

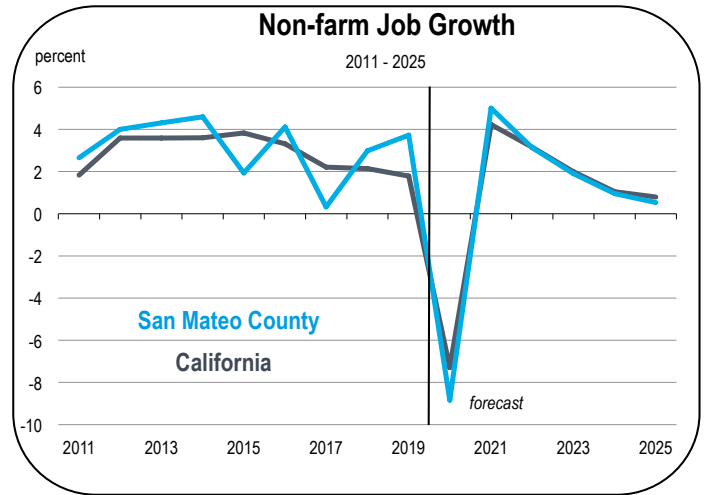
San Mateo County Economic Forecast

Forecast Summary

- It is estimated that an average of 34,000 to 42,000 jobs will be lost in San Mateo County during 2020. Job losses will be heavy in the first half of the year.
- Employment losses will be largest in leisure services, professional business services, transportation and warehousing, and retail.
- The unemployment rate averaged 2 percent in 2019. It will average between 6 percent and 8 percent for the 2020 calendar year.
- The San Mateo County population is expected to grow slowly during the 2020-2025 forecast period.
- Housing production will decline in 2020 but should rebound in 2021 and expand in 2022.
- Home prices are not expected to change much in 2020 or 2021.

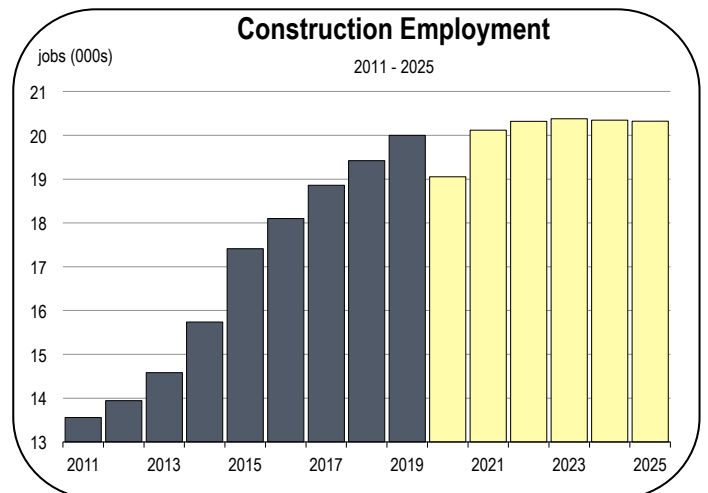
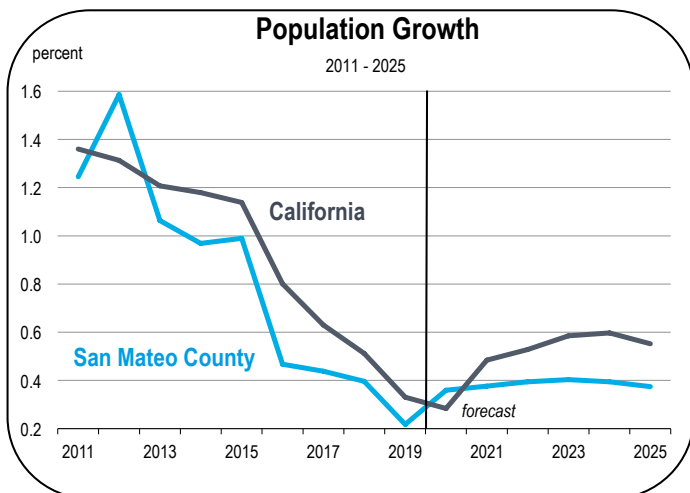
Job Growth

- Total employment in San Mateo County will decline between 6 and 8 percent in 2020. This is an annual average change from 2019.
- In 2021, the county is expected to re-gain many of the jobs lost during the Coronavirus Recession.

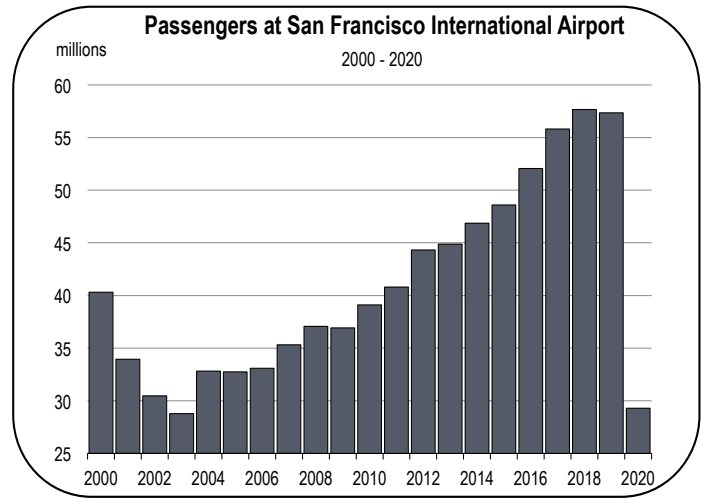
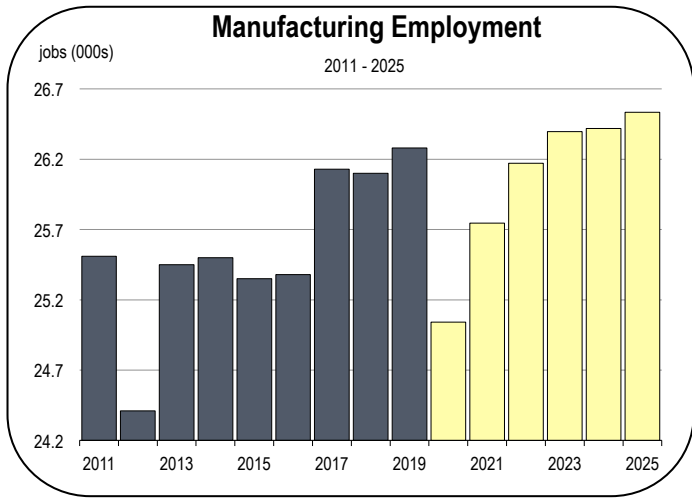


