



CENTERS OF EXCELLENCE
FOR LABOR MARKET RESEARCH

NEVADA COUNTY ECONOMIC AND WORKFORCE OPPORTUNITY PROFILE



March 2020

Prepared by the North/Far North
Center of Excellence

Aaron Wilcher
Wen Sun
Ebony Benzing



TABLE OF CONTENTS

Executive Summary	3
Introduction.....	4
Methodology	5
Population	6
Labor Force and Unemployment.....	7
Demographics.....	8
Commuting Patterns	12
County-to-County Migration.....	14
Industry Profiles.....	16
Occupational Profile	22
Sierra College Career Education Awards.....	26
Findings and Conclusion	30
Recommendations	32
Appendix A: Nevada County Industry Sector Data Overview	34
Appendix B: Employment Data for Truckee, Nevada City, and Grass Valley.....	35
Appendix C: Small Business and Priority Sectors.....	36
Appendix D: Detailed Industries and Establishments in the Eight Priority Sectors	37
Appendix E: Occupational Profiles, Placer County and Washoe County.....	43

EXECUTIVE SUMMARY

The North/Far North Center of Excellence was asked by the Nevada County Economic Resource Council and Sierra College to conduct a regional economic and workforce assessment with recommendations on priority investment areas. Through an industry analysis, eight priority industry sectors were identified for economic and workforce development: health care; construction; manufacturing; utilities; professional, scientific, and technical services; information; accommodation and food services; and arts, entertainment, and recreation.

Overall job growth in the county is stagnant. Health care, and accommodations and food services are the only sectors demonstrating significant growth. These sectors warrant attention for workforce development opportunities to meet hiring needs. But four sectors have lost significant shares of jobs in the last 10 years: manufacturing; professional, scientific, and technical services; information; and arts, entertainment, and recreation.

The analysis also examined middle-skill jobs (those requiring less than a bachelor's degree) and above-middle-skill jobs (those requiring a bachelor's degree or higher). Several areas present potential opportunities for workforce program development and pathway development where occupational projections show demand. These include maintenance and repair, construction, education, administration, and management.

The study examined several other measures critical to the health of the overall economy:

Demographics—Nevada County has a much higher share of people aged 55 and older compared to the state, with about half of the county's population in this category. By contrast, a quarter of the state's population is in this category. The findings indicate a retention challenge for the county, since it appears working age adults are leaving in search of better prospects elsewhere.

Commuting patterns—In Nevada County, there is a daily net loss of workers (leakage). About 6,600 more workers leave the county daily than enter it. Locations in Placer County and Greater Sacramento account for much of this net pull. Nevada City/Grass Valley has a daily net gain 7,589 workers. Truckee experiences a daily net loss of 713 workers but has roughly the same number of inbound commuters as outbound commuters.

County-to-county migration—Most new residents are moving from Placer County, Contra Costa County, and San Mateo County. Residents leaving the county are moving to Placer County, Washoe County in Nevada, and Sacramento County.

Wages—Three industries have the highest annual wages in the county: utilities; professional, scientific, and consulting services; and manufacturing. But the analysis shows several industries have low average annual wages compared to the rest of California, and workers are probably leaving the county in search of higher wages, or due to industry declines.

Career education awards—The analysis also examined program offerings through Sierra College and its satellite campuses. On average each year, just less than one out of 10 career education degrees and certificates are conferred by the college to residents of Nevada County. Overall, there is substantial alignment between program assets, occupational demand areas, and priority industry sectors identified in the research.



Truckee, CA, by Don Graham is licensed under [CC BY-ND 2.0](https://creativecommons.org/licenses/by-nd/2.0/).

INTRODUCTION

Sandwiched between two major metropolitan areas—California’s state capitol, Sacramento, and the booming tech hub Reno, Nevada—Nevada County has much to offer. The county is rich in history and home to spectacular natural beauty. It also boasts a vibrant creative community, a burgeoning food scene, and is a stalwart destination for outdoor enthusiasts in all seasons.

Anchored by the population centers of Nevada City and Grass Valley to the west, and Truckee to the east, the county’s arts, entertainment, and tourism sector draws thousands of visitors to the area and offers quality-of-life amenities for residents. The county has two of the state’s 14 cultural districts—Truckee and Grass Valley/Nevada City—and hosts numerous arts and music festivals each year. Recreation opportunities abound, from skiing and mountain biking to fishing and other mountain activities. The county also has local access to services, including two major hospitals.

The county possesses a number of vital economic and workforce development assets. The Northern Rural Training and Employment Consortium (NoRTEC) supports county services for job seekers. Business leadership organizations including the Sierra Business Council, Valley Vision, and local chambers of commerce offer important resources to the county and region. The Nevada County Economic Resource Council (NCERC) supports tourism and business attraction efforts, and the Nevada County Tech Connection (NCTC) is working to boost entrepreneurship and innovation. Based in Rocklin, Sierra College has two satellite campuses in the county—the Nevada County Campus in Grass Valley and the Truckee-Tahoe Campus in Truckee.

Like other rural areas of California, however, the county faces a number of challenges. The county’s population is in no-growth mode. It is shedding working-age adults who appear to be leaving the county for job prospects elsewhere that offer higher wages. Another factor contributing to population loss appears to be industry contraction in the county’s basic industries. For example, several industry sectors with high job concentrations demonstrate a concerning trend. Four sectors have lost significant shares of jobs in the last 10 years: manufacturing; professional, scientific, and technical consulting services; information; and arts, entertainment, and recreation. The county’s overall population, however, has remained stable due to an influx of retirement-age residents.

Given the opportunities and challenges facing the county, the Nevada County Economic Resource Council and Sierra College asked the North/Far North Center of Excellence to conduct a regional economic and workforce assessment and provide recommendations on priority investment areas. The analysis in this report incorporates important measures that contribute to the overall health of a regional economy—population demographics, commuting patterns, the expansion or contraction of key industry sectors, in-demand occupations, and education and training assets. A summary of the study’s main findings and strategies for strategic planning and workforce investment can be found at the end of the report.



METHODOLOGY

This report incorporates common measures for analyzing regional economic and workforce needs including population and demographics, commuting and migration patterns, industry sectors, occupations, and educational and training assets.

Population and demographics

The research uses population data from the California Department of Finance, and demographic data using 1-year estimates from the U.S. Census Bureau's American Community Survey (ACS), which provides statistics on race, ethnicity, age, gender, and educational attainment.

Labor force and unemployment

Labor force and unemployment data is derived from the California Employment Development Department's Labor Market Information Division (LMID).

Commuting and migration patterns

This report's analysis of commuting and migration describes movement to and from towns/cities in Nevada County, and from Nevada County to other locations in Northern California and Nevada. The U.S. Census Bureau's Longitudinal Household Dynamics Program (LEHD) Origin-Destination Employment Statistics OntheMap tool serves as the basis for the commuting analysis. The American Community Survey's county-to-county migration patterns reflect trends over a multi-year period.

Industry and establishments

The report's industry and wage analysis uses the Quarterly Census of Employment and Wages (QCEW) from the Bureau of Labor Statistics (BLS). The LEHD OntheMap tool was used to look at industry sector concentrations in major cities/towns and census-designated places, population concentrations identified by the Census Bureau for statistical purposes. The North/Far North Center of Excellence uses the workforce/economic development platform EconoVue to access Dun & Bradstreet data on significant employers. The data was used to analyze business size and how employment is distributed among large and small employers. Detailed industry sector analysis for Nevada County can be found in Appendix A, and industry sector employment data for Nevada City, Truckee, and Grass Valley is in Appendix B. Appendix C discusses how jobs are concentrated among a handful of large employers in the county with a detailed list of companies by industry in Appendix D.

Occupations

Emsi modeling software was used to analyze occupations and wages. Occupational data is not typically available for rural counties from the BLS and the California Employment Development Department. However, Emsi software enables estimates for Nevada County. Appendix E provides an occupational analysis for Washoe County and Placer County.

Education and training programs

The research team conducted several interviews and web searches for a qualitative inventory of educational and training programs at Sierra College. The California Community Colleges Chancellor's Office Management and Information Systems (MIS) Data Mart was the source of quantitative data on Sierra College awards (degrees and certificates). The Office of Institutional Research at Sierra College provided data on student awards by ZIP code for analysis of Nevada County residents who have been enrolled in programs or who have completed programs through the college.

POPULATION

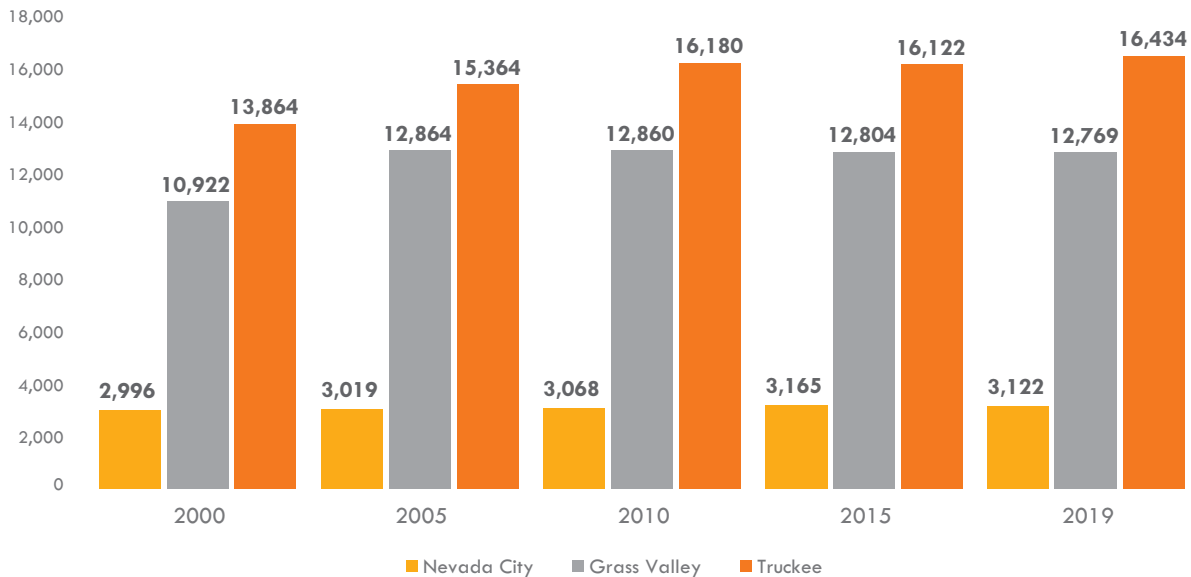
Nevada County's population trend was flat over the last decade (no growth), compared to a 7% increase in the period 2000 to 2010 (Exhibit 1). Most of the population changes derive from the three largest cities in the county. Truckee and Grass Valley grew by nearly 20% during the 2000s but flattened in the following decade. Nevada County experienced a low growth rate, 2% in the last 20 years.

Exhibit 1. Historical population change, Nevada County and major cities/towns, 2000-2019¹

Location	2000	2005	2010	2015	2019	2000-2010 # change	2010-19 # change	2000-2010 % change	2010-2019 % change
Grass Valley	10,922	12,864	12,860	12,804	12,769	1,938	(91)	18%	(1%)
Nevada City	2,996	3,019	3,068	3,165	3,122	72	54	2%	2%
Truckee	13,864	15,364	16,180	16,122	16,434	2,316	254	17%	2%
Nevada County	92,033	97,454	98,764	98,448	98,904	6,731	140	7%	0%

Population growth in Truckee and Grass Valley was most substantial between 2000 and 2005. Truckee remained in slow growth mode for the next 15 years, while Grass Valley's growth flattened. Nevada City's population size has remained small but added some residents over the last 20 years (Exhibit 2).

Exhibit 2. Historical population change in Nevada City, Grass Valley, and Truckee, 2000-2019²



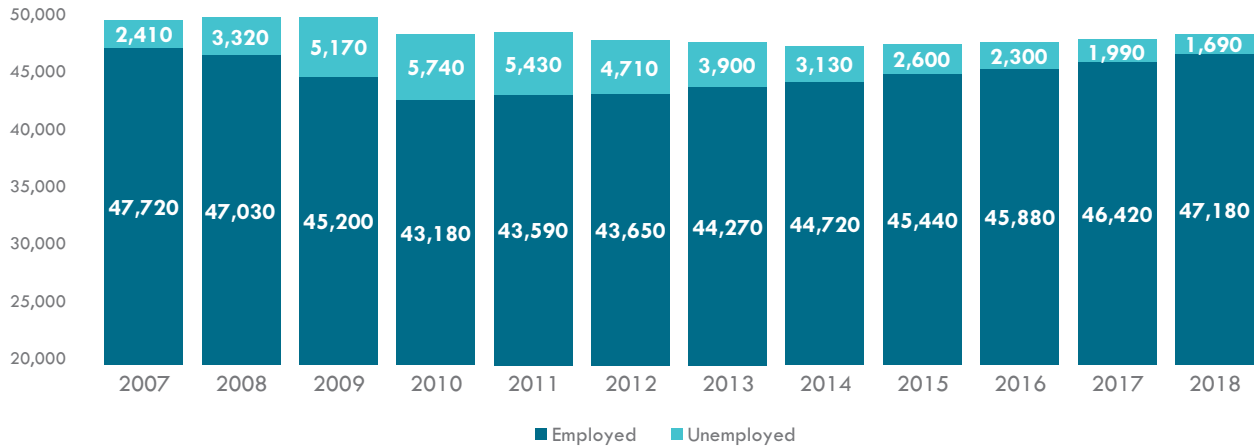
¹ State of California Department of Finance Demographics Forecasting, accessed November 26, 2019, <http://dof.ca.gov/Forecasting/>.

