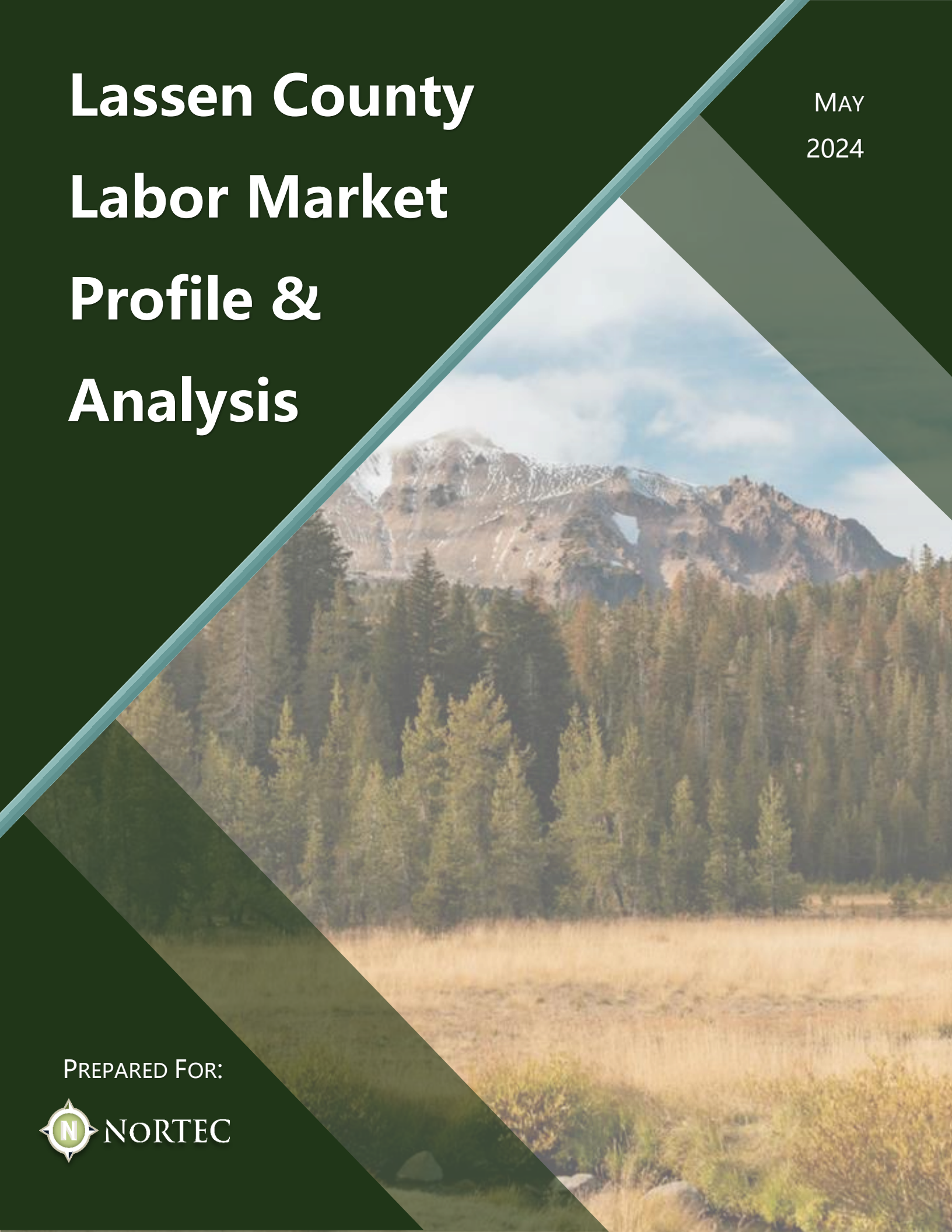
# Lassen County Labor Market Profile & Analysis

May 2024



Prepared For:

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# Table of Contents


Introduction ..... 3
Executive Summary ..... 3
Demographic & Labor Force Characteristics ..... 5
- Total Population ..... 5
- Non-Institutionalized Population ..... 6
- Race/Ethnicity ..... 6
- Education Attainment ..... 7
- Income ..... 7
- Commuting ..... 8

Human Capital ..... 9
- Labor Force ..... 9
- Labor Force Participation Rate ..... 9
- Employment ..... 10
- Unemployment ..... 11

Industry Sector Analysis ..... 14
- Industry Mix ..... 14
- Key Industries ..... 16

Occupational Analysis ..... 18
- Occupational Groups ..... 18
- Top Occupations by Employment ..... 19
- Education & Training Requirements for High Demand Jobs ..... 21

Staffing Pattens of Target Sectors in Lassen County ..... 23
- Agriculture ..... 23
- Construction ..... 24
- Healthcare ..... 25
- Hospitality ..... 26
- Public Services ..... 27

Economic Impact of Prison Closure ..... 28
- Employment, Earnings, & Income Tax Change ..... 28
- Taxes ..... 29
- Impacted Industries ..... 29

Recommendations ..... 31
Appendix A: Non-Institutionalized Population Estimation Methodology ..... 37

Appendix B: Industry Sector Definitions ..... 38
Appendix C: Regional Demand Data ..... 40

# Introduction

Lassen County presents a unique microcosm of economic evolution. To navigate this shifting terrain and ensure a thriving workforce, a deep understanding of the local labor market is crucial. However, it is important to recognize the challenges the County has faced over the last few years, including COVID-19, natural disasters, and the closure of the California Correctional Center in Susanville.

The analysis that follows dives into the current landscape, dissecting recent changes in population characteristics, human capital, emerging industries and occupations, and staffing patterns of targeted industry sectors for the County in relation to the greater region that makes up the Northern Rural Training and Employment Consortium (NoRTEC). Data was collected through public data resources, including California Employment Development Department (EDD), U.S. Census Bureau, U.S. Bureau of Labor Statistics, as well as proprietary data resources, such as Lightcast for year 2022 (the latest full calendar year of available data from federal statistical agencies).

This profile is being developed as part of a larger project operating concurrently with NoRTEC and the Alliance for Workforce Development, which includes a workforce survey to employers in the County on how best to serve the immediate and emerging workforce needs of businesses across Lassen County, regardless of industry or employment size.

Armed with these insights, this profile report paves the way for crafting strategic initiatives that attract, hire, and equip a skilled workforce, ensuring that employers in Lassen County have access to a pipeline of talent and propose in the face of an economic transformation.

# Executive Summary

Since NoRTEC prepared the last County profile in 2019, drastic changes occurred, impacting Lassen County's labor market, including a global pandemic, a state prison closure, and numerous natural disasters. Opportunities exist for Lassen County to diversify its workforce and economy, including leveraging assets like close proximity to neighboring metropolitans, such as Reno, Nevada.

The following takeaways should be considered to support a Lassen County workforce development strategy for attracting talent, developing, and upskilling talent to meet the needs of emerging jobs and industry sectors, and retain younger populations.

- Lassen County's population declined by 11% between 2012 and 2022 with the greatest declining percentage share concentrated in individuals between the ages of 35-54
- The percentage of individuals with a bachelor's degree or graduate degree in Lassen County is lower than California, but higher than the nation
- Lassen County's poverty rate (13.9%) was higher than the rate in California (12.2%) and nationally (12.6%)

- Lassen County is a net exporter of workers (i.e., more people commute out of the County for work than commute in)
- Between 2002 and 2022, employment in Lassen County peaked in October 2009 (14,312) and was at its lowest level in July 2022 (8,553). The County's employment size by December 2022 was 8,867
- On average, unemployment rates in Lassen County follow state trends but since COVID-19, the County's unemployment rate has decreased at a slower rate than California statewide
- The top industry sectors in Lassen County employing the most workers in 2022 are Government (5,814; 57.1%); Retail Trade (935; 9.2%); Health Care and Social Assistance (908; 8.9%); and Accommodation and Food Services (457; 4.5%)
- The top occupations in Lassen County in 2022 include Office and Administrative Support (1,123 jobs); Protective Service (917 jobs); Life, Physical, and Social Science (829 jobs); Educational Instruction and Library (750 jobs)

# DEMOGRAPHIC & LABOR FORCE CHARACTERISTICS

## Total Population

Lassen County is located along the eastern border of California. Between 2012 and 2022, the County experienced an 11% decline in population, resulting in a loss of over 3,700 individuals. Over half of the population loss was concentrated in those between the ages of 35-54 (2,328). With the exception of individuals 65 years and older, every cohort experienced a decline in population. However, the next ten years project a rosier picture as Lassen County is projected to add 4,884 individuals to its population – a 16.3% growth. The greatest projected growth is concentrated in individuals between the ages of 35-54 years of age (+2,137).

The age cohorts that experienced the smallest percentage of population decline over the last ten years are those that are typically not in the labor force. Individuals under the age of five experienced a 7.8% decrease in population and those between the ages of 5-19 experienced a 9.5% decrease. Those preparing to exit the labor force due to retirement (e.g., 55–64-year-olds) experience a 22.6% decrease over the last ten years.

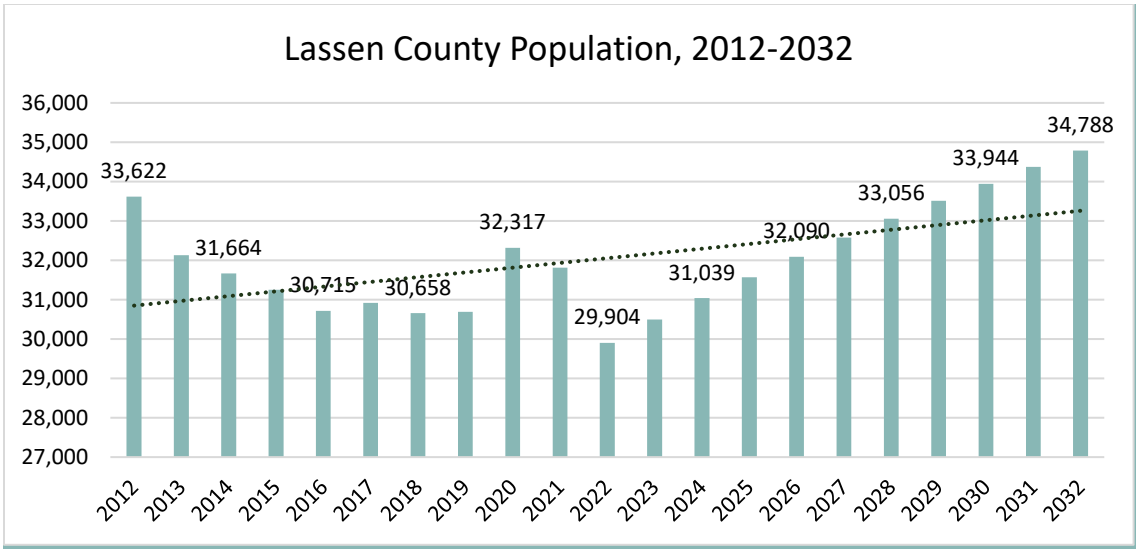
| Age | 2012 Population | 2022 Population | Change 2012-2022 | % Change 2012-2022 | Projected Change 2022-2032 | Projected % Change 2022-2032 |
|---|---|---|---|---|---|---|
| Under 5 | 1,545 | 1,424 | (121) | (7.8%) | 166 | 11.6% |
| 5-19 | 5,067 | 4,587 | (480) | (9.5%) | 842 | 18.4% |
| 20-34 | 8,993 | 7,304 | (1,689) | (18.8%) | 1,221 | 16.7% |
| 35-54 | 10,304 | 7,976 | (2,328) | (22.6%) | 2,137 | 26.8% |
| 55-64 | 4,059 | 3,366 | (693) | (17.1%) | (294) | (8.7%) |
| Over 65 | 3,654 | 5,247 | 1,593 | 43.6% | 813 | 15.5% |
| **Total** | **33,622** | **29,904** | **(3,718)** | **(11.1%)** | **4,884** | **16.3%** |

Source: Lightcast, 2023.4 (includes data from California Employment Development Department)

The overall population in Lassen County from 2012 to 2016 continuously declined, however from 2016 to 2019, the population hovered between 30,600 to 30,900. The County experienced a population surge in 2020 and 2021. According to California Policy Lab, California, like much of the nation, experienced a migration from heavily populated metropolitan areas to more rural, less populated areas.[1] This trend might explain why during the pandemic, Lassen County experienced an increase in residents compared to years before.

While the population in Lassen County dipped in 2022 from the year before, estimates project that the County will continue to experience a gradual increase in population. Whereas the average population total for the county was 31,426 from 2012-2022, it is projected to average 32,745 from 2023-2032.

[1] California Policy Lab, Pandemic Patterns: California is Seeing Fewer Entrances and More Exits, April 2022; https://www.capolicylab.org/wp-content/uploads/2022/04/Pandemic-Patterns.-California-is-Seeing-Fewer-Entrances-and-More-Exits-April-2022-update.pdf




Source: Lightcast, 2023.4 (includes data from California Employment Development Department)

## Non-Institutionalized Population

Located in Lassen County are two prisons, one federal and one state. Prior to its closure on June 30, 2023, there was an additional state prison, California Correctional Center. To gain a sense of the non-incarcerated population, the non-institutionalized population was estimated.[2] Between 2012 and 2022, the County saw a 6.6% decline in the non-institutionalized population, a loss of about 1,500 individuals. Every age cohort, with the exception of the 65+ community, saw a decline.

| Age | 2012 | 2022 | Change 2012-2022 | % Change 2012-2022 |
|---|---|---|---|---|
| **Under 5** | 1,545 | 1,424 | (121) | (7.8%) |
| 5-19 | 4,886 | 4,567 | (319) | (6.5%) |
| 20-34 | 3,652 | 2,991 | (661) | (18.1%) |
| 35-54 | 6,137 | 4,785 | (1,352) | (22.0%) |
| 55-64 | 3,697 | 2,969 | (728) | (19.7%) |
| Over 65 | 3,574 | 5,212 | 1,638 | 45.8% |
| **Total** | **23,491** | **29,904** | **(1,542)** | **(6.6%)** |

Source: Lightcast, 2023.4 (includes data from California Employment Development Department), 2022 American Community Survey 5-Year Estimates, 2010 and 2020 Decennial Census.

## Race/Ethnicity

Lassen County has a less diverse population than California as a whole. In 2022, Lassen County's largest population cohort by race/ethnicity was White (64.2%), but for California, this cohort represented 34.7% of the total population. The largest statewide population by race/ethnicity was Hispanic at 40.3%.

California has a sizable Asian population, representing 15.6% of the state's residents. This group was the second least represented population cohort in Lassen County (1.5%). The significant projected population growth in Lassen County over the next ten years will make the County more diverse. The percentage of Hispanic residents, for example, will increase 57.3% from 6,062 in 2022 to 9,538 in 2032.

[2] Information on the methodology used to estimate the non-institutionalized population can be found in Appendix A.