Construction Employment

- The construction sector is expected to lose 750 to 1,000 jobs in 2020.
- Most California construction activity was deemed non-essential for several weeks in March and April, leading to significant construction layoffs that average down total employment in 2020.
- Construction employment will expand in 2021 and may return to pre-recession levels relatively quickly.



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Manufacturing Employment

- In San Mateo County, the manufacturing industry is dominated by two sectors: biotech manufacturing and computer/semiconductor manufacturing.
- Genentech accounts for about 40 percent of all manufacturing jobs in the county.
- Manufacturing employment is expected to fall by more than 1,000 jobs in 2020.
- Manufacturing activity is forecast to rebound sharply in 2021 but may take several years to return to pre-recession levels.

Transportation and Warehousing Employment

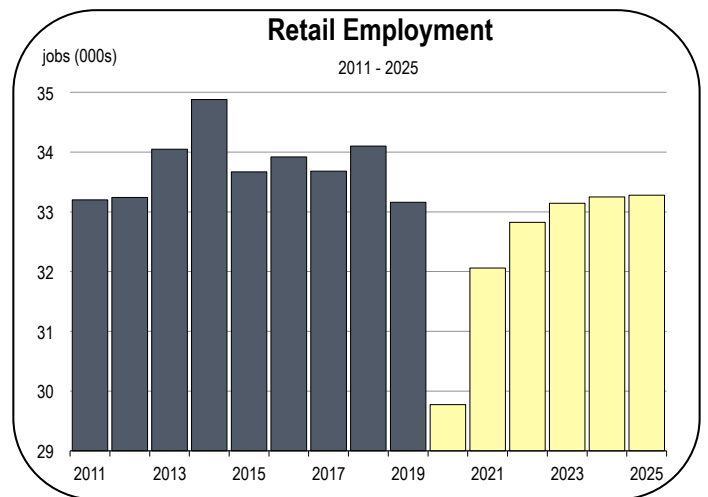
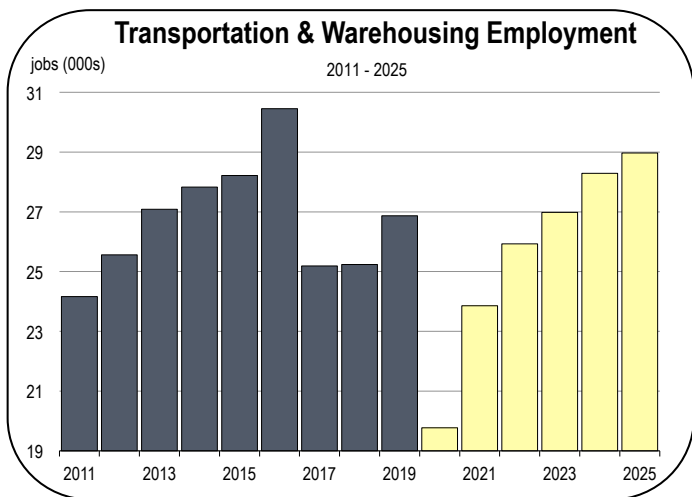
- More than half of all transportation jobs in San Mateo County are at SFO.
- Passenger traffic through SFO declined by more than 90 percent in March and April of 2020, but began to increase very slowly

as travel restrictions were eased and business activity started to resume. The total number of passengers in 2020 is expected to be half of the passenger traffic of 2019.

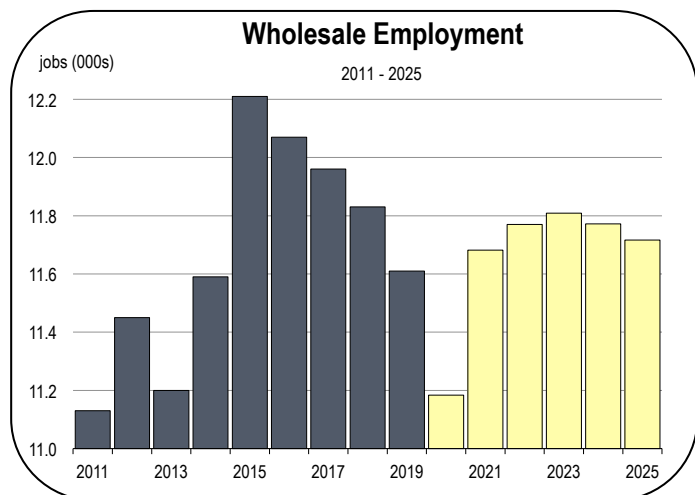
- A substantial number of San Mateo County transportation jobs are in delivery companies like FedEx, UPS, and Instacart. Delivery firms hired large numbers of workers during the second quarter of 2020, and may be among the few corners of the labor market to expand during the entire 2020 calendar year.
- Overall transportation and warehousing employment is expected to expand sharply in 2021 and 2022 and eventually surpass pre-pandemic levels.

