NoRTEC

Northern Rural Training and Employment Consortium (NoRTEC)

Tehama County Labor Market Profile and Industry/Sector Analysis

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Executive Summary

This report provides a detailed Demographic, Labor Market and Industry/Sector Analysis for Tehama County, which is part of the Northern Rural Training and Employment Consortium (NoRTEC) Region within Northern California.

The report includes both quantitative and qualitative data regarding past, current and projected economic trends within the county. Data examined include age and race trends and projections; income and poverty; human capital and labor force; unemployment; commuting patterns; employment by industry; employment by occupation; industry and occupation connections; and industry sectors. Data were gathered from a variety of public and proprietary data sources and a survey of regional employers. An input session was held within the county in May 2016 to validate and supplement the quantitative data. Participants included key stakeholders, service providers, and employers.

Based on an analysis of the quantitative and qualitative analysis, the following section outlines the key findings, including strengths and challenges within the county, as well as recommended industry sectors to emphasize for purposes of workforce planning and resource allocation.

Key Findings

- The county's population increased at a rate of 4% over the past ten years. This growth outpaced growth within the NoRTEC region, which was 1.3%. However, it lags growth within the state which was 9.3% over the same time period.
- The median household income within the county is $42,369, which is slightly below the average for the NoRTEC region, which is $43,977. It also trails the state, which is $61,489. The poverty rate for the county is 18.2%, which is similar to the NoRTEC region (18.6%). It is higher than the state average, which is 16.4%.
- Over the past ten years, unemployment trends have been similar to the state. However, the overall unemployment rates within the county are consistently 2 to 4 percentage points higher.
- The top industry sector by employment for the county is Government, which includes education, state and federal government. Government makes up nearly 20% of employment. Other significant sectors include: Health Care; Retail Trade; Agriculture; and Manufacturing. However, with the exception of Government, all of these sectors grew over the past five years. Health Care and Social Assistance led the way by adding nearly 750 new jobs.
- High demand occupations within the county are primarily within the Health Care sector and include: Personal Care Aides (125 new jobs); Combined Food Preparation and Serving Workers, Including Fast Food (48 new jobs); Home Health Aides (35 new jobs); Nursing Assistants (24 new jobs); and Laborers and Freight, Stock, and Material Movers, Hand (21 new jobs).
- According to feedback from the May 2016 input session, one of the county's advantages is that it is located on a major transportation corridor and between two larger population centers. This allows employers to draw workers from the neighboring areas. However, one of the challenges is that wages are higher in the neighboring areas and many workers are willing to commute out of the county.
- The need for bilingual employees was also expressed. Many employers within the Health Care, Manufacturing and Agriculture sectors indicated a preference for hiring employees who are bilingual.

- Based on survey results, the most significant challenges for employers within the county include finding qualified candidates to hire and filling high-skill positions.
- For difficult to fill positions, most employers indicated that education was the most desired attribute amongst candidates.

Recommendations

The priority sectors for the NoRTEC region include: Health Care; Manufacturing; Agriculture; Tourism; and Information Technology (IT). These recommendations are based on an analysis of employment trends within each of the 11 counties, as well as the region as a whole. These industry sectors are economically vital to the region, have experienced employment growth, are projected to grow through 2020, and/or tend to be concentrated within the region. Another key consideration was an emphasis on industry sectors with occupations that have a variety of entry-level educational requirements, and pay a relatively higher wage compared to other sectors. All of these sectors are present to some degree within each of the 11 NoRTEC counties. However, some of the sectors are a better fit for individual counties than for others.

Within Tehama County, the sectors that match the priority sectors for the region include: Health Care; Manufacturing; Agriculture; and Tourism. The Information Technology (IT) sector has a very small employment presence within the county with fewer than 20 employees.

Health Care

- Health Care is the second largest employment sector within the county and added the greatest number of jobs since 2010. Growth is projected to continue through 2020. Of the top ten high demand occupations within the county, five are within the Health Care sector. These trends indicate that this should be a priority sector for the county.
- Key occupations within Health Care include: Personal Care Aides; Nursing, Psychiatric, and Home Health Aides; Miscellaneous Healthcare Support Occupations; and Registered Nurses. All have experienced growth over the past five years and are projected to grow through 2020. Registered Nurses, which is one of the largest occupational groups, pays one of the highest wages, with a median hourly wage of $42.63/hr.

Manufacturing

- For the Manufacturing sector, key subsectors include Miscellaneous Wood Product Manufacturing; Fruit and Vegetable Preserving and Specialty Food Manufacturing; and Veneer, Plywood, and Engineered Wood Product Manufacturing. However, the Manufacturing sector is quite diverse within the county and other significant manufacturing categories include: Paper Manufacturing; Machinery Manufacturing; Transportation Equipment Manufacturing; and Grain and Oilseed Milling.
- Occupations with the greatest number of employees include: Miscellaneous Assemblers and Fabricators; Woodworking Machine Setters, Operators, and Tenders; and Cabinet and Bench Carpenters. These occupations are projected to add the greatest number of jobs through 2020. Median hourly earnings for these occupations range from $11.61/hr to $15.62/hr. High wage manufacturing jobs within the county include: Industry Production Managers ($39.49/hr); General and Operations Managers ($37.01/hr); and Sales Representatives, Wholesale and Manufacturing ($25.45/hr).

Agriculture

- The Agriculture sector is the fourth largest industry sector within the County. It has experienced growth since 2010 and is project to grow through 2020. The majority of employment is found within Crop Production, along with supporting activities. Animal Production and Aquaculture and Logging are also important sectors.
- Key occupations within Agriculture for the county include: Miscellaneous Agricultural Workers and Farmers, Ranchers, and Other Agricultural Managers. The median wage for Miscellaneous Agricultural Workers is $10.00/hr. However, the median wage for Farmers, Ranchers, and Other Agricultural Managers is $18.46/hr.

Tourism

- The Tourism sector falls across several business categories including Hotels and Restaurants; Travel Agencies and Tour Operators; Arts, Entertainment and Recreation; and Sightseeing Transportation. Within the county, the largest subsectors include Restaurants and Other Eating Places; Other Amusement and Recreation Industries; and Traveler Accommodation. All are projected to grow through 2020.
- Key occupations for the Tourism sector include primarily fall within food service: Fast Food and Counter Workers; Cooks; Waiters and Waitresses; and Supervisors of Food Preparation and Serving Workers. Of these four, Supervisors, etc. pay the highest median wage ($16.27/hr).

Tehama County

Introduction

The following is a labor market and industry/sector profile for Tehama County, California. 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.

Demographic and Labor Force Characteristics

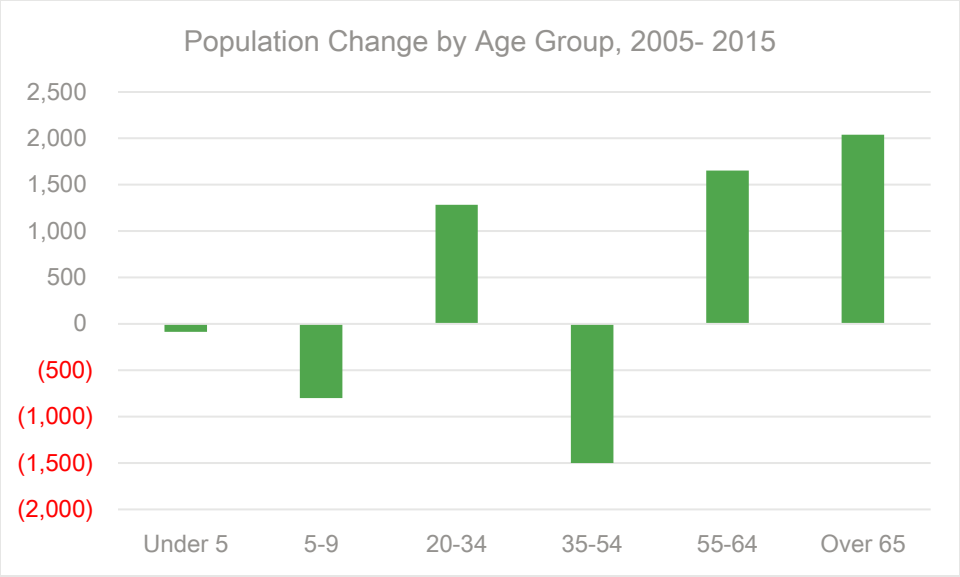
Total Population

Tehama County is located at the north end of the NoRTEC region, in between the Shasta Trinity Forest and the Lassen National Forest. The largest community is Red Bluff. The population of Tehama County increased from 60,602 to 63,192 residents over the past ten years.[1] This represents a 4% increase, which is lower than the state's growth rate of 9.3% and the national growth rate of 8.7%. Looking forward over the next five years, the county's population is projected to decrease an additional 0.5%.

The population of Tehama County is aging. Over the past ten years, the population of 65 years and older and those ages 55 to 64 were the two fastest growing cohorts. The aging population is a concern because it impacts the availability of labor over the next decade.

Age	2005 Population	2015 Population	Change (2005-2015)		Projected Change (2015-2020)	
Under 5	4,073	3,987	(86)	(2.0%)	486	12.2%
5-19	13,433	12,632	(801)	(6.0%)	(259)	(2.1%)
20-34	9,840	11,125	1,285	13.1%	(377)	(3.4%)
35-54	16,783	15,284	(1,499)	(8.9%)	(1,050)	(6.9%)
55-64	7,087	8,741	1,654	23.3%	593	6.8%
Over 65	9,386	11,425	2,039	21.7%	935	8.2%
Total	60,602	63,192	2,590	4.0%	329	0.5%

[1] EMSI Analyst 2016



Race/Ethnicity

The population of the county is fairly diverse, though 68% of the 2015 population identifies as White, Hispanics are a large minority group (25% of the population). The three fastest growing race/ethnicity groups in the county are Black, Native Hawaiian or Pacific Islander, and Hispanic.[2]

Race/Ethnicity	2015 Population	Change, 2005-2015	
White	43,547	(2,203)	(4.8%)
Hispanic	15,501	4,060	35.5%
Asian	757	191	33.7%
Two or More Races	1,620	262	19.3%
American Indian or Alaskan Native	1,216	102	9.2%
Black	468	155	49.5%
Native Hawaiian or Pacific Islander	85	25	41.7%

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

Educational Attainment

Compared to the NoRTEC region, Tehama County has a slightly higher percentage of those with just a High School Diploma and a much higher percentage than the state average. However, residents have a lower percentage with Some College, Associate's Degree, Bachelor's Degree, or Graduate Degree or Higher. Although the percentage of those with at least Some College is slightly lower than the NoRTEC average, it is much higher than the California and US averages. Compared to the state and the nation, Tehama County should be relatively more competitive for jobs that require between a high school diploma and less than a college degree, which may include those who have earned a short-term credential.

