



**ASSESSING THE  
REDWOOD CITY ECONOMY  
THROUGH INDICATORS, 2021**

**The State of  
Redwood City, California**  
*Indicators and Revenue Forecasts*

by Marin Economic Consulting

February 14, 2021

Exploring the economics, demographics, and well-being of Redwood City and its residents through indicators.

## Acknowledgements

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### Report Authors:

Jon Haveman, Ph.D.  
National Economic Education Delegation  
874 Fourth St, Second Floor #1  
San Rafael, CA 94901  
415-336-5705  
Jon@NEEDelegation.org

Robert Eyler, Ph.D.  
Economic Forensics & Analytics  
P.O. Box 750641  
Petaluma, CA 94975  
eyler@econforensics.com



# Executive Summary

## *Assessing the City with Indicators*

### **About this Report**

This report provides background or summary information of Redwood City (the City) in the form of indicators and provides a forecast of some key revenue sources for the City. These revenue sources are employment, property taxes, sales taxes, and transient occupancy taxes.

### **Using this Report**

Indicators are measures of various aspects of a regional economy. They help to provide an indication of the quality of life in a region and progress toward improving conditions in the local economy. This report focuses on indicators for changing demographics, incomes, housing markets, commute patterns, and employment in Redwood City. These indicators are compared to San Mateo County (the County) as a whole, the Bay Area, California, and the United States.

The picture painted by these indicators is of a very prosperous city in a very prosperous

county. It is on the whole slightly younger than the County, slightly better educated, and with higher incomes. Employment is of a very high quality for residents in Redwood City and commutes are relatively short. The same cannot be said of those commuting into the City. Their commutes are long and getting longer.

In normal times, these indicators would paint a very helpful picture of the future. However, we are not in normal times. The many structural economic changes that could result from the pandemic suggest infusing a grain of salt into many of these statistics and trends. As is discussed, there are many changes to the economy, some unknown set of which will be permanent.

Forecasts are included for employment, property taxes, sales taxes, and transient occupancy taxes. The forecasts indicate continued strong growth regionally with no sign of a recession. They also indicate a solid housing market with continued price appreciation through 2021.



Figure 1: Golden Gate Bridge: Gateway to San Francisco Bay

# Contents

## Key Observations

### Forecasts

Forecasts of the future in the middle of a pandemic are fraught with uncertainty. However, planning continues and reasonable forecasts are necessary to plan efficiently. Our forecasts are neither optimistic nor pessimistic about the future and are designed to provide a plausible basis for such planning. Central to our forecasts is projecting a return to pre-pandemic, or 2019, levels.

- **Taxable Sales:** It is not until 2023, or adjusting for inflation, 2024 until the City's level of taxable sales will return to its earlier peak. Central to this forecast is a relatively slow overall economic recovery and sluggish car sales.
- **Property Taxes:** Our forecast does not anticipate a boom in either residential or commercial real estate until fiscal year 2025-26. However, housing real estate is somewhat offsetting the downturn in commercial and overall taxable sales figures should continue to increase, though at a slower pace than otherwise would have been the case.
- **Transient Occupancy Tax:** Travel has been a particular casualty during the pandemic and with it transient occupancy taxes. In 2020, revenues were some 15% lower than in 2019. Recovery of 2019 levels is unlikely to be achieved until 2024.
- **Employment:** Here, the forecasts need to be thought of in two parts, though the forecasts are not dissimilar. The first, for employed residents is that pre-pandemic levels will be recovered by 2022. For overall City employment, it may take a little bit longer, or until 2023. Recall, however, that a simple recovery of pre-pandemic levels ignores growth that would likely have occurred in the absence of the pandemic. In both cases, this alternative level of employment is unlikely to be achieved in the forecast period, through 2026.

### Other Economic Trends

- **Housing Market:** After a pre-pandemic lull, Redwood City home prices are on the rise, suggesting a tight housing market going forward.
- **Population:** Redwood City has been growing faster than the County or Bay Area since 2010. Evidence from 2020 suggests that the pandemic has not altered this trend.<sup>a</sup>
- **Income:** Among California's largest cities, Redwood City has the 7<sup>th</sup> highest per capita personal income (\$74,326). Nationwide, its rank is 9<sup>th</sup>.
- **Earnings:** Prior to the pandemic, earnings in Redwood City were growing substantially faster than in the County as a whole.
- **Poverty:** Poverty rates in Redwood City are slightly elevated relative to the County, which is not surprising; in the Bay Area, poverty tends to be concentrated in urban areas.
- **Education:** Redwood City has both a high proportion of highly educated individuals (with an advanced degree) and relatively uneducated individuals (those w/o a high school diploma).
- **Race:** Redwood City has a large hispanic population in comparison with the County or the Bay Area, more closely resembling the racial composition of the state.

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<sup>a</sup>The Bay Area includes the nine counties that touch the San Francisco Bay: Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Sonoma, and Solano counties.

# Coronavirus Economics

There is an old curse, “may you live in interesting times”. The past year has certainly been that. Beginning about March 19, 2020, much of the local Bay Area economy came to a screeching halt. Stay-at-home orders were issued and most in-person service provision ceased. The exceptions were essential services such as grocery stores. Employment declined at a pace never seen before in the United States or likely any other developed nation.

In the intervening eleven months, much of the economy has recovered, but is functioning differently than it had before. Businesses that are not essential and do not require employees to be onsite have maintained work from home orders. Consumer spending has reoriented away from many forms of entertainment to goods consumption. There have been many changes to the economy, some of which are likely to be permanent, though it is difficult at this point to determine which. In what follows, we discuss these changes and some trends in some key economic statistics - GDP, employment - and how Redwood City is faring.

## ***Gross Domestic Product***

### **Why is it important?**

Gross domestic product (GDP) is the primary measure of the size of the economy. Throughout the pandemic, GDP has been below where it otherwise would have been. Looking at GDP provides one measure of how well the economy is recovering.

### **How are we doing?**

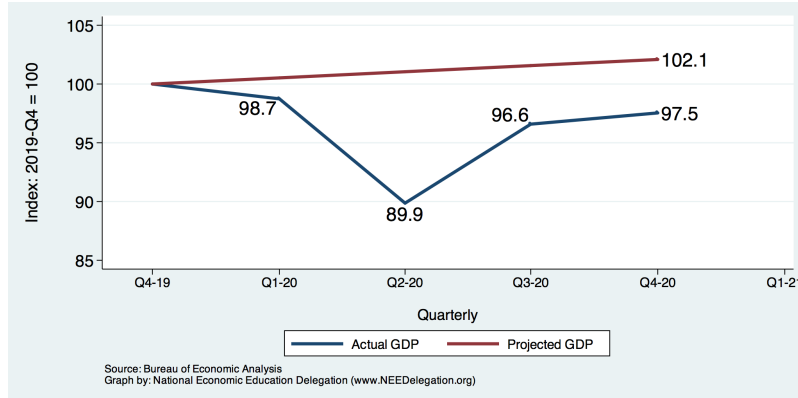
The fourth quarter of 2019 was the last quarter of economic activity unaffected by the pandemic. It was early in 2020 that the implications of the pandemic first became apparent and the economy began its contraction. Although the first two months of the first quarter of 2020 were largely unaffected by the pandemic, the implications for March were so severe that real, or inflation adjusted GDP declined by 5% on an annualized basis. It was the second quarter of 2020 when the contraction was particularly severe, with real GDP falling by an additional 31.4%. As the economy opened back up, real GDP rebounded with growth of 33.4%. Despite this dramatic rebound, the level of real GDP remained 3.4% below what it was at the end of 2019. It was even further behind where GDP would have been had the pandemic not occurred. At the end of 2020, with another increase in GDP of 4%, the level of

GDP remained 2.5% below the end of 2019, but 4.6% below where it might have otherwise been (97.5 versus 102.1 in the figure below).

Changes in GDP are primarily driven by changes in consumer spending. Consumer spending comprises roughly 67% of GDP, so changes in spending can have a big impact on GDP. As is clear from the images below, consumer spending declined significantly in March of 2020 (Figures 3-5). This decline, of over 30%, persisted for just a couple of weeks, after which spending gradually rose until the fall. This is all consistent with the changes in GDP illustrated above. In early January, consumer spending was still nearly 3% below its early 2020 levels. As with GDP, consumer spending would have increased over the course of 2020 were it not for the pandemic.

The pain from the pandemic has been hardly evenly distributed. People-facing sectors, such as restaurants and hotels, transportation, and entertainment and recreation, remain well below their early 2020 levels. Entertainment and recreation in particular is at levels barely half of what they were just a year earlier. Other sectors, of course, are doing quite well. As people are spending less on services, they are spending more on goods. Both the retail and grocery sectors of the economy are doing quite well.

Figure 2: GDP During the Pandemic



## Nonfarm Employment

### Why is it important?

Employment is a key indicator of the strength of the economy. As the demand for workers grows, so do the fortunes of the nation's households. As consumer spending declined rapidly during the pandemic, so too did employment. Job losses are part of the driving force behind the declines in consumer spending just discussed.

### How are we doing?

Employment is available on a monthly basis, so we are able to make comparisons with February of 2020. At its worst, in April, total nonfarm employment had declined by 14.5%. At the end of 2020, employment remained significantly suppressed at 6.5% below February levels. This represents the sharpest calendar year decline in employment in the last 40 years.

As with consumer spending, the effects have been felt differentially across industries (Fig-

ure 6). At the same time, there is no industry that has recovered its employment level of February, 2020. The financial activities sector is close, down just 1.2% relative to February, but all major sectors of the economy remain, sometimes significantly so, below pre-pandemic levels.

The employment effects have not been felt evenly by all different types of workers (Figure 7). High-wage workers, defined as those with annual incomes in excess of \$60,000, have seen an increase in employment since the pandemic started. Low-wage workers, on the other hand, have been disproportionately affected, with their jobs remaining 21% below their levels in January, 2020. A review of the hardest hit sectors easily explains this inequitable impact. People-facing sectors, restaurants, retail, entertainment, and transportation are all significant employers of low-wage workers.

## Small Businesses

### Why is it important?

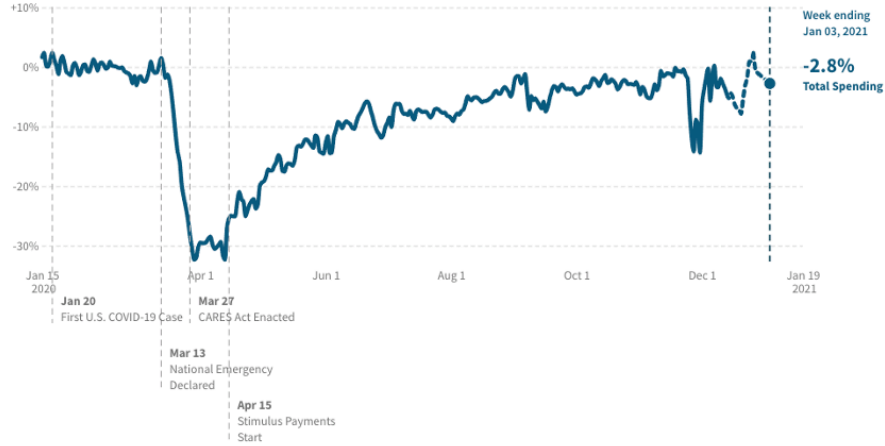
Small businesses are often heralded as the primary job creators in the United States. To

the extent that that is true, they are important sources of growth. The implications for small businesses through the pandemic may well have significant implications for growth go-

## Consumer Spending

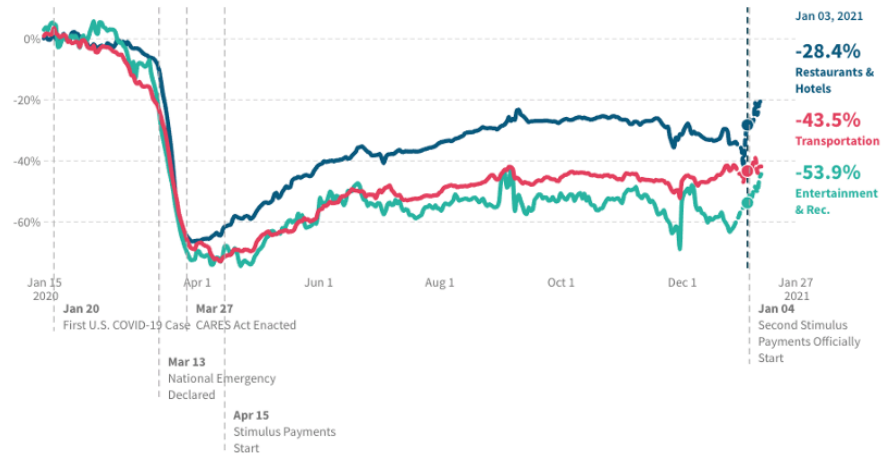
**Figure 3: Total Spending Changes**

In the United States, as of January 03 2021, total spending by all consumers decreased by **2.8%** compared to January 2020.



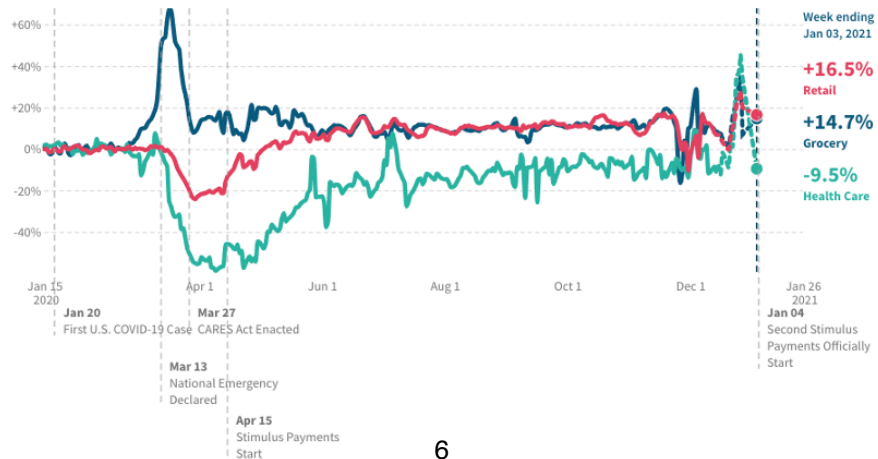
**Figure 4: Sectors Still Negatively Impacted**

In the United States, as of January 03 2021, restaurant and hotel spending by all consumers decreased by **28.4%** compared to January 2020.



**Figure 5: Sectors Doing Relatively Well**

In the United States, as of January 03 2021, grocery spending by all consumers increased by **14.7%** compared to January 2020.