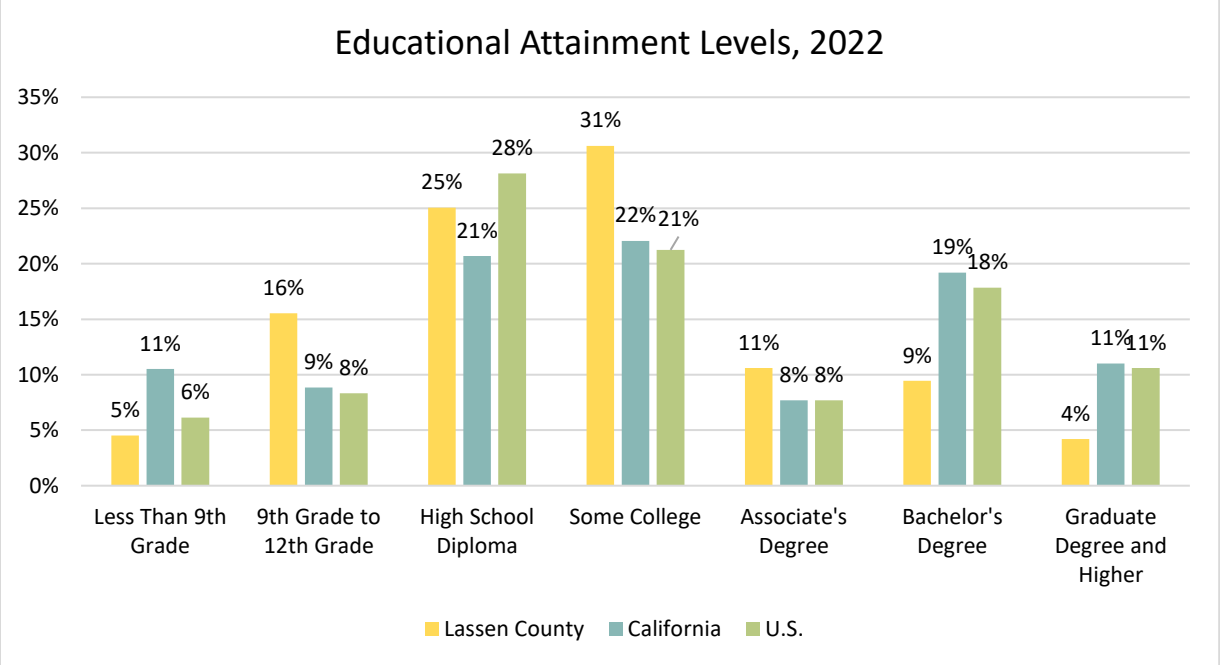
| Race/Ethnicity | 2022 Population | Change 2012-2022 | % Change 2012-2022 | 2032 Population |
|---|---|---|---|---|
| **White** | 19,186 | (3,024) | (13.6%) | 19,478 |
| **Hispanic** | 6,062 | (68) | (1.1%) | 9,538 |
| **Black** | 2,123 | (780) | (26.9%) | 2,610 |
| **American Indian or Alaskan Native** | 838 | (128) | (13.3%) | 1,158 |
| **Two or More Races** | 999 | 143 | 16.7% | 860 |
| **Asian** | 445 | 86 | 24.0% | 816 |
| **Native Hawaiian or Pacific Islander** | 251 | 53 | 26.8% | 328 |
| **Total** | **29,904** | **(3,718)** | **(11.1%)** | **34,788** |

Source: Lightcast, 2023.4 (includes data from California Employment Development Department)

## Education Attainment

Lassen County has a significantly lower rate of individuals with a bachelor's degree or graduate degree and higher than the state and nation, respectively. Nearly 9% of Lassen County residents have a bachelor's degree compared to 19% of California residents and 18% of all Americans. However, around 25% of Lassen County residents have an educational attainment of just a high school diploma, which outperforms the attainment level in California (21%) but falls short of nation levels (28%).

Additionally, 31% of Lassen County residents have some college which is nine percentage points higher than statewide and ten percentage points higher than national averages.




Source: Lightcast, 2023.4 (includes data from California Employment Development Department)

## Income

Median household income refers to the distribution of household income into two equal groups: one having incomes above the median, and one having incomes below the median. The U.S. Census Bureau defines a household as a persons classified as members of a married-couple family, other family type, or as an unrelated individual. The 2021 median household income for Lassen County was $59,292 – $1,133

more than the average median household income for the entire NoRTEC region. Despite this, Lassen County trails the state and national median household incomes, respectively.

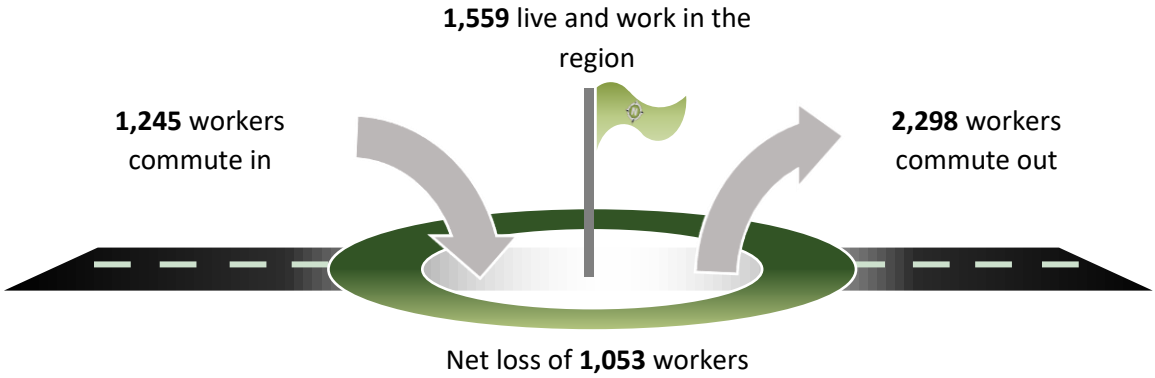
The poverty rate is the ratio of the number of people whose income falls below the poverty line. In California, the poverty rate was 12.2% in 2021 and 12.6% nationally. Lassen County was slightly higher than both at 13.9% and second highest among neighboring counties (Modoc, Shasta, Sierra, Plumas).

| County | Median Household Income | Poverty Rate |
|---|---|---|
| **Lassen** | $59,292 | 13.9% |
| **Butte** | $64,426 | 18.8% |
| **Del Norte** | $53,280 | 17.3% |
| **Modoc** | $51,090 | 19.6% |
| **Nevada** | $78,401 | 11.0% |
| **Plumas** | $57,885 | 11.9% |
| **Shasta** | $68,276 | 13.7% |
| **Sierra** | $56,152 | 8.2% |
| **Siskiyou** | $49,857 | 16.7% |
| **Tehama** | $58,884 | 14.5% |
| **Trinity** | $42,206 | 22.5% |
| **California** | $91,551 | 12.2% |
| **United States** | $74,755 | 12.6% |

Source: U.S. Census Bureau, 2021 American Community Survey 5-Year Estimates

## Commuting

The graphic below details the commuting patterns of workers in Lassen County among private primary jobs as reported by the U.S. Census Bureau. In 2021, Lassen County was reported to be a net exporter of workers with 2,298 workers commuting out of the county for work versus only 1,245 workers commuting into the county for work. The top counties where workers are commuting from into Lassen County include Shasta County (6.6%), Washoe County, Nevada (5.6%), Plumas County (3.7%), Sacramento County (2.9%), and Tehama County (2.65).



The table below details the top 20 inbound commuters to Lassen County in 2022.

| County | Inbound Commuters (to Lassen Co.) | Outbound Commuters (from Lassen Co.) | Net Commuters (difference) |
|---|---|---|---|
| **Washoe County, NV** | 1,031 | 53 | 979 |
| **Shasta County, CA** | 472 | 417 | 55 |
| **Plumas County, CA** | 344 | 417 | (73) |
| **Butte County, CA** | 245 | 268 | (23) |
| **Modoc County, CA** | 243 | 60 | 182 |
| **Sacramento County, CA** | 175 | 252 | (77) |
| **Tehama County, CA** | 159 | 124 | 34 |
| **Nevada County, CA** | 144 | 53 | 90 |
| **Siskiyou County, CA** | 121 | 58 | 63 |
| **Placer County, CA** | 118 | 104 | 15 |
| **Glenn County, CA** | 55 | 24 | 31 |
| **Solano County, CA** | 52 | 50 | 2 |
| **Sierra County, CA** | 48 | 1 | 48 |
| **El Dorado County, CA** | 36 | 23 | 13 |
| **Sutter County, CA** | 26 | 35 | (9) |
| **Yuba County, CA** | 26 | 8 | 18 |
| **Mendocino County, CA** | 24 | 41 | (17) |
| **Douglas County, NV** | 19 | 3 | 16 |
| **Lyon County, NV** | 19 | 1 | 18 |
| **Lake County, CA** | 15 | 23 | (8) |

Source: Lightcast 2023.4 (U.S. Census Bureau, American Community Survey, 2022)

# Human Capital

## Labor Force

| Employment in Lassen County 2002 - 2022[3] | | |
|---|---|---|
| **Peak** | October 2009: 14,312 | December 2022: 8,867 (5,445 lower) |
| **Trough** | July 2022: 8,553 | December 2022: 8,867 (314 higher) |
| **December 2022** | Employment: 8,459<br>Labor Force: 8,867<br>Unemployment Rate: 4.6% | |

Labor force statistics include both the employed and the unemployed, excluding only those who have stopped looking for work (discouraged workers) and those who are voluntarily not in the labor force. In December 2022, 8,867 individuals participated in the Lassen County labor force. Of these, 8,459 were employed and 408 were unemployed. Over the last 20 years, employment in the county was at its highest in October 2009 and lowest in July 2022. As of December 2022, the unemployment rate was 4.6%, higher than the unemployment rate of California (4.1%) and the United States (3.5%).

## Labor Force Participation Rate

The labor force participation rate is sensitive to demographic changes because participation rates vary across age, gender, income, and race/ethnicity. It represents the proportion of the population that is working or pursuing work, as opposed to those voluntarily not working or not pursuing work. The labor

[3] Source: U.S. Bureau of Labor Statistics, LAUS Data

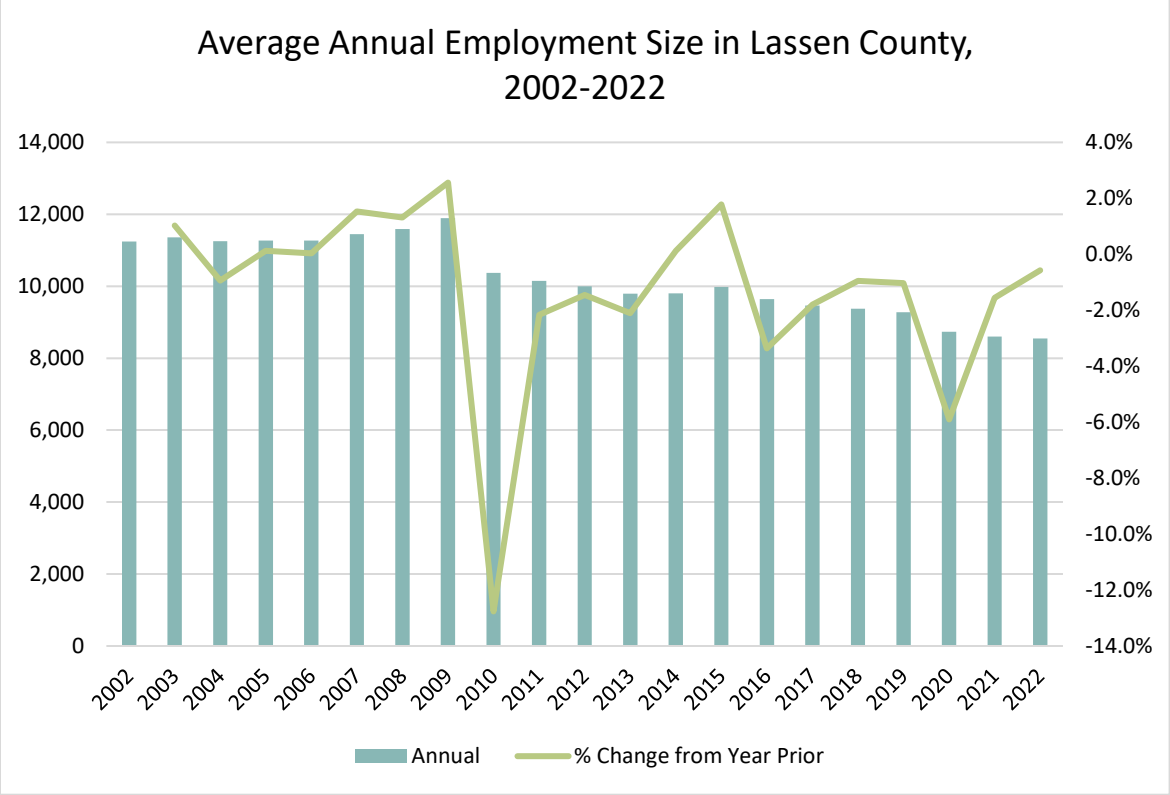
force participation rate is affected by various factors, including availability of jobs, socioeconomic composition of the population, demographics, as well as structural changes in the economy

Since 2002, the annual national labor force participation rate peaked in 2002 at 66.6% and hovered above 66% until 2009 during the Great Recession, when it dipped to 65.4% and ever since, the annual rate has declined until 2019. The COVID-19 pandemic stalled progress on a higher national labor force participation rate but signs of improvement appeared in 2022 when it increased for first time since 2019.

Workers in older age brackets and those who are retirement age, compose a considerable proportion of Lassen County's population. The older worker population (55 to 64 years of age) was estimated to be 3,366 in 2022, which is equivalent to 11% of the county's population. A large number of these older workers are expected to retire in the next ten years. Even more notably, those who are currently 65 years and older were estimated to total 5,247, equivalent to 18% of the county's population.

## Employment

Employment size in Lassen County hovered around 11,200 to 11,500 between 2002 and 2008 and began decreasing from 2009 to 2014. In 2020, the county's employment size was 10,374, a 12.8% decrease from the year prior. Not until 2020 – the height of the COVID-19 pandemic – did the County's employment size drop below 9,000. In 2022, the average annual employment size in Lassen County was 8,549, a 0.6% decrease from the year prior.