Retail Trade Employment

- The retail sector is expected to lose more than 3,000 jobs in 2020 on an annual average basis.
- Many national 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.



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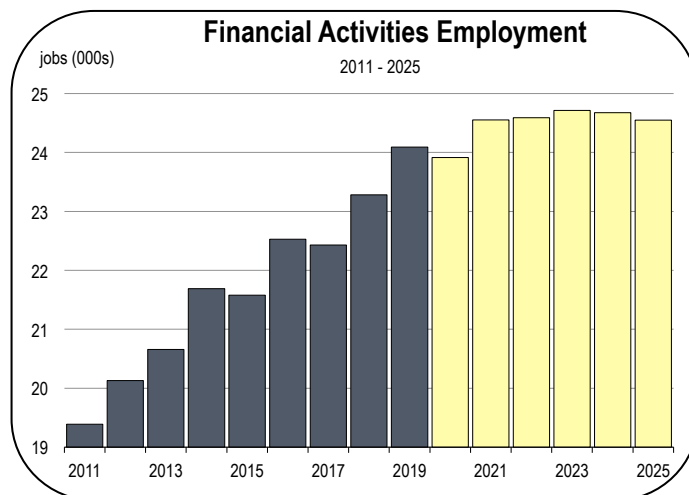
- Accounting for furloughed workers more than 5,000 retail workers could be effectively not working and not earning an income on an annual average basis in 2020.
- Retail trade jobs will gradually return after social distancing protocols are lifted in a sustained way, but it is unclear if overall employment will return to pre-recession numbers.

Wholesale Trade Employment

- Wholesale trade employment is expected to fall by 3 to 4 percent on an annual average basis in 2020.
- Prior to the recession, consolidation within the wholesale trade industry led to persistent reductions in workers.
- Consolidation is likely to continue after the pandemic has been contained, preventing the wholesale trade sector from gaining a substantial number of new jobs during the forecast period.

Financial Activities Employment

- Virtually all of the financial activities industry had been classified as essential, but substantial job declines are expected this year because many employers closed, committing their employees to shelter-in-place for health reasons.
- The most prominent losses are expected in real estate sales and lending although the SBA PPP program boosted lending substantially in April and early May.
- Information on home listings through April shows that there are far fewer homes on the market than there were last year, and there is far less interest from potential buyers. This should translate into fewer home sales, reducing the need for real estate agents and mortgage brokers.



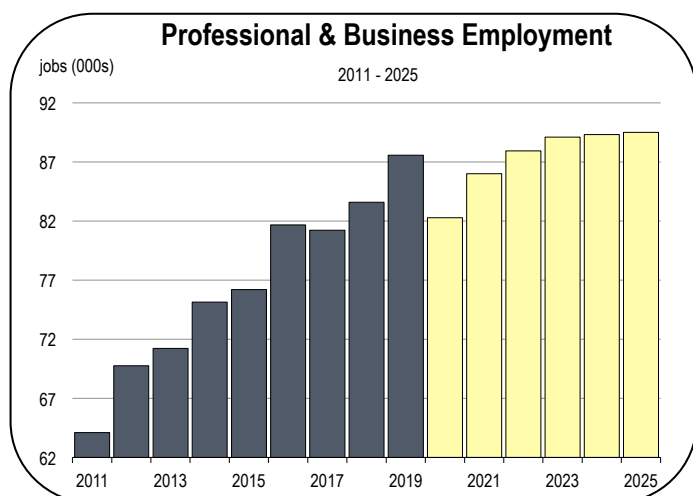
- Banks also reduced their head counts in the second quarter of 2020 due to a temporary reduction of in-person branch visits.
- Asset management is not expected to lose a significant number of jobs during or after the lockdowns.
- Financial Activities companies may not return to the employment totals that were observed before the Coronavirus Recession.

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 shutdowns but may rebound at office and industrial buildings with repopulating employment.
- Staffing agencies were characterized by very significant losses during the contraction, but should bounce back quickly once the economy begins to expand again.

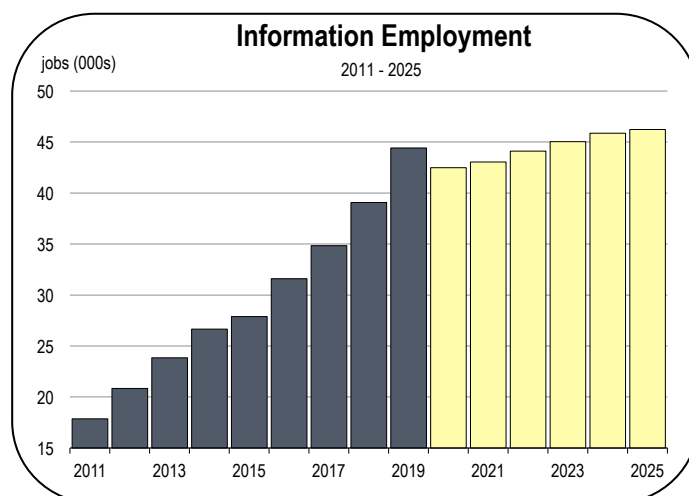
Financial Activities Sub-Sectors 2019	Jobs in Subsector (000s)	Subsector's Share of Overall Industry
Investment Management	6.8	28.2%
Banks	6.5	27.0%
Real Estate	4.6	19.1%
Insurance	3.4	14.1%
Rental and Leasing Services	2.8	11.6%

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- Staffing agencies primarily employ temp workers. Temp workers are usually laid off first during a downturn but hired back first during a recovery.
- There have been mixed outcomes at scientific research firms. Some were in essential functions and remained employed through the recession and recovery. These included bioscience, military research, and healthcare technology. But some jobs in laboratory settings were put on hold and workers were either laid off or furloughed.
- 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 economic downturn.
- By 2022, jobs in the professional and business services sector are expected to largely be restored.

