

Sonoma County Economic Forecast

Forecast Summary

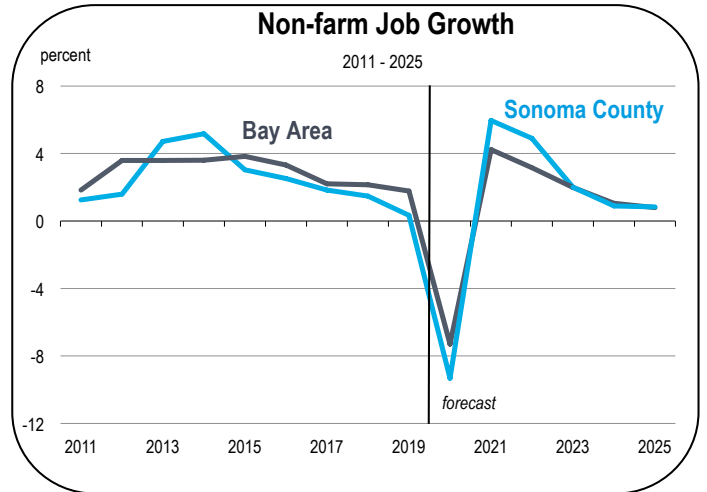
- It is estimated that an average of 17,000 to 22,000 jobs will be lost in Sonoma County during 2020. Job losses will be heavy in the first half of the year.
- Employment losses will be largest in leisure services, retail trade, private healthcare and education, and government.
- The unemployment rate averaged 2.7 percent in 2019. It will average somewhere between 8.5 percent and 10.5 percent for the 2020 calendar year.
- The Sonoma County population is expected to grow more slowly than the Bay Area average during the forecast period.
- Home values are not expected to change much in 2020 or 2021.
- Housing production is expected to decrease sharply in 2020 but rebound meaningfully in 2021.

Job Growth

- Total employment in Sonoma County will decline by 8 to 10 percent in 2020 on an annual average basis.
- In 2021, the county is expected to re-gain many of the jobs that were lost during the Coronavirus Recession.

Construction Employment

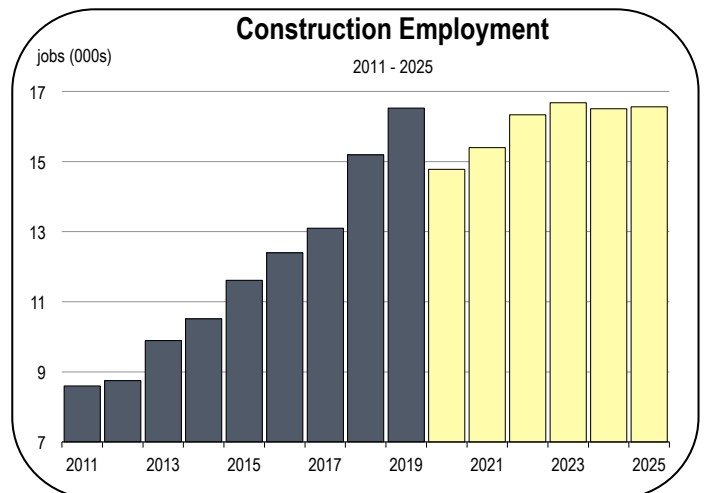
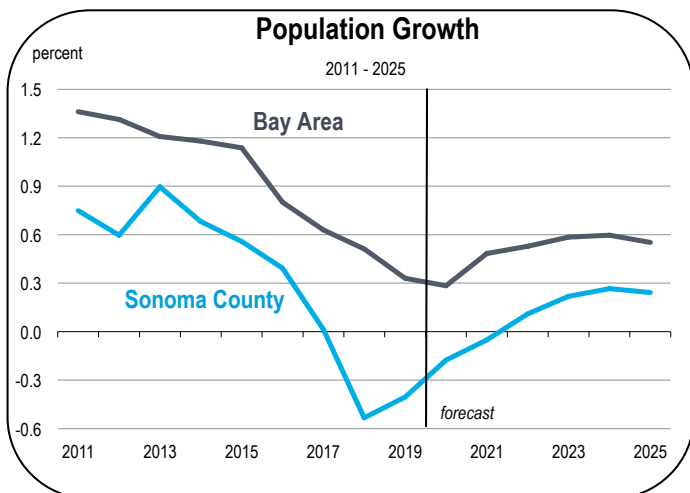
- The construction sector is expected to lose 1,500 to 2,000 jobs in 2020.
- Most California construction activity was deemed non-essential for several weeks in March and April, leading to construction layoffs.



