

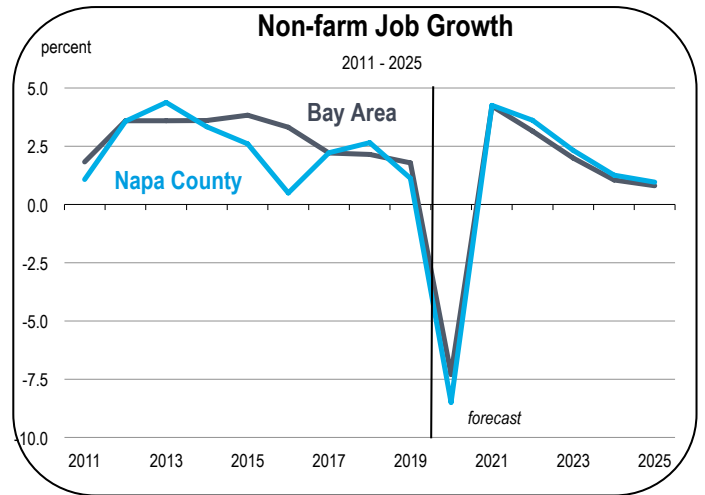
Napa County Economic Forecast

Forecast Summary

- On an annual average basis, approximately 5,500 to 7,500 non-farm jobs will be lost in Napa County during 2020. Job losses will be very heavy in the first half of the year.
- Employment losses will be largest in leisure services, including hotels, bars, and restaurants. Leisure services will account for more than half of all net job losses in the county in 2020.
- The unemployment rate averaged 2.9 percent in 2019. It will average between 9 and 11 percent for the 2020 calendar year.
- The Napa County population is expected to grow more slowly than the Bay Area average during the forecast period.
- Housing production will decline in 2020 but should rebound to pre-recession levels in 2021.
- Housing prices are expected to increase in 2020 and 2021.

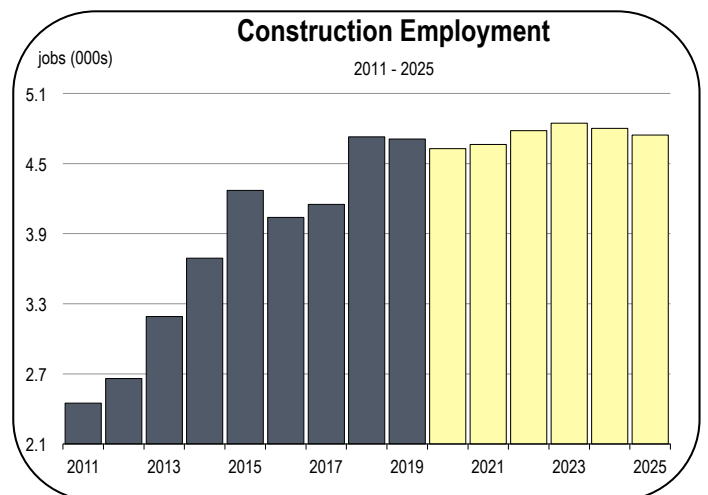
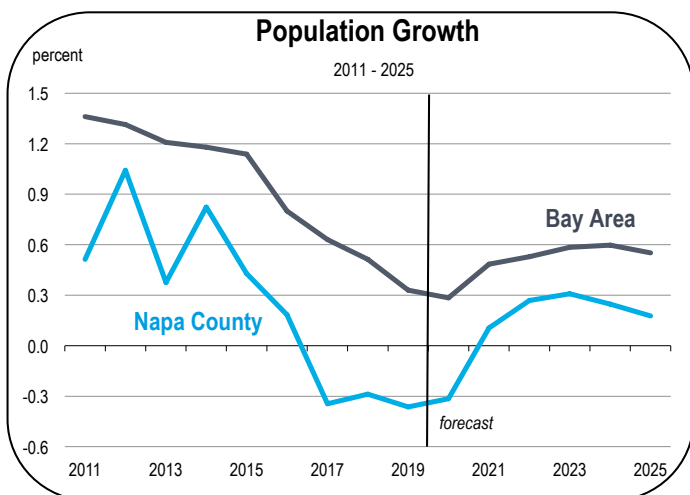
Job Growth

- Total employment in Napa County will decline by 7 to 9 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.

