

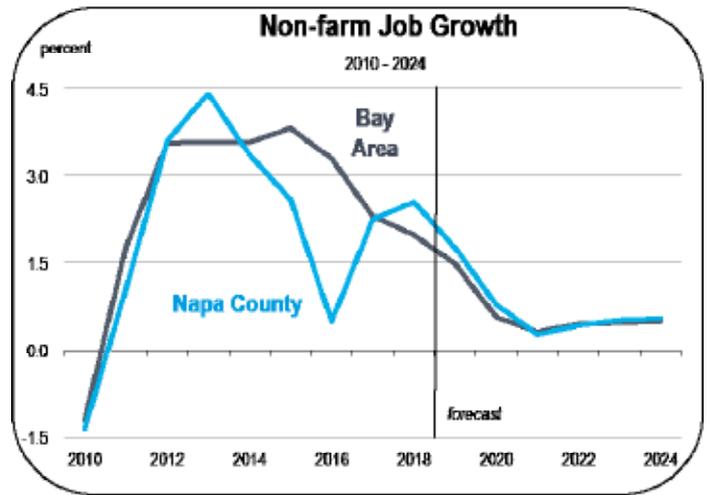
Napa County Economic Forecast

Forecast Summary

- 1,300 non-farm jobs will be created in Napa County during 2019. Over the following five years, an average of 400 new jobs are expected per year.
- Employment growth will be led by leisure services, education and healthcare, and manufacturing. These sectors will account for 83 percent of net job creation through 2024.
- The unemployment rate averaged 2.9 percent in 2018, but may begin to deteriorate in 2019.
- The population declined in 2018. It will grow very slowly during the forecast period.
- Home prices are rising faster than incomes, and housing affordability is now a problem.
- Housing production accelerated in 2018 as homes lost in the wildfires began to be rebuilt.

Job Growth

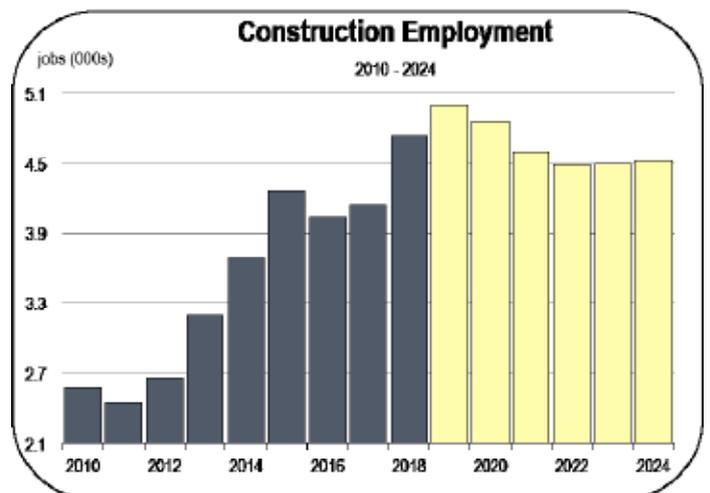
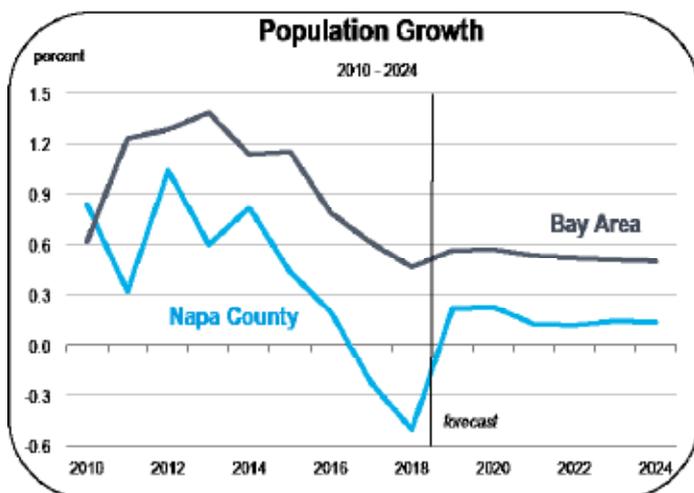
- Job growth was strong in 2017 and accelerated even further in 2018.
- In 2019 job growth will begin to decelerate, and by 2021 the county will be in danger of losing jobs.
- 2018 gains were largest in construction as hundreds of workers were hired to rebuild the homes destroyed by wildfires.
- Between 2012 and 2018, non-farm job growth averaged 2.6 percent per year.



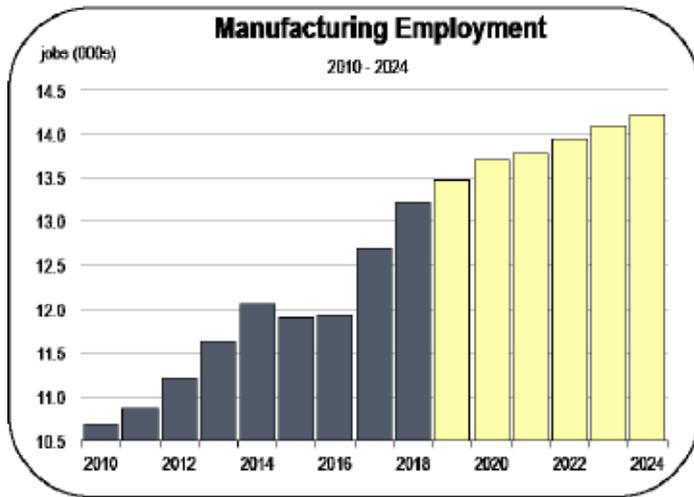
- Between 2018 and 2024, growth is forecast to average 0.7 percent per year.
- Approximately 1,300 non-farm jobs will be created during 2019.
- Through 2024, an average of 400 new non-farm wage and salary jobs are expected per year.