Education Level	2015 Population	2015 Percent	2015 Percent NoRTEC	2015 Percent California	2015 Percent US
Less Than 9th Grade	4,076	9.5%	5.1%	11.2%	6.6%
9th Grade to 12th Grade	4,847	11.3%	8.4%	8.2%	7.7%
High School Diploma	12,514	29.3%	24.9%	21.0%	28.1%
Some College	12,175	28.5%	30.5%	21.7%	21.0%
Associate's Degree	3,390	7.9%	9.7%	7.8%	7.8%
Bachelor's Degree	3,819	8.9%	14.2%	19.3%	18.0%
Graduate Degree and Higher	1,929	4.5%	7.2%	10.9%	10.7%

Income

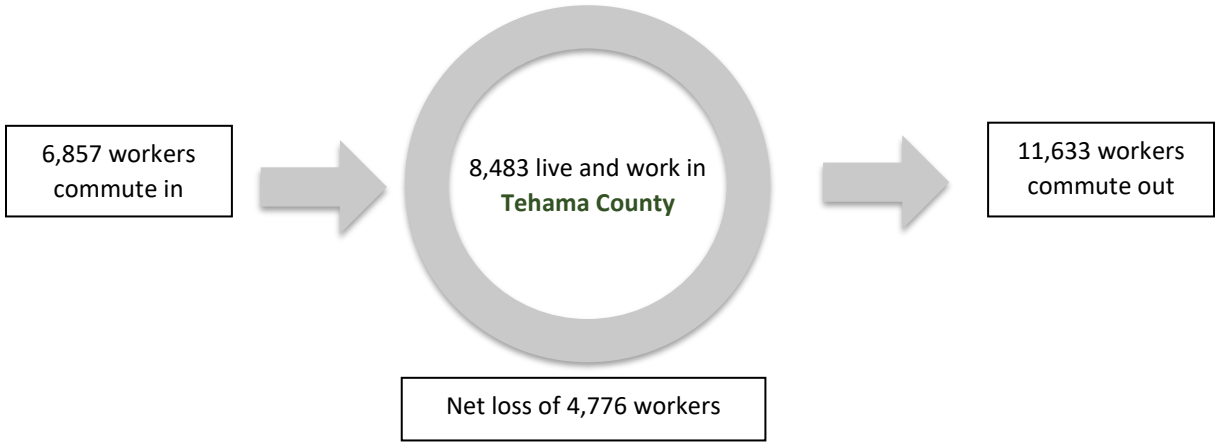
Tehama County's poverty rate of 18.2% is fifth highest within the NoRTEC region. It is also higher than the median rates for California and the United States.[3] The Median Household Income ($42,369) for the County is also the fifth highest within the NoRTEC region. However, it is significantly lower than the state of California and the United States.

	Median Household Income ('10-'14)	Poverty Rate
Butte	$43,165	21.9%
Del Norte	$39,302	22.4%
Lassen	$53,351	19.4%
Modoc	$38,560	20.2%
Nevada	$56,949	11.4%
Plumas	$48,032	14.0%
Shasta	$44,556	14.7%
Sierra	$43,107	13.8%
Siskiyou	$37,495	21.1%
Tehama	**$42,369**	**18.2%**
Trinity	$36,862	19.9%
California	$61,489	16.4%
United States	$53,482	14.8%

[3] U.S. Census Bureau 2010-2014.

Commuting

In 2014, Tehama County had 6,857 workers commuting into the county and 11,600 commuting out. This means that Tehama County is a net exporter of workers.[4] Apart from the commuting population, a large number of individuals (8,483) both lived and worked within the county. Of those commuting into Tehama County, the largest number came from Shasta County (2,195, 14.3% of the workforce), and Butte County (1,042, 6.8%). The top destination counties for Tehama County out-commuting workers were Shasta County (3,213, 16.0%), and Butte County (1,606, 8.0%).



[4] U.S. Census Bureau, OnTheMap, 2014 (most recently available). http://onthemap.ces.census.gov/

Human Capital

Labor Force

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 2016, over 24,800 workers participated in the Tehama County labor force, of these, 22,810 were employed. Over the last 20 years, employment in the county was at its highest in October 2002 and lowest in January 1996. As of January 2016, the unemployment rate for the county was 8.1%, higher than the unemployment rate of California (5.8%) and the United States (4.9%).

EMPLOYMENT IN TEHAMA COUNTY 1996-2016 [5]		
Peak	October 2002 (25,268)	January 2016 (22,810– 9.7% lower)
Trough	January 1996 (19,679)	January 2016 (22,810 – 15.9% higher)
January 2016	Employment: 22,810 Labor Force: 24,813 Unemployment rate: 8.1%	

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. For example, in 2015 the national labor force participation rate for individuals older than 54 (39.9%) was significantly lower than for those between the ages of 25 and 54 (80.7%).

Labor Force Participation Rate

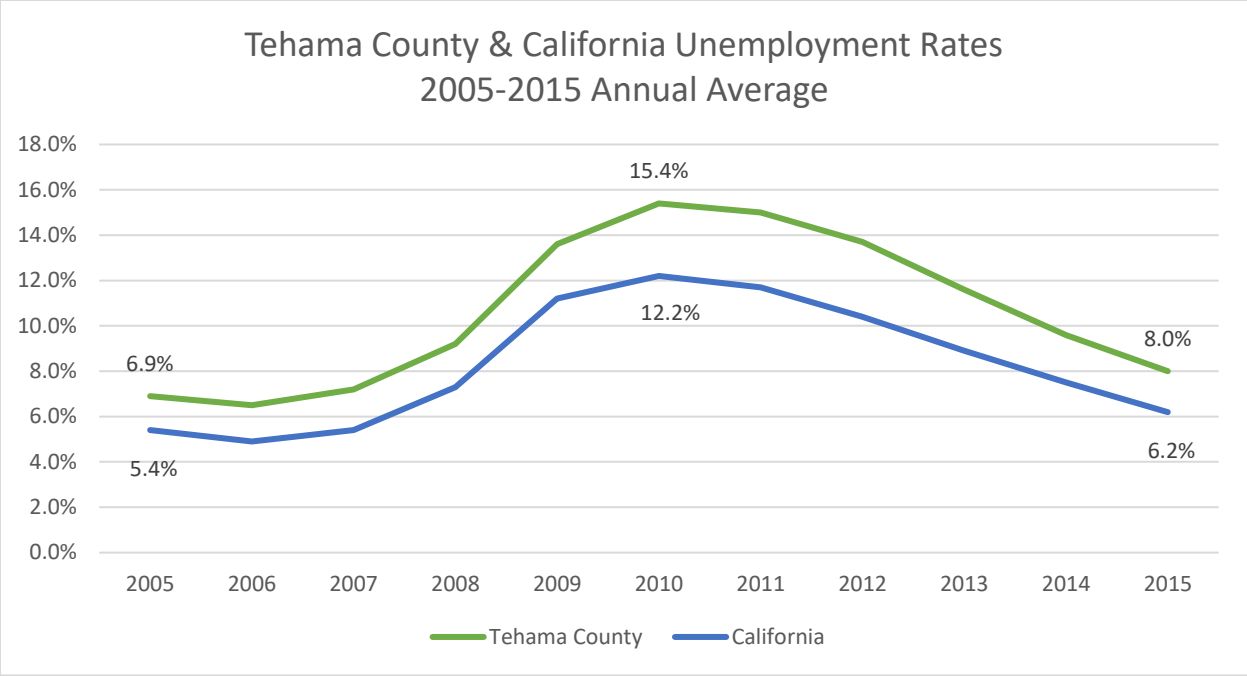
The labor force participation rate represents the proportion of the population that is working or pursuing work, as opposed to those voluntarily not working or not pursuing work. The labor force participation rate is affected by various factors, including availability of jobs, socioeconomic composition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

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 8,741 in 2015.[6] 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 11,425, equivalent to 18% of the county's population.

[5] U.S. Bureau of Labor Statistics, 1996.1-2016.1. http://www.bls.gov/data/

[6] The older worker population (55 years and older) in the county is estimated by multiplying the population of this age group by the corresponding labor force participation rate.



As noted previously, individuals can be members of the labor force even if they are not currently employed. Those who are not employed but who are actively looking for work are classified by the United States Department of Labor as unemployed. Like participation rates, what is considered a normal unemployment rate varies from region to region based on demographics of each population. Generally speaking, unemployment tends to spike during recessions and following major layoffs or relocations, 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.

At its peak, the unemployment rate struck 15.4% in 2010, and dipped to its lowest rate in 2006 at 6.5%. The Bureau of Labor Statistics of the U.S. Department of Labor reported a gradual decrease in unemployment in Tehama County since 2010. The unemployment rate for the state of California followed a similar trend between 2005 and 2015, though the story at the state level is more positive; the state's rate is consistently 2 to 4 percentage points lower than Tehama County's. For California, the unemployment rate hit its highest mark in 2010 at 12.2% and its lowest mark in 2006 at 4.9%.

Industry Sector Analysis

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 prove data that descend in order according to 2015 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).

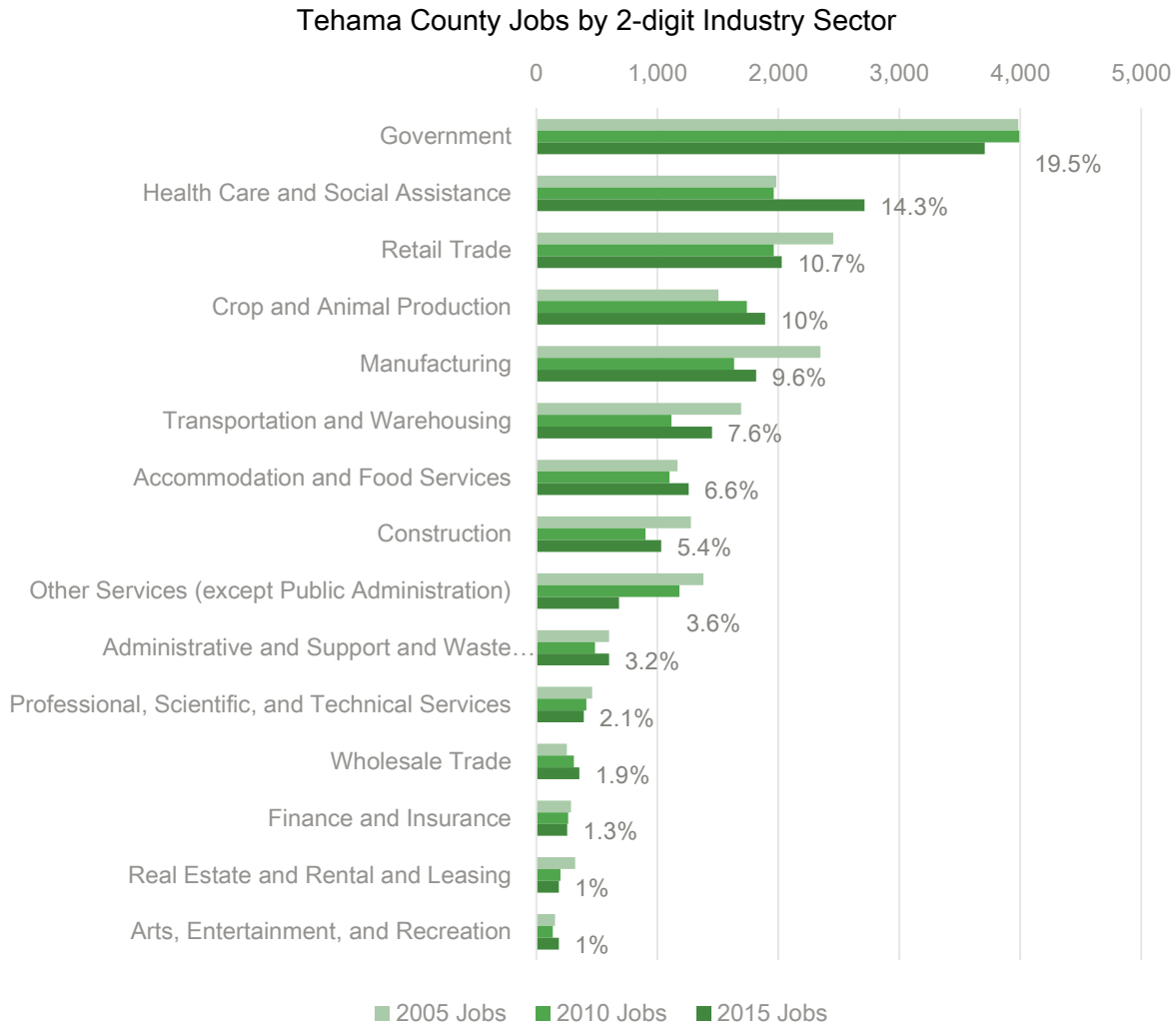
The competitive effect helps to determine the amount of job growth that occurred due to the county's competitive advantages as compared to the national growth in general and the national growth rate for each sector. In other words a positive number indicates that the county experienced more growth than 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 that circulating money already present within the county.[7]

