



Retail, Hospitality, & Tourism Industry



Introduction

The COVID-19 pandemic and subsequent lockdown measures forced many businesses across California to close their doors, leading to both temporary and permanent employee layoffs. While workers across all industries were negatively affected by the pandemic, workers in Retail, Hospitality, and Tourism (RHT) were particularly hard hit. Unemployment insurance (UI) claims from workers in these industries in California hit an all-time high in July 2020.

As the pandemic continued into 2021, several news outlets reported- and continue to report- that workers in the RHT industry were considering leaving the industry after several months of unemployment, concerns about contracting COVID-19 while working, and low wages.^{1,2,3} However, research has shown that it is difficult for workers employed in low-wage occupations, many of which are RHT occupations, to transition to high-wage occupations. Additionally, the skills that are required or requested for RHT occupations do not align well with the skills that are usually required in non-RHT occupations. These findings illustrate the difficulty of moving from an RHT job to a higher paying, more stable non-RHT job. However, that research does not account for the ability of RHT workers to gain new skills through training programs at a community college or other educational institution.

To assist displaced RHT workers find viable occupations outside of the RHT industry, this report identifies in-demand, growing occupations that RHT workers can enter after completing additional training at a community college or transferring to a four-year college or university. Additionally, this report includes the typical time it would take to complete one of these training programs and the expected wages for each occupation. Though these programs take time to complete, research has consistently shown that workers with higher levels of educational attainment have lower rates of unemployment and higher wages.⁴ Additionally, many of the in-demand, growing occupations in this report are considered recession-resilient, meaning that they are less susceptible to job losses during economic downturns.

Key findings from this report include:

- Within the RHT industry, 11 occupations accounted for 57% of job losses from 2019 to 2020.
 - › All 11 occupations have entry-level hourly earnings below the statewide living wage of \$16.75.
- Research shows that workers employed in low-wage occupations, many of which are RHT occupations, transition to other occupations with similar wages and do not transition to higher-paying jobs.⁵
 - › Additionally, the skills required for these low-wage RHT occupations are typically not related to the skills required in non-RHT occupations, making it difficult for RHT workers to transition out of the industry.

1 <https://www.wsj.com/articles/hospitality-workers-are-pushed-into-new-careers-as-pandemic-begins-second-year-11613999342>

2 <https://www.washingtonpost.com/food/2021/05/28/restaurant-workers-demands/>

3 <https://www.fau.edu/newsdesk/articles/hospitality-poll.php>

4 <https://www.bls.gov/careeroutlook/2020/data-on-display/education-pays.htm>

5 <https://www.brookings.edu/wp-content/uploads/2019/11/Realism-About-Reskilling-Final-Report.pdf>

- Of the nearly 800 occupations in the Standard Occupational Classification (SOC) system, 67 were identified as growing, in-demand occupations in California.
 - › Of those, 79% (53) have entry level hourly earnings above the statewide living wage estimate of \$16.75.
 - › However, all 67 of these occupations typically require some form of training or higher education.
- Community colleges throughout California offer training or transfer programs for 66 of the 67 in-demand, growing occupations. These programs can be completed in time frames that range from 1-3 months to over 2 years and can lead to employment in non-RHT occupations that have entry-level hourly earnings above the statewide living wage.
 - › Of these growing, in-demand occupations, 33% (22) are considered recession-resilient.
 - › All 22 recession-resilient occupations typically require higher education, further demonstrating the link between education, employment stability, and high wages.
- RHT workers that either lost their job during the pandemic or are considering leaving the RHT industry altogether may want to consider these 67 growing, in-demand occupations and related community college programs so they can advance to a higher-paying, more stable job.

While the goal of this analysis is to provide workers with information about a variety of viable occupations outside of the RHT industry, employers—particularly restaurants—are aggressively hiring to fill open positions.⁶ Due to the current increase in demand, displaced RHT workers could relatively easily return to the industry with their existing skill-set and should consider the costs and benefits associated with staying in the industry versus pursuing training for a non-RHT job.

