

Labor Market Analysis

This chapter provides a snapshot of labor and workforce dynamics in the region. It discusses occupations, wages, the impacts of recent economic and technological developments and their effects on the labor market. Also discussed are projected labor trends in existing key industries and common barriers that limit access to high-quality jobs and relevant training programs and apprenticeships. Key industry standards for workers are touched on as relevant.

Key Takeaways

- ◆ The Redwood Region has experienced significant job losses in legacy industries (forestry, agriculture, manufacturing). Populations typically associated with these legacy industries—men and workers with lower educational attainment—exhibit low prime age labor force participation compared to state averages.
- ◆ Workers in the region struggle to gain career momentum. Wages for young workers and those with low levels of education match state averages. However, wages among more educated and experienced workers are suppressed, reflecting a trend common in rural areas across California.
- ◆ Current shortages and projected labor market needs clearly signal an ongoing demand for family-sustaining employment in healthcare, teaching, and skilled trades including electricians, plumbers, carpenters, and automotive service technicians. Demand for a number of occupations that are critical to all Redwood Region industry clusters is projected to be strong, including management, truck driving, and accounting.
- ◆ Most family-sustaining job growth is in occupations that do not require a bachelor's degree, and so relevant training programs are available locally. However, in many cases, completion rates from these programs do not keep pace with the demand for workers in those program's areas. Graduation rates from nursing, counseling and psychology, teacher credentialing, and skilled trades programs do not appear to be sufficient to meet the current or projected needs.
- ◆ High school graduates across the region are less prepared for secondary training compared to state averages, indicating a critical barrier to success in postsecondary training programs.

Key Metrics

- ◆ **Prime-age labor force participation rate by race and age:** Track the proportion of working-age adults (age 25–54) who are employed or actively seeking work, disaggregated by demographic characteristics. This indicator is less influenced by differences in the age distribution between regions or changes over time.
- ◆ **Percentage of jobs that pay a family-sustaining or living wage:** Assess the quality of employment opportunities by calculating the share of jobs that provide wages sufficient to support a family or individual. Based on the MIT Living Wage Calculator, the minimum wage sufficient to support a family of two working adults (full-time) and two children at least \$27.49.¹²⁷
- ◆ **Living Wage:** Also based on the MIT Living Wage Calculator, a wage sufficient to support a single adult (working full-time) with no children equals at least \$21.78.
- ◆ **Projected job openings and growth rates by occupation:** Analyze long-term labor market projections to identify high-demand occupations and guide workforce development priorities.
- ◆ **High school graduation rates and college readiness:** Monitor educational outcomes and preparedness for postsecondary training to ensure sufficient supply of skilled workers.

Major Trends in the Labor Market

Decline in Legacy Industries and the Rise of Healthcare and Social Assistance

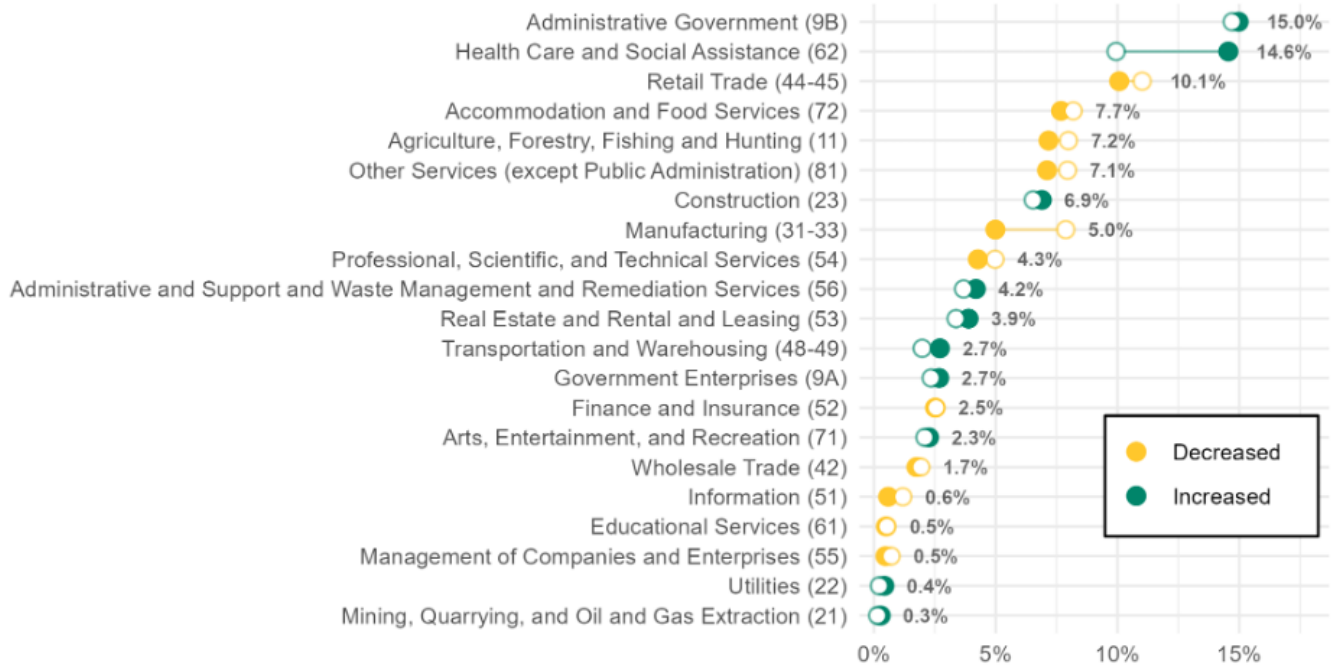
Like many rural areas in the United States, the Redwood Region's economy was historically concentrated in land-based sectors like agriculture, forestry, and logging, and government services. Workers in these rural regions, who typically have lower levels of educational attainment, face greater challenges when displaced from their jobs due to the area's lack of diversity in employment opportunities compared to urban areas (Dumont, 2024).

Regional data reflect these trends in the Redwood Region, demonstrating a decline in employment in manufacturing and natural resource-based industries over the last few decades. Simultaneously, there has been a notable increase in employment concentration within the Health and Social Assistance sector. This sector employs the largest number of workers (21%) in the region. Nearly 60% of workers are concentrated in health care, retail, public administration, and educational services. Essential industries have faced significant pressure due to the COVID-19 pandemic (Policy Link, 2024).

See Figure 7.1 for shifts in areas of employment within the region over the two preceding decades.

¹²⁷ This is the population-weighted average of the four counties.

Figure 7.1 Employment Concentration and Change Since 2001 (2001, 2022)