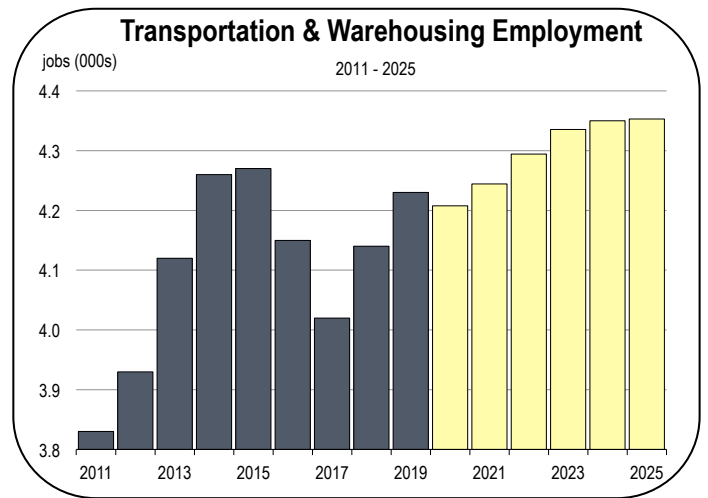
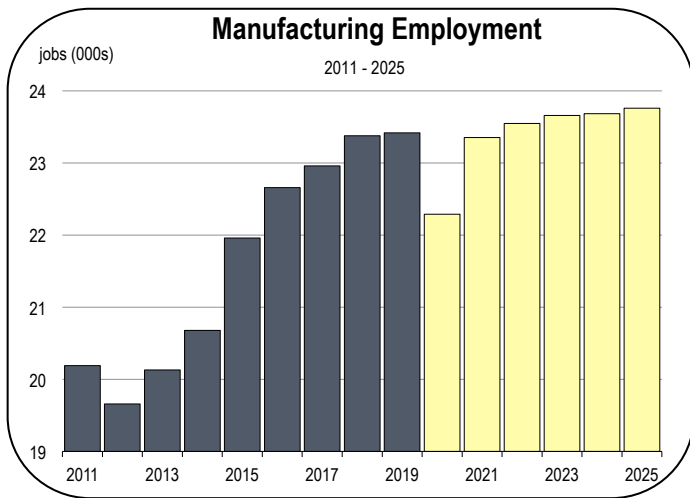
- Construction activity resumed in May and June, bringing some construction workers back to their jobs.
- Approximately 1,500 additional workers augmented the total construction workforce in Sonoma County to rebuild the 5,300 homes destroyed in the 2017 Sonoma Complex fire. Most of the remaining rebuilds will be completed this year and in 2021.
- Construction employment is expected to gradually rebound in 2021 and 2022.

Manufacturing Employment

- Wineries account for 32 percent of all manufacturing jobs in Sonoma County, as wineries are considered to be in the beverage manufacturing industry.



Sonoma County Economic Forecast



- Wineries had an average year in 2019 when they processed approximately 225,000 tons of wine grapes. Production will decrease in 2020 as the global demand for wine contracts along with the economy.
- Sonoma County also has several thousand jobs in electronic equipment and medical device manufacturing, anchored by Keysight Technologies and Medtronic.
- Manufacturing employment will decline in 2020 by 1,000 to 1,500 jobs. However, many of these jobs will be restored in 2021. As global wine consumption resumes, the growth of employment in beverage manufacturing is forecast to increase over time.

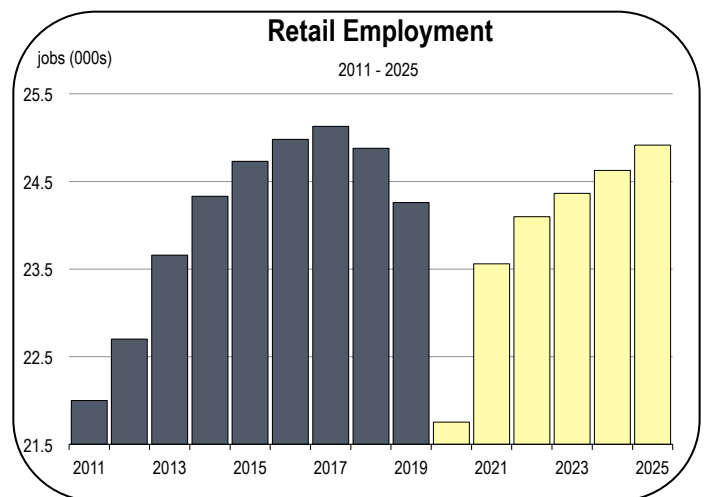
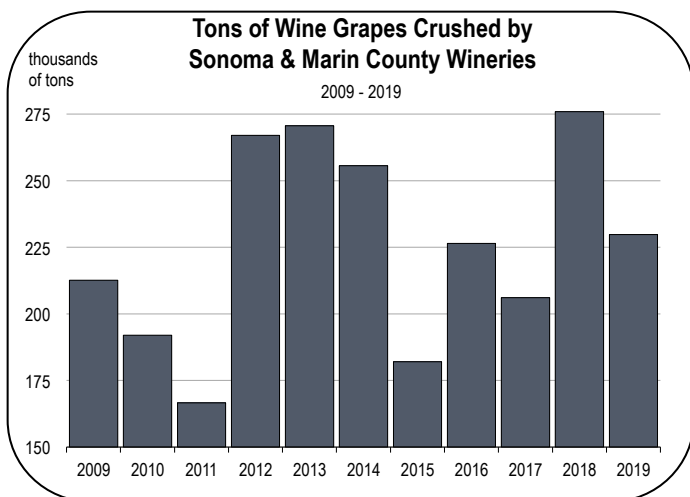
- Losses were observed in trucking and warehousing in 2020, but trucking and warehousing employment is expected to rebound in 2021 and 2022.
- Some transportation subsectors hired large numbers of workers during the second quarter of 2020, including delivery firms like UPS, FedEx, and Instacart. Delivery firms may be among the few corners of the labor market to expand throughout the year.
- During the 2020-2025 forecast period, overall transportation and warehousing employment will expand in tandem with consumer and businesses spending and travel activity.

Transportation and Warehousing Employment

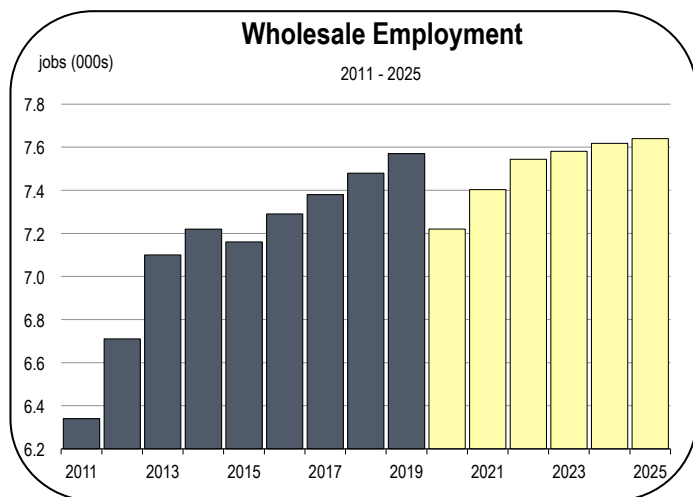
- Transportation and warehousing employment is expected to remain relatively unchanged on an annual average basis in 2020.

