



**Northern Rural Training and
Employment Consortium (NoRTEC)**

.....

Tehama County Labor Market Profile and Industry Sector Analysis

.....

July 2019

Prepared for:

NoRTEC Workforce Development Board

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INTRODUCTION

The following is a labor market and industry/sector profile for Tehama County, California. This is an update to a prior version of the County Labor Market Profiles that were completed in the summer of 2017, which were completed using 2016 labor market data.



The quantitative data for the profile includes a geographic overview, demographic and labor force characteristics, industry analysis, occupation analysis, and labor force data. For the profile, the project team collected and analyzed data from Economic Modeling Specialists Int'l. (EMSI), U.S. Census Bureau, and the U.S. Bureau of Labor Statistics. Though 2019 is the current calendar year, 2018 labor market data are utilized as these represent the latest full calendar year of data available from federal statistical agencies.

EXECUTIVE SUMMARY

The following are some of the most pertinent information and statistics uncovered in the process of creating this report.

Social and Demographic Highlights

- Population growth in Tehama County significantly trails rates for California and the United States. Over the prior ten years, population increased by 2% for Tehama County while population increased by 9% for the state and 8% for the nation.
- Tehama County has an aging population. The only age cohort that has experienced increases in population over the last five years and is projected to increase into the next five years are those ages 55 and older.
- Educational attainment by individuals in Tehama County lags behind the NoRTEC region, state, and nation beyond a Bachelor's degree or higher. The county has a higher percentage of individuals with an Associate's degree than the NoRTEC region.
- Tehama County experiences a net loss of talent due to out-commuting. Though 9,366 individuals both live and work in the County, 11,579 live in the County and work elsewhere.
- Income levels in Tehama County are fairly low, which results in a considerable need for social services. Median household income in the county is \$42,512 and over 23% of the area population is in poverty. Likewise, 14.4% of the county population receives CalFresh.
- As of December 2018, there were 25,414 individuals in the Tehama County labor force, of which 1,431 were unemployed.
- Since the 2016 version of this report was released, the Tehama County economy has expanded at an average annual rate of 2.9%. The highest growth sectors include Agriculture, Forestry, Fishing & Hunting; and Health Care and Social Assistance. In combination, these sectors added over 500 jobs, over 40% of the county's net new job growth. Meanwhile, the sector with the largest decrease was Real Estate, Rental, & Leasing.

- Between 2016 and 2018, Tehama County's population increased slightly by 1.0% (+636 in numeric terms). The highest growth age groups included those ages 70 to 74 years, and those 50 to 54 years saw the largest decrease. The highest growth race/ethnicity group was White Hispanics, while White, Non-Hispanics saw the largest decrease.

Industry & Occupation Highlights

- Tehama County's largest industry sectors include Government; Health Care and Social Assistance; Agriculture, Forestry, Fishing and Hunting; Retail Trade; and Manufacturing.
- Significant industries adding the most jobs in Tehama County include Health Care and Social Assistance (+488 jobs); Agriculture, Forestry, Fishing and Hunting (+327 jobs); Government (+203 jobs); and Retail Trade (+135 jobs).
- Individual (4-digit North American Industry Classification System (NAICS) Code) industries with strong growth prospects for the county include: Support Activities for Crop Production; Individual and Family Services; Local Government, Excluding Education and Hospitals; and Other Wood Product Manufacturing.
- Because Tehama County has an aging population, it is not surprising to see a future demand and growth within the healthcare industry. However, it is unique to the county the Other Wood Product Manufacturing is projected to become a high-demand industry.

ECONOMIC IMPACT OF 2018 FOREST FIRES

Thomas P. Miller & Associates (TPMA) conducted an economic impact analysis of the northern California forest fires of 2018 for NoRTEC in January 2019. TPMA's analysis started with a literature review and an empirical observation of the economic effects of wildfires in the United States. The literature review provided general and specific trends on the topic. For the empirical review, TPMA focused on other highly destructive fires in the United States in terms of acreage, structures, or both. Since few federal data sources have yet to reveal the specific effects of the Camp and Carr fires on Northern California, these analyses were primarily based on observations of past similar events. In addition, Dr. Robert Eyster of Sonoma State University, a renown regional economist, has summarized some of the recent effects of the Carr and Camp Fires on northern California.

In general, economic impacts are most severe upon those counties in which the fires occurred, namely, Shasta and Butte, though some impacts upon adjacent counties is expected. The following are a few pertinent points that relate to likely effects on Tehama County.

- In keeping with patterns of wildfire economic impact on adjacent counties, the results of the Carr fire on Tehama County likely resulted small bump in wages (typically less than 1% increase) and no impact on jobs in quarter four of 2018.
- Historically, areas near wildfires suffer a slight lag in land-dependent industry sectors, such as tourism and agriculture, over the next several seasons.
- Forest service suppression spending on contractors located in Tehama, was the largest in the NoRETEC region, equating to \$21.0 million between October 2017 and December 2018.

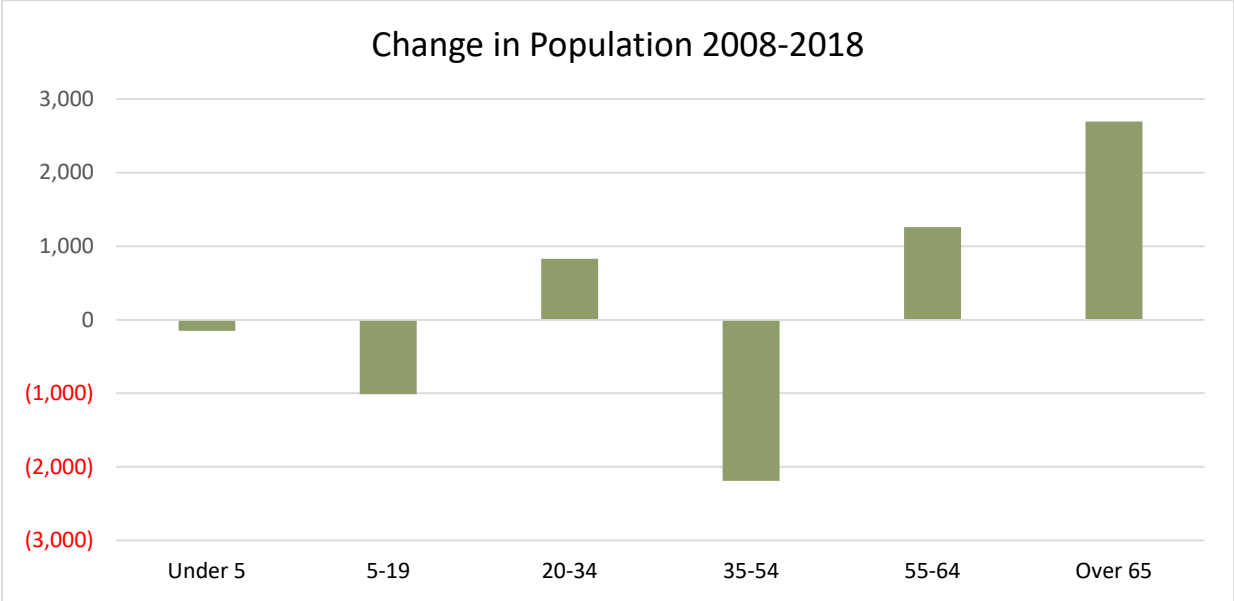
DEMOGRAPHIC & LABOR FORCE CHARACTERISTICS

Total Population

Tehama County is geographically located in the southwestern part of the NoRTEC region. The population in the county has increased by over 1,400 over the last ten years and is projected to increase by nearly 1,200 over the next five years. Compared to the state and national figures, Tehama County’s population growth has been slower. Over the last ten years, California’s population increased by 9% and the nation’s population increased by 8%. By 2023, both the state and the nation’s population are projected to grow by 3%.

Over the past ten years, the age cohort that makes up a significant part of the workforce, individuals age 35-54, has decreased by nearly 2,200 and is projected to decrease by an additional 10 over the next five years. The only age cohort that has experienced increases in population over the last five years and is projected to increase into the next five years are those ages 55 and older. The aging population in Tehama County will be a significant factor in the county’s future available labor force.

| Age | 2008 Population | 2018 Population | Change 2008-2018 | % Change 2008-2018 | Projected Change 2018-2023 | |
|---------|-----------------|-----------------|------------------|--------------------|----------------------------|------|
| Under 5 | 4,406 | 4,258 | (148) | (3%) | 321 | 8% |
| 5-19 | 13,575 | 12,563 | (1,012) | (7%) | 314 | 2% |
| 20-34 | 10,383 | 11,211 | 828 | 8% | (453) | (4%) |
| 35-54 | 16,760 | 14,571 | (2,189) | (13%) | (10) | (0%) |
| 55-64 | 7,820 | 9,079 | 1,259 | 16% | (137) | (2%) |
| Over 65 | 9,706 | 12,400 | 2,694 | 28% | 1,140 | 9% |
| Total | 62,649 | 64,081 | 1,432 | 2% | 1,176 | 2% |



Race/Ethnicity

The population of the region is predominately White, with 67% identifying as White in 2018, followed by 26% identifying as Hispanic.¹ The top fastest growing race/ethnicity groups in the county are Native Hawaiian or Pacific Islander; Black; and Asian. Although Tehama County's population remains two-thirds White, increases in diverse populations could indicate a need for more diverse community resources to best serve these populations.

| Race/Ethnicity | 2018 Population | Change 2008-2018 | % Change 2008-2018 |
|-------------------------------------|-----------------|------------------|--------------------|
| White | 43,178 | (2,641) | (6%) |
| Hispanic | 16,477 | 3,330 | 25% |
| Two or More Races | 1,804 | 289 | 19% |
| American Indian or Alaskan Native | 1,221 | 88 | 8% |
| Asian | 811 | 183 | 29% |
| Black | 492 | 148 | 43% |
| Native Hawaiian or Pacific Islander | 99 | 36 | 57% |

Educational Attainment

The educational attainment in the NoRTEC region beyond an Associate's degree is higher than that of those in Tehama County. The percentage of individuals in the county with a two-year degree is over 3% less than the NoRTEC region and those with a Bachelor's degree is even higher. The state and nation has a percentage of individuals over twice the amount of Tehama County's that have a Bachelor's degree and three times more with a graduate degree or higher.

| Education Level | 2018 Tehama County Population | 2018 Tehama County Percent | 2018 Percent NoRTEC | 2018 Percent California | 2018 Percent US |
|----------------------------|-------------------------------|----------------------------|---------------------|-------------------------|-----------------|
| Less Than 9th Grade | 5,018 | 11.5% | 4.9% | 11.8% | 6.8% |
| 9th Grade to 12th Grade | 3,257 | 7.4% | 6.9% | 7.0% | 6.9% |
| High School Diploma | 13,408 | 30.7% | 25.3% | 20.8% | 27.6% |
| Some College | 14,006 | 32.0% | 30.5% | 21.4% | 20.7% |
| Associate's Degree | 2,783 | 6.4% | 9.8% | 7.6% | 8.0% |
| Bachelor's Degree | 3,698 | 8.5% | 15.0% | 19.9% | 18.6% |
| Graduate Degree and Higher | 1,561 | 3.6% | 7.6% | 11.6% | 11.3% |

¹ The Hispanic population includes Hispanics in White, Black, Two or More Races, Asian, American Indian or Alaskan Native, Native Hawaiian, or Pacific Islander.