² Ibid.

LABOR FORCE AND UNEMPLOYMENT

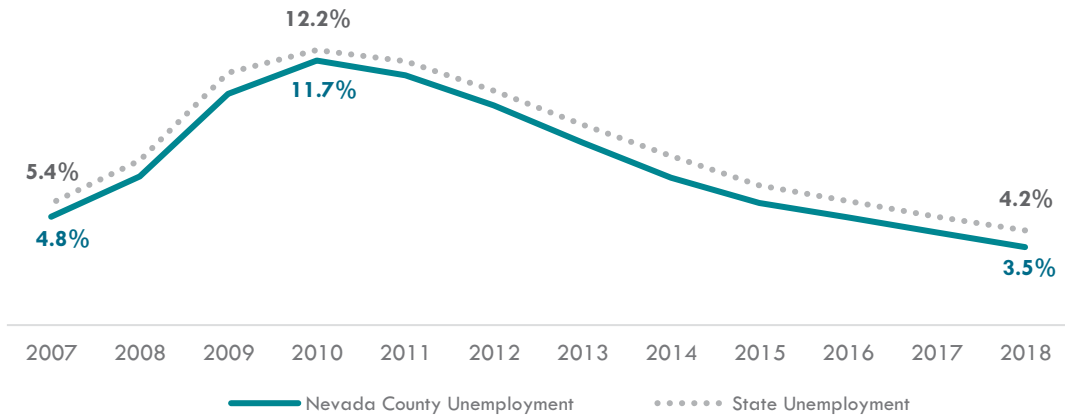
Labor force figures represent the number of workers who are employed and those who are unemployed in Nevada County. The recession doubled the number of unemployed workers in Nevada County, but the county's current unemployment numbers are lower than before the recession (Exhibit 3). In 2018, the county's overall labor force had nearly 49,000 workers, a decline of 3% from a 10-year peak of 50,400 workers in 2009.

Exhibit 3. Nevada County labor force, employed and unemployed, 2007-2018³



Unemployment rates in Nevada County are consistently lower than the state (Exhibit 4). County unemployment (annual rate) peaked at 11.7% in 2010. Both county and state unemployment rates are below pre-recession levels. The county rate in 2018 was 3.5%.

Exhibit 4. Nevada County's unemployment rate compared to the state⁴



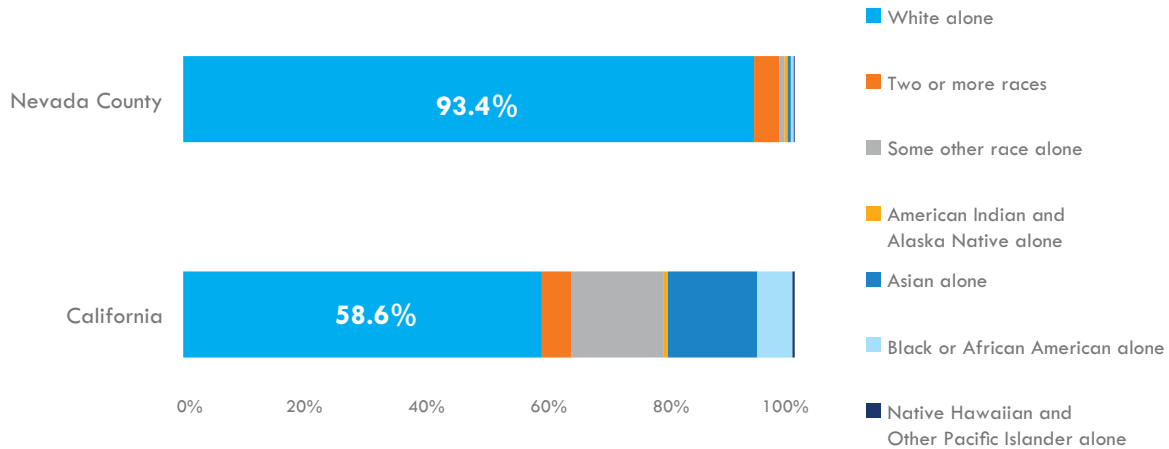
³ Employment Development Department (EDD), Labor Market Information Division (LMID), Unemployment and Labor Force statistics. <https://www.labormarketinfo.edd.ca.gov/data/unemployment-and-labor-force.html>

⁴ Ibid.

DEMOGRAPHICS

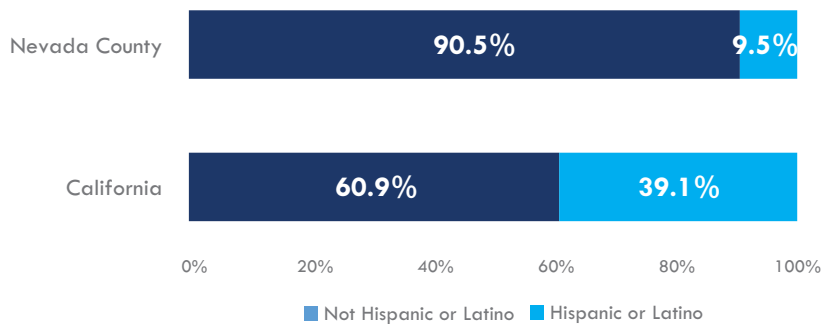
Nevada County has a demographic profile that is much less diverse than the state. Regarding measures of race from the U.S. Census Bureau, 93% of Nevada County residents identify as white alone (Exhibit 5). Residents comprising the second largest segment identify as two or more races, 4%. All other categories measure less than 1%. By contrast, 59% of California residents identify as white alone, and the state has significant population shares in several other categories.

Exhibit 5. Racial demographics, Nevada County and California, 2017⁵



The U.S. Census Bureau’s ethnicity measure compares two categories: “Hispanic or Latino” and “Not Hispanic or Latino.” Nearly 10% of Nevada County residents identify as Hispanic or Latino, compared to 39% in the state (Exhibit 6).

Exhibit 6. Ethnicity demographics, Nevada County and California, 2017⁶

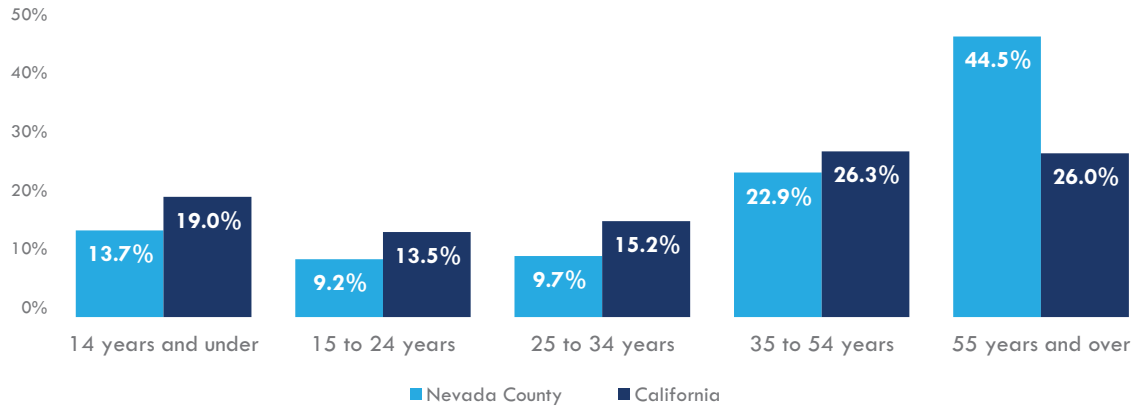


⁵ U.S. Census Bureau, 2017 American Community Survey 1-Year Estimates.

⁶ Ibid.

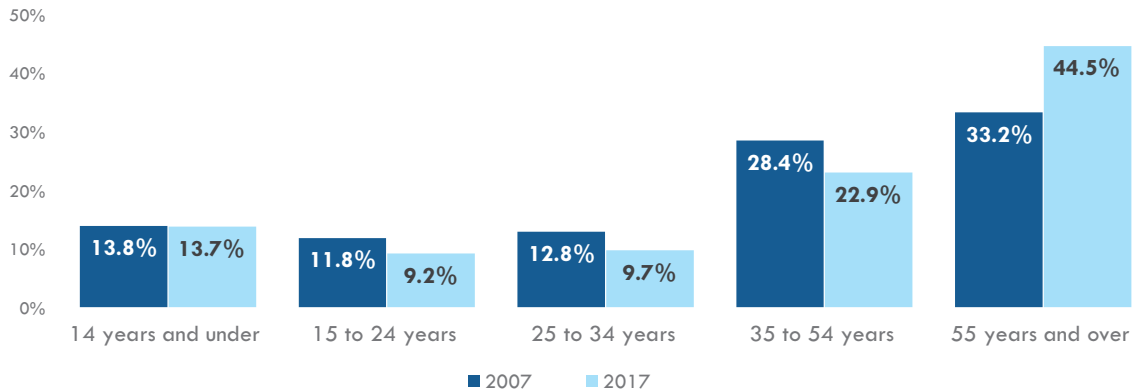
Nevada County has a much higher share of people aged 55 and older compared to the state (Exhibit 7). Nearly half of the county’s population fits into the age category of 55 and older. By contrast, a quarter of the state’s population is in this category. The county has lower population shares in every other category. The difference is notable in the 25-to-34 age category which totals 9.7% in Nevada County compared to 15.2% in the state, a 5% difference.

Exhibit 7. Age demographics, Nevada County and California, 2017⁷



Nevada County appears to be aging. In the 10-year period between 2007 and 2017, the share of people aged 55 and older in Nevada County increased by 11 percentage points, from 33.2% to 44.5% (Exhibit 8). Every other age category shrank during the same time period, except the 14-and-under category. The data indicates that many families with minor children have stayed in the county but working age adults are leaving.

Exhibit 8. Age demographics, Nevada County, 2007-2017⁸

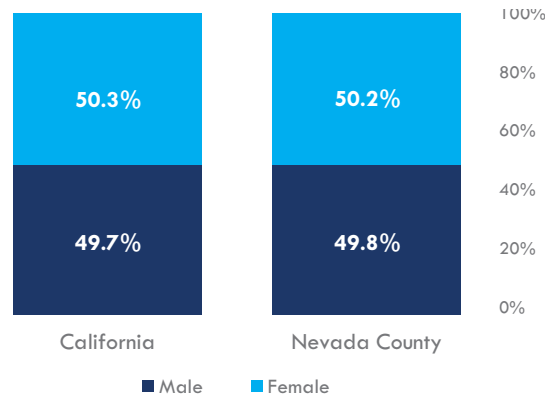


⁷ Ibid.

⁸ Ibid.

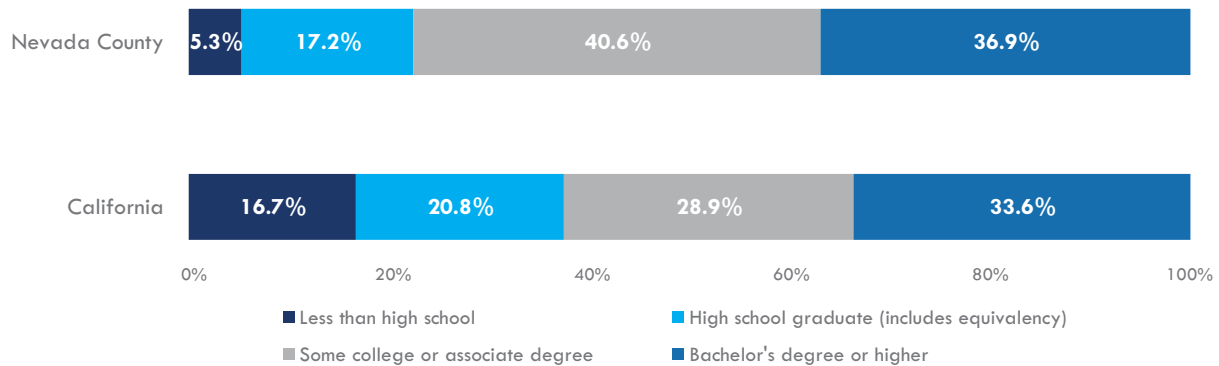
Nevada County’s gender demographics are equivalent to the state. The population is equally divided between men and women (Exhibit 9).

Exhibit 9. Gender demographics, Nevada County, 2017⁹



Nevada County has a higher share of residents who possess a bachelor’s degree or advanced degree, 37%, compared to California, 34% (Exhibit 10). The difference is marked, more than 10 percentage points higher, for residents who have completed some college or an associate degree in the county compared to the state: 41% in Nevada County versus 29% in the state.