Retail Trade Employment

- The retail sector is expected to lose more than 2,000 jobs in 2020 on an annual average basis.
- Many large retail chains chose to furlough their employees rather than lay them off completely, and furloughed workers are not



Sonoma County Economic Forecast



considered to be unemployed. This is a technical detail that will mask the true number of work stoppages in the retail sector.

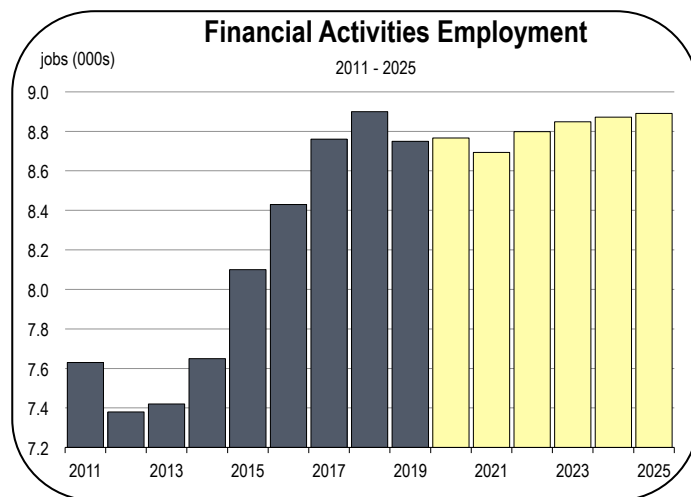
- Accounting for furloughed workers more than 3,000 retail workers could be effectively not working and not earning an income on an annual average basis in 2020.
- Retail trade jobs will return after social distancing protocols are removed in a sustained manner, but it is unknown when and if retail employment will eclipse pre-recession levels because of the strengthening demand trend towards online purchasing.

Wholesale Trade Employment

- Wholesale trade employment is expected to fall by at least 300 jobs on an annual average basis in 2020.
- Wholesale employment may not return to pre-lockdown levels until 2022 or 2023. Wholesale trade supports retail trade which is vulnerable to the demand shift to online purchasing.

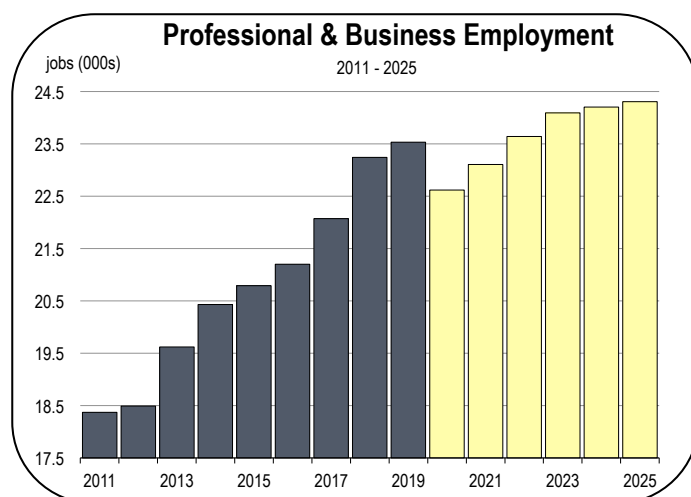
Financial Activities Employment

- The financial activities sector is not expected to gain or lose a meaningful number of jobs in 2020.
- Employment levels are expected to increase slowly over the 2020-2025 forecast period.



Professional and Business Services Employment

- The professional and business services industry has a diverse array of subsectors, and each will be impacted differently during the recession and recovery periods of 2020 and 2021.
- Jobs in corporate security and building maintenance declined substantially during the shutdowns but are expected to rebound at office and industrial buildings with repopulating employment.
- Staffing agencies had significant losses during the contraction, but may bounce back quickly once the economy begins to rebound.



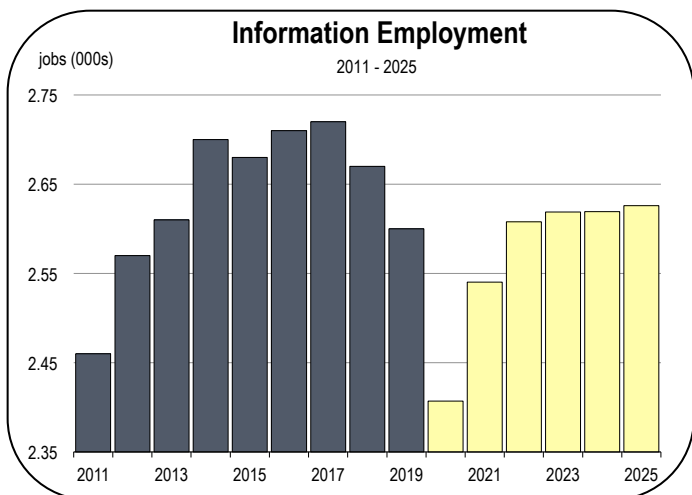
Sonoma County Economic Forecast

Professional & Business Services Sub-Sectors 2019	Jobs in Subsector	Subsector's Share of Overall Industry
Building Maintenance	5,300	22.6%
Staffing Agencies	3,000	12.8%
Engineering & Architecture	2,300	9.8%
Corporate Headquarters	2,100	8.9%
Accounting & Bookkeeping	1,600	6.8%
Law	1,200	5.1%
Custom IT Services	1,200	5.1%
Corporate Security	900	3.8%
Business Consulting	700	3.0%
Scientific Research	600	2.6%
Call Centers & Collections Agencies	500	2.1%
Marketing and Advertising	400	1.7%
Other	3,700	15.7%

- Staffing agencies primarily employ temp workers. Temp workers are usually laid off first during a downturn but hired back first during a recovery.
- Aside from security, maintenance, staffing agencies, and scientific research labs, most subsectors of the professional business services industry were able to operate remotely and were less affected by the recession.