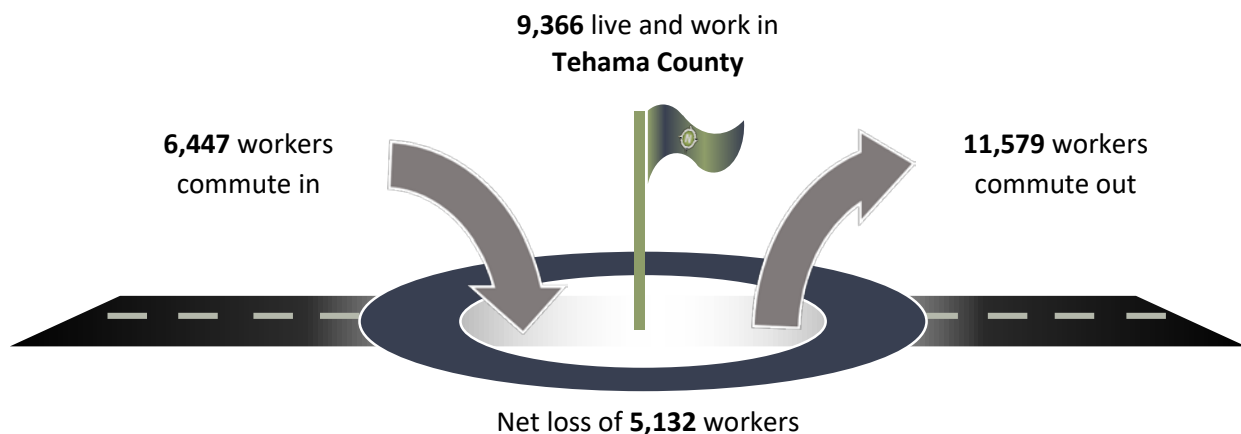
Income

Tehama County has the fourth lowest median household income amongst the counties in the NoRTEC region at \$42,512, which is \$24,657 less than that of California and \$15,140 less than that of the U.S. The poverty rate for the county is the second highest amongst all counties in the NoRTEC region at 20.9%. The only other county with a higher poverty rate is Del Norte County, which has a reported poverty rate of 23.2%.

| County | Median Household Income 2013-2017 | Poverty Rate |
|---------------|--------------------------------------|--------------|
| Butte | \$46,516 | 20.5% |
| Del Norte | \$41,287 | 23.2% |
| Lassen | \$54,083 | 14.6% |
| Modoc | \$39,296 | 18.1% |
| Nevada | \$60,610 | 12.1% |
| Plumas | \$50,266 | 13.3% |
| Shasta | \$47,258 | 18.1% |
| Sierra | \$44,190 | 12.3% |
| Siskiyou | \$40,884 | 20.7% |
| Tehama | \$42,512 | 20.9% |
| Trinity | \$36,563 | 19.9% |
| California | \$67,169 | 15.1% |
| United States | \$57,652 | 14.6% |

Commuting

The graphic below details the commuting patterns into and out of Tehama County in 2015. With 11,579 workers commuting out of the county and 6,447 commuting into the county, a net loss of 5,132 workers is experienced in Tehama County. Over 9,300 individuals work and live in the county. Of those commuting into Tehama County, 55.6% are workers between the ages of 30 and 54, and 42.6% earn more than \$3,333 per month. Compared to those commuting out of Tehama County, 38.5% earn more than \$3,333 per month.



In addition to looking at commuting data by total population, it is also helpful to examine commuter statistics by occupational classification. In terms of occupational classification, Transportation and Material Moving Occupations; and Production Occupations were the only groups which experience a net gain of in-commuters to the county. A larger number of county residents commute outside of the county for employment. The largest occupation groups for out-commuters are Office and Administrative Support Occupations; Food Preparation and Serving Related Occupations; and Sales and Related Occupations.

| Occupation Group | 2018 Commuters |
|--|-------------------|
| Transportation and Material Moving Occupations | 226 in-commuters |
| Production Occupations | 95 in-commuters |
| Education, Training, and Library Occupations | 16 out-commuters |
| Legal Occupations | 21 out-commuters |
| Military-only occupations | 28 out-commuters |
| Installation, Maintenance, and Repair Occupations | 33 out-commuters |
| Arts, Design, Entertainment, Sports, and Media Occupations | 43 out-commuters |
| Healthcare Support Occupations | 46 out-commuters |
| Life, Physical, and Social Science Occupations | 57 out-commuters |
| Architecture and Engineering Occupations | 66 out-commuters |
| Computer and Mathematical Occupations | 98 out-commuters |
| Building and Grounds Cleaning and Maintenance Occupations | 102 out-commuters |
| Community and Social Service Occupations | 105 out-commuters |
| Protective Service Occupations | 111 out-commuters |
| Construction and Extraction Occupations | 135 out-commuters |
| Farming, Fishing, and Forestry Occupations | 199 out-commuters |
| Business and Financial Operations Occupations | 205 out-commuters |
| Management Occupations | 234 out-commuters |
| Personal Care and Service Occupations | 240 out-commuters |
| Healthcare Practitioners and Technical Occupations | 302 out-commuters |
| Sales and Related Occupations | 510 out-commuters |
| Food Preparation and Serving Related Occupations | 519 out-commuters |
| Office and Administrative Support Occupations | 584 out-commuters |

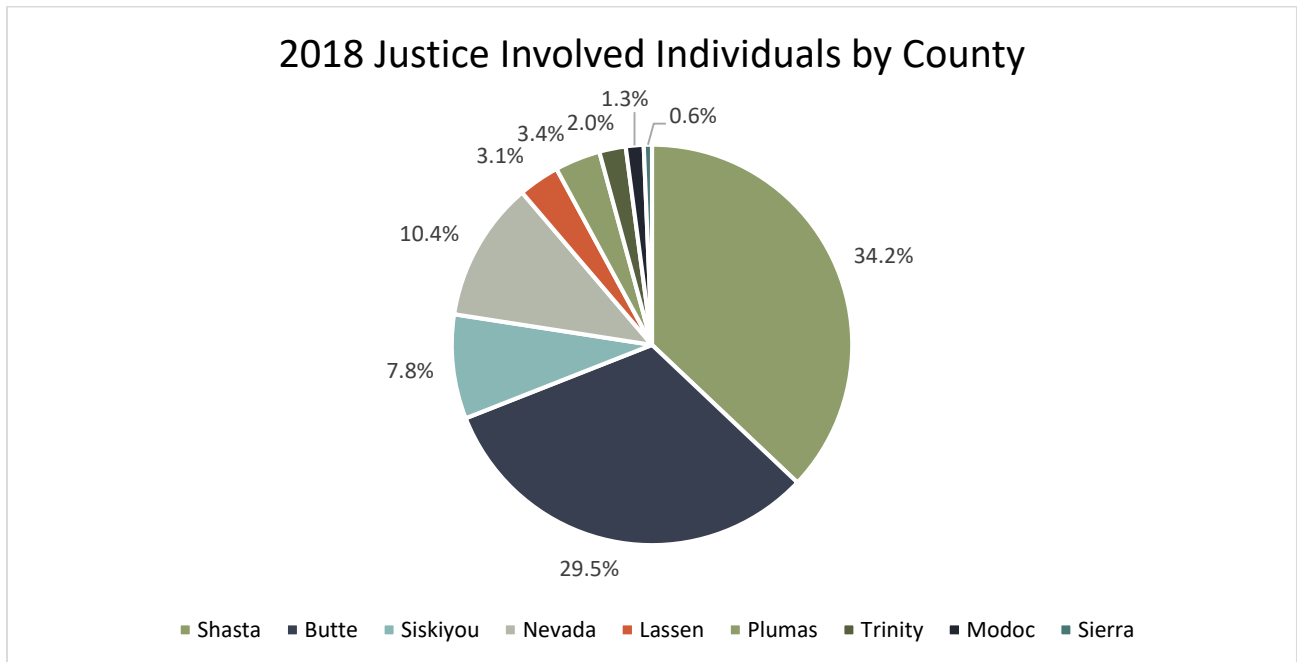
Special Populations

With consideration of the state of California’s Regional and Local Planning Guidance for program year 2018-19, California counties are also concerned with quantifying and assisting certain sub-population groups, namely: formerly incarcerated and other justice-involved individuals and CalFresh recipients.

Justice-Involved Individuals

The graph and table below detail the percentage of individuals involved in felony probations, misdemeanor probations, mandatory supervisions, and post-release community supervisions (PRCS) within the 11- county NoRTEC region.²

The largest share of activity stems from Shasta County (34.2%) followed by Butte County (29.5%) and Siskiyou County (7.8%). Data was unavailable from the source for Tehama County. In the NoRTEC region in 2017, there were a total of 7,372 individuals involved in felony probations, misdemeanor probations, or mandatory supervision.



² Data for this section of the report are derived from the Chief Probation Officers of California, <https://www.cpoc.org/data>.

| | Felony Probation | Misdemeanor Probation | Mandatory Supervision | PRCS | Total |
|---------------|------------------|-----------------------|-----------------------|------------|------------|
| Shasta | 1,976 | 0 | 156 | 389 | 2,521 |
| Butte | 1,339 | 272 | 165 | 401 | 2,177 |
| Siskiyou | 507 | 7 | 12 | 47 | 573 |
| Tehama | N/A | N/A | N/A | N/A | N/A |
| Nevada | 566 | 127 | 30 | 47 | 770 |
| Lassen | 126 | 75 | 8 | 17 | 226 |
| Plumas | 148 | 86 | 1 | 15 | 250 |
| Trinity | 111 | 17 | 4 | 13 | 145 |
| Modoc | 79 | 19 | N/A | N/A | 98 |
| Del Norte | N/A | N/A | N/A | N/A | N/A |
| Sierra | 28 | 15 | 1 | 1 | 45 |

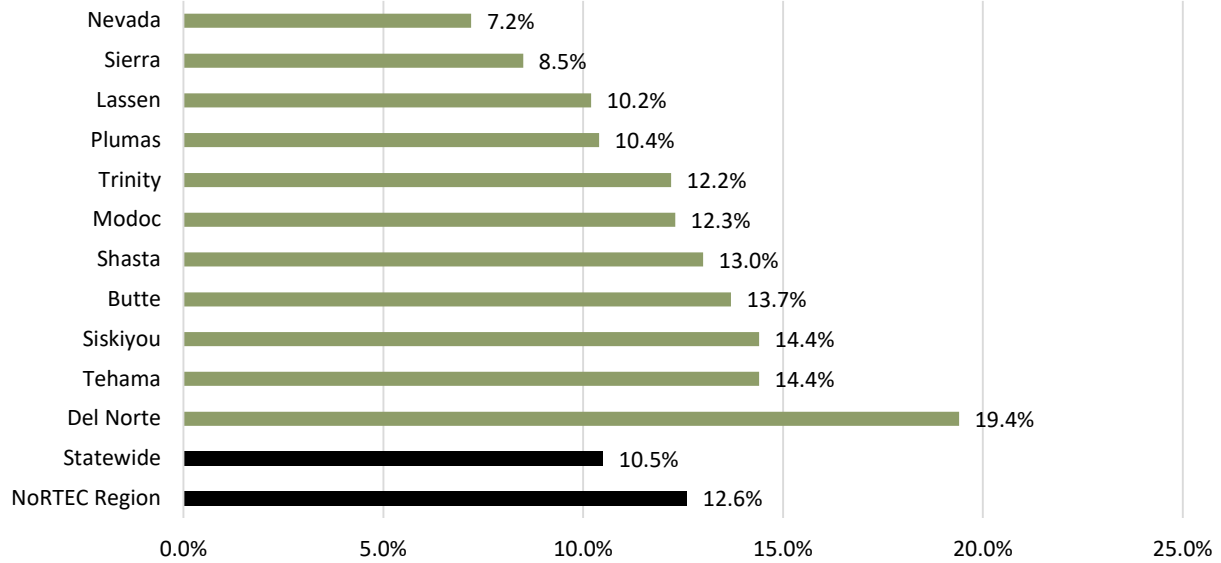
CalFresh Recipients

CalFresh, the California implementation of Supplemental Nutrition Assistance Program (SNAP), is received by larger percentage of NoRTEC area residents than statewide residents.³ In Tehama County, 14.4% of individuals receive CalFresh, the second largest of any county in the NoRTEC region following Del Norte County (and tied with Siskiyou County). For comparison, the NoRTEC region is 1.8% less and the state is 3.9% less.