## Employment Consequences

Figure 6: Employment Through the Pandemic

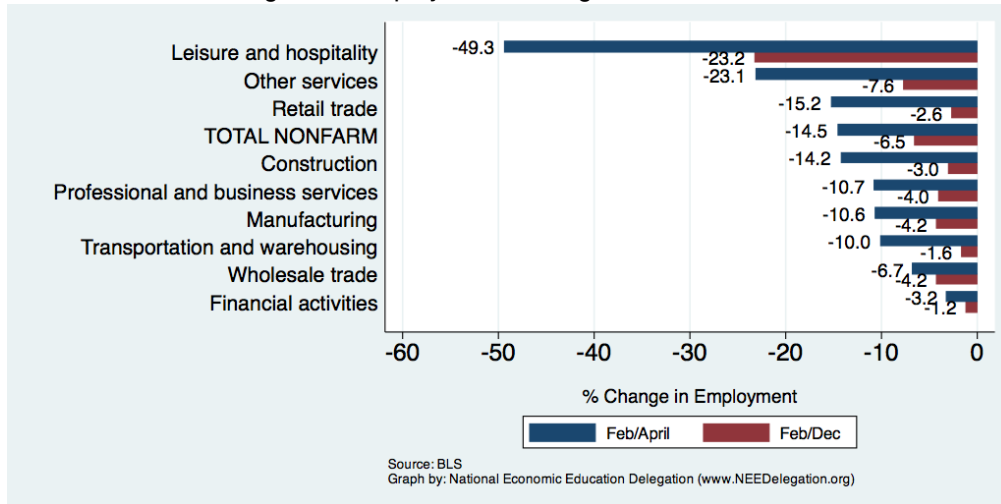
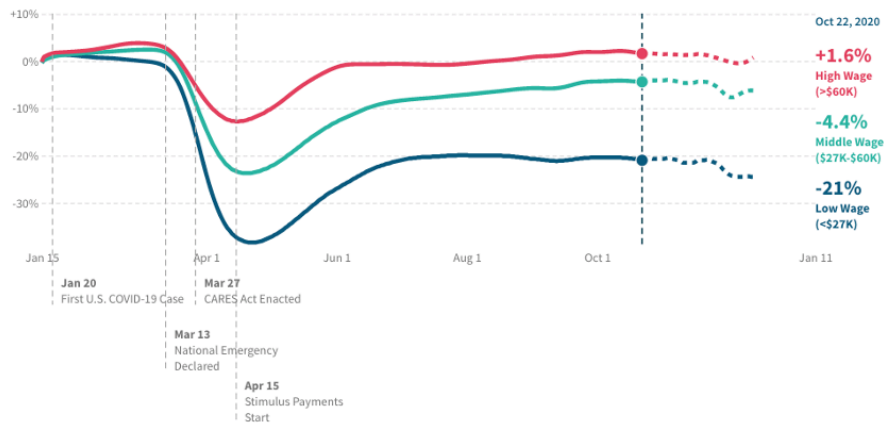


Figure 7: Employment Change by Wage Level

In the United States, as of October 22, 2020, employment rates among workers in the bottom wage quartile decreased by 21% compared to January 2020 (not seasonally adjusted).



ing forward. Tracking the status of small businesses during the pandemic is an important indicator of the health of the economy.

### How are we doing?

In the aggregate, nearly one in three small businesses that was open in January of 2020 was closed at the end of 2020. This is not to say that none of these small businesses will reopen when they are able, but that they are currently closed.

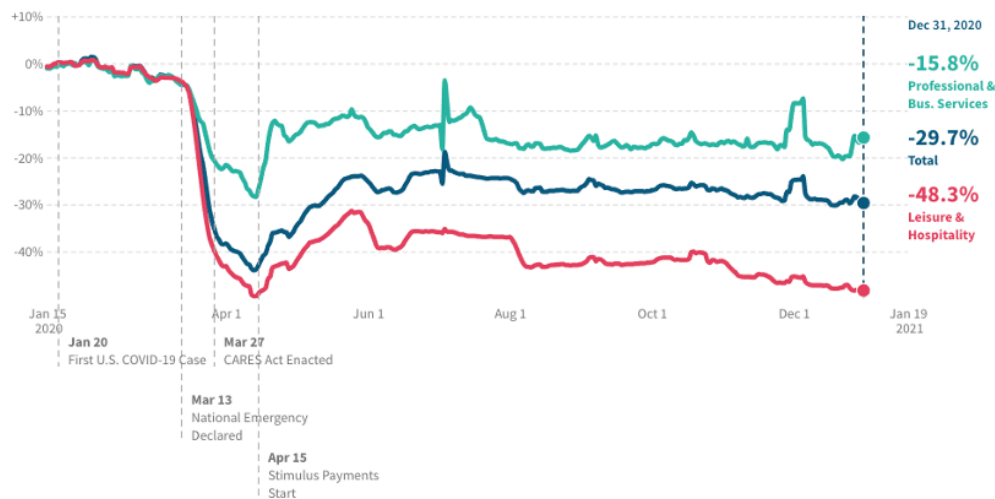
Many will reopen, but it is highly likely that many of these small businesses, and some of those that have remained open through the pandemic will be in a more financially precarious position than they were before the pandemic. There is ample evidence that most of the federal aid to businesses has bypassed small businesses. As little as just one-third of those small businesses requiring assistance received it from Federal sources. The rest borrowed from family and friends, business and personal credit cards, and other sources.

Figure 8 highlights the fact that, again, the impact was felt differentially across sectors. As with employment, all sectors of the economy have fewer small businesses operating than prior to the pandemic. The leisure and hospitality sector is doing particularly poorly, with nearly half of all small businesses in the sector currently closed. Surprisingly, 15.8% of the professional and business services sector's small firms are closed. An important side note is that we do not know from the data how many of these closures are permanent and how many are temporary.

The trends in numbers of small businesses open is less promising than the trend in consumer spending. Consumer spending appears poised to recover, while business closures have been increasing since July. This downward trend reflects the back and forth in policy regarding in-person activities. With each tightening of the restrictions, greater stress is placed on affected small businesses.

Figure 8: Small Business Closures Through the Pandemic

In the United States, as of December 31 2020, the number of small businesses open decreased by 29.7% compared to January 2020.





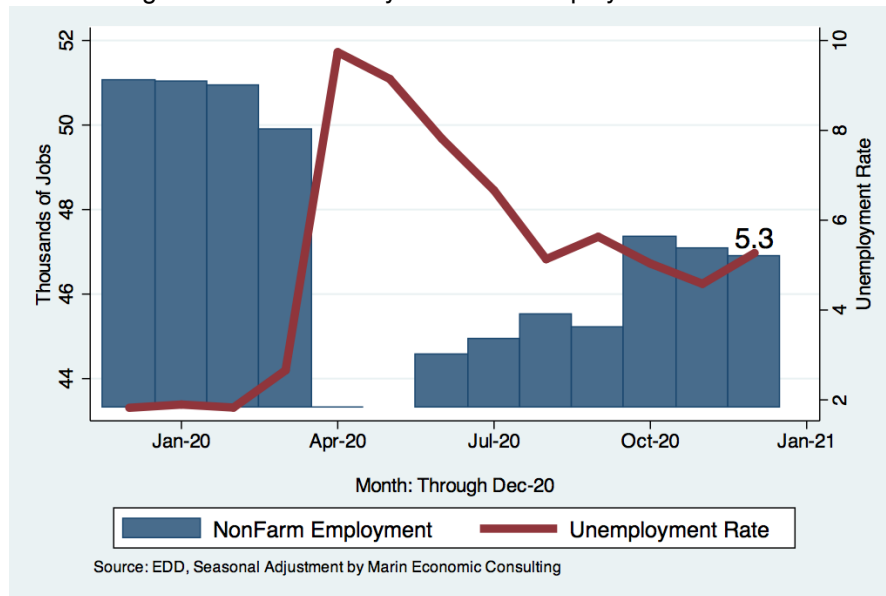
## Redwood City

Timely city level data are hard to come by in the best of times. And during the pandemic is no exception. Although a wealth of new highly detailed data on larger regions has been exploited to understand the implications of the pandemic, there is still very little to bring to bear directly on Redwood City. What we do have is from California's Employment Development Division. Figure 9 presents evidence on the path of nonfarm employment and unemployment in Redwood City. Employment has fallen by 4,168, from roughly 51,000 to 47,000, or about 8%, which is down further than is overall U.S. employment. It is worth noting, however, that roughly half of the job losses have been recovered.

The unemployment rate, however, remains lower than the national rate. Locally it is 5.3%, while it is 6.7% across the country. The difference here is the difference between the employed residents and employment in the City. Given the high cost of living, employed residents are more likely to be high-wage workers and less likely to have lost their jobs while many of those employed in the City will live elsewhere and their lost jobs will not affect the City's unemployment rate.

Unfortunately, data by detailed industry are not yet available for the City, but more is known about the MSA in which the City resides.

Figure 9: Redwood City Pandemic Employment Situation



## Regional Data

County-level employment data is also hard to come by. Accordingly, the following graphs present data from the San Francisco MSA, which includes Alameda, Contra Costa, San Francisco, and San Mateo Counties. Figure 10 provides a cross industry picture of employment

losses in the MSA. The blue bars indicate the percent of industry jobs lost between February (the pre-pandemic peak) and April (the trough of employment during the pandemic). Leisure & hospitality, as we saw nationally has experienced the largest loss of jobs. At the peak of job

losses, nearly 60% of all jobs in the sector had been lost. It has since recovered about one-third of the jobs lost.

Across almost all sectors, the story is the same, massive job losses upfront and then a partial recovery. Several exceptions stand out. These include important goods movement sectors: transportation and warehousing and wholesale trade. Employment in these sectors continued to decline through the second half of the year. Only the financial activities sector is in the black (or maroon) in terms of jobs since February. Although the data would surely be different for Redwood City if they were available, it is reasonable to assume that local job losses would be similar to those in the MSA.

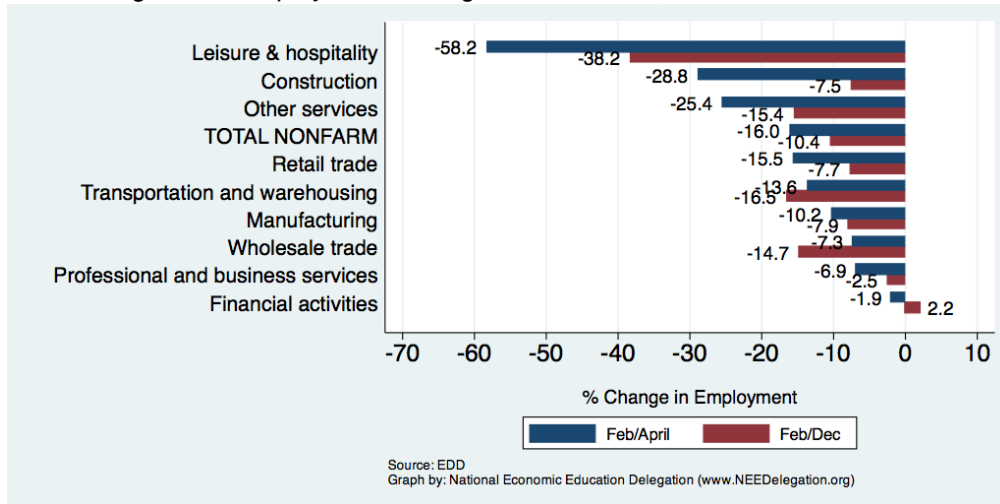
Among major MSAs, San Francisco's small businesses have experienced the second largest employment decline (Figure 11), with 46% of jobs lost. New York City is currently down just slightly more jobs at 47%. The job losses in

these regions are high relative to the nation, which is down just 28%. Nationally, one half of all jobs at small businesses have returned, while just one-third of these same jobs in the San Francisco MSA have returned.

With regard to small businesses in the MSA, HomeBase, and employee scheduling service for small businesses, has provided a wealth of data during the pandemic. These data are limited to their clients, of which there are many, but they are all small businesses.

Small business closures remain high in some sectors of the San Francisco MSA (Figure 12). Leisure and entertainment again tops the list, followed by beauty and personal care and other in-person services. All of these data indicate that there remains a long way to go to recover the economic activity that was present before the pandemic in the MSA and likely in Redwood City as well.

Figure 10: Employment Through the Pandemic, San Francisco MSA



### The Way Forward

The economist's crystal ball has been and continues to be especially murky during the pandemic. So much of the progress on economic recovery depends on getting the virus under con-

trol. At this point, that is a function of mask wearing, social distancing, and vaccine distribution. The message seems to be getting out and virus cases are falling rapidly in most localities. Na-

Figure 11: Employment at Small Businesses Through the Pandemic: MSAs

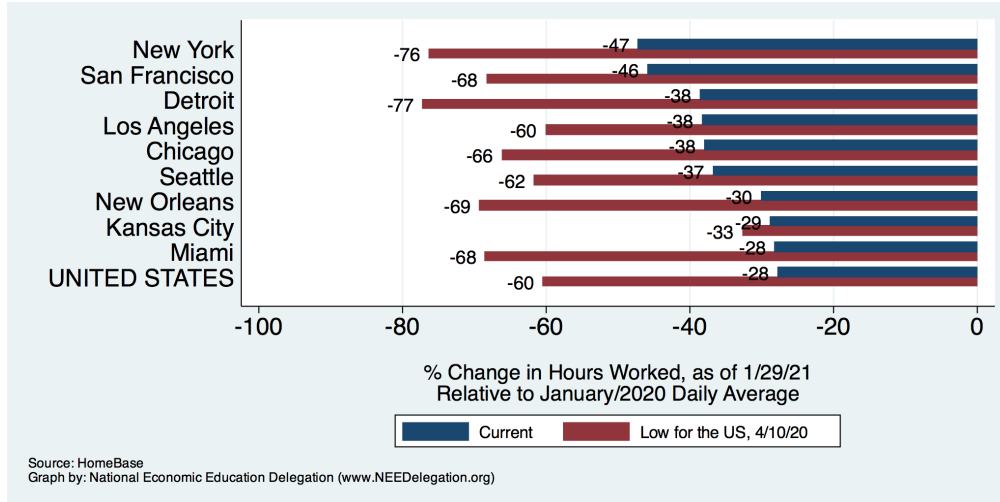
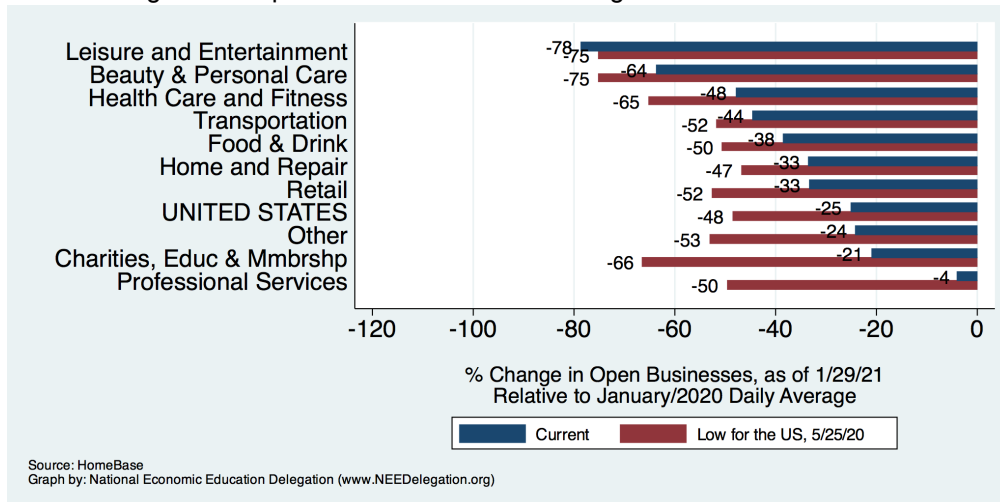


Figure 12: Open Small Businesses Through the Pandemic: MSAs



tionwide, the 14 day trend in cases is down 24% (as of February 2). There is lots to be hopeful for. Vaccines are being distributed and more vaccines are coming on line, which should further speed distribution around the world.

Accordingly, the Congressional Budget Office has just released a very optimistic forecast of the future of GDP and employment growth.

**Real GDP** expands rapidly over the coming year, reaching its previous peak in mid-2021 and surpassing its potential level in early 2025. The annual growth of real GDP averages 2.6 percent during the five-year period, exceeding

the 1.9 percent growth rate of real potential GDP.

**Labor market** conditions continue to improve. As the economy expands, many people rejoin the civilian labor force who had left it during the pandemic, restoring it to its prepandemic size in 2022. The unemployment rate gradually declines throughout the period, and the number of people employed returns to its prepandemic level in 2024.

Essentially, GDP achieves its previous growth path in 2025 and full employment is achieved in

2024. This is an optimistic view of things, but is not outside the realm of possibility.

Of perhaps greater interest are structural changes in the economy following a return to unconstrained movement. The inclination to say "return to normal" is great, but things will not likely look normal for quite some time. In terms of changes, the pandemic has been more of an accelerant than a change agent. It pushed the economy faster in directions that it was already headed. And some of these trends have very significant implications for housing, transportation, and other important aspects of the local economy.

### Accelerated Trends

- **Retail:** E-commerce has been making inroads into the retail sector for over twenty years. While e-commerce's share of retail was less about 3% in early 2006, it had grown to 10% in early 2020 (Figure 13). That trend accelerated into the pandemic, with e-commerce's share of retail peaking at just under 16%. It has since declined to 14.3%, but is still significantly elevated relative to the prepandemic levels. It is likely that brick and mortar retail stores have suffered a blow from which they may never recover, but was likely coming regardless of the pandemic in the next few years.