It is important to note that labor market information in general, including that contained within this report, is based on historical data trends and therefore incorporates only the short-term effects of the COVID-19 pandemic on the labor market. The earnings data included in this report reflect 2020 earnings, the most recent full-year worth of data.

Retail, Hospitality, and Tourism Occupational Analysis

RHT Industry Employment

The effects of the COVID-19 pandemic on the labor market were felt across all industries and occupations. The RHT industry was hit particularly hard, as many businesses were considered non-essential or forced to heavily modify their business models. Prior to the pandemic, RHT employment in California steadily increased after a decline during the Great Recession (2007-2009). However, there was a sharp decline in RHT employment between 2019 and 2020, with Retail employment declining by 75,730 jobs (a 4.2% decline) and Hospitality and Tourism employment declining by 212,075 jobs 9.7 (a 9.7% decline). A full analysis of the effects of the COVID-19 pandemic on the RHT industry is included in the companion piece to this report, which can be found at the link in the accompanying footnote.⁷

Affected RHT Occupations

Workers employed in RHT occupations were particularly hard-hit due to lockdown measures that forced non-essential retail stores, hotels, restaurants, and other hospitality businesses to close, resulting in massive job losses. The occupations analyzed in this section accounted for 57% of the job losses in the RHT industry in California from 2019 to 2020. While the occupations that were affected in Retail are different from those in Hospitality and Tourism, they share several characteristics, including similar wages, age composition, and educational attainment. Generally, these occupations are considered entry-level, have low wages, a large percentage of young workers, and typically require no more than a high school diploma or equivalent.

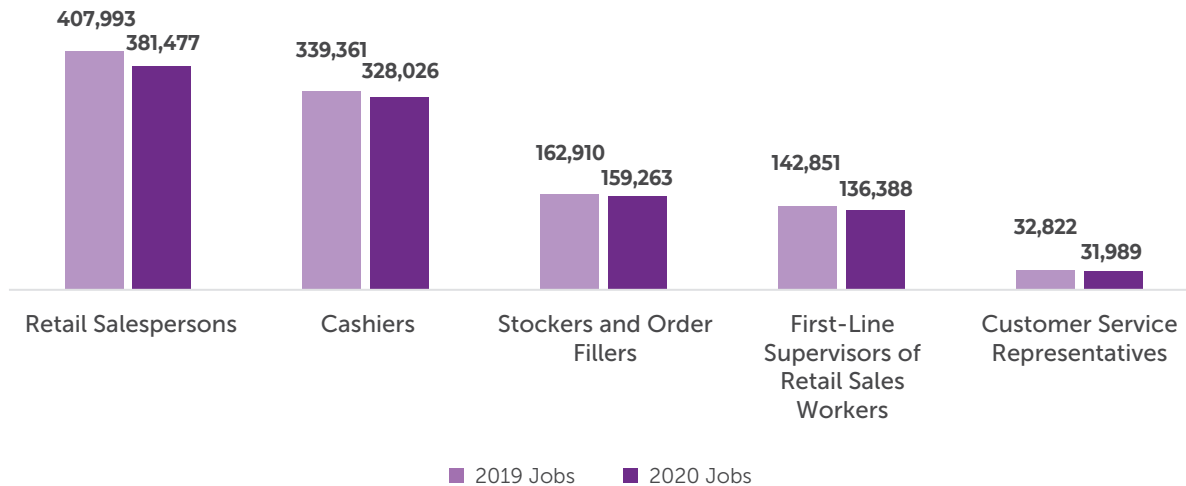
Retail Occupations

The occupations within the Retail industry that were most affected were Retail Salespersons, Cashiers, Stockers and Order Fillers, First-Line Supervisors of Retail Sales Workers, and Customer Service Representatives. Collectively, these five Retail occupations accounted for a loss of 48,793 jobs (a 4% decline). Job losses in these occupations accounted for 64% of all job losses in the Retail industry from 2019 to 2020 in California. Exhibit 1 shows employment in these Retail occupations in 2019 and 2020. Additional information regarding these occupations is included in Appendix A.