Information Employment

- In Sonoma County, the information sector is very small and is primarily comprised of telecommunicate companies and firms that publish newspapers, magazines, and books.

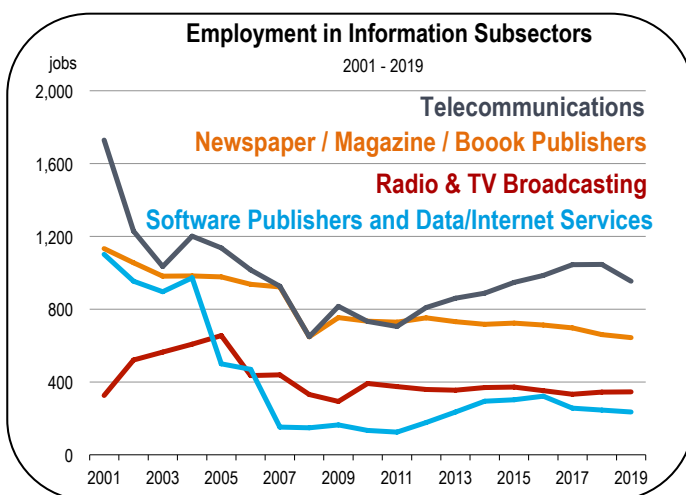


Information Sub-Sectors 2019	Jobs in Subsector	Subsector's Share of Overall Industry
Telecommunications	1,000	35.7%
Newspaper / Magazine / Book Publishing	700	25.0%
Radio & TV Broadcasting	400	14.3%
Movie Theaters	300	10.7%
Data & Internet Services	200	7.1%
Software Publishers	100	3.6%
Other	100	3.6%

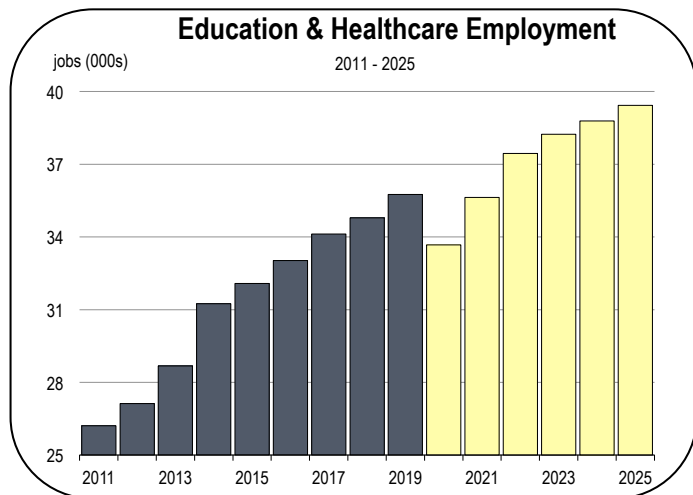
- The telecommunications industry is anchored by AT&T, which has 600 employees in Sonoma County.
- Most subsectors in the information industry are in long term patterns of decline. Even the software publishing and data/Internet subsectors have struggled to expand in Sonoma County.
- Telecommunications firms expanded between 2011 and 2018 before reducing their employee headcounts in 2019.
- After recovering from the Coronavirus Recession, no meaningful gain in information employment is expected.

Private Education and Healthcare Employment

- There were 22,000 healthcare jobs in Sonoma County in 2019.
- Healthcare jobs were recession proof during the 2008-2009 financial crisis. However, some non-essential medical offices had to close in 2020, and hospitals reduced employment levels because resources were utilized as envisioned to support Coronavirus patients.



Sonoma County Economic Forecast



- There were approximately 10,000 social assistance jobs in 2019, including industries like childcare, housing shelters, and non-medical care for senior citizens.
- There were also 2,000 jobs in private schools and colleges, tutoring services, vocational schools, and other educational organizations.
- Jobs in social assistance and education were mostly classified as essential, but there were still layoffs at institutions with revenue shortfalls.

Leisure and Hospitality Employment

- The leisure and hospitality industry was devastated by the recession more than any other sector of the labor market.
- In 2019, Sonoma County had 22,000 jobs in restaurants, hotels, and bars. Our research indicates that most were laid off, furloughed, or had their hours cut in March and April of 2020.
- Sonoma County also had 4,000 jobs in entertainment and recreation in 2019, including things like fitness centers, museums, and recreation centers. Many of these organizations will operate at reduced capacities through 2020 and potentially into 2021.

