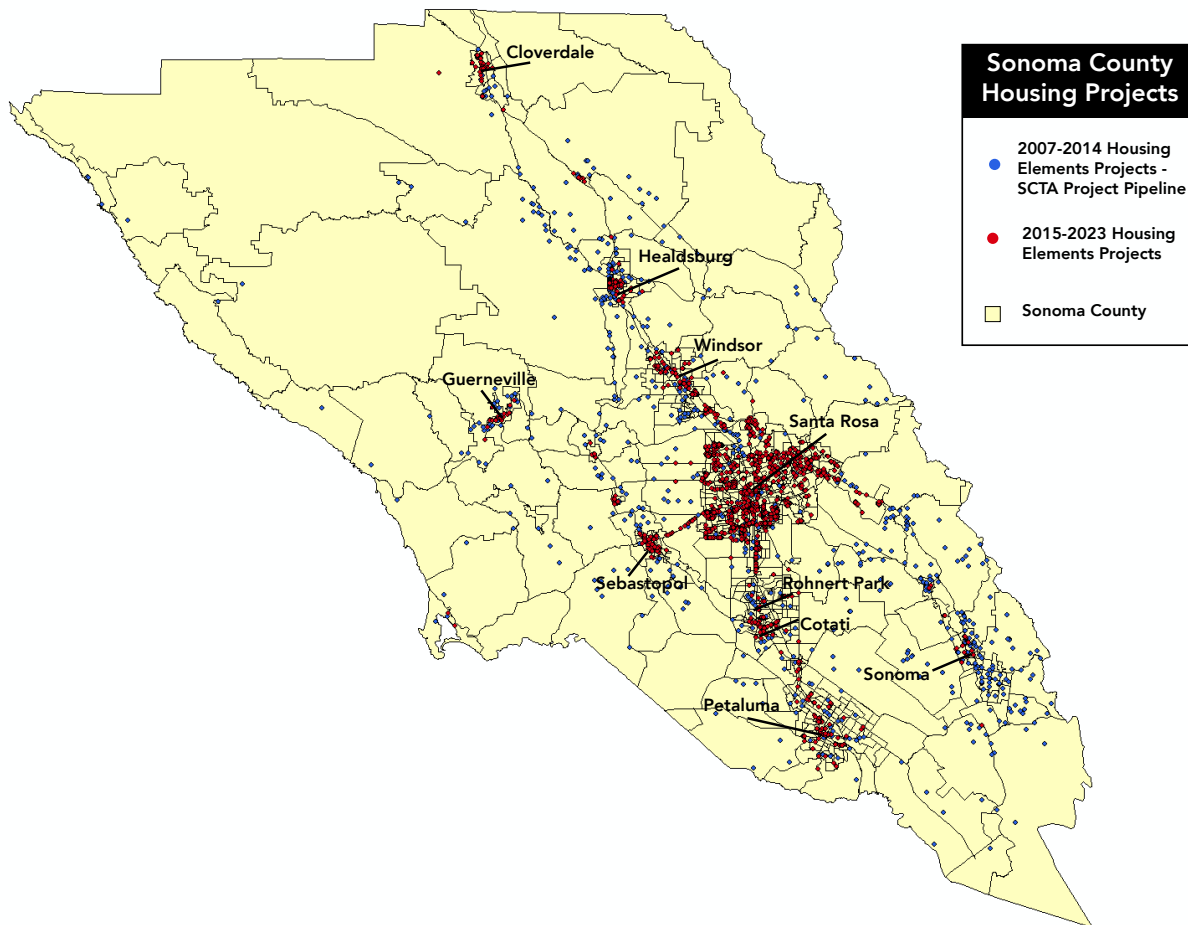
## Analysis

The map above displays the different housing pipeline projects used in the SCTA TAZ model. The pipeline projects are from the 2007-2014 housing elements across Sonoma County. Upon initial analysis, we observe that most of the housing projects are located away from the densely populated city centers. Most of these projects are for single family residences (SFR) or ranchettes. Additionally, many of the projects are located in unincorporated land in Sonoma County.