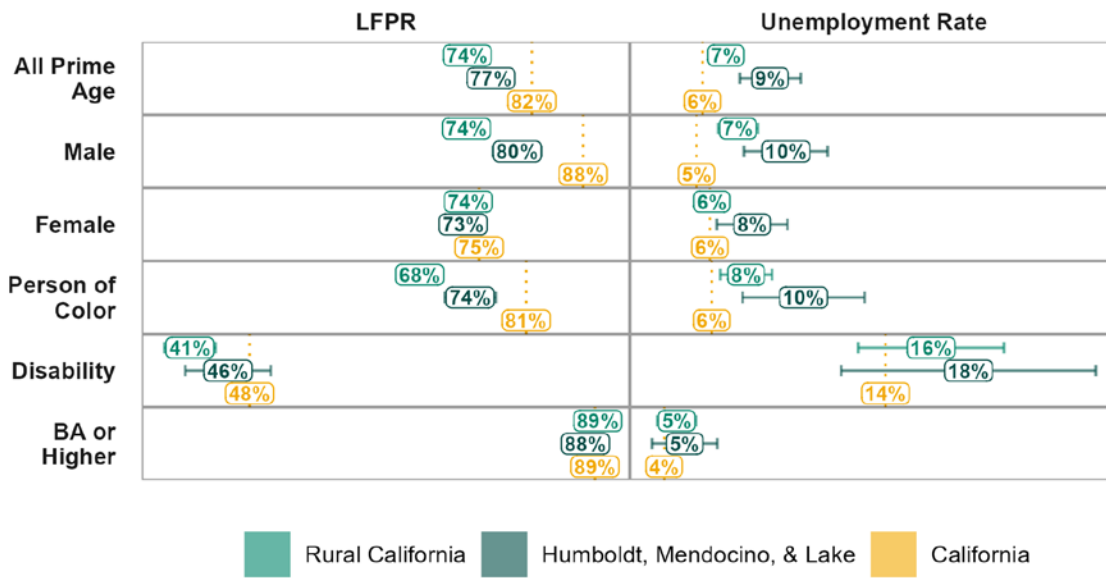
Note. Data sourced from IMPLAN.¹²⁸

These employment shifts in the Redwood Region have had varying impacts on different groups of workers. Traditionally, the declining sectors such as Manufacturing and Resource Extraction have predominantly employed men without bachelor’s degrees. In contrast, the growing Health and Social Assistance sectors tend to employ more women and more individuals holding bachelor’s degrees. Consequently, the region’s employment shifts have disproportionately displaced men and those with lower educational attainment. Data from the Redwood Region, and rural California as a whole, show that men experience significantly lower labor force participation rates, whereas individuals with a bachelor’s degree or higher maintain employment rates that align with state averages. Despite this, women in the Region still have lower labor force participation than men.



¹²⁸ North American Industry Classification System (NAICS) code in parentheses. Solid points indicate current value.

Figure 7.2 Labor Force Participation Rate (LFPR) and Unemployment Rate, Prime Age Adults¹²⁹



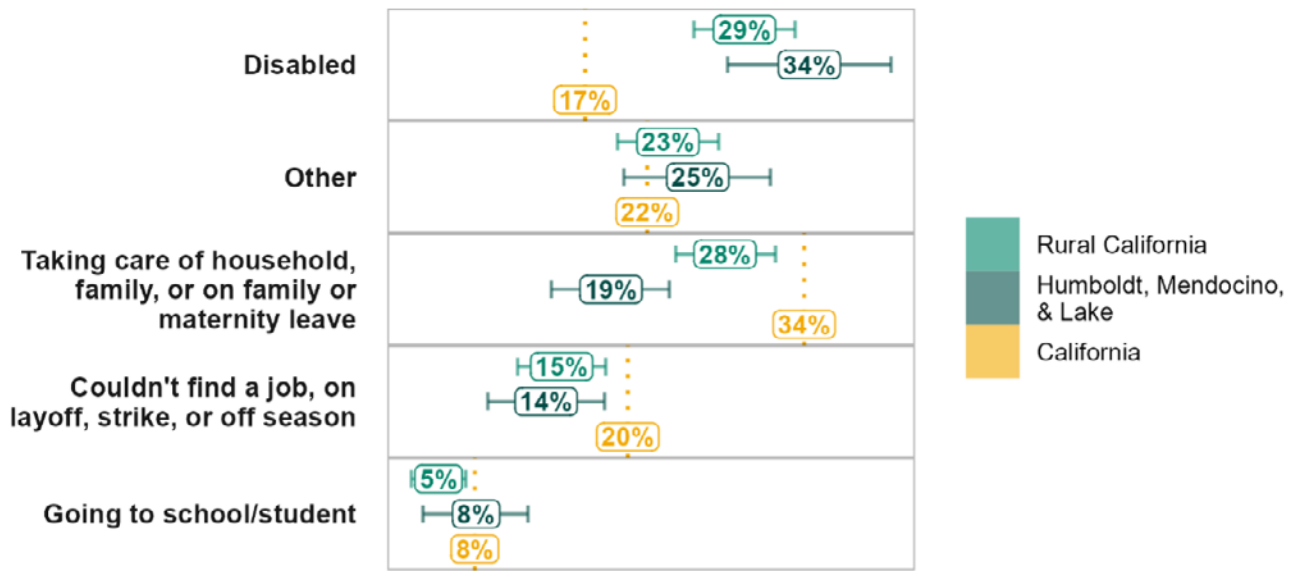
Note. Data sourced from Census PUMS. Five-year estimates 2017–2021. Rural California is defined as all California counties with an Index of Relative Rurality (IRR) of at least 0.50 (Waldorf & Kim, 2018).¹³⁰

Health and disability factors significantly complicate these workforce challenges in the Redwood Region, where, as discussed in the Public Health Analysis, rates of disability are far higher than state averages, including among young adults. As shown in Figure 7.3, a substantial proportion of prime-age adults who are unemployed or out of the labor force cite disability as their main reason for not working. Furthermore, among younger adults, substance use and mental health issues are the predominant causes of these disabilities, suggesting that workforce challenges are intertwined with a growing public health crisis (*Symptoms Matter—Leading Causes of Disability*, n.d.).

¹²⁹ Prime age adults include adults aged 25 to 54.

¹³⁰ These include Alpine, Amador, Calaveras, Colusa, Del Norte, Glenn, Humboldt, Inyo, Lake, Lassen, Mariposa, Mendocino, Modoc, Mono, Plumas, San Benito, Sierra, Siskiyou, Tehama, Trinity, and Tuolumne Counties. Lake County has the lowest IRR in the region (i.e., is the least rural) and so represents the low threshold for the Rural California comparison group.

Figure 7.3 Main Reason Not Working, Prime Age Adults



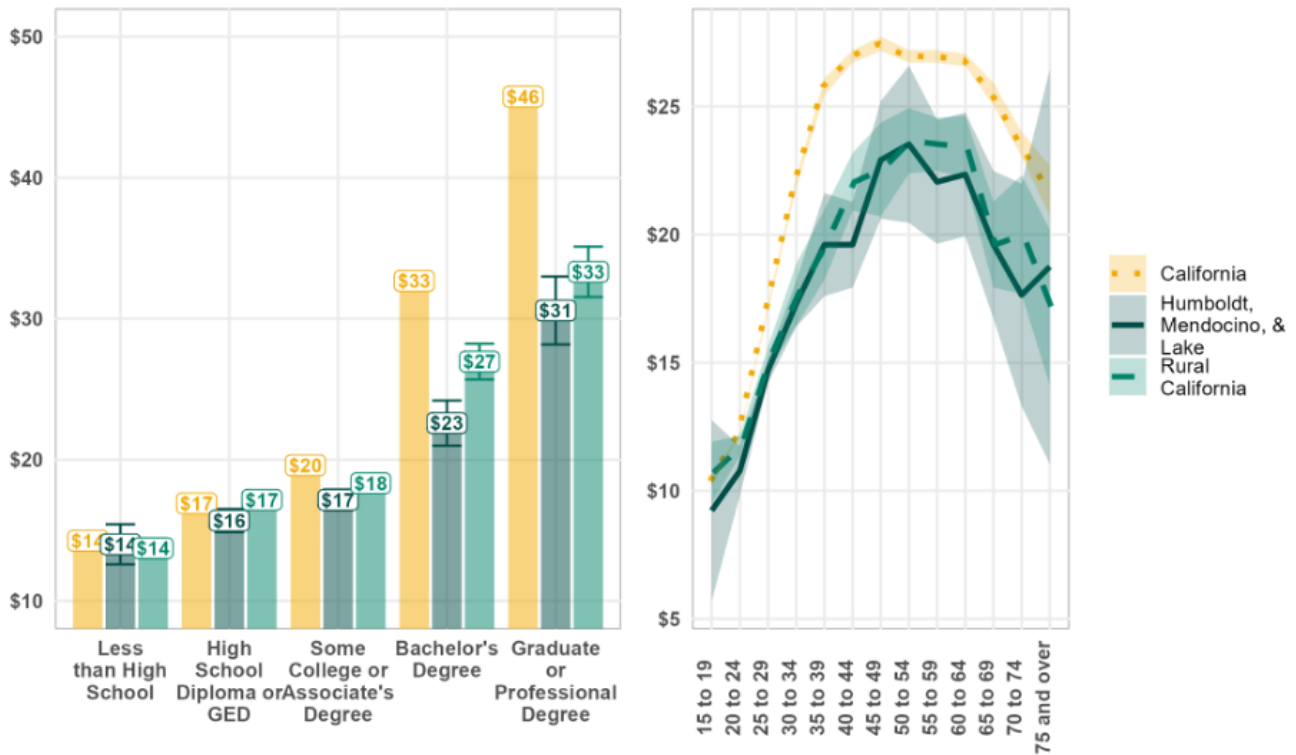
Note. Data sourced from California Health Information Survey. Data years include 2011–2022.¹³¹

Failure to Gain Career Momentum

Jobs are available in the Redwood Region, but career progression is elusive for many workers. Young workers and those with low levels of education earn wages comparable to state averages. However, workers with more experience or further education experience significant wage gaps, suggesting that the region’s labor market does not adequately reward accrued experience or education. These trends are typical of other rural areas in California. See Figure 7.4 for hourly wage by education and age.