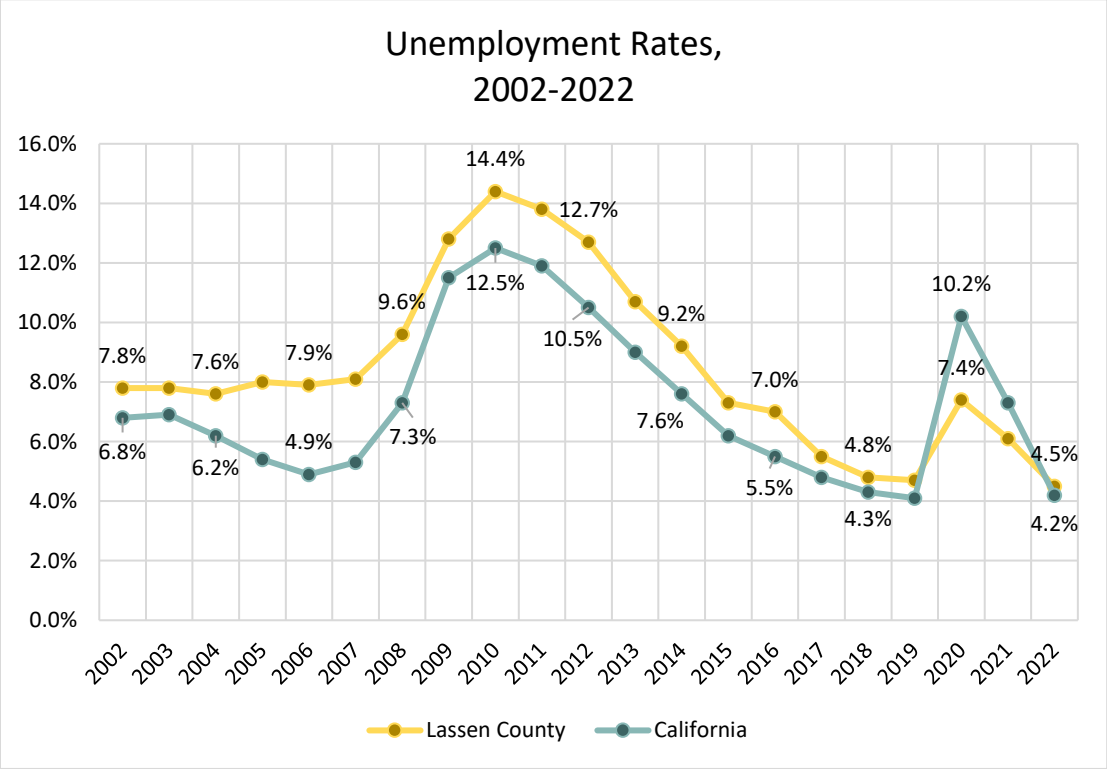



Source: U.S. Bureau of Labor Statistics, LAUS Data

## Unemployment

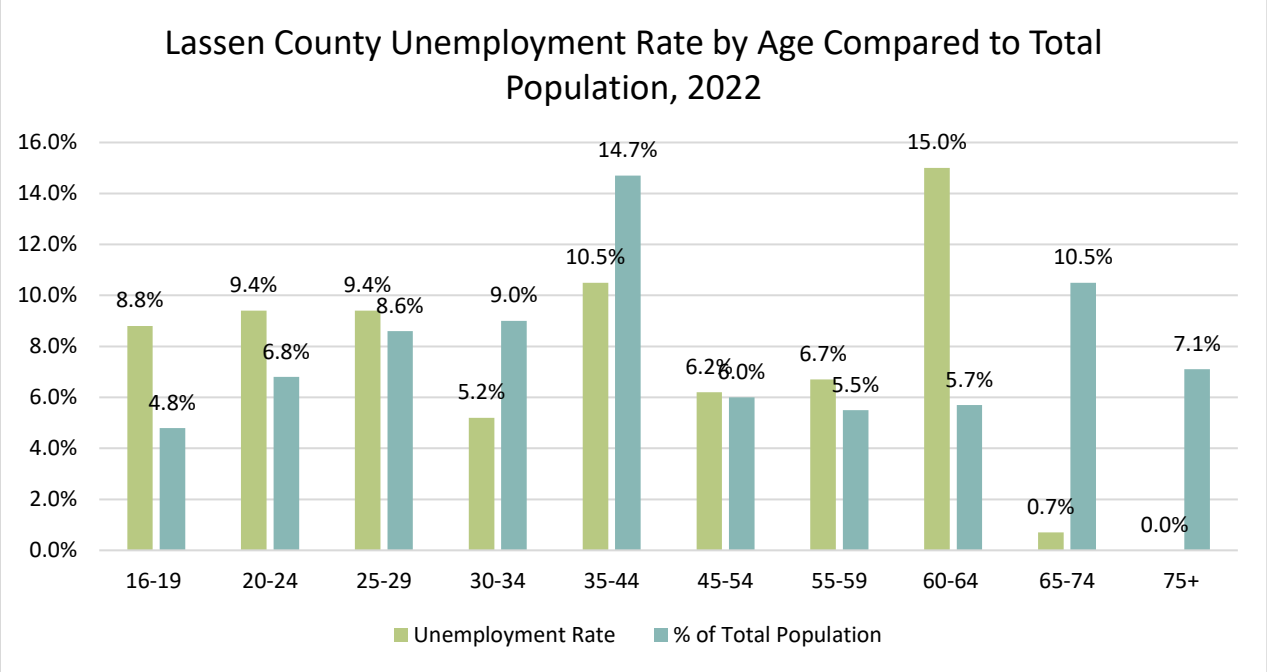
The onset of the COVID-19 pandemic in early 2020 greatly impacted the region. Businesses closed and unemployment soared during shelter-in-place orders. Employers deemed essential required additional health and safety protocols for workers. Schools closed in-person learning resulting in challenges for working parents, especially women.

The average annual unemployment rate in Lassen County has followed state trends. From 2020 to 2021, the average annual unemployment rate in Lassen County was less than that of California – the first time in the twenty-year period (2002-2022). This mirrors national trends where smaller, more rural communities did not experience as significant layoffs during the COVID-19 pandemic as larger, more populated communities. However, although Lassen County's unemployment rate continues to decrease into 2022, California's unemployment rate is decreasing at a faster rate.




Source: U.S. Bureau of Labor Statistics, LAUS Data

The unemployment rate in Lassen County for individuals between the ages of 25 to 29, 45 to 54, and 55 to 59 is nearly proportionate to the population share for those age cohorts in 2022. The greatest discrepancy between unemployment rate and population share is among individuals between the ages of 60 to 64 which represents 5.7% of the population, but 15.0% of the County's total unemployment.

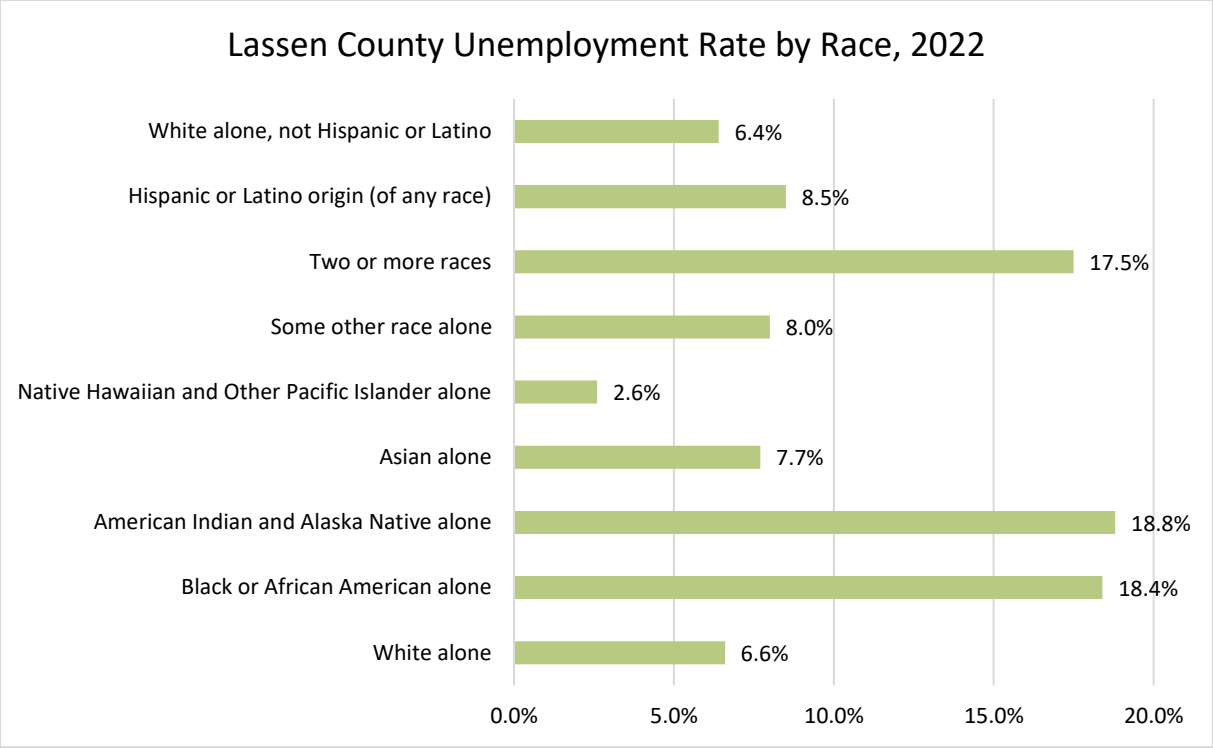



Source: U.S. Census Bureau, American Community Survey 5-Year Estimates, S2301

Though reasons for unemployment are not collected and aggregated at the State and local levels, interpreting national data collected by the U.S. Bureau of Labor Statistics (BLS) can shed light into potential reasons for why adults in Lassen County were unemployed in 2022. According to BLS, nationwide, 46.1% of job losses were persons who completed temporary jobs, 31.5% were re-entrants (unemployed people who have past work experience but were not in the labor force for a period of time prior to beginning their current job search), 14.3% were job leavers (people who have quit their jobs because they are confident about employment opportunities), and 8.0% were new entrants (unemployed people looking for their first job).[4]

Unemployment by race in Lassen County is disproportionate. While the population in Lassen County is overwhelmingly White (64.2%), only 6.4% are unemployed compared to 17.5% of individuals who are two or more races, which represents 3.3% of the population.

[4] Source: U.S. Bureau of Labor Statistics, Household Data, Unemployed Persons by Reason for Unemployment, Sex, and Age, 2022



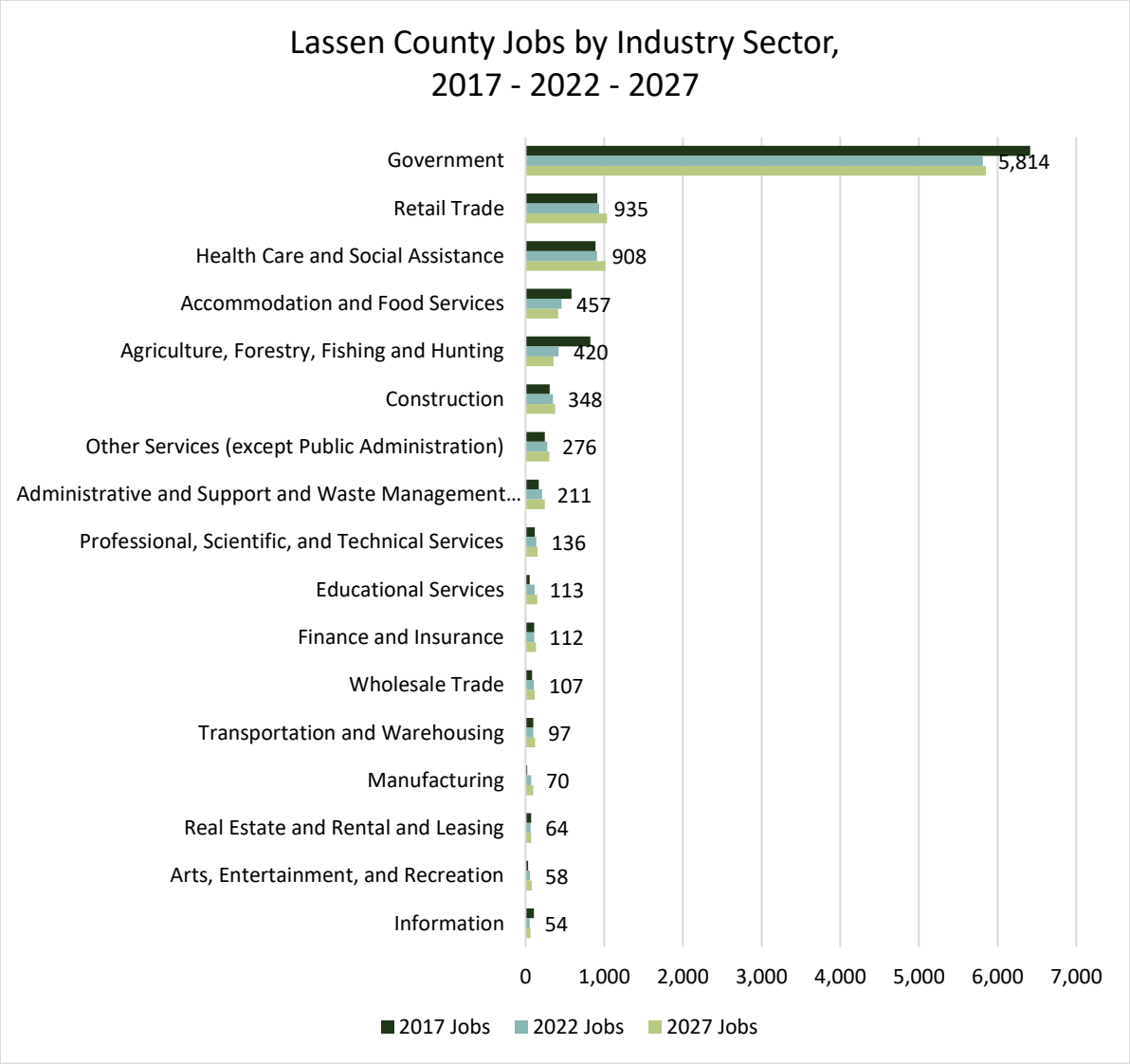

Source: U.S. Census Bureau, American Community Survey 5-Year Estimates, S2301

# Industry Sector Analysis

## Industry Mix

The broad industry sectors in Lassen County employing the most workers in 2022 are Government (5,814; 57.1%); Retail Trade (935; 9.2%); Health Care and Social Assistance (908; 8.9%); and Accommodation and Food Services (457; 4.5%). Sectors that experienced the greatest decline in jobs over the last five years include Government (-601 jobs); Agriculture, Forestry, Fishing, and Hunting (-403 jobs); and Accommodation and Food Services (-127 jobs). The Health Care and Social Assistance sector was largely impacted by workers exiting the workforce or seeking careers in other sectors that did not pose as great a risk of COVID-19 exposure, however, in Lassen County, the sector is projected to experience a 12% increase in jobs by 2027, easing concerns of a declining workforce.

Projections into the next five years indicate that Health Care and Social Assistance is projected to add the most jobs (+109), followed by Retail Trade (+102 jobs); and Educational Services (+37 jobs).




Source: Lightcast, 2023.4 (includes data from California Employment Development Department)

A closer look at industry data reveals the workforce characteristics by age.[5] The data in the table below represents the percentage of workers in those age categories for each sector. Based on available data, younger workers (ages 25-34) make up the greatest proportion of the workforce for Arts, Entertainment, and Recreation (48.7%) and Information (40.8%). Older workers (ages 55-64) make up the greatest share of the workforce for Real Estate and Rental and Leasing (33.0%).

