

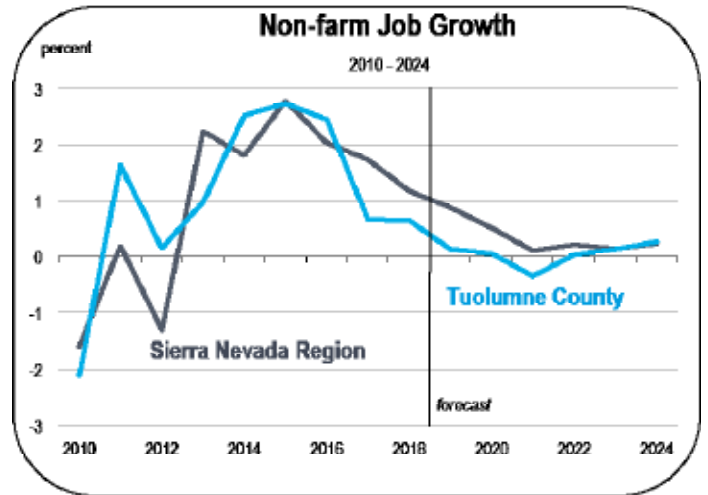
Tuolumne County Economic Forecast

Forecast Summary

- Fewer than 50 jobs are expected to be created in Tuolumne County in 2019. In the following five years, job creation is expected to be minimal.
- Between 2018 and 2024, virtually all net job creation will occur in government and in leisure and hospitality.
- By 2024, employment contractions are likely in manufacturing, transportation and warehousing, private education and healthcare, and financial activities.
- The unemployment rate averaged 4.6 percent in 2018 and is near its lowest sustainable level. The unemployment rate may begin to rise in 2019 or 2020.
- The Tuolumne County population is expected to decline during the 2018–2024 forecast period.
- Housing production remains very low in Tuolumne County, and very few new homes will be built during the forecast period.

Job Growth

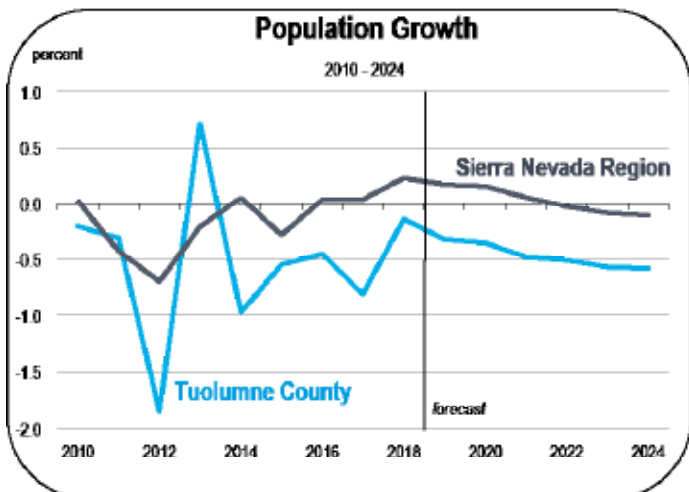
- Government is the largest employer in Tuolumne County, accounting for 31 percent of all wage-and-salary jobs. This includes jobs at public schools.
- The other major employment sectors are retail trade, leisure and hospitality, and healthcare.



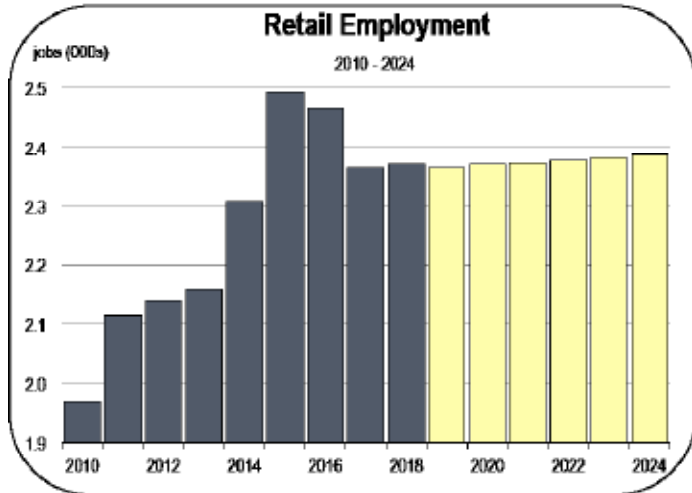
- Between 2012 and 2018, approximately 1,700 jobs were created in Tuolumne County. The largest gains were in leisure and hospitality (500 jobs), government (300 jobs), construction (250 jobs), and retail trade (250 jobs).
- Between 2018 and 2024, very few new jobs are expected to be created in the county.

Construction Employment

- Construction employment boomed between 2013 and 2018.
- More than 300 new homes have been constructed in Tuolumne County since 2013, and more than \$150 million was spent building and renovating non-residential structures.