- **Telecommuting:** Throughout the pandemic, those who could have been working from home. This is a grand experiment in telecommuting that is going to be an enormous source of productivity growth ultimately. Through this experiment, many firms are finding that telecommuting works. When the pandemic is over, it is highly likely that most employees will return to the office. It is equally likely that many will not. Untold numbers of tech workers are banking on telecommuting continuing and have moved out of the Bay Area. That is likely a gamble, but will hopefully pay off for many of them. Twitter's announcement that employees will never again come into the office is an ex-

treme viewpoint is seems unlikely to hold over the long term.

What is clear is that many workers will spend more time working from home after the pandemic than would otherwise have been the case. This has implications for housing markets as housing near the office is not so highly valued - residences will space out. It has implications for transportation. Many fewer people will commute each day. It has implications for retail and eating establishments in urban settings as more people will be eating from home or in their suburban neighborhood. There are surely many other implications that will be revealed over the course of the next three to five years.

- **Telehealth:** As the internet has permeated throughout society and into more and more homes nationwide, services that can be increasingly being provided electronically. Some forms of health services are good candidates for receipt over the internet. There was a trend toward increasing the provision of these services that way before the pandemic, but the share of all doctors visits held electronically was very small. The pandemic is forcing a massive experiment in the electronic provision of health services. Of course, many doctor's visits are not good candidates for such visits, but many are. Historically, wait times in doctor's waiting rooms have been significant. One productivity improvement from telehealth will be a reduction in these wait times, or a more productive use of the wait time because the patient will be at home or the office. A second important productivity benefit will be a more efficient use of the doctor's time. Rather than going from room to room, washing hands, and otherwise servicing in-person patients, the doctor can now just stay in their office and move seamlessly from patient to patient. There should be an additional cost savings because there will be a lesser need for physical space by doctor's offices.

- **Business travel:** During the pandemic, business travel has largely stopped. There remains some travel, but it is at a much lower level than

in late 2019. During this time, many in business have explored and learned of the benefits of holding meetings electronically, through Zoom, WebEx, or some other online conference facility. It seems quite likely that some significant proportion of future business travel may well continue to be pursued through this technology because it is much cheaper. Granted, much of the business travel that happened prepandemic and that will be desired postpandemic will still be necessary even with a good electronic alternative. Consider, for example, the courting of a new client. For that very important activity, in-person meetings requiring travel will continue to happen. The implications for transportation providing businesses, airlines, in particular, are significant.

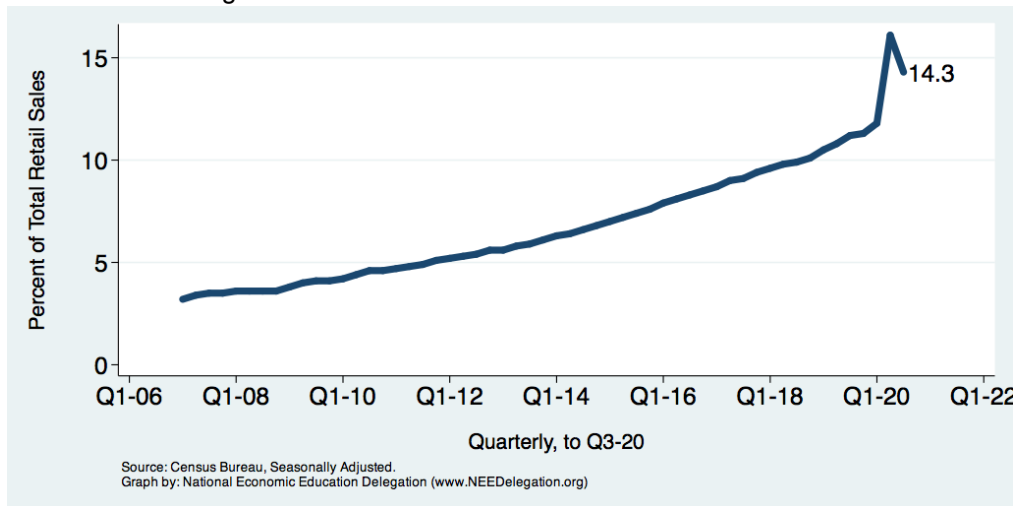
- **Wealth concentration:** The economic impact of the pandemic has been grossly inequitable. As we have seen, job losses among low-income workers have been much more significant than among higher income workers. Despite significant government spending designed to help these workers and their families (direct payments and expanded unemployment insurance), it remains the case that many lower income households are having to rely on their savings. This reduces wealth held in the lower half of the wealth distribution. At the same time, many of those in the upper half of the wealth distribution (Elon Musk, Jeffrey Be-

zos), are doing very well. Wealth concentration was growing rapidly prior to the pandemic and things have only accelerated over the last year.

- **Industry concentration:** Small businesses play a significant role in most sectors of the economy. Throughout the pandemic, the set of businesses hurt hardest, regardless of industry, are small businesses. Whether this is inherent in how they function, their financial position at the beginning of the pandemic relative to larger firms, or because of policies that were aimed to help them, but were not terribly effective (Paycheck Protection Program). Accordingly, there will be significant concentration at the end of the pandemic throughout the economy. This is a trend that was well underway prior to the pandemic, the implications of which are the subject of much debate among economists. The concern is twofold. First, that concentration will permit excessive price increases, which transfer money from consumers to the owners of the businesses. Second, as workers today tend not to enjoy the gains of their employer, this will lead to an increased concentration of wealth. The other side of the argument is that larger firms can exploit efficiencies, through economies of scale or through purchasing power. In principle, these efficiencies should lead to lower prices as well as a more efficient allocation of resources throughout the economy.

The implications for the economy are potentially enormous. The geography of employment may be less concrete, leading to a wider distribution of skills across the country. The nature of the workplace may be forever changed, with fewer people populating commercial office space. And retail may make up a much smaller share of downtowns. However, having never experienced such a disruption of the economy, it is extremely difficult to make predictions about the future. Some reversion to previous arrangements will no doubt happen, but the question of how much will not be answered for years to come.

Figure 13: Ecommerce Sales as a Share of All Retail



# Demographics

## A Snapshot of Redwood City

**Table 1. DEMOGRAPHIC SUMMARY**

Statistic	2019	2010
<b>POPULATION</b>		
Population Estimate	85,926.0	77,013.0
Veterans	2,195.0	3,342.0
Foreign born persons (% , 5yr)	34.0	32.2
Population age 25+	63,084.0	51,355.0
<b>AGE AND SEX</b>		
Persons under 5 years (%)	6.9	8.4
Persons under 18 years (%)	20.3	25.5
Persons 65 years and over (%)	13.7	11.3
Female persons (%)	52.2	50.2
<b>INCOME AND POVERTY</b>		
Median household income	138,913.0	76,468.0
Per capita income in past 12 months	74,326.0	38,846.0
Persons in poverty (%)	7.3	6.9
Children age less than 18 in poverty (No.)	1,379.0	1,952.0
Children age less than 18 in poverty (%)	8.0	10.1
<b>RACE AND ETHNICITY</b>		
White alone (%)	59.0	74.4
African American alone (% , 5yr)	1.7	2.8
American Indian or Alaska Native alone (% , 5yr)	0.7	0.8
Asian alone (%)	15.5	11.5
Native Hawaiian and Other Pacific Islander alone (% , 5yr)	1.0	1.0
Two or More Races (% , 5yr)	4.9	3.1
Hispanic or Latino (%)	30.1	39.3
White alone, not Hispanic or Latino (%)	46.9	42.6
<b>HOUSING</b>		
Housing units	33,563.0	28,156.0
Owner-occupied housing units (%)	45.5	54.2
Median value of owner-occupied housing units	1,570,300.0	763,000.0
Median selected monthly owner costs-with a mortgage	4,001.0	3,193.0
Median selected monthly owner costs-without a mortgage	800.0	629.0
Median gross rent	2,760.0	1,303.0
<b>FAMILIES AND LIVING ARRANGEMENTS</b>		
Households	32,199.0	26,963.0
Persons per household	2.6	2.8
Living in same house 1 year ago, % of persons age 1+	81.6	85.5
<b>EDUCATION</b>		
High school graduate or higher, % of persons age 25+	91.3	86.5
Bachelor's degree or higher, % of persons age 25+	54.1	39.8
<b>HEALTH</b>		
With a disability, under age 65 years	2,264.0	2,756.0
Persons without health insurance, under age 65 years (%)	5.5	14.4
<b>LABOR FORCE</b>		
In civilian labor force, persons age 16+ (% , 5yr)	70.8	69.7
In civilian labor force, women age 16+ (% , 5yr)	64.8	61.4
Employed, persons age 16+ (% , 5yr)	66.7	63.3
Self employed (% , 5yr)	10.7	14.1
<b>TRANSPORTATION</b>		
Mean travel time to work (minutes), workers age 16+ (5yr)	25.6	22.1
Using public transportation (% , 5yr)	9.7	5.2
Drive alone in private vehicle (% , 5yr)	73.4	75.8

Source: American Community Survey, Summary Files

Note: Data are from the 1-year files unless indicated by the notation 5yr.

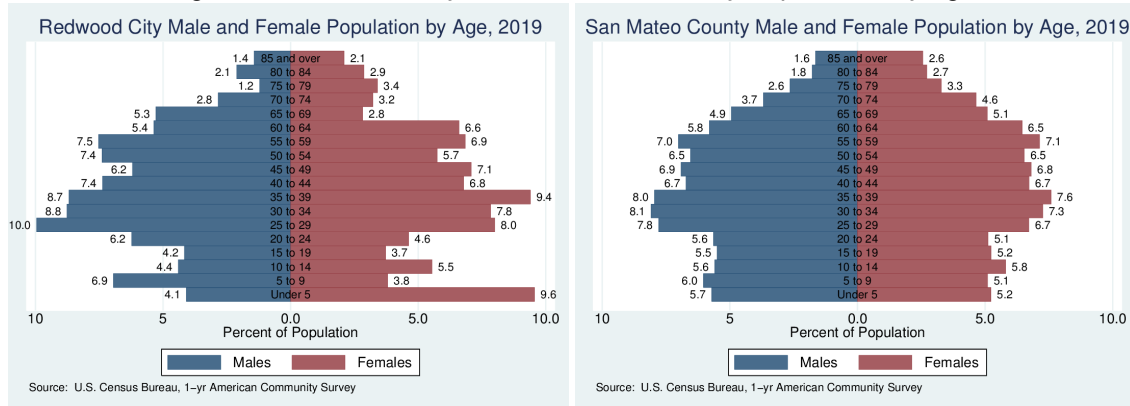
## Current Population

In 2020, the population of Redwood City as reported by the California Department of Finance was 84,179. According to the American Community Survey, the population skewed slightly towards women in 2019; women made up 52.2 percent of the population. The age distribution across the sexes differs slightly (Figure 14). At the top, the well established fact that women tend to live longer than men is borne out. The most common age for men is between 25 to 29, while it is higher, 35 to 39, for women. This is a significant change from 2015 when men's ages were higher and women's ages were

lower. There must have been something funny in the water over the last 5 years as there appear to have been more girls under the age of 5 than there were boys in 2019, significantly more, while the reverse was true just 5 years ago.

Relative to San Mateo County overall, there appears to be a slight concentration among younger folks in the City than is apparent in the County overall. The median age in Redwood City is 38, while it is 40 in the County as a whole.

Figure 14: Redwood City and San Mateo County Populations by Age



Overall, the racial composition of the population of Redwood City differs significantly from that of the County as a whole. White non-Hispanic and Hispanic populations are more heavily concentrated in Redwood City than in the County, while there is a significantly smaller proportion of Asian non-Hispanic individuals, 15.2% in the City relative to 29.3% in the County overall. The racial composition of Redwood City has changed over the last 13 years. Relative to 2006, the proportion of Asian non-Hispanic residents has doubled from 7.2% to 15.2%. The White non-Hispanic population declined by a little under 3 percentage points and the Hispanic population declined by a 7.6 percentage points.

Relative to the state as a whole, Redwood City has a very highly educated labor force. The proportion of workers with at least a bachelor's degree is significantly higher than in the state as a whole or even the Bay Area. At the same time, it is comparable to the County in terms of overall levels of education, but men with an advanced degree are more common in the City. Located as it is in the heart of Silicon Valley, this is hardly surprising.

In a dramatic shift from our 2017 report, it has a comparable incidence of individuals with less than a high school diploma as the County, about 9% of the population over age 25 is without a high school diploma. Statewide, 16% of the same population has not attained a high school diploma.



Figure 15: Redwood City and San Mateo County Populations by Race/Ethnicity

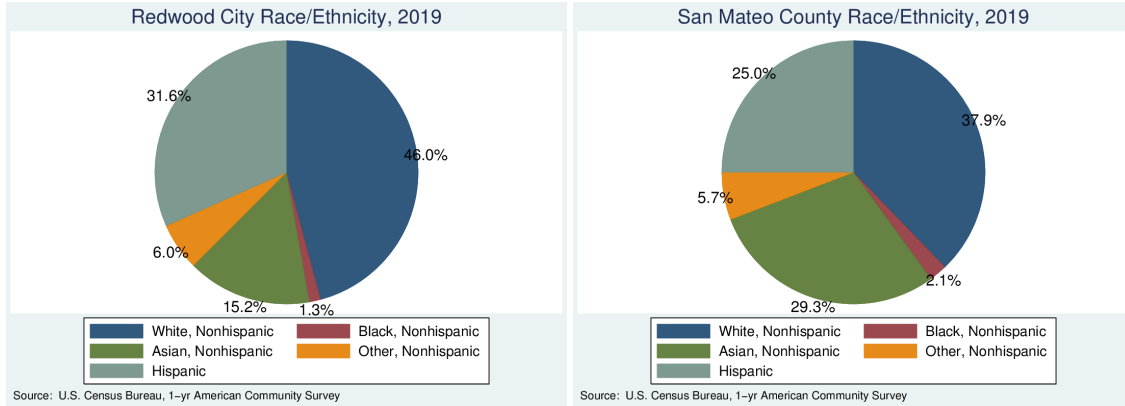
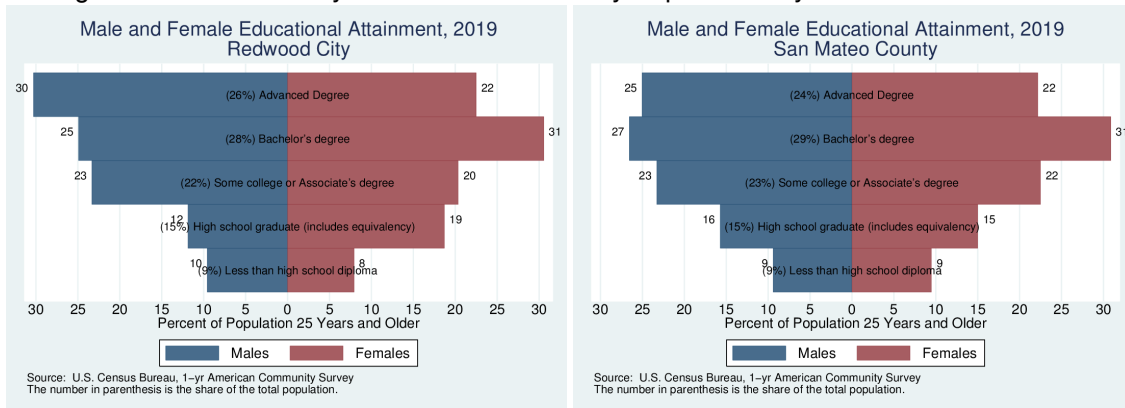


Figure 16: Redwood City and San Mateo County Populations by Educational Attainment



## Population Growth

Redwood City has been growing more quickly than has the rest of the County or California. Between 2010 and 2020, the population of Redwood City grew by 12.9%, compared with just 7.6% for the county overall. Although the population of the County fell between 2019 and 2020, the population of Redwood City grew.

The California Department of Finance has forecast that the population of San Mateo County will increase by 16% relative to its 2010 level.