Lassen County has a larger share of young workers (ages 14-24) in the Retail Trade and Accommodation and Food Services sectors than other sectors. It makes sense that the County sees lower shares of older workers for these sectors as they typically are low-skill, entry-level jobs. Opportunity exists to prepare younger workers for growing and in-demand sectors like Health Care and Social Assistance and Government, which have recorded shares of younger workers. Further development will supply a talent pipeline for employers from these sectors in Lassen County.

| 2-Digit NAICS | 14-18 | 19-21 | 22-24 | 25-34 | 35-44 | 45-54 | 55-64 | 65+ |
|---|---|---|---|---|---|---|---|---|
| Agriculture, Forestry, Fishing & Hunting | -- | -- | 3.2% | 25.5% | 20.5% | 20.4% | 20.2% | 10.3% |
| Construction | -- | -- | -- | 17.2% | 26.2% | 24.1% | 21.6% | 10.9% |
| Manufacturing | -- | -- | -- | 29.4% | 25.8% | 22.7% | 22.1% | -- |
| Wholesale Trade | -- | -- | -- | 26.4% | 27.5% | 24.3% | 21.8% | -- |
| Retail Trade | 6.0% | 9.3% | 6.9% | 21.3% | 19.8% | 17.1% | 16.6% | 9.0% |
| Transportation & Warehousing | -- | -- | -- | 16.0% | 23.2% | 41.7% | 19.2% | -- |
| Information | -- | -- | -- | 40.8% | 31.9% | -- | 27.3% | -- |
| Finance and Insurance | -- | -- | -- | 16.5% | 23.2% | 25.9% | 20.5% | 13.9% |
| Real Estate & Rental & Leasing | -- | -- | -- | -- | 22.8% | 25.8% | 33.0% | 18.4% |
| Prof., Scientific, & Tech. Services | -- | -- | -- | 17.7% | 20.9% | 22.7% | 18.4% | 20.2% |
| Admin., Support, & Waste Mngt & Rem. Services | -- | -- | -- | 22.9% | 23.8% | 29.7% | 17.3% | 6.3% |
| Educational Services | -- | -- | -- | 30.0% | 27.4% | 24.6% | 18.1% | -- |
| Health Care and Social Assistance | 1.5% | 2.3% | 4.0% | 20.6% | 22.8% | 20.1% | 19.6% | 10.6% |
| Arts, Entertainment, and Recreation | -- | -- | -- | 48.7% | 27.0% | 24.3% | -- | -- |
| Accommodation and Food Services | 18.5% | 14.2% | 5.7% | 21.6% | 20.6% | 17.4% | 12.4% | 8.0% |
| Other Services (except Public Admin.) | -- | -- | -- | 18.1% | 22.5% | 22.0% | 24.4% | 13.0% |
| Government | 0.5% | 2.6% | 3.3% | 20.7% | 24.7% | 23.3% | 19.4% | 6.0% |

Source: Lightcast 2023.4 (California Employment Development Department)

The competitive effect helps to determine the amount of job growth that occurred due to the County's competitive advantages as compared to the national growth in general and the national growth rate for each sector. In other words, a positive number indicates that the County experienced more growth than was expected. A negative number indicates that the County experienced less growth than expected. Sectors with the largest CE scores include Retail Trade (76); Educational Services (28); Manufacturing (23); and Administrative and Support and Waste Remediation Services (19). Three of the top five sectors had negative CE scores in 2022: Government (-183); Agriculture, Forestry, Fishing, and Hunting (-82); and Accommodation and Food Services (-72).

[5] Sectors not included in this table are due to low workforce counts and/or unavailable data. Age categories without data indicate a very small workforce of less than ten.

| Sector (2-digit NAICS) | 2022 Jobs | 2017-2022 Job Change | | 2022-2027 Job Change | | 2022 Average Annual Earnings | 2022 CE |
|---|---|---|---|---|---|---|---|
| Government | 5,814 | (601) | (9%) | 38 | 1% | $87,764 | (183) |
| Retail Trade | 935 | 21 | 2% | 102 | 11% | $44,562 | 76 |
| Health Care and Social Assistance | 908 | 19 | 2% | 109 | 12% | $69,703 | 16 |
| Accommodation and Food Services | 457 | (127) | (22%) | (41) | (9%) | $27,226 | (72) |
| Agriculture, Forestry, Fishing and Hunting | 420 | (403) | (49%) | (64) | (15%) | $68,327 | (82) |
| Construction | 348 | 42 | 14% | 28 | 8% | $52,072 | 8 |
| Other Services (except Public Administration) | 276 | 31 | 13% | 28 | 10% | $32,257 | 15 |
| Administrative and Support and Waste Management and Remediation Services | 211 | 45 | 27% | 34 | 16% | $52,495 | 19 |
| Professional, Scientific, and Technical Services | 136 | 19 | 16% | 16 | 12% | $68,237 | 1 |
| Educational Services | 113 | 61 | 117% | 37 | 32% | $54,910 | 28 |
| Finance and Insurance | 112 | 3 | 2% | 21 | 19% | $88,786 | 13 |
| Wholesale Trade | 107 | 23 | 27% | 10 | 10% | $61,753 | 6 |
| Transportation and Warehousing | 97 | (2) | (2%) | 25 | 26% | $58,715 | 14 |
| Manufacturing | 70 | 47 | 202% | 27 | 39% | $60,045 | 23 |
| Real Estate and Rental and Leasing | 64 | (10) | (13%) | 8 | 13% | $63,913 | 3 |
| Arts, Entertainment, and Recreation | 58 | 24 | 71% | 22 | 38% | $33,183 | 17 |
| Information | 54 | (51) | (49%) | 12 | 22% | $51,659 | 7 |
| **Total** | **10,183** | **(889)** | **(8%)** | **411** | **4%** | **$73,207** | **(93)** |

Source: Lightcast, 2023.4 (includes data from California Employment Development Department)

## Key Industries

The following table shows the 20 largest industries in terms of employment in Lassen County in 2022 at the 4-digit NAICS (North American Industry Classification System). Between 2017 and 2022, over half of the top industry groups experienced employment declines with the largest decline experienced by State Government, Excluding Education and Hospitals (-378 jobs). This industry group is also projected to have the greatest decrease in jobs over the next five years (-137 jobs). Other industry groups that experienced significant job losses from 2017-2022 include Crop Production (-325 jobs); Federal Government, Civilian (-137 jobs); and Local Government, Excluding Education and Hospitals (-108 jobs). The largest employment gains over the last five years were concentrated in Warehouse Clubs, Supercenters, and Other General Merchandise Retailers (+107 jobs).

Between 2022 and 2027, Education and Hospitals (Local Government) is projected to add to most jobs (+146) followed by Warehouse Clubs, Supercenters, and Other General Merchandise Retailers (+48 jobs); and Individual and Family Services (+43 jobs). As Lassen County's aging population continues to grow, it will be important to maintain appropriate staffing levels in healthcare-related industries.

| Industry Group (4-digit NAICS) | 2022 Jobs | 2017-2022 Job Change | | 2022-2027 Job Change | |
|---|---|---|---|---|---|
| State Government, Excluding Education and Hospitals | 2,226 | (378) | (15%) | (137) | (6%) |
| Federal Government, Civilian | 1,721 | (137) | (7%) | (8) | (<1%) |
| Local Government, Excluding Education and Hospitals | 952 | (108) | (10%) | 35 | 4% |
| Education and Hospitals (Local Government) | 873 | 17 | 2% | 146 | 17% |
| Restaurants and Other Eating Places | 414 | (64) | (13%) | (28) | (7%) |
| Crop Production | 270 | (325) | (55%) | (55) | (20%) |
| Individual and Family Services | 202 | 30 | 17% | 43 | 21% |
| General Medical and Surgical Hospitals | 194 | 97 | 99% | 22 | 11% |
| Grocery Stores | 193 | (32) | (14%) | 7 | 4% |
| Offices of Physicians | 139 | (5) | (4%) | (16) | (11%) |
| Department Stores | 127 | (40) | (24%) | (33) | (26%) |
| Warehouse Clubs, Supercenters, and Other General Merchandise Retailers | 119 | 107 | 894% | 48 | 40% |
| Services to Buildings and Dwellings | 114 | (5) | (4%) | (3) | (2%) |
| Residential Building Construction | 105 | 8 | 8% | (3) | (2%) |
| Logging | 86 | (3) | (4%) | (3) | (3%) |
| Automotive Parts, Accessories, and Tire Retailers | 82 | (1) | (2%) | 10 | 12% |
| Gasoline Stations | 77 | 12 | 18% | 0 | 0% |
| Automotive Repair and Maintenance | 77 | (11) | (12%) | 5 | 6% |
| Continuing Care Retirement Communities and Assisted Living Facilities for the Elderly | 75 | 75 | Insf. Data | 59 | 78% |
| Building Equipment Contractors | 67 | 7 | 12% | 13 | 20% |

Source: Lightcast, 2023.4 (includes data from California Employment Development Department)

# Occupational Analysis

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

## Occupational Groups

The top occupations in Lassen County in 2022 at the 2-digit SOC (Standard Occupational Classification) level include the following:

- Office and Administrative Support Occupations (1,123 jobs)
- Protective Service Occupations (917 jobs)
- Life, Physical, and Social Science Occupations (829 jobs)
- Educational Instruction and Library Occupations (750 jobs)

Occupations that have experienced the greatest increase in jobs from 2018 to 2022 include the following:

- Business and Financial Operations Occupations (+58 jobs)
- Healthcare Practitioners and Technical Occupations (+57 jobs)
- Healthcare Support Occupations (+46 jobs)
- Transportation and Material Moving Occupations (+30 jobs)

The COVID-19 pandemic increased the demand for healthcare workers which helps inform the increase in Healthcare Practitioners and Technical Occupations and Healthcare Support Occupations. Over the next five years, both occupations are projected to increase in employment with Healthcare Support Occupations projected to see a greater number of jobs (+58) compared to 27 new Healthcare Practitioners and Technical Occupation jobs.

Other occupations projected to add the most jobs by 2027 include:

- Educational Instruction and Library Occupations (+116 jobs)
- Sales and Related Occupations (+70 jobs)
- Transportation and Material Moving Occupations (+65 jobs)
- Installation, Maintenance, and Repair Occupations (+30 jobs)

The average hourly earnings for all occupations range from $16.13/hr. for Food Preparation and Serving Related Occupations to $58.23/hr. for Healthcare Practitioners and Technical Occupations.

| Occupational Group (2-digit SOC) | 2022 Jobs | % of Total Employment | 2017-2022 Job Change | 2022-2027 Job Change | 2022 Avg. Hourly Earnings |
|---|---|---|---|---|---|
| Office and Administrative Support Occupations | 1,123 | 11.0% | (148) | 7 | $21.73 |
| Protective Service Occupations | 917 | 9.0% | (95) | (34) | $36.23 |
| Life, Physical, and Social Science Occupations | 829 | 8.1% | (103) | (29) | $27.16 |
| Educational Instruction and Library Occupations | 750 | 7.4% | (8) | 116 | $34.14 |
| Business and Financial Operations Occupations | 718 | 7.1% | 58 | 28 | $35.29 |
| Management Occupations | 712 | 7.0% | 1 | 25 | $46.91 |
| Sales and Related Occupations | 625 | 6.1% | (79) | 70 | $22.70 |
| Food Preparation and Serving Related Occupations | 520 | 5.1% | (88) | (9) | $16.13 |
| Transportation and Material Moving Occupations | 511 | 5.0% | 30 | 65 | $22.57 |
| Healthcare Practitioners and Technical Occupations | 489 | 4.8% | 57 | 27 | $58.23 |
| Community and Social Service Occupations | 414 | 4.1% | (107) | 7 | $28.85 |
| Healthcare Support Occupations | 398 | 3.9% | 46 | 58 | $18.22 |
| Construction and Extraction Occupations | 390 | 3.8% | (34) | 16 | $27.62 |
| Installation, Maintenance, and Repair Occupations | 348 | 3.4% | (42) | 30 | $25.59 |
| Farming, Fishing, and Forestry Occupations | 288 | 2.8% | (293) | (37) | $20.74 |
| Building and Grounds Cleaning and Maintenance Occupations | 280 | 2.8% | (33) | 6 | $19.71 |
| Personal Care and Service Occupations | 200 | 2.0% | (16) | 13 | $19.32 |
| Production Occupations | 174 | 1.7% | 12 | 23 | $23.05 |
| Computer and Mathematical Occupations | 149 | 1.5% | (2) | 17 | $42.11 |
| Architecture and Engineering Occupations | 128 | 1.3% | (35) | 5 | $43.66 |
| Legal Occupations | 109 | 1.1% | (14) | (3) | $57.66 |
| Arts, Design, Entertainment, Sports, and Media Occupations | 89 | 0.9% | (8) | 9 | $33.80 |
| Military-only occupations | 22 | 0.2% | 3 | 1 | $24.89 |
| **Total** | **10,183** | **100.0%** | **(899)** | **411** | **$30.15** |

Source: Lightcast, 2023.4 (includes data from California Employment Development Department)

## Top Occupations by Employment

The following table displays the top occupational by total employment for the slightly more specific group of 4-digit Standard Occupational Classification (SOC) Codes. Average hourly earnings for these occupations range from $14.83 for Fast Food and Counter Workers to $62.37 for Registered Nurses. Over the last five years, the greatest job growth among these top occupations was concentrated in Home Health and Personal Care Aides (+70 jobs), followed by Laborers and Material Movers (+57 jobs); and Elementary and

Middle School Teachers (+29 jobs). From 2017 to 2022, most of the top occupations at the 4-digit SOC level experienced job losses – none greater than Miscellaneous Agricultural Workers (-211 jobs). Bailiffs, Correctional Officers, and Jailers experienced a loss of 156 jobs over the five-year period and is projected to loss an additional 38 jobs from 2022 to 2027. This can be attributed in part due to the recent prison closure in Susanville. Minimal job growth is projected for these top occupations into 2027. Postsecondary Teachers are projected to add the most jobs (+64) followed by Home Health and Personal Care Aides (+51 jobs).

Automation index analyzes the potential automation risk of occupations based on job task content – derived from ONET work activities. Based on a 100-point index, occupations with an index score above 100 have an above average risk of automation, while occupations with an index score below 100 have a below average risk of automation. Of the top 20 occupations, those most at risk of automation in Lassen County include Fast Food and Counter Workers (130.8); Cooks (125.0); Building Cleaning Workers (123.3); Laborers and Material Movers (116.2); Miscellaneous Agricultural Workers (110.5); Cashiers (105.5); Office Clerks, General (102.0); and Firefighters (100.6). The top two occupations with the highest index score also have one of the County's lowest average hourly earnings, respectively.