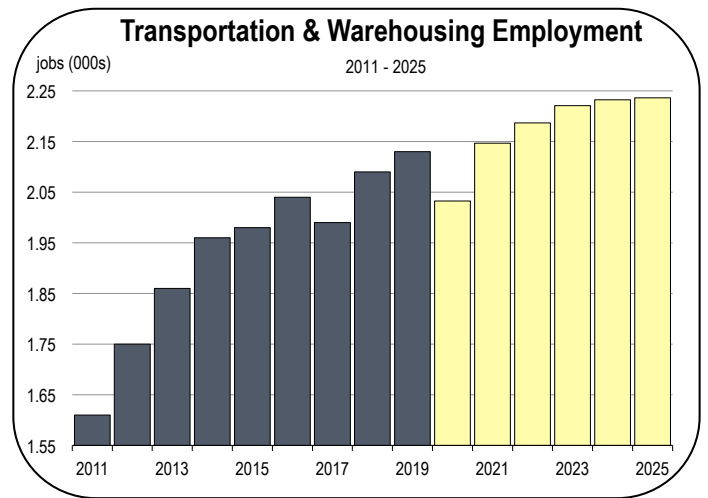
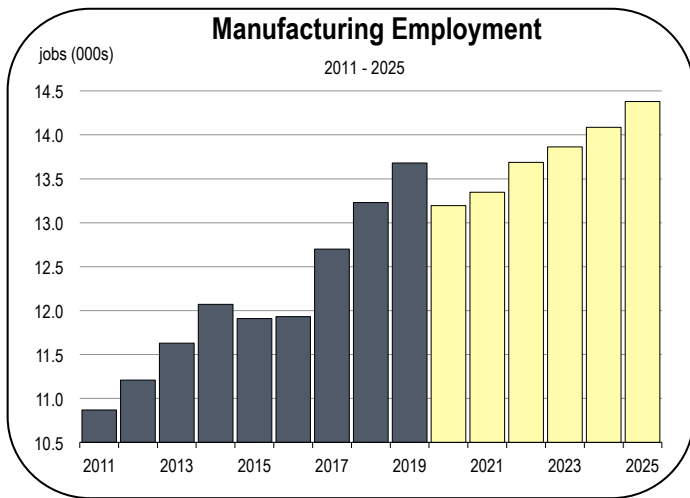


Construction Employment

- 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 most construction workers back to their jobs.
- On an annual average basis, construction employment is not expected to change substantially in 2020 or 2021.



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Manufacturing Employment

- Wineries account for 85 percent of all manufacturing jobs in Napa County, as wineries are considered to be in the beverage manufacturing industry.
- Wineries had an average year in 2019 when they processed approximately 160,000 tons of wine grapes. Production will decrease in 2020 as the global demand for wine contracts along with the economy.
- Overall manufacturing employment is expected to decrease by 300 to 500 jobs during 2020, and some of these jobs may not be restored for several years.

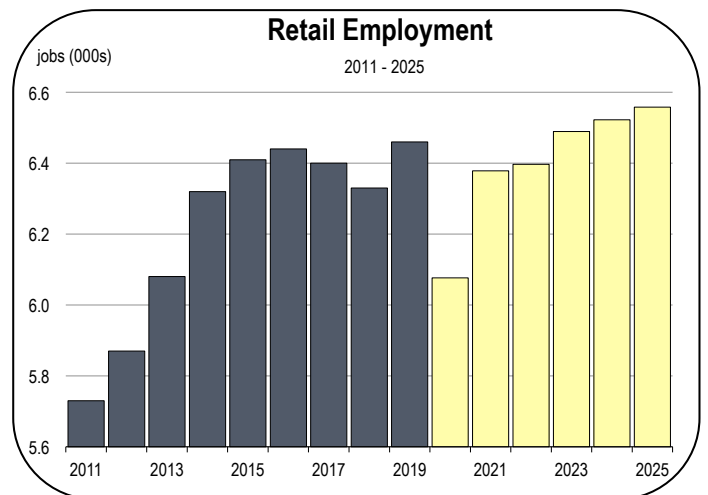
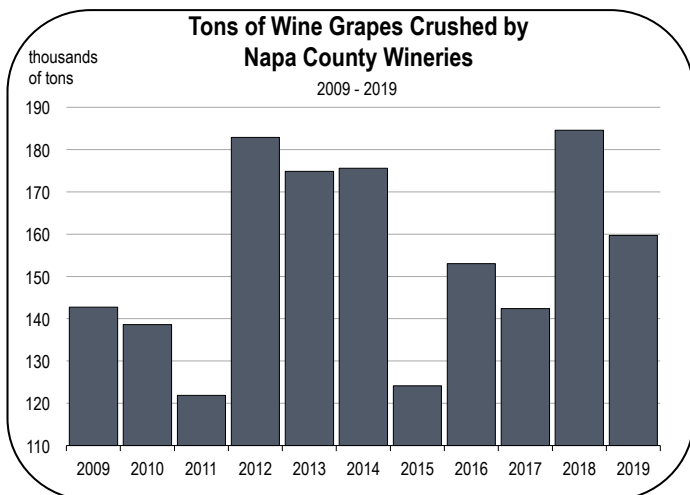
Transportation and Warehousing Employment

- Transportation and warehousing employment is expected to decline by 3 to 6 percent in 2020.