Forecasts of growth by age and race/ethnicity do suggest changes in the demographics of the County and possibly the City. By 2060, the pop-

ulation will be significantly older, with a much higher proportion of individuals aged 65 or older. The County will also continue the trend of de-

Having already grown by 7.6% in 2020, that suggests growth of roughly 7.7% between 2020 and 2060, with almost all of that growth occurring by 2039. Employment in the County will continue to grow through 2048, but then will decline back to 2039 levels in 2060.

Growth prospects are better for the City than the County, but is significantly diminished relative to just 5 years ago, with growth of less than 10% between 2020 and 2060.

Figure 17: Bay Area and California Populations by Educational Attainment

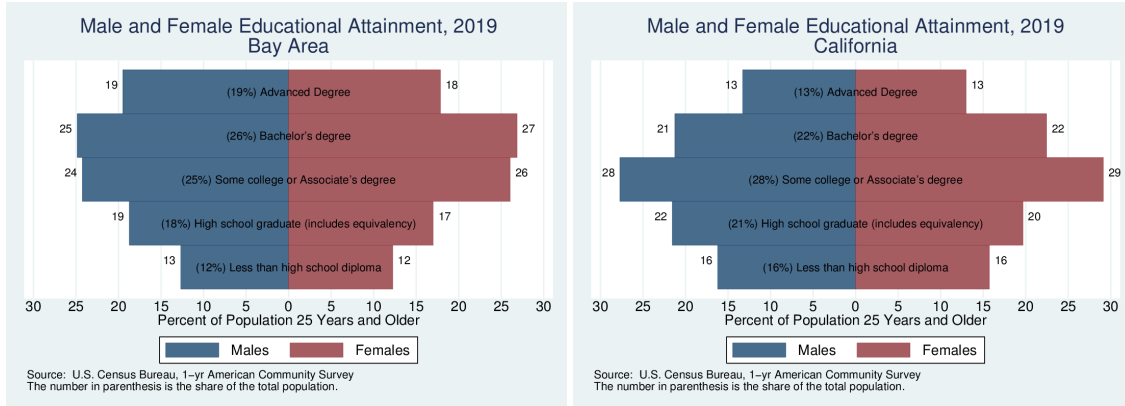


Figure 18: Population Growth

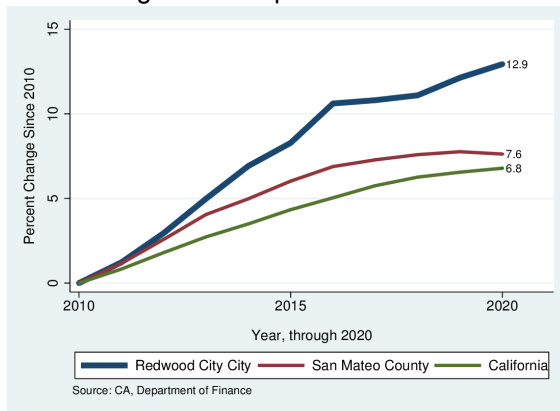
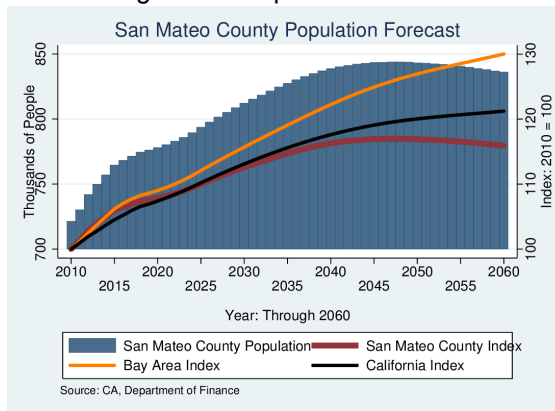


Figure 19: Population Growth



clining share of White nonhispanics in the population. Both the share of Hispanics and those identifying as some other race (including Asian) will continue to grow into the future.

In San Mateo County, births and to a lesser extent net immigration contributed negatively to population growth between 2019 and 2020. That marks the fifth year in a row that net migration

has reduced population growth - at an accelerating rate of decline (Figure 22). At the same time domestic migration contributed positively to the County's population between 2019 and 2020. This is an inverted picture relative to 2016 when births and net immigration were contributing positively and deaths and net domestic migration both reduced population growth.

Figure 20: San Mateo County Population Forecasts by Age and Race

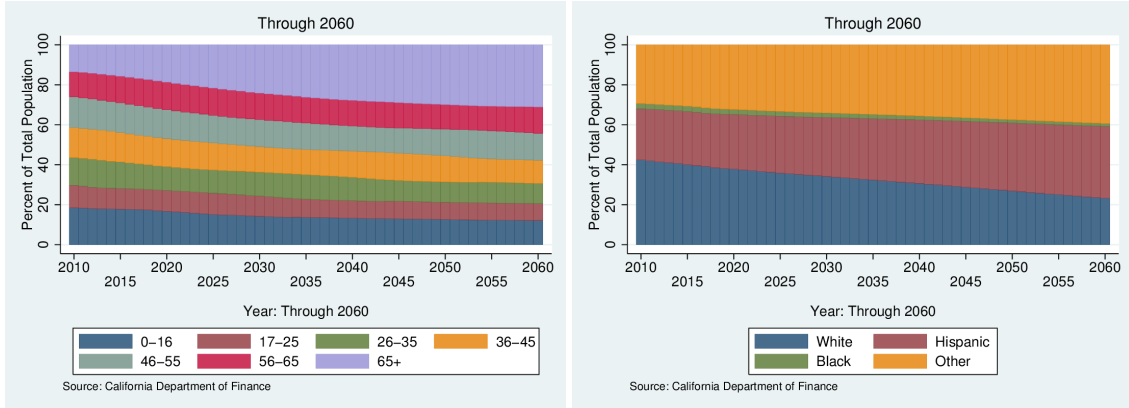


Figure 21: San Mateo County: Decomposition of Figure 22: San Mateo County: Population Change - Primary Components

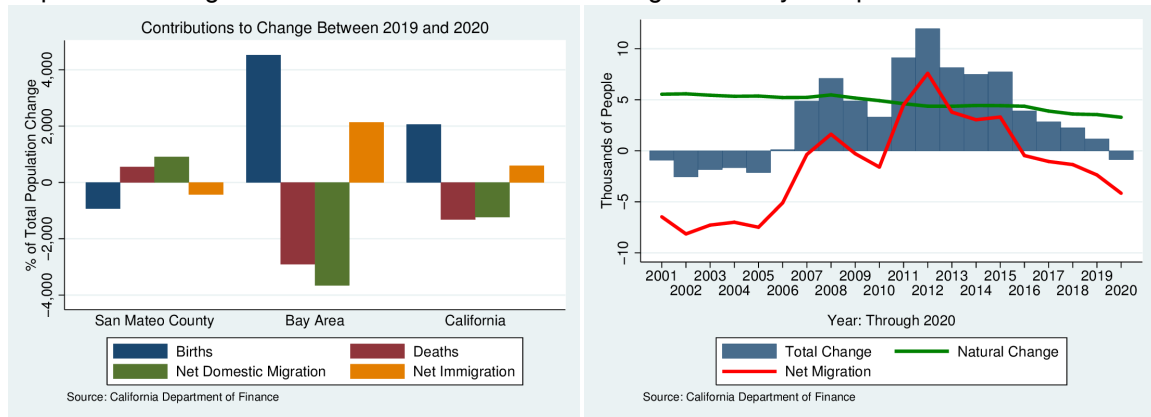


Figure 23: San Mateo County: Natural Population Growth

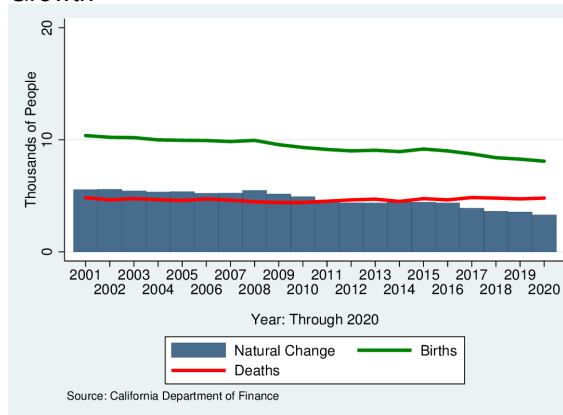
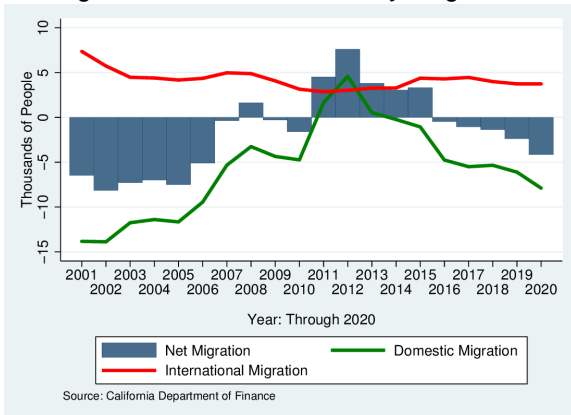


Figure 24: San Mateo County: Migration



# Income and Earnings

## Per Capita Income Growth

### Definition:

Per capita income is the average income per person in Redwood City. Personal income is the income received by, or on behalf of, all persons from all sources: from participation as laborers in production, from owning a home or unincorporated business, from the ownership of financial assets, and from government and business in the form of transfer receipts. Non-cash government benefits are not included.

### Why is it important?

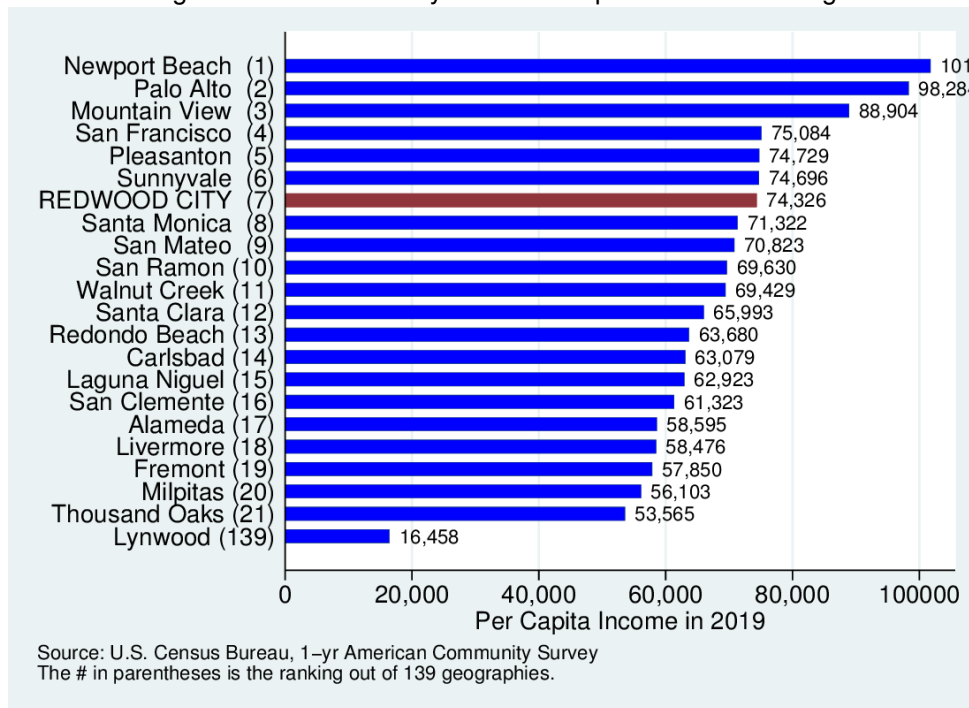
Income is the money that is available to persons for consumption expenditures, taxes, in-

terest payments, transfer payments to governments and the rest of the world, or for saving. As such, it is an important indicator of economic well-being in a community.

### How are we doing?

In 2019, per capital personal income in Redwood City was \$74,326. At that time, there were only six cities in California that had higher per capita personal income. Not surprisingly, five of those six cities are located in Silicon Valley or the Bay Area more broadly. Palo Alto, just to the south of Redwood City had the second highest recorded per capita income in 2019 at just over \$98 thousand.

Figure 25: Redwood City Real Per Capita Income Ranking



In 2019, the residents of Redwood City experienced a dramatic increase in per capita income. Per capita income is total income in the City divided by the total population. The Census Bu-

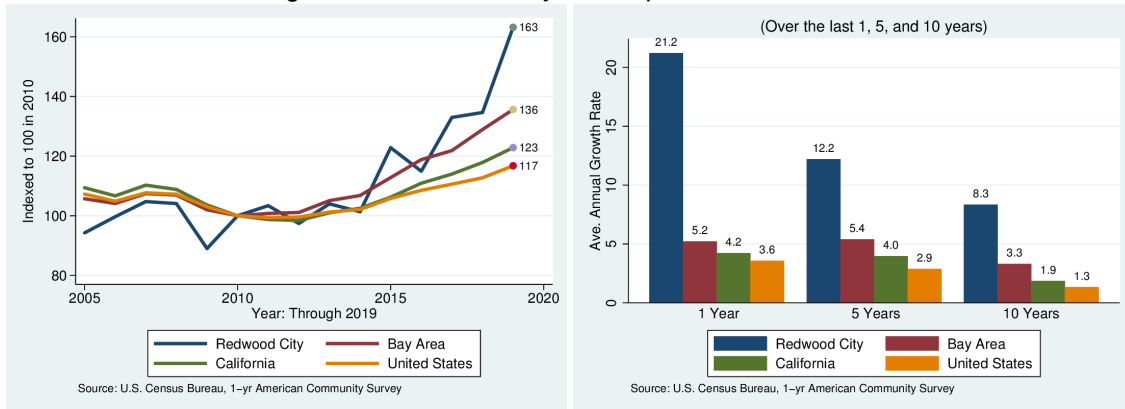
reau reports that the population increased from 2019 to 2020 at about the same rate that it had been for the last several years, or even a bit faster, but aggregate income increased enor-

mously. Between 2018 and 2019, aggregate income in the City increased from \$5.2 billion to \$6.4 billion, or by about 23%. The source of this increase is unknown and its veracity will only be known when the 2020 data are released in September, 2021.

Income growth in Redwood City has historically outpaced the broader Bay Area region, California, and the U.S. as a whole (Figure 26). Over

the last 10 years, incomes in the City have grown at a rate of 8.3%, nearly three times faster than in the Bay Area as a whole at 3.3%. Over the last 5 years, the rate of growth in the region has increased relative to the City, though both are growing faster than the 10-year average, 12.2% and 5.4%, respectively. The year 2019 appears to have been a remarkable one for Redwood City, with per capita income growing by more than 21%.

Figure 26: Redwood City Per Capita Income Growth



At \$74.3 thousand, the level of per capita income in Redwood City is higher than in all but two counties in the Bay Area, Marin County (\$75.2 thousand) and San Francisco County (\$75.1

thousand). Nationwide, Redwood City ranks 9<sup>th</sup> in per capita among more than 589 cities for which data are available.

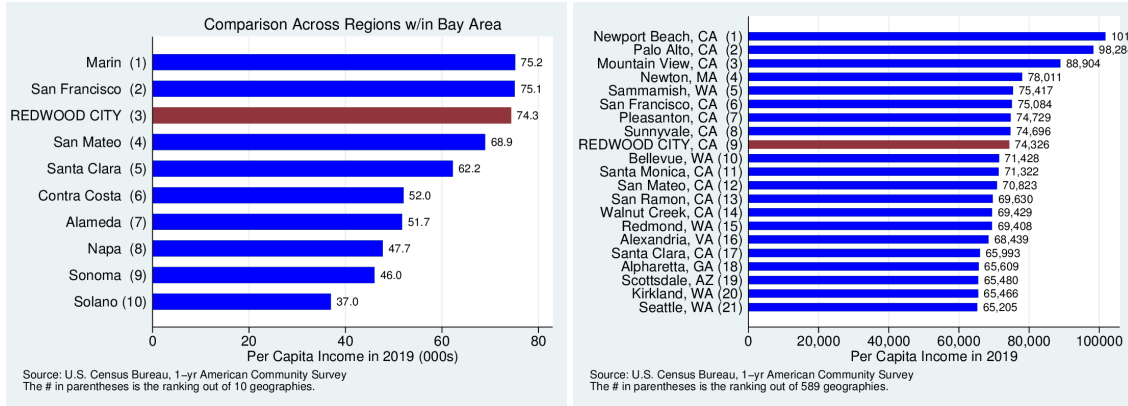
## Earnings

Earnings reflect the income derived from working at a job, as opposed to income, which includes monies derived from a broader set of sources. In 2019, median earnings for all workers 16 years and over living in Redwood City was \$71,812. This is a significant increase over \$56,286 in 2018 and helps to explain the dramatic increase in income discussed above. Median earnings in Redwood City are considerably higher than in the County as a whole, the Bay Area, California, and nationwide, with sig-

nificantly larger gains since 2007, just before the Great Recession. In those 12 years, median earnings in the state as a whole fell slightly, making Redwood City an extremely positive outlier.