Construction Employment

- The construction industry gained 500 jobs last year and will expand by an additional 300 jobs in 2019.
- The 2017 wildfires destroyed hundreds of homes in Napa County, as well as hundreds of commercial buildings and other structures. The rebuilds are now underway, and the County is expected to authorize construction permits for all remaining rebuilds by the end of 2020.



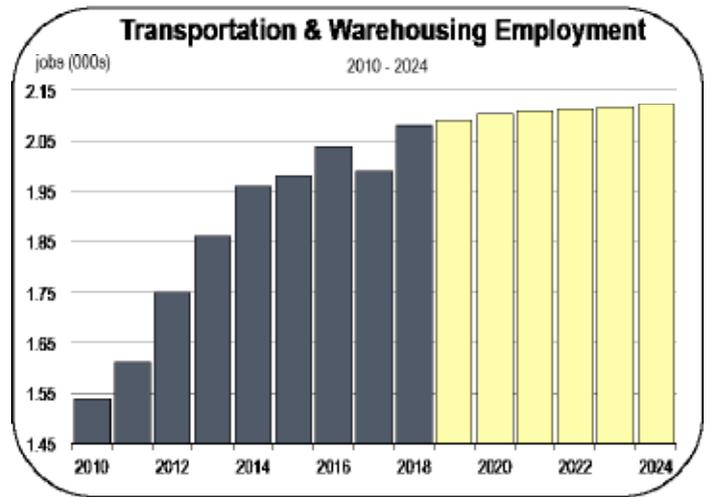
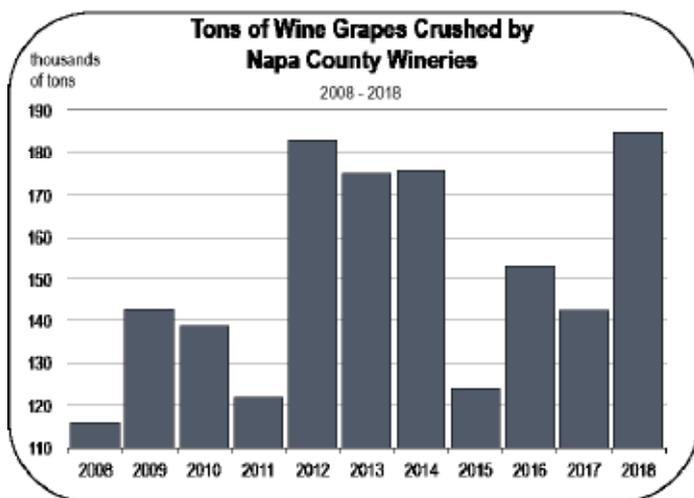
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- After these rebuilds are completed, construction employment may decline, but with all the new housing projects in the County, employment in this sector will remain relatively high.

Manufacturing Employment

- The Napa County manufacturing industry is almost exclusively comprised of wineries (which are considered beverage manufacturers).
- The 2018 grape harvest increased 6 percent in value from 2017, and harvested volume soared by 40,000 tons. Most of this increase was due to the a 33 percent increase in the production Cabernet Sauvignon grapes.
- During 2018, wineries hired almost 500 new workers. Job growth will remain positive in 2019 and 2020, but Napa winemakers will face increased competition from international vintners, preventing faster job creation.
- The manufacturing industry is particularly sensitive to changes in the minimum wage. As the California minimum wage rises to



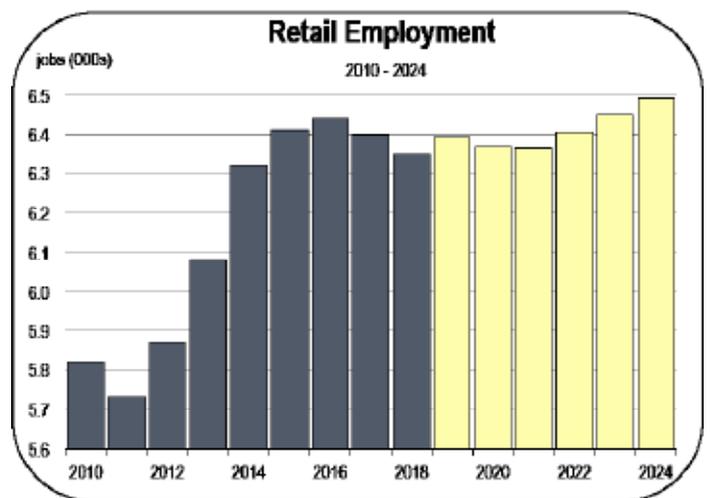
- \$15/hour by 2022, job creation in this sector may be adversely influenced (or may be adversely affected).

Transportation and Warehousing Employment

- This industry gained a small number of jobs last year.
- This industry will expand slightly in 2019 and 2020, partially the result of new firms leasing space at Napa Logistics Park, the new warehousing and distribution center.
- Napa Logistics Park will ultimately include 5.5 million square feet of warehousing /distribution capacity, supporting hundreds of jobs.
- But industry-wide growth is expected to be slow, and could turn negative if the economy falls into recession.