### Analysis

The map above displays the different housing projects identified in the 2015-2023 housing elements in Sonoma County. We observe that these housing projects are more densely populated in city centers in comparison to the 2007-2014 pipeline projects. This indicates a shift towards urban development in downtown centers. With Santa Rosa being the fifth largest city in Northern California, this map projects denser urban infill to be able to accommodate the growing workforce and population within city centers in Sonoma County



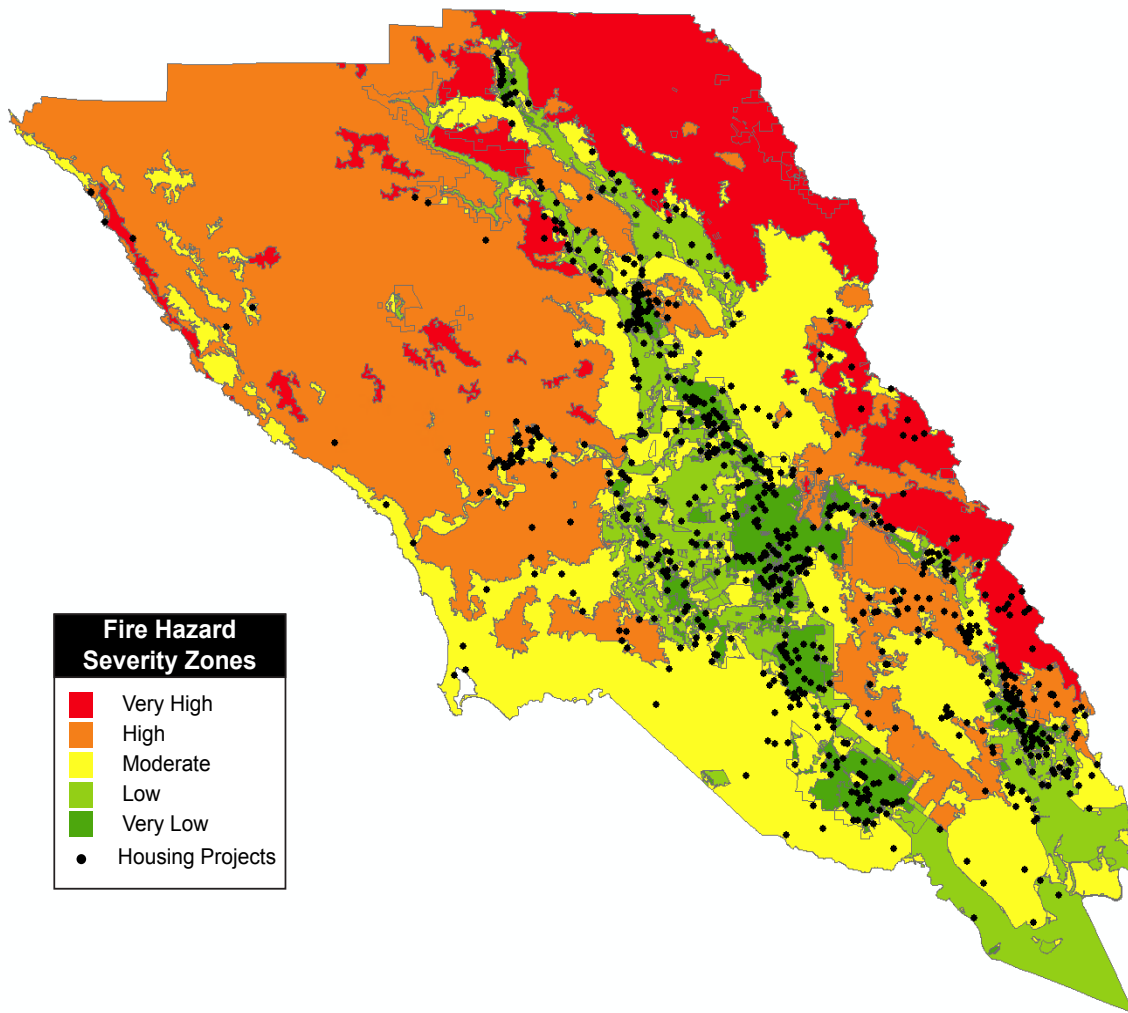
### Analysis

The map above displays the different housing projects permitted in the 2007-2014 and 2015-2023 housing elements in Sonoma County. We observe the differences between the two different sets of projects more clearly. The 2015-2023 housing projects are more densely populated in city centers in comparison to the 2007-2014 pipeline projects. This indicates a shift towards urban development in downtown centers. With Santa Rosa being the fifth largest city in Northern California, this map projects denser urban infill to be able to accommodate the growing workforce and population within city centers in Sonoma County.