⁶ <https://www.businessinsider.com/fast-food-struggles-to-hire-as-demand-soars-us-economy-roars-2021-4>

⁷ COE's companion pieces exploring the effects of the COVID-19 pandemic on the RHT industry in 2020 available on www.coecccc.net.

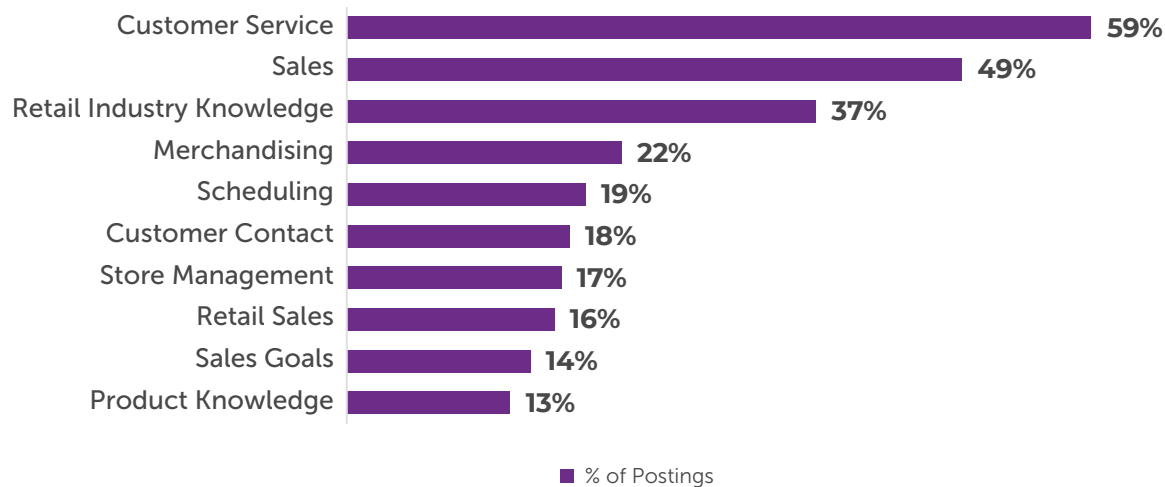
Exhibit 1: Retail Occupations, 2019 vs. 2020 Employment in California



Source: EMSI

These five Retail occupations are usually customer-facing and workers typically have skills related to customer service and sales. Exhibit 2 shows the top skills that Retail workers in these occupations are likely to have based on the top requested skills in online job postings.