Exhibit 10. Educational attainment, Nevada County and California, population aged 25 and over, 2017¹⁰

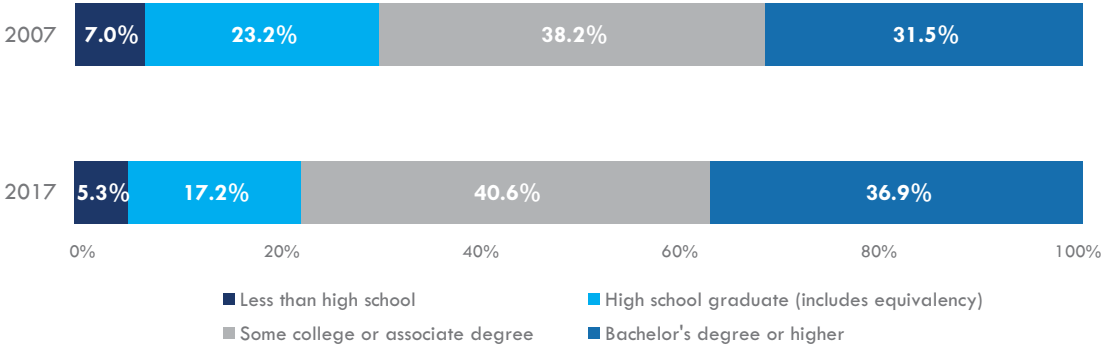


⁹ Ibid.

¹⁰ Ibid.

The county's population is becoming more educated. Between 2007 and 2017, the share of Nevada County's population possessing a bachelor's degree or advanced degree increased by 5%, from 31.5% to 36.9% (Exhibit 11). The share with some college or an associate degree increased by more than 2%, from 38.2% to 40.6%.

Exhibit 11. Educational attainment, Nevada County, population aged 25 years and over, 2007-2017¹¹



¹¹ Ibid.

COMMUTING PATTERNS

Analysis of commuting patterns in three geographies—Nevada County, Truckee, and Nevada City/Grass Valley—employed the U.S. Census Longitudinal Employer-Household Dynamics (LEHD) OntheMap tool. The analysis explores the following:

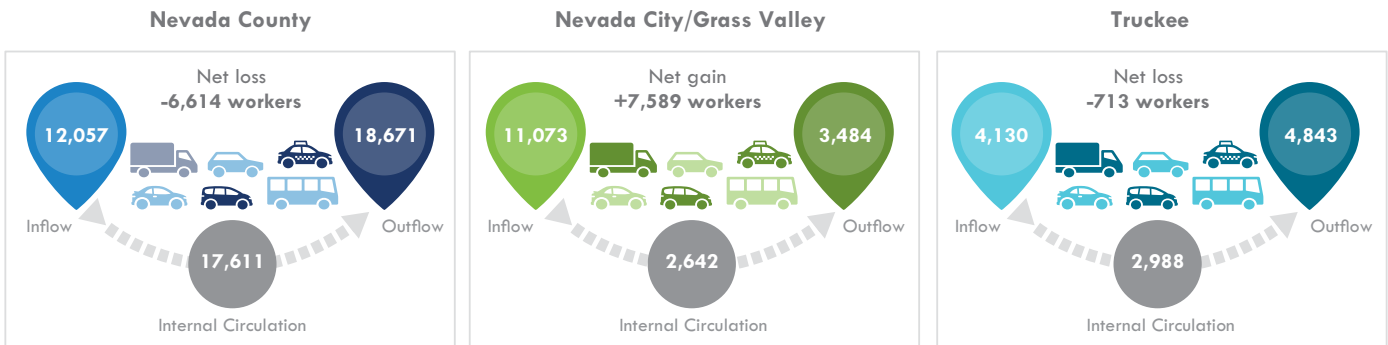
- Inflow, outflow, and local circulation
- Top places of origin for incoming workers
- Top destinations for outgoing workers

Inflow-and-outflow analysis provides estimates for daily commuting, comparing the number of workers entering a geography from outside and the number who leave a geography to work elsewhere. Analysis also provides details on the number of workers who live and work in a geography, referred to as “internal circulation,” which is shown in Exhibit 12.

This type of analysis helps to define regions for workforce and economic development planning and investment:

- The net loss of workers indicates leakage and an opportunity to capture workers locally with new business activity.
- Importing workers (net gains) could indicate opportunities to upskill the local workforce for local jobs.

Exhibit 12. Top origins and destinations in Nevada County, Nevada City/Grass Valley, and Truckee¹²



Nevada County

Estimates show that 17,600 workers live and work in Nevada County, 12,000 workers commute into Nevada County from elsewhere, and 18,700 people who live in Nevada County leave the county for work (Exhibit 13). Nevada County exports a total of 6,600 more workers than it gains.

Grass Valley/Nevada City

In Grass Valley/Nevada City, most of the workforce, about 11,000 workers, commutes from outside the area. About 2,600 workers live and work in Grass Valley/Nevada City, and another 3,500 commute out. Grass Valley/Nevada City is a major net importer of workers; it gains 7,600 more workers than it loses.

Truckee

Truckee has a roughly equivalent number of workers coming into the city to work from outside (4,100 workers); circulating in the city (3,000 workers); and leaving the city to work elsewhere (4,800). Truckee exports 700 more workers than it gains.

¹² U.S. Census Bureau, Longitudinal-Employer Household Dynamics Program, LEHD Origin-Destination Employment Statistics (2002-2017), Washington, DC, accessed December 15, 2019, <https://onthemap.ces.census.gov>. LODES 7.4.

Exhibit 13. Net workers, inflow or outflow, daily commute patterns, Nevada County, Nevada City/Grass Valley, and Truckee¹³

Geographical Area	Workers
Nevada County	
Employed and Live in Nevada County (Internal Circulation)	17,611
Employed in Nevada County, Live Outside (Inflow)	+12,057
Live in Nevada County, Employed Outside (Outflow)	(18,671)
Net Job Inflow (+) or Outflow (-)	(6,614)
Nevada City/Grass Valley	
Employed and Live in Nevada City/Grass Valley (Internal Circulation)	2,642
Employed in Nevada City/Grass Valley, Live Outside (Inflow)	+11,073
Live in Nevada City/Grass Valley, Employed Outside (Outflow)	(3,484)
Net Job Inflow (+) or Outflow (-)	+7,589
Truckee	
Employed and Live in Truckee (Internal Circulation)	2,988
Employed in Truckee, Live Outside (Inflow)	+4,130
Live in Truckee, Employed Outside (Outflow)	(4,843)
Net job Inflow (+) or Outflow (-)	(713)

About 15% of county workers (residents) commute to Auburn, Roseville, and other destinations in Placer County. Residents also commute to destinations in Sacramento County (6%), especially the city of Sacramento. Reno and locations in Washoe County attract workers, especially from Truckee.

People who work in the county originate from external locations, such as Placer County (9.5%), Reno and other locations in Washoe County (6%), and the city of Sacramento and other locations in Sacramento County (4.5%).

Exhibit 14. Detailed destinations for resident workers and origins for workers in the county¹⁴

	Work Destination for Resident Workers		Origin Location of Workers in the County		
	Count	Share	Count	Share	
Grass Valley city, CA	6,650	18.3%	Truckee town, CA	3,252	11.0%
Truckee town, CA	3,211	8.9%	Grass Valley city, CA	2,900	9.8%
Nevada City city, CA	2,572	7.1%	Alta Sierra CDP, CA	1,293	4.4%
North Auburn CDP, CA	1,002	2.8%	Reno city, NV	1,066	3.6%
Roseville city, CA	937	2.6%	Nevada City, CA	722	2.4%
Reno city, NV	873	2.4%	Lake Wildwood CDP, CA	664	2.2%
Sacramento city, CA	859	2.4%	Lake of the Pines CDP, CA	404	1.4%
Auburn city, CA	600	1.7%	Sacramento city, CA	377	1.3%
San Francisco city, CA	590	1.6%	Roseville city, CA	324	1.1%
Chico city, CA	434	1.2%	North Auburn CDP, CA	285	1.0%
All Other Locations	18,554	51.1%	All Other Locations	18,381	62.0%
Total All Jobs	36,282	100.0%	Total All Jobs	29,668	100.0%

¹³ Ibid.

¹⁴ Ibid.

COUNTY-TO-COUNTY MIGRATION

The research uses U.S. Census county-to-county migration estimates to show the origin of new residents and the destination for residents moving out of Nevada County between 2013 and 2017.

Exhibit 15 shows the top 10 locations Nevada County residents have moved from, including Placer County, Contra Costa County, San Mateo County, and Alameda County. Besides Placer County, counties in the San Francisco Bay Area represent a significant source of new residents in Nevada County.

The exhibit also displays the top county locations for residents who moved away. Placer County, Washoe County, and Sacramento County top the list, indicating residents move to metropolitan job centers for work. Reno, Nevada in Washoe County is notable, ranking second after Placer County for the greatest number of movers. Placer County, on the southern border of Nevada County ranks first for the greatest number of incoming and outgoing residents, demonstrating its importance along with Nevada County as a regional unit.

Exhibit 15. County origins of new residents to Nevada County and county destinations for movers, 2013-2017¹⁵

Moved From	Estimated # New Residents	Moved To	Estimated # Movers
Placer County	1,250	Placer County	628
Contra Costa County	268	Washoe County, NV	417
San Mateo County	240	Sacramento County	407
Alameda County	230	Marin County	333
Los Angeles County	219	Yuba County	220
Shasta County	172	Orange County	192
Sacramento County	148	Sutter County	160
Kern County	136	Los Angeles County	160
Santa Clara County	131	Santa Cruz County	111
Sonoma County	116	Sonoma County	111
All other counties	1,213	All other counties	1,307
Total	4,123	Total	4,046

The analysis in Exhibit 16 shows a comparison of the number of people who moved to Nevada County (by county of origin) with the people who left Nevada County (by county destination). Placer County and counties in the San Francisco Bay Area are the chief sources of new residents. Washoe County and Sacramento County, which are job centers, are the largest source of net resident losses.

¹⁵ U.S. Census Bureau, American Community Survey, County-to-County Migration Flows, accessed December 15, 2019, <https://www.census.gov/topics/population/migration/guidance/county-to-county-migration-flows.html>

Exhibit 16. County sources of net resident gains and net losses for movers, Nevada County, 2013-2017¹⁶

Net Gains		Net Losses	
Location	Net Estimated	Location	Net Estimated
Placer County	622	Washoe County, NV	(385)
Contra Costa County	194	Sacramento County	(259)
San Mateo County	174	Marin County	(244)
Alameda County	136	Orange County	(191)
Kern County	118	Yuba County	(180)
Humboldt County	88	Santa Cruz County	(100)
San Francisco County	75	Amador County	(99)
El Dorado County	74	Carson City, NV	(80)
Monterey County	70	Sutter County	(62)
Shasta County	68	Fresno County	(51)



Broad Street, Nevada City, California, by Brylie Oxley is licensed under [CC BY-ND 3.0](https://creativecommons.org/licenses/by-nd/3.0/).

¹⁶ Ibid.

INDUSTRY PROFILES

This section describes average annual wages for each priority sector and compares each sector to county and state averages.

Average annual wage in Nevada County: **\$45,400**

Average annual wage in California: **\$68,500**

The research team conducted an industry analysis of Nevada County to identify priority industry sectors for regional economic and workforce development. The analysis takes several factors into consideration for each industry sector, including:

- Number of current jobs, share of the economy
- Historical job growth rate
- Average annual wages
- County job concentration compared to the nation (location quotient, "LQ")
- Executive interviews conducted with members of the Nevada County Economic Resource Council

Cluster and sector planning through regional engagement with community and industry stakeholders is a common way to apply this type of data. The research team identified eight key industry sectors for regional planning and strategizing. Areas that would typically have commonalities for workforce planning were grouped together into four priority areas that correspond to categories for engagement and strategic planning. The industry sectors and priority areas are:

- **Priority Area 1**
 - Health Care and Social Assistance
- **Priority Area 2**
 - Construction
 - Manufacturing
 - Utilities
- **Priority Area 3**
 - Professional, scientific, and technical services
 - Information
- **Priority Area 4**
 - Accommodation and Food Services
 - Arts, Entertainment, and Recreation

Some sectors do not display competitive numbers within the county or compared to the state, but have potential for economic development. Other sectors are growing rapidly and present comparative advantages. The analysis includes information on detailed industries. (Note: Some detailed industries have data suppression due to confidentiality of reporting and are not included.)

Key findings are summarized for each priority:

Priority Area 1

Health care and social assistance:

The sector grew by 30% over the last 10 years, the largest growth rate of any industry sector; but sector growth was still just half the rate of the state. The sector has the largest number of jobs of all sectors in the county's economy, and a slightly higher concentration of jobs in the county compared to the state. Average wages in the sector (\$49,000) are middling due to low wages in some sector employment. The wage levels are somewhat competitive with state averages. Notable industries

include:

- Services for the elderly and disabled (low wages, top industry by jobs and concentration)
- Skilled nursing facilities (top employer, below-average wages, above-average concentration)
- Offices of physicians (high wages, average concentration, top employer)
- Sierra Nevada Memorial Hospital is the top health care employer in western Nevada County. Tahoe Forest Hospital is the top health care employer in the eastern part of the county.