Professional & Business Services Sub-Sectors 2019	Jobs in Subsector (000s)	Subsector's Share of Overall Industry
Scientific Research	22.8	26.0%
Custom IT Services	17.1	19.5%
Building Maintenance	7.6	8.7%
Corporate Headquarters	7.3	8.3%
Staffing Agencies	6.8	7.8%
Accounting & Bookkeeping	3.8	4.3%
Business Consulting	3.6	4.1%
Marketing and Advertising	3.4	3.9%
Corporate Security	3.0	3.4%
Law	3.0	3.4%
Engineering & Architecture	2.9	3.3%
Other	6.3	7.2%

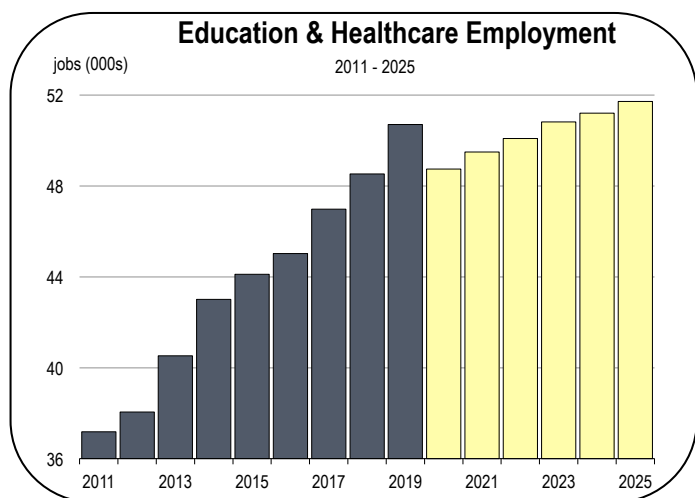


Information Employment

- In San Mateo County, the information sector is dominated by software publishers like Oracle, as well as data and Internet service companies like YouTube.
- Most San Mateo software and Internet jobs are in publicly-traded companies, but job creation is more prolific in startups that rely on venture capital and other private funding.
- In 2019, Venture Capital deals surpassed \$32 billion for software and Internet firms, fueling a continuation of very rapid job growth in San Mateo County.
- Telecommunications jobs were classified as essential and these workers largely remained employed throughout the recession.
- Many newspaper, magazine, and TV/radio workers were allowed to remain in their jobs, but advertising revenues shrank with the rest of the economy, giving employers little choice but to issue layoff notices.
- Job growth in software and Internet firms will be slow in 2021 and 2022 because many of these firms were not yet turning a profit before the Coronavirus Recession began, which could lead

Information Sub-Sectors 2019	Jobs in Subsector (000s)	Subsector's Share of Overall Industry
Internet & Data Services	26.0	58.4%
Software Publishers	12.2	27.4%
Telecommunications	1.4	3.1%
Movie / TV / Music Recording	1.2	2.7%
Newspaper / Magazine / Book Publishers	0.6	1.3%
Other	3.1	7.0%

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to cautious hiring at these firms, pending how business conditions evolve in 2021 and 2022.

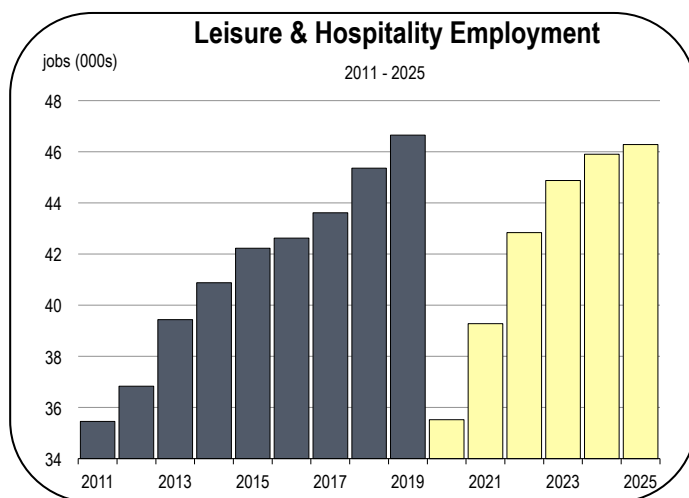
- Most other subsectors of the information industry are in long-term patterns of decline and will not create many jobs during the forecast period.

Private Education and Healthcare Employment

- There were 29,000 healthcare jobs in San Mateo County in 2019.
- Healthcare jobs were recession proof during the 2008-2009 financial crisis. However, some non-essential medical offices have had to close, and hospitals are reducing employment levels because resources are not being utilized as envisioned to support Coronavirus patients.
- There were approximately 12,000 social assistance jobs in 2019, including industries like childcare, housing shelters, and non-medical care for senior citizens.
- There were also 9,000 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. Nevertheless, there were layoffs at institutions with revenue shortfalls.