Exhibit 2: Top Skills for Retail Occupations in California

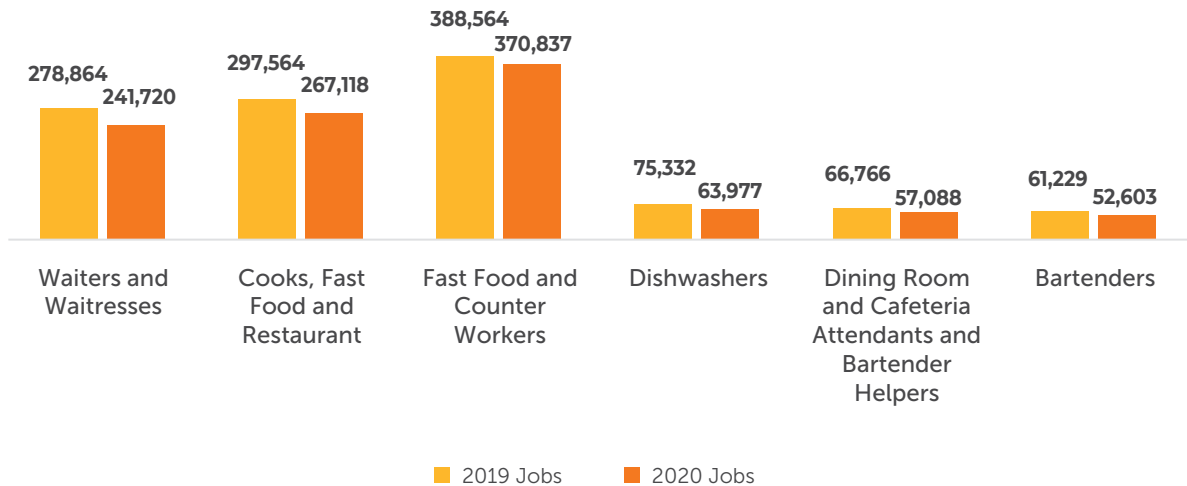


Source: Labor Insight/Burning Glass

Hospitality and Tourism Occupations

The occupations within the Hospitality and Tourism industry that were most affected were Waiters and Waitresses; Cooks, Fast Food and Restaurant; Fast Food and Counter Workers; Dishwashers; Dining Room and Cafeteria Attendants and Bartender Helpers; and Bartenders. Collectively, these six Hospitality and Tourism occupations had a loss of 114,976 jobs (a 10% decline). Job losses in these six occupations accounted for 54% of all job losses in the Hospitality and Tourism industry from 2019 to 2020 in California. Exhibit 4 shows employment in these Hospitality and Tourism occupations in 2019 and 2020. Additional information regarding these occupations is included in Appendix A.

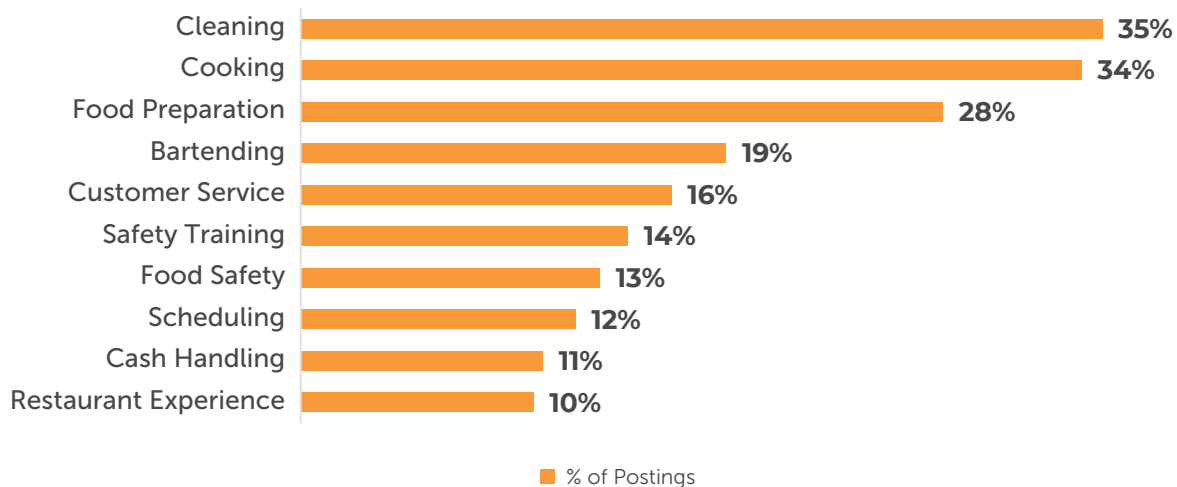
Exhibit 3: Hospitality and Tourism Occupations, 2019 vs. 2020 Employment in California



Source: EMSI

These six Hospitality and Tourism occupations are all related to food service and include bartenders, wait staff, and food preparation/cooking positions. Workers in these occupations typically have skills such as cleaning, cooking, food preparation, and bartending. Exhibit 4 shows the top skills that Hospitality and Tourism workers in these occupations are likely to have based on the top requested skills in online job postings.