Priority Area 2

Construction:

The sector represents a top employment source for the county and displays a significantly higher concentration of jobs compared to the state and the nation. Other economic analysis has shown that the county has shown tepid building production, and the 10-year job growth rate reflects that trend, having increased just 0.5%. Job growth has been more significant in the last five years, adding more than 500 jobs. Average annual wages are much lower than the state, \$56,000 compared to \$70,000. Notable industries include:

- New single-family general contractors (very high job concentration, average annual wages)
- Plumbing, electrical, and painting contractors (high job concentration, average annual wages)

Manufacturing:

Manufacturing has an important history in the county's economy and should continue to be a priority area of focus, especially with the sector's discouraging job trends. The sector lost 30% of its employment in the last 10 years and has nearly a 40% lower job concentration (0.5 location quotient) than the state (0.88 location quotient). The sector's job numbers remained stable in the last five years. Average annual manufacturing wages in the county (\$60,800) are above the county average, but drastically lower than the state average (\$95,600). Strong industries and companies in the county include:

- Broadcast and wireless communications equipment (300 jobs, well-above average annual wages, and a location quotient of 29.3)
- Machine shops (average job concentration, average wages)

Utilities:

The number of jobs in the utilities sector is small, just over 400, but the concentration levels are high. In Nevada County, the sector has more than twice the concentration of jobs than the state, and the county location quotient is 2.4. Employment dipped slightly in the last 10 years, but less than in the state overall, and there has been a small uptick in the last five years in the county. Average annual county wages for the utilities sector (\$84,000) are nearly double the county average but are much lower than the state (\$117,000). Top industries and employers include:

- Sewage treatment facilities (113 jobs, average annual wages of \$90,000, a location quotient of 9.9)
- Top employers are Pacific Gas & Electric, Nevada Irrigation District, and Truckee Donner Public Utility District

A word on job estimates:

Some detailed industries in the Bureau of Labor Statistics Quarterly Census of Employment and Wages data (shown in the appendices) contain few companies, or one or two companies that account for most of an industry's employment. In this case, the data is suppressed in public records for confidentiality. Two-digit NAICS codes (in the report body) generally represent a more complete count.

For business records from Dun & Bradstreet, sometimes employment counts are attributed to branches in another location, or counts are misreported in surveys. (See appendix.)

Using both data sources offers a more complete picture of actual business activity.

Why are industry job concentrations important?

The concentration of industry jobs in a city, county, or region indicates something special about the business activity in certain places. Regions and cities realize economic prosperity by having industry advantages over other places with similar kinds of businesses. The competitive advantages tend to draw economic activity from other places and increase wealth circulation in local areas.

The term “location quotient” refers to the simple calculation for comparing the concentration of industry jobs in one place with their national concentration.

A location quotient of 1.0 shows a local industry job concentration that is equivalent to the nation. A location quotient of 0.5 is half as concentrated (less competitive). A location quotient of 4.5 is four-and-a-half times as concentrated (much more competitive).

Priority Area 3

Professional, Scientific, and Technical Services:

Professional, scientific, and technical services lost about a fifth of its jobs during the recession, but showed some resiliency in the last five years, with a small increase in the county. Average annual wages (\$73,700) are above the county average, but far below the state (\$122,000). The sector has low levels of concentration, but there are 1,300 sector jobs in the county. Several detailed industries are worth noting. Top industries and employers include:

- Computer systems design services (230 jobs, average job concentration, average annual wages of just over \$100,000)
- Veterinary services (jobs twice as concentrated as the nation, just under 200 jobs, below-average wages)
- Engineering services (140 jobs, average annual wages of \$66,000, jobs less concentrated than the nation)

Information:

The information sector also struggled during the recession, losing about a quarter of its jobs. The sector showed some resiliency in the last five years and did not decline but remained flat. Information wages (\$53,400) are slightly above the county annual average wages, and job concentration is low. The wage picture is highly concerning for a growing the sector in the county because the average annual wages for the state are more than \$180,000. Top industries and employers include:

- Wired telecommunications carriers (100 jobs, average annual wages of \$81,000, average job concentration)

Priority Area 4

Arts, entertainment, and recreation:

Interviews and a review of the region’s assets reveals the importance of recreation industries and the creative economy for tourism and quality of life amenities in Nevada County. This sector is one of the few that displays job growth between 2008 and 2013 but has losses over the last five years. Over the past 10 years, the number of jobs in this sector has declined by 9%. However, job concentration is double the national level. Wages are highly concerning, with an annual average of just \$26,700, less than half the state’s sector average. Top industries and companies include:

- Skiing facilities (600 jobs, a location quotient of 66.4, average annual wages of \$27,500)
- Fitness and recreational centers (200 jobs, a location quotient of 1.6, average annual wages of \$17,600)

Accommodations and food services:

Accommodation and food services provides valuable services supporting visitors and tourism, and the quality of life amenities that locals enjoy. The sector was stable during the recession and grew significantly over the last five years. Between 2008 and 2018, the job growth rate was 24%. The sector is the third largest in the county. Wages are concerning. The annual average wage is \$23,000, similar to the state, but the lowest of the eight priority sectors. Job concentration is above average with a location quotient of 1.27. Major industries and employers include:

- Full-service restaurants (1,750 jobs, 1.5 location quotient, average annual wages of \$23,000)
- Limited-service restaurants (750 jobs, average annual wages of \$19,000)

Priority sector comparison

The exhibits in this section present summary data for eight priority industry sectors. The appendices display additional industry and employer detail for all sectors of the economy and sector details for jobs in the major cities in Nevada County. The appendices also present information on the top industries and employers in the eight priority sectors.

Exhibit 17 shows a summary of key metrics for the eight priority sectors, including 2018 industry sector job totals and share of total jobs, 2008-2018 historical trends, and location quotients. Each of the four metrics compares the county's numbers with the state. (The previous section summarized the data included in the table.)

Exhibit 17. Key job metrics, eight industry sectors, Nevada County and California, 2008-2018¹⁷

Industry	2018 Jobs		2008-2018 % Change		% of Total Employment 2018		LQ 2018	
	County	CA	County	CA	County	CA	County	CA
NAICS 62 Health care and social assistance	5,515	2,532,860	30.0%	61.5%	17.4%	14.6%	1.17	0.98
NAICS 72 Accommodation and food services	3,841	1,700,548	23.7%	28.8%	12.1%	9.8%	1.27	1.03
NAICS 23 Construction	2,973	870,221	0.5%	9.6%	9.4%	5.0%	1.85	0.99
NAICS 31-33 Manufacturing	1,401	1,320,070	(29.7%)	(6.6%)	4.4%	7.6%	0.51	0.88
NAICS 54 Professional and technical services	1,313	1,298,125	(18.6%)	19.5%	4.1%	7.5%	0.64	1.16
NAICS 71 Arts, entertainment, and recreation	1,197	370,926	(9.1%)	14.7%	3.8%	2.1%	2.02	1.14
NAICS 22 Utilities	426	105,186	(0.5%)	(3.7%)	1.3%	0.6%	2.43	1.10
NAICS 51 Information	308	540,269	(25.4%)	11.6%	1.0%	3.1%	0.48	1.54

¹⁷ Bureau of Labor Statistics, Quarterly Census of Employment and Wages (QCEW), 2018 annual averages. <https://www.bls.gov/cew/downloadable-data-files.htm>.

Exhibit 18 compares historical job growth rates for the eight industry sectors in Nevada County and California between 2008 and 2018. The data is sorted in descending order in Nevada County. Health care and social assistance had the highest growth over the 10-year period in Nevada County (30%). However, the growth rate was half that of California in the sector. Manufacturing displayed the weakest performance in the county, shedding nearly a third of its jobs during the period studied.

Exhibit 18. Job growth in the eight priority sectors, Nevada County and California, 2008-2018¹⁸

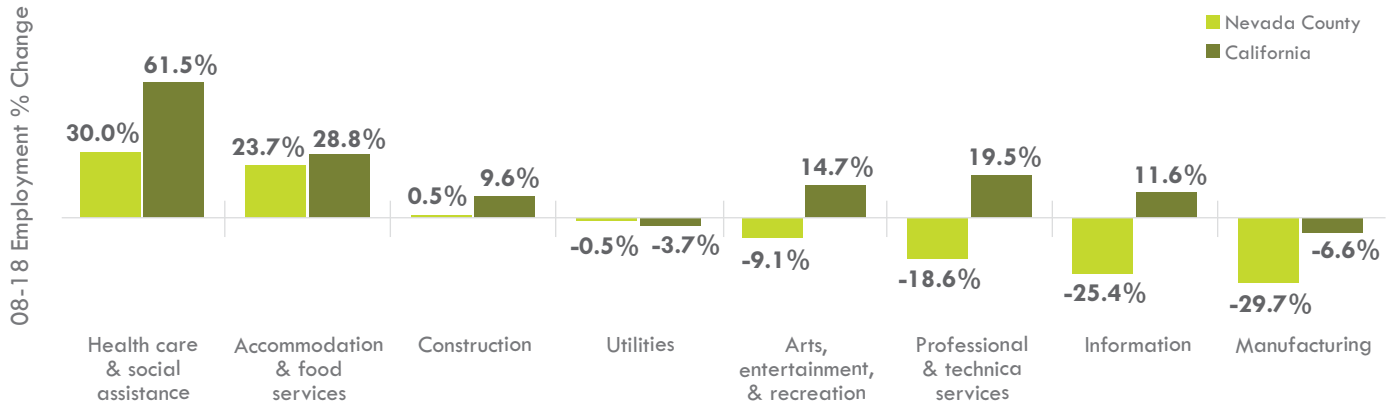


Exhibit 19 shows the average annual wages in the eight priority industry sectors. Utilities; professional, scientific, and technical services; and manufacturing have the highest annual wages in the county.

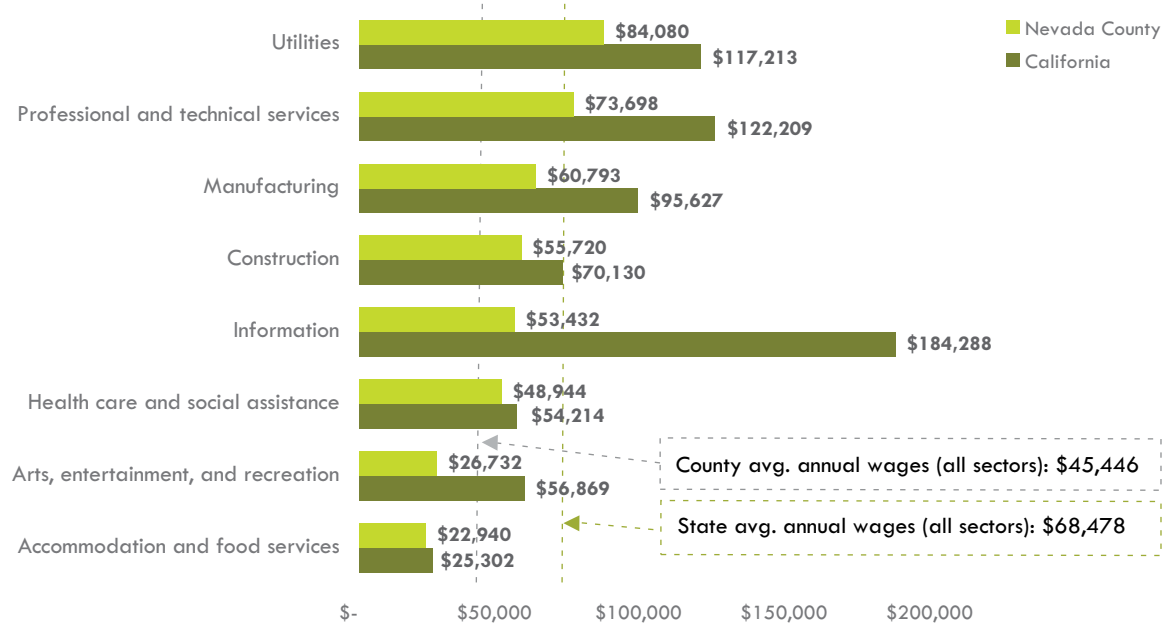
The chart compares wage levels in Nevada County to the state. In most cases, the wage levels for the state are significantly higher. Health care and social assistance, and accommodations and food service have comparable wage levels for the state and the county.

The chart also compares sector wages to the average annual wages for all sectors in the economy. The dashed lines represent the average annual wage levels for the county and the state. Six of the eight priority sectors meet the average threshold at the county level.

The data indicates significant challenges for capturing and retaining workers in Nevada County. Based on the low wages in some sectors, it appears workers might be leaving the county in search of higher wages.

¹⁸ Ibid.

Exhibit 19. Average annual wages, eight priority sectors, Nevada County and California, 2018¹⁹



¹⁹ Ibid.

OCCUPATIONAL PROFILE

What are middle-skill jobs?

The occupational analysis uses a skill-level designation to count occupational employment by required and typical education and training levels.

Occupations are broken into two categories:

- Middle-skill jobs are jobs that require more than a high school diploma, but less than a bachelor's degree, indicating areas for the community colleges and other workforce education and training providers to focus attention.
- Above-middle-skill jobs require at least a bachelor's degree. These occupations are included to show pathway opportunities for community college students and workforce needs for mid-career professionals and workforce program managers.

This report incorporates two types of analysis: industry and occupational. Industry analysis counts jobs at similar kinds of companies while occupational analysis counts similar kinds of workers within individual industries and across multiple industries. Industry data is publicly available and is based on legal reporting requirements for most employers. With some exceptions, industry data counts are reliable estimates of the number of jobs in the economy and in industries, including in rural counties.

Occupational analysis involves surveys of businesses and represents estimates. Samples tend to be smaller in rural places. Data is often not available at the county level. In practice, analysts use what are called "staffing patterns" and other methods to estimate the number of jobs in occupations based on the counts of industries in a given location. The analysis below used software from labor analytics company Emsi, which models these counts for Nevada County.

Based on the commute patterns analysis, the occupational research covers three counties:

- Nevada County
- Washoe County, Nevada
- Placer County

The analysis reveals important areas of emphasis for workforce education and training providers in Nevada County, including the community colleges. Exhibit 20 displays priority middle-skill and above-middle-skill occupations in eight areas.