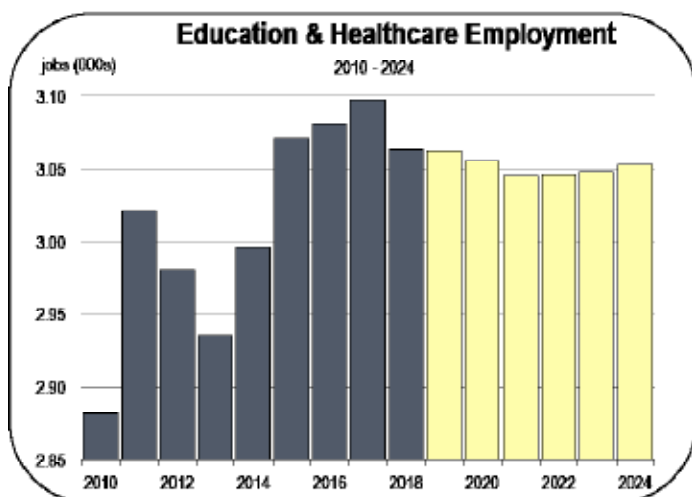
Tuolumne County Economic Forecast



- Construction activity is expected to plateau during the 2018–2024 forecast period. We are near the peak of the building cycle and construction firms may begin to reduce their employee headcounts.

Retail Trade Employment

- Employment in the Tuolumne County retail sector grew fairly consistently between 2010 and 2015, but more than 100 jobs were lost between 2015 and 2018.
- The retail industry is being divided into two groups: stores that face heavy online competition, and stores that do not.
- In 2019 and 2020, jobs are expected to be created in sectors not facing heavy online competition:
 - Drug stores and healthcare stores
 - Grocery stores
 - Gas Stations



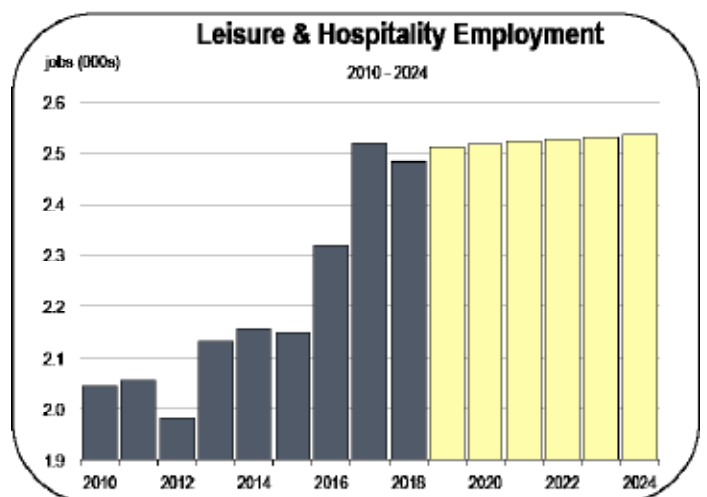
- Jobs may be lost in sectors that are facing heavy online competition:
 - Clothing stores
 - Sporting goods stores
 - Consumer electronics stores
 - Department stores

Private Education and Healthcare Employment

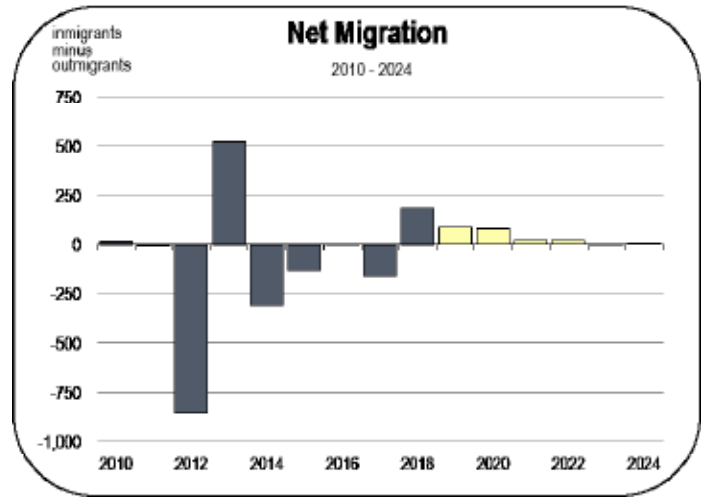
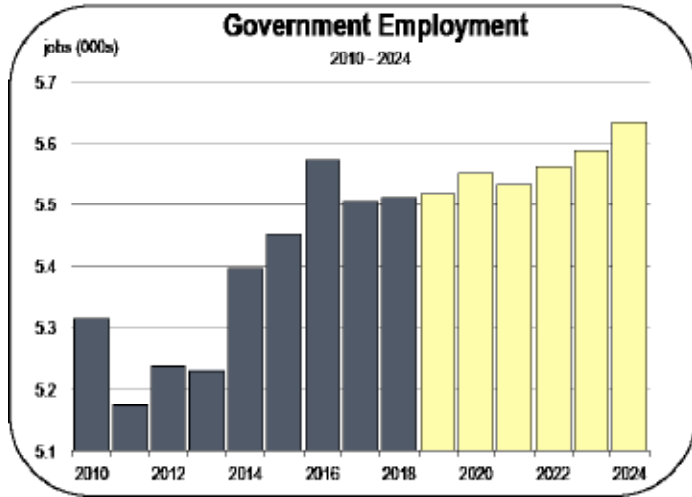
- The Healthcare sector has generated almost 200 jobs since 2010.
- Our baseline forecast assumes that there will be a contraction in healthcare jobs in the next few years. Healthcare is a population-serving industry, and the Tuolumne County population is expected to decline.
- The private education sector is very small in Tuolumne County, and it neither gains nor loses a substantial number of jobs in a typical year (public schools are included in the government sector).
- The future of the U.S. health insurance landscape is unknown, and legislative changes could influence job growth in this sector.