The median figure masks stark differences in earnings across different levels of educational attainment and gender. The figure below provides an indication of how earnings changes with education and between men and women.

Figure 27: Comparison with Bay Area Counties and All Cities Nationwide, 2019



**Table 2. Median Earnings (Inflation Adjusted to 2019\$)**

Geography	2007	2019	% Change
Redwood City	51,821	71,812	38.6
San Mateo County	54,422	62,701	15.2
Bay Area	52,193	53,348	2.2
California	41,586	41,540	-0.1
United States	39,039	40,083	2.7

Source: U.S. Census Bureau, 1-year American Community Survey Summary Files.

In Redwood City, the upper left hand chart, men with a graduate or professional degree make more than 5 times more than men without a high school diploma. For women, the same figure is just over 4x more. Between men and women, the difference ranges from women making slightly more among those with some college or an associate’s degree (\$53 thousand for

women and \$48 thousand for men), to a very significant difference among those with graduate or professional degrees. At this highest category of education, men make almost 50% more than do women. This difference is big in Redwood City, but is larger still (in percentage terms) in the County and region, but smaller at the state level.

## Poverty and Inequality

### Definition:

The local poverty rate provides an indication of the well-being of those at the bottom of the income distribution. The federal poverty rate measures the proportion of households in the region that are classified as living in poverty. Also included are measures of the extent to which the City’s children are impoverished. Measures of the income distribution provide further evidence on disparities in income in the region.

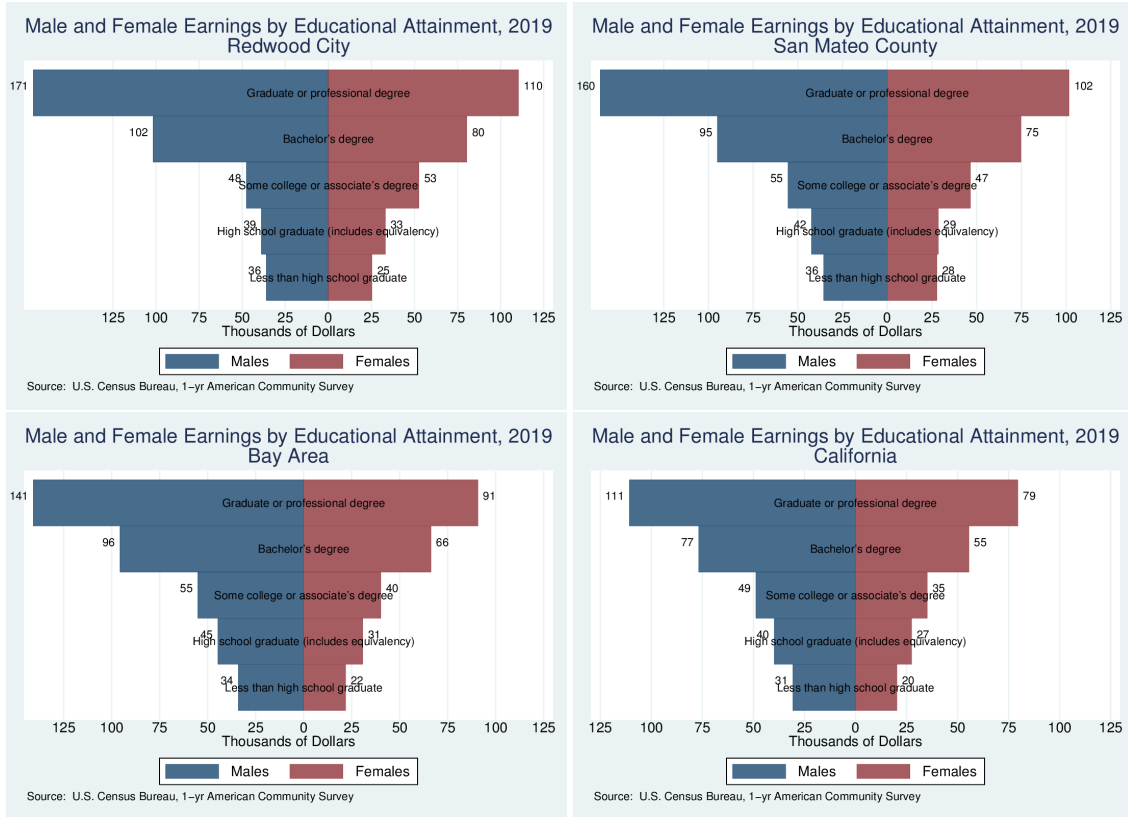
### Why is it important?

It is important to track measures of poverty and inequality to assess the extent of income disparities in the region, with an eye toward understanding how well the local economy is performing for all of its citizens.

### How are we doing?

In 2019, the Federal Poverty Rate for Redwood City was 7.3% and had been trending downward (Figure 29). This is slightly higher than

Figure 28: Earnings by Educational Attainment and Sex

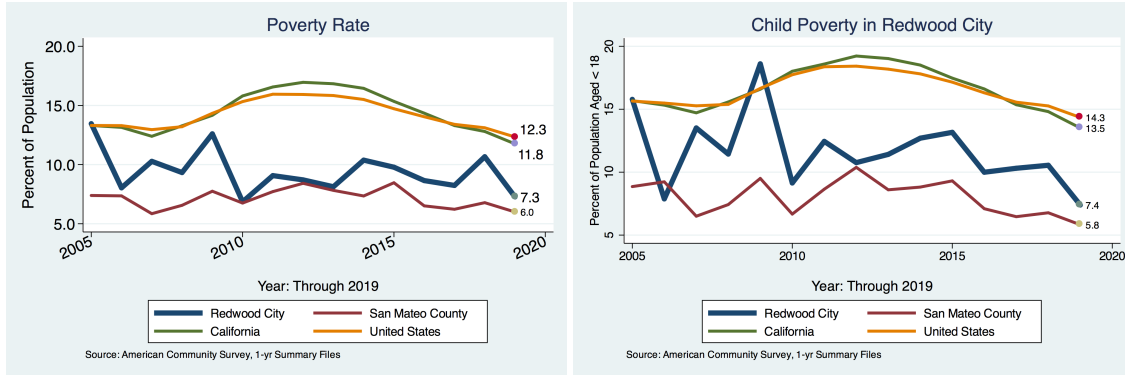


for San Mateo County as a whole (6.0%), but compares favorably to California as a whole (11.8%) or the nation (12.3%). The low rate of poverty in Redwood City and San Mateo County as a whole is somewhat deceptive. A major shortcoming of the Federal Poverty Rate is that it does not take into consideration differences in the cost of living or in the share of housing in the household budget across regions. Given that Redwood City has a relatively high cost of living and of housing in particular, it is likely that the City's poverty rate is significantly higher than indicated by the Federal Poverty Rate. Indeed, for the year 2011, the Public Policy Institute of California and Stanford attempted to adjust the San Mateo County poverty rate for these factors. They found that in 2011, rather than 6.7% as indicated by the FPR, the poverty rate in San Mateo County was actually in excess of 18%. This suggests

that the poverty rate in Redwood City is likely significantly higher than 7.3%.

With regard to child poverty, Redwood City has seen significant decreases since 2015. Much of this is likely due to reduced immigration and the outmigration of low income households because of high housing costs. Measured child poverty in Redwood City, at 7.4%, compares favorably with overall levels of poverty. The opposite is true in California and the United States as a whole, where child poverty rates are significantly higher than overall poverty. Income inequality in Redwood City, although frequently low relative to the state and San Mateo County, is currently comparable to the County, state, and nation. For much of the last 25 years, inequality nationwide has been on the rise. This is especially true of the Bay Area, and has been true for Redwood City and San Mateo County for at least the last 14 years.

Figure 29: Poverty in Redwood City



The top quintile, the 20% of richest households, and top 5% of households in Redwood City have a very high share of total county incomes, but about the same share as nationwide. More than 20% of all income goes to the top 5% of households. The top 20% of households get more than

50% of all income. At the same time, the bottom 20% of households, the poorest households, receive less than 5%. This share is lower, though only slightly, than for any of the other geographies displayed in the figure below.



Figure 30: Inequality in Redwood City

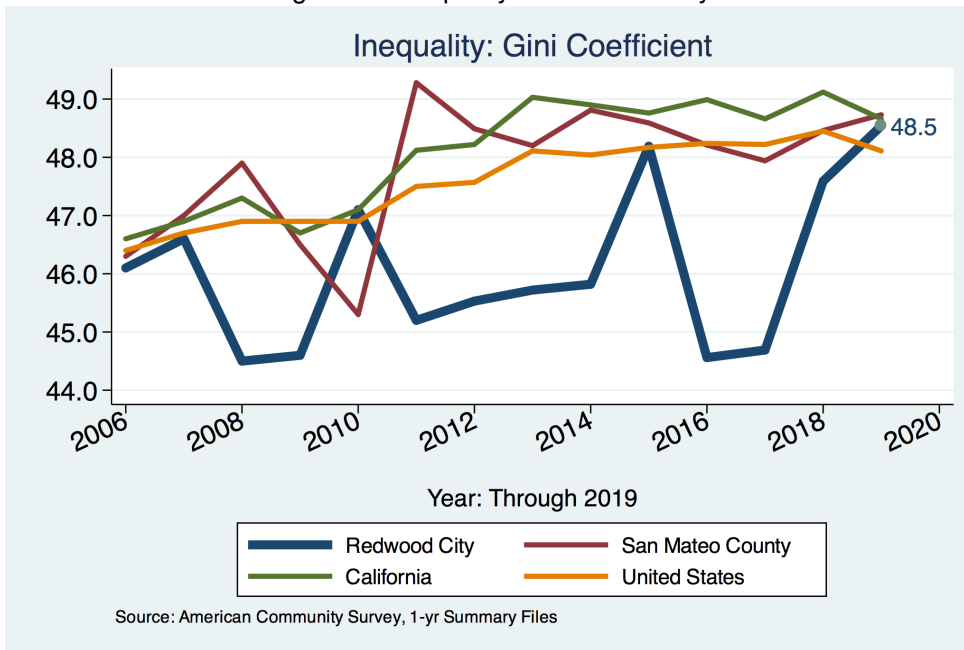
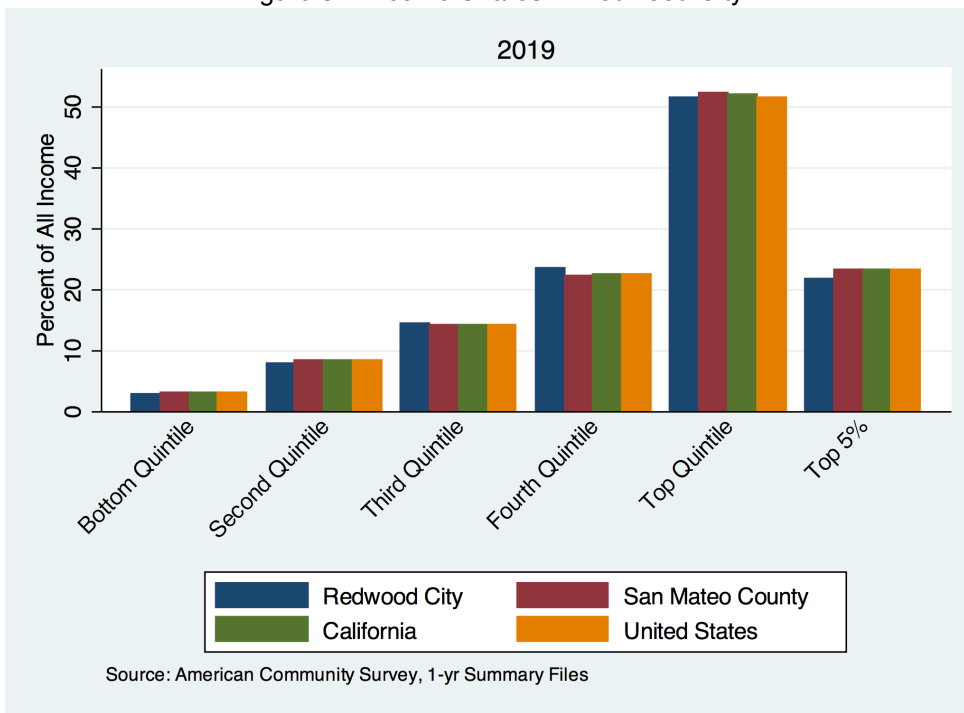


Figure 31: Income Shares in Redwood City



# Housing

## Housing Costs

### Definition:

Housing costs in Redwood City are measured as the median home price and the median rental price. The median value is the amount in the middle. Fifty percent of units are above the median and 50 percent are below.

### Why is it important?

Housing is one of three fundamental necessities, along with food and clothing. A measure of the cost of housing is an integral part of the measurement of the cost of living in a specific community. This is particularly true in cities and regions throughout the Bay Area, though the pandemic has altered trends significantly. Time will tell if things revert to historic norms.

### How are we doing?

In the latest data, the median home price in Redwood City was over \$1.6 million and the median rental rate was \$3.2 thousand. These data indicate that Redwood City is one of the most expensive places in the Bay Area, California, and indeed the nation in which to seek shelter. Home prices and rents are currently on different trajectories, with home prices rising in the City and rents in rapid decline. As of late 2020, home values are rising in San Mateo County and falling in San Francisco. This is a common theme throughout the pandemic as many with means are moving out of San Francisco to places where real estate with a greater element of outdoor living - a backyard - is more readily available. Rents are declining as many in the area have left, perhaps permanently.

## Housing Costs in Redwood City

Figure 32: Median Home Prices

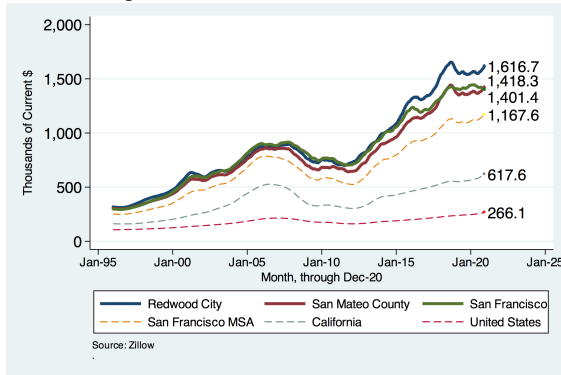
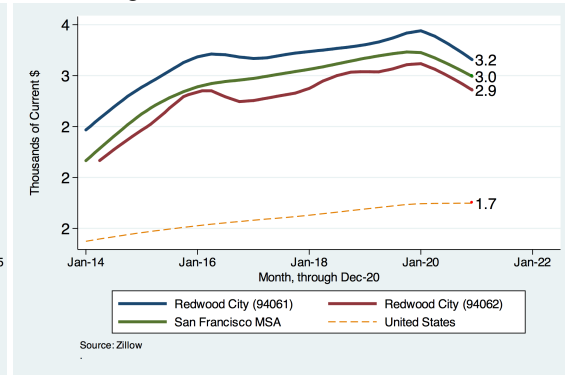


Figure 33: Median Rental Prices



Home prices in Redwood City are high by regional standards. For much of the last 20 years, they were comparable to prices in San Mateo County and San Francisco. Over the course of the last decade, however, home price appreciation has accelerated in Redwood City relative to those geographies, the Bay Area (represented by the San Francisco MSA), California and the nation. At the same time, rents seem

broadly in line with the region. One of the zip codes (94061) is running above the region (San Francisco MSA) while the other, 94062 is a little lower. The San Francisco MSA includes San Francisco, San Mateo, Alameda, and Contra Costa counties.