These occupational categories and detailed occupations have the most projected annual job openings in the three counties over the next five years, from 2018 through 2023, based on estimates of added jobs, retirements, and workers moving into new occupations.

The section below presents a closer look at occupational demand in Nevada County. Appendix E has detailed occupational demand tables for Placer County, and Washoe County, Nevada.



Exhibit 20. Priority occupations for Nevada County, Placer County, and Washoe County²⁰

Occupational Category	Middle-Skill Occupations	Above-Middle-Skill Occupations
Construction	<ul style="list-style-type: none"> • Carpenters • Electricians 	<ul style="list-style-type: none"> • Construction managers
Education	<ul style="list-style-type: none"> • Teaching assistants • Childcare workers 	<ul style="list-style-type: none"> • Postsecondary teachers • Secondary teachers • Primary teachers
Health	<ul style="list-style-type: none"> • Registered nurses • Medical secretaries 	
Maintenance & repair	<ul style="list-style-type: none"> • Maintenance & repair workers 	
Administration & management	<ul style="list-style-type: none"> • First-line supervisors • Administrative assistants • Bookkeeping 	<ul style="list-style-type: none"> • General and operations managers • Accountants • Management analysts
Customer service & sales	<ul style="list-style-type: none"> • Customer service reps • Sales reps 	
Trucking	<ul style="list-style-type: none"> • Truck drivers 	
Cosmetology	<ul style="list-style-type: none"> • Hairdressers & cosmetologists 	

Several areas present potential opportunities for pathway development, where occupational projections show demand for middle-skill and above-middle-skill occupations:

- **Construction:** training the existing construction workforce to enter management positions
- **Education:** pathways for childcare providers and teacher assistants to primary, secondary, and postsecondary faculty positions
- **Administration & management:** pathways to attainment of four-year degrees in business, management, and accounting

Demand is generally strong in the three counties for middle-skill jobs. There are more annual openings for middle-skill jobs than above-middle-skill jobs.

Software and other technology-related occupations are notably absent from the occupational profiles in the three counties; a few tech occupations show modest demand but did not warrant including in the lists. Also absent are public safety occupations, and occupations dealing with utilities, such as water treatment operators. Artists and other creative occupations also did not show up in the occupational data.

Exhibit 21 details the occupational demand picture for middle-skill occupations in Nevada County. The table shows estimated occupational employment in 2018, the change in number of jobs from 2008 to 2018, median hourly earnings, and the five-year projected annual openings. (Tables for Washoe County and Placer County are included in Appendix E.) Middle-skill occupations with the most openings include carpenters, secretaries and administrative assistants (except legal, medical, and executive), and teacher assistants.

²⁰ Emsi, 2019.4. Note: The selection of occupations was based on examining common in-demand occupations in Nevada County, Placer County, and Washoe County, Nevada. Demand is defined by the number of annual openings projected over a five-year period, 2018-2023. Annual openings are the number of new jobs plus the number of workers who either leave the workforce or move to a different occupation.



Exhibit 21. Middle-skill occupational employment, Nevada County, 2008-2023²¹

Middle-Skill Jobs					
SOC	Description	2018 Jobs	2008-2018 Job Change	Median Hourly Earnings	2018-2023 Annual Openings
47-2031	Carpenters	825	(217)	\$27.15	83
43-6014	Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	585	79	\$20.62	63
25-9041	Teacher Assistants	558	76	\$14.56	66
43-3031	Bookkeeping, Accounting, and Auditing Clerks	537	(87)	\$21.46	61
41-1011	First-Line Supervisors of Retail Sales Workers	518	(13)	\$20.77	58
29-1141	Registered Nurses	502	53	\$51.04	32
49-9071	Maintenance and Repair Workers, General	462	109	\$21.13	53
43-1011	First-Line Supervisors of Office and Administrative Support Workers	328	15	\$28.77	34
53-3032	Heavy and Tractor-Trailer Truck Drivers	292	14	\$22.82	34
47-1011	First-Line Supervisors of Construction Trades and Extraction Workers	278	(100)	\$30.20	31
47-2111	Electricians	276	(37)	\$29.85	36
41-3099	Sales Representatives, Services, All Other	260	83	\$30.29	34
39-9011	Childcare Workers	256	(112)	\$13.84	40
39-5012	Hairdressers, Hairstylists, and Cosmetologists	253	24	\$17.65	33
43-6013	Medical Secretaries	242	38	\$19.55	27

Exhibit 22 shows the occupational demand picture in Nevada County for above-middle-skill occupations. Above-middle-skill occupations with the most annual openings include elementary school teachers (except special education), general and operations managers, and managers, all other.

²¹ EMSI, 2019.4.



Exhibit 22. Above-middle-skill occupational employment, Nevada County, 2008-2023²²

Above-Middle-Skill Jobs					
SOC	Description	2018 Jobs	2008-2018 Job Change	Median Hourly Earnings	2018-2023 Annual Openings
25-2021	Elementary School Teachers, Except Special Education	762	(11)	\$36.57	64
11-1021	General and Operations Managers	565	145	\$48.15	57
11-9199	Managers, All Other	422	129	\$37.17	35
25-2031	Secondary School Teachers, Except Special and Career/ Technical Education	405	5	\$31.67	34
11-9021	Construction Managers	305	(67)	\$35.42	23
13-2011	Accountants and Auditors	297	8	\$41.26	31
13-1111	Management Analysts	205	(15)	\$58.72	21
13-1199	Business Operations Specialists, All Other	203	35	\$34.64	23
25-3097	Teachers and Instructors, All Other	175	86	\$35.77	23
23-1011	Lawyers	174	(5)	\$74.42	10
21-1018	Substance Abuse, Behavioral Disorder, and Mental Health Counselors	164	77	\$25.38	22
25-3098	Substitute Teachers	136	31	\$19.82	17
25-3011	Adult Basic and Secondary Education and Literacy Teachers and Instructors	131	18	\$33.30	14
27-1024	Graphic Designers	110	3	\$33.60	12
25-1099	Postsecondary Teachers	109	80	\$26.32	8

²² EMSI, 2019.4

SIERRA COLLEGE CAREER EDUCATION AWARDS

This section of the report examines career education programs at two satellite campuses of Sierra College: the Tahoe-Truckee campus and the Nevada County campus, which sits near the border between Nevada City and Grass Valley. The section also presents information on community college awards for residents in ZIP codes near Tahoe and Truckee, and in the western part of the county.

Comparing coursework and programs and the awards data with the eight priority industry sectors and occupational demand areas revealed some strategic takeaways for program development. Exhibit 23 presents an overview of the career education coursework and programs that each satellite campus offers onsite based on interviews and a review of schedules of classes. Students who live in Nevada County commonly combine coursework between a local satellite campus, distance learning online, and the main campus of Sierra College in Rocklin, Placer County.

Exhibit 23. On-campus career education coursework and programs for Sierra College’s Nevada County Campus and Truckee-Tahoe Campus²³

Nevada County Campus	Truckee-Tahoe Campus
• Administration of Justice	• Administration of Justice
• Agriculture	• Intro to Allied Health
• Intro to Allied Health	• Applied Arts & Design
• Applied Arts & Design	• Accounting
• Accounting	• Business (multiple areas)
• Business (multiple areas)	• Child Development
• Child Development	• EMT
• Programming/Computing	• Electronics/Mechatronics
• Construction	• Business Information Systems
• Fire Academy	• Nutrition
• EMT	
• Business Information Systems	
• Electronics/Mechatronics	
• Nutrition	

Program awards data shows that Nevada County residents enroll in courses and earn awards in 70 programs at Sierra College, including 39 career education programs. Students who are residents of Nevada County earn approximately fewer than 1 out of every 10 career education awards from Sierra College. The data indicates that Nevada County residents generally account for a small share of awards in many individual programs.

Some programs are notable for a handful of concentrations among Nevada County students. Accounting, Administration of Justice, Business Administration, and Child Development have concentrations from both satellite campuses. West County residents earn awards in computer infrastructure, networking, and programming. These residents also earn a significant share of awards in industrial electronics.

The data reveals some potential gaps that are worth considering for future program investments:

- Nevada County residents earn a small number of health-related awards.
- There are few awards issued in construction-related programs for Nevada County residents.
- Welding and applied engineering, which are important programs for manufacturing, and maintenance and repair, have few awards for Nevada County residents.
- Electronics, mechatronics, and drafting may yield transferable skills for manufacturing, construction, and utilities.

²³ Truckee-Tahoe residents live in ZIP codes 96160, 96161, and 96162. Western Nevada County residents live in 95924, 95945, 95949, 95959, 95946, and 95975. Chicago Park, 95712, accounted for a negligible number of awards and was not included.

Nevada County can likely boost the number of awards conferred in these areas or could consider other coursework to address these industries' needs.

- The research did not reveal any professional teacher pathway preparation at satellite campuses.
- The research did not reveal any programs targeting hospitality or recreation management.

Exhibit 24 displays a three-year average of the academic years 2016-17, 2017-18, and 2018-19 of headcount awards (unduplicated students) in career education programs for residents of Nevada County by ZIP code. The table also shows award counts for Sierra College overall (all awards, all students). The table shows award totals according to Taxonomy of Programs (TOP) codes, which may not be similar to the name of the department or course. (Please note that although Recreation is not considered a career education program, it was included in this analysis due to its regional importance.)



Broad Street In Nevada City California, by Noah_Loverbear is licensed under [CC BY-ND 3.0](https://creativecommons.org/licenses/by-nd/3.0/).

Exhibit 24. Three-year average headcount awards, Nevada County Campus and Truckee-Tahoe Campus; three-year average awards (all), Sierra College²⁴

TOP Code	Description	3-year Average Truckee Tahoe Students (Undupl.)	3-year Average West Nevada City Students (Undupl.)	3-year Average Sierra College (All)
0502.00	Accounting	6	5	106
2105.00	Administration of Justice	2	8	135
0101.00	Agriculture Technology and Sciences, General	0	3	16
1012.00	Applied Photography	0	2	35
0953.10	Architectural Drafting	0	1	24
0948.00	Automotive Technology	0	1	29
0505.00	Business Administration	1	11	330
0501.00	Business and Commerce, General	0	2	30
0506.00	Business Management	0	3	22
1305.80	Child Development Administration & Mgmt.	1	1	4
1305.00	Child Development/Early Care and Education	1	7	86
0957.00	Civil and Construction Mgmt. Technology	0	0	0
0708.00	Computer Infrastructure and Support	0	2	40
0708.10	Computer Networking	0	3	26
0707.10	Computer Programming	0	2	26
0952.00	Construction Crafts Technology	0	0	5
2105.10	Corrections	0	1	4
0953.00	Drafting Technology	0	1	15
0946.10	Energy Systems Technology	0	2	9
0924.00	Engineering Technology, General (req. Trig)	0	0	1
0303.00	Environmental Technology	0	1	1
2133.00	Fire Technology	0	1	39
0835.20	Fitness Trainer	0	3	12
2206.10	Geographic Information Systems (GIS)	0	1	4
1030.00	Graphic Art and Design	0	3	63
1201.00	Health Occupations, General	0	1	7
0934.20	Industrial Electronics	0	11	71
0602.00	Journalism	0	0	6
0956.00	Manufacturing and Industrial Technology	0	1	20
0953.40	Mechanical Drafting	0	0	18
0614.10	Multimedia	0	2	22
0514.00	Office Technology/Office Computer Apps.	0	3	15
1299.00	Other Health Occupations	0	0	3
0511.00	Real Estate	0	1	4
0836.00	Recreation	0	1	17
1230.10	Registered Nursing	0	0	36
0850.10	Sign Language Interpreting	0	1	21
0506.40	Small Business and Entrepreneurship	0	1	17
0702.10	Software Applications	0	1	13
0956.50	Welding Technology	0	1	29
Total		13	90	1,361

²⁴ Sierra College totals come from the California Community Colleges Chancellor's Office DataMart. Nevada County resident awards come from the Institutional Research office at Sierra College, with analysis by the COE.

Exhibit 25 presents a qualitative assessment of the relationship between Sierra College career education programs, and the occupational demand and priority industries identified in the other sections of the report. The table is intended to highlight program and partnership development opportunities to align workforce and economic development goals and priorities.

Overall, Sierra College and the satellite campuses possess robust assets from which they can build to meet the needs of the county’s economy. There is substantial alignment among programs, occupational demand areas, and priority industry areas.