Exhibit 4: Top Skills for Hospitality and Tourism Occupations in California



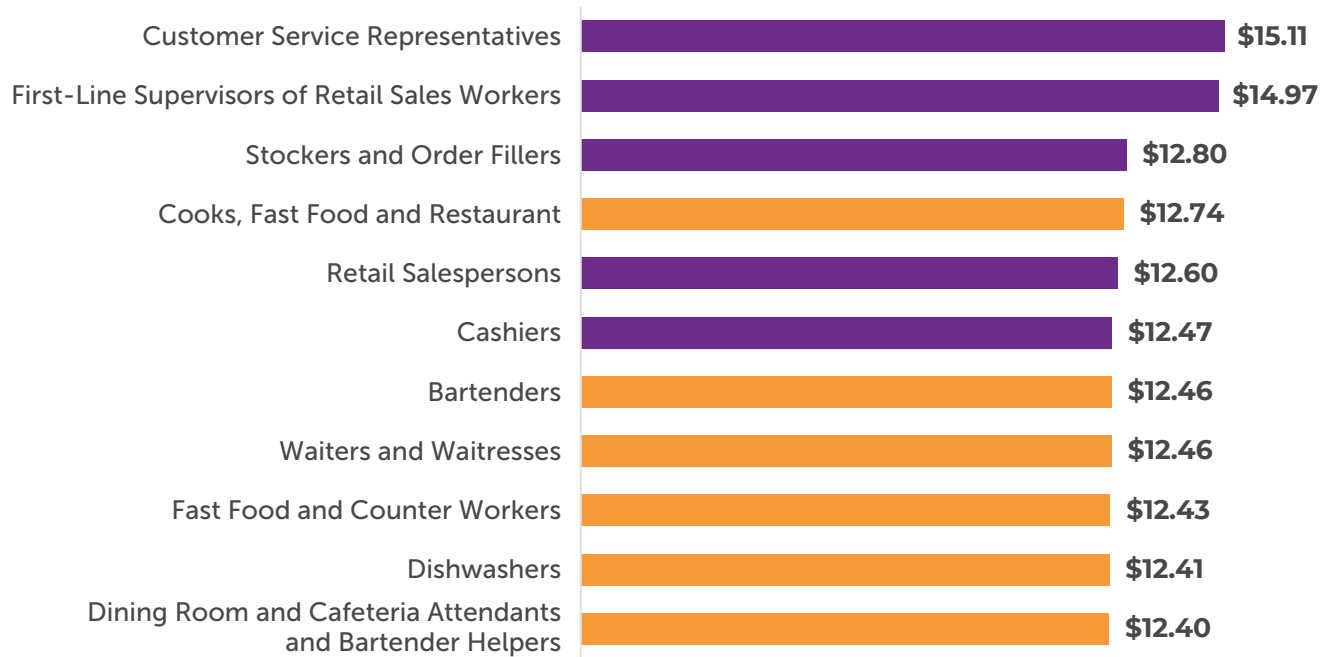
Source: Labor Insight/Burning Glass

Characteristics of RHT Occupations

Though these 11 combined RHT occupations have different tasks, work activities, and skills profiles, they share many similar characteristics. Typical entry-level hourly earnings for these occupations range from \$12.40 to \$15.11, which is below both the statewide average of \$20.57 and the average statewide living wage of \$16.75. Generally, earnings for Hospitality and Tourism occupations are lower than earnings for Retail occupations. Exhibit 5 shows the typical entry-level hourly earnings for all 11 RHT occupations (Retail occupations are in purple and Hospitality and Tourism occupations are in orange). It is important to note that the figures included in Exhibit 6 include tips and commissions, but do not include overtime pay.⁸ Additionally, because labor market information is based on past trends, the earnings in Exhibit 5 reflect 2020 earnings.

⁸ For more details on what is included in earnings, see: <https://kb.emsidata.com/glossary/occupation-earnings/>