¹³¹ To define a rural California comparison, Public Use Microdata Areas (PUMA) selected have at least one county with an [Index of Relative Rurality \(IRR\)](#) that is at least as high (≥ 0.5) as the IRR for the Redwood Region county with the lowest IRR (0.5 in Lake County). California counties covered by these PUMAs include Alpine, Amador, Calaveras, Inyo, Mariposa, Mono, Tuolumne, Colusa, Glenn, Tehama, Trinity, Humboldt, Lake, Mendocino, Monterey (South & East only), Del Norte, Lassen, Modoc, Plumas, Siskiyou, San Benito, Nevada, and Sierra. Due to differences in geographic aggregation between the CHIS and Census PUMS data, Monterey County, which does not meet our threshold of rurality of 0.5, is excluded in the Rural California comparison in CHIS data.

Figure 7.4 Hourly Wage by Education and Age



Note. Data sourced from Census PUMS data 2017-21 5-year estimates. Bars on the left panel and shared region on the right panel represent 95% confidence intervals. See footnote for detailed methodology.¹³²

Wage Disparities and Equity Considerations

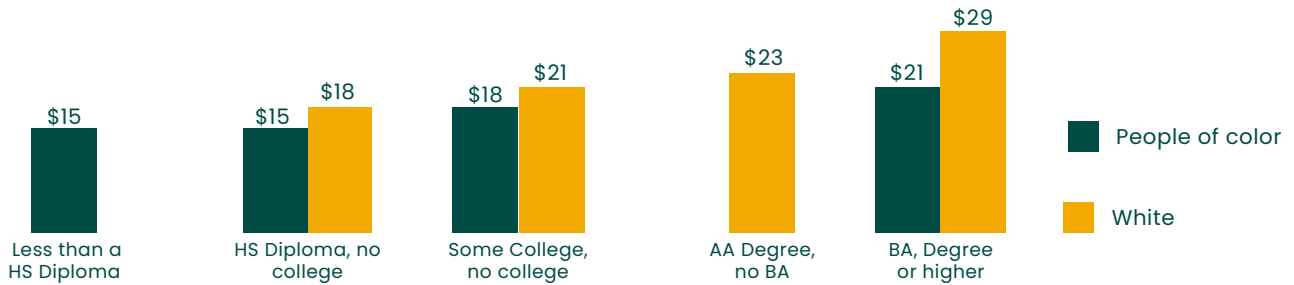
People of color are highly represented in lower-paying industries like agriculture (44%), retail trade (32%), and durable manufacturing (32%). They are underrepresented in higher-paying sectors like information (20%), professional services (15%), and finance, insurance, and real estate (21%).

Since 1980, the median wage in the region has dropped by 16 percent. Although data constraints limit historical comparisons for Latinx and Native American workers, wages for white workers have fallen by 12 percent. The wage disparity between Latinx and white workers is notable, with the median hourly wage for Latinx workers being just 73 percent of that for white workers. Over the last 40 years, earnings growth has predominantly benefited the top 10% of earners while declining sharply for the bottom half of workers.

The National Equity Index from PolicyLink provides targeted data analysis on wage disparities and inequities in the Redwood Coast’s labor market and is the source of Figure 7.5.

¹³² Hourly wages were calculated from the estimated number of weeks worked, average number of hours worked per week, and labor income. Outliers were then removed by excluding all nonpositive hourly rates and all hourly rates outside an acceptable interval. To determine this interval, the log of the hourly rates was taken to convert the distribution into an approximately normal distribution. The first and third quartiles (Q1 and Q3) were then determined to calculate the interquartile range (IQR = Q3 - Q1) of this distribution. All observations for which the log hourly rate was below Q1 - 1.5I * IQR or above Q3 + 1.5 * IQR were excluded.

Figure 7.5 Median Wage by Race/Ethnicity and Educational Attainment 2020



Source: National Equity Atlas analysis of 5-year American Community Survey microdata from IPUM USA. Universe includes civilian noninstitutional full-time wage and salary ages 25 through 64 years. Note: Data for 2020 represent a 2016 through 2020 average. Values are in 2020 dollars.

Note: There is not enough data to display on median wages for Asian American workers with less than a high school diploma, nor Black, Native American, and Pacific Islander workers at any level of education.

Workers At Risk of Displacement

Worker displacement refers to an involuntary loss of employment due to an employer's downsizing or closure (OECD, 2016). By analyzing shifting trends in industry and job growth, this section identifies groups of workers within the region who may be at risk of displacement over the coming decade.

Nearly two-thirds of projected jobs¹³³ to be created over this period are predicted to come from two sectors: Education Services (Private), Health and Social Assistance, and Leisure and Hospitality¹³⁴ (see below). Both sectors employ predominantly women; aside from this, however, the sectors diverge across race, age, education, and income. The former workforce earns more income, skews toward white, is older, and has more education than the latter, who tend to earn a lower wage, are younger, have lower levels of educational attainment, and are more likely to be persons of color.

The remaining third of projected job openings are divided among 11 sectors. Although the proportion of total jobs created within these sectors is smaller than in the top two sectors, Transportation, Warehousing, and Utilities, Construction, Other Services,¹³⁵ and Wholesale Trade are projected to experience faster than average job growth rates. Therefore, workers in these fields appear to be at lower risk of displacement. The outlook for skilled trades and construction occupations is especially strong, and many of these occupations pay living wages and require only some postsecondary training.

The remaining sectors (see Manufacturing through Information in Figure 7.6) are expected to experience slower than average job growth rates and so account for a small proportion of overall jobs created. These slower growing fields include a mix of both industries having more highly educated workers and those with lower levels of educational attainment.

Workers in many Manufacturing; Total Farm, Mining, and Logging; and Retail Trade are already experiencing displacement (see the Crop Production and Forestry and Logging Industry Cluster Analysis), and these projections suggest an ongoing poor outlook for job growth in these industries. Such

¹³³ Including living wage and below living wage jobs. See next section for projected living wage occupations.