Leisure and Hospitality Employment

- Tuolumne County is near Yosemite and has a vibrant tourism industry.
- The largest tourism draw is during the summer months for activities like hiking, fishing, and boating.
- Leisure and hospitality firms generated 500 jobs between 2012 and 2018.



Tuolumne County Economic Forecast



- Additional job growth is likely during the 2018–2024 forecast period, but the leisure sector is highly exposed to the business cycle, and any economic downturn could impact local restaurants, hotels, and other leisure and hospitality businesses.
- The leisure industry is also sensitive to changes in the minimum wage. As California’s minimum wage rises to \$15 per hour by 2022, job growth could be impacted.

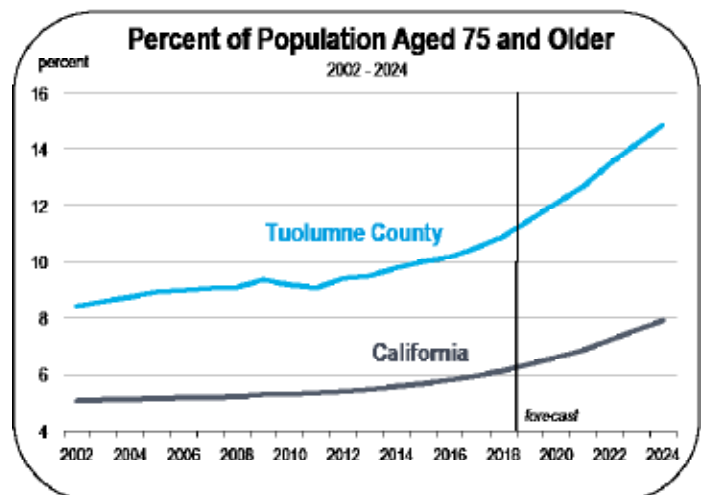
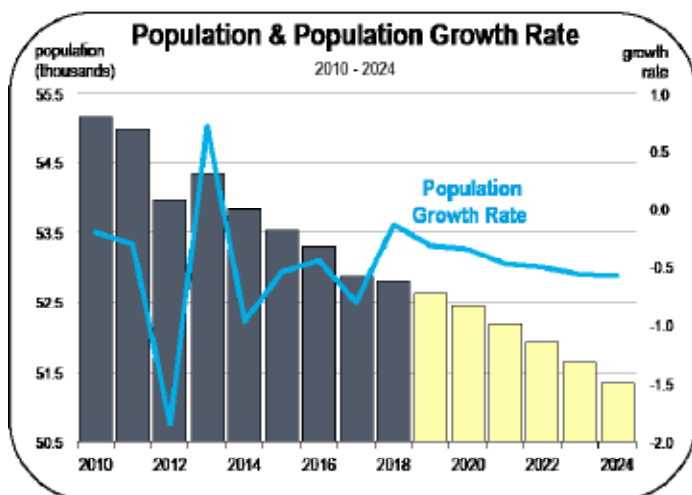
- State and local government agencies employ approximately 5,100 workers, including staff and teachers at public schools.
- Future employment gains will be determined by population growth and by the condition of state and local government budgets.