Retail Trade Employment

- The retail sector is losing jobs, and meaningful job creation is not expected during the 2019—2024 forecast period.



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- Losses in 2018 were heavy in sectors facing competition from online retailers:
 - Clothing stores
 - Sporting goods stores
 - Consumer electronics stores
 - Furniture stores
 - Department stores (i.e. Macy's)
 - Office supply stores
- Losses were less severe in sectors not facing heavy online competition:
 - Car dealerships
 - Drug stores and healthcare stores
 - Grocery stores
 - Gas stations

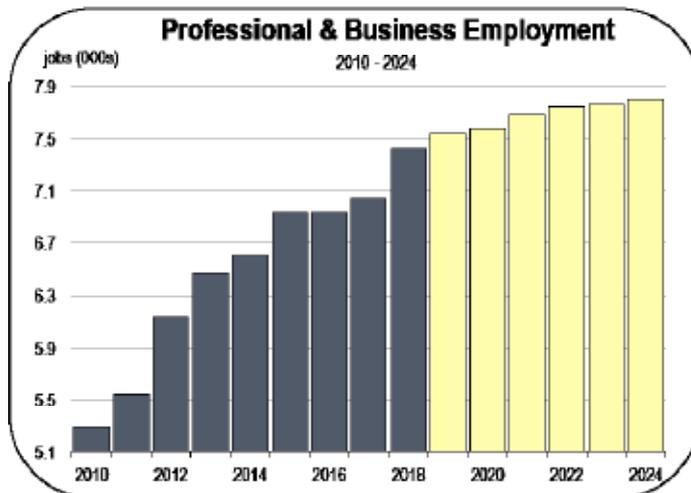
• Future gains will be small, with further bifurcation of the industry.

Financial Activities Employment

- The financial activities sector is very small in Napa County. The industry lost 100 jobs in 2018.
- Downsizing was observed at banks and insurance firms, but real estate companies increased their headcounts slightly.
- Jobs will be lost in 2019 and 2020 as banking customers utilize more online services and make fewer in-person trips to a local branch.

Professional and Business Services Employment

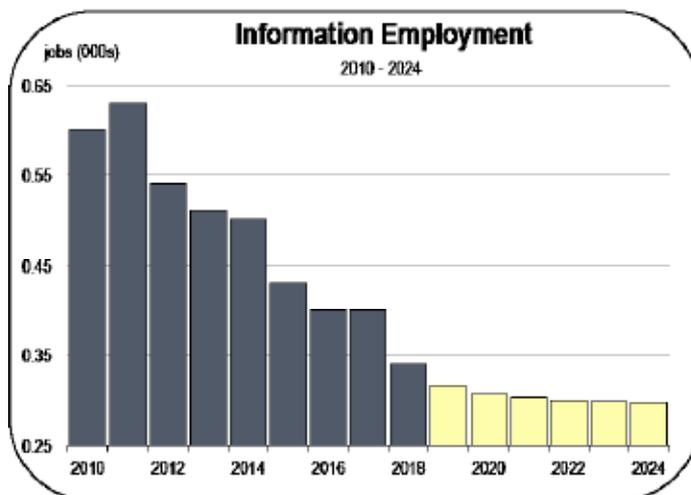
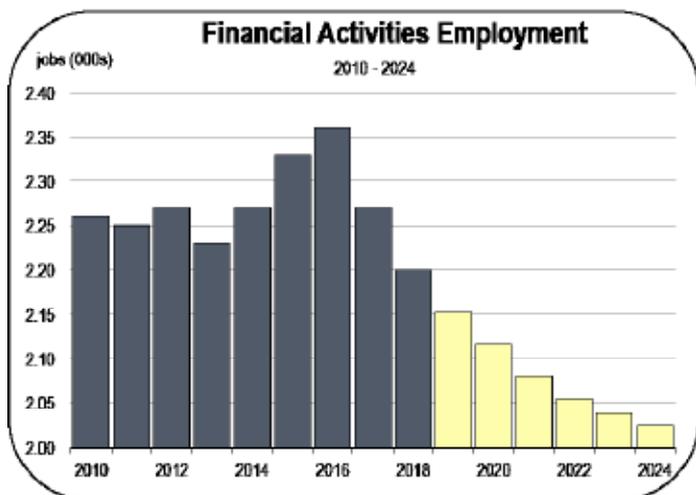
- Professional services firms added 400 jobs last year—the first meaningful increase since 2015.