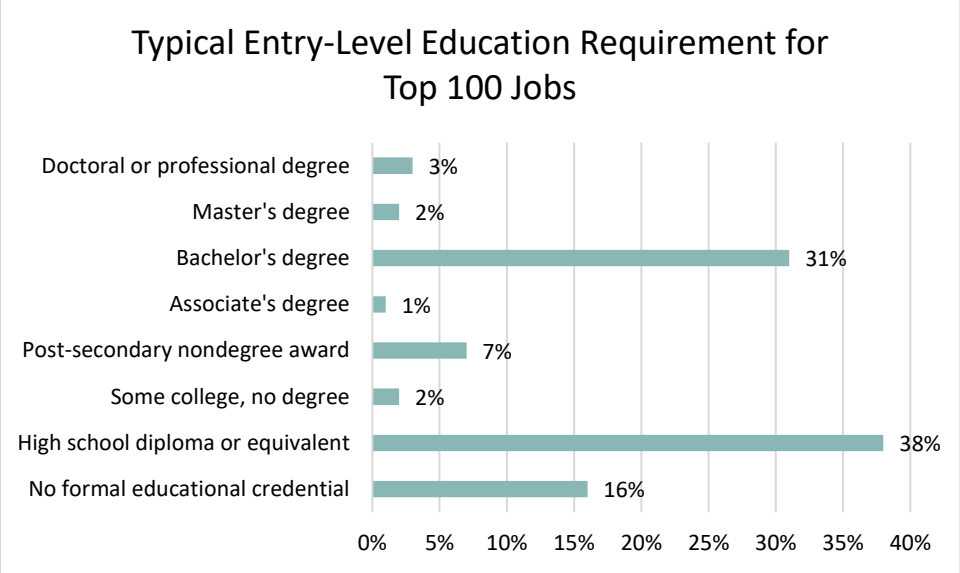
| Occupational Group (4-digit SOC) | 2022 Jobs | 2017-2022 Job Change | | 2022-2027 Job Change | | Automation Index | 2022 Avg. Hourly Earnings |
|---|---|---|---|---|---|---|---|
| Forest and Conservation Technicians | 484 | (111) | (19%) | (24) | (5%) | 75.5 | $19.62 |
| Bailiffs, Correctional Officers, and Jailers | 420 | (156) | (27%) | (38) | (9%) | 91.0 | $38.73 |
| Laborers and Material Movers | 252 | 57 | 29% | 42 | 17% | 116.2 | $18.27 |
| Secretaries and Administrative Assistants | 239 | (15) | (6%) | (10) | (4%) | 92.2 | $22.22 |
| Cashiers | 231 | (26) | (10%) | 5 | 2% | 105.5 | $16.39 |
| Home Health and Personal Care Aides | 223 | 70 | 46% | 51 | 23% | 93.6 | $15.11 |
| Miscellaneous Business Operations Specialists | 207 | 2 | 1% | 2 | 1% | 86.8 | $32.45 |
| Building Cleaning Workers | 177 | (15) | (8%) | (1) | (<1%) | 123.3 | $18.85 |
| Office Clerks, General | 173 | (27) | (13%) | 3 | 2% | 102.0 | $18.82 |
| Elementary and Middle School Teachers | 173 | 29 | 20% | 9 | 5% | 83.0 | $37.67 |
| Miscellaneous Community and Social Service Specialists | 172 | (54) | (24%) | 0 | 0% | 85.0 | $30.09 |
| Fast Food and Counter Workers | 165 | (45) | (22%) | (19) | (11%) | 130.8 | $14.83 |
| Miscellaneous Agricultural Workers | 161 | (211) | (57%) | (29) | (18%) | 110.5 | $16.20 |
| Postsecondary Teachers | 156 | (5) | (3%) | 64 | 41% | 86.6 | $48.47 |
| Registered Nurses | 141 | (5) | (3%) | 12 | 9% | 85.3 | $62.37 |
| Social Workers | 133 | (30) | (18%) | 1 | 0% | 83.1 | $27.20 |
| Retail Salespersons | 126 | (57) | (31%) | 24 | 19% | 93.4 | $18.56 |
| Teaching Assistants | 122 | (1) | (1%) | 9 | 8% | 89.3 | $17.60 |
| Firefighters | 120 | 14 | 13% | 1 | 1% | 100.6 | $23.39 |
| Cooks | 117 | (24) | (17%) | (2) | (1%) | 125.0 | $16.44 |

Source: Lightcast, 2023.4 (includes data from California Employment Development Department)

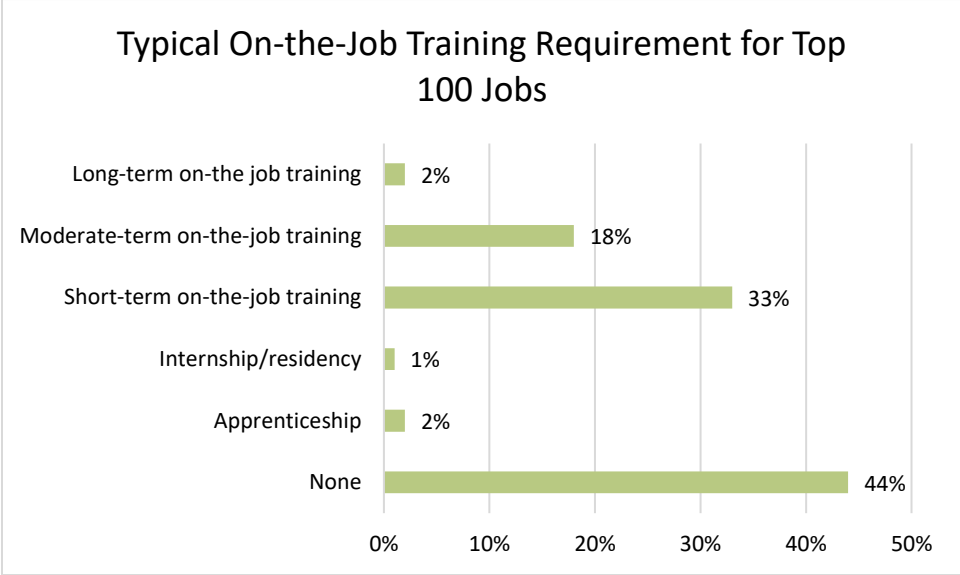
## Education & Training Requirements for High Demand Jobs

High demand jobs are defined in this analysis as top occupations by employment size at the 5-digit SOC level in 2027. The top projected occupations by employment size in Lassen County include Forest and Conservation Technicians (460 jobs); Correctional Officers and Jailers (382 jobs); Home Health and Personal Care Aides (274 jobs); Cashiers (236 jobs); and Postsecondary Teachers (220 jobs).[6]

The graphs below detail the typical entry level education requirements and typical on-the-job training requirements needed for the top 100 jobs by employment size in 2027.




Source: Lightcast, 2023.4 (includes data from California Employment Development Department)




Source: Lightcast, 2023.4 (includes data from California Employment Development Department)

[6] Note: data collected for this analysis is based on historical trends and does not take into account the number of jobs that may be impacted by the prison closure in Susanville until after that occurs.

| Occupational Group (5-digit SOC) | 2027 Jobs | 2022-2027 Job Change | Avg. Hourly Earnings | Typical Entry Level Education | Typical On-the-Job Training |
|---|---|---|---|---|---|
| Forest and Conservation Technicians | 460 | (24) | $19.62 | Associate's degree | None |
| Correctional Officers and Jailers | 382 | (38) | $38.73 | High school diploma or equivalent | Moderate-term on-the-job training |
| Home Health and Personal Care Aides | 274 | 51 | $15.11 | High school diploma or equivalent | Short-term on-the-job training |
| Cashiers | 236 | 5 | $16.39 | No formal educational credential | Short-term on-the-job training |
| Postsecondary Teachers | 220 | 64 | $48.47 | Doctoral or professional degree | None |
| Business Operations Specialists, All Other | 209 | 2 | $32.45 | Bachelor's degree | None |
| Stockers and Order Fillers | 188 | 25 | $18.92 | High school diploma or equivalent | Short-term on-the-job training |
| Office Clerks, General | 176 | 3 | $18.82 | High school diploma or equivalent | Short-term on-the-job training |
| Registered Nurses | 153 | 12 | $62.37 | Bachelor's degree | None |
| Elementary School Teachers, Except Special Education | 152 | 7 | $37.96 | Bachelor's degree | None |
| Retail Salespersons | 150 | 24 | $18.56 | No formal educational credential | Short-term on-the-job training |
| Fast Food and Counter Workers | 146 | (19) | $14.83 | No formal educational credential | Short-term on-the-job training |
| Secretaries and Administrative Assistants, Except Legal, Medical, and Executive | 132 | (2) | $20.95 | High school diploma or equivalent | Short-term on-the-job training |
| General and Operations Managers | 121 | 12 | $48.45 | Bachelor's degree | None |
| Firefighters | 121 | 1 | $23.39 | Postsecondary nondegree award | Long-term on-the-job training |
| Teaching Assistants, Except Postsecondary | 120 | 6 | $17.48 | Some college, no degree | None |
| Janitors and Cleaners, Except Maids and Housekeeping Cleaners | 119 | 1 | $18.66 | No formal educational credential | Short-term on-the-job training |
| Police and Sheriff's Patrol Officers | 116 | 5 | $38.62 | High school diploma or equivalent | Moderate-term on-the-job training |
| Bookkeeping, Accounting, and Auditing Clerks | 100 | 0 | $23.23 | Some college, no degree | Moderate-term on-the-job training |
| Managers, All Other | 97 | 6 | $47.66 | Bachelor's degree | None |

Source: Lightcast, 2023.4 (includes data from California Employment Development Department)

# Staffing Pattens of Target Sectors in Lassen County

On a quarterly basis, NoRTEC produces and distributes an occupational outlook report for the 11-county region focused on target industry sectors: Agriculture, Construction, Healthcare, Hospitality, IT & Digital Media, Manufacturing, and Public Services.

The following tables detail the occupational staffing patterns for these industries in Lassen County alone, identifying the top occupations within each sector along with its job outlook. Some tables will include more occupations than others, which indicates the demand level for jobs in that sector within Lassen County.

Note: the Manufacturing and IT & Digital Media sectors are not included in this analysis as both sectors did not register occupations in 2022 and 2027 greater than ten. Lightcast records any potential occupations simply as "<10".

## Agriculture

| Occupational Group (5-digit SOC) | 2022 Jobs | 2022-2027 Job Change | Median Hourly Earnings | Typical Entry Level Education | Typical On-the-Job Training |
|---|---|---|---|---|---|
| Farmworkers and Laborers, Crop, Nursery, and Greenhouse | 90 | (16) | $14.89 | No formal educational credential | Short-term on-the-job training |
| Farmers, Ranchers, and Other Agricultural Managers | 79 | (19) | $17.38 | High school diploma or equivalent | None |
| Farmworkers, Farm, Ranch, and Aquacultural Animals | 34 | (7) | $15.39 | No formal educational credential | Short-term on-the-job training |
| Logging Equipment Operators | 32 | (0) | $29.69 | High school diploma or equivalent | Moderate-term on-the-job training |
| Agricultural Workers, All Other | 18 | (3) | $15.79 | No formal educational credential | Short-term on-the-job training |
| Heavy and Tractor-Trailer Truck Drivers | 16 | (1) | $22.98 | Postsecondary nondegree award | Short-term on-the-job training |
| First-Line Supervisors of Farming, Fishing, and Forestry Workers | 15 | (1) | $23.01 | High school diploma or equivalent | None |
| Fallers | 11 | (1) | $50.41 | High school diploma or equivalent | Moderate-term on-the-job training |
| Agricultural Equipment Operators | 11 | (1) | $16.73 | No formal educational credential | Moderate-term on-the-job training |

Source: Lightcast, 2023.4 (includes data from California Employment Development Department)

## Construction

| Occupational Group (5-digit SOC) | 2022 Jobs | 2022-2027 Job Change | Median Hourly Earnings | Typical Entry Level Education | Typical On-the-Job Training |
|---|---|---|---|---|---|
| Construction Laborers | 57 | 5 | $19.86 | No formal educational credential | Short-term on-the-job training |
| Carpenters | 56 | (1) | $24.42 | High school diploma or equivalent | Apprenticeship |
| Construction Managers | 26 | 3 | $31.29 | Bachelor's degree | Moderate-term on-the-job training |
| Painters, Construction and Maintenance | 19 | 0 | $20.71 | No formal educational credential | Moderate-term on-the-job training |
| Plumbers, Pipefitters, and Steamfitters | 18 | 4 | $25.85 | High school diploma or equivalent | Apprenticeship |
| Managers, All Other | 17 | 2 | $39.00 | Bachelor's degree | None |
| First-Line Supervisors of Construction Trades and Extraction Workers | 17 | 1 | $32.62 | High school diploma or equivalent | None |
| Heating, Air Conditioning, and Refrigeration Mechanics and Installers | 13 | 4 | $22.05 | Postsecondary nondegree award | Long-term on-the-job training |
| Electricians | 12 | 1 | $25.73 | High school diploma or equivalent | Apprenticeship |
| Operating Engineers and Other Construction Equipment Operators | 10 | 1 | $27.89 | High school diploma or equivalent | Moderate-term on-the-job training |

Source: Lightcast, 2023.4 (includes data from California Employment Development Department)

## Healthcare

| Occupational Group (5-digit SOC) | 2022 Jobs | 2022-2027 Job Change | Median Hourly Earnings | Typical Entry Level Education | Typical On-the-Job Training |
|---|---|---|---|---|---|
| Home Health and Personal Care Aides | 182 | 48 | $14.07 | High school diploma or equivalent | Short-term on-the-job training |
| Registered Nurses | 73 | 10 | $65.24 | Bachelor's degree | None |
| Medical Secretaries and Administrative Assistants | 41 | (1) | $18.17 | High school diploma or equivalent | Moderate-term on-the-job training |
| Medical Assistants | 37 | 1 | $19.42 | Postsecondary nondegree award | None |
| Nursing Assistants | 33 | 5 | $20.97 | Postsecondary nondegree award | None |
| Childcare Workers | 26 | (6) | $15.76 | High school diploma or equivalent | Short-term on-the-job training |
| Dental Assistants | 22 | (5) | $21.65 | Postsecondary nondegree award | None |
| Licensed Practical and Licensed Vocational Nurses | 21 | 1 | $30.47 | Postsecondary nondegree award | None |
| Receptionists and Information Clerks | 15 | 0 | $15.52 | High school diploma or equivalent | Short-term on-the-job training |
| Medical and Health Services Managers | 15 | 3 | $61.22 | Bachelor's degree | None |
| Maids and Housekeeping Cleaners | 14 | 3 | $16.92 | No formal educational credential | Short-term on-the-job training |
| Social and Human Service Assistants | 13 | 4 | $19.66 | High school diploma or equivalent | Short-term on-the-job training |
| Preschool Teachers, Except Special Education | 11 | (1) | $18.40 | Associate's degree | None |
| Social and Community Service Managers | 11 | 2 | $28.38 | Bachelor's degree | None |
| Office Clerks, General | 10 | 0 | $17.03 | High school diploma or equivalent | Short-term on-the-job training |
| Dental Hygienists | 10 | (3) | $47.92 | Associate's degree | None |

Source: Lightcast, 2023.4 (includes data from California Employment Development Department)