Much of what happens with housing markets in Redwood City and the rest of the region is highly

dependent on when the pandemic is under control and what the new version of normal is. Will telecommuting remain a dominant feature of the workplace? Will public transportation bounce

back from its current levels? There are many questions regarding housing markets that only time can answer.

## Residential Permitting

### Definition:

This indicator provides evidence on the number of residential buildings that are permitted for construction each year. Permit data for Redwood City are compared with those for San Mateo County as a whole and broader regions. The statistic provided scales the number of permits by population. This is done to facilitate comparisons across regions.

### Why is it important?

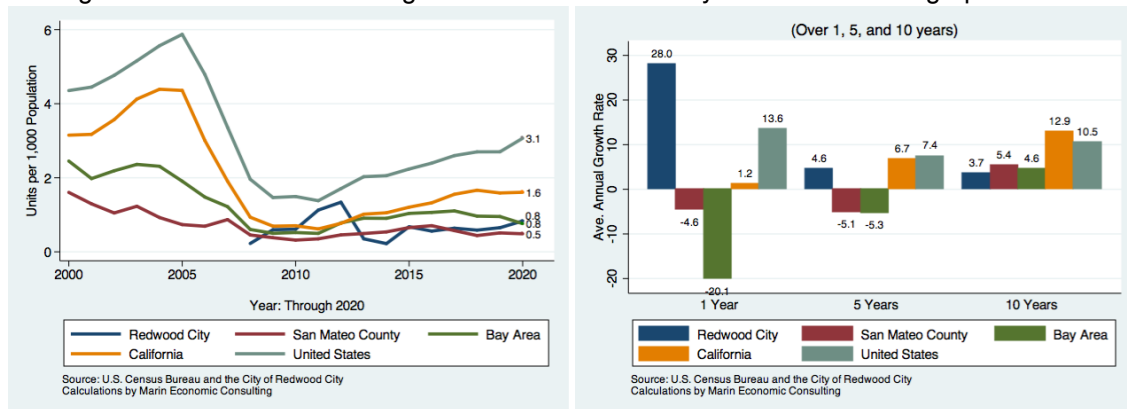
Building permits are the best indicator available of new units coming on the market. In order for a region's population to grow and flourish, new residential properties must be added to the existing stock. Building, both in the City and in the County more generally, is an indication of the extent to which new residences are affecting prices through increased supply.

### How are we doing?

It has been nearly 15 years since the bursting of the housing bubble. In that time, San Mateo

County has permitted new housing units at a rate slower than the rest of the Bay Area. Since 2008, permitting in Redwood City has been roughly in line with the rest of the county. There was an uptick in the wake of the Great Recession, but it has since returned to the regional trend. Permitting in all geographies initially increased following the Great Recession, but in the last 5 years we have seen permitting slow throughout the Bay Area, including San Mateo County and Redwood City. Over the course of the last year of data (between 2019 and 2020), permits in the City have grown faster than any of the other geographies, while permitting has fallen in the County and in the Bay Area as a whole. For most of the last 10 years, new units relative to the overall population have been lower in Redwood City than in the Bay Area or California more broadly. It is also the case that over those same 10 years the rate of new building permitting has increased in the City, but from relatively low levels. Such a dramatic increase in permitting through the pandemic is curious and may well abate as time goes on.

Figure 34: Residential Building Permits in Redwood City and Broader Geographies: Units



## Housing Picture

### Why is it important?

In areas where the rate of population growth exceeds the rate of housing growth, this is likely to reflect a tightening housing market. A tightening housing market will also likely be reflected in lower vacancy rates and higher occupancy rates. It may also be reflected in higher numbers of people per household.

### How are we doing?

Over the last 10 years, Redwood City has experienced a significant tightening of its housing market relative to the County as a whole. This is primarily evident in the vacancy rate in the two regions. In Redwood City, the vacancy

rate declined from 4.1% to 2.6%, which is significantly elevated from a prepandemic level of approximately 2.6%. In the County as a whole, the vacancy rate increased by 11.1%. Population in Redwood City grew by nearly 12.9% over the course of the last decade, but by just 7.6% countywide. The number of occupied units in Redwood City increased faster than did the total number of homes, while it grew slower in San Mateo County. All of these trends indicate a significant tightening of the housing market in Redwood City relative to the County as a whole, but evidence from the pandemic period is not yet complete.

**Table 3. Housing Market Indicators for Redwood City**

Indicator	2020	2010	% Change from 2010
Total Population	86,754.0	76,815.0	12.9
Total # of Homes	31,536.0	29,167.0	8.1
# Occupied Units	30,346.0	27,957.0	8.5
Persons per Household	2.8	2.7	4.3
Vacancy Rate (%)	3.8	4.1	-9.0

Source: CA DOF; Calculations by Marin Economic Consulting

**Table 4. Housing Market Indicators for San Mateo County**

Indicator	2020	2010	% Change from 2010
Total Population	773,244.0	718,451.0	7.6
Total # of Homes	280,879.0	271,031.0	3.6
# Occupied Units	265,689.0	257,837.0	3.0
Persons per Household	2.9	2.8	4.5
Vacancy Rate (%)	5.4	4.9	11.1

Source: CA DOF; Calculations by Marin Economic Consulting

Housing units did increase faster in Redwood City than in the County or state, but the number of persons per household grew in lock-step with the same number for the County as a whole. Both of which grew faster than in the

state. Whether this increase is the result of more singles living together or more generations of families living together, it is a reasonably clear indicator of scarce housing and high housing costs.

Figure 35: Housing Growth

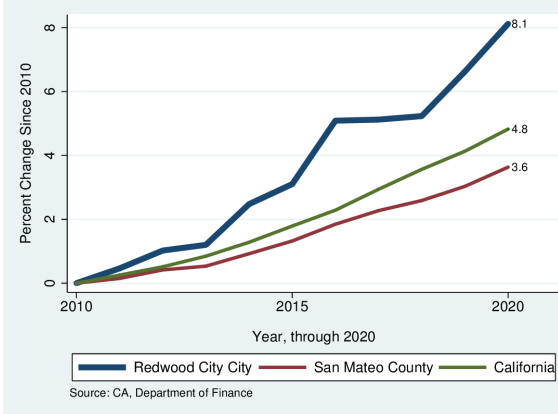


Figure 36: Persons per Household

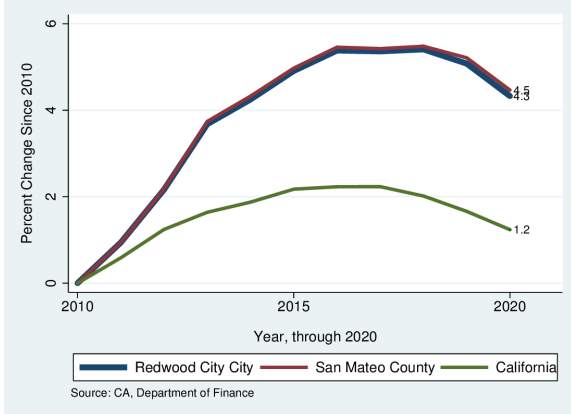


Figure 37: Vacancy Rates

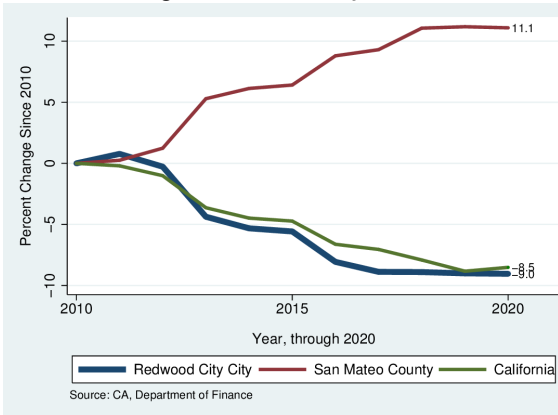
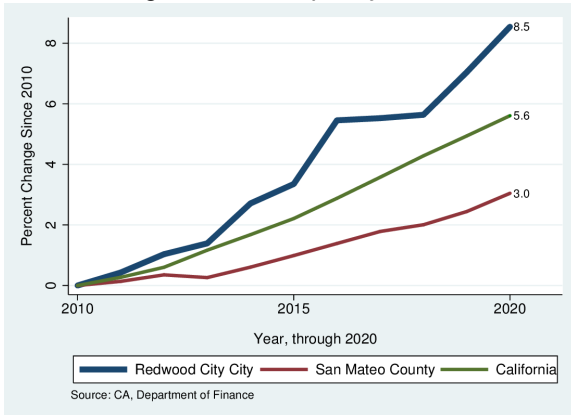


Figure 38: Occupancy Rates



## Trends in the Growth of Housing by Housing Type

Figure 39: Single Detached Homes

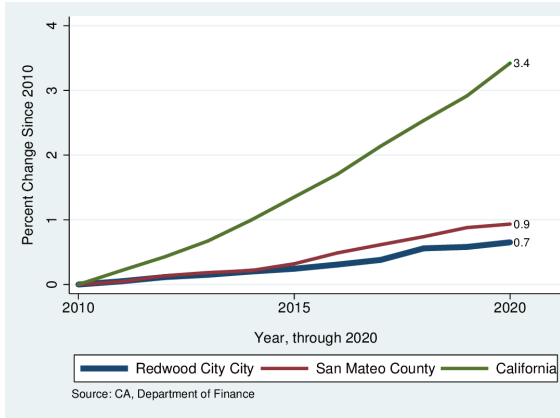


Figure 40: Single Attached Homes

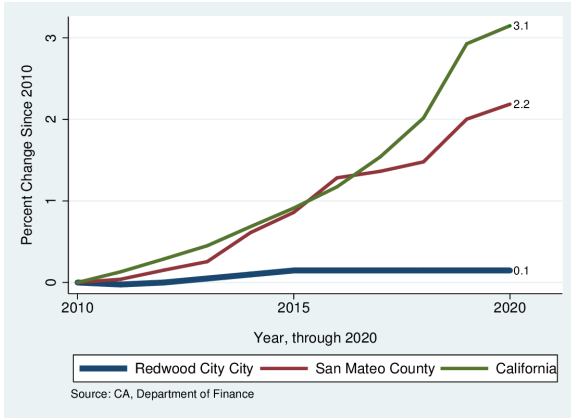


Figure 41: Housing in Buildings with Two to Four Units

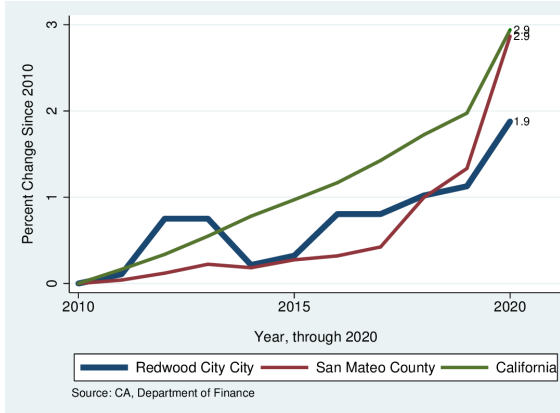
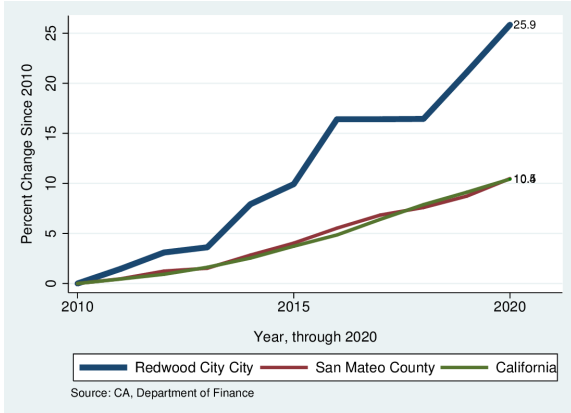


Figure 42: Housing in Buildings with Five or More Units



## Commute Patterns

During the recovery from the Great Recession, the period from 2010 to 2019, the Bay Area economy, and Silicon Valley in particular, has been growing at a pace roughly double that of the state as a whole and triple that of the nation. This growth has precipitated a tight hous-

ing market and has also brought about some significant changes in commute patterns. Recent years have seen significant changes in both the mode of transportation and commute times.

### Mode of Transportation

Redwood City's employed residents have reduced their penchant for driving alone in their car, but rather than commuting or taking public transportation, have been increasingly working from home. Their inclination to carpool had been growing in the years following the Great Recession, but seems to be waning. Public trans-

portation use is high relative to the last decade, but appears to be on the decline. These are all trends that largely buck those for the Bay Area, California and the United States, with the exception of working from home. This trend has been reasonably consistent nationwide and has no doubt gotten a big boost by the pandemic.

Figure 43: Percent of Workers Commuting by Car Alone

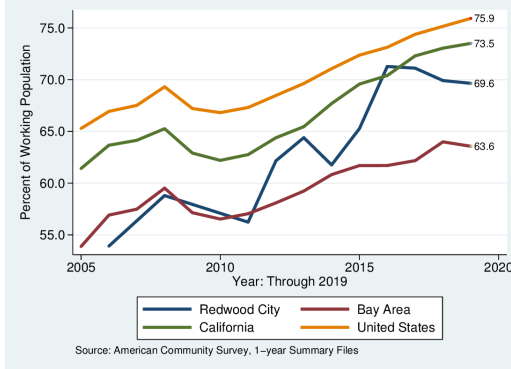


Figure 44: Percent of Workers Commuting by Carpool

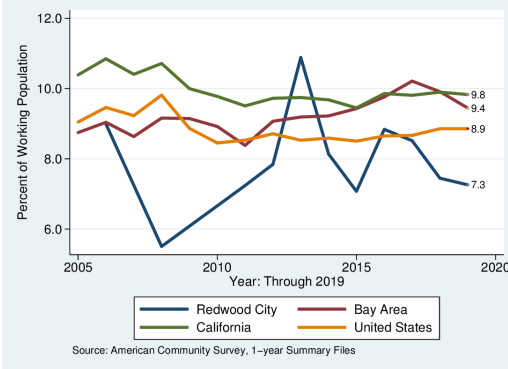


Figure 45: Percent of Workers using Public Transportation

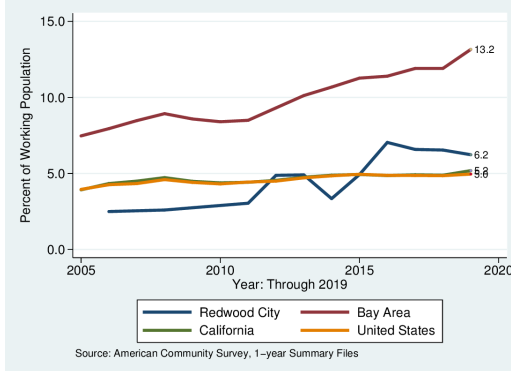
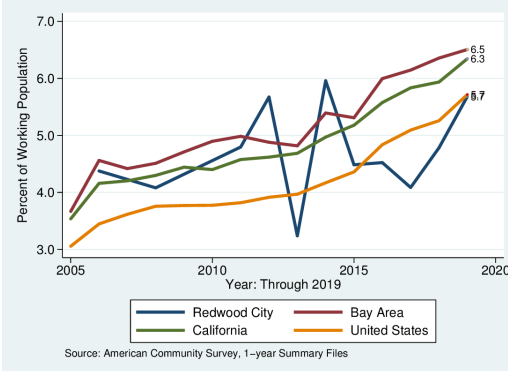


Figure 46: Percent of Workers Who Work From Home



## Commute Times

Up until the last two years, commute times for Redwood City's employed individuals had been on a pretty steady upward trend. The percent of the population with a one-way commute in excess of 30 minutes reached its highest level since data were made available in 2005 in 2017. Some 40% of workers had commutes in excess of 30 minutes. It may well have been higher during the dot.com era, but data for that time period is not readily available. This trend has reversed itself in the last two years, with now just 37% of employed residents commuting for more

than 30 minutes. This is low relative to San Mateo County, the Bay Area, the state, and the nation.