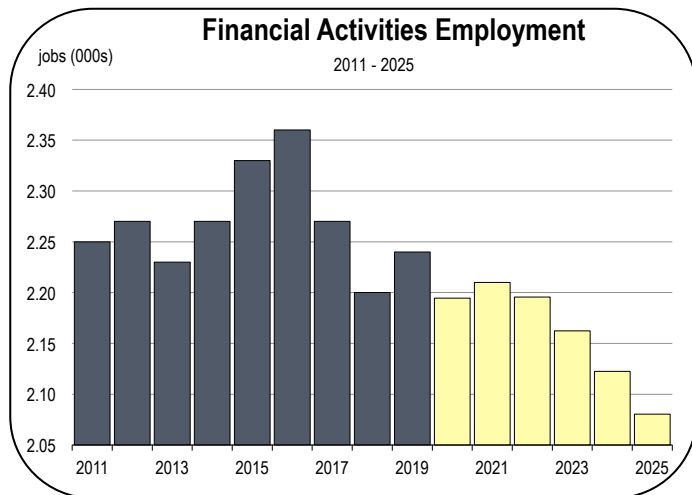
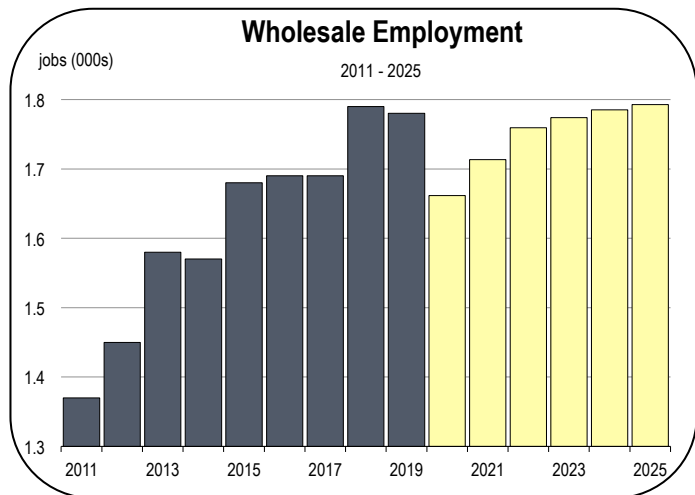
- Some transportation subsectors hired large numbers of workers during the second quarter of 2020, including delivery firms like UPS, FedEx, and Instacart. Delivery firms may be among the few corners of the job market to expand throughout 2020.
- Overall transportation employment will regain most the jobs lost in the Coronavirus Recession by 2021 or 2022.

Retail Trade Employment

- The retail sector is expected to lose more than 300 jobs in 2020 on an annual average basis.
- Many retail chains chose to furlough their employees rather than lay them off completely, and furloughed workers are not 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 800 retail workers could be effectively not working and not earning an income on an annual average basis in 2020.



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- Retail trade jobs will return after social distancing protocols are removed in a sustained way, but it could take several years for retail employment to surpass pre-recession levels.

Wholesale Trade Employment

- Wholesale trade employment is expected to fall by at least 100 jobs on an annual average basis in 2020.
- Wholesale employment is expected to rebound slowly in 2021 and 2022.

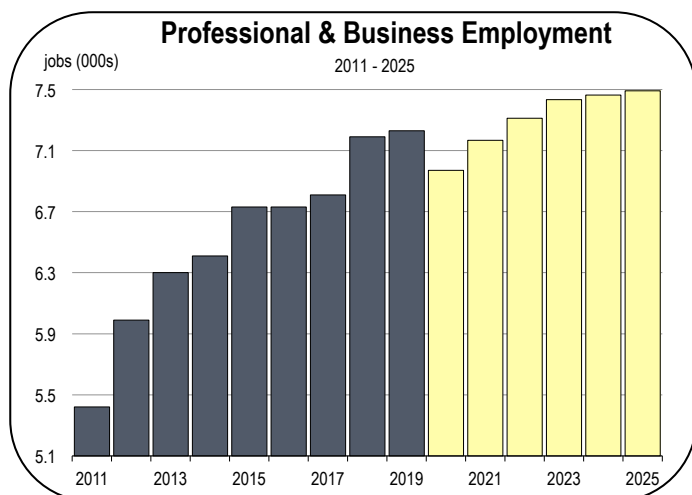
Financial Activities Employment

- Substantial job declines are expected at financial activities firms in 2020 because some employers closed, committing their employees to shelter-in-place for health reasons.
- Banks reduced their head counts in 2020 due to a temporary reduction of in-person branch visits.
- Employment in financial activities companies began declining several years before the Coronavirus Recession, and it is expected that employment levels will continue to decline during the 2020-2025 forecast period.

Financial Activities Sub-Sectors 2019	Jobs in Subsector	Subsector's Share of Overall Industry
Insurance	700	31.8%
Real Estate	600	27.3%
Banks	500	22.7%
Rental & Leasing Services	200	9.1%
Investment Management	200	9.1%

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 phases of 2020 and 2021.
- Jobs in corporate security and building maintenance declined substantially during the March-April recession 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 expand again.
- Staffing agencies primarily employ temp workers. Temp workers are usually laid off first during a downturn but hired back first during a recovery.