## Hospitality

| Occupational Group (5-digit SOC) | 2022 Jobs | 2022-2027 Job Change | Median Hourly Earnings | Typical Entry Level Education | Typical On-the-Job Training |
|---|---|---|---|---|---|
| Fast Food and Counter Workers | 128 | (22) | $14.71 | No formal educational credential | Short-term on-the-job training |
| Waiters and Waitresses | 53 | 3 | $14.16 | No formal educational credential | Short-term on-the-job training |
| Cooks, Fast Food | 47 | (11) | $14.71 | No formal educational credential | Short-term on-the-job training |
| First-Line Supervisors of Food Preparation and Serving Workers | 39 | (3) | $17.88 | High school diploma or equivalent | None |
| Cooks, Restaurant | 32 | 5 | $15.94 | No formal educational credential | Moderate-term on-the-job training |
| Food Preparation Workers | 18 | (2) | $15.71 | No formal educational credential | Short-term on-the-job training |
| Food Service Managers | 15 | 0 | $25.61 | High school diploma or equivalent | None |
| Cashiers | 14 | (2) | $15.80 | No formal educational credential | Short-term on-the-job training |
| Dishwashers | 14 | 0 | $14.65 | No formal educational credential | Short-term on-the-job training |
| Dining Room and Cafeteria Attendants and Bartender Helpers | 11 | 1 | $14.23 | No formal educational credential | Short-term on-the-job training |

Source: Lightcast, 2023.4 (includes data from California Employment Development Department)

## Public Services

| Occupational Group (5-digit SOC) | 2022 Jobs | 2022-2027 Job Change | Median Hourly Earnings | Typical Entry Level Education | Typical On-the-Job Training |
|---|---|---|---|---|---|
| Forest and Conservation Technicians | 483 | (24) | $17.67 | Associate's degree | None |
| Correctional Officers and Jailers | 420 | (38) | $40.51 | High school diploma or equivalent | Moderate-term on-the-job training |
| Business Operations Specialists, All Other | 192 | 0 | $30.07 | Bachelor's degree | None |
| Postsecondary Teachers | 153 | 63 | $45.40 | Doctoral or professional degree | None |
| Elementary School Teachers, Except Special Education | 137 | 6 | $35.85 | Bachelor's degree | None |
| Firefighters | 118 | 2 | $20.17 | Postsecondary nondegree award | Long-term on-the-job training |
| Office Clerks, General | 118 | (2) | $17.03 | High school diploma or equivalent | Short-term on-the-job training |
| Police and Sheriff's Patrol Officers | 111 | 4 | $33.91 | High school diploma or equivalent | Moderate-term on-the-job training |
| Teaching Assistants, Except Postsecondary | 104 | 4 | $16.86 | Some college, no degree | None |
| Secretaries and Administrative Assistants, Except Legal, Medical, and Executive | 96 | (4) | $20.35 | High school diploma or equivalent | Short-term on-the-job training |
| First-Line Supervisors of Correctional Officers | 77 | (6) | $53.56 | High school diploma or equivalent | None |
| Information and Record Clerks, All Other | 75 | (1) | $20.26 | High school diploma or equivalent | Short-term on-the-job training |
| Probation Officers and Correctional Treatment Specialists | 74 | (4) | $38.77 | Bachelor's degree | Short-term on-the-job training |
| Registered Nurses | 67 | 2 | $65.24 | Bachelor's degree | None |
| Child, Family, and School Social Workers | 66 | (2) | $23.37 | Bachelor's degree | None |
| Compliance Officers | 64 | 0 | $29.30 | Bachelor's degree | Moderate-term on-the-job training |
| Maintenance and Repair Workers, General | 62 | (1) | $20.18 | High school diploma or equivalent | Moderate-term on-the-job training |
| Janitors and Cleaners, Except Maids and Housekeeping Cleaners | 62 | 3 | $16.72 | No formal educational credential | Short-term on-the-job training |
| First-Line Supervisors of Office and Administrative Support Workers | 57 | (3) | $27.17 | High school diploma or equivalent | None |
| Management Analysts | 56 | 7 | $34.47 | Bachelor's degree | None |

Source: Lightcast, 2023.4 (includes data from California Employment Development Department)

# ECONOMIC IMPACT OF PRISON CLOSURE

Utilizing the Lightcast™ Impact Analysis, Input/Output (I/O) model[7], we can estimate the impact of the prison closure on the County of Lassen. Based on estimated employment of 1,025 full-time equivalent staff in NAICS Sector 902999 (State Government, Excluding Education and Hospitals), the closure will result in a total loss of ***1,379*** Jobs in the County, a reduction of just under ***$107 million*** in earnings for County residents, and a decrease of ***$2.4 million*** in taxes (sales and import). These taxes are in addition to approximately ***$8.6 million*** in lost California state income taxes (based on a marginal tax rate of 8% on $107+ million in earnings).

All values are generated based on data from 2022 on regional employment and earnings (US Bureau of Labor Statistics), GRP (US Bureau of Economic Analysis), and federal/state tax rates, pegged to 2022 dollars.

## Employment, Earnings, & Income Tax Change

The table below contains the full breakout of jobs, earnings, and estimated state income taxes lost due to the closure of the correctional facility. The impacts are estimated as "initial" (these are the prison jobs eliminated by the closure), "direct" (employment lost at outside firms that supply the prison with myriad goods and services), "indirect" (the supply chain's suppliers, for example, jobs lost at a food processing plant as a result of the closure will also impact jobs at a farm, further down the supply chain), and "induced" (these are jobs supported by the spending of prison employees within the community, for example, at restaurants, taverns, and shops).

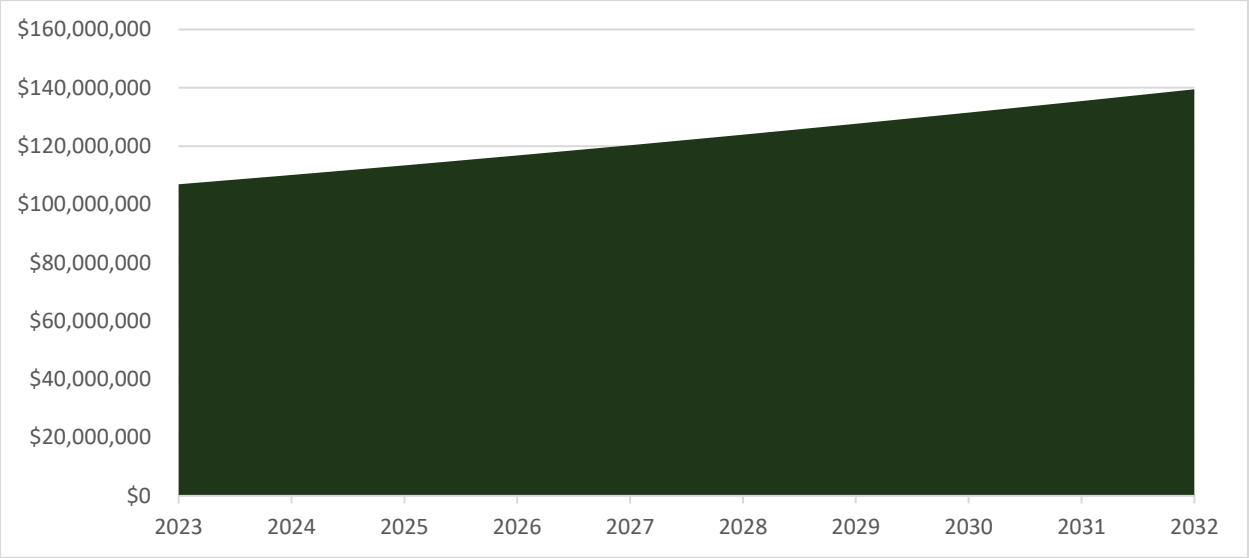
The estimated state income taxes assume a marginal tax rate of 8%, applied to all earnings. In some situations, of course, some employees who lose their jobs may be paying more or less than the assumed flat rate of 8%.

| | Jobs Lost | Earnings Lost | Estimated Lost State Income Taxes |
|---|---|---|---|
| Correctional Facility | 1,025 | $92.7 M | $7.4 M |
| Direct (Suppliers to the Facility) | 233 | $9.1 M | $728,000 |
| Indirect (Supply Chain's, Suppliers) | 15 | $606,416 | $48,513 |
| Induced (From Employee Spending) | 107 | $5.0 M | $400,000 |
| **Total** | **1,380** | **$106.9 M** | **$8.58 M** |

These lost earnings, it should be stressed, are for a single year. If we assume an annual cost-of-living adjustment (COLA) of 3%, the value of the lost paychecks in the region increases substantially. The figure below plots this loss of income annually through 2032, by which point the annual lost earnings swell to just under $140 million. Over the course of ten years, the cumulative loss of earnings in the region stands at $1.23 Billion.

[7] Using the Lightcast Type II model, recommended for regional impact estimates. Additional information on the Lightcast modeling/documentation can be found at: Lightcast Data and Lightcast Modeling

**Inflation Adjusted Lost Earnings, 2023-2032**




## Taxes

To estimate the impact on tax receipts caused by the closure of the facility, we again utilize the Lightcast I/O Model. The model produces tax estimates at the federal, state, and local level, which appear in the table below.

Lightcast includes an array of tax types in these estimates, specifically: "(t)axes on production and imports (TPI) consist of tax liabilities, such as general sales and property taxes, that are chargeable to business expenses in the calculation of profit-type incomes. Special assessments are also included. TPI is comprised of state and local taxes—primarily non-personal property taxes, licenses, and sales and gross receipts taxes—and Federal excise taxes on goods and services." Given the tax-free status of state agencies, these numbers are somewhat lower than would be expected for job loss of this scale, but all in all, still contribute a total loss of just over $2.4 million annually in tax revenue.

| | Sales, Excise, & Import Taxes |
|---|---|
| Local | $1,100,000 |
| State | $897,091 |
| Federal | $443,753 |
| **Total** | **$2,440,844** |

## Impacted Industries

Finally, to estimate the losses for industries in the region, we use inter-industry sales data from the Bureau of Economic Analysis for calendar year 2022. After controlling for the proportion of NAICS sector 90299 total employment in Lassen County lost due to the closing of the facility (45%), we apply this ratio to the total purchases from the sector as a proxy for lost sales, by industry. The table below includes estimates of total purchases from Sector 90299 in 2022, the portion of those sales attributable to the Lassen County prison, and the estimated lost revenue for industries, both in and out of the region, due to the facility's closure.

The "Sales Attributable to Prison" column in the table below estimates lost revenue for the top 11-impacted industries by the closure, located both inside and outside of Lassen County. These sales are further disaggregated to isolate the impact on Lassen County businesses, particularly, and reported in the highlighted column labeled "In Region Sales (to Prison)". Based on our estimates, the closure will result in just over $20 million in lost inter-industry sales revenue for businesses located in Lassen County.

| NAICS | Description | 2022 Total Sales to Sector | Sales Attributed to Prison | In-Region Sales (to Prison) | Out of Region Sales (to Prison) |
|---|---|---|---|---|---|
| 23 | Construction | $78,604,842 | $35,372,179 | $7,518,282 | $27,853,896 |
| 31 | Manufacturing | $65,924,704 | $29,666,117 | $491,514 | $29,174,603 |
| 54 | Professional, Scientific, and Technical Services | $24,014,830 | $10,806,674 | $1,123,161 | $9,683,513 |
| 51 | Information | $23,595,188 | $10,617,834 | $1,656,275 | $8,961,560 |
| 56 | Administrative and Support and Waste Management and Remediation Services | $20,080,863 | $9,036,388 | $2,892,016 | $6,144,372 |
| 42 | Wholesale Trade | $19,247,050 | $8,661,172 | $1,508,412 | $7,152,760 |
| 53 | Real Estate and Rental and Leasing | $13,210,669 | $5,944,801 | $2,048,611 | $3,896,190 |
| 48 | Transportation and Warehousing | $10,983,175 | $4,942,429 | $1,015,191 | $3,927,238 |
| 52 | Finance and Insurance | $10,629,266 | $4,783,169 | $545,935 | $4,237,234 |
| 81 | Other Services (except Public Administration) | $9,085,667 | $4,088,550 | $1,581,006 | $2,507,544 |
| **Total** | | **$275,376,253** | **$123,919,314** | **$20,380,404** | **$103,538,910** |

# Recommendations

NoRTEC, in partnership with Lassen County, is positioned strongly to leverage its assets and uniqueness to develop a pipeline of talent for high-wage, high-demand jobs. Each recommendation listed below is specific to the workforce trends cited in this profile report, including emerging industry and occupational trends, labor force characteristics, and regional assets.

## Cross-State Collaboration

The neighboring relationship between Lassen County, California and Washoe County, Nevada provides the opportunity for cross-state collaboration that benefits the needs of employers and jobseekers in both states. Geographically, Lassen County is part of the "Greater Reno Economy." Organizations and stakeholders in both southern Lassen County and northern Washoe County have already been collaborating, most recently forming the Sierra Alliance. Additionally, commuting patterns already reveal that the greatest share of commuters into Lassen County stem from Washoe County, however few from Lassen County commute to Washoe. The commuting time from Susanville, California to Reno, Nevada is not exactly a simple nor quick drive, however, the close proximity to both county seats provides the opportunity for collaboration to develop, attract, and retain talent.

Take for example Tesla's Gigafactory Nevada plant. Located less than an hour from Lake Tahoe, this factory is one of the world's highest volume plants for electric motors, energy storage, vehicle powertrains, and batteries. Tesla has a growing need for skilled electric and automotive manufacturers and established the *Tesla START* training program that develops an individual's technical expertise while earning industry certifications through in-class theory, hands-on labs, and self-paced learning. Tesla partnered with the Truckee Meadows Community College (TMCC) in Reno last May (2023) to enroll students in the *Tesla START* program, resulting in 75 *Tesla START* graduates with certifications. The partnership also established a state-of-the-art space with eight fully operative robots to enhance training in automation courses.

Lassen County has a foundation to support the scaling and replication of a *Tesla START* model in Susanville through the Lassen Community College (LCC)'s Automotive Technology program. The program prepares students with the necessary skills to acquire an entry-level position in the automotive industry. It is recommended that a workforce leadership committee, comprised of individuals from Lassen County, LCC, and NoRTEC, forge a partnership with TMCC and Tesla to determine how Lassen County can be a feeder of talent for these high-skilled manufacturing jobs.

If successful, more cross-state collaboration opportunities can begin to percolate in other sectors, such as healthcare, agriculture, and tourism. Forging these connections, and establishing Lassen County as a leader in workforce development, can help the county overcome challenges associated with the state's business tax structure, leading to prosperity for both Reno and Lassen County.

## New Resident Attraction

Despite being a net exporter of talent, Lassen County is a vibrant community with much to offer, including proximity to outdoor amenities such as Lassen Volcanic National Park, Lassen National Forest, Lake Tahoe, Tahoe National Forest, and more. Since the pandemic, communities nationwide have invested heavily in talent attraction efforts, offering incentives to remote workers to relocate to their communities, increasing competition for new residents. *MakeMyMove*, for example, provides a listing of nearly 200 communities, all with incentives specifically to entice remote workers to make the move.[8]

[8] https://www.makemymove.com/

Domestic relocations are increasingly motivated by personal and lifestyle reasons, whereas job-related moves are on the decline. This means that people are choosing where they want to live and are willing to relocate to live the life they want, in a community that they choose. They are prioritizing lifestyle preferences over jobs, yet jobs and strong workforce ecosystems are critical for communities. In addition to outdoor amenities, Lassen County can promote access to postsecondary education, quality K-12 education, cultural and civic engagement, etc. Should an attraction campaign be initiated and achieved, it is equally important to also understand the gaps in providing relocation support (e.g., what were the motivating reasons for relocation, did new residents easily get embedded in the community, what community resources were not available that were necessary, etc.).