Among those with particularly long commutes, the proportion of workers with 90 minute commutes is very low by regional standards. That said, it has been increasing, it is increasing at a much slower pace than in the Bay Area as a whole and remains less than one-third of the employed population that it is for the Bay Area (1.7% vs 5.2%).

Figure 47: Percent of Employed Population With Commutes of More than 30 Minutes

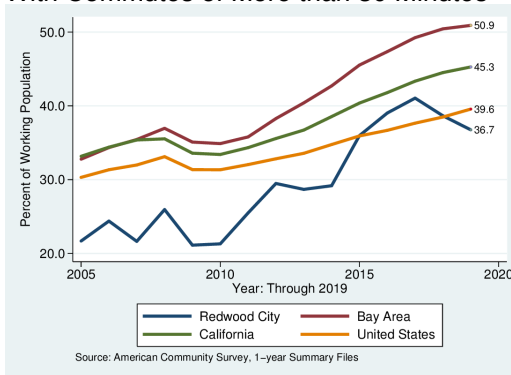
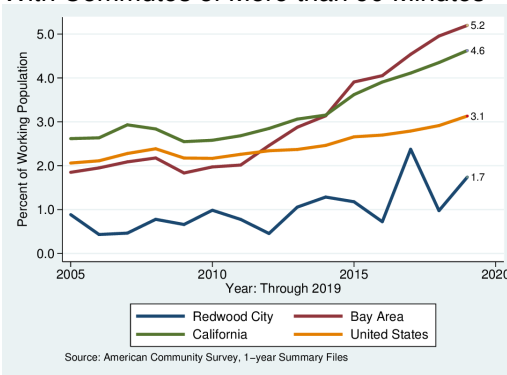


Figure 48: Percent of Employed Population With Commutes of More than 90 Minutes



The picture is different for those commuting into Redwood City to work. Commutes, both those in excess of 30 minutes and 90 minutes have been increasing for these workers. Percentages were on a par with the Bay Area as a whole in 2019. The proportion with more than a 30 minute commute was above 50% among those employed in Redwood City and the Bay Area as a whole. The proportion of workers with commutes in excess of 90 minutes was over 7% in both regions. The effect of the pandemic is likely to reduce these trends significantly, with telecommuting playing a much more significant role in people's work lives.

With regard to those with commutes of 90 minutes or longer, so-called MegaCommuters, in

2019, Redwood City ranked among the worst geographies in California for its incoming workers. Out of 140 cities for which data are available for 2019, Redwood City ranks 133<sup>rd</sup>. Many nearby cities are close in the rankings: San Jose (123), Santa Clara (129), Palo Alto (134).

The rapidly-increasing commute times for those working in the City and region are clearly a result of the tight housing market, a growing economy, and a transportation system unable to handle the load. In particular, as housing becomes more expensive, more and more workers move to the surrounding counties to live, but they can not take their jobs with them, nor does public transportation always provide the solution.



Figure 49: Percent of Local Employees With Commutes of More than 30 Minutes Figure 50: Percent of Local Employees With Commutes of More than 90 Minutes

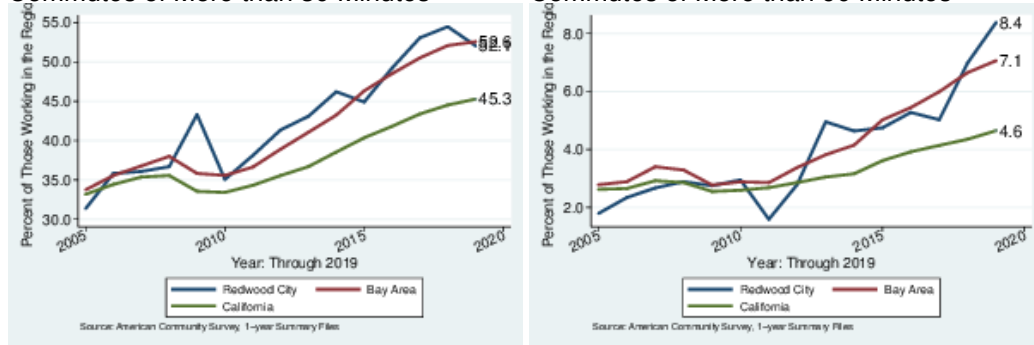
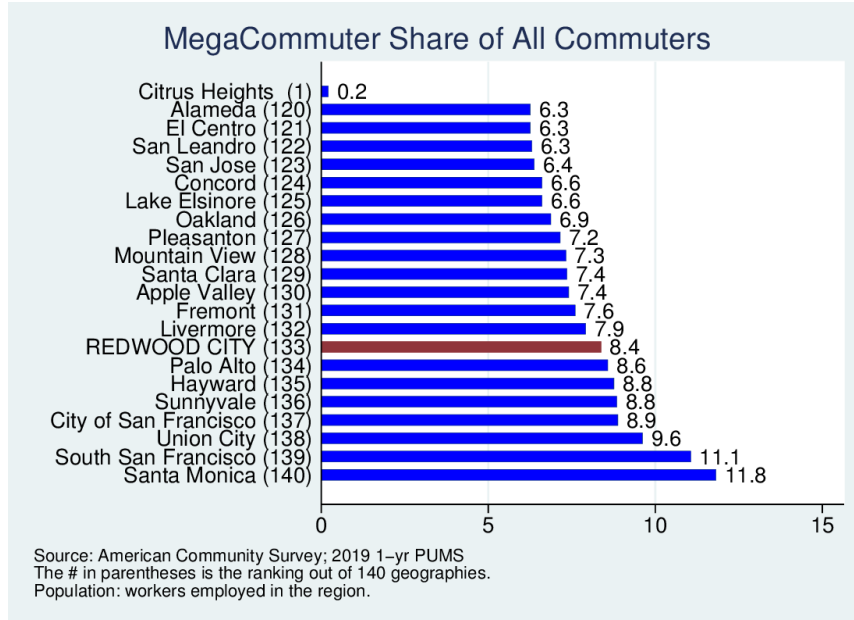


Figure 51: Rank: Share of MegaCommuters Across Similar Geographies



## Employment Report

### Definition:

Each month, California’s Employment Development Division (EDD) publishes an update on employment in California and in MSAs and counties all across the state. The report focuses primarily on non-farm employment, providing estimates of changes in employment by industry as well as unemployment in each region.

### Why is it important?

Employment growth is a fundamental indicator of the health of an economy.

### How are we doing?

Relative to San Mateo County, employment in Redwood City has experienced roughly the same trajectory. Significant growth in the wake of the Great Recession of a decade ago and similar declines through the pandemic. Prior to the pandemic, and since 2010, the nation had been growing at 1.6% per year, the state at

2.3% per year, and the Bay Area at over 2.9% per year. Redwood City had been growing at approximately 3.1% per year, faster than most parts of the Bay Area, the state, and the nation.

Through 2020, employment in Redwood City has declined by more than any of the other regions depicted in Figure 41. While employment nationwide is down roughly 6%, employment in Redwood City is down 7.9%. As discussed in the section on the economic effects of the pandemic, it is service-oriented or people-facing jobs that have been hit the hardest. As these sectors likely make up a large proportion of the urban Redwood City economy, it is not surprising that the decline is more pronounced.

Unemployment, though significantly reduced from its early pandemic highs of nearly 10%, remains very high relative to the end of 2019 when it was just 1.8% on a seasonally adjusted basis. The current rate is triple the pre-pandemic unemployment rate.

Table 5. Redwood City Summary for December, 2020

Category	Current Value	Change From:		
		Last Month	2 Months Ago	Last Year
Employment	46,890	-173	-462	-4,168
Labor Force	49,376	61	-879	-2,614
Number Unemployed	2,607	347	97	1,659
Unemployment Rate	5.7	1.0	0.7	3.9

Source: EDD, Marin Economic Consulting

Figure 52: Historical Employment and Unemployment in Redwood City

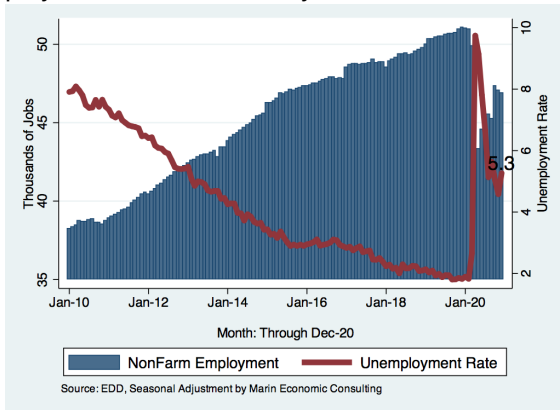
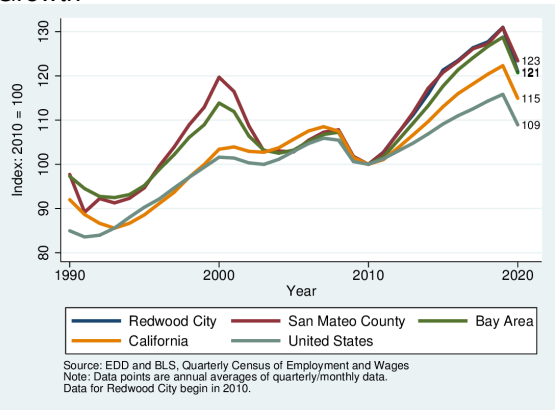


Figure 53: Redwood City's Relative Employment Growth



## Redwood City Forecast and Model Considerations

This report provides Redwood City with a forecast for the following variables :

1. Taxable Sales to determine sales tax revenues;
2. Assessed Values of Real Property to determine property tax revenue;
3. Transient Occupancy Tax (TOT) Revenue; and
4. City employment levels for both residential (those that live in Redwood City) and industry employment (those that work in Redwood City regardless of where they live).

In each section below, the forecast variables and the forecast assumptions are discussed. We start with state and national level context given the volatility of 2020 on the macroeconomy.

### ***General Issues: National and State Economic Context***

Forecasts for local areas (cities and counties) depend greatly on forecasts for the local county, state and national economies as they exist. National policies, such as fiscal and monetary policies, affect local employment, income and interest rates. Because of COVID-19, economic data describing both calendar year 2020 and fiscal years 2019-20 and 2020-21 show the effects of both the current recession (which may be declared over in Q4 2020 by the National Bureau of Economic Research or NBER) and how economic recovery has started as of January 2021.

At the national level, the macroeconomic implications of COVID-19 continue to play out. Interest rates are assumed to remain at historically-low levels until 2023. Even as interest rates rise, the forecasts below do not expect any rate increase to be significant enough to change the forecast's trajectory. Fiscal stimulus has been aggressive since April 2020, having two rounds of spending primarily focused on augmented unemployment insurance benefits and transfer payments (direct payments) to households versus government investment as of January 2021. Such policy speeds up the process of providing economic relief by sending money directly to households or businesses, including an array of social assistance changes (augmented unemployment insurance, for example) and policy choices (loan deferment on mortgages and eviction moratoria, for example), that continue to provide some economic stability in 2021 versus uncertainty as to COVID-19 caseloads and potential social policy choices that affect local businesses and jobs.

Forecasted fiscal policy beyond direct stimulus addressing issues from COVID-19 may change the forecasts below for Redwood City for the better in terms of more support for permitted construction, commercial space expansions, home sales, and more taxable sales. These would also lead to rising employment, assuming no other negative shocks, and more transient occupancy tax (TOT) based on a faster, growing economy and more travel as possible given continued social constraints.

Continued restrictions on travel may lead to a lag in the recovery of overnight stays throughout California and traffic through the San Francisco (SFO) airport. That regional traffic support thousands of jobs in San Mateo County based on SFO's location, where Redwood City generates overnight stay visitors and also employment support from flows of visitors through SFO and Redwood City based on travel on Interstate 280. Forecasts for travel suggest the national travel market may not see the same number of international and domestic travelers by plane as there were at the end of 2019 until 2024. The transient occupancy tax (TOT) forecast below assumes a return by June 2024 to 2019 levels. If more social restrictions come to California and its regions due to new variants

of COVID-19 or some lack of efficacy in vaccines, the hotel and visitor-support industries will be the first to slow down or experience muted recovery momentum. Let's now look at each individual forecast section, its assumptions, and results starting with taxable sales.

### ***Taxable Sales Forecast***

Because there may be changes in both the overall sales tax rate or its distribution among the City of Redwood City, San Mateo County, other special districts, and the state of California, we focus here on forecasting taxable sales levels for Redwood City. We consider fiscal-year levels as affected by:

- National and state level forecasts of economic growth, specifically in terms of personal income after inflation;
- Population growth, as taxable sales are primarily coming from local households (but also come from regional households based on commute patterns and retail leakages as well as visitors);
- Recent data on taxable sales, as well as annual forecasts that exist from CalTrans and also California Department of Finance;
  - San Mateo County has a local forecast for both personal income and taxable sales from Cal-Trans which is updated annually;
  - Recent auto sales levels and forecasts for the number of vehicles per household in San Mateo County and California overall (as auto sales are a relatively large proportion of historic taxable sales in Redwood City); and
- City of Redwood City taxable sales forecasts and other data as provided by the city finance.

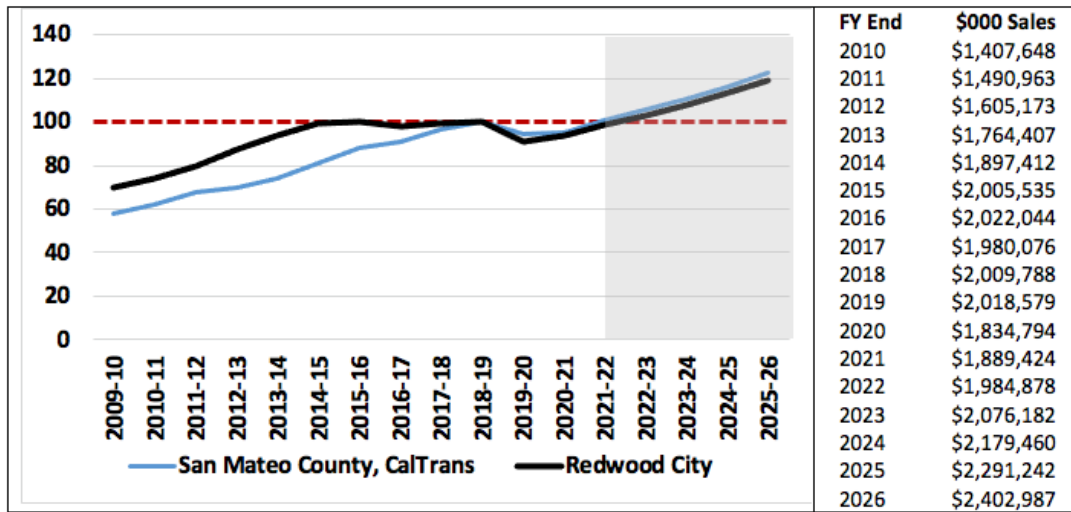
From the taxable sales forecasts, city finance can multiply these data by the expected sales tax rate to determine sales tax revenue forecasts as needed. The following figure shows this forecast for fiscal years 2020-21 to 2025-26 after actual data are shown. These data are shown in index form on the figure, and then shown in tabular form to provide a way to consider them next two recent actuals for San Mateo County starting both series at the end of the 2018-19 fiscal year, equal to 100. In terms of auto sales, we expect that auto sales will not grow at the same pace as before COVID-19 for the following reasons (Figure 54 reflects this difference with the rest of San Mateo County due to slower growth):

1. We expect the number of vehicles per household to not recover to COVID-19 levels until after 2025 due to shifting incomes and demand for vehicles overall based on more work from home;
2. We expect Redwood City will get older and less mobile as a population by household.

### ***Property Tax Revenue***

Forecasting property tax revenues is about forecasting change in assessed real property values; like the taxable sales forecasts above, we provide the growth of assessed value rather than a specific property tax value due to the actual rate changing. We assume any changes and special assessments that may come and go based on bond issues and other, local taxes voted in by local/state residents would use the same assessed values to determine property taxes. Growth of

Figure 54: Taxable Sales Actuals and Forecast, Redwood City, 2009-10 to 2025-2026 Fiscal Years Index Fiscal Year 2018-19 = 100 for Graph, Thousands of Current Dollars in Table



Sources: City of Redwood City, California Department of Tax and Fee Administration, CA Department of Finance, California Department of Transportation, Federal Reserve

new structures can drive assessed value also; forecasts and recent data suggest more commercial real estate is coming to Redwood City, with growth in new housing units over the forecast window remaining at a slow and steady pace. This forecast does not expect a housing or commercial construction boom until fiscal year 2025-26; given the COVID-19 recession has changed vacancy rates in commercial real estate for the worse, but housing demand for the better, there are mixed effects on values other than rising forecasts for median home prices.