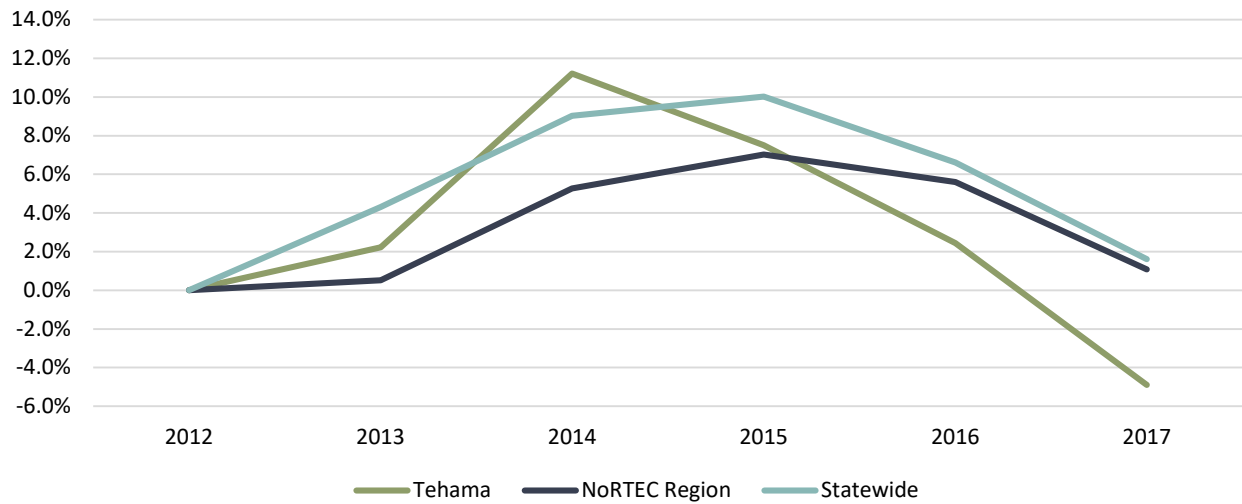
Between 2012 and 2015, the NoRTEC region experienced a rise in the number of individuals enrolled in CalFresh and then a considerable decrease between 2015 and 2017. Within Tehama County, the number of enrolled individuals increased between 2012 and 2014. Since 2014, the number of enrolled individuals has decreased to its lowest figure in that timeframe to 9,219.

³ Data for this section are derived from the California Department of Social Services, CalFresh Data Dashboard, <https://www.cdss.ca.gov/inforesources/Data-Portal/Research-and-Data/CalFresh-Data-Dashboard>.

Percent of Population Receiving CalFresh Benefits



Cumulative Growth Rate in CalFresh Enrollment 2012-2017



HUMAN CAPITAL

Labor Force

Labor Force Participation Rate
 The labor force participation rate represents the proportion of the population that is working or pursuing work, as opposed to those voluntarily not working or not pursuing work. The labor force participation rate is affected by various factors, including availability of jobs, socioeconomic composition of the population, demographics, as well as structural changes in the economy.

| EMPLOYMENT IN TEHAMA COUNTY 1998-2018 ⁴ | | |
|--|--|--|
| Peak | October 2002 (25,268) | December 2018 (23,983 – 5% lower) |
| Trough | March 1998 (20,926) | December 2018 (23,983 – 15% higher) |
| December 2018 | Employment: 23,983 Labor Force: 25,414 Unemployment rate: 5.6% | |

Labor force statistics include both the employed and the unemployed, excluding only those who have stopped looking for work (discouraged workers) and those who are voluntarily

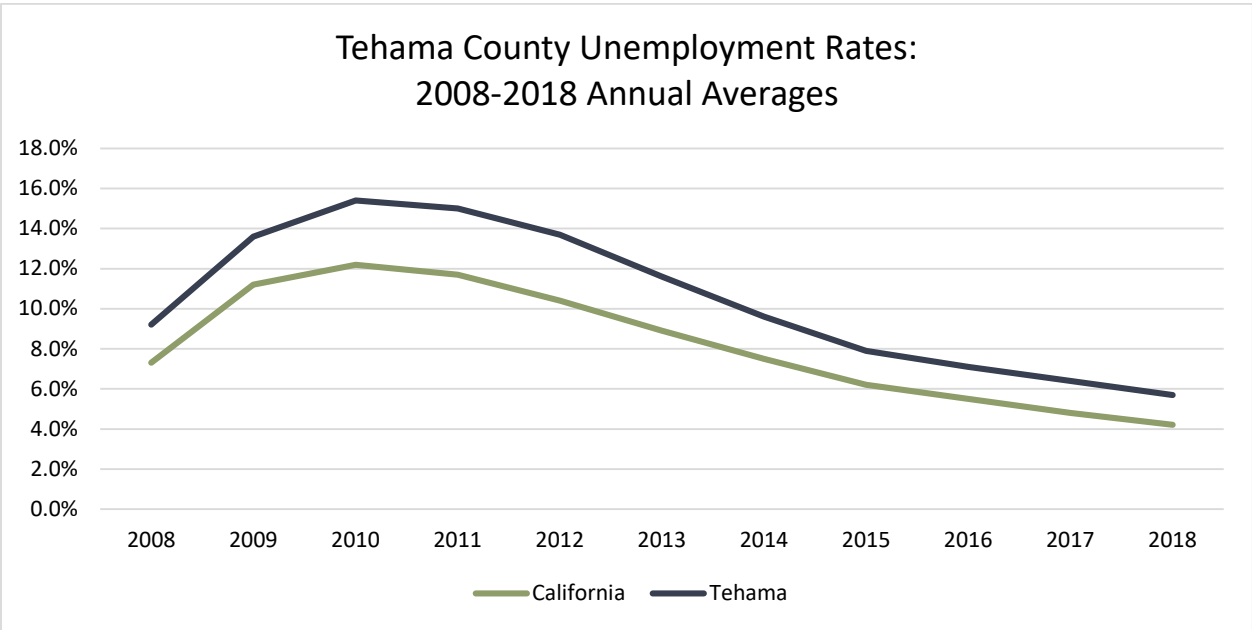
not in the labor force. In December 2018, 25,414 individuals participated in the Tehama County labor force, of these, 23,983 were employed and 1,431 were unemployed⁵. Over the last 20 years, employment in the county was at its highest in October 2002 and lowest in March 1998. As of December 2018, the unemployment rate was 5.6%, higher than the unemployment rate of California (4.1%) and the United States (3.9%).

Labor Force Participation Rate

The labor force participation rate is sensitive to demographic changes because participation rates vary across age, gender, income and race/ethnicity.⁶ The national labor force participation rate has decreased since 2000, a trend that is expected to continue in the next decade in part due to the aging of the baby-boomer generation. In 2000, baby boomers were the heart of the workforce. However, as this large group of individuals moves closer to retirement, the overall workforce participation rate decreases. It is worth mentioning that the participation rate of older workers has been increasing in the past ten years, but it is still significantly lower than those of the young adult and middle-aged groups.

Workers in older age brackets and those who are retirement age, compose a considerable proportion of Tehama County’s population. The older worker population (55 to 64 years of age) was estimated to be 9,079 in 2018, which is equivalent to 14% of the county’s population.⁷ A large number of these older workers are expected to retire in the next ten years. Even more notably, those who are 65 years and older were estimated to total 12,400, equivalent to 19% of the county’s population.

⁴ U.S. Bureau of Labor Statistics, 1998.4-2018.4. <http://www.bls.gov/data/>
⁵ December of 2018 was used as comparison throughout the 1998-2008 timeframe.
⁶ For example, in 2015 the national labor force participation rate for individuals older than age 54 (40.0%) was significantly lower than for those between the ages of 25 and 54 (81.3%).



Generally, unemployment tends to spike during recessions and following major layoffs, eventually settling to a more normal and stable rate as individuals adjust to the new availability of employment opportunities. Prolonged periods of unusually high unemployment are typically a signal that the supply of workers is not in balance with demand for workers.

Since 2010, the unemployment rate for Tehama County has been in a gradual decline to its lowest figure over the last ten years in 2018 at 5.7%. The unemployment rate peaked in 2010 to 15.4%, which was 3.2 points higher than the unemployment rate for California.

INDUSTRY SECTOR ANALYSIS

To this point, the analysis of Tehama County has focused on the socioeconomic characteristics of the region's population. Socioeconomic data are useful in understanding the economy, but to truly comprehend economic dynamics we must also analyze industry data. Industry data are classified according to the types of goods and services that are rendered by businesses. These data indicate past and projected growth trends by sector and reveal sectors in which Tehama County is well suited to be competitive.

A chart and several tables are displayed related to industry data. Each of the figures provide data that descend in order according to 2018 employment. Other data displayed include: employment growth over the past five years, forecasted growth over the next five years, growth due to competitive effect (CE), and location quotient (LQ).

The *competitive effect* helps to determine the amount of job growth that occurred due to the county's competitive advantages as compared to the national growth in general and the national growth rate for each sector. In other words, a positive number indicates that the county experienced more growth than was expected.

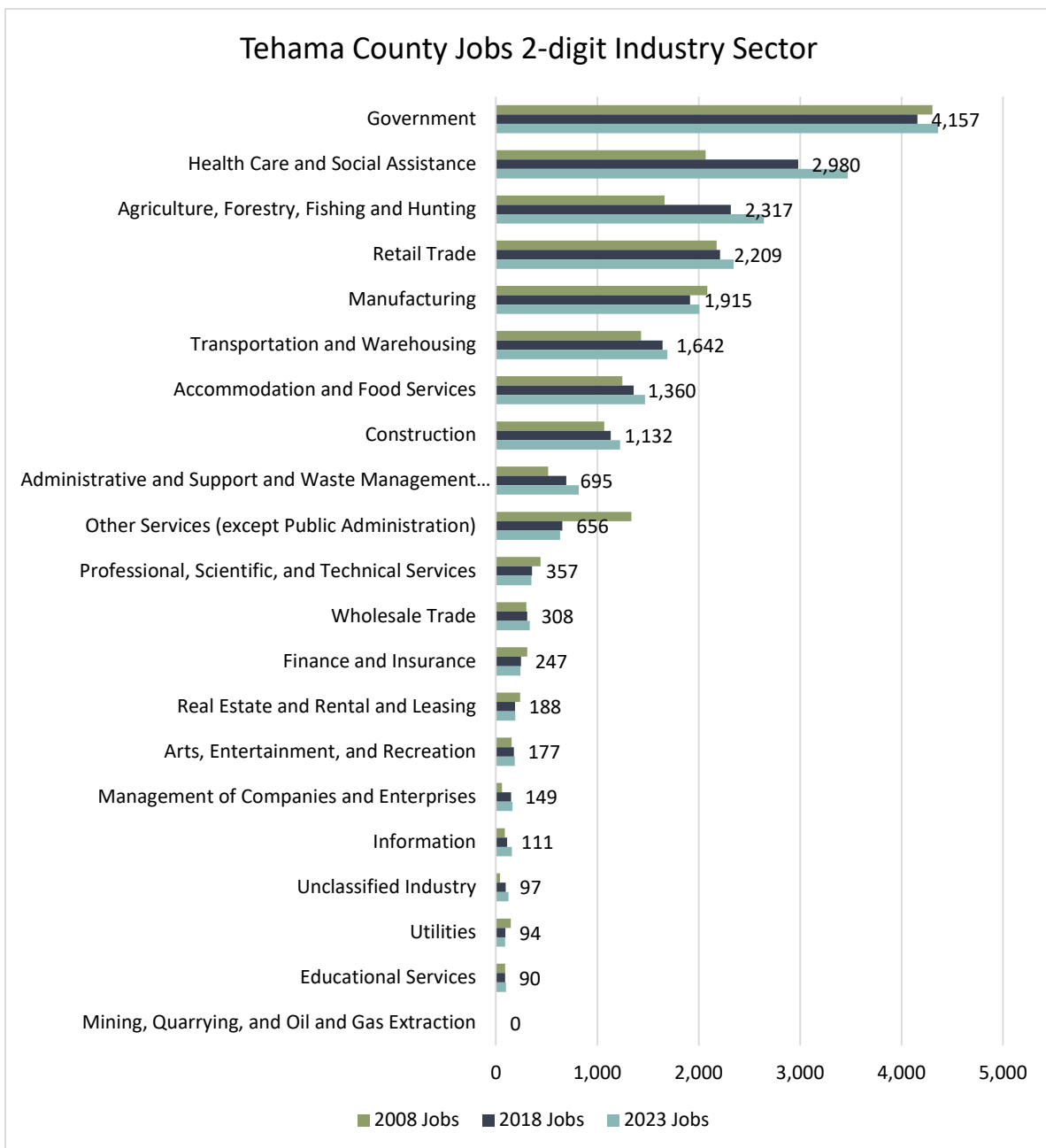
Location Quotient (LQ) measures how concentrated or specialized an industry is in a particular county and helps to demonstrate what makes a particular county's economy unique. A number greater than 1.25 indicates that the particular sector is considerably more concentrated than the national average. It also typically indicates that local demand for the products and/or services produced by that industry have been met and the industry is likely exporting products and/or services outside of the county. In other words, these may be industries that are bringing money into the county, rather than circulating money already present within the county.⁸