Government Employment

- Government agencies are expected to lose revenue from taxes and fees in 2020, and these revenue shortfalls will likely persist into 2021 and 2022.
- When government agencies need to reduce expenditures on salaries, many workers are expected to be given unpaid furlough

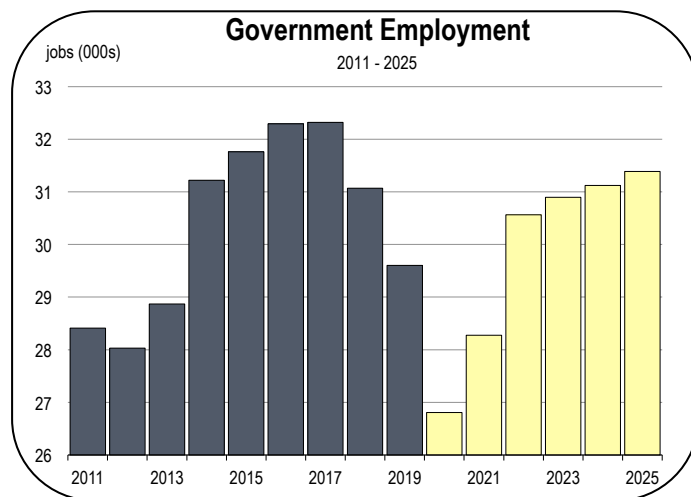


days that are distributed throughout the year, and many staffing reductions could be the result of hiring freezes rather than layoffs.

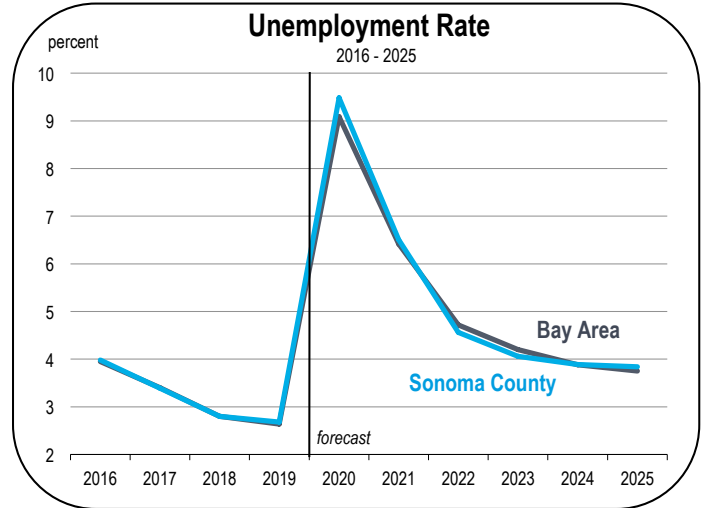
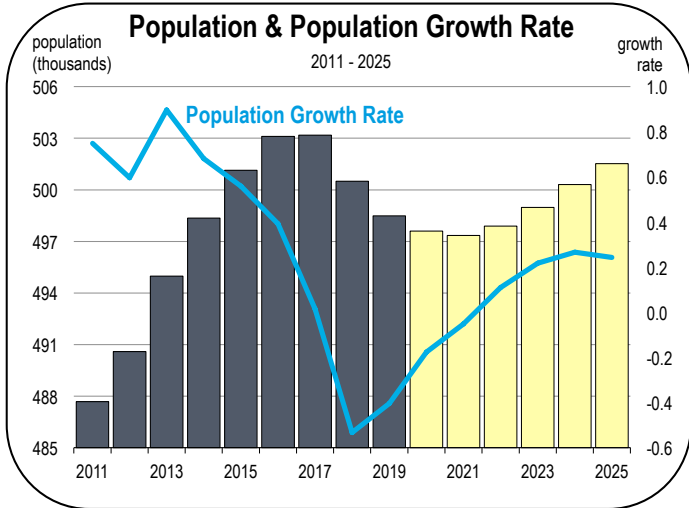
- However, if revenue shortfalls are severe and Congress does not appropriate funding to mitigate these shortfalls, government agencies may have no choice but to issue layoffs.

Population Growth

- The Sonoma County population is expected to expand more slowly than the Bay Area average between 2020 and 2025.
- The population began to decline in late 2017 during a severe wildfire season, and the population continued to shrink in 2018 and 2019.



Sonoma County Economic Forecast



- Another two years of declines are expected before slow growth returns for the remainder of the forecast period.
- The population will grow at an annual average rate of 0.1 percent per year from 2020 to 2025, and the county will surpass 500,000 residents by the year 2025.

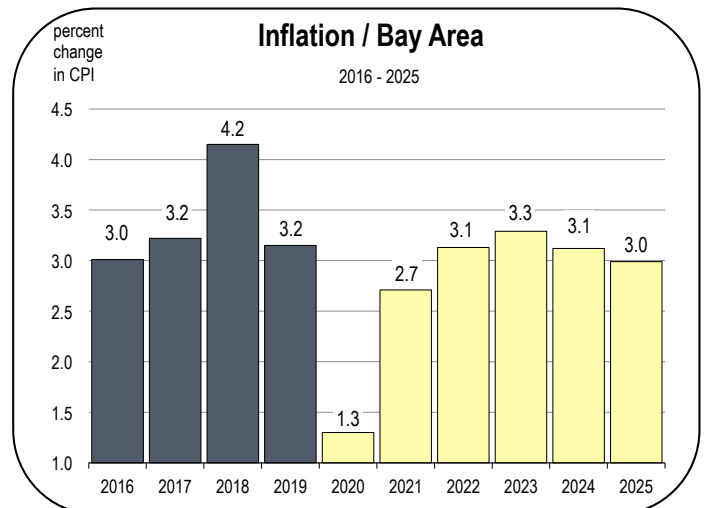
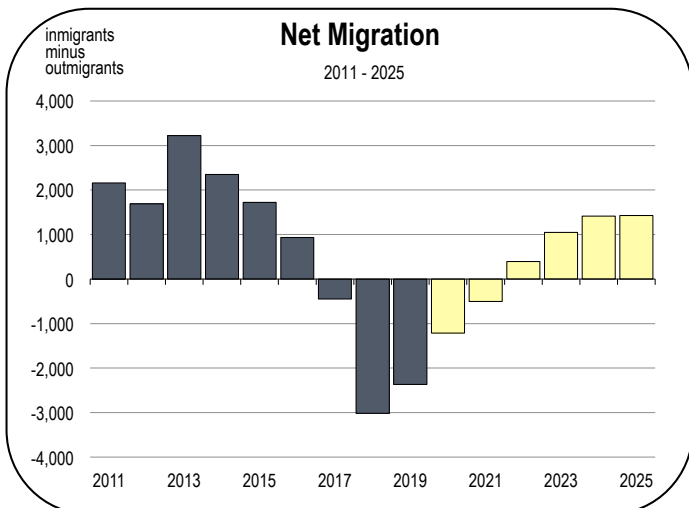
- The unemployment rate is expected to remain elevated for several years, but is likely to improve more quickly than after the 2008-2009 recession.
- Inflation decelerated in 2019 as energy prices declined and home prices increased more slowly than the previous year.
- Inflation is expected to be very low in 2020 but could accelerate in 2021 or 2022.