[7] Data from this section are from Economic Modeling Specialists International (EMSI), 2016.1 Class of Worker.

Industry Mix

The broad industry sectors in Tehama County employing the most workers are Government (3,707, 19.5% of all county employment), Health Care (2,712, 14.3%), Retail Trade (2,029, 10.7%), and Agriculture (1,890, 10%).[8] Multiple industry sectors expanded over the past five years, but Health Care and Transportation and Warehousing lead the pack in terms of net new job growth.



Tehama County's economy is more diverse that many other areas within the NoRTEC region. The county has a strong presence of many different varieties of both service and product producing industries. Looking at the county in terms of competitive strengths, it significantly outperformed other parts of the United States in job growth in each of the following sectors: Health Care, Transportation and Warehousing, and Construction. Transportation and Warehousing, and Health Care are both worthy of special attention due to the fact that they also have strong location quotient scores (2.24 and 1.16, respectively) indicating that they are more concentrated in Tehama County that other parts of the United States.

[8] These industries are by 2-digit NAICS code. EMSI Analyst 2016.

Industry	2010 Jobs	2015 Jobs	Change in Jobs 2010 - 2015		Change in Jobs 2015 - 2020		Location Quotient	Comp. Effect
Government	3,992	3,707	(285)	(7%)	47	1%	1.26	(215)
Health Care and Social Assistance	1,963	2,712	749	38%	330	12%	1.14	491
Retail Trade	1,962	2,029	67	3%	(67)	(3%)	1.03	(79)
Crop and Animal Production	1,741	1,890	149	9%	8	0%	8.12	78
Manufacturing	1,635	1,816	181	11%	(49)	(3%)	1.20	79
Transportation and Warehousing	1,117	1,451	334	30%	(13)	(1%)	2.34	193
Accommodation and Food Services	1,101	1,258	157	14%	81	6%	0.79	(19)
Construction	903	1,032	129	14%	60	6%	1.02	39
Other Services (except Public Administration)	1,184	683	(501)	(42%)	(45)	(7%)	0.75	(512)
Administrative and Support and Waste Management and Remediation Services	485	600	115	24%	64	11%	0.51	30
Professional, Scientific, and Technical Services	414	392	(22)	(5%)	26	7%	0.32	(83)
Wholesale Trade	311	356	45	14%	76	21%	0.49	23
Finance and Insurance	261	254	(7)	(3%)	32	13%	0.34	(18)
Real Estate and Rental and Leasing	200	185	(15)	(8%)	(18)	(10%)	0.59	(28)
Arts, Entertainment, and Recreation	137	185	48	35%	23	12%	0.58	31
Utilities	100	112	12	12%	(3)	(3%)	1.63	10
Unclassified Industry	41	85	44	107%	5	6%	2.73	16
Educational Services	82	80	(2)	(2%)	15	19%	0.17	(11)
Information	76	74	(2)	(3%)	22	30%	0.21	(4)
Management of Companies and Enterprises	303	72	(231)	(76%)	(29)	(40%)	0.27	(290)
Mining, Quarrying, and Oil and Gas Extraction	14	<10	Insf. Data	Insf. Data	Insf. Data	Insf. Data	0.01	(14)

Key Industries

The industry group (4-digit NAICS) level sheds light on specific drivers of economic growth. The following table shows the county's top 20 industry groups by total employment in 2015.[9] Of the top 20 largest industries, Local Government, Excluding Education and Hospitals employs the most people, followed by Education and Hospitals (Local Government). The three highest growth industries were Warehousing and Storage (281 new jobs); Other Wood Product Manufacturing (209 new jobs); and Local Government, Excluding Education and Hospitals (122 new jobs).

Industry	2015 Jobs	'10-'15 Change		'15-'20 Change	
Local Government, Excluding Education and Hospitals	1,696	122	8%	35	2%
Education and Hospitals (Local Government)	1,588	(390)	(20%)	23	1%
Warehousing and Storage	1,090	281	35%	44	4%
Other Wood Product Manufacturing	1,001	209	26%	155	15%
Crop Production	999	4	0%	(19)	(2%)
Restaurants and Other Eating Places	986	67	7%	28	3%
Individual and Family Services	880	635	259%	334	38%
Support Activities for Crop Production	508	87	21%	29	6%
General Medical and Surgical Hospitals	429	(28)	(6%)	11	3%
Grocery Stores	358	7	2%	(28)	(8%)
Gasoline Stations	336	49	17%	11	3%
Offices of Physicians	287	56	24%	(3)	(1%)
Fruit and Vegetable Preserving and Specialty Food Manufacturing	286	(74)	(21%)	(51)	(18%)
Services to Buildings and Dwellings	239	19	9%	4	2%
Federal Government, Civilian	226	(59)	(21%)	(8)	(4%)
Building Material and Supplies Dealers	220	35	19%	(28)	(13%)
General Freight Trucking	219	56	34%	(36)	(16%)
Other Specialty Trade Contractors	213	30	16%	4	2%
Department Stores	210	0	0%	13	6%
Animal Production and Aquaculture	199	50	34%	3	2%

[9] These industries are by 4-digit NAICS code.

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, administrative support staff, lawyers, and many other occupational categories necessary for the industry's survival. As a workforce development board, NoRTEC's mission is to serve individual job seekers and businesses more specifically than serving as catalysts for industry-specific development. As such, it's important to understand the specific occupational roles that are required to keep local businesses flourishing.

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 occupations include:

- Office and Administrative Support Occupations (2,250 jobs)
- Transportation and Material Moving Occupations (1,893 jobs)
- Sales and Related Occupations (1,664 jobs)
- Education, Training, and Library Occupations (1,588 jobs)[10]

The median hourly earnings for all occupations available range from $10.25/hr for Personal Care and Service Occupations to $42.12/hr for Legal Occupations.

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

- Farming, Fishing and Forestry (9.74)
- Transportation and Material Moving Occupations (1.53)
- Education, Training, and Library Occupations (1.42)
- Production Occupations (1.34)

These are the occupation groups for which the region is highly specialized. For example, jobs in Farming, Fishing, and Forestry make up 9.74x more of the employment base than they do nationally.

[10] These occupations are by 2 digit SOC code (Standard Occupation Classification System).

Broad Occupation Mix

Occupation	2015 Employment	% of Total Employment	Median Hourly Earnings	2015 Location Quotient
Office and Administrative Support	2,250	11.7%	$16.57	0.78
Transportation and Material Moving	1,893	9.9%	$16.86	1.53
Sales and Related	1,664	8.7%	$13.21	0.87
Education, Training, and Library	1,588	8.3%	$21.73	1.42
Production	1,549	8.1%	$14.82	1.34
Farming, Fishing, and Forestry	1,484	7.7%	$11.49	9.74
Food Preparation and Serving Related	1,390	7.3%	$10.72	0.87
Management	1,129	5.9%	$32.44	1.10
Installation, Maintenance, and Repair	849	4.4%	$20.62	1.02
Construction and Extraction	848	4.4%	$18.61	1.19
Personal Care and Service	773	4.0%	$10.25	1.02
Building and Grounds Cleaning and Maintenance	711	3.7%	$12.38	0.98
Healthcare Practitioners and Technical	602	3.1%	$41.71	0.59
Protective Service	484	2.5%	$27.54	1.15
Business and Financial Operations	440	2.3%	$25.37	0.47
Healthcare Support	410	2.1%	$14.30	0.78
Community and Social Service	353	1.8%	$22.16	1.13
Life, Physical, and Social Science	188	1.0%	$23.52	1.24
Arts, Design, Entertainment, Sports, and Media	154	0.8%	$14.90	0.47
Architecture and Engineering	109	0.6%	$32.98	0.35
Military	106	0.6%	$16.43	0.41
Computer and Mathematical	95	0.5%	$30.71	0.19
Legal	83	0.4%	$42.12	0.51

Top Occupations – 4 Digit SOC Codes

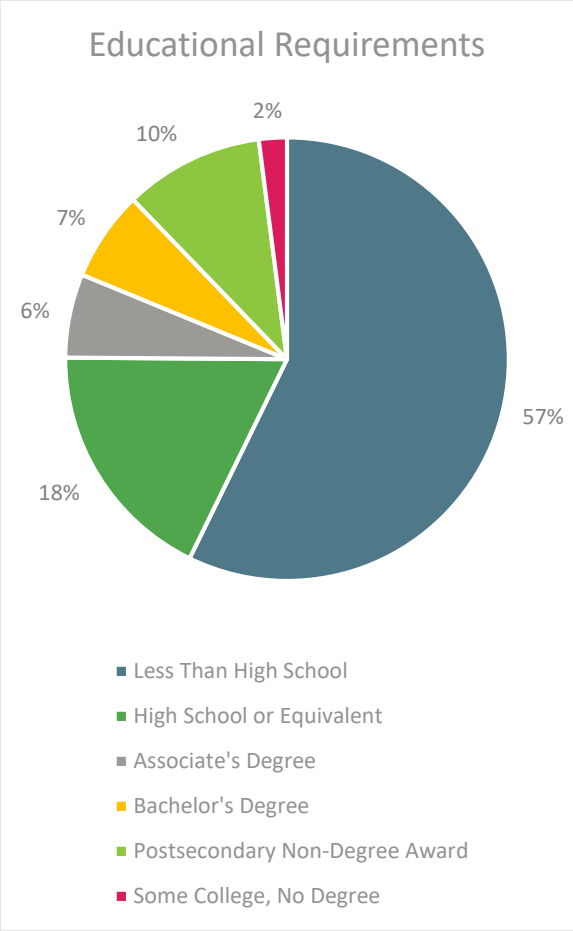
The following table displays the top 20 occupations by 4-digit occupational groups within Tehama County[11]. The occupation employing the most workers is Miscellaneous Agricultural Workers, followed by Cashiers and Driver/Sales Workers and Truck Drivers. Miscellaneous Assemblers and Fabricators experienced the most growth, with the addition of 126 new jobs between 2010 and 2015.