⁸ Data from this section are from Economic Modeling Specialists International (EMSI), 2019.2 Class of Worker.

Industry Mix

The broad industry sectors in Tehama County employing the most workers are Government (4,157; 20%); Health Care and Social Assistance (2,980; 14%); Agriculture, Forestry, Fishing and Hunting (2,317; 11%); and Retail Trade (2,209; 11%).

Each of the top nine industries in Tehama County have experienced job growth over the last five years and are all projected to experience growth into 2023. The industry with the largest growth is projected to be Health Care and Social Assistance (488 jobs), followed by Agriculture, Forestry, Fishing and Hunting (327 jobs); Government (203 jobs); and Retail Trade (135 jobs).



In terms of past growth, Agriculture, Forestry, Fishing and Hunting added the most jobs (577 jobs); followed by Government (487 jobs); Health Care and Social Assistance (419 jobs); and Transportation and Warehousing (307 jobs).

Looking deeper into job change in the county, competitive effect reveals how many jobs were created or retained due uniquely to characteristics of Tehama County. According to these data, Agriculture, Forestry, Fishing and Hunting is the strongest (adding 561 jobs due to competitive effect). Others that performed better in Tehama County than other regions in the United States include Government (415 jobs); Retail Trade (193 jobs); Health Care and Social Assistance (144 jobs); and Administrative and Support and Waste Management and Remediation Services (135 jobs).

Industries with the strongest location quotient score in Tehama County include Agriculture, Forestry, Fishing and Hunting (9.44); Transportation and Warehousing (2.18); and Government (1.32).

| Industry | 2013 Jobs | 2018 Jobs | Change 2013 – 2018 | % Change 2013-2018 | Change 2018-2023 | % Change 2018-2023 | 2018 LQ | Comp. Effect |
|--|-----------|-----------|--------------------|--------------------|------------------|--------------------|---------|--------------|
| Government | 3,670 | 4,157 | 487 | 13% | 203 | 5% | 1.32 | 415 |
| Health Care and Social Assistance | 2,561 | 2,980 | 419 | 16% | 488 | 16% | 1.13 | 144 |
| Agriculture, Forestry, Fishing and Hunting | 1,740 | 2,317 | 577 | 33% | 327 | 14% | 9.44 | 561 |
| Retail Trade | 1,925 | 2,209 | 284 | 15% | 135 | 6% | 1.05 | 193 |
| Manufacturing | 1,709 | 1,915 | 206 | 12% | 91 | 5% | 1.16 | 121 |
| Transportation and Warehousing | 1,335 | 1,642 | 307 | 23% | 48 | 3% | 2.18 | 31 |
| Accommodation and Food Services | 1,232 | 1,360 | 128 | 10% | 111 | 8% | 0.76 | (33) |
| Construction | 996 | 1,132 | 136 | 14% | 93 | 8% | 0.97 | (44) |
| Administrative and Support and Waste Management and Remediation Services | 506 | 695 | 189 | 37% | 123 | 18% | 0.53 | 135 |
| Other Services (except Public Administration) | 668 | 656 | (12) | (2%) | (24) | (4%) | 0.66 | (55) |
| Professional, Scientific, and Technical Services | 406 | 357 | (49) | (12%) | (7) | (2%) | 0.26 | (100) |
| Wholesale Trade | 341 | 308 | (33) | (10%) | 26 | 8% | 0.40 | (39) |
| Finance and Insurance | 275 | 247 | (28) | (10%) | (6) | (2%) | 0.29 | (47) |
| Real Estate and Rental and Leasing | 160 | 188 | 28 | 18% | 3 | 2% | 0.53 | 10 |
| Arts, Entertainment, and Recreation | 148 | 177 | 29 | 20% | 9 | 5% | 0.49 | 7 |
| Management of Companies and Enterprises | 61 | 149 | 88 | 144% | 13 | 9% | 0.50 | 81 |
| Information | 86 | 111 | 25 | 29% | 46 | 41% | 0.29 | 21 |
| Unclassified Industry | 44 | 97 | 53 | 120% | 28 | 29% | 3.44 | 38 |
| Utilities | 112 | 94 | (18) | (16%) | (3) | (3%) | 1.31 | (20) |
| Educational Services | 96 | 90 | (6) | (6%) | 8 | 9% | 0.17 | (14) |
| Mining, Quarrying, and Oil and Gas Extraction | <10 | <10 | Insf. Data | Insf. Data | Insf. Data | Insf. Data | 0.05 | 3 |

Key Industries

The following table shows the 20 largest 4-digit NAICS industries in terms of employment in Tehama County in 2018. Of the top ten key industries, all but one, Crop Production, has experienced job growth over the last five years. The industry with the greatest job growth was Support Activities for Crop Production, which experienced a 176% increase between 2013-2018 (631 jobs). Additionally, this industry is also projected to experience the greatest increase over the next five years, adding 374 jobs, over 50 more than Individual and Family Services, which is projected to add the second highest number of jobs.

| Industry | 2018 Jobs | Change 2013-2018 | % Change 2013-2018 | Projected Change 2018-2023 | Projected % Change 2018-2023 |
|---|-----------|------------------|--------------------|----------------------------|------------------------------|
| Local Government, Excluding Education and Hospitals | 1,835 | 78 | 4% | 224 | 12% |
| Education and Hospitals (Local Government) | 1,680 | 155 | 10% | (92) | (5%) |
| Warehousing and Storage | 1,209 | 202 | 20% | 50 | 4% |
| Other Wood Product Manufacturing | 1,125 | 218 | 24% | 108 | 10% |
| Restaurants and Other Eating Places | 1,095 | 128 | 13% | 85 | 8% |
| Individual and Family Services | 1,058 | 196 | 23% | 321 | 30% |
| Support Activities for Crop Production | 990 | 631 | 176% | 374 | 38% |
| Crop Production | 922 | (86) | (9%) | (46) | (5%) |
| General Medical and Surgical Hospitals | 428 | 24 | 6% | 18 | 4% |
| State Government, Excluding Education and Hospitals | 344 | 298 | 648% | 107 | 31% |
| Gasoline Stations | 339 | 33 | 11% | 30 | 9% |
| Grocery Stores | 335 | (9) | (3%) | (26) | (8%) |
| Services to Buildings and Dwellings | 321 | 105 | 49% | 51 | 16% |
| Other Specialty Trade Contractors | 318 | 122 | 62% | 68 | 21% |
| Offices of Physicians | 314 | 98 | 45% | 57 | 18% |
| Department Stores | 296 | 85 | 40% | 31 | 10% |
| Fruit and Vegetable Preserving and Specialty Food Manufacturing | 278 | (62) | (18%) | (50) | (18%) |
| Building Material and Supplies Dealers | 265 | 109 | 70% | 35 | 13% |
| Federal Government, Civilian | 205 | (38) | (16%) | (32) | (16%) |
| Automotive Repair and Maintenance | 192 | (12) | (6%) | (8) | (4%) |

OCCUPATION ANALYSIS

An examination of occupational demand is separate and distinct from industry analysis because industries require a mix of occupations to function. For example, the Manufacturing sector employs occupations that might be traditionally defined as “manufacturing occupations” – called Production occupations at the broadest level of occupation classification. The Manufacturing sector, however, also employs managers, accountants, maintenance and repair personnel, and many other occupational categories necessary for the industry’s operation. As a workforce development board, NoRTEC’s mission is to serve individual job seekers and businesses more than driving forward industry-specific economic development. As such, it’s important to understand the specific occupational roles that are required to keep local businesses functioning.

The occupational analysis that follows provides a view of the most critical occupations within the region from an overarching economic perspective and specifically related to some of the key industries that were highlighted previously.

Occupational Groups

Tehama County’s top 2-digit Standard Occupational Classification (SOC) System categories include:

- Office and Administrative Support Occupations (2,306 jobs)
- Transportation and Material Moving Occupations (2,225 jobs)
- Sales and Related Occupations (1,818 jobs)
- Education, Training, and Library Occupations (1,644 jobs)

The median hourly earnings for all occupations range from \$11.55/hr. for Personal Care and Service Occupations to \$40.44/hr. for Healthcare Practitioners and Technical Occupations.

As noted in the industry analysis section, location quotient scores can indicate fields where the county has a strong competitive advantage over other regions in United States. Occupational categories where Tehama County has a strong concentration of workers (above an LQ of 1.25) include

- Farming, Fishing, and Forestry Occupations (9.22)
- Transportation and Material Moving Occupations (1.56)
- Personal Care and Service Occupations (1.54)
- Education, Training, and Library Occupations (1.39)
- Community and Social Service Occupations (1.26)

These are the occupation groups for which the region is highly specialized.