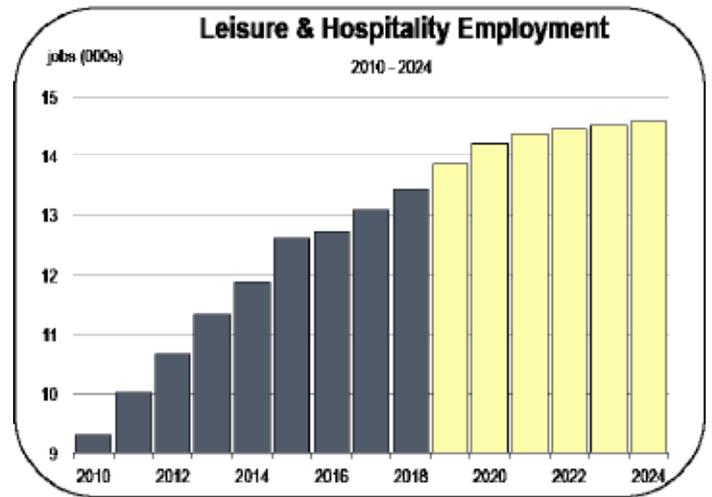
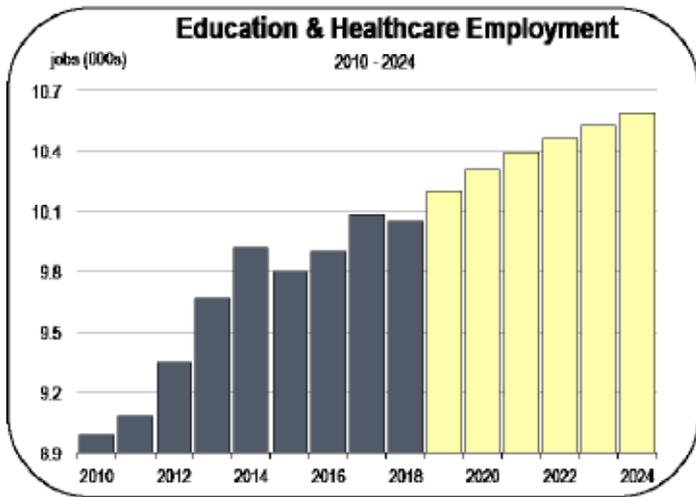
- Job gains were strongest at accounting companies, IT consulting firms, professional staffing agencies, and corporate security firms.
- This sector will continue to expand, but will only create 200 new jobs by 2020.

Information Employment

- This sector has been contracting for more than half a decade.
- The information industry is very small in Napa County, with only a handful of newspaper publishers, telecommunications companies, software publishers, and data service providers (such as cloud storage and web hosting).
- Positive trends in software and data services have been outweighed by downsizing in the newspaper and telecommunications sectors.



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- In other parts of California, the software and data sectors will increase quickly enough to expand the entire information industry. But this outcome is not expected in Napa County, and total industry employment will decline further in 2019.

Private Education and Healthcare Employment

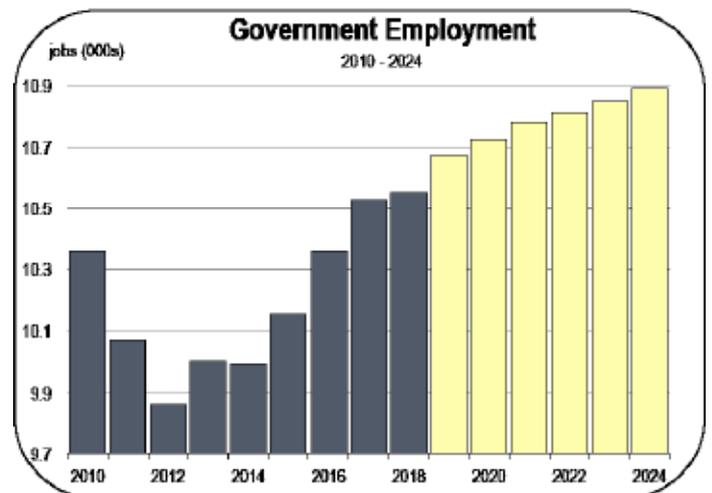
- Healthcare and education organizations did not expand in 2018.
- Most subsectors were flat. Virtually no jobs were added to doctors' offices, hospitals, outpatient care centers, or private schools.
- Growth will resume in 2019, but the future of U.S. health insurance landscape is unknown, and legislative changes could influence job growth in health services.

Leisure and Hospitality Employment

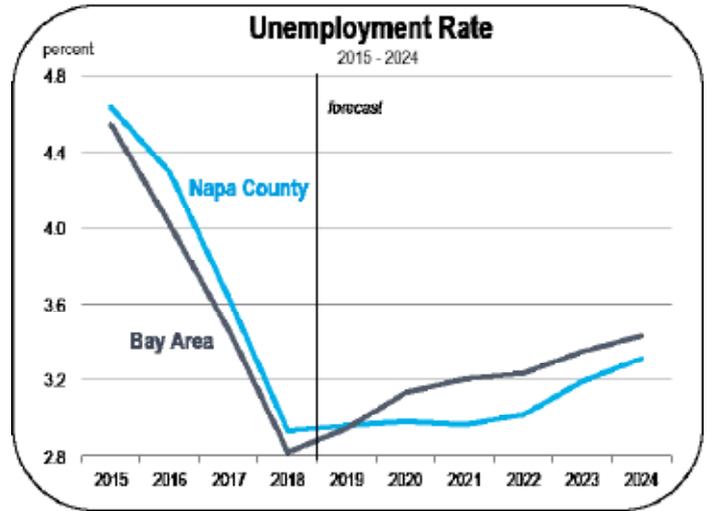
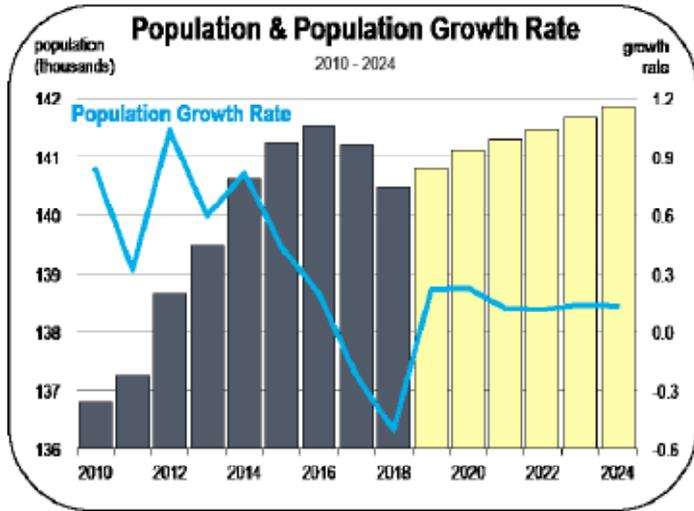
- The leisure sector added 300 jobs in 2018. The largest gains were at hotels and motels (+200 jobs), restaurants (+150 jobs), and catering services (+100 jobs)
- Hotels lost several hundred jobs in 2017. During the wildfires that began in the fall of 2017, there was a drop in tourism to Napa County hotels and some hotels shut their doors. But these facilities returned to normal activity in 2018, hiring back the workers that had been temporarily laid off.