Government Employment

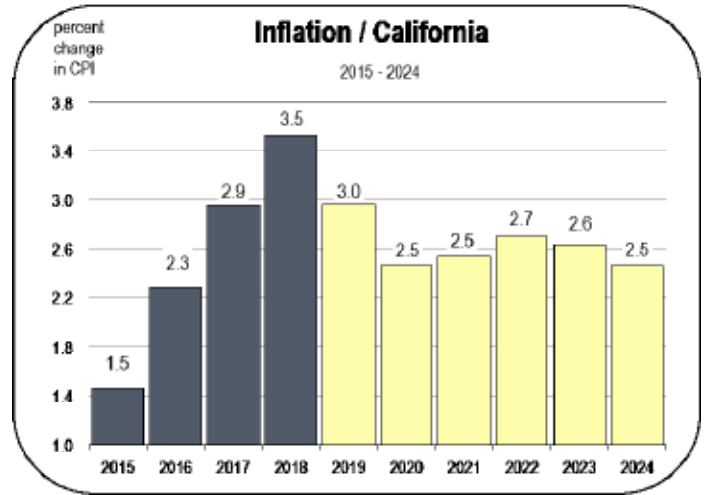
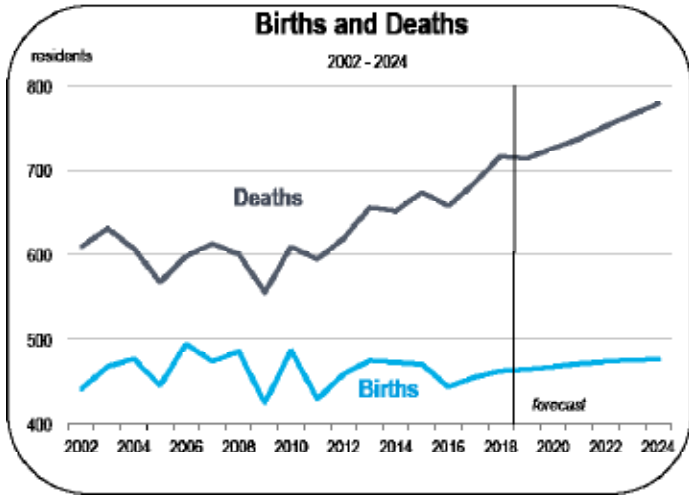
- Government agencies in Tuolumne County gained a substantial number of jobs between 2011 and 2018.
- The federal government employs approximately 400 workers in Tuolumne, most of whom work for the National Park Service.

Population Growth

- The Tuolumne County population is now declining and is expected to decline further by 2024.
- Tuolumne County’s population is much older than the statewide average. As of 2018, almost 11 percent of the county’s population was aged 75 or older, compared to just 6 percent of the California population.



Tuolumne County Economic Forecast



- Because Tuolumne County has a high share of residents aged 75 and older, the number of deaths has exceeded the number of births for more than two decades.
- Because deaths have exceeded births, new migrants have been the only source of population growth. And in several recent years, the number of people moving out of the county has exceeded the number of people moving in, exacerbating overall population decline.
- Between 2018 and 2024, a small number of net migrants are expected to move into the county, but there are expected to be 1,600 more deaths than births, so the Tuolumne County population will continue to shrink.

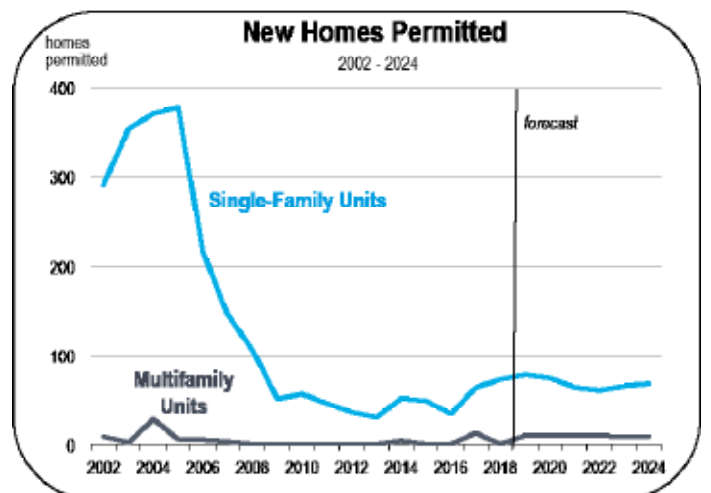
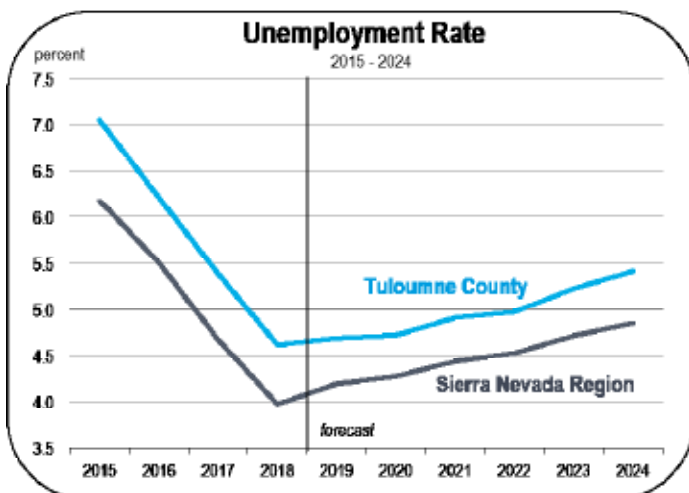
- The unemployment rate has reached its lowest sustainable level and may begin to rise in 2019 or 2020.
- Inflation accelerated in 2018 as home prices and energy costs increased across California.
- In 2019 and 2020, inflation is expected to be within a range of 2.0 percent and 3.5 percent.