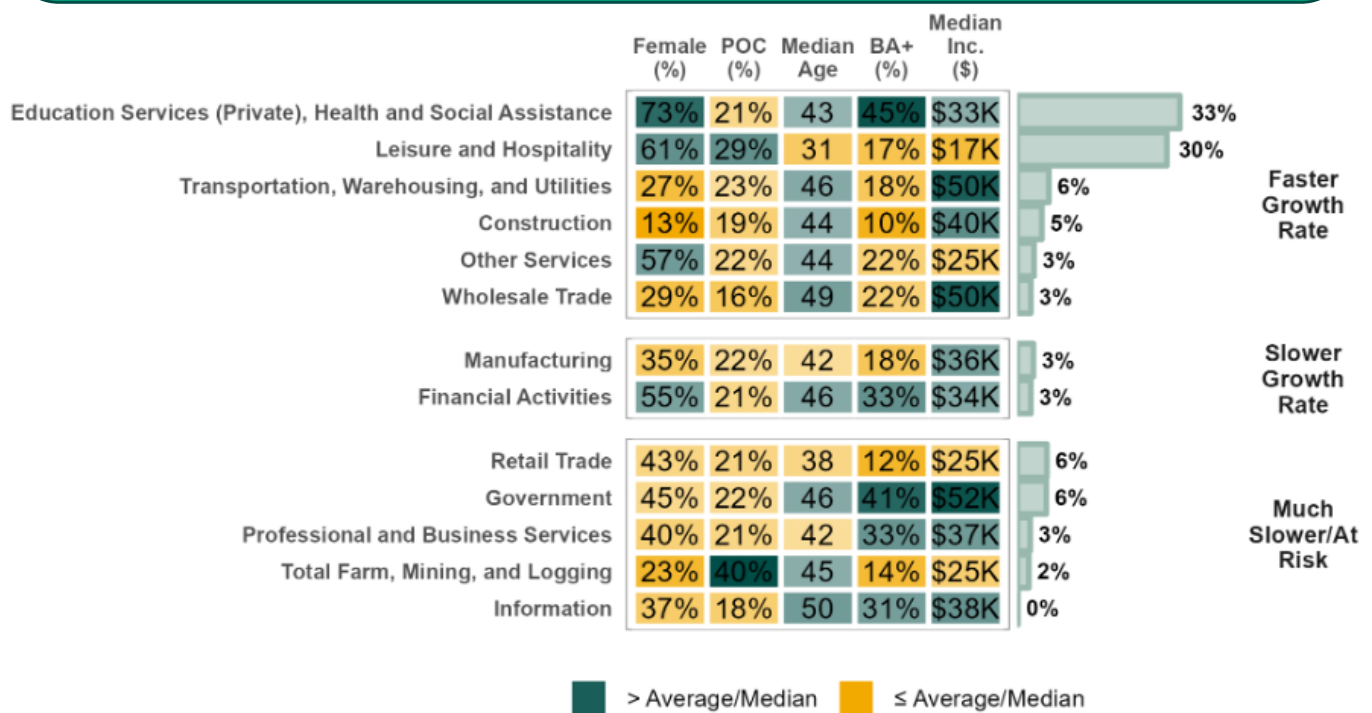
¹³⁴ As defined by the EDD. NAICS codes included in each.

¹³⁵ This includes NAICS code 81. This is defined as follows: "Establishments in this sector are primarily engaged in activities such as equipment and machinery repairing, promoting or administering religious activities, grantmaking, advocacy, and providing drycleaning and laundry services, personal care services, death care services, pet care (except veterinary) services, photofinishing services, temporary parking services, and dating services. Private households that engage in employing workers on or about the premises in activities primarily concerned with the operation of the household are included in this sector." (North American Industry Classification System (NAICS) U.S. Census Bureau, n.d.)

displacement is likely to disproportionately impact men, persons of color (within the Total Farm, Mining, and Logging sector), and individuals characterized by lower levels of educational attainment.

More highly educated workforces also appear to be at risk of displacement. Job growth in knowledge-based industries including Financial Activities, Government,¹³⁶ Professional and Business Services, and Information is projected to be minimal.¹³⁷ A compounding risk factor for these industries is the potential impact from current and future developments in generative artificial intelligence (AI). Roughly 16% of the United States workforce now regularly uses AI in the workplace (Brooks, 2023) and, as with many new technologies, the risk of displacement is a central topic of research and debate. A recent study found that many knowledge occupations are highly exposed to AI automation risk and displacement—particularly workers in legal and administrative¹³⁸ professions—whereas workers in trades, construction, outdoor and manual work, healthcare fields, and food services are expected to be relatively insulated from AI displacement (Hatzius et al., 2023). Workers in several of these at-risk fields skew older, compounding the potential workforce development challenge.

Figure 7.6 Workforce Demographics (Left) and Percent Breakdown of All Projected Jobs Created (Right) from 2020–2030



Note. Projection data sourced from EDD. Demographic data sourced from Census PUMS data 2017–21 5-year estimates. Demographic data do not include Del Norte.¹³⁹ Job growth does not sum to 100% due to rounding. Median income includes labor income only.¹⁴⁰ Bars illustrate the total percentage of all jobs created in each sector. Growth rates (see classification on the right) categorize sectors based on their percentage job growth rate.¹⁴¹

¹³⁶ As discussed in the next section, teachers and firefighters appear to be an important exception.

¹³⁷ See Potential Growth for Major Industry Sectors, Redwood Region, in the Industry Cluster Appendix.

¹³⁸ Legal and office and administrative support occupations are particularly exposed. Architecture and engineering occupations also have some exposure.

¹³⁹ Census PUMS data aggregate Del Norte with several other counties outside the Redwood Region.

¹⁴⁰ Includes both part-time and full-time workers. Does not include workers who report no labor income. These are approximate estimates only. Please see the wage data in the following section for more precise wage estimates.

¹⁴¹ Larger sectors can account for a sizable portion of job openings even if the job growth rate is slow.

Barriers to Workforce Participation

Identifying workforce barriers was a key goal of the 355 listening sessions the RRRISE outreach and engagement team conducted with residents. The primary barriers identified were:

Transportation: Given the remoteness of the region’s communities, residents stated that travel time between places is long, a particular difficulty for people with disabilities or people who rely on public transportation. The lack of public transportation limits the places residents can go. For residents who manage their own transportation, the cost of gas can be prohibitively expensive, and roads are frequently closed due to extreme weather events, such as wildfires.

Health: Many residents live more than 10 miles from a grocery store, limiting access to healthy foods. Access to healthcare providers, for both physical and mental health, is scarce in the Redwood Coast, as is healthcare education.

Childcare: Across the region, as many as seven in 10 children do not have access to a licensed childcare provider. Residents who cannot find licensed child care often leave children with family members or sometimes bring their children with them to work, limiting the parents’ opportunities parents at work.

Cost of Living: Residents reported difficulties affording their bills and rent and having to rely on credit cards. As mentioned previously, affordability concerns impact transportation and nutrition for families as well.

Working Culture and Job Access: Residents stated that many jobs have less than favorable working conditions, citing favoritism and bullying by supervisors. Residents who are non-native English speakers or who do not speak English reported difficulties navigating the workplace. Few workforce-preparation or career-exploration programs are available for residents, and many feel that, without some means of seeing what jobs are available, they miss out on job opportunities.

Educational opportunities are also a workforce barrier. Many jobs in the area require a college degree that residents do not have, but the jobs are such that these residents could learn on the job and be successful. Residents are typically unable to commit to a college degree because they have to support their families or cannot afford to attend college, thus limiting their career opportunities. Online schooling is an option, but many people in the region do not have access to a computer or the internet.

Residents’ experiences navigating the workforce in the region are summarized in a report from outreach partners that is available on the RISE website.

Projected Workforce Development Needs in High-Growth Living Wage and Family-Sustaining Occupations

By examining all sources of job growth, regardless of wage and training requirements, the previous section identified the region’s workers who are at risk of displacement. This section’s objective is identifying living-wage occupation workforce-development opportunities that both support the development of living wage and family-sustaining careers and serve the workforce-development needs of the region’s key industry clusters.

In the examination of job growth projections by occupation based on the EDD data that follows, the focus is solely on occupations that offer at least a living wage and that necessitate some form of postsecondary education or graduation from an apprenticeship program; in other words, occupations aligned with High Road priorities that have workforce-development requirements.¹⁴² Figure 7.6 below shows projections for openings in living wage jobs requiring postsecondary education or training.

Labor market projections from the EDD overwhelmingly speak to an ongoing need for skilled healthcare workers in the Redwood Region (see Health & Caregiving below). Key among these are family-sustaining, skilled health occupations that require only a few years of training, including registered nurses (RN)¹⁴³ and licensed vocational nurses (LVN). Living wage opportunities exist in Medical, Nursing, and Dental sector assisting roles. The outlook is also strong for health-management occupation professionals having higher levels of education.