Government Employment

- Government agencies expanded by only 100 jobs last year.
- Local public schools downsized, while California state agencies grew slightly.
- Future job gains will depend on local population growth and the condition of state and local government budgets.



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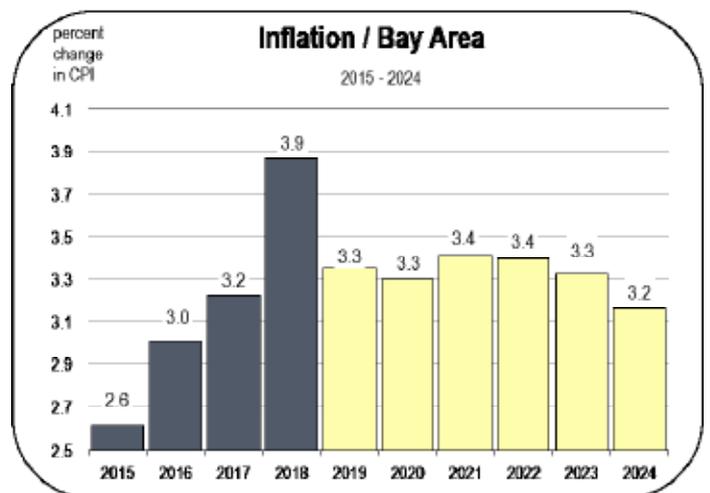
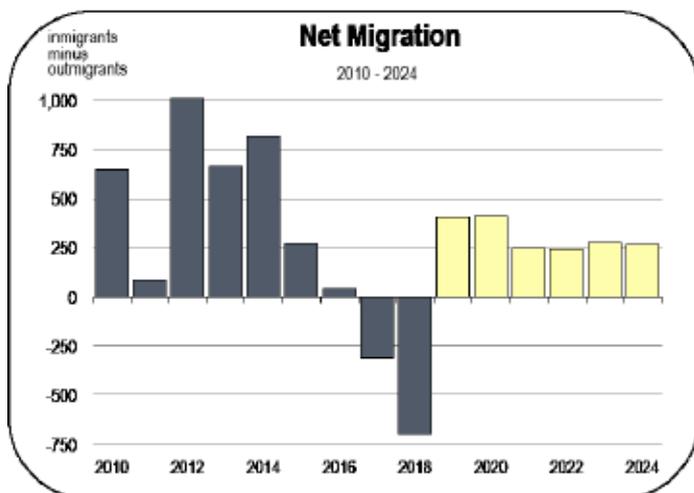
Population Growth

- The Napa County population declined by more than 700 residents in 2018 because almost 700 net migrants left the county.
- Many of the out-migrants were people who lost their homes in the fires of late 2017 and had not yet returned by 2018.
- The number of resident deaths in 2018 exceeded the number of children born, further reducing the population.
- An average of 300 net migrants will enter the county each year over the forecast period. Net migration will be higher in 2019 and 2020 as families return to homes that have been rebuilt.

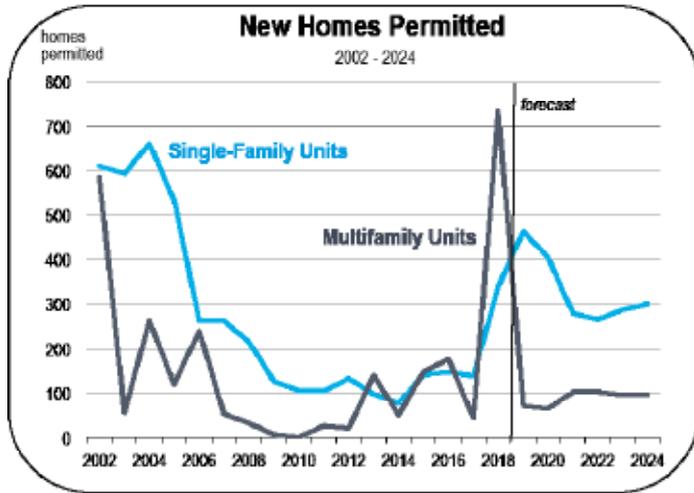
- Population growth will average 0.2 percent annually through 2024, and the county will surpass 141,000 residents by the end of the forecast period.