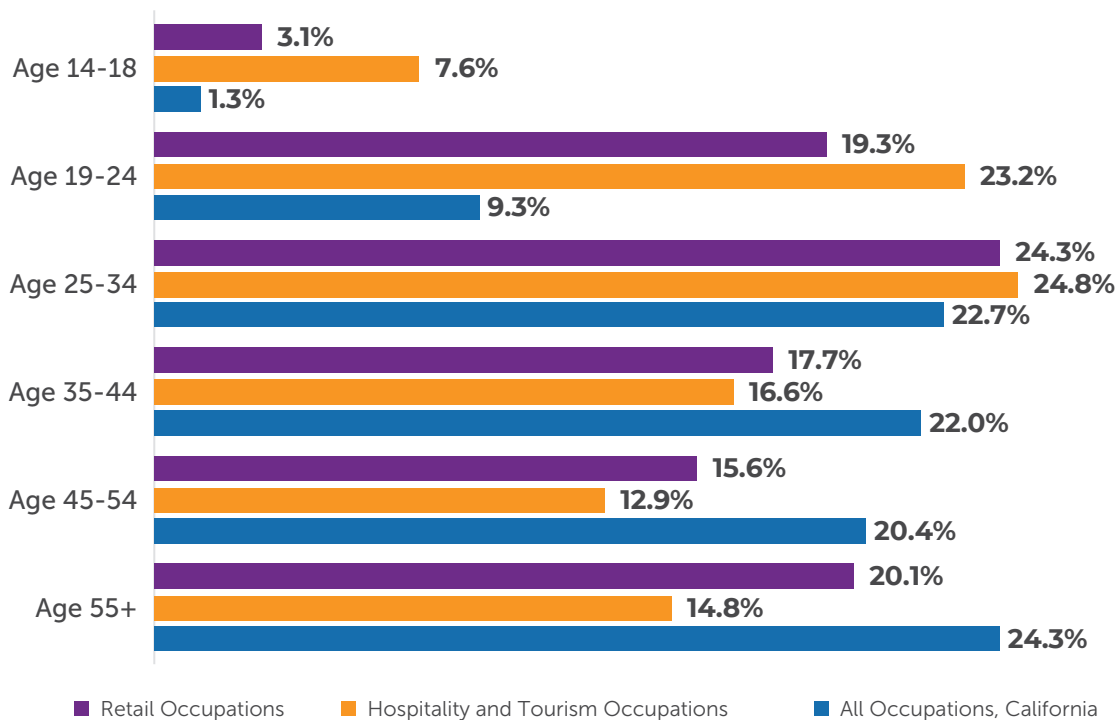
Exhibit 5: Entry-Level Hourly Earnings for RHT Occupations in California



Source: EMSI

Workers in these 11 RHT occupations are younger than average when compared to workers across all occupations in California. Over 46% of workers in the Retail occupations and nearly 56% of workers in the Hospitality and Tourism occupations are between the ages of 14 and 34. This compares with an average of 33% of workers in the same age group across all occupations in California. Exhibit 6 shows the age composition of workers in these RHT occupations compared to the average of all workers in California (Retail occupations are in purple, Hospitality and Tourism occupations are in orange, and all occupations in California are in blue).

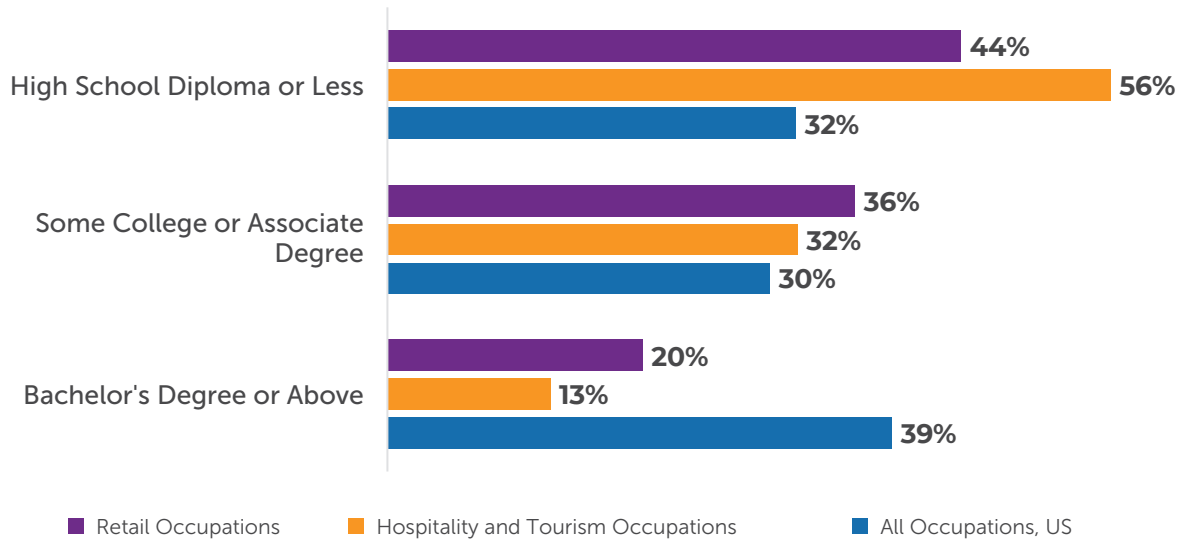
Exhibit 6: Age Composition of Workers in RHT Occupations in California