There is also significant need and opportunity for occupations that span the region's key industry clusters (see Cross-Cutting Occupations below) particularly the management, truck driving, and accounting occupations, for which workforce development is critical to all Redwood Region industry clusters.

Another high-need area—although not tied specifically to any industry cluster—is for education professionals (see “Other in Figure 7.7 below). Among living wage occupations and across all grade levels, those in teaching are projected to have the highest number of openings. Compared to their statewide counterparts, the region's high school students are less prepared for college, and an education workforce sufficient in number and quality is critical to address that challenge.¹⁴⁴

Finally, skilled trades occupations critical to the Wood Products cluster, Construction, and the future development of a Renewable and Resilient Industry cluster are expected to be particularly strong. Demand for carpenters, electricians, plumbers, and automotive service technicians is expected to be high. Moreover, potential future development within wind energy will require workforce development in some skilled-trades occupations not discussed below. According to the Bureau of Labor Statistics, over one-third of workers in the Wind Electric Power Generation (NAICS 221115) industry are Wind Turbine Service Technicians (SOC 49-9081), a family-sustaining¹⁴⁵ career that requires non-degree postsecondary training (*Occupational Employment and Wage Statistics*, n.d.).

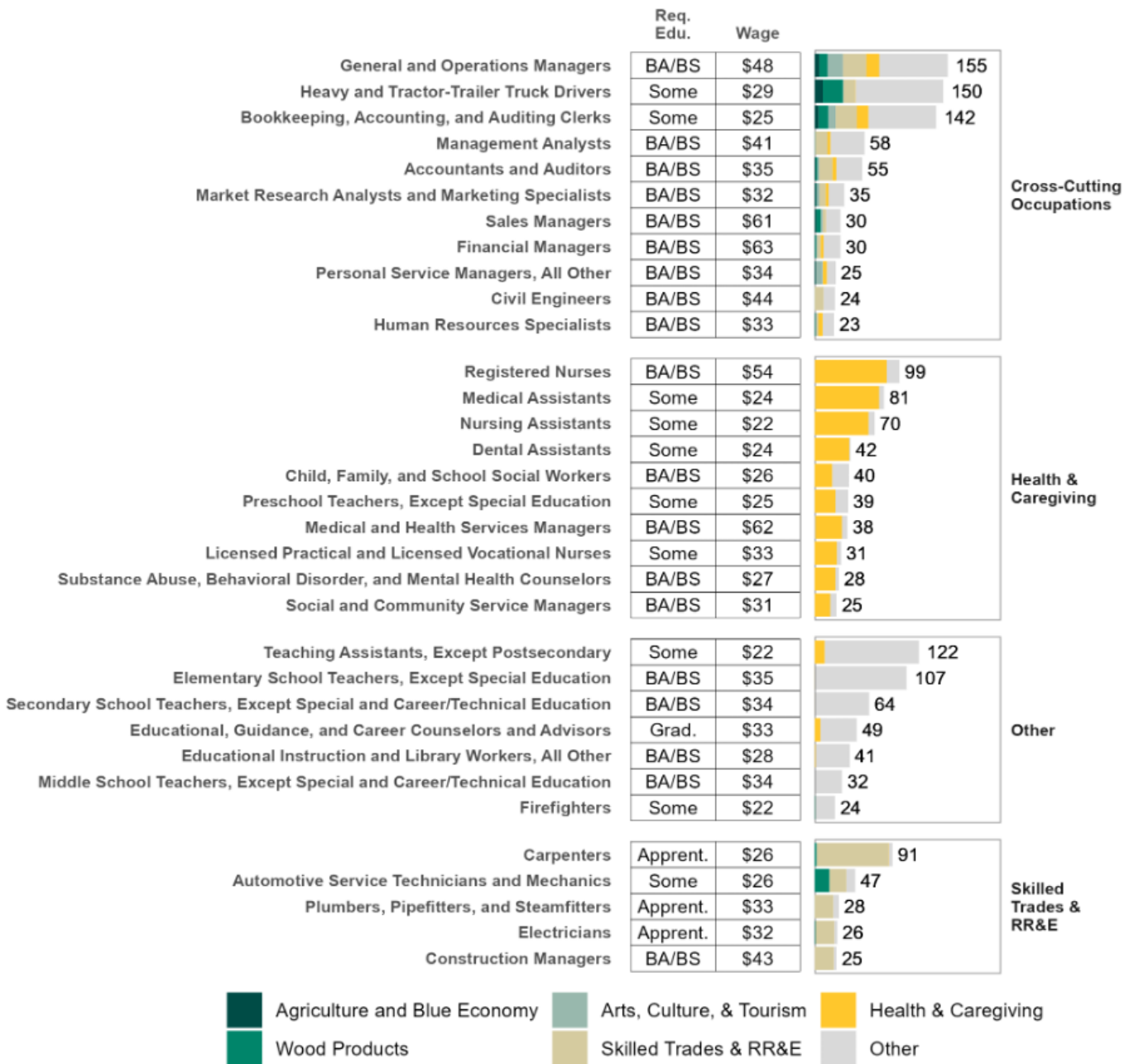
¹⁴² If a job does not pay a living wage, then it is not a High Road priority. If a job requires on-the-job training only, then the workforce-development need for this job is minimal.

¹⁴³ The EDD dataset used in this analysis states that a bachelor's degree is an RN job requirement; however, this is not accurate.

¹⁴⁴ See Educational Outcomes and Barriers in the Industry Cluster Analysis Appendix.

¹⁴⁵ In California, the average hourly wage is \$45.35.

Figure 7.7 Top Projected Living Wage Openings Requiring Postsecondary Education or Training, Projected Openings per Year¹⁴⁶



Note. Labor market projections (total amounts) sourced from the California EDD. Component breakdowns based on IMPLAN data.¹⁴⁷ Wages sourced from IMPLAN. 2020 to 2030 projections. Only occupations paying living wages are shown.

¹⁴⁶ All occupations with 250 or more projected openings through 2020 to 2030 that require any amount of postsecondary education (e.g. certificate, Associate’s degree, bachelor’s degree) or apprenticeship.

¹⁴⁷ The percent of each occupation employed in a cluster was calculated. This percentage breakdown was then applied to the total projected openings for each occupation to obtain an estimate of the level of exposure each cluster has to the total level of projected openings. For instance, 11.5 % of the General and Operations Managers positions are employed in the Arts, Culture, and Tourism industries. Occupations not concentrated in a key industry cluster (the “Other” category) constitute less than 75% of employment in Other and so are defined as cross-cutting.

Potential Gaps in Local Education and Training

Skilled Health Occupations

For some skilled health occupations, local graduation rates appear nearly sufficient to supply the job openings projected over the near term. Over the past five academic years, the region has produced an average of 89 registered nurses (RNs) annually, slightly below the projected need of 99 RNs per year. Additionally, the region graduates an average of 31 licensed vocational nurses (LVNs) each year, precisely meeting the forecasted demand for this profession. However, data from the California Department of Healthcare Services indicate nurse shortage areas throughout the region (*Registered Nurse Shortage Areas in California - Registered Nurse Shortage Areas - California Health and Human Services Open Data Portal*, n.d.),¹⁴⁸ suggesting that other factors may be impacting the supply and demand for nurses.

For other occupations, there are gaps, the most obvious among these being the lack of regional training opportunities for medical doctors, psychiatrists, dentists, pharmacists, physician assistants, and nurse practitioners, which forces reliance on professionals relocating from outside the region.¹⁴⁹ As discussed in the Public Health Analysis section, the region has a shortage of primary, mental, and dental health.

Training gaps are also evident in other skilled health occupations, even those for which training programs are available. For example, community colleges (CR and MC) have been graduating an average of 21 dental assistants annually, which constitutes only half of the 42 openings projected per year.