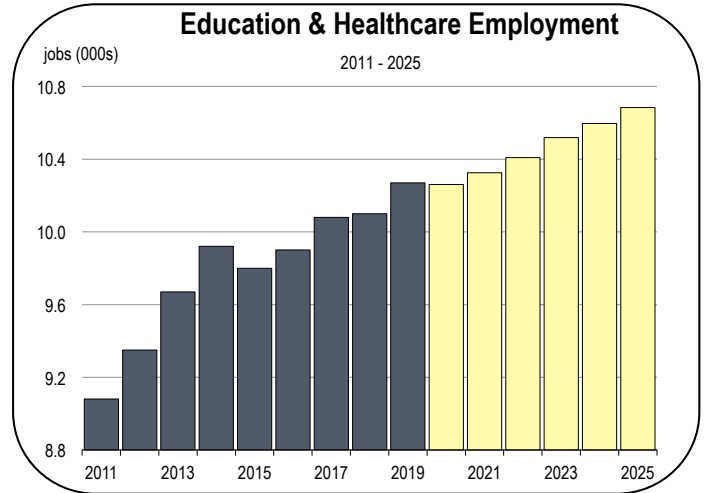
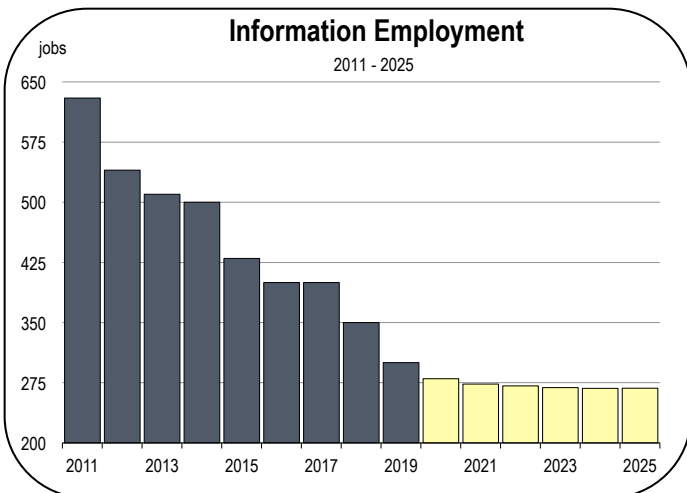
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Professional & Business Services Sub-Sectors 2019	Jobs in Subsector	Subsector's Share of Overall Industry
Building Maintenance	1,600	22.2%
Staffing Agencies	1,200	16.7%
Corporate Security	600	8.3%
Corporate Headquarters	600	8.3%
Engineering & Architecture	500	6.9%
Business Consulting	400	5.6%
Accounting & Bookkeeping	300	4.2%
Scientific Research	200	2.8%
Custom IT Services	200	2.8%
Law	200	2.8%
Marketing and Advertising	200	2.8%
Other	1,200	16.7%

- 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 impacted by the economic downturn.

Information Employment

- In Napa County, the information sector is very small and is primarily comprised of telecommunicate companies, movie theaters, local newspapers, and Internet service firms.
- Most subsectors in the information industry are in long term patters of decline, including telecommunications and newspapers.



- No meaningful gain in employment levels is expected during the 2020-2025 forecast period.

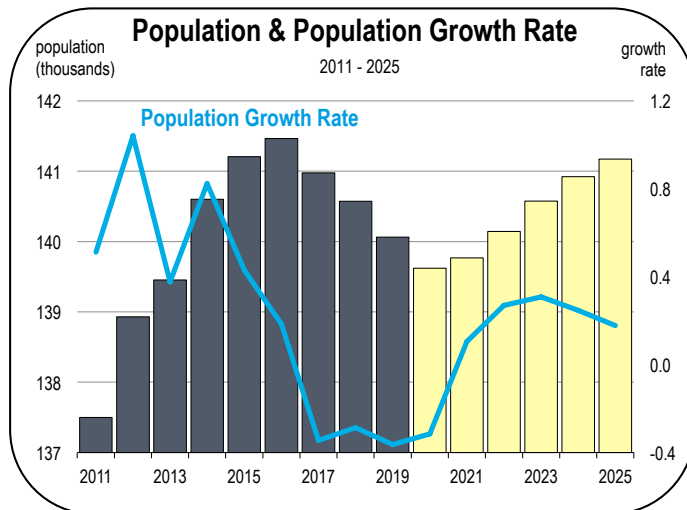
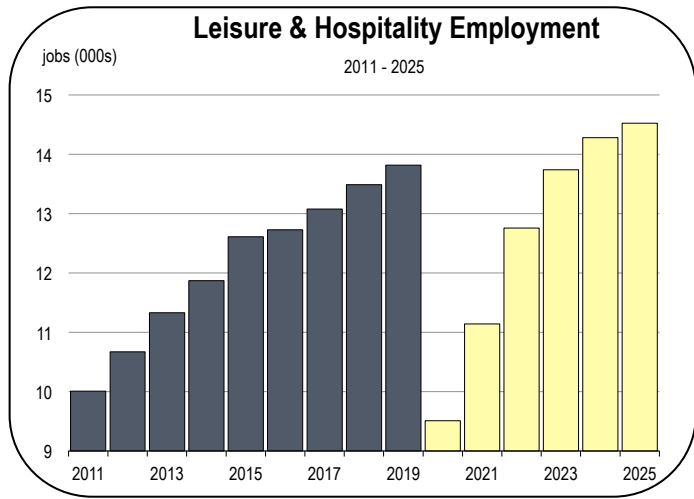
Private Education and Healthcare Employment

- No job growth is expected in private education and healthcare firms in 2020.
- There were 6,000 healthcare jobs in Napa County in 2019. Healthcare jobs were recession proof during the 2008-2009 financial crisis, but some medical offices had to close during the Coronavirus Recession, which will prevent the healthcare industry from expanding in 2020.
- There were approximately 2,000 social assistance jobs in 2019, including industries like childcare, housing shelters, and non-medical care for senior citizens. There were also 1,000 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 in 2020.
- Very slow growth is expected in 2021 and 2022 in the overall private education and healthcare industry.