Lassen County has the opportunity to reflect on what makes it a great place to live, work, and play and assemble a list of strategies/incentives for attracting new residents and generating a vibrant community.

## Small Businesses Support

In navigating the evolving economic landscape, Lassen County stands at a pivotal juncture, facing the loss of the prison, and recognizing the imperative to reinvigorate the local economy. The closing of the prison not only poses economic challenges, but also underscores the need for a concerted effort to develop and support local businesses.

To address this, NoRTEC, working in partnership with Lassen County, the Lassen County Chamber of Commerce and the Sierra Small Business Development Center, can create a community business center. This would be a one-stop-shop for small businesses, regardless of the phase of development. This center could provide a variety of services, including:

1. **Incentive Programs**: Provide information, and application assistance if required, on existing state and local incentives to encourage the establishment and growth of small businesses.
2. **Technical Assistance**: Provide guidance to startups, such as business planning, marketing, and financial management. This is crucial for the long-term success of small businesses.
3. **Networking**: Encourage collaboration between local businesses, residents, and support organizations, where ideas, resources, and experience can be shared, building a stronger business ecosystem.
4. **Business Attraction**: Highlight the benefits of doing business in Lassen County, including those identified as part of the new resident attraction strategy.

By investing in small businesses, Lassen County can forge a path toward a vibrant future, rebuilding Main Street and providing a rich ecosystem of support for economic development.

## Assessing Childcare Impact

The declining population in Lassen County below the age of 65 presents a challenge for the region as it aims to attract and retain talent. The unemployment rate for County residents between the ages of 30-34 is 5.2% and 10.5% for those 35-44. Several factors contribute to unemployment, however since the pandemic, many people have yet to return to the labor force due in part to childcare challenges. A 2022 study presented by the *First Five Years Fund* revealed that the average annual cost of childcare in America has increased 220% over the past three decades and considerably faster than any other essential family expense.[9]

Understanding the economic impact and the childcare landscape is critical to approaching the problem. This includes focusing on estimates of parents returning to the workforce full-time and estimates of the

[9] https://www.ffyf.org/resources/2023/01/new-bls-report-finds-price-of-child-care-untenable-for-all-families/

lost wages, taxes, sales, and revenue because of parents working less than full-time due to limitations caused by lack of available childcare options. Armed with knowledge and verifiable, independent estimates of impact based on a tested and respected, methodology, NoRTEC in partnership with Lassen County, can begin the conversation with elected officials, employers, and community organizations about how and why it is important to rally around childcare solutions.

Collaboration among these partners can result in establishing a childcare network, developing economies of scale that can reduce the financial burdens on businesses and organizations and allow them to adjust down profits and turn a profit.

## Nurturing a Care Giver Economy

The aging population of those 65 years and older presents the question of whether or not Lassen County has the resources and talent available to care for older individuals in the care economy.

According to an American Association of Colleges of Nursing report, nurses make up the largest segment of U.S. healthcare professionals, with nearly 4.2 million registered nurses among them.[10] Despite these numbers, the profession faces significant staffing challenges as the U.S. Bureau of Labor Statistics projects an average of 193,100 openings for registered nurses each year, on average, over the next decade.[11]

To successfully prepare for the care giver economy, NoRTEC can formalize a career pathway program around healthcare in partnership with strategic partners like Lassen Community College (LCC), NoRTEC, K-12 school districts, and more. Developing a healthcare career pathway, beginning with an entry-level job as a home health and personal care aide, has the potential to support the care economy in Lassen County. Many entry-level healthcare occupations, like home health and personal care aides, require only a high school diploma. Through additional education and training, these workers can progress through their career pathway journey to become a nursing assistant and registered nurse.

The convening of healthcare companies in and serving Lassen County can serve a dual purpose: (1) strategize on how to work with partners to create a shared healthcare career pathway model and (2) formalize a healthcare sector partnership. A sector partnership is a proven workforce development strategy that identifies common workforce issues and challenges across individual employers, communicates industry priorities to workforce leaders and policy makers, addresses current and emerging skill gaps, and better aligns programs, education/training curriculum and other resources services employers and workers.

## Industry Diversification

Over half of Lassen County's jobs are concentrated in the government sector. Strong reliance on a single sector can spell significant impacts on the regional economy – good or bad – as evidenced negatively by the closing of the California Correctional Center in Susanville. A diversified industry economy in Lassen County has the potential to create sustainable cycles of economic activity where businesses benefit from one another, growing the economy.

Diversifying a regional economic footprint is part art, part science and often the result of a series of sometimes unrelated decisions over a long period of time. For regions looking to differentiate the existing mix of businesses and employment opportunities, there is no one size fits all approach, but when considering recruiting new industries, professionals should ask themselves these questions:

1. Does the Identified industry fit with the region's Assets or Competitive Advantages?

[10] https://www.aacnnursing.org/news-data/fact-sheets/nursing-workforce-fact-sheet
[11] https://www.bls.gov/ooh/healthcare/registered-nurses.htm#tab-6

2. Does the identified industry coincide with established development goals?
3. Does the recommended industry have growth potential and/or a base to diversify?
4. Does the recommended industry address an unmet need/demand from the population?
5. What is the potential impact of the recommended industry on the economy of the region?

While the answers to all of these questions are well beyond the scope of this brief synopsis (indeed, industry diversification studies are extensive, standalone documents), as an example, we can focus on question 4: unmet need. As COVID-19 highlighted, supply chains can be disrupted, perhaps more easily than we would like to admit, and the shortages that result can have impacts that resonate in ways we might not consider. To address this, there has been a trend toward "onshoring" and shortening of supply chains, leading communities to look for opportunities to attract businesses that their communities (and other employers) rely upon as an intentional diversification strategy.

One way to approach this challenge, with numbers, is to closely consider regional demand (and inter-industry sales) tables. We focus here on the former, reproduced in full for Lassen County in Appendix C and with key highlights below. Combining data from the Bureau of Economic Analysis and local and state tax offices for the year 2022, Lightcast™ generates regional demand tables that include:

1. **NAICS** (we use the 3-digit level, but data is available down to 6-digit)
2. **Industry Description**
3. **Total Demand**: sales from within Lassen County in 2022 to the affiliated family of industries (in dollars)
4. **Demand met in-Region**: sales from within Lassen County in 2022 to the affiliated family of industries (in dollars) located WITHIN Lassen County
5. **% Demand met In-Region**: these in-region sales divided by total sales
6. **Demand met by Imports**: sales from within Lassen County in 2022 to the affiliated family of industries (in dollars), located OUTSIDE of Lassen County
7. **% Demand met by Imports**: sales from these out-of-region businesses divided by total industry sales to residents and businesses in Lassen County, 2022.

When considering a targeted industry diversification strategy, it is important to fully vet and examine each identified potential industry. However, considering the import/in-region trends for a community is a helpful place to start. When a community sends the vast majority of its dollars to out-of-region enterprises, it could be a prime opportunity to shorten the supply chain and seek out businesses of its type to relocate or initiate operations regionally. Based on the 2022 data, these possibilities stand out as both representing a large volume of absolute dollars in sales and are overwhelmingly serviced by out-of-region employers:

### *1. Professional Scientific and Technical Services*

- **Sales from Out-of-Region Establishments**: $168 million
- **Total Sales**: $180 million
- **Percent of Sales, Out-of-Region Establishments**: 94.6%

| Key Occupations in Professional Scientific & Technical Services Industry, 2022-2032 (data reported for top 5 occupations by percent of industry) | | | | | | | |
|---|---|---|---|---|---|---|---|
| SOC | Description | Employed in Industry (2022) | Employed in Industry (2032) | Change (2022 - 2032) | % Change (2022 - 2032) | % of Total Jobs in Industry (2022) | Median Hourly Earnings |
| 15-1200 | Computer Occupations | 251,178 | 321,903 | 70,725 | 28% | 17.5% | $61.71 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 13-1000 | Business Operations Specialists | 183,953 | 217,376 | 33,423 | 18% | 12.8% | $38.85 |
| 17-2000 | Engineers | 83,880 | 97,044 | 13,164 | 16% | 5.8% | $57.84 |
| 13-2000 | Financial Specialists | 82,458 | 94,989 | 12,532 | 15% | 5.7% | $40.28 |
| 11-3000 | Operations Specialties Managers | 67,784 | 82,743 | 14,959 | 22% | 4.7% | $72.46 |

### *2. Specialty Trade Contractors*

- **Sales from Out-of-Region Establishments**: $105 million
- **Total Sales**: $130 million
- **Percent of Sales, Out-of-Region Establishments**: 80.3%

| Key Occupations in Specialty Trade Contractors Industry, 2022-2032 (data reported for top 5 occupations by percent of industry) | | | | | | | |
|---|---|---|---|---|---|---|---|
| SOC | Description | Employed in Industry (2022) | Employed in Industry (2032) | Change (2022 - 2032) | % Change (2022 - 2032) | % of Total Jobs in Industry (2022) | Median Hourly Earnings |
| 47-2000 | Construction Trades Workers | 327,711 | 379,660 | 51,949 | 51,949 | 16% | $29.02 |
| 49-9000 | Other Installation, Maintenance, and Repair Occupations | 44,602 | 52,382 | 7,779 | 7,779 | 17% | $25.51 |
| 47-1000 | Supervisors of Construction and Extraction Workers | 31,174 | 36,537 | 5,363 | 5,363 | 17% | $41.71 |
| 13-1000 | Business Operations Specialists | 26,585 | 29,152 | 2,567 | 2,567 | 10% | $38.85 |
| 43-9000 | Other Office and Administrative Support Workers | 20,323 | 21,027 | 704 | 3% | 3.3% | $20.52 |

### *3. Data Processing, Hosting, and Related Services*

- **Sales from Out-of-Region Establishments**: $23.4 million
- **Total Sales**: $23.4 million
- **Percent of Sales, Out-of-Region Establishments**: 99.7%

| Key Occupations in Data Processing, Hosting, and Related Services Industry, 2022-2032 (data reported for top 5 occupations by percent of industry) | | | | | | | |
|---|---|---|---|---|---|---|---|
| SOC | Description | Employed in Industry (2022) | Employed in Industry (2032) | Change (2022 - 2032) | % Change (2022 - 2032) | % of Total Jobs in Industry (2022) | Median Hourly Earnings |
| 15-1200 | Computer Occupations | 27,104 | 38,592 | 11,488 | 42% | 38.0% | $61.71 |
| 13-1000 | Business Operations Specialists | 7,800 | 10,386 | 2,587 | 33% | 10.9% | $38.85 |

| Key Occupations in Data Processing, Hosting, and Related Services Industry, 2022-2032 (data reported for top 5 occupations by percent of industry) | | | | | | | |
|---|---|---|---|---|---|---|---|
| 11-3000 | Operations Specialties Managers | 6,374 | 8,614 | 2,240 | 35% | 8.9% | $72.46 |
| 41-3000 | Sales Representatives, Services | 4,121 | 5,612 | 1,492 | 36% | 5.8% | $32.79 |
| 43-4000 | Information and Record Clerks | 3,838 | 5,040 | 1,202 | 31% | 5.4% | $20.94 |

### *4. Truck Transportation*

- **Sales from Out-of-Region Establishments**: $18.5 million
- **Total Sales**: $21.5 million
- **Percent of Sales, Out-of-Region Establishments**: 86.22%

| Key Occupations in Truck Transportation Industry, 2022-2032 (data reported for top 5 occupations by percent of industry) | | | | | | | |
|---|---|---|---|---|---|---|---|
| SOC | Description | Employed in Industry (2022) | Employed in Industry (2032) | Change (2022 - 2032) | % Change (2022 - 2032) | % of Total Jobs in Industry (2022) | Median Hourly Earnings |
| 53-3000 | Motor Vehicle Operators | 90,587 | 110,495 | 19,908 | 22% | 59.0% | $23.09 |
| 53-7000 | Material Moving Workers | 17,580 | 20,875 | 3,295 | 19% | 11.5% | $18.05 |
| 43-5000 | Material Recording, Scheduling, Dispatching, and Distributing Workers | 5,842 | 6,727 | 886 | 15% | 3.8% | $22.39 |
| 53-1000 | Supervisors of Transportation and Material Moving Workers | 4,666 | 5,583 | 918 | 20% | 3.0% | $28.31 |
| 49-3000 | Vehicle and Mobile Equipment Mechanics, Installers, and Repairers | 4,607 | 5,594 | 986 | 21% | 3.0% | $28.95 |

# Appendix A: Non-Institutionalized Population Estimation Methodology

In order to estimate the non-institutionalized population, the project team employed a multi-step methodology. Firstly, the team retrieved the number of individuals residing in group quarters in both 2012 and 2022 through the American Community Survey 5-Year Estimates. Subsequently, the team calculated the percentage of the group quarters population that could be identified as institutionalized by using the 2010 and 2020 Decennial Census Estimates. Assuming this percentage was unchanged in 2012 and 2022, this was multiplied by the number of individuals residing in group quarters to estimate the institutionalized population in 2012 and 2022.

The team then retrieved the age distribution of individuals living in correctional facilities from the 2010 and 2020 Decennial Census Estimates. Operating under the assumption that the age ratio of the incarcerated population remained consistent, the team extrapolated the ages of the institutionalized population for both 2012 and 2022. This was then subtracted from estimates of the total population, from Lightcast, to estimate the non-institutionalized population. This began with the number of individuals living in group quarters in 2012 and 2022, from American Community Survey 5-Year Estimates.