## Wild Urban Interface (WUI)

After completing the analysis for the Sonoma County Transit Authority, we proceeded to analyze the sustainability of building the permitted housing projects across Sonoma County. To do this, we overlaid the geocoded addresses on top of the Wild Urban Interface (WUI) map of Sonoma County. This map indicates the potential hazard for wildfires within the county. The fire hazard risk ranges from very low to very high. Homes located in the very high fire hazard severity zones are significantly more prone to being burned down during a wildfire. Several projects are located

within fire hazard zones that range from moderate to very high. This has several adverse implications for the sustainability of housing in the county. With wildfires posed as an annual threat across California, specifically in Sonoma County, we have advised Sonoma County and city planners across the county to reconsider future housing project permits in terms of the proximity to the WUI. This will lead to enriched sustainability of housing within the county for years to come.





# 5

## North Bay Workforce Housing Needs Survey

### Introduction

The North Bay, along with the rest of the Bay Area is experiencing a housing affordability crisis that is negatively impacting families and their employers. The catastrophic fires in October 2017 exacerbated this situation by destroying over 5,000 homes in the North Bay. As the region rebuilds and builds the housing necessary for the next generation of people and their families, it is important to address their changing needs and preferences. The North Bay Workforce Housing Needs survey was and will be used to inform public and private sector decision-makers. The survey was developed by the Bay Area Council Economic Institute and was distributed in partnership with the Rebuild North Bay Foundation and the North Bay Leadership Council.

### Methodology

We created a 52 question survey to address the housing needs and preferences of the workforce in the North Bay (Sonoma, Solano, Napa, Lake, Mendocino counties). To conduct the survey, we utilized Qualtrics, an online survey software. The survey was available in English and in Spanish to accommodate all backgrounds. The survey was conducted from September 6th, 2018 through November 1, 2018.