Leisure and Hospitality Employment

- The leisure and hospitality industry was devastated by the economic contraction more than any other sector of the labor market.
- In 2019, Napa County had 13,000 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.

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- Napa County had 1,000 jobs in entertainment and recreation in 2019, including things like fitness centers, museums, and performing arts venues. Many of these organizations will operate at reduced capacities throughout 2020 and potentially into 2021.
- Leisure and hospitality employment will rebound sharply in 2021 and 2022, but it will still take several years to re-gain the jobs lost during the recession.

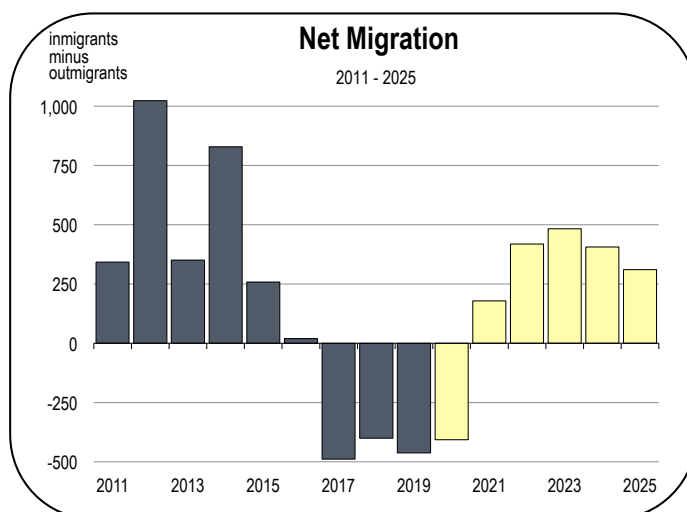
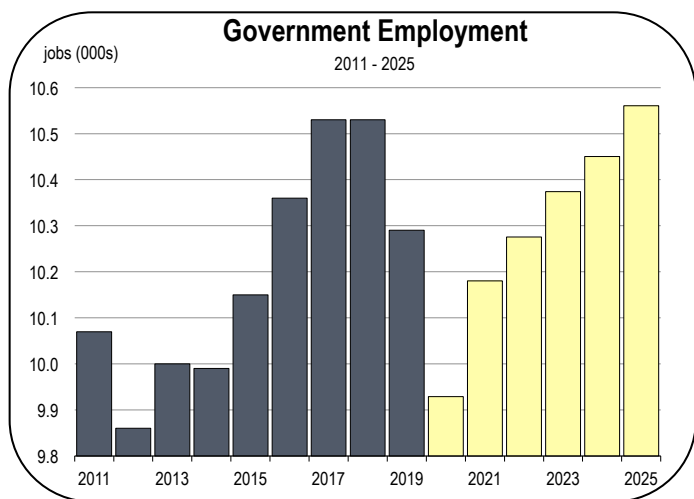
- However, if revenue shortfalls are severe and Congress does not appropriate funding to mitigate these shortfalls, government agencies may have no choice but to issue layoffs.