Unemployment and Inflation Rates

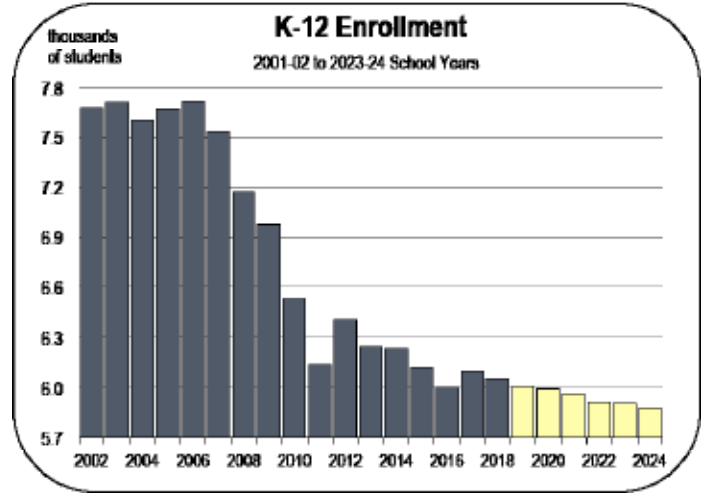
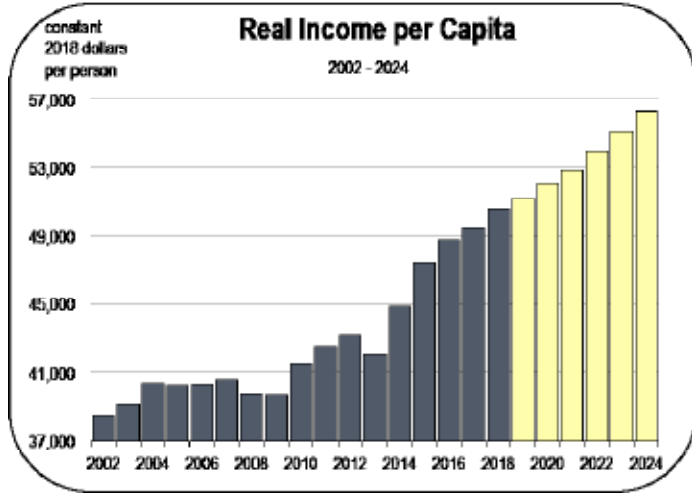
- The unemployment rate in Tuolumne County was 4.6 percent in 2018, which was above the average for the Sierra Region.

New Housing Production

- From 2013 to 2018, a total of 319 new homes were built in Tuolumne County. Most were single-family homes.
- Between 2019 and 2024, approximately 450 to 500 homes are expected to be built, the majority of which will be single-family.



Tuolumne County Economic Forecast

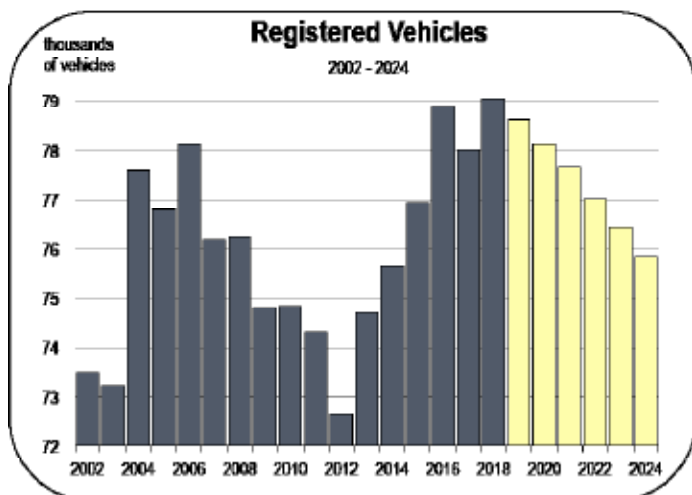


Income per Capita

- Income per capita was \$50,600 in 2018, which was below the Sierra Nevada Region average of \$55,400.
- Over the last six years, real income per capita increased at a rate of 2.7 percent per year.
- Over the next six years, real income per capita is expected to increase by an average of 1.8 percent per year.

Registered Vehicles

- There were approximately 79,000 registered vehicles in Tuolumne County in 2018.



- By 2024, it is expected that the county will have 75,800 registered vehicles.
- The number of vehicles will decline because the population will decline.

Public School Enrollment

- In Tuolumne County, approximately 6,100 students were enrolled in K-12 public schools in 2018.
- By 2024, the county is expected to have 5,900 public K-12 students. Enrollment will decline as the population aged 5 to 17 declines.