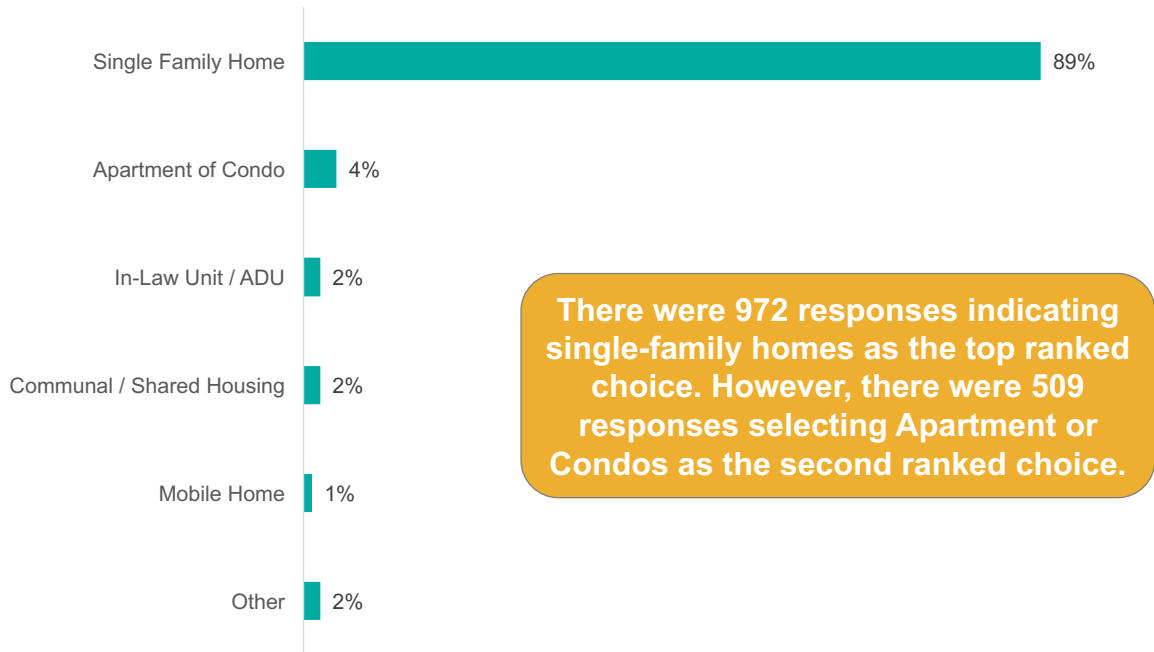
### Survey Respondents

There were a total of 1,181 respondents to the workforce housing needs survey. Eighty-seven percent of respondents lived in Sonoma County. Seventy percent of the respondents identified as female. The age of the survey respondents ranged from 18 years old to 65 years and older. Eighty percent of the respondents identified as being White. Seventy-two percent of survey respondents were employed full time and approximately 10% of respondents lost their home in the devastating 2017 fires. Initial preferences indicated that most respondents currently occupied single-family homes with nearly an even split of renters and owners.

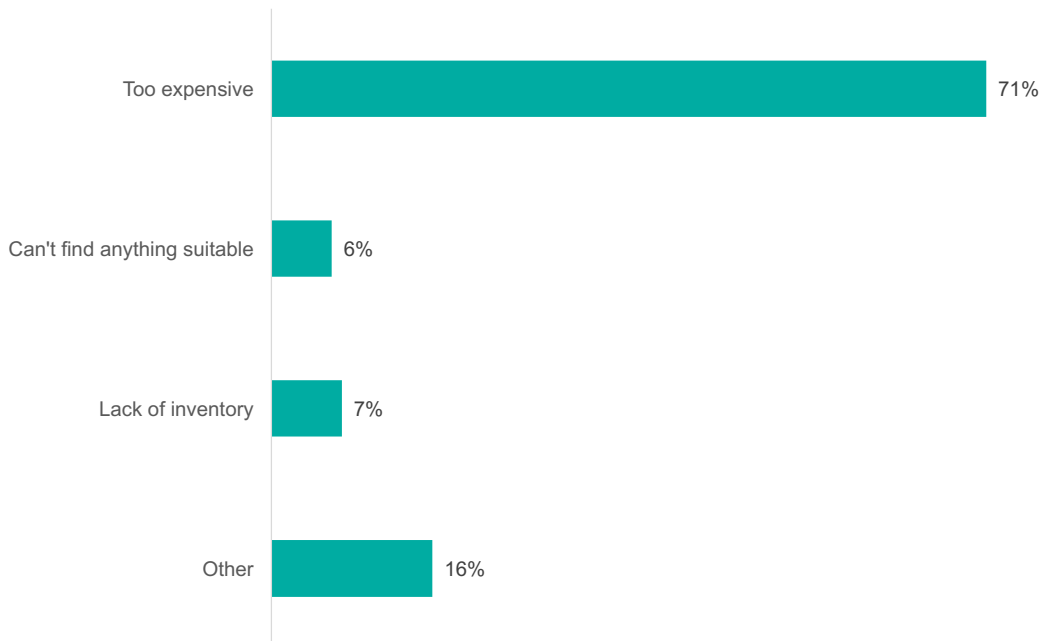
### Survey Results

The survey yielded significant findings for the housing and transportation preferences of the workforce in the North Bay. Some of the results from the survey are as follows:

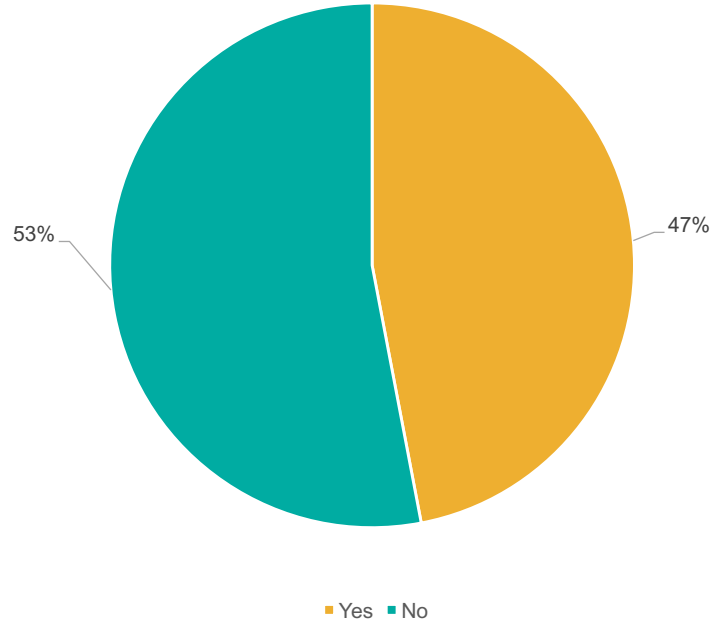
### Rank the type of dwelling you would prefer to live in: (1-6) These are the results for the 1<sup>st</sup> ranked choice.