# APPENDIX B: INDUSTRY SECTOR DEFINITIONS

The following details the specific NAICS codes that went into each staffing patterns analysis for targeted industry sectors.

| Agriculture | |
|---|---|
| 11 | Agriculture, Forestry, Fishing and Hunting |

| Construction | |
|---|---|
| 23 | Construction |

| Healthcare | |
|---|---|
| 62 | Health Care and Social Assistance |

| Hospitality | |
|---|---|
| 487110 | Scenic and Sightseeing Transportation, Land |
| 487210 | Scenic and Sightseeing Transportation, Water |
| 487990 | Scenic and Sightseeing Transportation, Other |
| 561510 | Travel Agencies |
| 561520 | Tour Operators |
| 561591 | Convention and Visitors Bureaus |
| 561599 | All Other Travel Arrangement and Reservation Services |
| 561622 | Locksmiths |
| 561920 | Convention and Trade Show Organizers |
| 561990 | All Other Support Services |
| 711110 | Theater Companies and Dinner Theaters |
| 711120 | Dance Companies |
| 711130 | Musical Groups and Artists |
| 711190 | Other Performing Arts Companies |
| 711211 | Sports Teams and Clubs |
| 711212 | Racetracks |
| 711219 | Other Spectator Sports |
| 711310 | Promoters of Performing Arts, Sports, and Similar Events with Facilities |
| 711320 | Promoters of Performing Arts, Sports, and Similar Events without Facilities |
| 711510 | Independent Artists, Writers, and Performers |
| 712110 | Museums |
| 712120 | Historical Sites |
| 712130 | Zoos and Botanical Gardens |
| 712190 | Nature Parks and Other Similar Institutions |
| 713110 | Amusement and Theme Parks |
| 713120 | Amusement Arcades |
| 713210 | Casinos (except Casino Hotels) |
| 713290 | Other Gambling Industries |
| 713910 | Golf Courses and Country Clubs |
| 713920 | Skiing Facilities |
| 713930 | Marinas |
| 713940 | Fitness and Recreational Sports Centers |
| 713950 | Bowling Centers |
| 721110 | Hotels (except Casino Hotels) and Motels |

| | |
|---|---|
| 721120 | Casino Hotels |
| 721191 | Bed-and-Breakfast Inns |
| 721199 | All Other Traveler Accommodation |
| 721211 | RV (Recreational Vehicle) Parks and Campgrounds |
| 721310 | Rooming and Boarding Houses, Dormitories, and Workers' Camps |
| 722310 | Food Service Contractors |
| 722320 | Caterers |
| 722330 | Mobile Food Services |
| 722511 | Full-Service Restaurants |
| 722513 | Limited-Service Restaurants |
| 722514 | Cafeterias, Grill Buffets, and Buffets |
| 722515 | Snack and Nonalcoholic Beverage Bars |

| **Public Services** | |
|---|---|
| 90 | Government |

# APPENDIX C: REGIONAL DEMAND DATA

| NAICS | Demand for | Demand met In-region | % Demand met In-region | Demand met by Imports | % Demand met by Imports | Total Demand |
|---|---|---|---|---|---|---|
| 541 | Professional, Scientific, and Technical Services | $11,506,259.02 | 6.39% | $168,690,100.33 | 93.61% | $180,196,359.35 |
| 238 | Specialty Trade Contractors | $25,781,931.09 | 19.70% | $105,075,308.88 | 80.30% | $130,857,239.97 |
| 524 | Insurance Carriers and Related Activities | $13,593,038.29 | 13.28% | $88,756,090.13 | 86.72% | $102,349,128.42 |
| 531 | Real Estate | $25,974,029.28 | 31.33% | $56,939,000.85 | 68.67% | $82,913,030.14 |
| 423 | Merchant Wholesalers, Durable Goods | $3,195,173.96 | 5.52% | $54,643,766.56 | 94.48% | $57,838,940.53 |
| 424 | Merchant Wholesalers, Nondurable Goods | $13,923,711.86 | 21.27% | $51,543,552.85 | 78.73% | $65,467,264.71 |
| 311 | Food Manufacturing | $1,388,586.62 | 2.70% | $49,956,825.68 | 97.30% | $51,345,412.29 |
| 621 | Ambulatory Health Care Services | $26,270,347.01 | 35.35% | $48,037,811.59 | 64.65% | $74,308,158.60 |
| 336 | Transportation Equipment Manufacturing | $77,248.06 | 0.17% | $45,099,091.61 | 99.83% | $45,176,339.67 |
| 324 | Petroleum and Coal Products Manufacturing | $236,967.62 | 0.54% | $43,339,844.67 | 99.46% | $43,576,812.29 |
| 561 | Administrative and Support Services | $12,908,869.72 | 24.39% | $40,016,535.79 | 75.61% | $52,925,405.52 |
| 325 | Chemical Manufacturing | $100,080.39 | 0.25% | $39,270,247.02 | 99.75% | $39,370,327.41 |
| 236 | Construction of Buildings | $14,482,428.75 | 27.81% | $37,586,143.89 | 72.19% | $52,068,572.64 |
| 523 | Securities, Commodity Contracts, and Other Financial Investments and Related Activities | $4,052,147.09 | 10.32% | $35,229,222.91 | 89.68% | $39,281,370.00 |
| 522 | Credit Intermediation and Related Activities | $5,865,966.09 | 14.99% | $33,278,606.79 | 85.01% | $39,144,572.88 |
| 221 | Utilities | $1,677,661.17 | 4.98% | $32,023,854.58 | 95.02% | $33,701,515.75 |
| 513 | Publishing Industries | $25,317.59 | 0.08% | $31,536,274.82 | 99.92% | $31,561,592.41 |
| 237 | Heavy and Civil Engineering Construction | $4,691,056.27 | 16.40% | $23,905,823.09 | 83.60% | $28,596,879.36 |
| 518 | Data Processing, Hosting, and Related Services | $66,722.76 | 0.28% | $23,375,899.65 | 99.72% | $23,442,622.40 |
| 517 | Telecommunications | $16,987,621.58 | 42.20% | $23,264,278.06 | 57.80% | $40,251,899.65 |

| NAICS | Demand for | Demand met In-region | % Demand met In-region | Demand met by Imports | % Demand met by Imports | Total Demand |
|---|---|---|---|---|---|---|
| 722 | Food Services and Drinking Places | $39,378,784.44 | 64.30% | $21,865,689.69 | 35.70% | $61,244,474.13 |
| 611 | Educational Services | $4,983,906.02 | 18.90% | $21,386,719.98 | 81.10% | $26,370,626.00 |
| 441 | Motor Vehicle and Parts Dealers | $2,775,847.73 | 12.33% | $19,734,872.88 | 87.67% | $22,510,720.61 |
| 484 | Truck Transportation | $2,962,884.38 | 13.78% | $18,543,022.93 | 86.22% | $21,505,907.30 |
| 516 | Broadcasting and Content Providers | $646,409.82 | 3.45% | $18,095,791.67 | 96.55% | $18,742,201.49 |
| 333 | Machinery Manufacturing | $0.00 | 0.00% | $16,580,830.66 | 100.00% | $16,580,830.66 |
| 445 | Food and Beverage Stores | $2,389,250.73 | 12.97% | $16,037,266.88 | 87.03% | $18,426,517.61 |
| 551 | Management of Companies and Enterprises | $646,865.56 | 4.01% | $15,479,943.65 | 95.99% | $16,126,809.21 |
| 115 | Support Activities for Agriculture and Forestry | $1,643,319.71 | 10.01% | $14,778,345.58 | 89.99% | $16,421,665.29 |
| 334 | Computer and Electronic Product Manufacturing | $0.00 | 0.00% | $14,751,591.83 | 100.00% | $14,751,591.83 |
| 455 | General Merchandise Retailers | $4,778,998.38 | 25.07% | $14,283,541.38 | 74.93% | $19,062,539.77 |
| 459 | Sporting Goods, Hobby, Musical Instrument, Book, and Miscellaneous Retailers | $1,887,884.45 | 12.48% | $13,242,788.92 | 87.52% | $15,130,673.37 |
| 525 | Funds, Trusts, and Other Financial Vehicles | $769,908.66 | 5.70% | $12,738,894.15 | 94.30% | $13,508,802.81 |
| 481 | Air Transportation | $0.00 | 0.00% | $12,069,380.60 | 100.00% | $12,069,380.60 |
| 458 | Clothing, Clothing Accessories, Shoe, and Jewelry Retailers | $585,376.66 | 4.81% | $11,577,661.15 | 95.19% | $12,163,037.81 |
| 813 | Religious, Grantmaking, Civic, Professional, and Similar Organizations | $2,614,212.31 | 19.13% | $11,053,333.66 | 80.87% | $13,667,545.97 |
| 339 | Miscellaneous Manufacturing | $0.00 | 0.00% | $10,552,407.90 | 100.00% | $10,552,407.90 |
| 444 | Building Material and Garden Equipment and Supplies Dealers | $1,162,320.27 | 10.56% | $9,839,612.58 | 89.44% | $11,001,932.85 |
| 312 | Beverage and Tobacco Product Manufacturing | $771,889.59 | 7.28% | $9,833,611.37 | 92.72% | $10,605,500.97 |

| NAICS | Demand for | Demand met In-region | % Demand met In-region | Demand met by Imports | % Demand met by Imports | Total Demand |
|---|---|---|---|---|---|---|
| 449 | Furniture, Home Furnishings, Electronics, and Appliance Retailers | $626,879.71 | 6.07% | $9,704,996.41 | 93.93% | $10,331,876.12 |
| 812 | Personal and Laundry Services | $5,916,790.41 | 37.97% | $9,666,230.81 | 62.03% | $15,583,021.22 |
| 532 | Rental and Leasing Services | $2,215,774.69 | 18.82% | $9,556,806.79 | 81.18% | $11,772,581.47 |
| 326 | Plastics and Rubber Products Manufacturing | $0.00 | 0.00% | $9,321,778.12 | 100.00% | $9,321,778.12 |
| 721 | Accommodation | $6,717,362.40 | 42.12% | $9,229,473.93 | 57.88% | $15,946,836.33 |
| 456 | Health and Personal Care Retailers | $1,917,487.70 | 17.76% | $8,880,157.29 | 82.24% | $10,797,644.99 |
| 332 | Fabricated Metal Product Manufacturing | $65,083.95 | 0.74% | $8,732,721.00 | 99.26% | $8,797,804.95 |
| 493 | Warehousing and Storage | $439,503.26 | 5.10% | $8,183,847.15 | 94.90% | $8,623,350.41 |
| 624 | Social Assistance | $10,927,520.29 | 57.29% | $8,147,137.72 | 42.71% | $19,074,658.01 |
| 623 | Nursing and Residential Care Facilities | $9,305,921.87 | 53.81% | $7,989,611.97 | 46.19% | $17,295,533.84 |
| 322 | Paper Manufacturing | $0.00 | 0.00% | $7,558,556.56 | 100.00% | $7,558,556.56 |
| 112 | Animal Production and Aquaculture | $1,482,035.29 | 16.49% | $7,507,138.80 | 83.51% | $8,989,174.09 |
| 713 | Amusement, Gambling, and Recreation Industries | $1,903,927.91 | 21.53% | $6,940,556.84 | 78.47% | $8,844,484.75 |
| 111 | Crop Production | $9,305,487.86 | 57.71% | $6,818,417.91 | 42.29% | $16,123,905.77 |
| 711 | Performing Arts, Spectator Sports, and Related Industries | $922,548.70 | 12.18% | $6,651,380.16 | 87.82% | $7,573,928.87 |
| 519 | Web Search Portals, Libraries, Archives, and Other Information Services | $0.00 | 0.00% | $6,575,839.14 | 100.00% | $6,575,839.14 |
| 335 | Electrical Equipment, Appliance, and Component Manufacturing | $0.00 | 0.00% | $6,489,192.37 | 100.00% | $6,489,192.37 |
| 811 | Repair and Maintenance | $7,818,712.38 | 55.64% | $6,234,614.13 | 44.36% | $14,053,326.51 |
| 562 | Waste Management and Remediation Services | $4,128,638.07 | 39.90% | $6,218,305.53 | 60.10% | $10,346,943.60 |
| 321 | Wood Product Manufacturing | $988,870.12 | 14.03% | $6,059,328.22 | 85.97% | $7,048,198.33 |

| NAICS | Demand for | Demand met In-region | % Demand met In-region | Demand met by Imports | % Demand met by Imports | Total Demand |
|---|---|---|---|---|---|---|
| 512 | Motion Picture and Sound Recording Industries | $333,149.13 | 5.28% | $5,974,716.91 | 94.72% | $6,307,866.04 |
| 485 | Transit and Ground Passenger Transportation | $2,025,762.56 | 27.42% | $5,362,028.61 | 72.58% | $7,387,791.17 |
| 323 | Printing and Related Support Activities | $8,041.02 | 0.16% | $5,062,832.39 | 99.84% | $5,070,873.41 |
| 211 | Oil and Gas Extraction | $0.00 | 0.00% | $5,060,594.39 | 100.00% | $5,060,594.39 |
| 213 | Support Activities for Mining | $17,771.06 | 0.38% | $4,621,244.87 | 99.62% | $4,639,015.93 |
| 457 | Gasoline Stations and Fuel Dealers | $6,554,397.71 | 58.94% | $4,565,185.74 | 41.06% | $11,119,583.45 |
| 212 | Mining (except Oil and Gas) | $186,334.86 | 4.13% | $4,326,908.75 | 95.87% | $4,513,243.61 |
| 337 | Furniture and Related Product Manufacturing | $32,723.62 | 0.81% | $4,031,624.37 | 99.19% | $4,064,347.99 |
| 622 | Hospitals | $56,879,324.11 | 93.49% | $3,957,801.31 | 6.51% | $60,837,125.43 |
| 425 | Wholesale Electronic Markets and Agents and Brokers | $0.00 | 0.00% | $3,857,187.58 | 100.00% | $3,857,187.58 |
| 488 | Support Activities for Transportation | $266,510.33 | 6.74% | $3,684,884.83 | 93.26% | $3,951,395.16 |
| 327 | Nonmetallic Mineral Product Manufacturing | $575,028.03 | 13.76% | $3,604,441.40 | 86.24% | $4,179,469.43 |
| 483 | Water Transportation | $0.00 | 0.00% | $2,174,125.83 | 100.00% | $2,174,125.83 |
| 492 | Couriers and Messengers | $2,065,722.22 | 56.72% | $1,576,011.54 | 43.28% | $3,641,733.76 |
| 482 | Rail Transportation | $2,213,271.29 | 61.64% | $1,377,214.61 | 38.36% | $3,590,485.90 |
| 712 | Museums, Historical Sites, and Similar Institutions | $0.00 | 0.00% | $1,293,442.33 | 100.00% | $1,293,442.33 |
| 314 | Textile Product Mills | $0.00 | 0.00% | $1,276,998.89 | 100.00% | $1,276,998.89 |
| 331 | Primary Metal Manufacturing | $0.00 | 0.00% | $1,275,381.46 | 100.00% | $1,275,381.46 |
| 486 | Pipeline Transportation | $0.00 | 0.00% | $1,164,586.30 | 100.00% | $1,164,586.30 |
| 313 | Textile Mills | $0.00 | 0.00% | $917,290.77 | 100.00% | $917,290.77 |
| 533 | Lessors of Nonfinancial Intangible Assets (except Copyrighted Works) | $2,530,158.02 | 75.61% | $815,991.48 | 24.39% | $3,346,149.50 |
| 315 | Apparel Manufacturing | $15,459.50 | 1.92% | $789,036.74 | 98.08% | $804,496.24 |
| 814 | Private Households | $862,870.29 | 55.00% | $706,078.19 | 45.00% | $1,568,948.48 |

| NAICS | Demand for | Demand met In-region | % Demand met In-region | Demand met by Imports | % Demand met by Imports | Total Demand |
|---|---|---|---|---|---|---|
| 316 | Leather and Allied Product Manufacturing | $0.00 | 0.00% | $438,878.92 | 100.00% | $438,878.92 |
| 521 | Monetary Authorities-Central Bank | $0.00 | 0.00% | $398,618.73 | 100.00% | $398,618.73 |
| 114 | Fishing, Hunting and Trapping | $27,349.38 | 12.20% | $196,783.78 | 87.80% | $224,133.16 |
| 487 | Scenic and Sightseeing Transportation | $39,405.84 | 38.32% | $63,429.01 | 61.68% | $102,834.85 |
| 491 | Postal Service | $0.00 | 0.00% | $8,436.17 | 100.00% | $8,436.17 |
| 113 | Forestry and Logging | $88,290.16 | 99.44% | $498.19 | 0.56% | $88,788.35 |