Government Employment

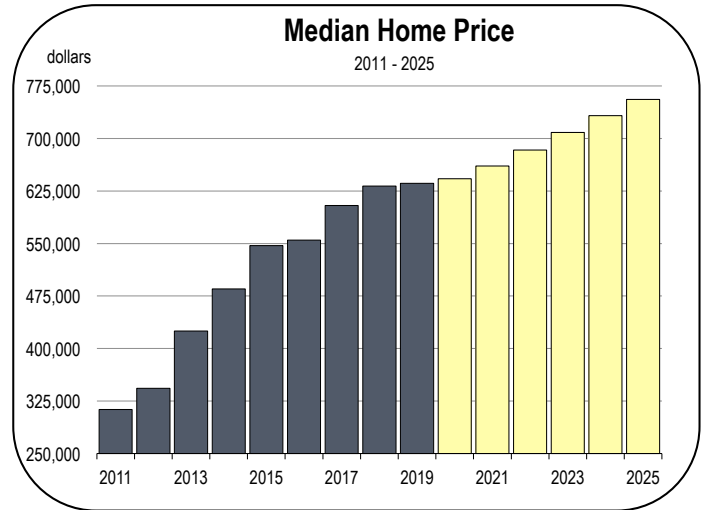
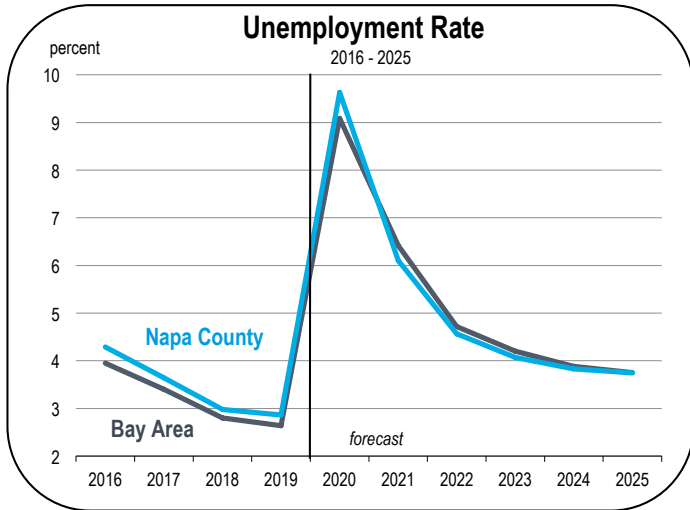
- Government agencies are expected to lose revenue from taxes and fees in 2020, and these revenue shortfalls will likely persist into 2021 and 2022.
- When government agencies need to reduce expenditures on salaries, many workers are expected to be given unpaid furlough days that are distributed throughout the year, and many staffing reductions could be the result of hiring freezes rather than layoffs.

Population Growth

- The Napa County population is expected to expand more slowly than the Bay Area average between 2020 and 2025.
- The population began to decline in 2017 during a severe wildfire season, and the population continued to shrink in 2018 and 2019.
- Another year of decline is expected in 2020 before slow growth returns for the remainder of the forecast period.
- An average of 360 net migrants are expected to move into the county each year between 2021 and 2025.



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- The population will grow at an annual average rate of 0.2 percent per year from 2020 to 2025, and the county will surpass 141,000 residents by the end of the forecast period.

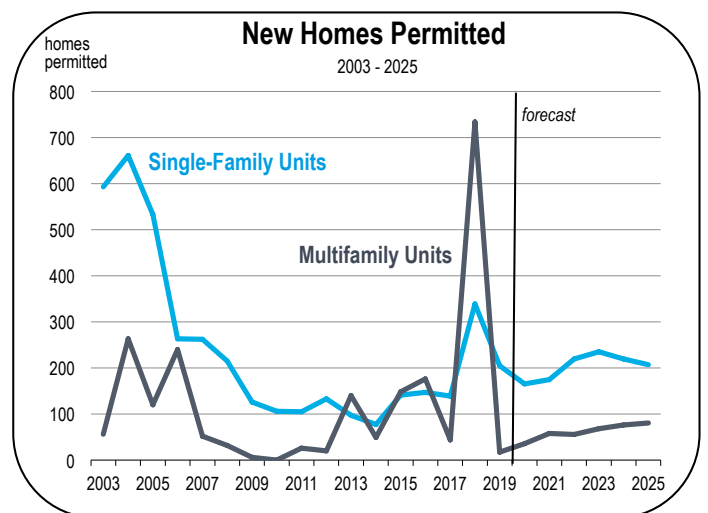
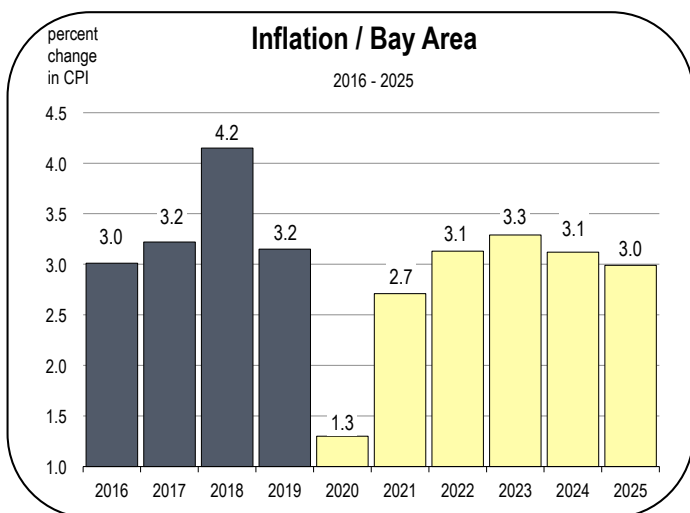
- Inflation is expected to be very low in 2020 but could accelerate in 2021 or 2022.

Unemployment and Inflation Rates

Home Prices and New Housing Production

- The unemployment rate in Napa County averaged 2.9 percent in 2019, which was near the composite rate for the Bay Area.
- The unemployment rate is expected to average between 9 and 11 percent in 2020.
- 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.

- In 2019 the median home price in Napa County was \$636,100.
- The median price is expected to increase by small amounts in 2020 and 2021.
- From 2014 to 2019, an average of 370 new homes were started per year in Napa County. Approximately half were single-family homes.
- Housing production is expected to average 270 homes per year from 2020 to 2025. Approximately 75 percent are expected to be single-family homes.