Source: EMSI

The 11 RHT occupations included in this report typically require no more than a high school diploma or equivalent. Of the five Retail occupations, two typically require no formal education and three typically require a high school diploma, while all six Hospitality and Tourism occupations typically require no formal education. Additionally, 44% of workers in the Retail occupations and 56% of workers in the Hospitality and Tourism occupations hold a high school diploma or less as their highest level of education, which is much higher than the national average of 32% across all occupations. Exhibit 7 shows the educational attainment of workers in these RHT occupations compared to the national average (Retail occupations are in purple, Hospitality and Tourism occupations are in orange, and all occupations in the US are in blue).

Exhibit 7: Educational Attainment of Workers in RHT Occupations



Source: EMSI

The 11 RHT occupations included in this section were severely impacted by the COVID-19 pandemic. Workers in these occupations typically have entry-level hourly earnings that are below both the statewide entry-level average of \$20.57 and the statewide average living wage of \$16.75. Additionally, workers in these occupations tend to be younger and have lower levels of educational attainment when compared to the statewide average.

In-Demand, Growing Occupations

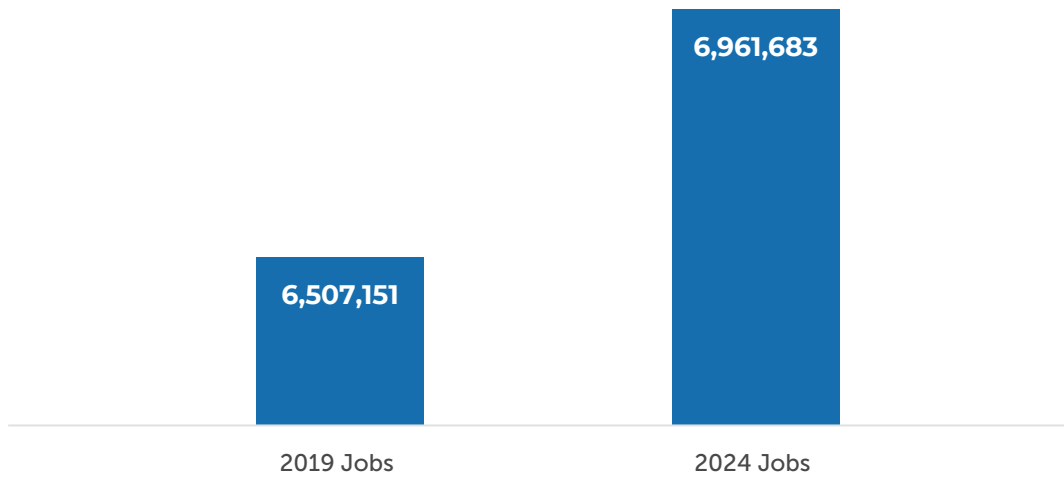
Non-RHT Occupations

This section identifies viable, in-demand, growing occupations that displaced RHT workers, or those that are looking to leave the industry, could enter with additional training. Research has shown that workers employed in low-wage occupations, many of which are RHT occupations, typically transition to other low-wage occupations when switching jobs. Additionally, the skills required for these low-wage RHT occupations are typically not related to the skills required in non-RHT occupations, making it difficult for RHT workers to transition out of the industry. While it is not impossible for workers in these RHT occupations to transition to generally higher paying and more stable non-RHT occupations, it is unlikely without acquiring additional skills or education.