Broad Occupation Mix

| Occupation | 2018 Employment | % of Total Employment | Median Hourly Earning | 2018 Location Quotient |
|--|-----------------|-----------------------|-----------------------|------------------------|
| Office and Administrative Support Occupations | 2,306 | 11.0% | \$16.70 | 0.76 |
| Transportation and Material Moving Occupations | 2,225 | 10.7% | \$17.57 | 1.56 |
| Sales and Related Occupations | 1,818 | 8.7% | \$12.55 | 0.88 |
| Education, Training, and Library Occupations | 1,644 | 7.9% | \$18.91 | 1.39 |
| Food Preparation and Serving Related Occupations | 1,495 | 7.2% | \$11.61 | 0.86 |
| Farming, Fishing, and Forestry Occupations | 1,435 | 6.9% | \$12.51 | 9.22 |
| Production Occupations | 1,435 | 6.9% | \$15.68 | 1.17 |
| Personal Care and Service Occupations | 1,386 | 6.6% | \$11.55 | 1.54 |
| Management Occupations | 1,191 | 5.7% | \$30.89 | 1.01 |
| Installation, Maintenance, and Repair Occupations | 947 | 4.5% | \$20.87 | 1.16 |
| Construction and Extraction Occupations | 901 | 4.3% | \$16.74 | 0.94 |
| Building and Grounds Cleaning and Maintenance Occupations | 760 | 3.6% | \$13.21 | 0.99 |
| Healthcare Practitioners and Technical Occupations | 719 | 3.4% | \$40.44 | 0.62 |
| Healthcare Support Occupations | 596 | 2.9% | \$16.71 | 1.05 |
| Business and Financial Operations Occupations | 507 | 2.4% | \$29.84 | 0.47 |
| Community and Social Service Occupations | 436 | 2.1% | \$20.89 | 1.26 |
| Protective Service Occupations | 314 | 1.5% | \$27.98 | 0.67 |
| Life, Physical, and Social Science Occupations | 192 | 0.9% | \$24.35 | 1.12 |
| Computer and Mathematical Occupations | 175 | 0.8% | \$32.73 | 0.29 |
| Arts, Design, Entertainment, Sports, and Media Occupations | 166 | 0.8% | \$19.98 | 0.43 |
| Architecture and Engineering Occupations | 117 | 0.6% | \$33.79 | 0.33 |
| Legal Occupations | 74 | 0.4% | \$36.00 | 0.43 |
| Military-only occupations | 48 | 0.2% | \$19.10 | 0.38 |

Top Occupations by Employment

The following table displays the top occupational by total employment for the slightly more specific group of 4-digit Standard Occupational Classification (SOC) Codes. The top occupations in Tehama County include Miscellaneous Agricultural Workers (1,281 jobs); Personal Care Aides (743 jobs); Laborers and Material Movers, Hand (682 jobs); and Miscellaneous Teachers and Instructors (674 jobs). Miscellaneous Agricultural Workers experienced the greatest increase in jobs over the last five years (364 jobs) and is projected to add the most over the next five years (217 jobs). In addition, this occupation is projected to have the highest number of annual openings (247). Farmers, Ranchers, and Other Agricultural Managers was the only top occupation that experienced a decrease in jobs over the last five years, but projections into the next five years reveal that three other occupations are projected to experience a decline in jobs in addition to Farmers, Ranchers, and Other Agricultural Managers: Miscellaneous Teachers and Instructors (34 jobs); Elementary and Middle School Teachers (17 jobs); and Teacher Assistants (10 jobs).

Median hourly earnings of all top occupations in Tehama County range from \$11.34/hr. for Personal Care Aides to \$33.43/hr. for Elementary and Middle School Teachers. As Personal Care Aides are projected to continue adding jobs, the county should be aware of the economic impact this low-paying occupation has on the local economy.

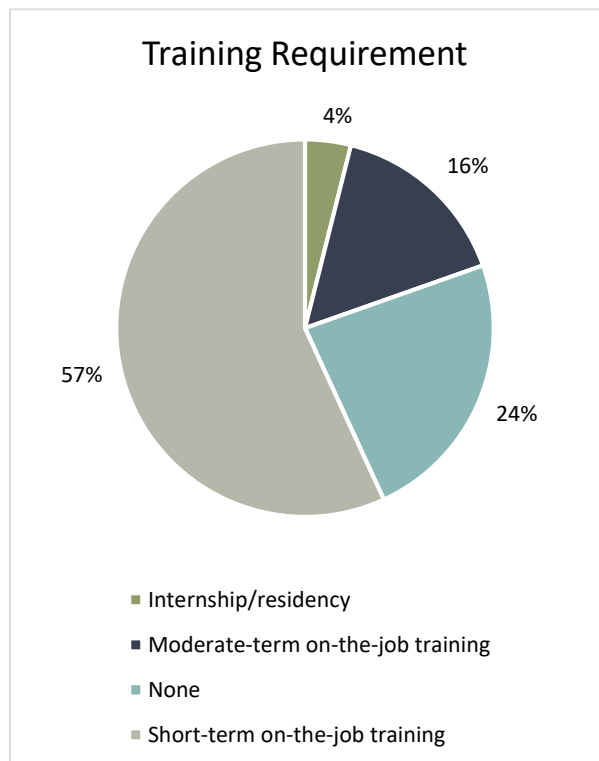
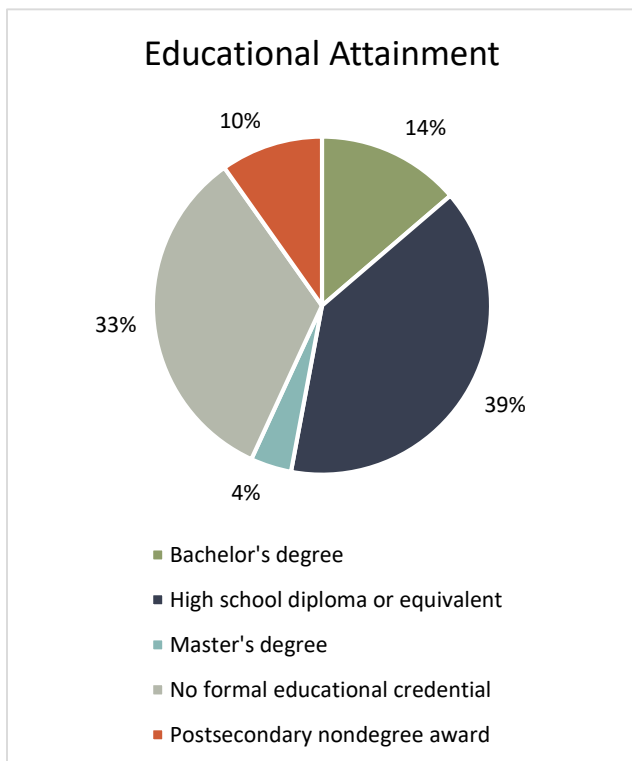
| Occupation | 2018 Employment | Change 2013-2018 | | Projected Change 2018-2023 | | Projected Annual Openings | Median Hourly Earnings |
|--|-----------------|------------------|-----|----------------------------|------|---------------------------|------------------------|
| Miscellaneous Agricultural Workers | 1,281 | 364 | 40% | 217 | 17% | 247 | \$12.38 |
| Personal Care Aides | 743 | 262 | 54% | 203 | 27% | 133 | \$11.34 |
| Laborers and Material Movers, Hand | 682 | 78 | 13% | 63 | 9% | 113 | \$13.30 |
| Miscellaneous Teachers and Instructors | 674 | 60 | 10% | (34) | (5%) | 98 | \$18.28 |
| Driver/Sales Workers and Truck Drivers | 624 | 91 | 17% | 18 | 3% | 82 | \$18.05 |
| Fast Food and Counter Workers | 622 | 120 | 24% | 86 | 14% | 122 | \$11.45 |
| Industrial Truck and Tractor Operators | 613 | 160 | 35% | 24 | 4% | 92 | \$20.24 |
| Cashiers | 567 | 71 | 14% | 39 | 7% | 114 | \$11.57 |
| Elementary and Middle School Teachers | 450 | 71 | 19% | (17) | (4%) | 53 | \$33.43 |
| Retail Salespersons | 437 | 72 | 20% | 41 | 9% | 76 | \$11.74 |
| Miscellaneous Assemblers and Fabricators | 429 | 71 | 20% | 1 | 0% | 63 | \$13.12 |
| Building Cleaning Workers | 423 | 39 | 10% | 16 | 4% | 68 | \$12.64 |
| Secretaries and Administrative Assistants | 368 | 38 | 12% | 15 | 4% | 47 | \$18.16 |
| Miscellaneous Healthcare Support Occupations | 353 | 50 | 17% | 31 | 9% | 52 | \$17.77 |
| Teacher Assistants | 338 | 57 | 20% | (10) | (3%) | 47 | \$13.70 |

| Occupation | 2018 Employment | Change 2013-2018 | | Projected Change 2018-2023 | | Projected Annual Openings | Median Hourly Earnings |
|--|-----------------|------------------|------|----------------------------|------|---------------------------|------------------------|
| First-Line Supervisors of Sales Workers | 307 | 26 | 9% | 17 | 6% | 37 | \$13.62 |
| Cooks | 306 | 19 | 7% | 13 | 4% | 49 | \$11.72 |
| Office Clerks, General | 295 | 26 | 10% | 20 | 7% | 38 | \$14.24 |
| Farmers, Ranchers, and Other Agricultural Managers | 281 | (12) | (4%) | (8) | (3%) | 25 | \$23.26 |
| Grounds Maintenance Workers | 269 | 42 | 19% | 38 | 14% | 39 | \$13.12 |

Education & Training Requirements for High Demand Jobs

The top high demand jobs in Tehama County include Farmworkers and Laborers, Crop, Nursery, and Greenhouse; Personal Care Aides; Combined Food Preparation and Serving Workers, Including Fast Food; and Laborers and Freight, Stock, and Material Movers, Hand. Of the top high demand jobs, less than a quarter do not require any type of training requirement compared to 57% that require short-term on-the-job training. Over 70% of the top high demand jobs in the county require a high school diploma or equivalent or less.

Average hourly earnings for high demand jobs range from \$11.98/hr. for Combined Food Preparation and Serving Workers, Including Fast Food to \$47.21/hr. for General and Operations Managers. Of the top 20 high demand jobs in Tehama County, eleven pay an average hourly earning above \$15.00/hr. and within the top five occupations, only one pays above that threshold: Laborers and Freight, Stock, and Material Movers, Hand (\$15.12/hr.).



| Description | 2023 Jobs | Change 2018 - 2023 | Annual Openings | Avg. Hourly Earnings | Typical Entry Level Education | Typical On-The-Job Training |
|--|-----------|--------------------|-----------------|----------------------|-----------------------------------|--------------------------------|
| Farmworkers and Laborers, Crop, Nursery, and Greenhouse | 1,171 | 208 | 203 | \$12.52 | No formal educational credential | Short-term on-the-job training |
| Personal Care Aides | 946 | 203 | 159 | \$12.25 | High school diploma or equivalent | Short-term on-the-job training |
| Combined Food Preparation and Serving Workers, Including Fast Food | 674 | 81 | 131 | \$11.98 | No formal educational credential | Short-term on-the-job training |
| Laborers and Freight, Stock, and Material Movers, Hand | 504 | 42 | 74 | \$15.12 | No formal educational credential | Short-term on-the-job training |
| Retail Salespersons | 478 | 41 | 74 | \$13.26 | No formal educational credential | Short-term on-the-job training |
| Cashiers | 600 | 39 | 116 | \$12.25 | No formal educational credential | Short-term on-the-job training |
| Home Health Aides | 171 | 35 | 24 | \$14.66 | High school diploma or equivalent | Short-term on-the-job training |
| Landscaping and Groundskeeping Workers | 283 | 34 | 38 | \$14.25 | No formal educational credential | Short-term on-the-job training |
| Construction Laborers | 242 | 30 | 29 | \$17.66 | No formal educational credential | Short-term on-the-job training |
| Industrial Truck and Tractor Operators | 637 | 24 | 74 | \$18.71 | No formal educational credential | Short-term on-the-job training |
| General and Operations Managers | 248 | 23 | 24 | \$47.21 | Bachelor's degree | None |
| Stock Clerks and Order Fillers | 217 | 22 | 30 | \$13.12 | High school diploma or equivalent | Short-term on-the-job training |
| Nursing Assistants | 91 | 20 | 13 | \$18.32 | Postsecondary nondegree award | None |
| Office Clerks, General | 315 | 20 | 40 | \$15.68 | High school diploma or equivalent | Short-term on-the-job training |
| Customer Service Representatives | 156 | 19 | 22 | \$20.27 | High school diploma or equivalent | Short-term on-the-job training |
| Packers and Packers, Hand | 144 | 18 | 24 | \$12.71 | No formal educational credential | Short-term on-the-job training |
| Registered Nurses | 104 | 18 | 8 | \$44.13 | Bachelor's degree | None |

| Description | 2023 Jobs | Change 2018 - 2023 | Annual Openings | Avg. Hourly Earnings | Typical Entry Level Education | Typical On-The-Job Training |
|--------------------------------------|-----------|--------------------|-----------------|----------------------|-----------------------------------|-----------------------------------|
| Police and Sheriff's Patrol Officers | 112 | 18 | 10 | \$40.70 | High school diploma or equivalent | Moderate-term on-the-job training |
| Agricultural Equipment Operators | 106 | 17 | 18 | \$15.20 | No formal educational credential | Moderate-term on-the-job training |
| Medical Assistants | 107 | 16 | 14 | \$17.69 | Postsecondary nondegree award | None |

Industry and Occupation Connections

Industries drive economic growth, but the fuel that enables those industries to function are its workforce. Considering the importance of talent to supporting key regional industries, it is worth exploring the connections between significant industries and the occupations that are most critical to those industries.