Unemployment and Inflation Rates

- The unemployment rate in Sonoma County averaged 2.7 percent in 2019, which was near the composite rate for the Bay Area.
- The unemployment rate is expected to average between 8.5 and 10.5 percent in 2020.

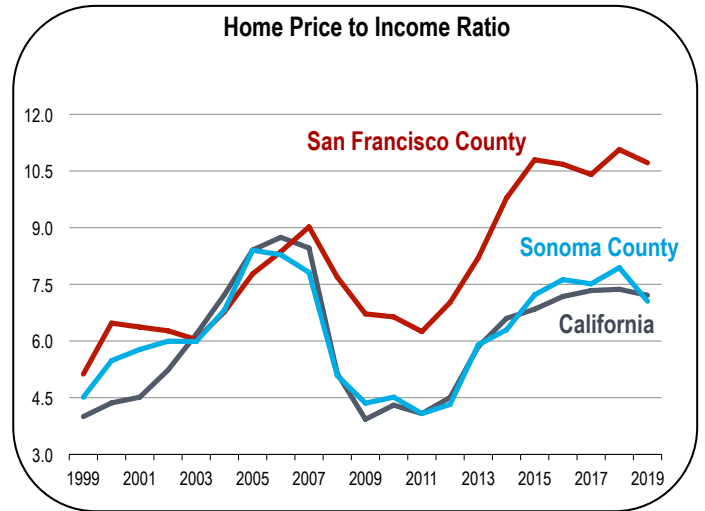
Home Prices and New Housing Production

- In 2019 the median home price in Sonoma County was \$590,000, a slight decrease from the previous year.

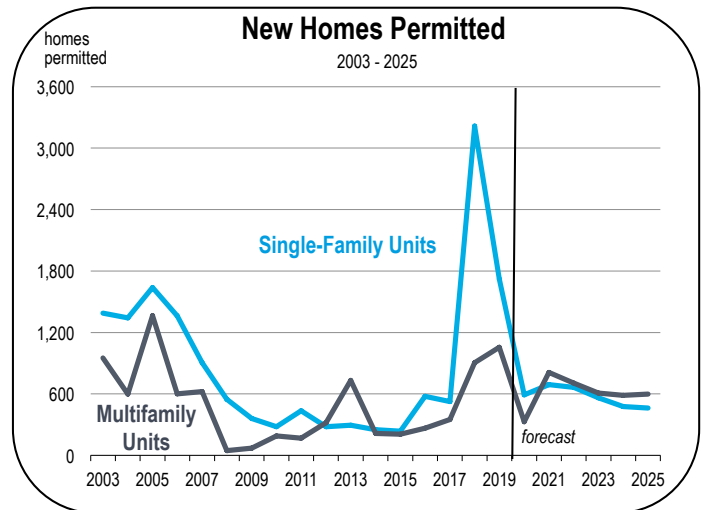
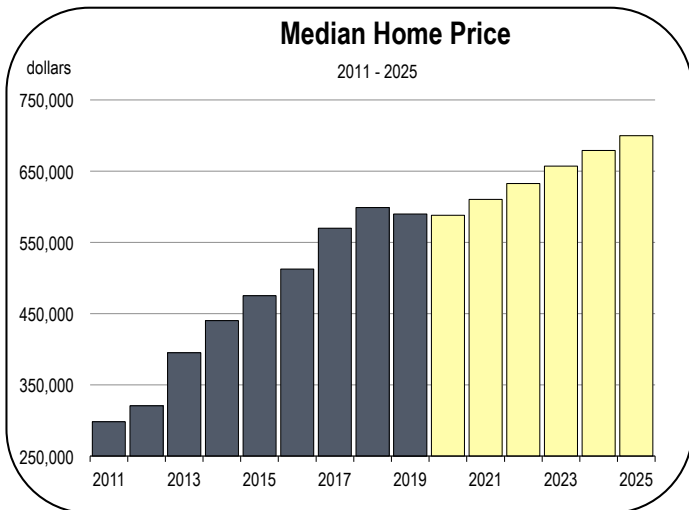


Sonoma County Economic Forecast

- The median price is not expected to change much in 2020 or 2021.
- In Sonoma County, the typical household spent approximately 30 percent of its income on mortgage payments or rent in 2019, which is similar to the statewide average.
- Homes in Sonoma County are much more affordable than other parts of the Bay Area, particularly San Francisco and Silicon Valley, where the typical household spends more than half of its income on housing.
- From 2014 to 2017, an average of 655 new homes were started per year in Sonoma County. Most were single-family homes.
- The wildfires of December 2017 destroyed thousands of homes and the rebuilding process began in 2018.
- More than 4,100 units were built in 2018 and almost 2,800 were constructed in 2019, and most were fire rebuilds.
- The rebuilding process has largely been completed, and future construction activity will consist of developing entirely new homes.