Leisure and Hospitality Employment

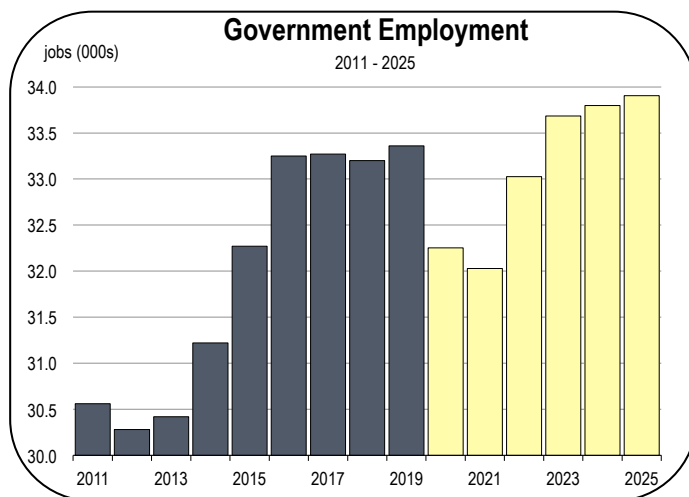
- The leisure and hospitality industry was devastated by the shutdown more than any other sector of the labor market.
- In 2019, San Mateo County had 40,000 jobs in restaurants, hotels, and bars. Our research indicates that most were laid off in the months of March and April.



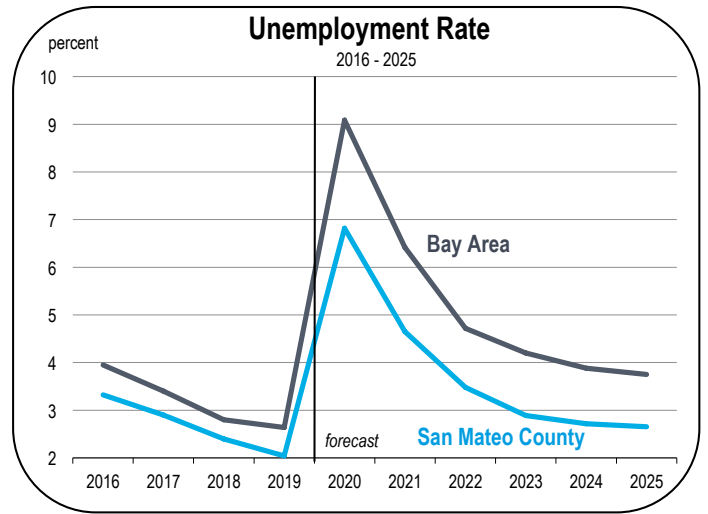
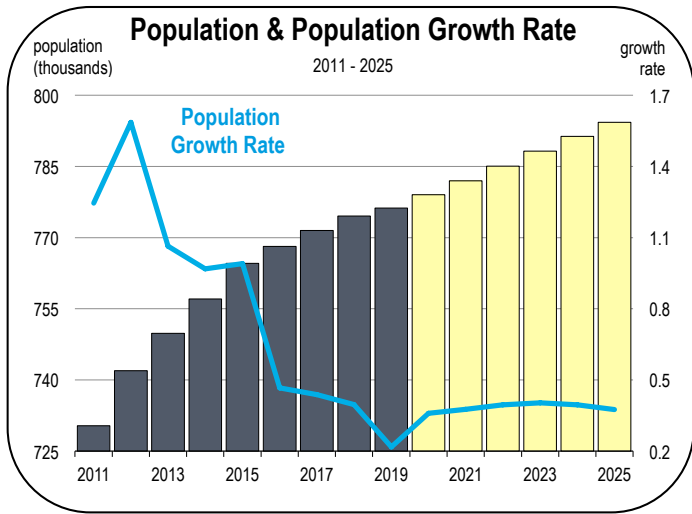
- San Mateo also had 6,000 jobs in entertainment and recreation, including things like fitness centers, museums, and performing arts venues. Many of these organizations will remain closed through the end of 2020 and potentially into 2021.
- Employment levels in the leisure and hospitality sector may not fully be restored to pre-recession levels until late in the forecast period.

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.



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- 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.

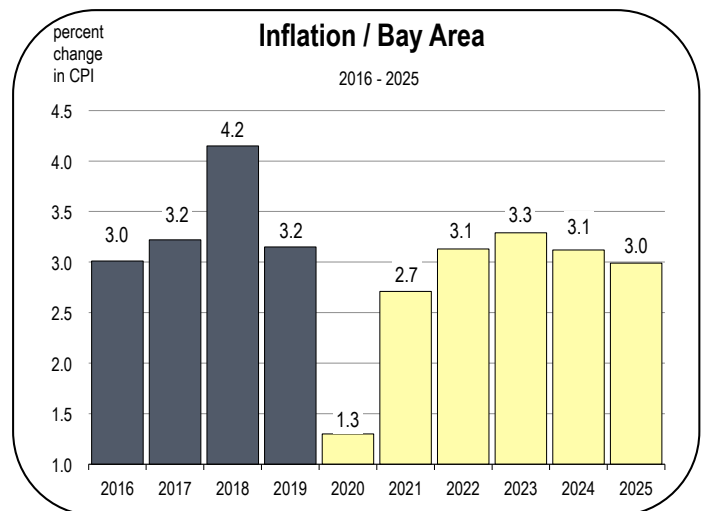
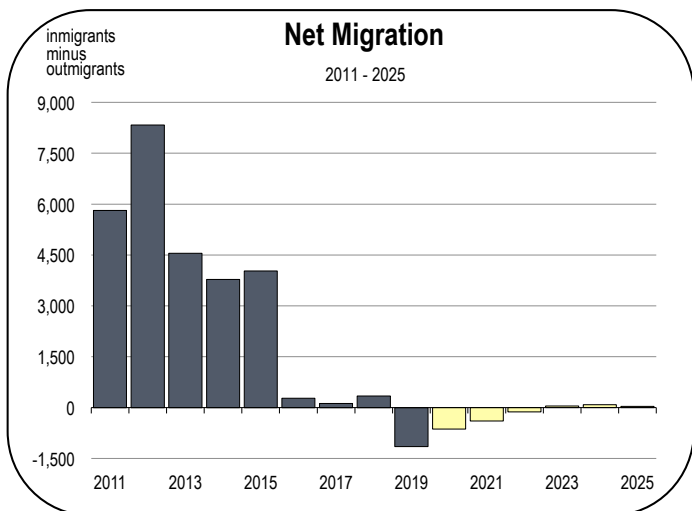
- By 2025 the San Mateo County population will surpass 790,000 residents.