Tuolumne 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 (millions) | Local Sales Tax (millions) | Real Industrial Production (millions) | Real per Capita Income (dollars) | School Enrollment (thousands) | Births (people) | Deaths (people) |
|------|------------------------|--------------------------------|---|-----------------------------------|---------------------------------------|----------------------------------|--|-------------------------------------|--|---|-------------------------------------|--------------------|--------------------|
| 2015 | 53,531 | 22.1 | \$105,511 | 49 | 76.9 | \$2.3 | \$495.5 | \$6 | \$280.0 | \$47,441 | 6.1 | 470 | 674 |
| 2016 | 53,291 | 22.3 | \$109,027 | 34 | 78.9 | \$2.4 | \$513.7 | \$6 | \$285.2 | \$48,730 | 6.0 | 444 | 657 |
| 2017 | 52,862 | 22.2 | \$113,314 | 77 | 78.0 | \$2.5 | \$536.4 | \$7 | \$286.8 | \$49,485 | 6.1 | 456 | 685 |
| 2018 | 52,790 | 22.2 | \$120,263 | 73 | 79.0 | \$2.7 | \$554.2 | \$7 | \$291.6 | \$50,550 | 6.1 | 463 | 716 |
| 2019 | 52,623 | 22.4 | \$123,509 | 89 | 78.6 | \$2.8 | \$569.6 | \$7 | \$290.8 | \$51,153 | 6.0 | 465 | 714 |
| 2020 | 52,441 | 22.5 | \$128,178 | 85 | 78.1 | \$2.9 | \$587.2 | \$7 | \$292.8 | \$52,044 | 6.0 | 468 | 726 |
| 2021 | 52,193 | 22.5 | \$132,720 | 74 | 77.6 | \$3.0 | \$604.9 | \$8 | \$294.9 | \$52,828 | 6.0 | 471 | 737 |
| 2022 | 51,930 | 22.6 | \$138,280 | 71 | 77.0 | \$3.1 | \$625.0 | \$8 | \$295.4 | \$53,962 | 5.9 | 474 | 752 |
| 2023 | 51,637 | 22.7 | \$143,903 | 75 | 76.4 | \$3.3 | \$645.4 | \$8 | \$296.8 | \$55,120 | 5.9 | 476 | 765 |
| 2024 | 51,339 | 22.7 | \$149,423 | 77 | 75.8 | \$3.4 | \$665.8 | \$8 | \$298.6 | \$56,286 | 5.9 | 476 | 778 |
| 2025 | 51,013 | 22.8 | \$154,448 | 78 | 75.3 | \$3.5 | \$683.3 | \$9 | \$299.9 | \$57,321 | 5.9 | 477 | 790 |
| 2026 | 50,685 | 22.8 | \$159,682 | 74 | 74.9 | \$3.6 | \$700.2 | \$9 | \$302.2 | \$58,434 | 5.9 | 478 | 802 |
| 2027 | 50,344 | 22.9 | \$165,230 | 73 | 74.4 | \$3.8 | \$717.0 | \$9 | \$304.4 | \$59,681 | 6.0 | 479 | 813 |
| 2028 | 49,986 | 23.0 | \$170,723 | 73 | 74.1 | \$3.9 | \$734.1 | \$9 | \$306.4 | \$60,861 | 6.0 | 480 | 825 |
| 2029 | 49,656 | 23.0 | \$175,078 | 73 | 73.6 | \$4.0 | \$752.6 | \$9 | \$305.5 | \$61,515 | 6.1 | 483 | 836 |
| 2030 | 49,355 | 23.1 | \$179,602 | 79 | 73.2 | \$4.1 | \$770.9 | \$10 | \$305.0 | \$62,222 | 6.1 | 485 | 847 |