Exhibit 25. Sierra College career education programs aligned to Nevada County’s occupational demand and industry sector priority areas

TOP	Description	Occupational Demand Area	Priority Industry Area
0502.00	Accounting	Admin. & Mgmt.	Prof. Tech. Servs.
2105.00	Administration of Justice	-	-
0101.00	Agriculture Technology and Sciences, General	-	-
1012.00	Applied Photography	-	Arts, Ent., Recreation
0953.10	Architectural Drafting	Construction	Construction
0948.00	Automotive Technology	Maint. & repair	-
0505.00	Business Administration	Admin. & Mgmt.	-
0501.00	Business and Commerce, General	Admin. & Mgmt.	-
0506.00	Business Management	Admin. & Mgmt.	-
1305.80	Child Development Administration & Mgmt.	Education	-
1305.00	Child Development/Early Care and Education	Education	-
0957.00	Civil and Construction Mgmt. Technology	Construction	Construction
0708.00	Computer Infrastructure and Support	-	Prof. Tech. Servs.
0708.10	Computer Networking	-	Prof. Tech. Servs.
0707.10	Computer Programming	-	Prof. Tech. Servs.
0952.00	Construction Crafts Technology	Construction	Construction
2105.10	Corrections	-	-
0953.00	Drafting Technology	Construction	Construction
0946.10	Energy Systems Technology	Construction	Construction
0924.00	Engineering Technology, General (req. Trig)	Maint. & repair	Prof. Tech. Servs.
0303.00	Environmental Technology	-	Prof. Tech. Servs.
2133.00	Fire Technology	-	-
0835.20	Fitness Trainer	-	Arts, Ent., Recreation
2206.10	Geographic Information Systems (GIS)	-	Prof. Tech. Servs.
1030.00	Graphic Art and Design	-	Prof. Tech. Servs.
1201.00	Health Occupations, General	Health	Health care
0934.20	Industrial Electronics	Maint. & repair	Manufacturing
0602.00	Journalism	-	-
0956.00	Manufacturing and Industrial Technology	Maint. & repair	Manufacturing
0953.40	Mechanical Drafting	Maint. & repair	Manufacturing
0614.10	Multimedia	-	-
0514.00	Office Technology/Office Computer Apps.	Admin. & Mgmt.	-
1299.00	Other Health Occupations	Health	Health care
0511.00	Real Estate	-	Construction
0836.00	Recreation	-	Arts, Ent., Recreation
1230.10	Registered Nursing	Health	Health care
0850.10	Sign Language Interpreting	-	-
0506.40	Small Business and Entrepreneurship	Admin. & Mgmt.	-
0702.10	Software Applications	-	Information
0956.50	Welding Technology	Maint. & repair	Manufacturing

FINDINGS AND CONCLUSION

Nevada County's industry and workforce assets, and quality of life amenities surpass many rural counties in the state. The county possesses major natural resources amenities and is noted for its recreation and tourism activities. Arts and culture are a key component of the county, driving visitation and contributing to quality of life.

Nevada County sits between two major economic engines in what has been described as a mega region, the area between Reno, Nevada and the San Francisco Bay Area. The county possesses significant economic assets with key industries that have high job concentrations compared to the state and nation. Many industries form significant parts of the economic history of the county, notably Grass Valley Inc.

The county has demonstrated some resiliency amid larger, structural changes. But the county, like other rural places, faces many challenges to support quality of life with services and local jobs that contribute to a healthy middle-income section of the economy. Over the last 10 years, retirement-age residents have replaced younger residents and workers, and many staple industry sectors have lost large shares of jobs.

The research uncovered the following key takeaways:

- Nevada County's population has only grown by about 1,400 people since 2005 (total population nearly 100,000). Significant population growth occurred in the early 2000s, but thereafter the trend flattened. This is notable for diverging from a national trend in which rural communities have experienced population declines.
- Similarly, even though the unemployment rate is consistently below the state, the overall labor force declined 3% over the last 10 years. The number of employed people in the county is virtually the same as it was in 2007.
- Older adults, especially those in the retirement-age bracket over age 55 account for the stable, yet flat population and labor force trend. In the 10-year period between 2007 and 2017, the share of people aged 55 and older increased by 11 percentage points to 45% of the population in Nevada County (almost double the state's share of residents aged 55 and older). Nearly every younger age group lost shares in the population.
- These new aging residents (net increases) are arriving from Placer County, the San Francisco Bay Area, Kern County, and El Dorado County. Washoe County in western Nevada and Sacramento County account for net losses from the county. The demographic data indicates that younger, working-age people are leaving Nevada County for these job centers.
- The aging of Nevada County's population also accounts for higher rates of educational attainment in the county. Between 2007 and 2017, the number of residents possessing a bachelor's degree or higher increased by 5%. The percentage who have completed some college or an associate degree increased by more than 2%.
- Commuting patterns reveal a daily net loss of workers (leakage). About 6,600 more workers leave the county than enter it in the daily commute. Locations in Placer County and Greater Sacramento account for much of this net pull. The number of residents commuting to and from Reno, Nevada from Nevada County is nearly the same. However, most commuters stay local and the majority of those work in one of the three major cities/towns in Nevada County.
- The industry analysis identified eight industry sectors in four priority areas for economic and workforce development and program investment. The eight sectors are health care; construction; manufacturing; utilities; professional, scientific, and technical services; information; accommodation and food services; and arts, entertainment, and recreation.
- Health care, and accommodations and food services are the only sectors demonstrating significant job growth in Nevada County. These sectors warrant attention for workforce development opportunities to meet hiring needs. Many occupational segments of the health care sector are good jobs (with adequate wages and benefits), but they can be

filled with labor from outside the county. Some segments of both industry sectors comprise low-wage jobs. Hospitality, especially, poses job quality issues in terms of low wages and few benefits.

- Utilities pay high wages and often have good benefits. There are high concentrations of jobs in the county's water districts, waste treatment plants, and electric utilities. Employment in the sector is flat, diverging from the state trend of job losses. Utilities represent a workforce opportunity area although job numbers are limited. Construction shows an encouraging recent trend, but job growth will depend entirely on the county's appetite for more building.
- Four sectors in particular present concerning job trends that warrant further investigation and partner engagement. Manufacturing lost nearly a third of its jobs over the 10-year study period. The sector is a major part of the county's economy. Professional, scientific, and technical services and information have experienced large job losses. Wage disparities compared to the state are one likely source of the declines in the county, but larger structural forces in manufacturing are a likely culprit. Arts, entertainment, and recreation, which are key industries for tourism and visitation, also lost a significant share of employment.
- Within these concerning sectors, large employers pose a special challenge because they employ a large segment of the county's workforce. Less than one-half of one percent of the employers in the eight priority sectors employ 35% of the sectors' workforce (about 80 of 4,000 employers). Several of the largest companies could pose a risk for the county's economy given the historic job losses in their industry sectors. Large companies include Ijot Development Inc., Grass Valley Inc., Nevada County Publishing Company, Telestream LLC, Technicolor USA Inc., and Seagate Technology.
- Industry wages in general are markedly lower than the state, especially in professional and technical services, information, and manufacturing, contributing to the challenge of attracting and retaining a trained workforce in Nevada County.
- When considering job numbers and projected annual openings, occupational analysis can reveal key areas for workforce education and training. Occupational demand overall is small, totaling dozens of annual openings. Many of these occupational areas are in key priority industry sectors, like health, construction, manufacturing, and utilities. Maintenance and repair workers, carpenters, and electricians are workforce opportunity areas.
- Other important occupational areas include education, where teacher preparation and work-based learning opportunities (school internship placements) are likely needed to create pathways into four-year higher education programs to serve projected county needs. Another noteworthy area is customer service and sales, especially at facilities in Washoe County where warehousing and distribution centers employ many of these workers.
- Professional management and business services workers represent another area of need, including bookkeeping, sales, and customer service. Many related positions that require less than a bachelor's degree can provide a trained workforce for local county businesses. Above-middle-skill workers for business services (accountants and analysts) and operations positions, and business manager positions are needed.
- Residents of Nevada County are taking coursework and earning awards in dozens of career education programs, albeit in small numbers. Overall, Sierra College and the satellite campuses possess robust assets which can be expanded to meet the workforce needs of the county and the region. There is substantial alignment between program assets, occupational demand areas, and priority industry sectors identified in the research.
- The community colleges provide significant access to programs through distance education and on-site introductory coursework like Introduction to Allied Health, other pre-requisites for health programs, and electronics and mechatronics basics. Other on-site career education coursework is in four-year degree program pathways, including business, accounting, and business information systems. Many Nevada County students are enrolled in transfer pathways at Sierra College. These students could potentially fill professional positions in the county.

RECOMMENDATIONS

Nevada County derives a number of key services and resources from regional and community partnerships. With added capacity to the Economic Resource Council, or other county entities, Nevada County can enhance technical assistance and service provision to the county's businesses and residents to shore up and grow a prosperous and equitable economy. The Economic Resource Council should explore alternative sources of funding from public and private sources to extend its coordination capacity and service provision to address the county's challenges. The Economic Resource Council is currently funded by Transient Occupancy Taxes (TOT). Background research revealed there are coordination challenges between the eastern and western parts of the county. Additional capacity could support addressing the intra-county challenges as well as broader mega-regional concerns raised in this report.

Nevada County's location in the megaregion between Reno and the San Francisco Bay Area make it a special candidate for large-scale economic and workforce development partnerships. Many of the challenges in Nevada County defy the confines of the county's geography. Business attraction, retention, and support, along with other community needs (such as housing and broadband) require broad partnerships for technical support, policy advocacy, and access to capital and grant funding.

Along with other county-level economic development stakeholders, key partners along the Interstate 80 corridor are: the Economic Development Authority of Western Nevada (EDAWN) in the Reno area; the Sierra Business Council in the greater Sierra region covering Nevada County, which oversees the Comprehensive Economic Development Strategy (CEDS) for the region covering Nevada County; and Valley Vision in the Greater Sacramento region. (The county currently contracts with the Sierra Business Council for some business attraction and business services provision.)

These broader regional partners should provide additional technical assistance to increase workforce housing that may include special funding access, zoning innovations, or other technical support. The ability to attract and retain a trained workforce will depend on the availability, price, and quality of housing in the region. While this report did not explore housing metrics, the commuting analysis indicates that the county experiences a jobs-housing imbalance. A good deal of it comes from within the county with residents commuting internally to the major towns. Other reporting on Nevada County points to weak housing production. The county, along with many other parts of the state, faces a massive housing shortfall. Nevada County should address this issue as part of its economic and workforce development strategies.

Extending broadband is a ubiquitous goal for all of rural California to support business activity and quality of life, requiring large-scale regional partnerships to address state and federal regulatory hurdles, tackle telecom interests, and secure funding for infrastructure. Broader regional partnerships are working on these issues in rural broadband consortia. Nevada County should support these efforts.

Industry sectors that pay middle-income and above-average wages are declining in Nevada County in favor of service industries, including the health care, and accommodations and food services industries that cater to retirement populations and visitors in the county. More needs to be done to support the eight industry sectors in the four priority areas identified in this report. The county has three efforts underway on which to build. These initiatives can address the challenges facing priority sectors in decline.

The county has engaged California Manufacturing Technology Consulting (CMTC) to provide technical assistance to the county's manufacturers, including connecting them to capital, and offering training and other support. Nevada County Tech Connection (NCTC) provides an online and in-person set of resources (training, coaching, networking) to support technology, design, and technical services to workers and entrepreneurs. The Small Business Development Center (SBDC), hosted by the Sierra Business Council and Sierra College's satellite campuses, provides vital business services and access to capital.



Main Street, Grass Valley, California, by Erin Johnson is licensed under [CC BY-ND 2.0](https://creativecommons.org/licenses/by-nd/2.0/).

Partnerships with these three entities need continued investment to support the eight priority sectors. Additional resources could help to extend service provision. With wider regional partners and major business interests in the county, the Economic Resource Council and these entities should address the substantial job losses in the county. With engagement and strategic planning, they should confront the reasons companies and workers are leaving the county and what can be done to reverse the trend.

More can be done to link arts, entertainment, and recreation, which are key assets in Nevada County, to economic and workforce development initiatives. The county is home to major art, music, and film festivals, and through the California Arts Council has two state-designated cultural districts in Truckee and Grass Valley/Nevada City. Arts and technology conferences that build on existing events and the work of the Nevada County Tech Connection could be one strategy. Destination management planning is another avenue for initiative development. Other revenue sources, like Tourism Business Improvement Districts (TBID) that invite new activity and revenue sources, could be another consideration.

On the workforce side, key regional partners include the Northern Rural Training and Employment Consortium (NoRTEC), the county's workforce development board that coordinates the job centers in the county through the Alliance for Workforce Development. EDAWN coordinates workforce partners in western Nevada County. The Golden Sierra Workforce Board serves nearby Placer County and along with other regional workforce boards can support training investments in key strategic priority areas.

The workforce investment priority areas include maintenance and repair occupations (for manufacturing, utilities, and construction); carpenters, electricians and construction managers; teacher pathway development in education; nursing and other skilled allied health occupations; middle-skill administrative positions, and professional business, management, and analyst positions; recreation and accommodations managers; and customer service and sales positions. Sierra College and its two satellite campuses possess many of the building blocks to extend their workforce education and training to meet existing employer demand and the needs of new business activity.

The research did not find that there is a windfall of employment demand necessitating many new program graduates. Instead, the research reveals many industries are in decline; as a result, most job openings will result from retirements and other separations (job churn). But maintaining economic prosperity depends on the availability of new, trained workers and resources for employers. Partner engagement in the eight industry sectors in the four priority areas can validate the demand data outlined in this report.

APPENDIX A: NEVADA COUNTY INDUSTRY SECTOR DATA OVERVIEW

Exhibit A1 displays a more comprehensive view of current and historical industry data for all industry sectors in Nevada County. The table has information on historical industry sector employment, share of total jobs, average annual wages, and location quotient. This data enabled selection of the eight priority industry sectors.