Population Growth

Unemployment and Inflation Rates

- The San Mateo County population is expected to grow more slowly than the Bay Area average during the 2020-2025 forecast period.
- Out-migrants exceeded in-migrants to San Mateo County in 2019 though positive net migration had been insignificant since 2016. Relocations out of the county have been to areas with more affordable housing.
- Net migration will not be a major factor in population growth. During the 2020-2025 forecast period, equal numbers of residents are expected to move into and out of the county.
- The population will increase at an annual average rate of 0.4 percent per year from 2020 to 2025.

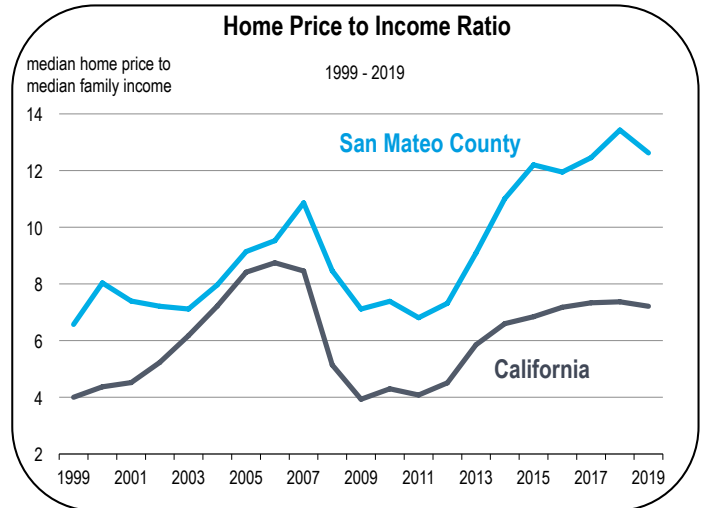
- The unemployment rate in San Mateo County averaged 2.0 percent in 2019, which was below the composite rate for the Bay Area.
- The unemployment rate is expected to average between 6 and 8 percent for the 2020 calendar year.
- The unemployment rate is expected to remain elevated for several years, but 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.



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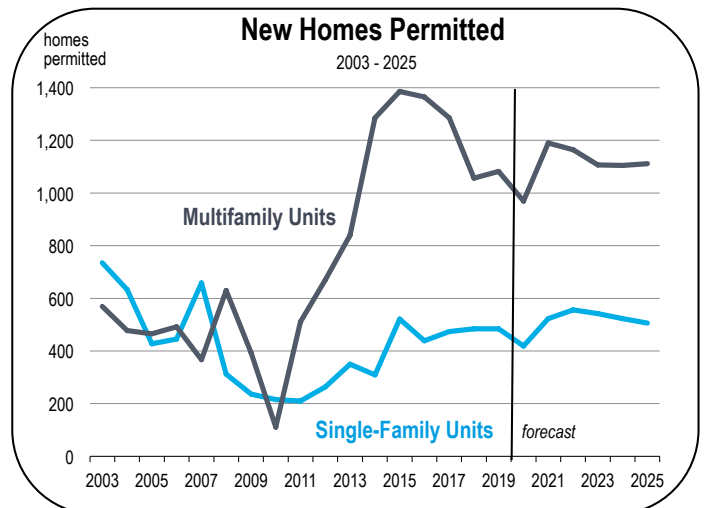
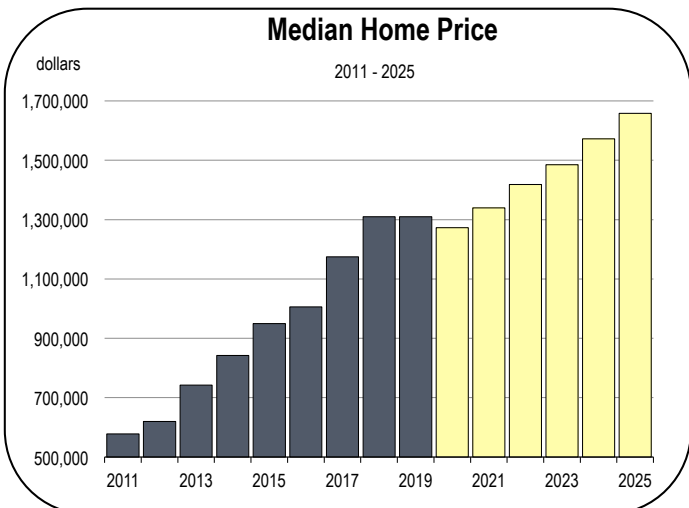
Home Prices and New Housing Production

- In 2019 the median home price in San Mateo County was \$1.3 million.
- The median price is not expected to change much in 2020 or 2021.
- The median price has become prohibitively expensive in San Mateo County, where housing affordability was worse in 2019 than it was during the housing bubble of 2004-2007.
- In 2019, a typical household in San Mateo County would have had to spend 55 percent of its pre-tax income on mortgage payments in order to afford the median-priced home, indicating that housing prices have become excessive.
- From 2014 to 2019, an average of 1,700 new homes were started per year. Most were apartments and condos.
- Housing production is forecast to average 1,600 homes per year from 2020 to 2025 and will consist primarily of apartments and condos.
- There are 25,000 housing units in the San Mateo County development pipeline. Some are in projects that could begin in 2020 or 2021, while others are not likely to be built for many years.