Napa 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	141,205	49.4	258	289	146	\$9.0	\$1.9	\$3.3	\$3.0	\$73,047	4.6	\$632	1.5
2016	141,466	49.5	20	323	149	\$9.5	\$1.9	\$3.4	\$3.1	\$74,797	4.3	\$818	2.3
2017	140,978	49.7	-489	183	148	\$9.8	\$2.0	\$3.5	\$3.0	\$74,668	3.6	\$813	2.9
2018	140,573	49.6	-400	1,073	148	\$10.5	\$2.2	\$3.7	\$3.0	\$76,713	3.0	\$1,076	3.6
2019	140,062	49.6	-462	222	151	\$11.0	\$2.2	\$3.8	\$3.1	\$78,269	2.9	\$991	3.0
2020	139,621	49.8	-407	201	150	\$10.5	\$2.0	\$3.6	\$3.1	\$74,555	9.6	\$944	0.6
2021	139,768	50.0	179	232	151	\$11.0	\$2.2	\$3.7	\$3.1	\$75,940	6.1	\$981	2.0
2022	140,144	50.2	418	275	152	\$11.9	\$2.3	\$3.9	\$3.2	\$78,980	4.6	\$992	2.5
2023	140,575	50.5	483	303	154	\$12.8	\$2.4	\$4.1	\$3.3	\$81,877	4.1	\$1,004	2.6
2024	140,922	50.8	406	295	155	\$13.6	\$2.5	\$4.4	\$3.5	\$84,300	3.8	\$1,015	2.5
2025	141,172	51.1	310	287	156	\$14.3	\$2.7	\$4.6	\$3.6	\$86,326	3.7	\$1,027	2.3
2026	141,469	51.4	364	266	158	\$15.1	\$2.8	\$4.9	\$3.7	\$87,867	3.6	\$1,039	2.3
2027	141,659	51.7	267	260	159	\$15.8	\$3.0	\$5.2	\$3.9	\$89,371	3.4	\$1,052	2.2
2028	141,759	51.9	192	256	160	\$16.6	\$3.1	\$5.5	\$4.0	\$91,370	3.4	\$1,064	2.2
2029	141,906	52.2	246	255	161	\$17.3	\$3.2	\$5.7	\$4.1	\$92,506	3.4	\$1,077	2.3
2030	142,072	52.4	270	251	162	\$18.1	\$3.3	\$5.9	\$4.2	\$93,673	3.4	\$1,090	2.2
2031	142,244	52.7	280	238	162	\$18.8	\$3.4	\$6.1	\$4.3	\$94,912	3.3	\$1,104	2.1
2032	142,297	52.9	172	238	163	\$19.6	\$3.5	\$6.3	\$4.4	\$95,856	3.4	\$1,117	2.3
2033	142,465	53.2	295	224	164	\$20.4	\$3.6	\$6.5	\$4.5	\$97,206	3.4	\$1,131	1.9
2034	142,700	53.4	372	227	165	\$21.3	\$3.7	\$6.7	\$4.6	\$98,331	3.4	\$1,145	2.1
2035	142,943	53.6	398	231	165	\$22.1	\$3.8	\$6.9	\$4.7	\$99,366	3.4	\$1,160	2.2
2036	143,062	53.9	296	236	166	\$23.0	\$4.0	\$7.1	\$4.8	\$100,030	3.4	\$1,175	2.6
2037	143,186	54.1	320	216	167	\$24.0	\$4.1	\$7.4	\$4.9	\$100,572	3.4	\$1,190	2.7
2038	143,267	54.3	301	208	167	\$24.9	\$4.2	\$7.6	\$5.0	\$101,418	3.4	\$1,206	2.5
2039	143,269	54.5	239	210	168	\$26.0	\$4.4	\$7.9	\$5.0	\$102,137	3.4	\$1,221	2.7
2040	143,297	54.7	283	183	168	\$27.0	\$4.5	\$8.1	\$5.1	\$102,798	3.4	\$1,237	2.6
2041	143,251	54.9	238	158	169	\$28.0	\$4.7	\$8.4	\$5.2	\$103,676	3.4	\$1,254	2.4
2042	143,074	55.1	135	149	170	\$29.2	\$4.8	\$8.7	\$5.3	\$104,810	3.4	\$1,271	2.3
2043	142,804	55.2	67	153	170	\$30.3	\$5.0	\$8.9	\$5.4	\$106,168	3.4	\$1,288	2.2
2044	142,692	55.4	245	142	171	\$31.5	\$5.1	\$9.2	\$5.6	\$107,428	3.4	\$1,305	2.0
2045	142,601	55.5	288	149	171	\$32.7	\$5.3	\$9.5	\$5.6	\$108,370	3.4	\$1,323	2.2
2046	142,444	55.7	233	155	172	\$33.8	\$5.4	\$9.7	\$5.7	\$109,427	3.4	\$1,342	2.1
2047	142,234	55.8	182	151	173	\$35.1	\$5.6	\$10.0	\$5.8	\$110,441	3.4	\$1,360	2.1
2048	142,007	56.0	167	145	173	\$36.3	\$5.7	\$10.3	\$6.0	\$111,471	3.4	\$1,379	2.1
2049	141,784	56.1	174	141	174	\$37.6	\$5.9	\$10.6	\$6.1	\$112,507	3.4	\$1,399	2.1
2050	141,568	56.3	178	120	174	\$38.9	\$6.1	\$10.9	\$6.2	\$113,449	3.4	\$1,418	2.1