Exhibit A1. Nevada County industry sector jobs, wages, and location quotient, 2008-2018²⁵

Industry	2008 Jobs	2013 Jobs	2018 Jobs	2008-2018 % Change	% of Total Employment 2018	Weighted Average Wage 2018	LQ 18
NAICS 62 Health care and social assistance	4,242	4,880	5,515	30.0%	17.4%	\$48,944	1.17
NAICS 44-45 Retail trade	4,142	3,765	3,999	(3.5%)	12.6%	\$32,532	1.16
NAICS 72 Accommodation and food services	3,104	3,173	3,841	23.7%	12.1%	\$22,940	1.27
NAICS 23 Construction	2,958	2,323	2,973	0.5%	9.4%	\$55,720	1.85
NAICS 61 Educational services	2,683	2,707	2,841	5.9%	9.0%	\$42,565	1.04
NAICS 92 Public administration	1,833	1,586	1,982	8.1%	6.2%	\$62,689	1.23
NAICS 81 Other services, except public administration	1,195	1,197	1,910	59.8%	6.0%	\$31,521	1.94
NAICS 31-33 Manufacturing	1,992	1,414	1,401	(29.7%)	4.4%	\$60,793	0.51
NAICS 54 Professional and technical services	1,613	1,288	1,313	(18.6%)	4.1%	\$73,698	0.64
NAICS 71 Arts, entertainment, and recreation	1,317	1,442	1,197	(9.1%)	3.8%	\$26,732	2.02
NAICS 56 Administrative and waste services	937	740	995	6.2%	3.1%	\$40,666	0.49
NAICS 52 Finance and insurance	897	673	681	(24.1%)	2.1%	\$70,507	0.52
NAICS 53 Real estate and rental and leasing	574	799	658	14.6%	2.1%	\$52,842	1.34
NAICS 48-49 Transportation and warehousing	219	175	625	185.4%	2.0%	\$45,450	0.47
NAICS 22 Utilities	428	376	426	(0.5%)	1.3%	\$84,080	2.43
NAICS 51 Information	413	302	308	(25.4%)	1.0%	\$53,432	0.48
NAICS 11 Agriculture, forestry, fishing and hunting	236	201	185	(21.6%)	0.6%	\$40,238	0.67
NAICS 55 Management of companies and enterprises	84	61	58	(31%)	0.2%	\$70,034	0.11
NAICS 21 Mining, quarrying, and oil and gas extraction	76	55	38	(50%)	0.1%	\$77,868	0.26
NAICS 42 Wholesale trade	401	-	-	(100%)	0.0%		0.00
Total Employment	30,152	28,443	31,715	5.2%	100%	\$45,446	

²⁵ Bureau of Labor Statistics, Quarterly Census of Employment and Wages (QCEW), 2018 annual averages. <https://www.bls.gov/cew/downloadable-data-files.htm>.

APPENDIX B: EMPLOYMENT DATA FOR TRUCKEE, NEVADA CITY, AND GRASS VALLEY

Exhibit B1 uses industry location data from the U.S. Census Bureau and displays job concentrations for Truckee, Grass Valley, and Nevada City in Nevada County. The highlighted rows represent the eight priority sectors identified in the research. Truckee has important job concentrations for seven priority sectors, except information. Grass Valley has concentrations in all eight sectors and is strong in health care and manufacturing. Nevada City is strong in accommodations and food services.

Exhibit B1. Employment data for Truckee, Grass Valley, and Nevada City by industry sector²⁶

Industry Sector	Truckee Town		Grass Valley City		Nevada City	
	2017 Jobs	% of All Jobs	2017 Jobs	% of All Jobs	2017 Jobs	% of All Jobs
Agriculture, Forestry, Fishing and Hunting	4	0.1%	10	0.1%	36	1.0%
Mining, Quarrying, and Oil and Gas Extraction	2	0.0%	0	0.0%	0	0.0%
Utilities	198	2.8%	272	2.7%	19	0.5%
Construction	1,121	15.7%	437	4.3%	62	1.7%
Manufacturing	179	2.5%	772	7.6%	132	3.7%
Wholesale Trade	29	0.4%	103	1.0%	59	1.6%
Retail Trade	699	9.8%	1,821	18.0%	322	8.9%
Transportation and Warehousing	66	0.9%	117	1.2%	84	2.3%
Information	44	0.6%	136	1.3%	55	1.5%
Finance and Insurance	66	0.9%	348	3.4%	35	1.0%
Real Estate and Rental and Leasing	389	5.5%	199	2.0%	16	0.4%
Professional, Scientific, and Technical Services	338	4.7%	326	3.2%	287	8.0%
Management of Companies and Enterprises	2	0.0%	0	0.0%	0	0.0%
Administration & Support, Waste Management and Remediation	380	5.3%	151	1.5%	65	1.8%
Educational Services	652	9.2%	610	6.0%	608	16.8%
Health Care and Social Assistance	883	12.4%	3,073	30.4%	226	6.3%
Arts, Entertainment, and Recreation	211	3.0%	122	1.2%	91	2.5%
Accommodation and Food Services	1,007	14.1%	1,114	11.0%	626	17.3%
Other Services (excluding Public Administration)	616	8.7%	341	3.4%	143	4.0%
Public Administration	232	3.3%	153	1.5%	744	20.6%

²⁶ U.S. Census Bureau, Longitudinal-Employer Household Dynamics Program, LEHD Origin-Destination Employment Statistics (2002-2017), Washington, DC, accessed December 15, 2019, <https://onthemap.ces.census.gov>. LODS 7.4. (All jobs as place of work.)

APPENDIX C: SMALL BUSINESS AND PRIORITY SECTORS

The research team used business establishment data to analyze the prevalence of small businesses in the eight priority sectors. Nearly all businesses in the county’s priority sectors have fewer than 50 employees (Exhibit C1). Nine out of 10 employers are businesses with fewer than 10 employees.

Exhibit C1. Business establishments and jobs by employment size, eight priority sectors, Nevada County, 2019²⁷

Employment Size	# of Jobs	% of Total Jobs	# of Establishments	% of All Establishments
<10 employee	9,055	39.6%	3,671	91.0%
<50 employee	14,897	65.2%	3,988	98.8%
Total	22,852	100%	4,035	100%



View of South Yuba from N Bloomfield Road Nevada City, CA, by J. Smith is licensed under [CC BY-ND 3.0](https://creativecommons.org/licenses/by-nd/3.0/).

²⁷ Econovue, Dun & Bradstreet, 2019.4.

APPENDIX D: DETAILED INDUSTRIES AND ESTABLISHMENTS IN THE EIGHT PRIORITY SECTORS

Exhibit D1. Detailed industries in the utilities sector, Nevada County, 2018²⁸

Utilities				
NACIS Code	Industry Description	2018 Jobs	2018 Average Annual Wage	2018 LQ
221320	Sewage treatment facilities	113	\$89,523	9.6

Exhibit D2. Detailed business establishments in the utilities sector, Nevada County, 2019²⁹

Registered Company Name	City	Employment	NAICS	NAICS Description
Pacific Gas and Electric Company	Grass Valley	200	221118	Other Electric Power Generation
Nevada Irrigation District	Grass Valley	160	221310	Water Supply and Irrigation Systems
Truckee Donner Public Utility District Financing Corporation	Truckee	68	221122	Electric Power Distribution
Tahoe-Truckee Sanitation Agency	Truckee	59	221320	Sewage Treatment Facilities
Truckee Sanitary District	Truckee	36	221320	Sewage Treatment Facilities

Exhibit D3. Detailed industries in the construction sector, Nevada County, 2019³⁰

Construction				
NACIS Code	Industry Description	2018 Jobs	2018 Average Annual Wage	2018 LQ
236115	New single-family general contractors	620	\$53,189	7.9
238221	Residential plumbing and HVAC contractors	291	\$50,297	2.5
238212	Nonresidential electrical contractors	183	\$60,409	1.3
238321	Residential painting contractors	182	\$41,655	6.8
238211	Residential electrical contractors	159	\$46,004	2.5
238911	Residential site preparation contractors	96	\$49,074	3.7
238912	Nonresidential site preparation contractors	81	\$73,447	1.7
237110	Water and sewer system construction	72	\$88,491	1.8
237310	Highway, street, and bridge construction	71	\$65,207	1.0
238331	Residential flooring contractors	16	\$63,384	1.5
238191	Other residential exterior contractors	3	\$34,658	0.8

²⁸ Bureau of Labor Statistics, Quarterly Census of Employment and Wages (QCEW), 2018 annual averages, <https://www.bls.gov/cew/downloadable-data-files.htm>.

²⁹ Econovue, Dun & Bradstreet, 2019.4. Employment numbers shown are approximations based on surveys and other sources. these numbers are sometimes incorrect based on misreporting or counting headquarter employment for a branch, etc.

³⁰ Bureau of Labor Statistics, Quarterly Census of Employment and Wages (QCEW), 2018 annual averages, <https://www.bls.gov/cew/downloadable-data-files.htm>.

Exhibit D4. Detailed business establishments in the construction sector, Nevada County, 2019³¹

Registered Company Name	City	Employment	NAICS	NAICS Description
Byers Enterprises, Inc.	Grass Valley	69	238390	Other Building Finishing Contractors
Patrick Dean Bryan	Nevada City	60	238990	All Other Specialty Trade Contractors
JM Streamline, Inc.	Grass Valley	55	236220	Commercial and Institutional Building Construction
Tim Mello Construction	Grass Valley	50	236115	New Single-Family Housing Construction (except For-Sale Builders)
Sierra West Construction, Inc	Auburn	50	238130	Framing Contractors
Beam Vacuums of California, Inc.	Grass Valley	50	238210	Electrical Contractors and Other Wiring Installation Contractors

Exhibit D5. Detailed industries in the manufacturing sector, Nevada County, 2019³²

Manufacturing				
NAICS Code	Industry Description	2018 Jobs	2018 Average Annual Wage	2018 LQ
334220	Broadcast and wireless communications equip.	309	\$95,509	29.3
332710	Machine shops	65	\$50,446	1.1
339950	Sign manufacturing	29	\$26,877	1.7
339113	Surgical appliance and supplies manufacturing	19	\$47,820	0.9
333111	Farm machinery and equipment manufacturing	18	\$49,621	1.4
337110	Wood kitchen cabinet and countertop mfg.	15	\$39,279	0.6
321113	Sawmills	4	\$26,923	0.2

Exhibit D6. Detailed business establishments in the manufacturing sector, Nevada County, 2019³³

Registered Company Name	City	Employment	NAICS	NAICS Description
Ijot Development, Inc.	Penn Valley	1600	337127	Institutional Furniture Manufacturing
Grass Valley, Inc.	Grass Valley	750	334220	Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing
Technicolor Usa, Inc.	Nevada City	513	334220	Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing
Grass Valley Usa, LLC	Grass Valley	300	334210	Telephone Apparatus Manufacturing
Seagate Technology LLC	Grass Valley	240	334112	Computer Storage Device Manufacturing

³¹ Econovue, Dun & Bradstreet, 2019.4. Bureau of Labor Statistics, Quarterly Census of Employment and Wages (QCEW), 2018 annual averages, <https://www.bls.gov/cew/downloadable-data-files.htm>.

³² Bureau of Labor Statistics, Quarterly Census of Employment and Wages (QCEW), 2018 annual averages, <https://www.bls.gov/cew/downloadable-data-files.htm>.

³³ Econovue, Dun & Bradstreet, 2019.4.

Exhibit D7. Detailed industries in the information sector, Nevada County, 2019³⁴

Information				
NACIS Code	Industry Description	2018 Jobs	2018 Average Annual Wage	2018 LQ
517311	Wired telecommunications carriers	103	\$81,124	0.9
515112	Radio stations	40	\$29,348	2.8
511210	Software publishers	14	\$127,025	0.2
512110	Motion picture and video production	3	\$46,892	0.1

Exhibit D8. Detailed business establishments in the information sector, Nevada County, 2019³⁵

Registered Company Name	City	Employment	NAICS	NAICS Description
Nevada County Publishing Co	Grass Valley	650	511110	Newspaper Publishers
Cequel Communications, LLC	Auburn	34	515210	Cable and Other Subscription Programming
Cequel Communications, LLC	Truckee	34	515210	Cable and Other Subscription Programming
County of Nevada	Nevada City	25	519120	Libraries and Archives
Moonshine Ink	Truckee	20	511110	Newspaper Publishers
Nevada County Broadcasters Inc	Grass Valley	20	515111	Radio Networks
County of Nevada	Nevada City	20	519120	Libraries and Archives

Exhibit D9. Detailed industries in the arts, entertainment, and recreation sector, Nevada County, 2019³⁶

Arts, Entertainment, and Recreation				
NACIS Code	Industry Description	2018 Jobs	2018 Average Annual Wage	2018 LQ
713920	Skiing facilities	583	\$27,516	66.4
713940	Fitness and recreational sports centers	217	\$17,601	1.6
713990	All other amusement and recreation industries	165	\$37,413	3.8
713910	Golf courses and country clubs	129	\$23,750	1.6

³⁴ Bureau of Labor Statistics, Quarterly Census of Employment and Wages (QCEW), 2018 annual averages, <https://www.bls.gov/cew/downloadable-data-files.htm>.

³⁵ Econovue, Dun & Bradstreet, 2019.4.

³⁶ Bureau of Labor Statistics, Quarterly Census of Employment and Wages (QCEW), 2018 annual averages, <https://www.bls.gov/cew/downloadable-data-files.htm>.