San Mateo County Residential Development Pipeline

Area	Units
Redwood City	14,291
Menlo Park	3,221
San Mateo	2,842
South SF	2,148
Daly City	1,547
San Bruno	425



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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	764,577	261.5	4,025	1,907	732	\$78.5	\$10.2	\$15.6	\$21.9	\$117,343	3.7	\$151.3	2.6
2016	768,147	263.0	278	1,804	747	\$82.4	\$10.3	\$15.8	\$23.8	\$118,901	3.3	\$149.7	3.0
2017	771,514	264.1	122	1,759	761	\$90.2	\$10.9	\$16.7	\$24.2	\$125,678	2.9	\$140.6	3.2
2018	774,570	265.1	338	1,540	770	\$97.3	\$11.4	\$17.5	\$23.0	\$129,532	2.4	\$143.4	4.2
2019	776,252	266.2	-1,148	1,566	781	\$103.3	\$11.7	\$18.1	\$23.6	\$133,117	2.0	\$143.2	3.2
2020	779,045	267.0	-633	1,389	786	\$98.7	\$11.0	\$16.8	\$20.8	\$125,037	6.8	\$136.4	1.3
2021	781,975	268.2	-395	1,713	792	\$104.5	\$11.9	\$18.2	\$22.7	\$128,477	4.6	\$129.8	2.7
2022	785,062	269.8	-127	1,721	798	\$112.3	\$12.4	\$19.0	\$24.3	\$133,326	3.5	\$123.3	3.1
2023	788,232	271.3	47	1,649	804	\$121.6	\$13.0	\$20.0	\$25.8	\$139,245	2.9	\$116.9	3.3
2024	791,342	272.7	85	1,628	810	\$131.2	\$13.6	\$21.0	\$27.5	\$145,048	2.7	\$110.7	3.1
2025	794,307	274.2	35	1,617	816	\$139.1	\$14.3	\$22.0	\$28.8	\$148,826	2.7	\$104.6	3.0
2026	797,159	275.6	19	1,603	821	\$146.8	\$15.0	\$23.1	\$30.1	\$152,005	2.5	\$98.6	2.9
2027	799,811	277.0	-63	1,604	827	\$154.1	\$15.7	\$24.2	\$31.0	\$154,659	2.4	\$92.8	2.8
2028	802,199	278.4	-239	1,599	831	\$162.7	\$16.5	\$25.4	\$32.1	\$158,237	2.4	\$87.2	2.9
2029	804,435	279.9	-314	1,583	836	\$169.9	\$17.1	\$26.3	\$32.9	\$160,024	2.4	\$81.7	3.0
2030	806,581	281.3	-332	1,564	840	\$177.3	\$17.6	\$27.1	\$33.6	\$161,836	2.4	\$76.4	2.9
2031	808,616	282.6	-343	1,538	844	\$184.9	\$18.1	\$27.9	\$34.4	\$163,782	2.4	\$71.3	2.8
2032	810,495	284.0	-406	1,514	847	\$192.0	\$18.6	\$28.8	\$34.9	\$164,786	2.4	\$66.4	3.0
2033	812,357	285.3	-361	1,489	851	\$200.1	\$19.1	\$29.5	\$35.8	\$167,027	2.4	\$61.7	2.6
2034	814,252	286.7	-259	1,482	855	\$208.6	\$19.7	\$30.4	\$36.6	\$169,005	2.4	\$57.1	2.8
2035	816,170	288.0	-180	1,468	858	\$217.4	\$20.3	\$31.3	\$37.4	\$170,877	2.4	\$52.8	2.9
2036	818,008	289.3	-183	1,465	862	\$226.3	\$21.0	\$32.3	\$38.0	\$171,840	2.4	\$48.7	3.3
2037	819,794	290.6	-167	1,455	865	\$235.6	\$21.7	\$33.4	\$38.6	\$172,727	2.4	\$44.8	3.4
2038	821,505	291.9	-168	1,436	869	\$245.5	\$22.4	\$34.5	\$39.3	\$174,125	2.4	\$41.0	3.2
2039	823,105	293.1	-205	1,414	872	\$255.7	\$23.2	\$35.7	\$39.8	\$175,141	2.4	\$37.5	3.4
2040	824,648	294.4	-191	1,407	875	\$266.2	\$23.9	\$36.9	\$40.4	\$176,243	2.4	\$34.2	3.3
2041	826,090	295.6	-208	1,385	878	\$277.1	\$24.7	\$38.1	\$41.0	\$177,673	2.4	\$31.0	3.1
2042	827,369	296.8	-284	1,358	880	\$288.3	\$25.4	\$39.3	\$41.7	\$179,225	2.4	\$28.1	3.0
2043	828,466	298.0	-375	1,328	882	\$299.7	\$26.2	\$40.4	\$42.4	\$180,895	2.4	\$25.4	2.9
2044	829,506	299.2	-310	1,318	884	\$311.5	\$26.9	\$41.5	\$43.2	\$182,878	2.4	\$22.8	2.7
2045	830,498	300.4	-244	1,310	886	\$323.4	\$27.7	\$42.8	\$43.8	\$184,284	2.4	\$20.5	2.9
2046	831,417	301.5	-238	1,300	888	\$335.3	\$28.5	\$44.0	\$44.4	\$185,701	2.4	\$18.3	2.8
2047	832,217	302.7	-261	1,287	890	\$347.2	\$29.3	\$45.3	\$44.9	\$186,929	2.4	\$16.3	2.8
2048	832,915	303.8	-281	1,273	891	\$359.5	\$30.2	\$46.6	\$45.4	\$188,132	2.4	\$14.4	2.8
2049	833,517	305.0	-288	1,264	892	\$372.3	\$31.0	\$47.9	\$46.0	\$189,420	2.4	\$12.7	2.8
2050	834,040	306.1	-281	1,255	893	\$385.4	\$31.9	\$49.3	\$46.5	\$190,663	2.4	\$11.2	2.8