The entire region is a mental health provider shortage area, underscoring the urgent need for more professionals in this field. According to a recent report, the region's behavioral health workforce currently comprises 1,900 professionals, approximately 950 individuals short of what is needed to adequately address the mental health and substance use demands of the region (Cal Poly Humboldt, 2023). From 2022 to 2027, the Redwood Region is projected to require an additional 485 mental and behavioral health professionals annually to replace retiring workers and to address unmet needs. In addition, the report identified an annual demand for 85 marriage and family therapists, 31 mental health and substance use social workers, and 15 psychologists.

However, based on current graduation rates from Cal Poly Humboldt (CPH), the supply of new professionals will not meet this demand. Over the past year, CPH graduated an average of 50 students in Social Work, 11 in Counseling Psychology, and eight in School Psychology at the master's level, clearly demonstrating that the region's educational output is insufficient to close the significant gap in the mental health workforce.

Cross-Cutting Occupations

The region's community colleges and Cal Poly Humboldt provide a comparatively high number of locally trained graduates in business and related disciplines, providing the educational opportunities required for the Bookkeeping/Accounting and General and Operations Managers occupations.

¹⁴⁸ These areas include the Crescent City/Bertsch-Oceanview (medium severity), Eureka/McKinleyville (low severity), Fort Bragg/Caspar (medium severity), and Clearlake/Hidden Valley Lake (high severity) areas.

¹⁴⁹ Nurse practitioners and physician assistants can perform some of the duties of a medical doctor such as diagnosis, referrals, and writing prescriptions (Medical Board of California, n.d.; Professional, n.d). Therefore, a local training opportunity for either nurse practitioners or physician assistants may alleviate some of the shortage.

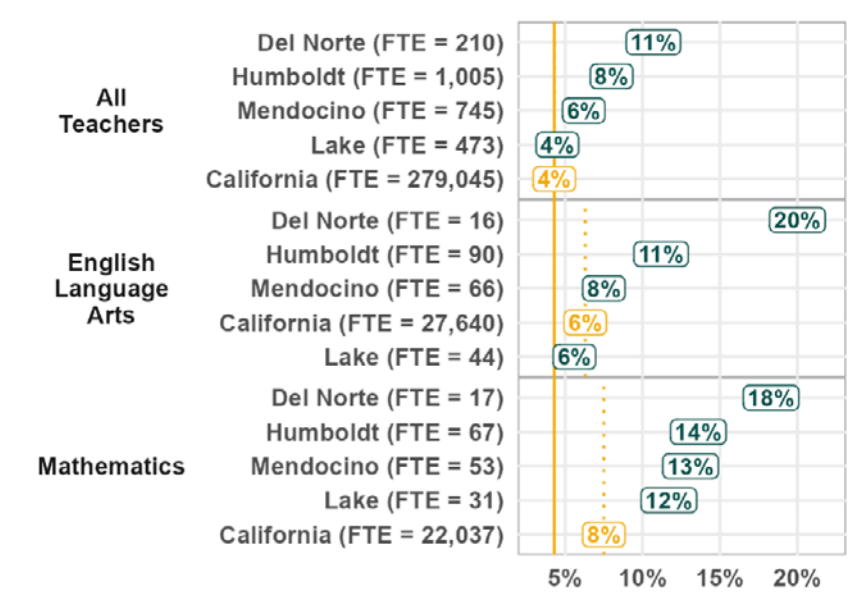
Education

The region shows significant gaps in teacher preparation, with projections indicating the need for 203 new teachers annually across the elementary, middle, and high school levels. However, Cal Poly Humboldt (CPH) graduates an average of 96 teaching credentialed students yearly (including both masters and BA programs).¹⁵⁰ Important to note is that CPH’s teaching program includes online students, enabling it to serve candidates across the state and complicating direct regional impact assessments.

According to Teach California, there is a high demand for teachers in specialized fields such as Special Education, Mathematics, Science, Bilingual, and Career Technical Education (*High-Need Subject Areas*, n.d.). Despite this demand, credentialing output is low: In the past five years, the region has averaged 24.8 graduates per year in Special Education, but only 4 in Mathematics, 7.2 in Science, and a mere 0.2 in Career Technical Education (*Credentials Granted by Academic Year*, n.d.). These statistics underscore the pressing need for targeted improvements in teacher training programs to better align with both regional and state needs.

The deficiencies described above force local school districts to compromise, often hiring under-qualified teachers to fill gaps. As shown in Figure 7.8 below, teacher subject matter expertise falls below state averages across the region, particularly for mathematics. As discussed in the Labor Market Analysis Appendix, the region’s K-12 achievement in mathematics and reading lag state averages, and the region’s high school graduates are far less prepared for UC/CSU admission compared to state averages. The lack of teacher preparation may play a role in these outcomes.

Figure 7.8 Out-of-Field Teachers¹⁵¹



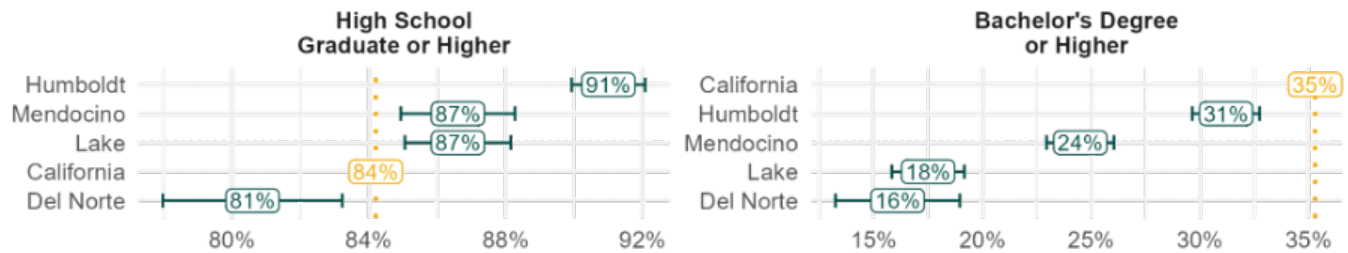
Note. Data sourced from the California Department of Education (California Department of Education, n.d.).

¹⁵⁰ Average 2018-19 through 2022/23 academic years.

¹⁵¹ An out-of-field teacher is defined as: “someone who has a credential but has not yet demonstrated subject matter competence in the subject area(s) or for the student population associated with the assignment” (*Teaching AMO Definitions*, n.d.).

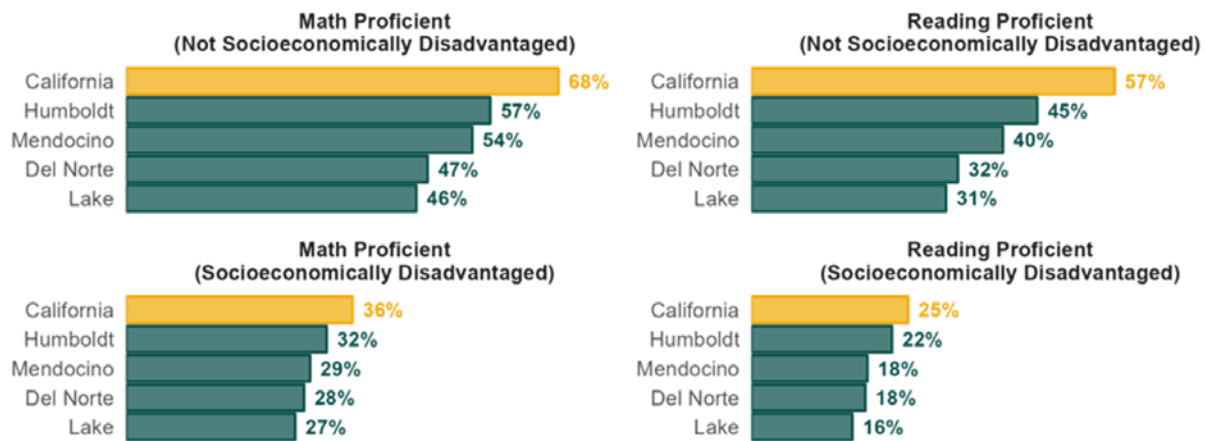
Correspondingly, except for Del Norte,¹⁵² the adult population has achieved high school graduation rates that are on par with or even exceed the state average. However, all Redwood Region counties lag behind in four-year degree attainment (see Figure 7.8 above). Therefore, while the region has comparable rates of high school graduation, the educational system apparently faces challenges in adequately preparing high school graduates for college.¹⁵³

Figure 7.9 Educational Attainment, Population 25 Years or Older (2017 – 2021)



Note. Data sourced from the ACS. As shown below, in the Redwood Region, gaps in educational attainment start early, with K-12 students lagging behind their statewide peers on reading and math proficiency.