Unemployment and Inflation Rates

- The unemployment rate in Napa County averaged 2.9 percent in 2018, which was similar to the composite rate for the Bay Area.
- Beginning in 2019, the unemployment rate may deteriorate, but with an unemployment rate of just 3.0 percent, the job market will still be very tight.
- Inflation accelerated in 2018 as energy prices increased and housing costs rose rapidly. Inflation will remain elevated in 2019 and 2020, and will likely be above 3 percent.



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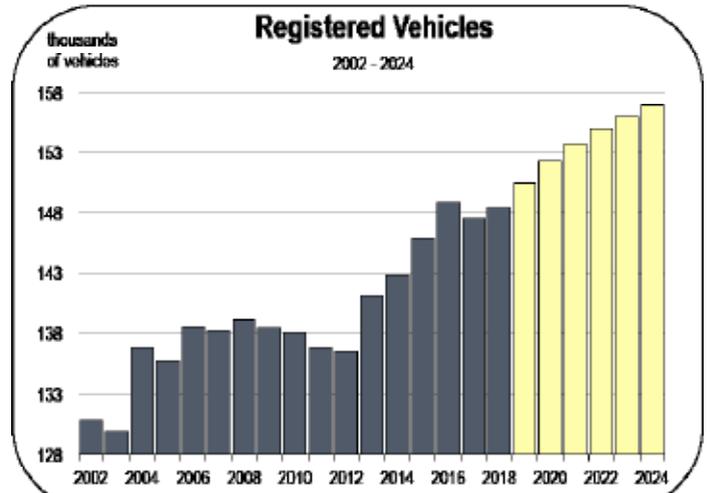
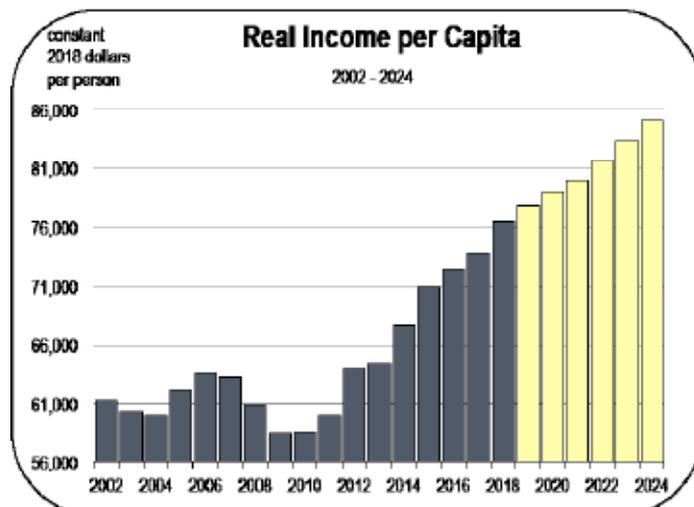


New Housing Production

- Housing production accelerated in 2018 as the rebuilding process began for the homes destroyed in the wildfires.
- Several large multifamily complexes also broke ground, including The Brayden, which will contain 282 apartments in the City of Napa.
- Several hundred additional single-family rebuilds will begin in 2019 and 2020, while multifamily construction should return to more normal levels.
- Aside from fire rebuilds, the most prominent project, called Napa Pipe, will produce 945 homes just south of Downtown Napa. A timeline for construction has not yet been determined.

Income per Capita

- Income per capita in 2018 was \$76,400. Income per capita has risen rapidly in Napa County, growing by an average of 3.0 percent per year over the last six years, adjusted for inflation.



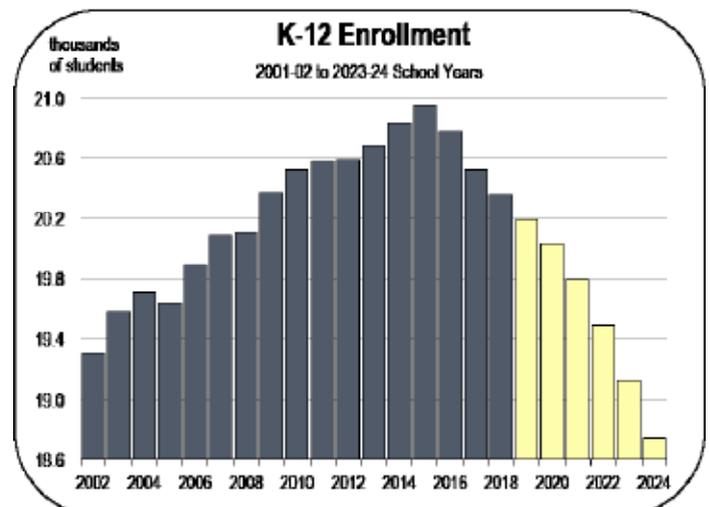
- Real income per capita is expected to grow more slowly over the forecast period, increasing by 1.8 percent per year through 2024.

Registered Vehicles

- There were 148,400 registered vehicles in Napa County in 2018.
- By 2024, it is expected that the county will have approximately 156,900 registered vehicles.

Public School Enrollment

- In Napa County, approximately 20,400 students were enrolled in K–12 public schools during the 2017–2018 school year.
- By 2024, there are expected to be 18,700 K–12 students in the county. Enrollment will decrease because the population aged 5 to 17 is forecast to decline sharply.