The following table identifies the top ten high demand occupations by 5-digit SOC codes and how they are connected to some of the county's key industries (2-digit NAICS). Note that four of the top ten occupations are tied to either Health Care and Social Assistance; Transportation and Warehousing; Manufacturing; or Retail Trade.

| Connection between Top Occupations and Key Industries | |
|--|--|
| Top Occupation | Key Industries |
| Farmworkers and Laborers, Crop, Nursery, and Greenhouse | <ul style="list-style-type: none"> Agriculture, Forestry, Fishing and Hunting |
| Personal Care Aides | <ul style="list-style-type: none"> Health Care and Social Assistance |
| Combined Food Preparation and Serving Workers, Including Fast Food | <ul style="list-style-type: none"> Accommodation and Food Services |
| Laborers and Freight, Stock, and Material Movers, Hand | <ul style="list-style-type: none"> Transportation and Warehousing Manufacturing |
| Retail Salespersons | <ul style="list-style-type: none"> Retail Trade |
| Cashiers | <ul style="list-style-type: none"> Retail Trade |
| Home Health Aides | <ul style="list-style-type: none"> Health Care and Social Assistance |
| Landscaping and Groundskeeping Workers | <ul style="list-style-type: none"> Administrative and Support and Waste Management and Remediation Services |
| Construction Laborers | <ul style="list-style-type: none"> Construction |
| Industrial Truck and Tractor Operators | <ul style="list-style-type: none"> Transportation and Warehousing Manufacturing |

DETAILED INDUSTRY ANALYSIS

The following section provides an in-depth look at 4-digit NAICS sectors that are important to the Tehama County economy. These industry sectors include: Agriculture; Health Care; Manufacturing; and Tourism. For each of these sectors the top employing sub-sectors are listed by 4-digit NAICS code, as well as the staffing patterns for each sector. Staffing patterns data show the top employing occupations at the 4-digit SOC level, along with past and projected growth, competitive effect, location quotient and average earnings.

Employment for Top Agriculture Industries

The top agriculture industries in Tehama County include Support Activities for Crop Production (990 jobs); Crop Production (922 jobs); Animal Production (154 jobs); and Logging (140 jobs). Support Activities for Crop Production added the bulk of the county’s agriculture jobs, experiencing an increase of 631 jobs over the last five years. Projections into the next five years indicate another 374 jobs added to the sector.

Average earnings for Tehama County Agriculture jobs range from \$25,776 for Support Activities for Animal Production to \$69,721 for Logging. Support Activities for Forestry has the county’s highest Agriculture LQ score of 25.85, indicating a high significance this sub-sector has to the county.

| Industry | 2018 Jobs | '13-'18 Change | CE '13-'18 | '18-'23 Change | CE '18-'23 | '18 LQ | Average Earnings |
|---|-----------|----------------|------------|----------------|------------|--------|------------------|
| Support Activities for Crop Production | 990 | 631 | 605 | 374 | 302 | 15.50 | \$46,216 |
| Crop Production | 922 | (86) | (62) | (46) | (47) | 8.86 | \$49,236 |
| Animal Production | 154 | (26) | (29) | (22) | (19) | 2.78 | \$35,132 |
| Logging | 140 | 2 | 10 | (9) | 4 | 15.50 | \$69,721 |
| Support Activities for Forestry | 71 | 54 | 51 | 28 | 18 | 25.85 | \$51,806 |
| Support Activities for Animal Production | 30 | 9 | 8 | 2 | 0 | 5.47 | \$25,776 |
| Timber Tract Operations | <10 | Insf. Data | (5) | Insf. Data | (0) | 1.38 | Insf. Data |
| Hunting and Trapping | <10 | Insf. Data | 4 | Insf. Data | 1 | 9.96 | Insf. Data |
| Fishing | <10 | Insf. Data | (3) | Insf. Data | (1) | 1.01 | Insf. Data |
| Forest Nurseries and Gathering of Forest Products | 0 | Insf. Data | (0) | 0 | 0 | 0.00 | \$0 |

Staffing Patterns for Agriculture

Diving deeper into the staffing patterns for the Agriculture industry, the top occupations include Miscellaneous Agricultural Workers; Farmers, Ranchers, and Other Agricultural Managers; Driver/Sales Workers and Truck Drivers; and Laborers and Material Movers, Hand. All of the occupations in this industry have experienced increases in jobs over the last five years and are projected to continue experiencing job increases over the next five years with the exception of Farmers, Ranchers, and Other Agricultural Managers. This occupation pays among the highest median hourly earnings of all Agriculture occupations in Tehama County. Median hourly earnings for all Agriculture occupations in the county range from \$10.65/hr. for Forest and Conservation Workers to \$40.71 for General and Operations Managers.

| Occupation | 2018 Employment | Change 2013-2018 | | Projected Change 2018-2023 | | Median Hourly Earnings |
|--|--------------------|---------------------|------|----------------------------------|------|------------------------------|
| Miscellaneous Agricultural Workers | 1,249 | 371 | 42% | 221 | 18% | \$12.38 |
| Farmers, Ranchers, and Other Agricultural Managers | 280 | (12) | (4%) | (8) | (3%) | \$23.26 |
| Driver/Sales Workers and Truck Drivers | 96 | 14 | 17% | 4 | 4% | \$18.05 |
| Laborers and Material Movers, Hand | 69 | 30 | 77% | 21 | 30% | \$13.30 |
| First-Line Supervisors of Farming, Fishing, and Forestry Workers | 63 | 11 | 21% | 8 | 13% | \$23.49 |
| Industrial Truck and Tractor Operators | 45 | 20 | 80% | 10 | 22% | \$20.24 |
| Graders and Sorters, Agricultural Products | 28 | 3 | 12% | 8 | 29% | \$12.19 |
| Secretaries and Administrative Assistants | 28 | 7 | 33% | 1 | 4% | \$18.16 |
| Packaging and Filling Machine Operators and Tenders | 27 | 20 | 286% | 7 | 26% | \$17.23 |
| Office Clerks, General | 22 | 6 | 38% | 3 | 14% | \$14.24 |
| Grounds Maintenance Workers | 22 | 3 | 16% | 3 | 14% | \$13.12 |
| Bookkeeping, Accounting, and Auditing Clerks | 21 | 3 | 17% | 2 | 10% | \$16.33 |
| Logging Workers | 20 | 1 | 5% | 0 | 0% | \$22.93 |
| Forest and Conservation Workers | 18 | 9 | 100% | 5 | 28% | \$10.65 |
| Heavy Vehicle and Mobile Equipment Service Technicians and Mechanics | 17 | 3 | 21% | 1 | 6% | \$22.59 |
| Miscellaneous Production Workers | 15 | 7 | 88% | 5 | 33% | \$16.56 |
| General and Operations Managers | 14 | 5 | 56% | 3 | 21% | \$40.71 |
| Building Cleaning Workers | 14 | 4 | 40% | 2 | 14% | \$12.64 |
| Maintenance and Repair Workers, General | 14 | 4 | 40% | 2 | 14% | \$18.51 |
| Nonfarm Animal Caretakers | 14 | 3 | 27% | 1 | 7% | \$11.22 |

Employment for Top Health Care Industries

The largest employing Health Care sectors in Tehama County include Individual and Family Services (1,058 jobs); General Medical and Surgical Hospitals (428 jobs); and Offices of Physicians (314 jobs). Nearly half of all Health Care industries in Tehama County experienced a negative competitive effect with the top sectors being Individual and Family Services (-33 jobs); Outpatient Care Centers (-28 jobs); and Home Health Care Services (-27 jobs). Projections over the next five years indicate that Individual and Family Services will experience the greatest increase in jobs (321) – more than all other subsectors combined.

Average earnings of Health Care industries in Tehama County range from \$17,525 for Individual and Family Services to \$105,997 for General Medical and Surgical Hospitals. These two sectors also have the most jobs in the Health Care industry in the county.

| Industry | 2018 Jobs | '13-'18 Change | CE '13-'18 | '18-'23 Change | CE '18-'23 | '18 LQ | Average Earnings |
|--|-----------|----------------|------------|----------------|------------|--------|------------------|
| Individual and Family Services | 1,058 | 196 | (33) | 321 | 83 | 3.16 | \$17,524 |
| General Medical and Surgical Hospitals | 428 | 24 | 0 | 18 | (2) | 0.71 | \$105,997 |
| Offices of Physicians | 314 | 98 | 84 | 57 | 22 | 0.92 | \$91,623 |
| Nursing Care Facilities (Skilled Nursing Facilities) | 170 | 28 | 32 | 33 | 32 | 0.82 | \$44,171 |
| Child Day Care Services | 157 | 0 | (6) | (11) | (14) | 0.98 | \$23,567 |
| Home Health Care Services | 148 | (2) | (27) | 17 | (21) | 0.76 | \$34,569 |
| Offices of Dentists | 147 | 3 | (9) | 18 | 3 | 1.16 | \$59,339 |
| Offices of Other Health Practitioners | 143 | 4 | (25) | 5 | (18) | 1.06 | \$44,160 |
| Vocational Rehabilitation Services | 140 | 53 | 53 | (21) | (18) | 3.18 | \$26,520 |
| Residential Intellectual and Developmental Disability, Mental Health, and Substance Abuse Facilities | 89 | 10 | 4 | 14 | 4 | 1.08 | \$27,029 |
| Continuing Care Retirement Communities and Assisted Living Facilities for the Elderly | 86 | 16 | 6 | 20 | 3 | 0.71 | \$34,262 |
| Community Food and Housing, and Emergency and Other Relief Services | 44 | Insf. Data | 42 | 20 | 15 | 1.92 | \$34,897 |
| Outpatient Care Centers | 36 | (11) | (28) | 10 | 2 | 0.29 | \$58,796 |
| Other Residential Care Facilities | 13 | (18) | (20) | Insf. Data | (9) | 0.60 | \$41,105 |
| Medical and Diagnostic Laboratories | <10 | Insf. Data | (16) | Insf. Data | (3) | 0.13 | Insf. Data |
| Other Ambulatory Health Care Services | <10 | Insf. Data | (9) | Insf. Data | (2) | 0.06 | Insf. Data |
| Psychiatric and Substance Abuse Hospitals | 0 | 0 | 0 | 0 | 0 | 0.00 | \$0 |
| Specialty (except Psychiatric and Substance Abuse) Hospitals | 0 | 0 | 0 | 0 | 0 | 0.00 | \$0 |

Staffing Patterns for Health Care

The top four highest employment 4-digit SOC categories for this industry sector include: Personal Care Aides (726 jobs); Miscellaneous Healthcare Support Occupations (272 jobs); Nursing, Psychiatric, and Home Health Aides (202 jobs); and Secretaries and Administrative Assistants (89 jobs). The latter experienced the greatest decline in jobs over the last five years (37) followed by Childcare Workers (20 jobs); Registered Nurses (17 jobs); and Therapists (6 jobs). Only Childcare Workers is projected to continue experiencing a decline in jobs between 2018-2023.