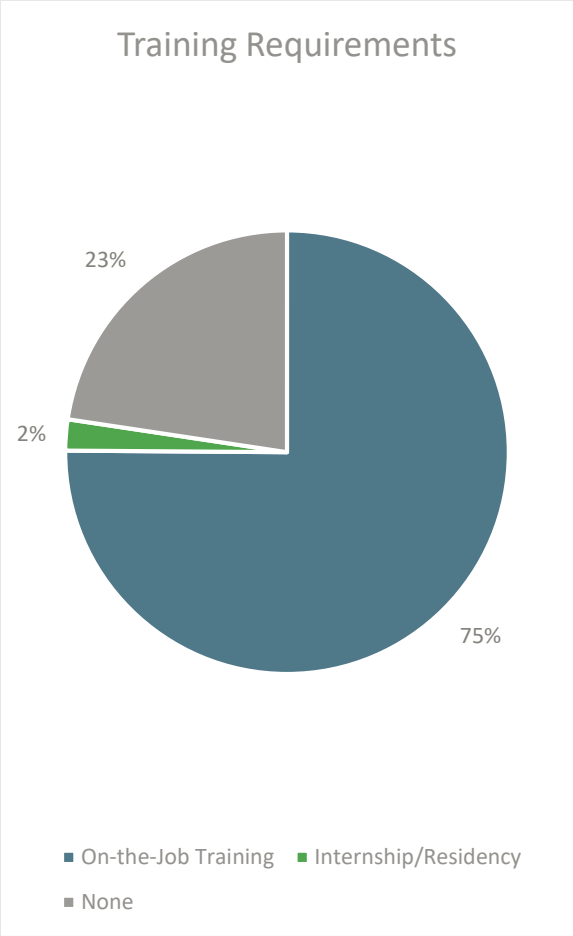
Occupation	2015 Employment	Change, 2010-2015		Projected Change, 2015-2020		Projected Annual Openings	Median Hourly Earnings
Miscellaneous Agricultural Workers	1,134	112	11%	9	1%	38	$10.00
Cashiers	714	61	9%	(9)	(1%)	31	$9.90
Driver/Sales Workers and Truck Drivers	667	115	21%	(9)	(1%)	12	$15.84
Laborers and Material Movers, Hand	587	78	15%	24	4%	22	$14.24
Fast Food and Counter Workers	441	36	9%	52	12%	30	$9.93
Elementary and Middle School Teachers	409	(86)	(17%)	14	3%	12	$29.97
Building Cleaning Workers	396	(123)	(24%)	1	0%	11	$11.77
Secretaries and Administrative Assistants	394	27	7%	9	2%	7	$17.50
Miscellaneous Assemblers and Fabricators	382	126	49%	6	2%	8	$12.70
Teacher Assistants	365	(39)	(10%)	9	2%	10	$13.03
Cooks	350	37	12%	10	3%	10	$11.22
Retail Salespersons	294	3	1%	(9)	(3%)	10	$12.19
Grounds Maintenance Workers	274	42	18%	10	4%	9	$12.50
Personal Care Aides	262	49	23%	125	48%	28	$9.97
General and Operations Managers	253	31	14%	10	4%	7	$37.01
Office Clerks, General	250	13	5%	5	2%	6	$13.32
Bookkeeping, Accounting, and Auditing Clerks	230	18	8%	2	1%	3	$18.21
Industrial Truck and Tractor Operators	228	30	15%	(7)	(3%)	5	$18.00
Maintenance and Repair Workers, General	224	35	19%	7	3%	6	$17.75
First-Line Supervisors of Sales Workers	220	(2)	(1%)	(4)	(2%)	5	$16.17

[11] Occupations are by 4 digit SOC code.

High Demand Jobs – Education and Training

According to the U.S. Bureau of Labor Statistics analysis of minimum education and training requirements[12], 57% typically require less than a high school diploma.[13] Approximately 7% of these high demand jobs typically require at least a Bachelor's degree. In terms of training and experience requirements, 77% of these jobs require some type of training, which is typically on-the-job training.





[12] Individual employers may require more education than BLS analysis suggests is required. For example, some employers may require high school completion even for jobs that BLS suggests could be performed with less education.
[13] A total of 23 occupations with the highest projected job growth from 2015 to 2020 are included in this analysis. These occupations are with 5 digit SOC code. EMSI Analyst 2016.1.

Description	2020 Jobs	2015 - 2020 Change	Annual Openings	Avg. Hourly Earnings	Typical Entry Level Education	Typical On-The-Job Training
Personal Care Aides	387	125	28	$10.19	Less than high school	Short-term on-the-job training
Combined Food Preparation and Serving Workers, Including Fast Food	439	48	26	$10.63	Less than high school	Short-term on-the-job training
Home Health Aides	91	35	9	$10.72	Less than high school	Short-term on-the-job training
Nursing Assistants	141	24	7	$11.69	Postsecondary non-degree award	None
Laborers and Freight, Stock, and Material Movers, Hand	354	21	15	$15.44	Less than high school	Short-term on-the-job training
Registered Nurses	190	17	7	$41.39	Associate's degree	None
Construction Laborers	200	15	7	$14.71	Less than high school	Short-term on-the-job training
Woodworking Machine Setters, Operators, and Tenders, Except Sawing	107	12	3	$13.50	High school diploma or equivalent	Short-term on-the-job training
Electrical Power-Line Installers and Repairers	35	11	3	$40.65	High school diploma or equivalent	Long-term on-the-job training
Licensed Practical and Licensed Vocational Nurses	97	11	4	$24.14	Postsecondary non-degree award	None
Operating Engineers and Other Construction Equipment Operators	70	10	3	$28.76	High school diploma or equivalent	Moderate-term on-the-job training
Tellers	78	10	5	$13.35	High school diploma or equivalent	Short-term on-the-job training
Dental Assistants	78	10	4	$19.39	Postsecondary non-degree award	None
Dental Hygienists	61	10	3	$47.22	Associate's degree	None
Elementary School Teachers, Except Special Education	311	10	9	$31.66	Bachelor's degree	Internship/residency
General and Operations Managers	263	10	7	$45.06	Bachelor's degree	None
Recreation Workers	48	9	2	$10.97	Bachelor's degree	None
Telecommunications Line Installers and Repairers	28	9	2	$30.25	High school diploma or equivalent	Long-term on-the-job training
Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	99	9	4	$35.08	High school diploma or equivalent	Moderate-term on-the-job training

Description	2020 Jobs	2015 - 2020 Change	Annual Openings	Avg. Hourly Earnings	Typical Entry Level Education	Typical On-The-Job Training
Cabinetmakers and Bench Carpenters	148	9	3	$16.32	High school diploma or equivalent	Moderate-term on-the-job training
Landscaping and Groundskeeping Workers	247	9	8	$11.86	Less than high school	Short-term on-the-job training
Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	266	9	5	$15.42	High school diploma or equivalent	Short-term on-the-job training
Teacher Assistants	374	9	10	$13.15	Some college, no degree	None

Industry and Occupation Connections

Industries drive economic growth, but the fuel that enables those industries to function are its workers, who are classified by occupational codes. 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 and how they are connected to some of the region's key industries.[14] Five of the high demand occupations are within the Health Care sector.

Connection between High Demand Occupations and Key Industries

Top Occupations	Key Industries
Personal Care Aides	• Health Care
Combined Food Preparation and Serving Workers, Including Fast Food	• Tourism
Home Health Aides	• Health Care
Nursing Assistants	• Health Care
Laborers and Freight, Stock, and Material Movers, Hand	• Transportation and Warehousing • Manufacturing
Registered Nurses	• Health Care
Construction Laborers	• Construction
Woodworking Machine Setters, Operators, and Tenders, Except Sawing	• Manufacturing
Electrical Power-Line Installers and Repairers	• Construction
Licensed Practical and Licensed Vocational Nurses	• Health Care

[14] Occupations are by 4-digit SOC code.

Detailed Industry Analysis

The following section provides an in-depth look at sectors that are important to the Tehama County economy. These industry sectors include: Health Care; Manufacturing; Professional, Scientific, and Technical Services; Agriculture; and Administrative and Support Services. 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.

Health Care by Employment – (Top 4-Digit NAICS)

The largest sectors by employment include Individual and Family Services (880); General Medical and Surgical Hospitals (429); and Offices of Physicians (287).The sectors with the largest LQs include Vocational Rehabilitation Services at 3.74 and Individual and Family Services at 3.22. Individual and Family Services is projected to grow over the next five years, while other industries, such as General Medical and Surgical Hospitals are expected to decrease in employment. The sector paying the highest average wages is General Medical and Surgical Hospitals ($76,524), while the sector with the lowest average wages is Vocational Rehabilitation Services ($10,563).

Industry	2015 Jobs	'10-'15 Change	CE '10-'15	'15-'20 Change	CE '15-'20	'15 LQ	Average Earnings
Individual and Family Services	880	635	482	334	139	3.22	$10,563
General Medical and Surgical Hospitals	429	(28)	(54)	11	(17)	0.77	$76,524
Offices of Physicians	287	56	33	(3)	(33)	0.90	$67,938
Vocational Rehabilitation Services	159	64	65	(78)	(84)	3.74	$14,689
Child Day Care Services	151	(48)	(47)	(22)	(28)	1.00	$18,714
Nursing Care Facilities (Skilled Nursing Facilities)	145	79	79	34	23	0.72	$26,866
Home Health Care Services	144	(15)	(48)	9	(24)	0.85	$22,036
Offices of Dentists	136	7	(5)	24	11	1.17	$47,234
Offices of Other Health Practitioners	118	(40)	(72)	(21)	(41)	1.03	$29,327
Continuing Care Retirement Communities and Assisted Living Facilities for the Elderly	81	1	(13)	24	10	0.76	$20,985
Residential Intellectual and Developmental Disability, Mental Health, and Substance Abuse Facilities	59	(17)	(24)	(18)	(25)	0.78	$22,293
Outpatient Care Centers	49	1	(11)	19	10	0.52	$39,986
Other Residential Care Facilities	44	Insf. Data	44	10	7	2.23	$24,616
Medical and Diagnostic Laboratories	15	3	2	7	5	0.46	$26,472

Industry	2015 Jobs	'10-'15 Change	CE '10-'15	'15-'20 Change	CE '15-'20	'15 LQ	Average Earnings
Other Ambulatory Health Care Services	11	Insf. Data	4	1	(0)	0.28	$22,724
Community Food and Housing, and Emergency and Other Relief Services	<10	Insf. Data	3	Insf. Data	(2)	0.20	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	0.00	$0

Staffing Patterns for Health Care (Top 4-digit SOC)

The top four occupations by employment within the Health Care sector include: Personal Care Aides (251); Nursing, Psychiatric and Home Health Aides (168); Miscellaneous Healthcare Support Occupations (163); and Registered Nurses (158). All of these top occupations increased in employment in the past five years and are projected to grow up to 2020. The occupation that pays the highest median wage is Medical and Health Services Managers at $80.15/hr and the occupation that pays the lowest median wage in this industry sector is Childcare Workers at $8.63/hr.