Napa County Economic Forecast

Economic Indicators

2015-2018 History, 2019-2050 Forecast

	Population (people)	House- holds (thousands)	Average Household Income (dollars)	New Homes Permitted (homes)	Registered Vehicles (thousands)	Personal Income (billions)	Taxable Retail Sales (billions)	Local Sales Tax (millions)	Real Industrial Production (billions)	Real per Capita Income (dollars)	School Enrollment (thousands)	Births (people)	Deaths (people)
2015	141,243	49.3	\$186,622	289	146	\$9.2	\$1.9	\$33	\$3.9	\$70,901	20.9	1,457	1,246
2016	141,524	49.4	\$194,169	323	149	\$9.6	\$1.9	\$34	\$4.0	\$72,411	20.8	1,406	1,242
2017	141,205	49.6	\$202,454	183	148	\$10.0	\$2.0	\$35	\$3.9	\$73,805	20.5	1,291	1,351
2018	140,491	49.3	\$217,878	1,073	148	\$10.7	\$2.1	\$36	\$4.1	\$76,434	20.4	1,271	1,384
2019	140,798	50.2	\$224,697	534	150	\$11.3	\$2.1	\$37	\$4.2	\$77,918	20.2	1,292	1,388
2020	141,120	50.4	\$233,393	468	152	\$11.8	\$2.2	\$39	\$4.3	\$78,999	20.0	1,312	1,394
2021	141,296	50.7	\$242,051	381	154	\$12.3	\$2.3	\$40	\$4.4	\$80,014	19.8	1,332	1,403
2022	141,465	51.0	\$252,323	369	155	\$12.9	\$2.3	\$41	\$4.5	\$81,659	19.5	1,352	1,425
2023	141,666	51.4	\$262,955	383	156	\$13.5	\$2.4	\$42	\$4.6	\$83,325	19.1	1,372	1,445
2024	141,859	51.8	\$273,667	396	157	\$14.2	\$2.5	\$43	\$4.7	\$85,078	18.7	1,388	1,459
2025	142,064	52.2	\$283,392	401	158	\$14.8	\$2.5	\$44	\$4.8	\$86,550	18.4	1,400	1,475
2026	142,289	52.6	\$293,134	394	159	\$15.4	\$2.6	\$45	\$5.0	\$87,998	18.1	1,415	1,491
2027	142,513	53.0	\$303,646	402	159	\$16.1	\$2.6	\$46	\$5.1	\$89,663	17.8	1,428	1,507
2028	142,734	53.4	\$314,362	417	160	\$16.8	\$2.7	\$47	\$5.2	\$91,281	17.6	1,440	1,523
2029	142,956	53.8	\$323,601	412	161	\$17.4	\$2.8	\$49	\$5.3	\$92,337	17.4	1,455	1,537
2030	143,176	54.2	\$332,750	397	161	\$18.0	\$2.8	\$50	\$5.4	\$93,382	17.2	1,465	1,554
2031	143,398	54.6	\$341,961	381	162	\$18.7	\$2.9	\$51	\$5.4	\$94,442	17.2	1,478	1,569
2032	143,619	55.0	\$350,853	375	163	\$19.3	\$3.0	\$52	\$5.5	\$95,142	17.2	1,488	1,585
2033	143,838	55.4	\$360,606	369	163	\$20.0	\$3.0	\$53	\$5.6	\$96,373	17.1	1,496	1,599
2034	144,056	55.8	\$370,761	364	164	\$20.7	\$3.1	\$54	\$5.7	\$97,455	17.2	1,501	1,610
2035	144,263	56.1	\$381,320	358	164	\$21.4	\$3.2	\$56	\$5.7	\$98,475	17.3	1,501	1,623
2036	144,455	56.5	\$391,916	352	165	\$22.1	\$3.3	\$57	\$5.8	\$99,057	17.5	1,494	1,635
2037	144,626	56.8	\$402,904	336	165	\$22.9	\$3.4	\$59	\$5.8	\$99,569	17.7	1,481	1,646
2038	144,783	57.2	\$414,437	320	166	\$23.7	\$3.5	\$61	\$5.9	\$100,312	17.9	1,475	1,657
2039	144,916	57.5	\$426,315	304	166	\$24.5	\$3.6	\$62	\$5.9	\$100,855	18.2	1,458	1,667
2040	145,042	57.8	\$438,315	277	167	\$25.3	\$3.7	\$64	\$6.0	\$101,419	18.4	1,456	1,675
2041	145,154	58.1	\$450,586	252	167	\$26.2	\$3.8	\$66	\$6.0	\$102,129	18.5	1,446	1,681
2042	145,260	58.3	\$463,268	246	167	\$27.0	\$3.9	\$67	\$6.1	\$102,915	18.7	1,439	1,685
2043	145,359	58.6	\$475,915	221	168	\$27.9	\$3.9	\$69	\$6.2	\$103,714	18.8	1,433	1,689
2044	145,454	58.8	\$488,873	206	168	\$28.7	\$4.0	\$71	\$6.2	\$104,668	19.0	1,431	1,693
2045	145,548	59.0	\$502,075	201	169	\$29.6	\$4.1	\$72	\$6.3	\$105,378	19.0	1,430	1,698
2046	145,644	59.2	\$515,335	196	169	\$30.5	\$4.2	\$74	\$6.3	\$106,122	19.0	1,429	1,698
2047	145,751	59.4	\$528,571	187	169	\$31.4	\$4.3	\$76	\$6.4	\$106,779	18.9	1,431	1,695
2048	145,866	59.6	\$542,205	178	170	\$32.3	\$4.4	\$77	\$6.4	\$107,428	18.9	1,434	1,693
2049	145,982	59.8	\$556,098	160	170	\$33.2	\$4.5	\$79	\$6.5	\$108,045	18.9	1,430	1,690
2050	146,108	59.9	\$570,607	151	171	\$34.2	\$4.6	\$81	\$6.5	\$108,670	18.7	1,431	1,686