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	75.3	5.0	4.3	11.9	2.0	8.1	2.3	6.7	0.4	9.8	12.6	10.2
2016	75.7	5.0	4.0	11.9	2.0	8.1	2.4	6.7	0.4	9.9	12.7	10.4
2017	77.3	5.0	4.2	12.7	2.0	8.1	2.3	6.8	0.4	10.1	13.1	10.5
2018	79.3	5.1	4.7	13.2	2.1	8.1	2.2	7.2	0.4	10.1	13.5	10.5
2019	80.2	5.2	4.7	13.7	2.1	8.2	2.2	7.2	0.3	10.3	13.8	10.3
2020	73.7	5.1	4.6	13.2	2.0	7.7	2.2	7.0	0.3	10.3	9.5	9.9
2021	76.7	5.2	4.7	13.3	2.1	8.1	2.2	7.2	0.3	10.3	11.1	10.2
2022	79.3	5.2	4.8	13.7	2.2	8.2	2.2	7.3	0.3	10.4	12.8	10.3
2023	81.1	5.2	4.8	13.9	2.2	8.3	2.2	7.4	0.3	10.5	13.7	10.4
2024	82.1	5.3	4.8	14.1	2.2	8.3	2.1	7.5	0.3	10.6	14.3	10.5
2025	82.8	5.3	4.7	14.4	2.2	8.4	2.1	7.5	0.3	10.7	14.5	10.6
2026	83.4	5.3	4.7	14.6	2.2	8.4	2.0	7.5	0.3	10.7	14.7	10.6
2027	84.0	5.3	4.6	14.8	2.2	8.5	2.0	7.6	0.3	10.8	14.9	10.6
2028	84.6	5.4	4.6	15.1	2.2	8.6	2.0	7.6	0.3	10.8	15.0	10.7
2029	85.1	5.4	4.6	15.3	2.2	8.7	2.0	7.6	0.3	10.9	15.1	10.7
2030	85.6	5.4	4.6	15.4	2.2	8.7	2.0	7.6	0.3	10.9	15.2	10.8
2031	86.0	5.5	4.5	15.6	2.2	8.7	2.0	7.7	0.3	11.0	15.4	10.8
2032	86.5	5.5	4.5	15.8	2.2	8.7	2.0	7.7	0.3	11.1	15.5	10.8
2033	86.9	5.5	4.5	16.0	2.3	8.8	2.0	7.7	0.3	11.1	15.5	10.9
2034	87.4	5.5	4.5	16.1	2.3	8.8	2.0	7.8	0.3	11.2	15.7	10.9
2035	87.9	5.6	4.5	16.3	2.3	8.8	2.0	7.8	0.3	11.3	15.8	11.0
2036	88.4	5.6	4.6	16.4	2.3	8.8	2.0	7.8	0.3	11.4	15.9	11.0
2037	88.7	5.6	4.5	16.5	2.3	8.8	2.0	7.8	0.3	11.4	16.0	11.0
2038	89.2	5.7	4.5	16.6	2.3	8.9	2.0	7.9	0.3	11.5	16.1	11.1
2039	89.6	5.7	4.5	16.7	2.3	8.9	2.0	7.9	0.3	11.6	16.2	11.1
2040	89.9	5.7	4.4	16.8	2.3	8.9	1.9	7.9	0.3	11.7	16.3	11.2
2041	90.3	5.7	4.3	17.0	2.3	8.9	1.9	8.0	0.3	11.8	16.4	11.2
2042	90.7	5.8	4.2	17.1	2.3	9.0	1.9	8.0	0.3	11.9	16.5	11.2
2043	91.3	5.8	4.3	17.3	2.3	9.0	1.9	8.0	0.3	11.9	16.6	11.3
2044	91.8	5.8	4.2	17.5	2.3	9.0	1.9	8.1	0.3	12.0	16.8	11.3
2045	92.2	5.9	4.3	17.6	2.3	9.0	1.9	8.1	0.3	12.0	16.9	11.4
2046	92.7	5.9	4.3	17.8	2.3	9.0	1.9	8.1	0.3	12.1	17.0	11.4
2047	93.2	5.9	4.3	17.9	2.3	9.1	1.9	8.1	0.3	12.1	17.1	11.4
2048	93.6	6.0	4.3	18.1	2.3	9.1	1.9	8.2	0.3	12.2	17.2	11.5
2049	94.0	6.0	4.3	18.2	2.3	9.1	1.9	8.2	0.3	12.2	17.3	11.5
2050	94.3	6.0	4.1	18.4	2.3	9.1	1.9	8.2	0.3	12.3	17.4	11.6

Napa County Economic Forecast

Socioeconomic Indicators