Median hourly earnings for occupations in the Health Care industry range from \$11.34/hr. for Personal Care Aides to \$130.58/hr. for Physicians and Surgeons. While Personal Care Aides has the highest number of jobs in 2018 and is projected to add the most over the next five years, the low median hourly earnings for this occupation are concerning for workers in the local healthcare economy.

| Occupation | 2018 Employment | Change 2013-2018 | | Projected Change 2018-2023 | | Median Hourly Earnings |
|---|--------------------|---------------------|-------|----------------------------------|-------|------------------------------|
| Personal Care Aides | 726 | 259 | 55% | 205 | 28% | \$11.34 |
| Miscellaneous Healthcare Support Occupations | 272 | 39 | 17% | 28 | 10% | \$17.77 |
| Nursing, Psychiatric, and Home Health Aides | 202 | (37) | (15%) | 54 | 27% | \$13.88 |
| Secretaries and Administrative Assistants | 89 | 10 | 13% | 10 | 11% | \$18.16 |
| Childcare Workers | 88 | (20) | (19%) | (13) | (15%) | \$11.31 |
| Building Cleaning Workers | 69 | 5 | 8% | 4 | 6% | \$12.64 |
| Counselors | 68 | 12 | 21% | 7 | 10% | \$25.85 |
| Social Workers | 64 | 0 | 0% | 14 | 22% | \$19.26 |
| Registered Nurses | 63 | (17) | (21%) | 15 | 24% | \$43.16 |
| Physicians and Surgeons | 61 | 16 | 36% | 7 | 11% | \$130.58 |
| Therapists | 61 | (6) | (9%) | 2 | 3% | \$39.60 |
| Preschool and Kindergarten Teachers | 54 | 7 | 15% | 3 | 6% | \$14.02 |
| Receptionists and Information Clerks | 54 | 7 | 15% | 7 | 13% | \$15.11 |
| Physician Assistants | 53 | 20 | 61% | 12 | 23% | \$66.89 |
| First-Line Supervisors of Personal Service Workers | 49 | 19 | 63% | 7 | 14% | \$14.24 |
| Health Practitioner Support Technologists and Technicians | 47 | 19 | 68% | 5 | 11% | \$25.76 |
| Miscellaneous Community and Social Service Specialists | 44 | 0 | 0% | 15 | 34% | \$19.59 |
| Miscellaneous Personal Care and Service Workers | 44 | 8 | 22% | 3 | 7% | \$12.58 |
| Office Clerks, General | 40 | 2 | 5% | 5 | 13% | \$14.24 |
| Medical and Health Services Managers | 40 | 4 | 11% | 4 | 10% | \$51.67 |

Employment for Top Manufacturing Industries

The top Manufacturing industries in Tehama County include Other Wood Product Manufacturing (1,125 jobs); Fruit and Vegetable Preserving and Specialty Food Manufacturing (278 jobs); Veneer, Plywood, and Engineered Wood Product Manufacturing (128 jobs); and Converted Paper Product Manufacturing (69 jobs). Other Wood Product Manufacturing had the county's highest LQ score of 35.11 and added the most jobs due to competitive effect over the last five years. Converted Paper Product Manufacturing, which added 13 jobs over the last five years, is projected to experience a decrease of 34 jobs over the next five years. Average earnings for sectors in the Manufacturing industry in Tehama County range from \$26,772 for Other Transportation Equipment Manufacturing to \$72,312 for Printing and Related Support Activities. The top ten Manufacturing sectors have average earnings above \$40,000.

| Industry | 2018 Jobs | '13-'18 Change | CE '13-'18 | '18-'23 Change | CE '18-'23 | '18 LQ | Average Earnings |
|---|-----------|----------------|------------|----------------|------------|--------|------------------|
| Other Wood Product Manufacturing | 1,125 | 218 | 66 | 108 | 78 | 35.11 | \$61,955 |
| Fruit and Vegetable Preserving and Specialty Food Manufacturing | 278 | (62) | (61) | (50) | (51) | 12.60 | \$59,607 |
| Veneer, Plywood, and Engineered Wood Product Manufacturing | 128 | (9) | (36) | 26 | 21 | 12.37 | \$80,659 |
| Converted Paper Product Manufacturing | 69 | 13 | 13 | (34) | (33) | 1.99 | \$43,631 |
| Grain and Oilseed Milling | 46 | 19 | 19 | 9 | 8 | 5.96 | \$41,520 |
| Cement and Concrete Product Manufacturing | 29 | Insf. Data | 22 | (1) | (1) | 1.14 | \$58,272 |
| Other Food Manufacturing | 27 | Insf. Data | 26 | 14 | 12 | 0.94 | \$42,135 |
| Beverage Manufacturing | 24 | 5 | (3) | 2 | (1) | 0.70 | \$46,884 |
| Clay Product and Refractory Manufacturing | 22 | 11 | 11 | 5 | 5 | 4.16 | \$47,533 |
| Printing and Related Support Activities | 22 | 3 | 4 | 0 | 2 | 0.38 | \$72,312 |
| Other Transportation Equipment Manufacturing | 17 | (11) | (14) | 2 | 2 | 3.73 | \$26,772 |
| Other Miscellaneous Manufacturing | 16 | 1 | 1 | 1 | 1 | 0.38 | \$65,381 |
| Forging and Stamping | 12 | 12 | 12 | 7 | 6 | 0.95 | \$53,324 |
| Coating, Engraving, Heat Treating, and Allied Activities | 12 | Insf. Data | 5 | 0 | 1 | 0.65 | \$44,203 |
| Other Fabricated Metal Product Manufacturing | <10 | Insf. Data | (4) | Insf. Data | 1 | 0.11 | Insf. Data |
| Machine Shops; Turned Product; and Screw, Nut, and Bolt Manufacturing | <10 | Insf. Data | 3 | Insf. Data | 0 | 0.14 | Insf. Data |
| Agriculture, Construction, and Mining Machinery Manufacturing | <10 | Insf. Data | 10 | Insf. Data | (0) | 0.36 | Insf. Data |
| Other General Purpose Machinery Manufacturing | <10 | Insf. Data | (38) | Insf. Data | (4) | 0.18 | Insf. Data |
| Aerospace Product and Parts Manufacturing | <10 | Insf. Data | (11) | Insf. Data | (1) | 0.04 | Insf. Data |
| Household and Institutional Furniture and Kitchen Cabinet Manufacturing | <10 | Insf. Data | (27) | Insf. Data | (1) | 0.20 | Insf. Data |

Staffing Patterns for Manufacturing

The top Manufacturing occupations for Tehama County include Miscellaneous Assemblers and Fabricators (390 jobs); Industrial Truck and Tractor Operators (154 jobs); Laborers and Material Movers, Hand (124 jobs); and First-Line Supervisors of Production and Operating Workers (81 jobs). Only two Manufacturing occupations experienced a decline in jobs over the last five years, though each decreased by 1: Cabinetmakers and Bench Carpenters; and Carpenters. Over the next five years, Laborers and Material Movers, Hand are projected to add the most jobs (10). Median hourly earnings for Manufacturing jobs in Tehama County range from \$13.12/hr. for Miscellaneous Assemblers and Fabricators to \$40.71/hr. for General and Operations Managers. Neither occupation is projected to add more than 3 jobs by 2023.

| Occupation | 2018 Employment | Change 2013-2018 | | Projected Change 2018-2023 | | Median Hourly Earnings |
|--|--------------------|---------------------|------|----------------------------------|-------|------------------------------|
| Miscellaneous Assemblers and Fabricators | 390 | 76 | 24% | 2 | 1% | \$13.12 |
| Industrial Truck and Tractor Operators | 154 | 4 | 3% | 2 | 1% | \$20.24 |
| Laborers and Material Movers, Hand | 124 | 15 | 14% | 10 | 8% | \$13.30 |
| First-Line Supervisors of Production and Operating Workers | 81 | 13 | 19% | 5 | 6% | \$24.28 |
| Packaging and Filling Machine Operators and Tenders | 78 | 3 | 4% | (7) | (9%) | \$17.23 |
| Miscellaneous Production Workers | 77 | 5 | 7% | 7 | 9% | \$16.56 |
| Inspectors, Testers, Sorters, Samplers, and Weighers | 65 | 11 | 20% | (3) | (5%) | \$16.48 |
| Driver/Sales Workers and Truck Drivers | 64 | 20 | 45% | 7 | 11% | \$18.05 |
| Industrial Machinery Installation, Repair, and Maintenance Workers | 58 | 4 | 7% | 3 | 5% | \$27.14 |
| Maintenance and Repair Workers, General | 42 | 5 | 14% | 1 | 2% | \$18.51 |
| Crushing, Grinding, Polishing, Mixing, and Blending Workers | 40 | 12 | 43% | 0 | 0% | \$15.91 |
| Sales Representatives, Wholesale and Manufacturing | 39 | 7 | 22% | 4 | 10% | \$27.62 |
| General and Operations Managers | 37 | 4 | 12% | 3 | 8% | \$40.71 |
| Shipping, Receiving, and Traffic Clerks | 37 | 4 | 12% | (1) | (3%) | \$14.93 |
| Cabinetmakers and Bench Carpenters | 31 | (1) | (3%) | 4 | 13% | \$22.11 |
| Office Clerks, General | 29 | 6 | 26% | 2 | 7% | \$14.24 |
| Printing Workers | 23 | 6 | 35% | (4) | (17%) | \$17.06 |
| Carpenters | 22 | (1) | (4%) | 4 | 18% | \$14.47 |
| Secretaries and Administrative Assistants | 21 | 4 | 24% | 1 | 5% | \$18.16 |
| Bookkeeping, Accounting, and Auditing Clerks | 20 | 0 | 0% | 1 | 5% | \$16.33 |

Employment for Top Tourism Industries

The top Tourism industry in Tehama County is consumed by Restaurants and Other Eating Places which has over 650 more jobs than the other sectors combined. This sector has the second lowest average earnings at \$18,982, behind Drinking Places (Alcoholic Beverages) which has an average earning of \$13,918. Special Food Services is projected to add significant job growth over the next five years, adding 32 jobs. The only Tourism industry in Tehama County that has an LQ score above 1.25 is RV (Recreational Vehicle) Parks and Recreational Camps, which has an LQ score of 3.75.

| Industry | 2018 Jobs | '13-'18 Change | CE '13-18' | '18-'23 Change | CE '18-23 | '18 LQ | Average Earnings |
|---|-----------|----------------|------------|----------------|-----------|--------|------------------|
| Restaurants and Other Eating Places | 1,095 | 128 | (6) | 85 | 1 | 0.80 | \$18,982 |
| Other Amusement and Recreation Industries | 124 | 31 | 15 | 5 | (5) | 0.67 | \$20,455 |
| Traveler Accommodation | 107 | (14) | (24) | (16) | (20) | 0.43 | \$23,003 |
| Special Food Services | 95 | 47 | 39 | 32 | 23 | 0.89 | \$21,406 |
| RV (Recreational Vehicle) Parks and Recreational Camps | 33 | (39) | (51) | 4 | (1) | 3.75 | \$27,965 |
| Drinking Places (Alcoholic Beverages) | 29 | 17 | 16 | 7 | 7 | 0.56 | \$13,918 |
| Independent Artists, Writers, and Performers | 22 | (1) | (3) | (1) | (2) | 0.57 | \$20,913 |
| Other Support Services | 19 | Insf. Data | 16 | 6 | 6 | 0.44 | \$30,763 |
| Spectator Sports | 11 | (3) | (4) | Insf. Data | (1) | 0.42 | \$20,913 |
| Agents and Managers for Artists, Athletes, Entertainers, and Other Public Figures | <10 | Insf. Data | 1 | Insf. Data | (0) | 0.15 | Insf. Data |