- Housing production is expected to average 1,200 homes per year from 2020 to 2025. Approximately half are expected to be single-family homes.



Sonoma County Economic Forecast

Economic Indicators

2015-2019 History, 2020-2050 Forecast

	Population (people)	House- holds (thousands)	Net Migration (people)	New Homes Permitted (homes)	Registered Vehicles (thousands)	Personal Income (billions)	Taxable Retail Sales (billions)	Total Taxable Sales (billions)	Real Industrial Production (billions)	Real per Capita Income (dollars)	Unemployment Rate (percent)	Real Farm Production (millions)	Inflation Rate (percent)
2015	501,142	187.8	1,724	442	522	\$27.8	\$6.1	\$8.8	\$5.2	\$63,442	4.5	\$875	2.6
2016	503,109	188.4	932	841	535	\$29.0	\$6.3	\$9.1	\$5.1	\$63,858	4.0	\$996	3.0
2017	503,181	189.0	-450	876	532	\$30.3	\$6.6	\$9.5	\$5.0	\$64,654	3.4	\$961	3.2
2018	500,499	185.1	-3,015	4,119	534	\$32.2	\$7.0	\$10.0	\$5.1	\$66,461	2.8	\$1,142	4.2
2019	498,480	186.4	-2,369	2,778	542	\$33.6	\$7.0	\$10.1	\$5.2	\$67,336	2.7	\$1,051	3.2
2020	497,600	188.0	-1,214	920	545	\$32.6	\$6.2	\$8.9	\$5.3	\$64,713	9.5	\$1,054	1.3
2021	497,346	189.6	-503	1,502	547	\$34.4	\$7.0	\$10.0	\$5.4	\$66,549	6.5	\$1,057	2.7
2022	497,890	191.5	394	1,369	548	\$37.4	\$7.3	\$10.5	\$5.5	\$69,944	4.6	\$1,060	3.1
2023	498,976	193.0	1,048	1,168	550	\$40.1	\$7.7	\$11.1	\$5.6	\$72,568	4.1	\$1,063	3.3
2024	500,307	194.1	1,414	1,063	550	\$42.6	\$8.2	\$11.8	\$5.8	\$74,517	3.9	\$1,066	3.1
2025	501,523	195.1	1,427	1,060	551	\$45.0	\$8.7	\$12.5	\$5.9	\$76,228	3.8	\$1,069	3.0
2026	502,668	196.1	1,474	1,137	551	\$47.2	\$9.2	\$13.3	\$6.1	\$77,509	3.7	\$1,072	2.9
2027	503,532	197.1	1,327	1,066	551	\$49.4	\$9.7	\$14.1	\$6.2	\$78,784	3.5	\$1,075	2.8
2028	503,735	198.1	783	1,205	551	\$51.8	\$10.3	\$14.9	\$6.4	\$80,290	3.5	\$1,078	2.9
2029	503,451	199.1	410	1,199	550	\$54.0	\$10.7	\$15.5	\$6.5	\$81,297	3.4	\$1,081	3.0
2030	502,930	200.2	290	1,218	550	\$56.3	\$11.0	\$16.0	\$6.6	\$82,364	3.5	\$1,084	2.9
2031	502,197	201.2	204	1,225	550	\$58.5	\$11.4	\$16.4	\$6.7	\$83,484	3.3	\$1,087	2.8
2032	501,265	202.3	112	1,325	550	\$60.8	\$11.7	\$16.9	\$6.8	\$84,397	3.4	\$1,090	3.0
2033	500,367	203.4	263	1,187	550	\$63.2	\$12.0	\$17.4	\$6.9	\$85,678	3.6	\$1,093	2.6
2034	499,556	204.4	489	1,030	550	\$65.7	\$12.4	\$17.9	\$7.0	\$86,811	3.6	\$1,096	2.8
2035	498,859	205.4	719	1,167	549	\$68.4	\$12.8	\$18.4	\$7.1	\$87,937	3.5	\$1,099	2.9
2036	498,185	206.4	872	1,064	549	\$71.1	\$13.2	\$19.1	\$7.2	\$88,691	3.5	\$1,102	3.3
2037	497,563	207.3	1,038	1,073	549	\$74.0	\$13.7	\$19.7	\$7.3	\$89,382	3.5	\$1,105	3.4
2038	496,887	208.3	1,142	702	549	\$76.9	\$14.1	\$20.4	\$7.4	\$90,189	3.5	\$1,108	3.2
2039	495,958	208.9	1,027	763	548	\$80.0	\$14.6	\$21.1	\$7.5	\$90,884	3.4	\$1,111	3.4
2040	494,894	209.6	1,031	730	548	\$83.1	\$15.1	\$21.8	\$7.6	\$91,696	3.4	\$1,113	3.3
2041	493,656	210.2	973	797	548	\$86.4	\$15.6	\$22.5	\$7.7	\$92,646	3.4	\$1,116	3.1
2042	491,981	210.9	665	608	547	\$89.6	\$16.0	\$23.2	\$7.8	\$93,665	3.4	\$1,119	3.0
2043	489,812	211.5	297	591	547	\$92.9	\$16.5	\$23.9	\$7.9	\$94,852	3.4	\$1,122	2.9
2044	487,634	212.0	411	606	546	\$96.3	\$17.0	\$24.5	\$8.0	\$96,200	3.4	\$1,125	2.7
2045	485,491	212.6	580	577	545	\$99.9	\$17.5	\$25.3	\$8.1	\$97,356	3.4	\$1,128	2.9
2046	483,169	213.1	535	508	544	\$103.5	\$18.0	\$26.0	\$8.2	\$98,594	3.4	\$1,131	2.8
2047	480,647	213.5	440	647	542	\$107.1	\$18.5	\$26.8	\$8.3	\$99,847	3.4	\$1,134	2.8
2048	477,920	214.1	345	511	541	\$110.8	\$19.1	\$27.6	\$8.4	\$101,102	3.4	\$1,137	2.8
2049	475,026	214.6	283	484	539	\$114.7	\$19.6	\$28.4	\$8.5	\$102,428	3.4	\$1,140	2.8
2050	472,017	215.0	269	506	538	\$118.7	\$20.2	\$29.2	\$8.6	\$103,782	3.4	\$1,143	2.8