Exhibit D10. Detailed business establishments in the arts, entertainment, and recreation sector, Nevada County, 2019³⁷

Registered Company Name	City	Employment	NAICS	NAICS Description
Boreal Ridge Corporation	Soda Springs	110	713920	Skiing Facilities
Truckee Donner Recreation & Park District	Truckee	100	713990	All Other Amusement and Recreation Industries
Donner Tahoe Golf Course Inc	Truckee	75	713910	Golf Courses and Country Clubs
Alta Sierra Country Club, Inc.	Grass Valley	50	713910	Golf Courses and Country Clubs

Exhibit D11. Detailed industries in the accommodation and food services sector, Nevada County, 2019³⁸

Accommodation and Food Services				
NACIS Code	Industry Description	2018 Jobs	2018 Average Annual Wage	2018 LQ
722511	Full-service restaurants	1,751	\$22,891	1.5
722513	Limited-service restaurants	768	\$19,194	0.8
722410	Drinking places, alcoholic beverages	131	\$16,514	1.5
721214	Recreational and vacation camps	113	\$18,781	14.4
722320	Caterers	54	\$16,469	1.4
721211	RV parks and campgrounds	51	\$25,283	7.3

Exhibit D12. Detailed business establishments in the accommodation and food service sector, Nevada County, 2019³⁹

Registered Company Name	City	Employment	NAICS	NAICS Description
Bhr Trs Tahoe LLC	Truckee	248	721110	Hotels (except Casino Hotels) and Motels
Sugar Bowl Corporation	Norden	100	721110	Hotels (except Casino Hotels) and Motels
Northern Queen Inc	Nevada City	65	721110	Hotels (except Casino Hotels) and Motels
Tjm Food Services Inc	Grass Valley	60	722511	Full-Service Restaurants
Ms Rosijinx Foods, Inc	Nevada City	40	722511	Full-Service Restaurants
Sisco Enterprises, Inc.	Grass Valley	40	722513	Limited-Service Restaurants
Thomas N Teague	Truckee	40	722513	Limited-Service Restaurants

³⁷ Econovue, Dun & Bradstreet, 2019.4.

³⁸ Bureau of Labor Statistics, Quarterly Census of Employment and Wages (QCEW), 2018 annual averages, <https://www.bls.gov/cew/downloadable-data-files.htm>.

³⁹ Econovue, Dun & Bradstreet, 2019.4.

Exhibit D13. Detailed industries in the professional, scientific, and technical services sector, Nevada County, 2019⁴⁰

Professional, Scientific, and Technical Services				
NACIS Code	Industry Description	2018 Jobs	2018 Average Annual Wage	2018 LQ
541512	Computer systems design services	227	\$101,864	1.0
541940	Veterinary services	183	\$36,477	2.2
541330	Engineering services	140	\$66,050	0.6
541611	Administrative management consulting services	72	\$119,362	0.5
541219	Other accounting services	61	\$27,721	1.1
541310	Architectural services	61	\$76,217	1.5
541690	Other technical consulting services	60	\$67,403	1.4
541511	Custom computer programming services	48	\$116,405	0.2
541211	Offices of certified public accountants	47	\$83,686	0.5
541430	Graphic design services	34	\$36,572	2.5
541410	Interior design services	21	\$61,343	2.1
541620	Environmental consulting services	21	\$51,352	1.1

Exhibit D14. Detailed business establishments in the professional, scientific, and technical services sector, Nevada County, 2019⁴¹

Registered Company Name	City	Employment	NAICS	NAICS Description
Telestream, LLC	Nevada City	110	541511	Custom Computer Programming Services
Tahoe Truckee Unified School District Financing Corporation	Truckee	73	541618	Other Management Consulting Services
Forest Tahoe Hospital District	Truckee	43	541219	Other Accounting Services
Micro Precision Calibration, Inc.	Grass Valley	43	541380	Testing Laboratories
Duane Morris LLP	Truckee	36	541110	Offices of Lawyers

⁴⁰ Bureau of Labor Statistics, Quarterly Census of Employment and Wages (QCEW), 2018 annual averages, <https://www.bls.gov/cew/downloadable-data-files.htm>.

⁴¹ Econovue, Dun & Bradstreet, 2019.4.

Exhibit D15. Detailed industries in the health care sector, Nevada County, 2019⁴²

Health Care				
NACIS Code	Industry Description	2018 Jobs	2018 Average Annual Wage	2018 LQ
624120	Services for the elderly and disabled	873	\$15,418	2.2
621111	Offices of physicians, except mental health	543	\$84,486	1.0
623110	Nursing care facilities, skilled nursing	532	\$38,866	1.5
621210	Offices of dentists	295	\$49,824	1.4
621498	All other outpatient care centers	214	\$58,348	5.8
623312	Assisted living facilities for the elderly	200	\$26,266	2.1
624410	Child day care services	158	\$20,248	0.8
624310	Vocational rehabilitation services	153	\$13,963	2.2
624190	Other individual and family services	131	\$27,157	1.4
621340	Offices of specialty therapists	89	\$39,619	1.0
624110	Child and youth services	83	\$42,736	1.9
624221	Temporary shelters	56	\$28,170	3.5
621310	Offices of chiropractors	51	\$25,256	1.7

Exhibit D16. Detailed business establishments in the health care sector, Nevada County, 2019⁴³

Registered Company Name	City	Employment	NAICS	NAICS Description
Sierra Nevada Memorial Hospital	Grass Valley	800	622110	General Medical and Surgical Hospital
Tahoe Forest Hospital District	Truckee	302	622110	General Medical and Surgical Hospitals
Mountain Valley Child and Family Services, Inc.	Nevada City	220	623110	Nursing Care Facilities (Skilled Nursing Facilities)
Golden Empire Convalescent Hospital LP	Grass Valley	180	622110	General Medical and Surgical Hospitals
Forest Tahoe Hospital District	Truckee	111	622110	General Medical and Surgical Hospitals
Meadow View Manor Inc	Grass Valley	100	623110	Nursing Care Facilities (Skilled Nursing Facilities)

⁴² Bureau of Labor Statistics, Quarterly Census of Employment and Wages (QCEW), 2018 annual averages. <https://www.bls.gov/cew/downloadable-data-files.htm>.

⁴³ Econovue, Dun & Bradstreet, 2019.4.

APPENDIX E: OCCUPATIONAL PROFILES, PLACER COUNTY AND WASHOE COUNTY

Exhibit E1. Middle-skill occupational employment, Placer County, 2008-2023⁴⁴

Middle-Skill Jobs					
SOC	Description	2018 Jobs	2008-2018 Job Change	Median Hourly Earnings	2018-2023 Annual Openings
47-2031	Carpenters	3,572	265	\$25.82	407
29-1141	Registered Nurses	3,365	1,004	\$57.86	280
43-4051	Customer Service Representatives	2,467	860	\$18.80	411
43-6014	Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	2,355	520	\$19.55	287
41-1011	First-Line Supervisors of Retail Sales Workers	2,090	145	\$21.61	248
43-3031	Bookkeeping, Accounting, and Auditing Clerks	2,069	45	\$22.56	269
25-9041	Teacher Assistants	1,693	230	\$15.70	212
43-1011	First-Line Supervisors of Office and Administrative Support Workers	1,620	336	\$30.16	197
41-3099	Sales Representatives, Services, All Other	1,540	806	\$31.20	228
31-9092	Medical Assistants	1,414	880	\$20.10	215
53-3032	Heavy and Tractor-Trailer Truck Drivers	1,407	388	\$22.39	226
49-9071	Maintenance and Repair Workers, General	1,390	345	\$22.42	196
39-9011	Childcare Workers	1,367	(127)	\$13.28	216
43-6013	Medical Secretaries	1,339	655	\$22.95	192
39-5012	Hairdressers, Hairstylists, and Cosmetologists	1,328	274	\$17.08	194

Exhibit E2. Above-middle-skill occupational employment, Placer County, 2008-2023⁴⁵

Above-Middle-Skill Jobs					
SOC	Description	2018 Jobs	2008-2018 Job Change	Median Hourly Earnings	2018-2023 Annual Openings
13-1111	Management Analysts	3,094	968	\$39.91	309
11-1021	General and Operations Managers	2,712	1,053	\$56.43	306
13-2011	Accountants and Auditors	1,998	503	\$36.97	233
25-2021	Elementary School Teachers, Except Special Education	1,581	92	\$33.74	152
11-9199	Managers, All Other	1,202	417	\$41.98	110
25-2031	Secondary School Teachers, Except Special and Career/ Technical Education	1,157	115	\$37.55	109
15-1121	Computer Systems Analysts	1,045	242	\$42.01	78
13-1199	Business Operations Specialists, All Other	1,026	196	\$38.57	123
25-3098	Substitute Teachers	967	343	\$20.03	126
15-1133	Software Developers, Systems Software	924	(217)	\$47.48	60
23-1011	Lawyers	910	275	\$62.69	63
41-3031	Securities, Commodities, and Financial Services Sales Agents	893	332	\$37.05	95
11-3031	Financial Managers	777	200	\$64.30	84
11-9021	Construction Managers	769	53	\$41.34	73
11-2022	Sales Managers	697	182	\$64.05	74

⁴⁴ EMSI, 2019.4

⁴⁵ Ibid.

Exhibit E3. Middle-skill occupational employment, Washoe County, Nevada, 2008 to 2023⁴⁶

Middle-Skill Jobs					
SOC	Description	2018 Jobs	2008-2018 Job Change	Median Hourly Earnings	2018-2023 Annual Openings
43-4051	Customer Service Representatives	4,882	1,378	\$17.32	695
29-1141	Registered Nurses	4,392	1,041	\$37.53	339
53-3032	Heavy and Tractor-Trailer Truck Drivers	3,905	275	\$23.77	494
43-6014	Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	3,191	382	\$18.91	356
47-2031	Carpenters	2,770	7	\$25.71	326
49-9071	Maintenance and Repair Workers, General	2,665	244	\$20.51	307
43-3031	Bookkeeping, Accounting, and Auditing Clerks	2,153	(580)	\$19.83	263
41-1011	First-Line Supervisors of Retail Sales Workers	2,064	(58)	\$20.40	246
41-3099	Sales Representatives, Services, All Other	1,973	954	\$31.88	281
43-1011	First-Line Supervisors of Office and Administrative Support Workers	1,893	14	\$27.35	211
41-4012	Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	1,826	(235)	\$32.45	219
35-1012	First-Line Supervisors of Food Preparation and Serving Workers	1,600	210	\$15.42	258
39-9011	Childcare Workers	1,558	(51)	\$11.34	245
49-3023	Automotive Service Technicians and Mechanics	1,314	146	\$23.04	144
47-2111	Electricians	1,262	77	\$25.60	173



Truckee California, by Wayne Hsieh is licensed under [CC BY-ND 2.0](https://creativecommons.org/licenses/by-nd/2.0/).

⁴⁶ Ibid.

Exhibit E4. Above-middle-skill occupational employment, Washoe County, Nevada, 2008 to 2023⁴⁷

Above-Middle-Skill Jobs					
SOC	Description	2018 Jobs	2008-2018 Job Change	Median Hourly Earnings	2018-2023 Annual Openings
11-1021	General and Operations Managers	3,415	894	\$56.29	356
25-1099	Postsecondary Teachers	2,711	298	\$37.14	204
25-2021	Elementary School Teachers, Except Special Education	1,735	(26)	\$28.20	145
13-2011	Accountants and Auditors	1,664	28	\$33.80	187
11-9199	Managers, All Other	1,439	383	\$41.75	130
13-1199	Business Operations Specialists, All Other	1,433	71	\$34.35	157
13-1111	Management Analysts	1,109	271	\$51.43	121
25-3098	Substitute Teachers	1,081	427	\$11.03	131
11-3031	Financial Managers	1,044	195	\$63.90	103
11-9021	Construction Managers	918	171	\$44.39	84
25-2031	Secondary School Teachers, Except Special and Career/ Technical Education	916	21	\$28.48	76
23-1011	Lawyers	863	(13)	\$69.41	41
13-1071	Human Resources Specialists	751	296	\$28.16	88
25-9099	Education, Training, and Library Workers, All Other	700	80	\$24.28	66
15-1132	Software Developers, Applications	613	270	\$49.31	82



Nevada City, CA, by Erin Johnson is licensed under [CC BY-ND 2.0](https://creativecommons.org/licenses/by-nd/2.0/).

⁴⁷ Ibid.

MORE ABOUT THE CENTERS OF EXCELLENCE

The Centers of Excellence (COE) for Labor Market Research deliver regional workforce research and technical expertise to California Community Colleges for program decision making and resource development. This information has proven valuable to colleges in beginning, revising, or updating economic development and Career Education (CE) programs, strengthening grant applications, assisting in the accreditation process, and in supporting strategic planning efforts.

The Centers of Excellence Initiative is funded in part by the Chancellor's Office, California Community Colleges, Economic and Workforce Development Program. The Centers aspire to be the leading source of regional workforce information and insight for California Community Colleges. More information about the Centers of Excellence is available at www.coeccc.net.

For more information on this study, contact:

Aaron Wilcher, COE Director
Center of Excellence, North/Far North Region
(916) 563-3233
wilchea@losrios.edu

Important Disclaimer

All representations included in this report have been produced from primary research and/or secondary review of publicly and/or privately available data and/or research reports. Efforts have been made to qualify and validate the accuracy of the data and the reported findings; however, neither the Centers of Excellence, COE host District, nor California Community Colleges Chancellor's Office are responsible for applications or decisions made by recipient community colleges or their representatives based upon components or recommendations contained in this study.

© 2020 California Community Colleges Chancellor's Office Economic and Workforce Development Program

Please consider the environment before printing.

This document is designed for double-sided printing.