| 2031 | 49,025 | 23.1 | \$184,089 | 83 | 72.8 | \$4.3 | \$788.8 | \$10 | \$304.8 | \$62,999 | 6.1 | 488 | 857 |
| 2032 | 48,664 | 23.2 | \$188,401 | 74 | 72.4 | \$4.4 | \$808.7 | \$10 | \$304.2 | \$63,616 | 6.1 | 489 | 866 |
| 2033 | 48,295 | 23.3 | \$192,723 | 71 | 72.1 | \$4.5 | \$826.0 | \$10 | \$304.0 | \$64,449 | 6.2 | 490 | 874 |
| 2034 | 47,916 | 23.3 | \$197,318 | 70 | 71.8 | \$4.6 | \$845.3 | \$11 | \$303.5 | \$65,238 | 6.2 | 491 | 882 |
| 2035 | 47,527 | 23.4 | \$202,107 | 70 | 71.5 | \$4.7 | \$865.8 | \$11 | \$302.8 | \$66,015 | 6.2 | 491 | 890 |
| 2036 | 47,130 | 23.4 | \$207,214 | 69 | 71.4 | \$4.9 | \$890.2 | \$11 | \$301.6 | \$66,628 | 6.2 | 490 | 896 |
| 2037 | 46,766 | 23.5 | \$212,612 | 70 | 71.4 | \$5.0 | \$916.1 | \$11 | \$301.0 | \$67,188 | 6.2 | 489 | 900 |
| 2038 | 46,404 | 23.6 | \$218,049 | 71 | 71.4 | \$5.1 | \$941.1 | \$12 | \$300.3 | \$67,850 | 6.1 | 488 | 905 |
| 2039 | 46,043 | 23.6 | \$223,710 | 70 | 71.4 | \$5.3 | \$968.5 | \$12 | \$299.8 | \$68,419 | 6.1 | 486 | 909 |
| 2040 | 45,691 | 23.7 | \$229,401 | 69 | 71.4 | \$5.4 | \$995.9 | \$12 | \$298.9 | \$69,008 | 6.1 | 486 | 913 |
| 2041 | 45,334 | 23.7 | \$235,098 | 67 | 71.6 | \$5.6 | \$1,022.1 | \$13 | \$299.3 | \$69,705 | 6.1 | 485 | 915 |
| 2042 | 44,975 | 23.8 | \$240,845 | 66 | 72.0 | \$5.7 | \$1,047.9 | \$13 | \$300.1 | \$70,455 | 6.0 | 484 | 915 |
| 2043 | 44,612 | 23.8 | \$246,519 | 64 | 72.3 | \$5.9 | \$1,073.4 | \$13 | \$300.8 | \$71,229 | 6.0 | 483 | 915 |
| 2044 | 44,243 | 23.9 | \$251,906 | 49 | 72.5 | \$6.0 | \$1,097.3 | \$14 | \$301.7 | \$72,039 | 6.0 | 484 | 917 |
| 2045 | 43,873 | 23.9 | \$257,799 | 48 | 72.8 | \$6.2 | \$1,123.9 | \$14 | \$301.2 | \$72,797 | 6.0 | 484 | 919 |
| 2046 | 43,500 | 24.0 | \$263,605 | 43 | 73.0 | \$6.3 | \$1,150.0 | \$14 | \$301.3 | \$73,580 | 6.0 | 485 | 922 |
| 2047 | 43,125 | 24.0 | \$269,468 | 37 | 73.3 | \$6.5 | \$1,176.8 | \$15 | \$301.6 | \$74,343 | 5.9 | 486 | 922 |
| 2048 | 42,751 | 24.0 | \$275,553 | 32 | 73.6 | \$6.6 | \$1,204.2 | \$15 | \$302.0 | \$75,131 | 5.9 | 487 | 923 |
| 2049 | 42,376 | 24.1 | \$281,857 | 27 | 74.1 | \$6.8 | \$1,232.2 | \$15 | \$302.8 | \$75,942 | 5.9 | 487 | 922 |
| 2050 | 42,002 | 24.1 | \$288,390 | 26 | 74.4 | \$6.9 | \$1,260.8 | \$16 | \$302.9 | \$76,777 | 5.9 | 488 | 922 |