Occupation	2015 Employment	Change, 2010-2015		Projected Change, 2015-2020		Median Hourly Earnings
Personal Care Aides	251	144	135%	128	51%	$9.97
Nursing, Psychiatric, and Home Health Aides	168	56	50%	59	35%	$11.01
Miscellaneous Healthcare Support Occupations	163	15	10%	10	6%	$16.59
Registered Nurses	158	12	8%	16	10%	$42.63
Secretaries and Administrative Assistants	124	33	36%	7	6%	$17.50
Building Cleaning Workers	110	38	53%	8	7%	$11.77
Counselors	91	25	38%	(5)	(5%)	$24.61
Childcare Workers	86	(27)	(24%)	(19)	(22%)	$8.63
Receptionists and Information Clerks	81	16	25%	0	0%	$15.02
Licensed Practical and Licensed Vocational Nurses	78	22	39%	11	14%	$23.68
Miscellaneous Community and Social Service Specialists	70	41	141%	10	14%	$16.61
Office Clerks, General	66	19	40%	2	3%	$13.32
Teacher Assistants	59	28	90%	6	10%	$13.03
Social Workers	56	25	81%	11	20%	$25.69
Dental Hygienists	50	4	9%	10	20%	$46.56

Occupation	2015 Employment	Change, 2010-2015		Projected Change, 2015-2020		Median Hourly Earnings
Therapists	49	(9)	(16%)	1	2%	$36.38
Preschool and Kindergarten Teachers	48	(1)	(2%)	1	2%	$18.79
General and Operations Managers	44	21	91%	5	11%	$37.01
Medical and Health Services Managers	44	7	19%	3	7%	$48.03
Bookkeeping, Accounting, and Auditing Clerks	42	17	68%	3	7%	$18.21

Manufacturing by Employment – (Top 4-Digit NAICS)

The largest industry within Manufacturing in the county is Other Wood Product Manufacturing with 1,001 jobs, followed by Fruit and Vegetable Preserving and Specialty Food Manufacturing, with 286 jobs. Other Wood Product Manufacturing grew between 2010 and 2015 and is expected to have continued growth. However, Fruit and Vegetable Preserving and Specialty Food Manufacturing has been on the decline, and further job decline is projected.

Industry	2015 Jobs	'10-'15 Change	CE '10-'15	'15-'20 Change	CE '15-'20	'15 LQ	Average Earnings
Other Wood Product Manufacturing	1,001	209	150	155	218	36.50	$46,707
Fruit and Vegetable Preserving and Specialty Food Manufacturing	286	(74)	(68)	(51)	(44)	13.81	$42,135
Veneer, Plywood, and Engineered Wood Product Manufacturing	163	163	163	(109)	(101)	18.41	$53,110
Converted Paper Product Manufacturing	54	(4)	(1)	Insf. Data	(49)	1.67	$59,253
Other General Purpose Machinery Manufacturing	46	Insf. Data	40	13	13	1.43	$61,238
Other Transportation Equipment Manufacturing	36	Insf. Data	31	15	15	9.20	$22,937
Grain and Oilseed Milling	34	10	10	11	12	4.77	$30,082
Household and Institutional Furniture and Kitchen Cabinet Manufacturing	28	(66)	(74)	0	3	0.88	$25,870
Beverage Manufacturing	22	Insf. Data	13	(5)	(5)	0.84	$51,388
Plastics Product Manufacturing	21	Insf. Data	16	(7)	(7)	0.31	$43,259
Printing and Related Support Activities	18	0	1	(6)	(4)	0.31	$37,770
Aerospace Product and Parts Manufacturing	18	Insf. Data	17	2	2	0.30	$59,272
Other Miscellaneous Manufacturing	13	(5)	(6)	Insf. Data	(4)	0.34	$30,278
Coating, Engraving, Heat Treating, and Allied Activities	11	Insf. Data	4	Insf. Data	(3)	0.69	$31,558
Architectural and Structural Metals Manufacturing	11	Insf. Data	5	2	2	0.24	$34,457

Industry	2015 Jobs	'10-'15 Change	CE '10-'15	'15-'20 Change	CE '15-'20	'15 LQ	Average Earnings
Clay Product and Refractory Manufacturing	10	Insf. Data	5	Insf. Data	(2)	1.93	$42,610
Semiconductor and Other Electronic Component Manufacturing	<10	Insf. Data	(0)	Insf. Data	(0)	0.03	Insf. Data
Communications Equipment Manufacturing	<10	Insf. Data	(2)	Insf. Data	(0)	0.07	Insf. Data
Industrial Machinery Manufacturing	<10	Insf. Data	1	Insf. Data	1	0.12	Insf. Data
Other Fabricated Metal Product Manufacturing	<10	Insf. Data	(6)	Insf. Data	1	0.20	Insf. Data

Staffing Patterns for Manufacturing (Top 4-digit SOC)

The largest employing Production related occupations in the county are Miscellaneous Assemblers and Fabricators at 315; followed by Woodworking Machine Setters, Operators, and Tenders at 163; and Cabinetmakers and Bench Carpenters at 135. Despite projected decline in most other fields, these top three occupations are projected to increase in employment.

Occupation	2015 Employment	Change, 2010-2015		Projected Change, 2015-2020		Median Hourly Earnings
Miscellaneous Assemblers and Fabricators	315	102	48%	5	2%	$12.70
Woodworking Machine Setters, Operators, and Tenders	163	(2)	(1%)	16	10%	$13.53
Cabinetmakers and Bench Carpenters	135	5	4%	8	6%	$15.62
Miscellaneous Production Workers	119	17	17%	(26)	(22%)	$11.61
Packaging and Filling Machine Operators and Tenders	99	(3)	(3%)	(15)	(15%)	$16.17
Laborers and Material Movers, Hand	98	(10)	(9%)	(6)	(6%)	$14.24
Driver/Sales Workers and Truck Drivers	61	6	11%	(5)	(8%)	$15.84
Industrial Machinery Installation, Repair, and Maintenance Workers	56	8	17%	(5)	(9%)	$21.71
First-Line Supervisors of Production and Operating Workers	51	2	4%	(1)	(2%)	$22.05
Industrial Truck and Tractor Operators	51	(4)	(7%)	(5)	(10%)	$18.00
General and Operations Managers	35	4	13%	(1)	(3%)	$37.01
Miscellaneous Food Processing Workers	30	(9)	(23%)	(4)	(13%)	$13.25
Maintenance and Repair Workers, General	30	2	7%	(2)	(7%)	$17.75
Sales Representatives, Wholesale and Manufacturing	25	0	0%	0	0%	$25.45
Inspectors, Testers, Sorters, Samplers, and Weighers	23	(1)	(4%)	0	0%	$16.66
Machinists	21	13	163%	1	5%	$19.42
Carpenters	20	0	0%	5	25%	$17.13

Occupation	2015 Employment	Change, 2010-2015		Projected Change, 2015-2020		Median Hourly Earnings
Crushing, Grinding, Polishing, Mixing, and Blending Workers	19	4	27%	0	0%	$13.82
Bookkeeping, Accounting, and Auditing Clerks	17	1	6%	0	0%	$18.21
Industrial Production Managers	17	3	21%	(1)	(6%)	$39.49

Agriculture by Employment – (Top 4-Digit NAICS)

In Tehama County, the top employing industries in the Agriculture sector are Crop Production at 999 jobs; Support Activities for Crop Production at 508 jobs and Animal Production and Aquaculture at 199 jobs. Of the top four, three are expected to grow through 2020, with the exception of Crop Production, which is projected to decline.

Industry	2015 Jobs	'10-'15 Change	CE '10-'15	'15-'20 Change	CE '15-'20	'15 LQ	Average Earnings
Crop Production	999	4	(51)	(19)	(20)	9.71	$32,977
Support Activities for Crop Production	508	87	50	29	1	9.01	$30,773
Animal Production and Aquaculture	199	50	51	3	14	3.81	$25,128
Logging	128	13	16	1	12	14.27	$45,555
Support Activities for Animal Production	22	(2)	(2)	(7)	(7)	4.57	$20,735
Support Activities for Forestry	19	(9)	(10)	(5)	(5)	8.37	$26,489
Fishing	12	Insf. Data	6	4	5	3.08	$7,482
Hunting and Trapping	<10	Insf. Data	(0)	Insf. Data	0	4.48	Insf. Data
Timber Tract Operations	<10	Insf. Data	0	Insf. Data	1	1.27	Insf. Data
Forest Nurseries and Gathering of Forest Products	0	0	0	0	0	0.00	$0

Staffing Patterns for Agriculture (Top 4-digit SOC)

The largest occupations employed within this sector include Miscellaneous Agricultural Workers with 566 jobs; Farmers, Ranchers and Other Agricultural Managers at 148 jobs, and Driver/Sales Workers and Truck Drivers at 32 jobs. Among these top three occupations, none grew between 2010 and 2015.

Occupation	2015 Employment	Change, 2010-2015		Projected Change, 2015-2020		Median Hourly Earnings
Miscellaneous Agricultural Workers	566	0	0%	(14)	(2%)	$10.00
Farmers, Ranchers, and Other Agricultural Managers	148	0	0%	0	0%	$18.46
Driver/Sales Workers and Truck Drivers	32	1	3%	0	0%	$15.84

Occupation	2015 Employment	Change, 2010-2015		Projected Change, 2015-2020		Median Hourly Earnings
First-Line Supervisors of Farming, Fishing, and Forestry Workers	24	0	0%	0	0%	$24.31
Graders and Sorters, Agricultural Products	24	(1)	(4%)	(1)	(4%)	$12.71
Laborers and Material Movers, Hand	21	1	5%	(1)	(5%)	$14.24
Grounds Maintenance Workers	15	0	0%	0	0%	$12.50
Sales Representatives, Wholesale and Manufacturing	10	0	0%	0	0%	$25.45

Tourism[15] by Employment – (4-Digit NAICS)

The vast majority of employment within this industry sector is found within one subsectors: Restaurants and Other Eating Places (986). Over the past five years, this subsector added 67 jobs. The subsector is projected to add another 28 jobs through 2020. However, RV (Recreational Vehicle) Parks and Recreation Camps is projected to add nearly 40 jobs through 2020. RV (Recreational Vehicle) Parks and Recreational Camps) has the highest average earnings ($37,578), while the sector with the lowest is Drinking Places (Alcoholic Beverages) ($9,238).