Staffing Patterns for Tourism⁹

Within the Tourism industry in Tehama County, the top occupations include Fast Food and Counter Workers (485 jobs); Cooks (233 jobs); Waiters and Waitresses (128 jobs); and Supervisors of Food Preparation and Serving Workers (106 jobs). Though many of the Tourism occupations experienced job growth over the last five years, five did not. Building Cleaning Workers and Grounds Maintenance Workers experienced the greatest dip in jobs between 2013-2018, respectively, and Building Cleaning Workers are projected to experience the greatest decline in jobs over the next five years. Median hourly earnings for Tourism occupations in Tehama County range from \$10.64/hr. for Hosts and Hostesses, Restaurant, Lounge, and Coffee Shop to \$40.71 for General and Operations Managers. Neither occupation is projected to experience significant growth over the next five years (General and Operations Managers is projected to add only 2 jobs).

| Occupation | 2018 Employment | Change 2013-2018 | | Projected Change 2018-2023 | | Median Hourly Earnings |
|--|-----------------|------------------|-------|----------------------------|-------|------------------------|
| Fast Food and Counter Workers | 485 | 98 | 25% | 77 | 16% | \$11.45 |
| Cooks | 233 | 15 | 7% | 9 | 4% | \$11.72 |
| Waiters and Waitresses | 128 | 11 | 9% | 4 | 3% | \$12.65 |
| Supervisors of Food Preparation and Serving Workers | 106 | 16 | 18% | 10 | 9% | \$14.05 |
| Food Preparation Workers | 50 | 3 | 6% | 5 | 10% | \$11.46 |
| Dishwashers | 43 | 4 | 10% | 1 | 2% | \$11.24 |
| Building Cleaning Workers | 41 | (9) | (18%) | (3) | (7%) | \$12.64 |
| Bartenders | 41 | 11 | 37% | 4 | 10% | \$11.95 |
| Food Service Managers | 33 | (6) | (15%) | 0 | 0% | \$16.15 |
| Dining Room and Cafeteria Attendants and Bartender Helpers | 33 | 4 | 14% | 1 | 3% | \$11.22 |
| Cashiers | 31 | 4 | 15% | 4 | 13% | \$11.57 |
| Recreation and Fitness Workers | 29 | 14 | 93% | 2 | 7% | \$11.06 |
| Driver/Sales Workers and Truck Drivers | 27 | 7 | 35% | 2 | 7% | \$18.05 |
| Hotel, Motel, and Resort Desk Clerks | 20 | (5) | (20%) | (2) | (10%) | \$11.87 |
| Hosts and Hostesses, Restaurant, Lounge, and Coffee Shop | 18 | 3 | 20% | 0 | 0% | \$10.64 |
| Miscellaneous Entertainment Attendants and Related Workers | 18 | 3 | 20% | 1 | 6% | \$10.73 |
| Maintenance and Repair Workers, General | 14 | (5) | (26%) | 1 | 7% | \$18.51 |
| Grounds Maintenance Workers | 12 | (7) | (37%) | 1 | 8% | \$13.12 |
| General and Operations Managers | 10 | 1 | 11% | 2 | 20% | \$40.71 |
| Miscellaneous Personal Appearance Workers | <10 | 1 | 50% | (1) | (33%) | \$10.72 |

⁹ The Tourism industry crosses over several industries, including NAICS 48 (Transportation and Warehousing); 56 (Administrative and Support Services); 71 (Arts, Entertainment, and Recreation); and 72 (Accommodation and Food Services).

APPENDIX

Data Sources and Glossary of Key Terms

Data Sources

All data and analysis for this report are directly or indirectly derived from information provided by either the U.S. Bureau of the Census or U.S. Bureau of Labor Statistics:

- Economic Modeling Specialists International (EMSI), 2018.4 Class of Worker data (based on the U.S. Quarterly Census of Employment and Wages) and general demographic estimates
- U.S. Census American Community Survey 2012-2016 Estimates
- U.S. Census OnTheMap

Competitive Effect

Used in conjunction with "Shift-Share Analysis" techniques¹⁰, *The Competitive Effect* metric seeks to isolate the influence of local dynamics from the influence of non-local factors on industries' employment growth or decline. A positive number indicates that the study area experienced more growth within a particular industry than would have been expected from non-local trends; the magnitude of *The Competitive Effect* indicates the strength of the purely local influence on the industry's employment change.

Location Quotient

Location Quotient (LQ) measures the relative importance of an industry's employment to a particular region, and uses the straightforward formula:

$$LQ = [\% \text{ of total local employment} / \% \text{ of total national employment}]$$

Location Quotients are one of the most common and important indicators of local economic characteristics; LQ's greater than 1.25 are typically considered to be the threshold for identifying an industry as especially relatively strong.

NAICS Codes (The North American Industry Classification System)

NAICS is the standard used by Federal statistical agencies in classifying business establishments for the purpose of collecting, analyzing, and publishing statistical data related to the U.S. business economy. The numbering structure is hierarchical in nature, meaning that fewer digits are broader in their meaning, while longer (up to six) digits provide greater specificity.

¹⁰ Shift share is a standard regional analysis method that attempts to determine how much of regional job growth can be attributed to national trends and how much is due to unique regional factors. Shift share helps answer why employment is growing or declining in a regional industry, cluster, or occupation.

SOC Codes (Standard Occupational Classification)

The 2000 Standard Occupational Classification (SOC) System was developed in response to a growing need for a universal occupational classification system. Such a classification system allows government agencies and private industry to produce comparable data. Users of occupational data include government program managers, industrial and labor relations practitioners, students considering career training, job seekers, vocational training schools, and employers wishing to set salary scales or locate a new plant. It is used by federal agencies collecting occupational data, providing a standard means to compare such data across agencies. It is designed to cover all occupations in which work is performed for pay or profit, reflecting the current occupational structure in the United States.

As with NAICS, the SOC coding structure is hierarchical, with fewer digits provide broad data (occupational categories), while larger provide more specific data (specific professions).

Industry Sector Definitions

Agriculture

| NAICS | Description |
|-------|---|
| 1110 | Crop Production |
| 1151 | Support Activities for Crop Production |
| 1120 | Animal Production |
| 1152 | Support Activities for Animal Production |
| 1153 | Support Activities for Forestry |
| 1142 | Hunting and Trapping |
| 1133 | Logging |
| 1131 | Timber Tract Operations |
| 1132 | Forest Nurseries and Gathering of Forest Products |
| 1141 | Fishing |

Health Care

| NAICS | Description |
|-------|--|
| 6241 | Individual and Family Services |
| 6211 | Offices of Physicians |
| 6214 | Outpatient Care Centers |
| 6212 | Offices of Dentists |
| 6242 | Community Food and Housing, and Emergency and Other Relief Services |
| 6244 | Child Day Care Services |
| 6213 | Offices of Other Health Practitioners |
| 6219 | Other Ambulatory Health Care Services |
| 6233 | Continuing Care Retirement Communities and Assisted Living Facilities for the Elderly |
| 6215 | Medical and Diagnostic Laboratories |
| 6216 | Home Health Care Services |
| 6243 | Vocational Rehabilitation Services |
| 6239 | Other Residential Care Facilities |
| 6222 | Psychiatric and Substance Abuse Hospitals |
| 6221 | General Medical and Surgical Hospitals |
| 6223 | Specialty (except Psychiatric and Substance Abuse) Hospitals |
| 6231 | Nursing Care Facilities (Skilled Nursing Facilities) |
| 6232 | Residential Intellectual and Developmental Disability, Mental Health, and Substance Abuse Facilities |

Manufacturing

| NAICS | Description |
|-------|---|
| 3111 | Animal Food Manufacturing |
| 3112 | Grain and Oilseed Milling |
| 3113 | Sugar and Confectionery Product Manufacturing |
| 3114 | Fruit and Vegetable Preserving and Specialty Food Manufacturing |
| 3115 | Dairy Product Manufacturing |

| NAICS | Description |
|-------|--|
| 3116 | Animal Slaughtering and Processing |
| 3117 | Seafood Product Preparation and Packaging |
| 3118 | Bakeries and Tortilla Manufacturing |
| 3119 | Other Food Manufacturing |
| 3121 | Beverage Manufacturing |
| 3122 | Tobacco Manufacturing |
| 3131 | Fiber, Yarn, and Thread Mills |
| 3132 | Fabric Mills |
| 3133 | Textile and Fabric Finishing and Fabric Coating Mills |
| 3141 | Textile Furnishings Mills |
| 3149 | Other Textile Product Mills |
| 3151 | Apparel Knitting Mills |
| 3152 | Cut and Sew Apparel Manufacturing |
| 3159 | Apparel Accessories and Other Apparel Manufacturing |
| 3161 | Leather and Hide Tanning and Finishing |
| 3162 | Footwear Manufacturing |
| 3169 | Other Leather and Allied Product Manufacturing |
| 3211 | Sawmills and Wood Preservation |
| 3212 | Veneer, Plywood, and Engineered Wood Product Manufacturing |
| 3219 | Other Wood Product Manufacturing |
| 3221 | Pulp, Paper, and Paperboard Mills |
| 3222 | Converted Paper Product Manufacturing |
| 3231 | Printing and Related Support Activities |
| 3241 | Petroleum and Coal Products Manufacturing |
| 3251 | Basic Chemical Manufacturing |
| 3252 | Resin, Synthetic Rubber, and Artificial and Synthetic Fibers and Filaments Manufacturing |
| 3253 | Pesticide, Fertilizer, and Other Agricultural Chemical Manufacturing |
| 3254 | Pharmaceutical and Medicine Manufacturing |
| 3255 | Paint, Coating, and Adhesive Manufacturing |
| 3256 | Soap, Cleaning Compound, and Toilet Preparation Manufacturing |
| 3259 | Other Chemical Product and Preparation Manufacturing |
| 3261 | Plastics Product Manufacturing |
| 3262 | Rubber Product Manufacturing |
| 3271 | Clay Product and Refractory Manufacturing |
| 3272 | Glass and Glass Product Manufacturing |
| 3273 | Cement and Concrete Product Manufacturing |
| 3274 | Lime and Gypsum Product Manufacturing |
| 3279 | Other Nonmetallic Mineral Product Manufacturing |
| 3311 | Iron and Steel Mills and Ferroalloy Manufacturing |
| 3312 | Steel Product Manufacturing from Purchased Steel |
| 3313 | Alumina and Aluminum Production and Processing |
| 3314 | Nonferrous Metal (except Aluminum) Production and Processing |
| 3315 | Foundries |
| 3321 | Forging and Stamping |

| NAICS | Description |
|-------|---|
| 3322 | Cutlery and Handtool Manufacturing |
| 3323 | Architectural and Structural Metals Manufacturing |
| 3324 | Boiler, Tank, and Shipping Container Manufacturing |
| 3325 | Hardware Manufacturing |
| 3326 | Spring and Wire Product Manufacturing |
| 3327 | Machine Shops; Turned Product; and Screw, Nut, and Bolt Manufacturing |
| 3328 | Coating, Engraving, Heat Treating, and Allied Activities |
| 3329 | Other Fabricated Metal Product Manufacturing |

Tourism

| NAICS | Description |
|-------|--|
| 7225 | Restaurants and Other Eating Places |
| 4841 | General Freight Trucking |
| 4931 | Warehousing and Storage |
| 7211 | Traveler Accommodation |
| 4842 | Specialized Freight Trucking |
| 5617 | Services to Buildings and Dwellings |
| 7113 | Promoters of Performing Arts, Sports, and Similar Events |
| 4922 | Local Messengers and Local Delivery |
| 5629 | Remediation and Other Waste Management Services |
| 5611 | Office Administrative Services |
| 7139 | Other Amusement and Recreation Industries |
| 4884 | Support Activities for Road Transportation |
| 7115 | Independent Artists, Writers, and Performers |
| 5614 | Business Support Services |
| 7224 | Drinking Places (Alcoholic Beverages) |
| 5616 | Investigation and Security Services |
| 5619 | Other Support Services |
| 7223 | Special Food Services |
| 5621 | Waste Collection |
| 4821 | Rail Transportation |