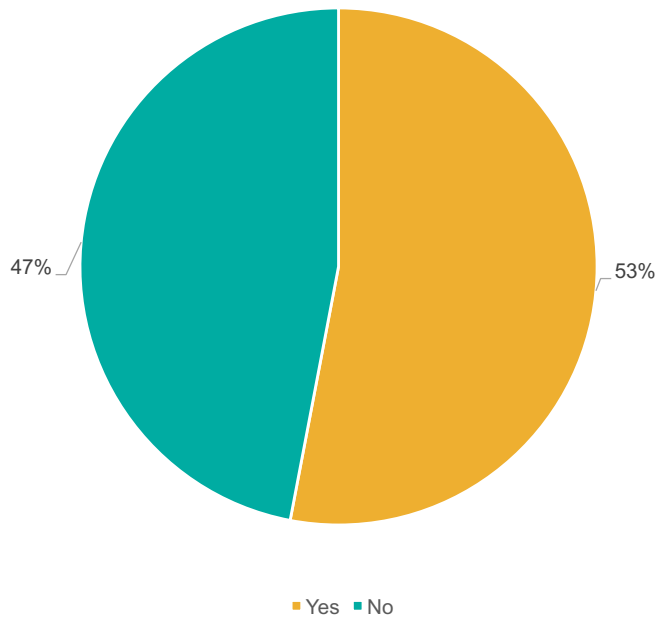
### If you prefer to live in a different dwelling than you currently occupy, what is preventing your from moving?



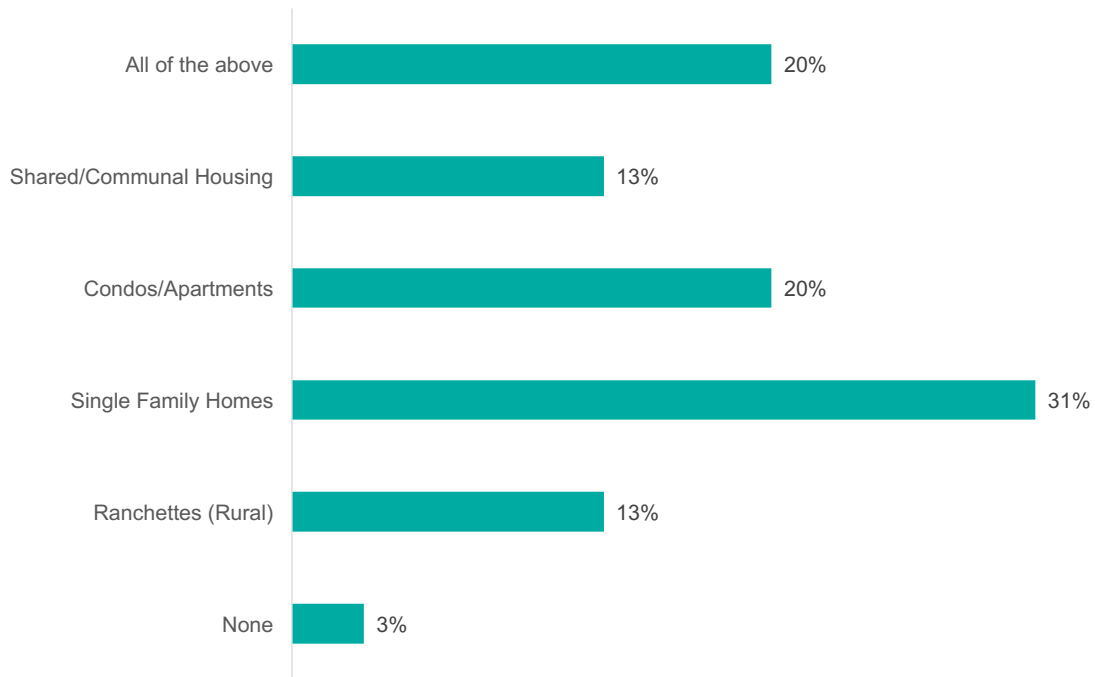
**In the next 5 years, do you plan on living in housing near public transportation (Bus, Lightrail, SMART, etc.)?**