Industry	2015 Jobs	'10-'15 Change	CE '10-'15	'15-'20 Change	CE '15-'20	'15 LQ	Average Earnings
Restaurants and Other Eating Places	986	67	(96)	28	(39)	0.81	$13,919
Other Amusement and Recreation Industries	125	38	27	16	6	0.79	$16,425
Traveler Accommodation	125	35	28	7	1	0.56	$16,047
RV (Recreational Vehicle) Parks and Recreational Camps	74	51	48	39	35	9.76	$37,578
Special Food Services	48	21	16	14	11	0.52	$21,683
Independent Artists, Writers, and Performers	24	(1)	(3)	0	0	0.66	$10,203
Drinking Places (Alcoholic Beverages)	15	Insf. Data	6	Insf. Data	(5)	0.32	$9,238
Spectator Sports	15	2	0	1	1	0.64	$16,662

Staffing Patterns for Tourism (Top 4-digit SOC)

The majority of employment within this industry sector is found within four occupations that are within the food service industry: Fast Food and Counter Workers (336); Cooks (261); Waiters and Waitresses (177); and Supervisors of Food Preparation and Serving Workers (72). These subsectors also added the

[15] 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).

most jobs over the past five years. Of the four, all but Waiters and Waitresses and are projected to add the greatest number through 2020.

Within this industry sector, General and Operations Managers is the occupation paying the highest median wage at $37.01/hr. The occupation with the lowest median earnings is Dishwashers at $9.64/hr.

Occupation	2015 Employment	Change, 2010-2015		Projected Change, 2015-2020		Median Hourly Earnings
Fast Food and Counter Workers	336	30	10%	46	14%	$9.93
Cooks	261	21	9%	4	2%	$11.22
Waiters and Waitresses	177	22	14%	(12)	(7%)	$9.65
Supervisors of Food Preparation and Serving Workers	72	9	14%	7	10%	$16.27
Food Preparation Workers	48	3	7%	2	4%	$10.50
Building Cleaning Workers	46	8	21%	5	11%	$11.77
Hotel, Motel, and Resort Desk Clerks	46	18	64%	6	13%	$10.78
Cashiers	45	6	15%	4	9%	$9.90
Food Service Managers	45	5	13%	3	7%	$16.04
Dishwashers	42	4	11%	(2)	(5%)	$9.64
Bartenders	36	9	33%	(3)	(8%)	$9.82
Grounds Maintenance Workers	31	16	107%	9	29%	$12.50
Hosts and Hostesses, Restaurant, Lounge, and Coffee Shop	20	2	11%	(2)	(10%)	$9.50
Maintenance and Repair Workers, General	18	8	80%	6	33%	$17.75
Dining Room and Cafeteria Attendants and Bartender Helpers	18	2	13%	(1)	(6%)	$9.67
Recreation and Fitness Workers	15	2	15%	4	27%	$12.26
Miscellaneous Entertainment Attendants and Related Workers	13	4	44%	3	23%	$10.13
Musicians, Singers, and Related Workers	12	2	20%	1	8%	$18.40
General and Operations Managers	11	3	38%	2	18%	$37.01

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), 2016.1 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 2010-2014 Estimates
- U.S. Census OnTheMap

Competitive Effect

Used in conjunction with "Shift-Share Analysis" techniques[16], *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:
[% of total local employment/% 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 provider greater specificity.

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).

[16] 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.

Industry Sector Definitions

Health Care

NAICS	Description
6211	Office of Physicians
6212	Offices of Dentists
6213	Offices of Other Health Practitioners
6214	Outpatient Care Centers
6215	Medical and Diagnostic Laboratories
6216	Home Health Care Services
6219	Other Ambulatory Health Care Services
6221	General Medical and Surgical Hospitals
6222	Psychiatric and Substance Abuse 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
6233	Continuing Care Retirement Communities and Assisted Living Facilities for the Elderly
6239	Other Residential Care Facilities
6241	Individual and Family Services
6242	Community Food and Housing, and Emergency and Other Relief Services
6243	Vocational Rehabilitation Services
6244	Child Care Services

Manufacturing

NAICS	Description
3111	Animal Food Manufacturing
3112	Grain and Oilseed Milling
3114	Fruit and Vegetable Preserving and Specialty Food Manufacturing
3115	Dairy Product Manufacturing
3116	Animal Slaughtering and Processing
3118	Bakeries and Tortilla Manufacturing
3119	Other Food Manufacturing
3121	Beverage Manufacturing
3149	Other Textile Product Mills
3152	Cut and Sew Apparel 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

NAICS	Description
3222	Converted Paper Product Manufacturing
3231	Printing and Related Support Activities
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
3271	Clay Product and Refractory Manufacturing
3272	Glass and Glass Product Manufacturing
3273	Cement and Concrete Product Manufacturing
3279	Other Nonmetallic Mineral Product Manufacturing
3313	Alumina and Aluminum Production and Processing
3321	Forging and Stamping
3322	Cutlery and Handtool Manufacturing
3323	Architectural and Structural Metals Manufacturing
3324	Boiler, Tank, and Shipping Container Manufacturing
3325	Hardware 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
3331	Agriculture, Construction, and Mining Machinery Manufacturing
3332	Industrial Machinery Manufacturing
3333	Commercial and Service Industry Machinery Manufacturing
3334	Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing
3335	Metalworking Machinery Manufacturing
3339	Other General Purpose Machinery Manufacturing
3341	Computer and Peripheral Equipment Manufacturing
3342	Communications Equipment Manufacturing
3344	Semiconductor and Other Electronic Component Manufacturing
3345	Navigational, Measuring, Electromedical, and Control Instruments Manufacturing
3346	Manufacturing and Reproducing Magnetic and Optical Media
3351	Electric Lighting Equipment Manufacturing
3352	Household Appliance Manufacturing
3353	Electrical Equipment Manufacturing
3362	Motor Vehicle Body and Trailer Manufacturing
3363	Motor Vehicle Parts Manufacturing
3364	Aerospace Product and Parts Manufacturing
3366	Ship and Boat Building
3369	Other Transportation Equipment Manufacturing
3371	Household and Institutional Furniture and Kitchen Cabinet Manufacturing
3372	Office Furniture (including Fixtures) Manufacturing
3391	Medical Equipment and Supplies Manufacturing
3399	Other Miscellaneous Manufacturing

Agriculture

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

Tourism

NAICS	Description
4871	Scenic and Sightseeing Transportation, Land
4872	Scenic and Sightseeing Transportation, Water
4879	Scenic and Sightseeing Transportation, Other
5615	Travel Arrangement and Reservation Services
5619	Other Support Services
7111	Performing Arts Companies
7112	Spectator Sports
7113	Promoters of Performing Arts, Sports, and Similar Events
7114	Agents and Managers for Artists, Athletes, Entertainers, and Other Public Figures
7115	Independent Artists, Writers, and Performers
7121	Museums, Historical Sites, and Similar Institutions
7131	Amusement Parks and Arcades
7132	Gambling Industries
7139	Other Amusement and Recreation Industries
7211	Traveler Accommodation
7212	RV (Recreational Vehicle) Parks and Recreational Camps
7213	Rooming and Boarding Houses
7223	Special Food Services
7224	Drinking Places (Alcoholic Beverages)
7225	Restaurants and Other Eating Places

Tehama County Input Session Takeaways

- Tehama County is situated on a major transportation corridor and between two larger population centers in the region, both of which provide economic opportunities and a larger talent pool to draw from. This also can be a challenge, as wages are higher in the nearby cities, and many workers are not opposed to commuting these distances for higher pay.
- There are currently efforts in the county, such as Expect More Tehama, to encourage collaboration among local organization and break down silos in services. These efforts should be continued and expanded as much as possible to maximize the diminishing resources of many organizations.
- There are a lot of personal relationships among community partners that help to spread information, but there needs to be a greater focus on sharing this information more widely and in a more sustainable way. This is true for programs and resources to support businesses and community members as well as events and other opportunities that contribute to the high quality of life in the area.
- The need for bilingual employees was also expressed. Many employers within the Health Care and Agriculture sectors indicated a preference for hiring employers who are bilingual.
- Participants recognized that as unemployment has decreased, employers have had to reach out and consider new populations to fill positions, specifically including ex-offenders. Many employers do not have full information to make them consider this population. Services to help employers understand and find creative solutions to mitigate the risks and concerns that they have would be very helpful.

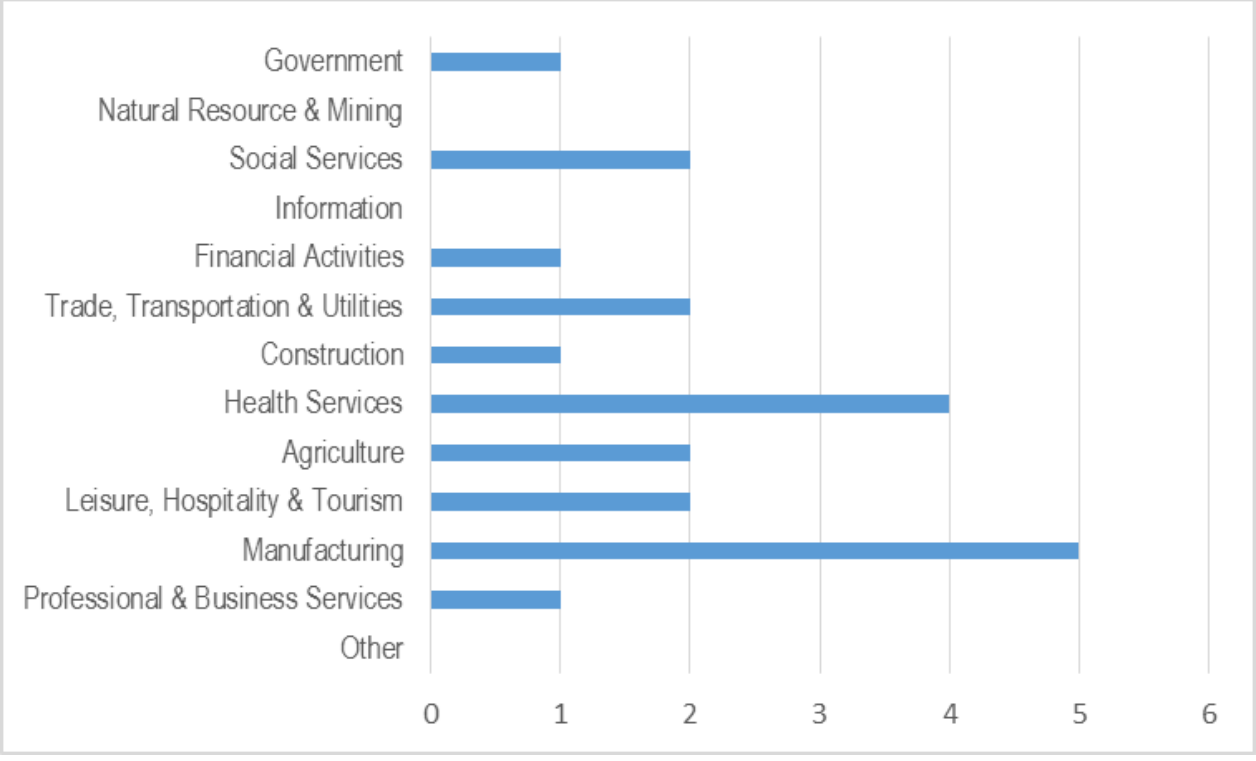
Tehama County Survey Response

TPMA developed a survey designed to engage county employers and to better understand current workforce trends and needs in the Tehama County region. In doing so, our consulting team collaborated with NoRTEC and its service providers, which included a diverse group of workforce development, economic development, and other community organizations. Over a four-month period the survey was distributed via email and completed through face-to-face meetings with employers. Survey questions were focused on the following topics:

- Industry and business demographics;
- Employment numbers and projections;
- Labor market "churn";
- Skill needs and gaps;
- Education and training requirements;
- Desired industry recognized credentials; and
- Training challenges.