Figure 7.10 K-12 Math and Reading Proficiency by Socioeconomic Status (2017 – 2019)



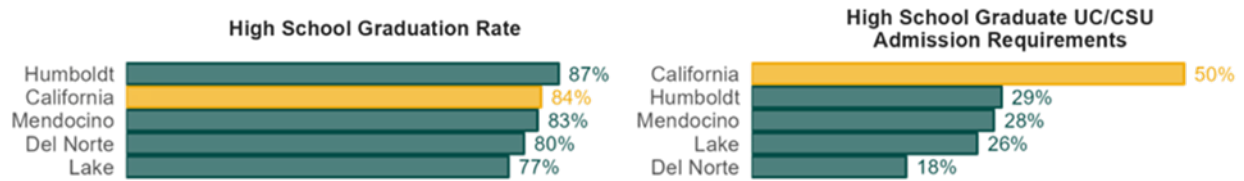
Note. Data sourced from Kidsdata.org. Includes grades 3, 4, 5, 6, 7, 8, and 11. Based on California Assessment of Student Performance and Progress's "Smarter Balanced Summative Assessment."

In the Redwood Region, high school graduation rates are on par with the state rate, but high school graduates in the region are much less prepared for college admission compared to the state average. Across the region, high school graduates complete the course requirements for admission to the University of California (UC) or California State University (CSU) systems (i.e. "A-G requirements") at roughly half the rate of their statewide counterparts.

¹⁵² The Pelican Bay State Prison population likely skews Del Norte's figure substantially.

¹⁵³ Another contributing factor for the gap in higher educational attainment may be a comparative lack of four-year colleges and universities that are geographically accessible for much of the region's population. Only Humboldt County is home to a public four-year university.

Figure 7.11 High School Graduation Rates and College Preparedness (2017 – 2021)



Note. Data sourced from Kidsdata.org.¹⁵⁴

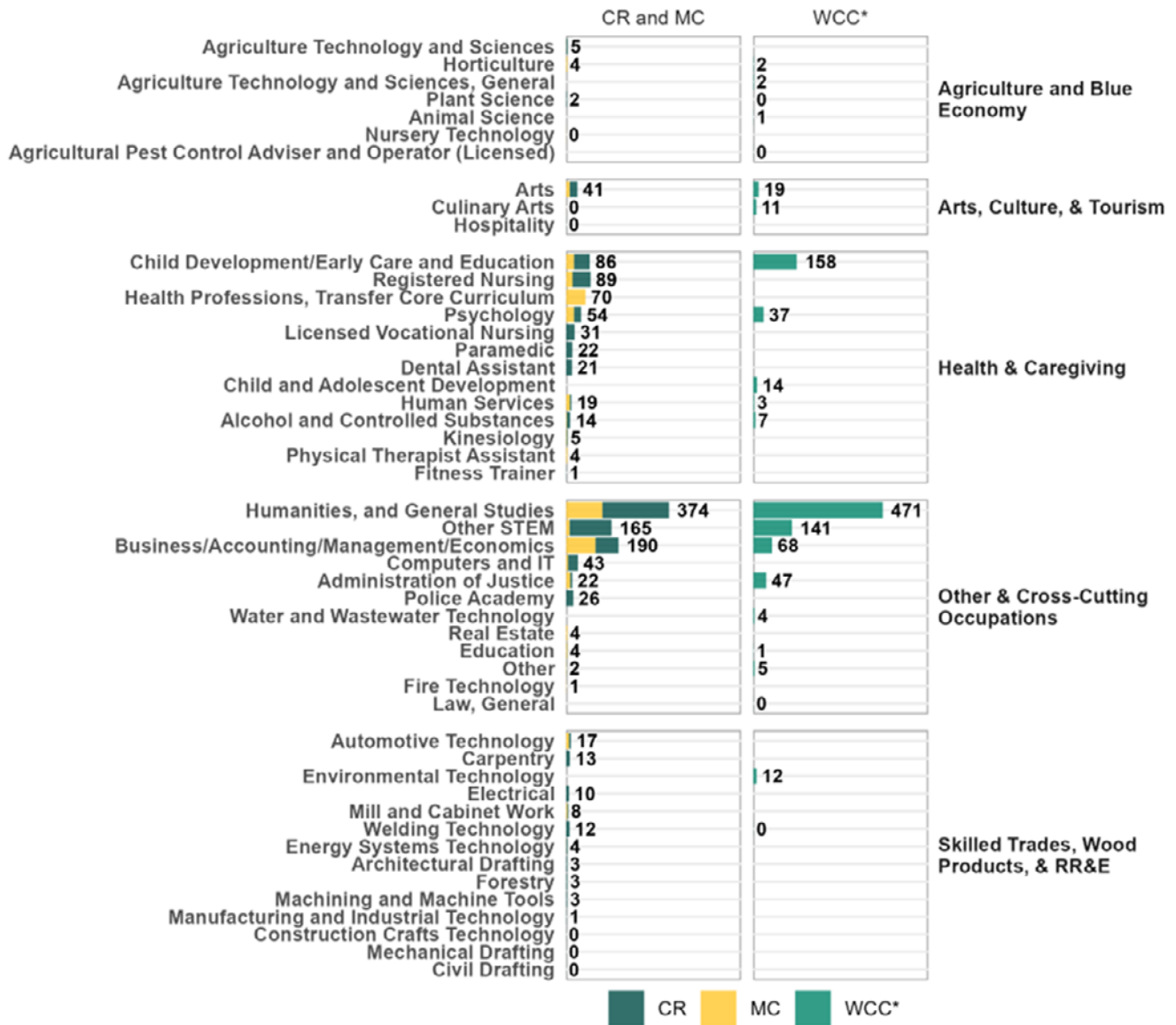
Skilled Trades

Training for skilled trades in the region's community colleges seems to be insufficient. The number of community college graduates who obtain certificates or degrees in skilled trades is notably low, and annual graduation rates do not meet the employment opportunities forecasted in these fields (see Figures 7.12 and 7.13 below). For example, the EDD projects an annual need for 91 carpenters, and yet, over the past five years, only an average of 13 students have graduated from the region's community colleges with carpentry qualifications. Similar shortages are observable in other trades such as those of automotive service technicians and electricians, suggesting a significant gap between available training capacity of community colleges and labor market demands for these skilled sectors.