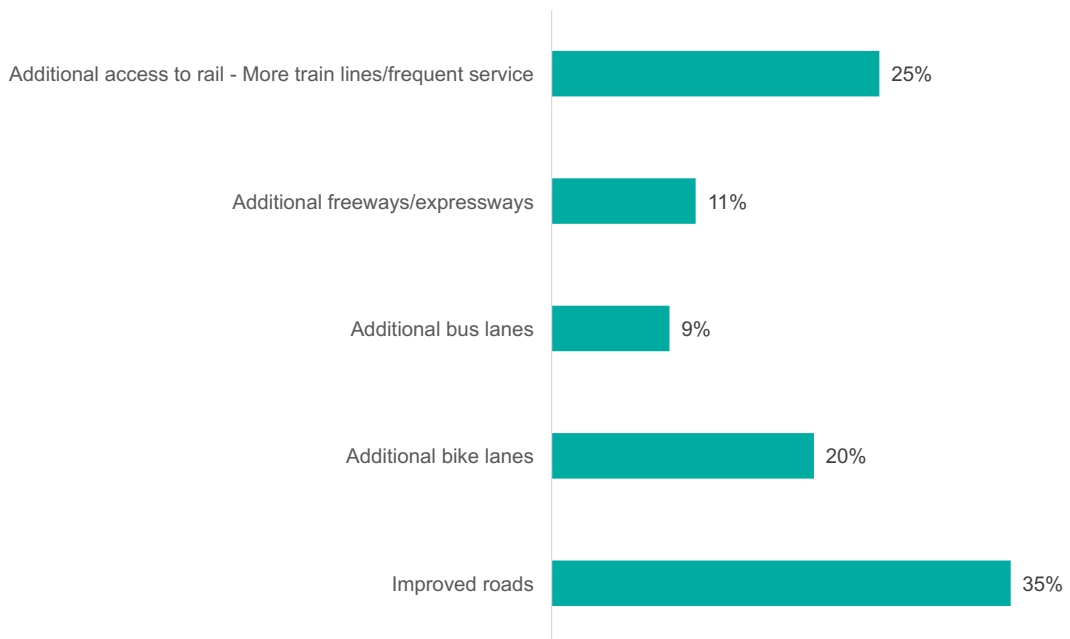
**Would you be willing to live in an Accessible Dwelling Unit (ADU) such as an in-law apartment?**