There were 25 employers who participated in the survey. The following includes a summary, analysis and key findings.

Which industry best describes your company?



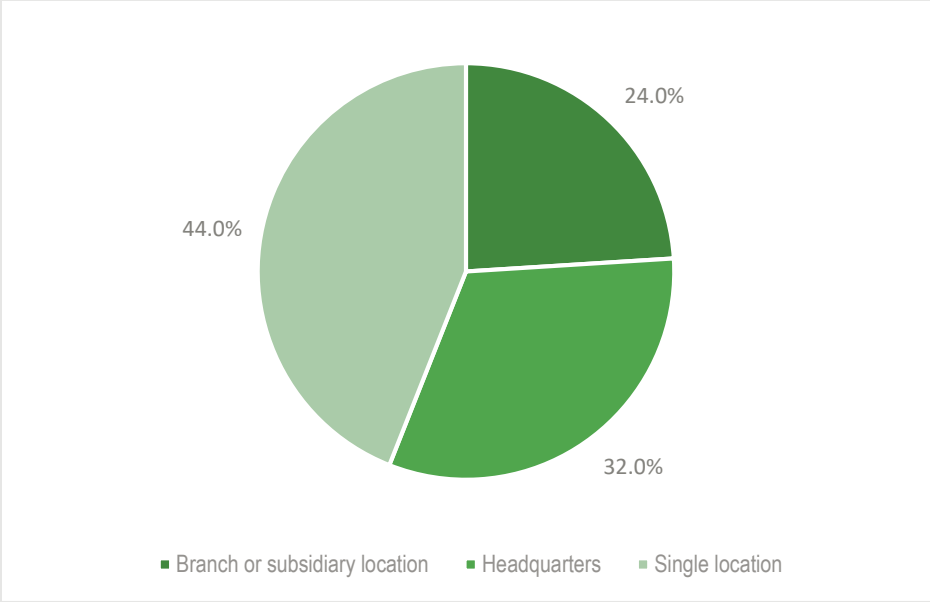
How many employees do you have?

Number of employees	Average
Total	112
Full-time	94
Part-time	20
Seasonal	41
Temp	4

How many total employees do you have by county?

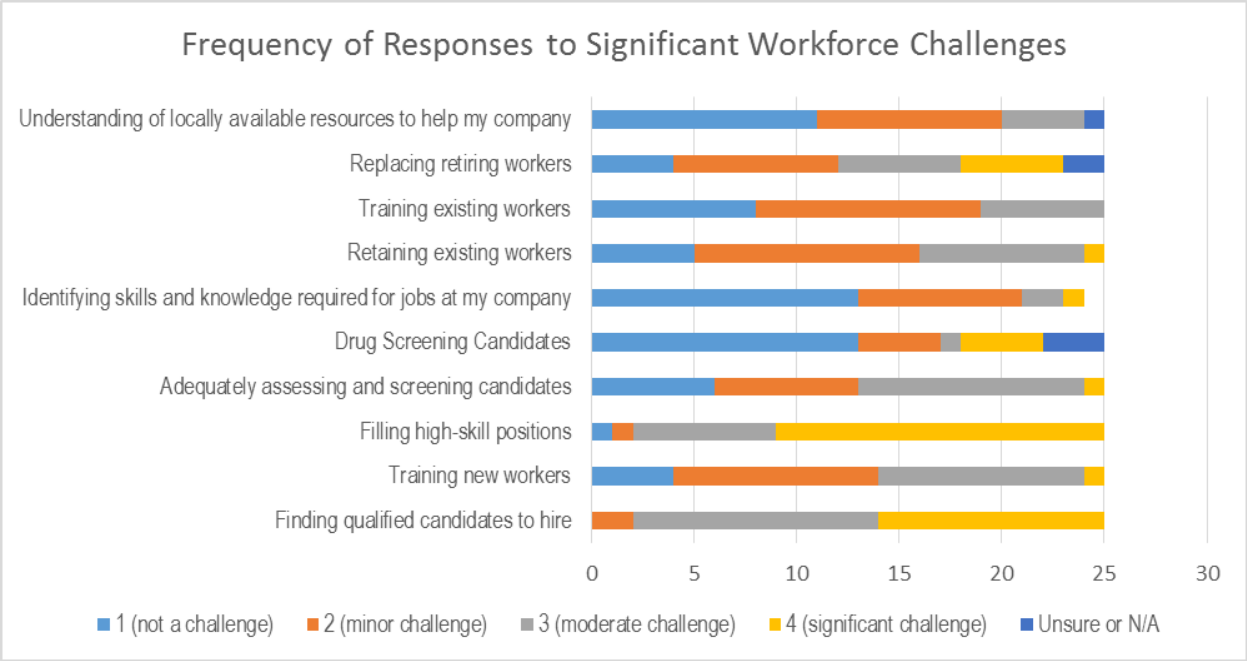
County	Average
Butte	24
Del Norte	0
Lassen	17
Modoc	0
Nevada	0
Plumas	0
Shasta	27
Sierra	0
Siskiyou	0
Tehama	86
Trinity	0

Which best describes this location?



On a scale of 1 {not a challenge} to 4 {significant challenge}, how challenging are the following workforce issues for your company?

Workforce Issues	1 (not a challenge)	2 (minor challenge)	3 (moderate challenge)	4 (significant challenge)	Unsure or N/A
Finding qualified candidates to hire	0	2	12	11	0
Training new workers	4	10	10	1	0
Filling high-skill positions	1	1	7	16	0
Adequately assessing and screening candidates	6	7	11	1	0
Drug Screening Candidates	13	4	1	4	3
Identifying skills and knowledge required for jobs at my company	13	8	2	1	0
Retaining existing workers	5	11	8	1	0
Training existing workers	8	11	6	0	0
Replacing retiring workers	4	8	6	5	2
Understanding of locally available resources to help my company	11	9	4	0	1
Determining competitive wage levels to attract workers	8	13	1	3	0



Top Five Most Challenging Workforce Issues from Above

Top Five Challenges	Responded "Moderate Challenge" or higher
Finding qualified candidates to hire	23
Filling high-skill positions	23
Adequately assessing and screening candidates	12
Replacing retiring workers	11
Training new workers	11

What is your most significant workforce-related challenge or your greatest workforce need?

Challenge	Top Responses
Finding qualified workers	15
Finding workers with soft skills (attendance, work ethic, people skills)	5
Trying to pay a competitive wage	2
Finding candidates who are willing to work PT or seasonal	2
Finding candidates with basic computer skills	1

What is the average vacancy length for open positions?

The average length based on all responses is 7.3 weeks.

How many full-time (35+ hours/week) new, replacement, and retiring workers do you expect within the next 0 to 12 months, 1 to 2 years, 3 to 4 years, and 5 to 7 years?

Number of new positions	Average	Range
0-12 months	1.7	1-2
1 - 2 years	1.9	1-2
3 - 4 years	1.8	1-2
5 - 7 years	2.0	2

Number of replacement positions	Average	Range
0-12 months	4.3	1
1 - 2 years	3.9	3-4
3 - 4 years	4.2	4
5 - 7 years	4.2	4

Number of retiring positions	Average	Range
0-12 months	2.0	2
1 - 2 years	2.1	2
3 - 4 years	2.2	2
5 - 7 years	2.5	2-3

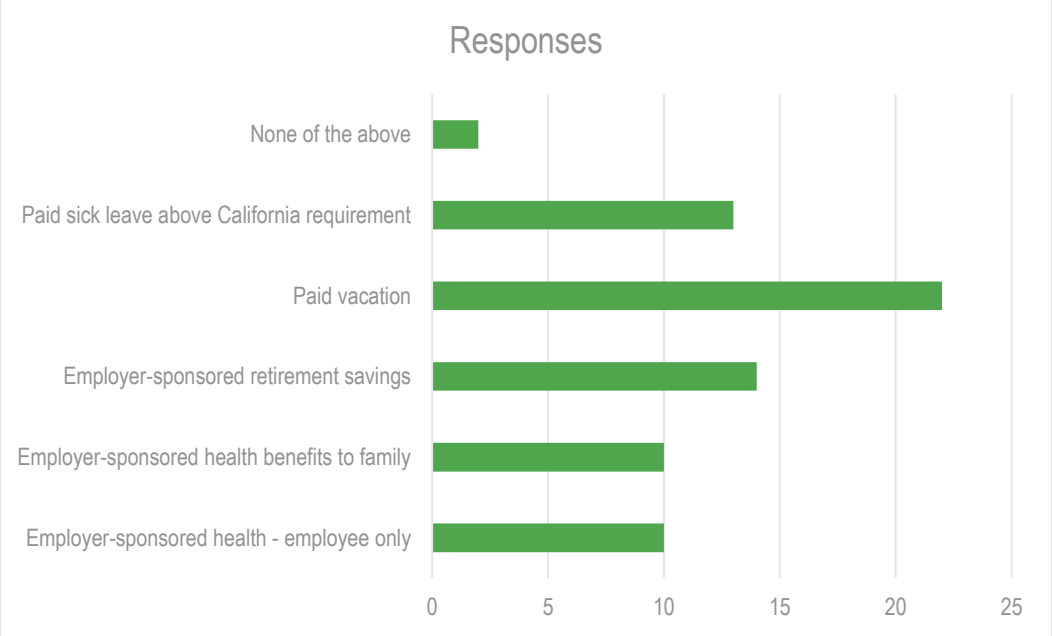
Please provide information regarding your current wages for up to 3 of your top full-time occupations by number of employees.

Top Occupation #1
Title: Technicians
Job Description: HVAC, electrician, welder
Average number of jobs at location: 5-6
Desired/required certificates/credentials: Certificate/license in specialty; previous work experience; HS diploma preferred
Average entry level: $15.02
Average mid-level: $17.38
Average advanced-level: $21.14

Top Occupation #2
Title: Administrative Positions
Job Description: Office and administrative tasks; working front desk; answering phones
Average number of jobs at location: 9-10
Desired/required certificates/credentials: HS diploma or AA preferred; typing skills; previous office experience
Average entry level: $14.27
Average mid-level: $15.15
Average advanced-level: $20.72

Top Occupation #3
Title: Entry-level workers
Job Description: Entry-level; often physical labor (cleaning, food service, customer service)
Average number of jobs at location: 23
Desired/required certificates/credentials: None, HS diploma preferred
Average entry level: $11.55
Average mid-level: $12.00
Average advanced-level: $14.75

Do you provide any of the following health benefits?