Employment Sectors

2015-2018 History, 2019-2050 Forecast

| | Total Wage & Salary | Farm | Construction | Manufac- turing | Transportation & Utilities | Wholesale & Retail Trade employment (jobs) | Financial Activities | Professional Services | Information | Health & Education | Leisure | Government |
|------|------------------------|------|--------------|--------------------|-------------------------------|--|-------------------------|--------------------------|-------------|-----------------------|---------|------------|
| 2015 | 17,360 | 63 | 574 | 803 | 235 | 2,670 | 512 | 938 | 208 | 3,071 | 2,147 | 5,453 |
| 2016 | 17,790 | 70 | 638 | 787 | 252 | 2,638 | 491 | 1,028 | 208 | 3,081 | 2,319 | 5,571 |
| 2017 | 17,920 | 75 | 663 | 797 | 213 | 2,535 | 485 | 1,073 | 193 | 3,098 | 2,518 | 5,504 |
| 2018 | 18,020 | 64 | 760 | 813 | 191 | 2,539 | 486 | 1,085 | 162 | 3,063 | 2,483 | 5,510 |
| 2019 | 18,050 | 69 | 776 | 805 | 191 | 2,536 | 477 | 1,087 | 161 | 3,063 | 2,511 | 5,517 |
| 2020 | 18,060 | 70 | 770 | 798 | 190 | 2,539 | 470 | 1,093 | 161 | 3,056 | 2,517 | 5,550 |
| 2021 | 18,000 | 70 | 748 | 788 | 190 | 2,540 | 464 | 1,100 | 161 | 3,046 | 2,522 | 5,532 |
| 2022 | 18,010 | 70 | 743 | 780 | 186 | 2,544 | 458 | 1,100 | 161 | 3,046 | 2,527 | 5,561 |
| 2023 | 18,030 | 70 | 754 | 774 | 184 | 2,548 | 452 | 1,096 | 161 | 3,048 | 2,532 | 5,588 |
| 2024 | 18,080 | 70 | 762 | 769 | 183 | 2,553 | 446 | 1,094 | 161 | 3,053 | 2,536 | 5,633 |
| 2025 | 18,120 | 70 | 767 | 765 | 182 | 2,554 | 442 | 1,091 | 161 | 3,060 | 2,543 | 5,665 |
| 2026 | 18,160 | 70 | 760 | 762 | 182 | 2,555 | 438 | 1,088 | 161 | 3,064 | 2,551 | 5,711 |
| 2027 | 18,190 | 70 | 759 | 758 | 180 | 2,555 | 434 | 1,085 | 161 | 3,068 | 2,558 | 5,744 |
| 2028 | 18,220 | 70 | 761 | 755 | 179 | 2,555 | 429 | 1,082 | 160 | 3,074 | 2,566 | 5,773 |
| 2029 | 18,230 | 70 | 763 | 751 | 178 | 2,556 | 424 | 1,079 | 159 | 3,074 | 2,572 | 5,803 |
| 2030 | 18,270 | 70 | 776 | 747 | 177 | 2,556 | 417 | 1,076 | 159 | 3,076 | 2,575 | 5,832 |
| 2031 | 18,300 | 71 | 789 | 743 | 176 | 2,556 | 409 | 1,072 | 158 | 3,079 | 2,577 | 5,864 |
| 2032 | 18,290 | 71 | 769 | 739 | 175 | 2,556 | 401 | 1,069 | 158 | 3,080 | 2,579 | 5,895 |
| 2033 | 18,290 | 71 | 761 | 735 | 174 | 2,556 | 392 | 1,065 | 157 | 3,082 | 2,581 | 5,922 |
| 2034 | 18,300 | 71 | 761 | 730 | 174 | 2,556 | 384 | 1,061 | 156 | 3,084 | 2,583 | 5,951 |
| 2035 | 18,320 | 71 | 760 | 726 | 173 | 2,556 | 376 | 1,057 | 155 | 3,090 | 2,584 | 5,980 |
| 2036 | 18,350 | 71 | 760 | 721 | 173 | 2,556 | 368 | 1,053 | 154 | 3,103 | 2,586 | 6,010 |
| 2037 | 18,380 | 71 | 761 | 716 | 174 | 2,556 | 360 | 1,050 | 154 | 3,116 | 2,588 | 6,037 |
| 2038 | 18,400 | 71 | 762 | 712 | 175 | 2,556 | 353 | 1,046 | 153 | 3,127 | 2,590 | 6,066 |
| 2039 | 18,430 | 71 | 761 | 707 | 176 | 2,556 | 346 | 1,042 | 152 | 3,138 | 2,592 | 6,092 |
| 2040 | 18,450 | 72 | 759 | 703 | 176 | 2,556 | 339 | 1,038 | 151 | 3,144 | 2,593 | 6,120 |
| 2041 | 18,480 | 72 | 754 | 699 | 177 | 2,557 | 333 | 1,034 | 151 | 3,152 | 2,596 | 6,154 |
| 2042 | 18,510 | 72 | 754 | 695 | 180 | 2,557 | 327 | 1,030 | 150 | 3,160 | 2,599 | 6,188 |
| 2043 | 18,540 | 72 | 749 | 690 | 181 | 2,557 | 321 | 1,026 | 149 | 3,164 | 2,602 | 6,222 |
| 2044 | 18,520 | 72 | 713 | 686 | 182 | 2,557 | 314 | 1,022 | 148 | 3,164 | 2,604 | 6,257 |
| 2045 | 18,540 | 72 | 709 | 682 | 182 | 2,558 | 308 | 1,018 | 147 | 3,168 | 2,606 | 6,291 |
| 2046 | 18,550 | 72 | 697 | 677 | 183 | 2,558 | 301 | 1,014 | 147 | 3,169 | 2,608 | 6,325 |
| 2047 | 18,560 | 72 | 684 | 673 | 185 | 2,558 | 295 | 1,009 | 146 | 3,167 | 2,610 | 6,359 |
| 2048 | 18,580 | 73 | 671 | 669 | 186 | 2,558 | 289 | 1,005 | 145 | 3,169 | 2,612 | 6,393 |
| 2049 | 18,600 | 73 | 659 | 665 | 188 | 2,559 | 284 | 1,000 | 144 | 3,176 | 2,615 | 6,428 |
| 2050 | 18,630 | 73 | 659 | 661 | 189 | 2,559 | 278 | 996 | 143 | 3,181 | 2,617 | 6,462 |

Tuolumne County Economic Forecast

Socioeconomic Indicators