### Commercial Real Estate

There is an inventory in Redwood City of approximately 3.864 million feet of industrial space; there is approximately 7.239 million square feet of office and research and development (R&D) space as of Q4 2020 according to Cushman Wakefield. Class A office space has seen rising vacancy rates in 2020, where Class B and R&D have seen relatively small changes in vacancy in 2020 as a reflection of the COVID-19 recession and potential planning by current tenants on their use of space.

Over the next two years, there is an expectation of 4.3 million more square feet of office to come on market in San Mateo County due to new construction (only 45.5 percent is said to be pre-leased, increasing the assessment basis for commercial, if those completions take place on time). There are no industrial projects underway or expected as of January 2021 in San Mateo County. COVID-19 and its aftermath are likely to keep commercial real estate unstable over the next few years.

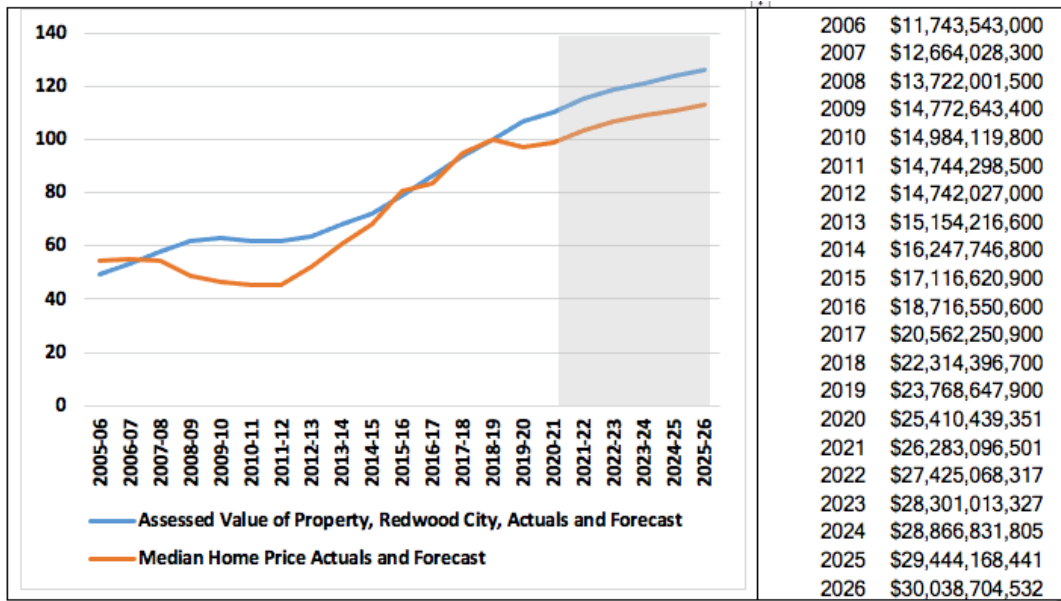
### Residential Real Estate

We assume here, based on the slow movement in commercial space and reassessments, that property tax revenue changes are driven by residential sales prices changing and thus generating re-assessments of the current housing stock's value when a portion is sold. New housing units in Redwood City have been primarily multifamily units since 2010. For property tax assessment purposes, multifamily units do not change hands short of major transactions for entire apartment

complexes, so we need to look at the stock of single-family homes (including condominiums or single-family “attached” in the official data) to use sales dynamics to forecast change. Since 2002, assessed property values on an annual basis as reported by the City of Redwood City and median home prices in Redwood City annualized on a fiscal year basis are 93 percent correlated. As with other municipalities, home prices rising tend to drive local assessed values more than other property types.

There can also be assessment changes based on renovations and re-assessment through permitting processes. Due to the mix of an unknown renovation market and the number of owners that may improve their property without reporting it for re-assessment, variables such as construction employment are not necessarily informative beyond what would be captured naturally in the variables above. We assume the ascension of interest rates is slow and predictable through 2026 as to not distort market activity otherwise.

Figure 55: Assessed Value Forecast for Property Tax, Fiscal Years 2005-06 to 2025-26, Forecast Window 2020-21 to 2025-26, Current Dollars (Figure Shows Index Number, FY 2018-19 = 100)



Sources: City of Redwood City, Zillow Research, Cushman/Wakefield

### ***Transient Occupancy Tax (TOT)***

COVID-19 has hit the travel industry particularly hard based on social constraints on domestic and international travel at different times between March 2020 and January 2021, but also household reticence to travel more than one day’s car drive from home when people were willing and able to travel. Taxable sales levels also depend on visitors somewhat, but transient occupancy tax (TOT) levels really felt this shock once occupancy rates fell in March and April 2020. Visitors come in two categories: business and leisure. Forecasts for business visitors depend on the global reach of local businesses and how travel versus technology is utilized for meetings. We assume that the TOT rate itself is not a factor in the choice of where to stay, but is a factor in the choice to convert

to an overnight stay from a day trip. The Bay Area is a draw for worldwide visitors, but also for regional visitors. Leisure travel depends on these major factors:

- Regional tourism forecasts of visitors and of personal income;
- Occupancy rates of hotel rooms;
- The percentage of visitor days that become overnight stays; and
- The number of hotel rooms, both current and planned.

The US Travel Association (the lobby organization for hotels, conference centers, airports, etc.) has forecast a return to pre-COVID domestic travel by 2023 and international travel (so-called long-haul travel) by 2024. Because the flow of passengers through SFO is a critical way in which visitors come to San Mateo County and Redwood City, monitoring the comeback of passenger traffic through SFO may be a critical way to see the domestic and international market come back. As of December 2020, SFO traffic is approximately 70 percent lower than its 2019 levels for the same month.

The forecast below for TOT revenues, however, assumes Redwood City will get some return to “normal” levels due to intrastate travel once restrictions are lifted. This assumes that travel restrictions will be local and regional first, and then travel for international visitors will lift sequentially.

TOT revenues are based on revenue per available room or RevPAR, the product of occupancy rates and the average daily rate (ADR) for available rooms. The ADR price the average final price charged by the hotel per day for tis rooms. We assume the hotel room supply remains stable over the forecast period.

The forecasted growth from fiscal year 2018-19 to 2025-26 is approximately 13 percent. The effects of COVID-19 on overnight stay spending are assumed to linger in the marketplace until June 2024 not only due to slow recovery in the travel industry from the recession created by social measures to combat rising healthcare concerns, but also the effects on consumers’ willingness to stay overnight in a hotel given the perceived threat of becoming sick:

- Visitor growth is forecast to continue;
- There is not a second recession for the national or state economies, which suggests domestic demand for travel is unlikely to wane for further economic reasons between 2021 and 2026; and
- Average daily rates rise back to pre-COVID levels by 2024 along with occupancy rates.

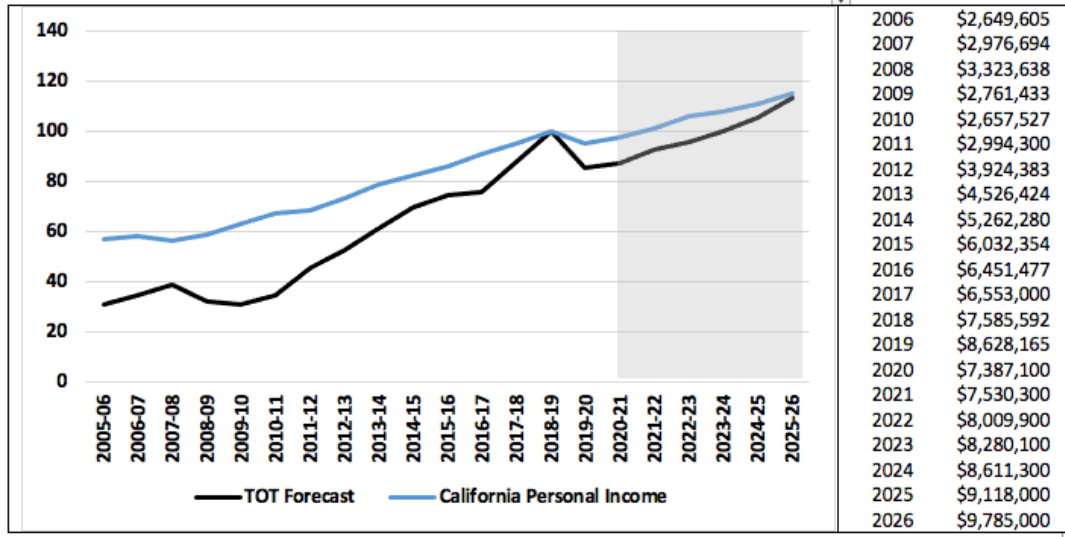
## ***Employment Forecasts***

An employment forecast for any city or county in the United States is generally a function of its employment history and state or national forecasts. The broader county trends also drive the city outcomes. While COVID-19 in 2020 caused a large amount of labor-market volatility, by the end of 2020 we saw three major changes emerge:

- Lower-wage workers, especially those in leisure and hospitality businesses (hotels, restaurants, event centers) and personal services (hair and nail salons, fitness, etc.) are at more risk than higher wage workers in technology or scientific positions;
- Fiscal stimulus from the federal government has been focused on providing relief for jobs lost through transfer payments versus investment in jobs by purchasing goods and services, which



Figure 56: TOT Forecast, Current Dollars, Fiscal Years 2005-06 to 2025-26 (Forecast Window, 2020-21 to 2025-26), Data in Figure Index 2018-19 = 100



Sources: City of Redwood City, Smith Travel Research, Tourism Economics

can lead to some volatility in local labor force due to augmented unemployment benefits and direct payments at home subsidizing the choice not to actively seek employment; and

- Most forecasts, even with local, regional, state, and national labor-market recovery in late 2020 are not expecting complete restoration of jobs lost in terms of volume of workers until after 2023.

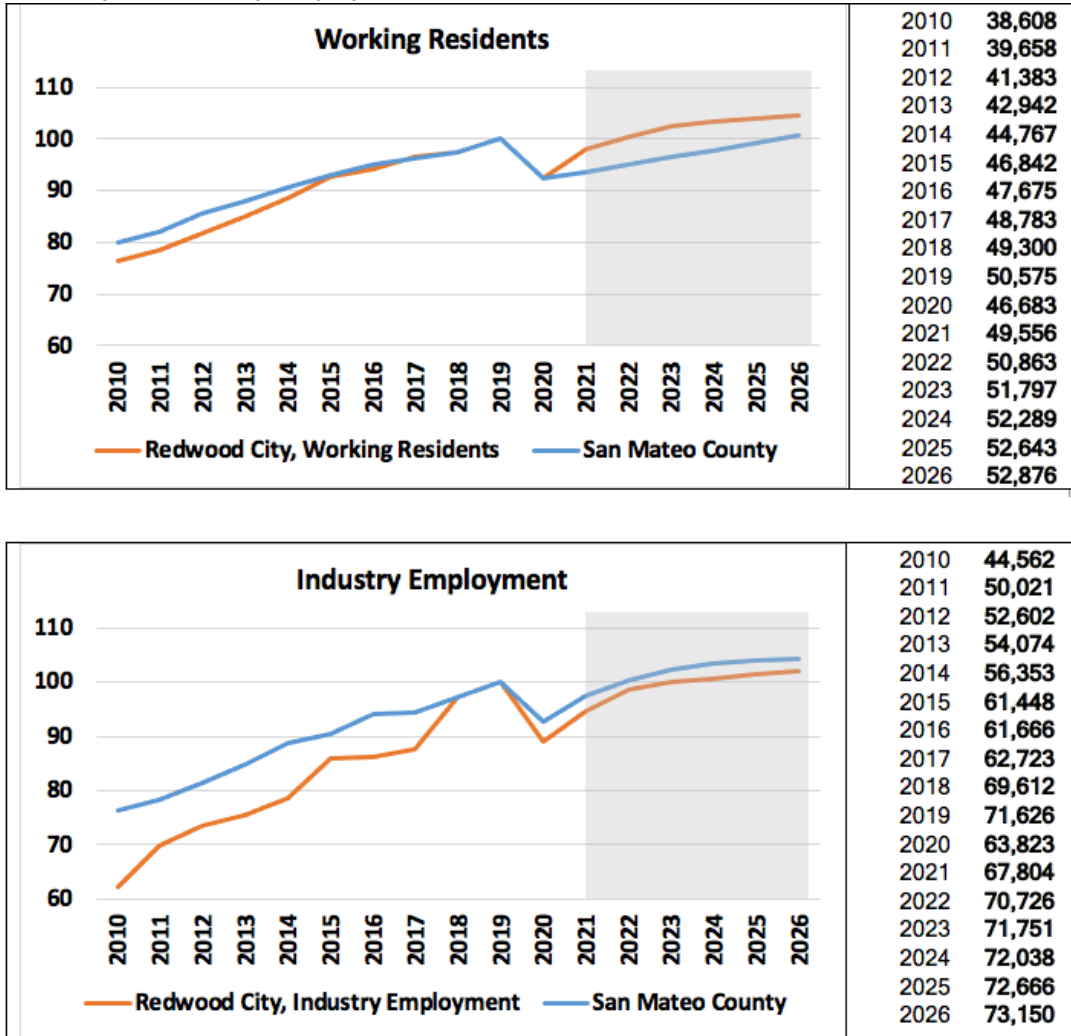
We assume continued strength San Mateo County’s job market once social restrictions are a thing of the past. Redwood City’s recovery may be tied more to Santa Clara County’s economy versus northern San Mateo County (which is more connected to San Francisco) in terms of economic cycles. Unfortunately, data for the city economy on jobs do not exist in a lot of detail other than industry sectors. The forecast elements for local employment, both residential (those that live in Redwood City and have a job) and industry (those that work in Redwood City regardless of where they live) are:

- Employment levels leading up to Jan 2020 as a benchmark for initial recovery;
- The percentage change per year in Redwood City versus San Mateo County and California overall as a way to gauge recent city growth that may outpace our undershoot other forecasts;
- Regional employment (forecasts for San Mateo County and California as context for city-level jobs growth to calendar year 2026; and
- Local specialties or legislation that may enhance or restrict hiring.

Redwood City is estimated to have approximately 46,700 working residents as of Dec 2020. Redwood City’s employers, between 2010 and 2020 using data from California EDD, hire approximately 15 to 36 percent more workers than there are residents of Redwood City. It is important to recognize that there are job possibilities all along the peninsula and also in the greater Bay Area for which Redwood City residents commute and also workers that are drawn for local employers from all over the region.

The forecasts here show both residential employment and the level of labor demand at Redwood City employers. We do not count the self-employed, which means these data are likely an underestimate.

Figure 57: Employment Actuals and Forecast, 2010-2026, Forecast Window 2021-2026, Compared to San Mateo County, Number of Workers, Calendar Years, Working Residents of Redwood City and Industry Employment



Sources: Census Bureau, California Employment Development Department, Bureau of Labor Statistics

## Summary

The forecasts have conclusions for Redwood City:

- Taxable sales forecasts follow forecasts for county, state and national personal income forecasts, and see a return to pre-COVID levels by June 2023;
- The property tax forecasts show no significant slowdown in home prices or commercial real estate values between 2021 and 2026;
- TOT revenue forecasts are the slowest to return based on recent forecasts of domestic and international travel, not returning to pre-COVID levels until June 2024;
  - Much depends on continued threats of travel-related social constraints and also on household reticence to travel and stay overnight;
  - Taxable sales are likely augmented by day travelers, but less than would be augmented if more travelers stayed overnight in Redwood City;
- The employment forecasts follow recent trends and assume there will not be another recession between 2021 and 2026; and
- These forecasts depend critically on smooth paths of national and state personal income forecasts becoming the actual experience, along with interest-rate stability and the regional economy continues to recover from the recession that began in March 2020.

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