Employment Sectors

2015-2019 History, 2020-2050 Forecast

	Total Wage & Salary	Farm	Construction	Manufac- turing	Transportation & Utilities	Wholesale & Retail Trade	Financial Activities	Professional Services	Information	Health & Education	Leisure	Government
	(thousands of jobs)											
2015	203.0	6.0	11.6	22.0	4.3	31.9	8.1	20.8	2.7	32.1	24.7	31.8
2016	208.1	6.1	12.4	22.7	4.2	32.3	8.4	21.2	2.7	33.0	25.4	32.3
2017	211.8	6.1	13.1	23.0	4.0	32.5	8.8	22.1	2.7	34.1	25.7	32.3
2018	215.4	6.7	15.2	23.4	4.1	32.4	8.9	23.2	2.7	34.8	25.7	31.1
2019	215.9	6.5	16.5	23.4	4.2	31.8	8.8	23.5	2.6	35.8	25.8	29.6
2020	195.9	6.0	14.8	22.3	4.2	29.0	8.8	22.6	2.4	33.7	19.4	26.8
2021	207.6	6.4	15.4	23.4	4.2	31.0	8.7	23.1	2.5	35.6	22.2	28.3
2022	217.6	6.5	16.3	23.5	4.3	31.6	8.8	23.6	2.6	37.4	25.0	30.6
2023	221.8	6.5	16.7	23.7	4.3	31.9	8.8	24.1	2.6	38.2	26.5	30.9
2024	223.8	6.5	16.5	23.7	4.4	32.2	8.9	24.2	2.6	38.8	27.3	31.1
2025	225.6	6.6	16.6	23.8	4.4	32.6	8.9	24.3	2.6	39.4	27.6	31.4
2026	226.7	6.6	16.2	23.8	4.4	32.8	8.9	24.4	2.6	40.0	27.8	31.5
2027	228.0	6.6	16.1	23.9	4.4	33.2	9.0	24.5	2.6	40.4	28.0	31.6
2028	229.2	6.6	16.0	24.0	4.4	33.5	9.0	24.6	2.6	40.8	28.1	31.8
2029	230.1	6.6	16.0	24.0	4.4	33.6	9.0	24.7	2.6	41.1	28.2	31.9
2030	230.8	6.6	15.8	24.1	4.3	33.7	9.0	24.9	2.7	41.5	28.3	32.0
2031	231.3	6.6	15.4	24.1	4.3	33.8	9.0	25.0	2.7	41.8	28.4	32.1
2032	232.0	6.6	15.3	24.2	4.3	33.8	9.1	25.1	2.7	42.0	28.5	32.3
2033	232.7	6.6	15.2	24.2	4.4	33.9	9.1	25.2	2.7	42.3	28.6	32.4
2034	233.3	6.6	15.1	24.2	4.4	33.9	9.1	25.3	2.7	42.5	28.7	32.5
2035	234.3	6.6	15.2	24.3	4.4	34.0	9.1	25.4	2.7	42.8	28.9	32.6
2036	235.1	6.7	15.2	24.3	4.4	34.1	9.1	25.5	2.7	43.1	29.0	32.7
2037	236.0	6.7	15.3	24.4	4.4	34.1	9.1	25.6	2.7	43.3	29.2	32.8
2038	236.5	6.7	15.2	24.4	4.4	34.2	9.1	25.7	2.7	43.5	29.3	32.9
2039	237.0	6.7	15.2	24.4	4.4	34.2	9.1	25.8	2.7	43.6	29.4	33.0
2040	237.9	6.7	15.4	24.5	4.4	34.3	9.1	25.9	2.7	43.6	29.5	33.1
2041	238.6	6.7	15.5	24.5	4.4	34.3	9.1	26.1	2.7	43.8	29.6	33.2
2042	239.0	6.7	15.4	24.6	4.4	34.4	9.1	26.2	2.7	43.8	29.7	33.3
2043	239.6	6.7	15.3	24.6	4.4	34.5	9.1	26.3	2.7	43.9	29.9	33.4
2044	240.2	6.7	15.2	24.6	4.4	34.5	9.1	26.4	2.7	44.1	30.0	33.5
2045	240.9	6.7	15.3	24.7	4.4	34.6	9.1	26.5	2.7	44.2	30.1	33.6
2046	241.6	6.7	15.3	24.7	4.4	34.7	9.1	26.6	2.7	44.3	30.2	33.8
2047	242.3	6.7	15.4	24.8	4.4	34.7	9.1	26.7	2.7	44.4	30.3	33.8
2048	242.7	6.8	15.3	24.8	4.4	34.8	9.1	26.8	2.7	44.5	30.4	33.9
2049	243.3	6.8	15.3	24.8	4.4	34.8	9.1	26.9	2.7	44.6	30.5	34.0
2050	243.9	6.8	15.4	24.9	4.4	34.9	9.1	27.0	2.7	44.6	30.6	34.1

Sonoma County Economic Forecast

Socioeconomic Indicators