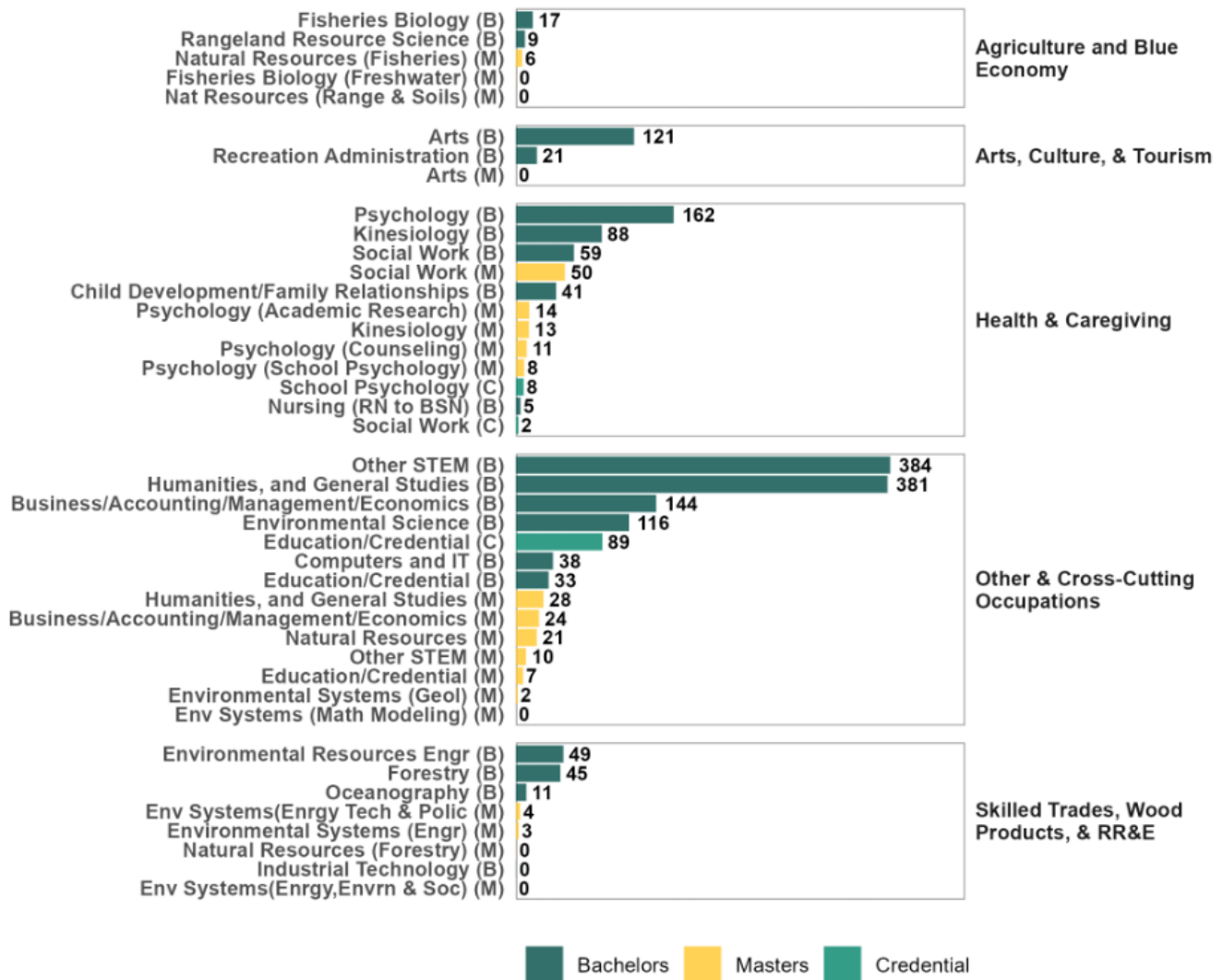
¹⁵⁴ Admission requirements data including only 2017–2019. Percents are annual averages. High school graduation rate is defined as the percentage of public school students from the graduating class who receive a high school diploma. Admission requirements is defined as the percentage of high school graduates who complete all courses required for UC/CSU admission with a grade of "C" or better.

Figure 7.12 Mendocino College (MC), College of the Redwoods (CR) and Woodland Community College (WCC) Average Program Completion per Year from Academic Years 18/19 to 22/23



Note. Data sourced from California Community Colleges Chancellor's Office, Data Mart. Woodland Community College serves both Lake and Colusa campuses. WCC data therefore includes graduates from outside the Redwood Region.

Figure 7.13 Cal Poly Humboldt Average Program Completion per Year from Academic Years 18/19 to 22/23



Note. Data sourced Cal Poly Humboldt Institutional Research.

Barriers to Success

Regionwide, students are less academically prepared for college compared to statewide averages. Less than a third of Redwood Region high school graduates complete the admission requirements for admission to the UC or CSU system, and regional students’ test scores in reading and math proficiency lag behind state averages. Not only do these barriers impact the region’s ability to grow its own workforce of skilled university graduates, but they also affect its production of skilled trades and health occupation workers for occupations that do not require a university degree. A 2016 study found that students admitted to California Community Colleges (CCC) that were placed in remedial courses had only about a 16% chance of earning a certificate or associate degree within six years (Cuellar Mejia et al., 2016), indicating that low reading and math proficiency among the region’s high school students has critical implications for its ability to train skilled workers in the trades and health occupations. Addressing the teacher shortage is thus a key step in preparing the next generation of workers.

Industry-Specific Labor Standards that Meet High-Road Priorities

Due to an economy centered around natural resources and outdoor recreation, protection from extreme weather is a key labor standard across many of the region's industries. As the climate crisis progresses, policies concerning extreme heat days and climate events that impact infrastructure and health will be key to protecting these workers. The Climate Analysis section (Chapter 5) provides information about the climate change.



Working Lands and Blue Economy

Labor standards in the Working Lands and Blue Economy sector are influenced primarily by the California Farm Bureau Federation, which promotes safe and sustainable agricultural practices, and the United Farm Workers (UFW), which advocates for fair wages, safe working conditions, and access to healthcare for agricultural workers (California Farm Bureau Federation, n.d.; United Farm Workers, n.d.). Cal/OSHA has specific safety standards for agricultural operations, including heat illness prevention, pesticide safety, and equipment safety (Cal/OSHA, n.d.). The California Agricultural Labor Relations Act (ALRA) provides collective bargaining rights for agricultural workers (California Agricultural Labor Relations Board, n.d.). In the Forestry sector, the American Wood Council (AWC) promotes sustainable forestry practices and worker safety (American Wood Council, n.d.), while the International Association of Machinists and Aerospace Workers (IAM) represents workers and advocates for fair wages and safe working conditions (IAMAW, n.d.) in those areas. OSHA and Cal/OSHA have specific safety standards for the Wood Products industry (OSHA, n.d.; Cal/OSHA, n.d.).



Arts, Culture, and Tourism

The California Travel Association (CalTravel) promotes responsible and sustainable tourism practices, including fair labor standards (CalTravel, n.d.). The Actors' Equity Association (AEA) represents actors and stage managers in the theater industry and advocates for fair wages and safe working conditions (Actors' Equity Association, n.d.). OSHA has specific safety standards for the entertainment industry, including guidelines for stage and set construction, electrical safety, and fall protection (OSHA, n.d.). The California Department of Industrial Relations has additional labor standards for the entertainment industry, including minimum wage requirements and overtime pay (California Department of Industrial Relations, n.d.).



Renewable and Resilient Energy

The American Clean Power Association (ACP) promotes responsible development and operation of renewable energy projects, including worker safety and training standards (American Clean Power Association, n.d.). The International Brotherhood of Electrical Workers (IBEW) represents workers in the renewable energy sector and advocates for fair wages, safe working conditions, and training opportunities (IBEW, n.d.). OSHA and Cal/OSHA have specific safety standards for the renewable energy industry, including guidelines for wind energy, solar energy, and energy storage systems (OSHA, n.d.; Cal/OSHA, n.d.).

Health and Caregiving

The California Hospital Association (CHA) promotes high-quality, safe, and equitable healthcare, including fair labor practices for healthcare workers (California Hospital Association, n.d.). The Service Employees International Union (SEIU) represents healthcare workers and advocates for fair wages, safe working conditions, and opportunities for advancement (SEIU, n.d.). OSHA has specific safety standards for the healthcare industry, including guidelines for bloodborne pathogens, personal protective equipment, and safe patient handling (OSHA, n.d.). The California Department of Public Health (CDPH) has additional regulations for healthcare facilities, including staffing requirements and infection control practices (California Department of Public Health, n.d.). SB-525 established a \$25 minimum wage for healthcare workers (signed into law October 2023).