### What type of housing would you like to see built in the city you live going forward? (select as many as applicable)

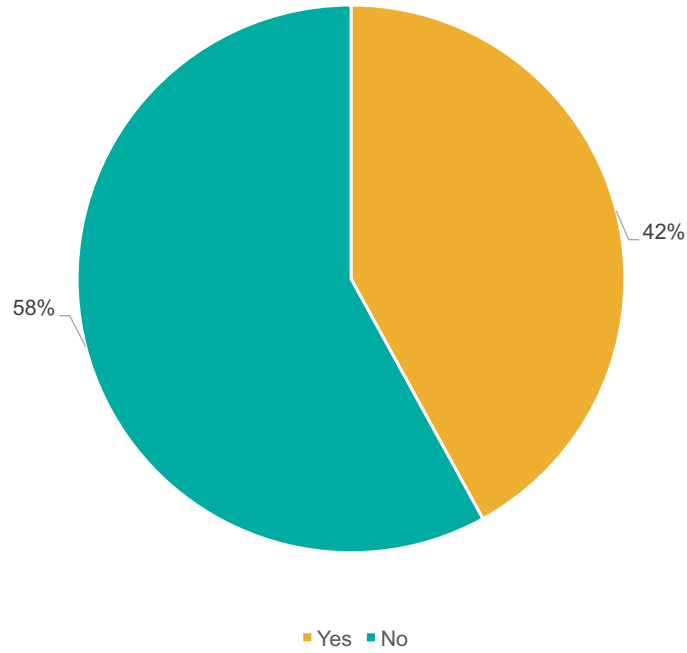


### What type of transportation improvements would you like to see built?

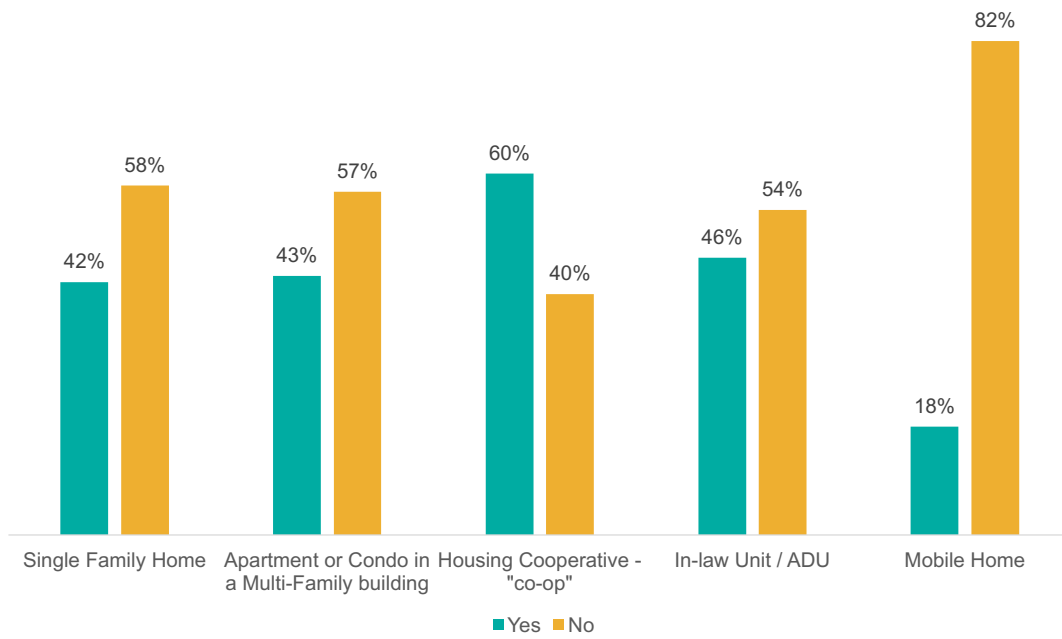




### Would you like to see higher density housing?



### Would you like to see higher density housing? Given current dwelling.





# 6

## Equity in Housing

### Introduction

The Sonoma County Community Development Commission has commenced an Equity in Housing Project to help Sonoma County address longstanding disparities in housing. Federal, state and local government policies have perpetuated these disparities, while the current political climate has made it more difficult to reach certain populations. Recently, immigrant community members have become even more reluctant to seek housing resources for fear of immigration enforcement, despite often needing those resources the most. This has resulted in a lack of representation from non-English speaking communities and communities of color in some Commission

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**The Equity in Housing Project includes two distinct but related components:**

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### An Assessment of Fair Housing

A countywide look at the impacts of policies, programs, zoning and market conditions across our communities that have a disparate impact on people in protected classes including minorities, seniors, people with disabilities, families with children, and others, puts equity at the forefront of the Commission's work

### The Equity in Housing Project

This project will guide the development of federally required 5-year planning frameworks for the Urban County, the City of Santa Rosa and the City of Petaluma, and will ensure that all of the Commission's work prioritizes equity in housing and opportunity first and foremost.

### Neighborhood Profiles

We created a series of neighborhood profiles for cities across Sonoma County. The cities include Cloverdale, Healdsburg, Rohnert Park, Cotati, Santa Rosa, Sonoma and West Sonoma County. These neighborhood profiles are used to assist the County with their countywide assessment of impediments to fair housing. The three entitlement jurisdictions, which include Sonoma County, the City of Petaluma, and the City of Santa Rosa, are mandated by the United States Department of Housing and Urban Development (HUD) to conduct this analysis. Each profile highlights the demographic and economic characteristics of the respective neighborhood.





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