Employment Sectors

2015-2019 History, 2020-2050 Forecast

	Total Wage & Salary	Farm	Construction	Manufac- turing	Transportation & Utilities	Wholesale & Retail Trade (thousands of jobs)	Financial Activities	Professional Services	Information	Health & Education	Leisure	Government
2015	377.0	1.8	17.4	25.4	28.2	45.9	21.6	76.2	27.9	44.1	42.2	32.3
2016	392.4	1.8	18.1	25.4	30.5	46.0	22.5	81.7	31.6	45.0	42.6	33.3
2017	393.6	1.7	18.9	26.1	25.2	45.6	22.4	81.2	34.8	47.0	43.6	33.3
2018	405.0	1.4	19.4	26.1	25.2	45.9	23.3	83.6	39.1	48.5	45.4	33.2
2019	420.0	1.4	20.0	26.3	26.9	44.8	24.1	87.6	44.4	50.7	46.7	33.4
2020	383.0	1.4	19.1	25.0	19.8	41.0	23.9	82.3	42.5	48.7	35.5	32.3
2021	402.1	1.4	20.1	25.7	23.9	43.7	24.6	86.0	43.0	49.5	39.3	32.0
2022	414.7	1.4	20.3	26.2	25.9	44.6	24.6	87.9	44.1	50.1	42.8	33.0
2023	422.5	1.3	20.4	26.4	27.0	45.0	24.7	89.1	45.0	50.8	44.9	33.7
2024	426.5	1.3	20.3	26.4	28.3	45.0	24.7	89.3	45.9	51.2	45.9	33.8
2025	428.8	1.3	20.3	26.5	29.0	45.0	24.5	89.5	46.2	51.7	46.3	33.9
2026	431.1	1.3	20.3	26.7	29.8	45.0	24.5	89.8	46.5	52.0	46.6	34.0
2027	433.2	1.3	20.4	26.8	30.2	45.0	24.4	90.2	46.9	52.2	46.8	34.1
2028	435.2	1.3	20.4	26.8	30.5	45.1	24.3	90.6	47.6	52.4	47.0	34.2
2029	437.5	1.3	20.3	26.9	31.0	45.1	24.3	91.1	48.3	52.7	47.1	34.3
2030	439.1	1.3	20.3	26.9	31.2	45.1	24.3	91.5	48.7	52.9	47.2	34.4
2031	440.9	1.3	20.3	27.0	31.5	45.2	24.3	91.9	49.1	53.2	47.4	34.4
2032	442.4	1.3	20.4	27.0	31.7	45.2	24.2	92.3	49.3	53.4	47.5	34.5
2033	443.8	1.3	20.4	27.0	32.0	45.2	24.2	92.8	49.5	53.7	47.6	34.6
2034	445.6	1.2	20.5	27.0	32.3	45.3	24.2	93.2	49.8	53.9	47.8	34.6
2035	447.2	1.2	20.6	27.0	32.6	45.3	24.2	93.6	49.9	54.2	48.0	34.7
2036	448.9	1.2	20.7	27.0	33.0	45.3	24.2	94.0	50.0	54.4	48.2	34.8
2037	450.6	1.2	20.7	27.1	33.2	45.3	24.2	94.5	50.3	54.7	48.4	34.9
2038	452.2	1.2	20.8	27.1	33.5	45.3	24.2	94.9	50.4	54.9	48.5	34.9
2039	453.8	1.2	20.8	27.1	33.6	45.3	24.1	95.3	50.8	55.2	48.7	35.0
2040	455.5	1.2	20.8	27.1	33.9	45.4	24.1	95.8	51.0	55.4	48.8	35.1
2041	457.3	1.2	20.8	27.2	34.0	45.3	24.1	96.2	51.6	55.7	49.0	35.2
2042	459.0	1.2	20.8	27.2	34.2	45.4	24.1	96.7	52.0	56.0	49.1	35.2
2043	460.9	1.2	20.8	27.2	34.4	45.4	24.1	97.1	52.5	56.2	49.3	35.3
2044	462.8	1.2	20.9	27.3	34.6	45.5	24.1	97.6	52.9	56.5	49.5	35.4
2045	465.0	1.2	20.9	27.3	34.7	45.6	24.1	98.0	53.7	56.8	49.6	35.4
2046	466.8	1.2	21.0	27.3	34.8	45.6	24.1	98.5	54.3	57.0	49.7	35.5
2047	468.6	1.2	21.0	27.3	34.9	45.7	24.0	98.9	54.8	57.3	49.9	35.5
2048	470.2	1.2	21.1	27.3	35.0	45.8	24.0	99.4	55.2	57.6	50.0	35.5
2049	472.0	1.2	21.1	27.3	35.1	45.8	24.0	99.8	55.6	57.9	50.2	35.6
2050	473.6	1.2	21.2	27.3	35.1	45.9	24.0	100.3	56.0	58.2	50.3	35.6

San Mateo County Economic Forecast

Socioeconomic Indicators