Most difficult to fill positions and why

Position	Reason	Responses
High-skilled technical positions	Finding qualified candidates	6
Medical positions	Hard to find candidates for licensed positions	4
Administrative positions	Require math skills and computer expertise	3
Cooks	Lack of qualified candidates	2

Please provide information for your most difficult to fill full-time occupations

Title: Technicians

Brief job description: Welders, equipment operators, machinists, HVAC, millwrights

Number of current openings: 29

Desired or required certificates or credentials (if any): N/A

Hourly/annual wage ($) $19.95

Title: Medical positions (primarily nurses and MAs)

Brief job description: Working with clients in a variety of settings/divisions

Number of current openings: 33

Desired or required certificates or credentials (if any): State license and required education

Hourly/annual wage ($) $40.333

Title: Therapists and social workers

Brief job description: Provides individual and group mental health care; connects eligible recipients to services

Number of current openings: 16

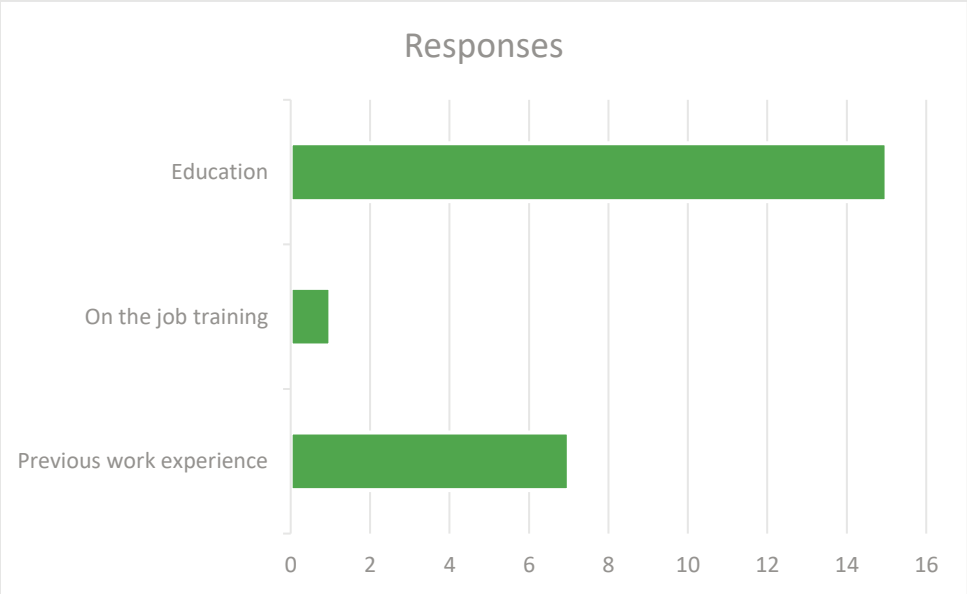
Desired or required certificates or credentials (if any): BSW and state license, MSW preferred

Hourly/annual wage ($): $20.85

What are the factors that most impact difficult to fill positions?

Factors	Responses
Lack of qualified candidates, generally	11
Rural location	4
Lack of soft skills	3
Low wages	3
Lack of previous work experience	2
Lack of candidates for positions requiring high skill/education level	1
Retaining existing employees	1
Undesirable work schedule	1

What do you look for most from candidates in difficult-to-fill positions?



What other {if any} skills and/or experience levels are currently in greatest demand?

Top Responses	Responses
Soft skills	19
Customer service experience	8
Basic math skills	2
Computer skills	2
Experience working with victims of domestic violence	1
Experience working with a county entity	1
Seasonal employees	1
SolidWorks design knowledge	1
Understanding of LEAN manufacturing	1
Knowledge of electronic medical records	1
Instrumentation operators	1

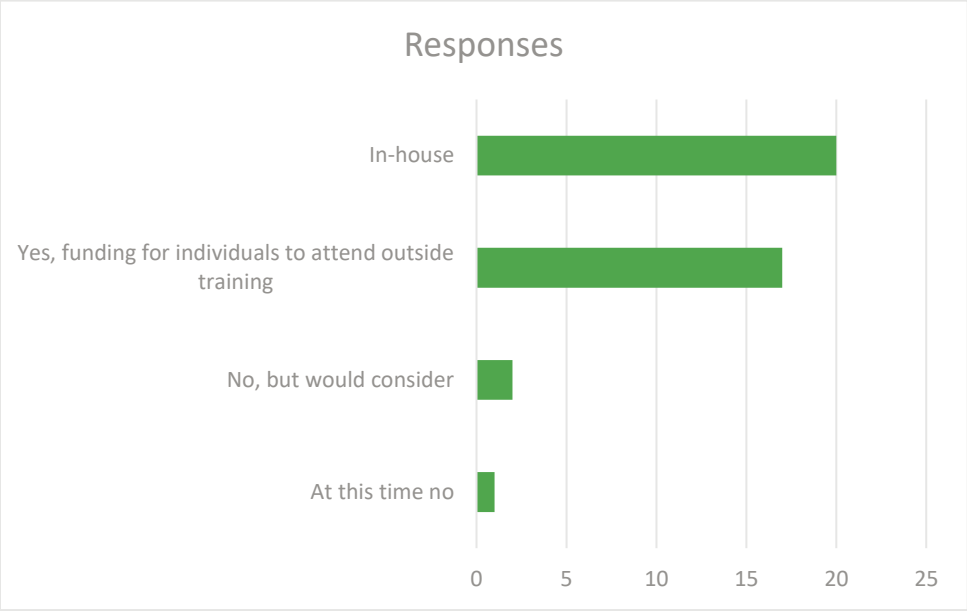
What other {if any} skills and/or experience levels are most difficult to find?

Top Responses	Responses
Work ethic/soft skills	3
Basic math skills	2
Drug free	1
Electricians	1
Masters-level social workers	1
Environmental safety	1

What industry-recognized credentials, certifications and/or degrees do you value most?

Top Responses	Responses
College degree	3
RN edu/license	3
Food handling card	2
Medical assistance edu/license	2
MSW, LSW, LCSW and corresponding license	2
ASE certification	1
Doctor of Chiropractic	1
Electrician certification	1
High school diploma	1
HVAC certification	1
Welding certification	1
CA insurance licenses	1
PLC	1

Do you offer training or other professional development, above and beyond initial on-the-job training?



How do you rate the following?

Top Responses	Excellent	Good	Poor	Fair	Unsure
Soft skills of workers	5	11	0	8	1
Hard/technical skills of workers	4	16	0	3	2
Overall quality of entry-level workers	1	13	1	10	0
Overall quality of high-skill workers	8	13	0	2	2
Quality of education and training programs	4	11	0	5	5
Knowledge of available services from America's Job Center of California (e.g. assistance with job ads)	6	15	1	3	0

Which of the following best describes your experience with your local America's Job Center of California office and/or business service center?

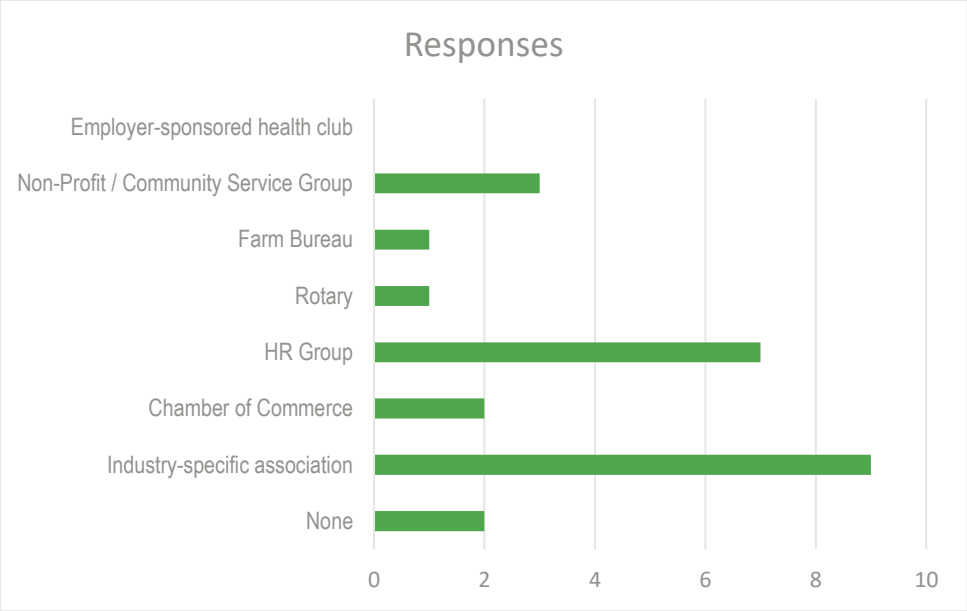
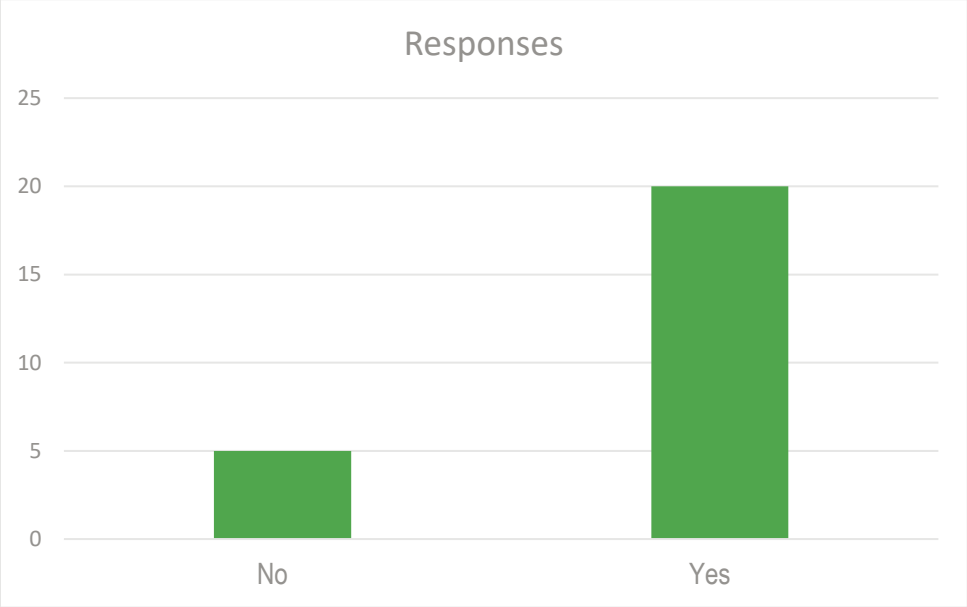
If utilized, if you could improve one thing about your local America's Job Center in California office and/or business service center, what would it be?

Top Responses	Responses
Communication with employers	1
More options for local training	1
Individual business consulting	1
More English and math assistance	1
More advertisement	1
More applications	1

Would you like to learn more about any of the following services to strengthen your business?

Services	Responses
Employee recruitment	11
Employer professional development seminars	11
Labor market information, wage data	9
Other training resources	9
Candidate screening/assessment	8
On-the-Job Training (OJT)	8
Employee education	7
Assistance with employee retention	6
Benefits of hiring a veteran	6
Tax credit information	6
Pre-employment testing	5
Job analysis and profiling information	3
On-site assistance for business downsizing	1
Hiring ex-offenders (a second chance)	0

What business or trade groups do you currently participate in?



If you do not participate, would you be open to a member of our staff contacting you to participate in a local business group that focuses on tackling the most pressing workforce and business growth issues?