Employment Sectors

2015-2018 History, 2019-2050 Forecast

	Total Wage and Salary	Farm	Construction	Manufac- turing	Transportation and Utilities	Wholesale and Retail Trade (thousands of jobs)	Financial Activities	Professional Services	Information	Health and Education	Leisure	Government
2015	75.5	5.0	4.3	11.9	2.0	8.1	2.3	6.9	0.4	9.8	12.6	10.2
2016	75.9	5.0	4.0	11.9	2.0	8.1	2.4	6.9	0.4	9.9	12.7	10.4
2017	77.5	5.0	4.2	12.7	2.0	8.1	2.3	7.0	0.4	10.1	13.1	10.5
2018	79.5	5.1	4.7	13.2	2.1	8.2	2.2	7.4	0.3	10.1	13.4	10.6
2019	80.8	5.2	5.0	13.5	2.1	8.2	2.2	7.5	0.3	10.2	13.9	10.7
2020	81.5	5.2	4.9	13.7	2.1	8.2	2.1	7.6	0.3	10.3	14.2	10.7
2021	81.7	5.3	4.6	13.8	2.1	8.2	2.1	7.7	0.3	10.4	14.4	10.8
2022	82.1	5.3	4.5	13.9	2.1	8.2	2.1	7.7	0.3	10.5	14.4	10.8
2023	82.5	5.3	4.5	14.1	2.1	8.2	2.0	7.8	0.3	10.5	14.5	10.8
2024	82.9	5.4	4.5	14.2	2.1	8.3	2.0	7.8	0.3	10.6	14.6	10.9
2025	83.4	5.4	4.5	14.4	2.1	8.3	2.0	7.8	0.3	10.7	14.7	10.9
2026	83.9	5.4	4.5	14.5	2.1	8.4	2.0	7.9	0.3	10.7	14.8	11.0
2027	84.3	5.5	4.5	14.6	2.1	8.4	2.0	7.9	0.3	10.8	14.9	11.0
2028	84.7	5.5	4.6	14.7	2.1	8.4	2.0	8.0	0.3	10.9	15.0	11.1
2029	85.1	5.5	4.5	14.8	2.2	8.5	1.9	8.0	0.3	10.9	15.1	11.1
2030	85.5	5.6	4.5	14.9	2.2	8.5	1.9	8.0	0.3	11.0	15.2	11.1
2031	85.9	5.6	4.5	15.0	2.2	8.5	1.9	8.1	0.3	11.1	15.3	11.2
2032	86.3	5.6	4.4	15.1	2.2	8.6	1.9	8.1	0.3	11.2	15.4	11.2
2033	86.7	5.6	4.4	15.2	2.2	8.6	1.8	8.1	0.3	11.2	15.5	11.3
2034	87.0	5.7	4.4	15.3	2.2	8.6	1.8	8.2	0.3	11.3	15.5	11.3
2035	87.4	5.7	4.4	15.3	2.2	8.7	1.8	8.2	0.3	11.4	15.6	11.3
2036	87.8	5.7	4.4	15.4	2.2	8.7	1.8	8.2	0.3	11.5	15.7	11.4
2037	88.1	5.8	4.4	15.5	2.2	8.7	1.7	8.3	0.3	11.6	15.8	11.4
2038	88.4	5.8	4.3	15.5	2.2	8.8	1.7	8.3	0.3	11.6	15.9	11.5
2039	88.7	5.8	4.3	15.6	2.2	8.8	1.7	8.4	0.3	11.7	16.0	11.5
2040	89.0	5.8	4.2	15.7	2.2	8.8	1.7	8.4	0.3	11.8	16.1	11.5
2041	89.2	5.8	4.1	15.7	2.2	8.8	1.6	8.4	0.3	11.8	16.2	11.6
2042	89.5	5.9	4.1	15.8	2.2	8.9	1.6	8.5	0.3	11.9	16.3	11.6
2043	89.8	5.9	4.0	15.8	2.2	8.9	1.6	8.5	0.3	12.0	16.4	11.7
2044	90.0	5.9	3.9	15.9	2.2	8.9	1.5	8.5	0.3	12.0	16.5	11.7
2045	90.3	5.9	3.9	15.9	2.2	9.0	1.5	8.6	0.3	12.1	16.6	11.8
2046	90.6	6.0	3.9	16.0	2.2	9.0	1.5	8.6	0.3	12.2	16.7	11.8
2047	90.9	6.0	3.9	16.1	2.2	9.0	1.4	8.7	0.3	12.2	16.7	11.8
2048	91.2	6.0	3.8	16.1	2.2	9.0	1.4	8.7	0.3	12.3	16.8	11.9
2049	91.4	6.0	3.7	16.2	2.2	9.1	1.3	8.7	0.3	12.3	16.9	11.9
2050	91.7	6.1	3.7	16.2	2.3	9.1	1.3	8.8	0.3	12.4	17.0	12.0

Napa County Economic Forecast

Socioeconomic Indicators