The in-demand, growing occupations identified in this section are projected to grow at a faster rate than the California average and have an above-average number of annual job openings. Additionally, the majority of these occupations, 79%, have typical entry-level hourly earnings that are above the statewide average living wage of \$16.75. Of the nearly 800 occupations in the Standard Occupational Classification (SOC) system, 67 were identified as in-demand, growing occupations in California. Additionally, 22 of these in-demand occupations were identified as recession-resilient, meaning that they are less susceptible to job losses during economic downturns. The full methodology for identifying the in-demand, growing and recession-resilient occupations are included in Appendix B.

Through 2024, these occupations are projected to grow 7% and there is projected to be nearly 673,000 annual job openings. Exhibit 8 shows the number of jobs in these occupations in 2019 and the projected number of jobs in 2024.

Exhibit 8: Number of Jobs for In-Demand, Growing Occupations in California, 2019 and 2024



Source: EMSI

While these occupations have varying education and training requirements, community colleges in California provide training or transfer programs that can prepare workers for all but one of these occupations. The in-demand, growing occupations can be grouped into four “training buckets” based on the typical length of time it would take to complete a related program: Short-Term Training (1-3 months), Moderate-Term Training (4-11 months), Long-Term Training (1-2 years), and Pathway/Transfer (2+ years). The full methodology for each training bucket is included in Appendix B.

Occupations that fall into the Pathway/Transfer training bucket typically require at least a bachelor’s degree and would require transfer to a four-year college or university. However, training programs for 58% (38) of the in-demand, growing occupations can be completed in less than two years and programs for 28% (19) of the occupations can be completed in less than one year. Exhibit 9 shows the full list of 67 in-demand, growing occupations by the typical length of a related training program.

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Exhibit 7: Educational Attainment of Workers in RHT Occupations

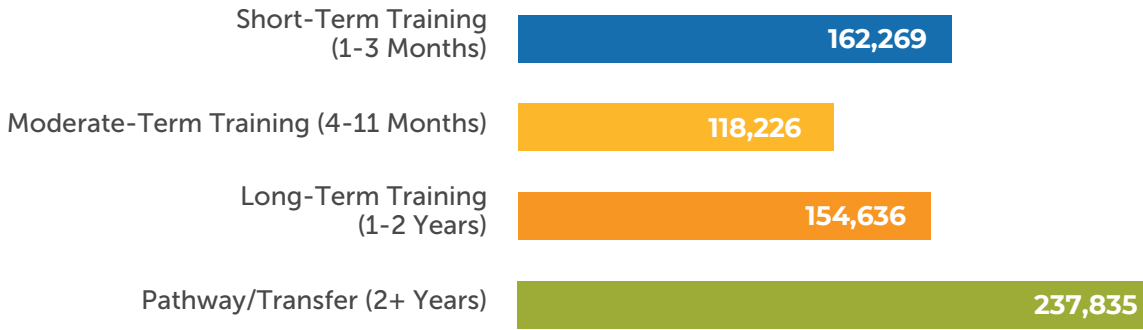
Occupations			
Short-Term Training (1-3 months)			
Home Health and Personal Care Aides	Massage Therapists	Nursing Assistants	Social and Human Service Assistants
Moderate-Term Training (4-11 Months)			
Billing and Posting Clerks	Computer User Support Specialists	First-Line Supervisors of Personal Service and Entertainment and Recreation Workers, Except Gambling Services	Insurance Sales Agents
Maintenance and Repair Workers, General	Manicurists and Pedicurists	Medical Assistants	Medical Dosimetrists, Medical Records Specialists, and Health Technologists and Technicians, All Other
Medical Secretaries and Administrative Assistants	Operating Engineers and Other Construction Equipment Operators	Paralegals and Legal Assistants	Real Estate Sales Agents
Sales Representatives of Services, Except Advertising, Insurance, Financial Services, and Travel	Teaching Assistants, Except Postsecondary	Welders, Cutters, Solderers, and Brazers	
Long-Term Training (1-2 Years)			
Administrative Services and Facilities Managers	Carpenters	Computer Occupations, All Other	Construction Managers
Correctional Officers and Jailers	Electricians	First-Line Supervisors of Construction Trades and Extraction Workers	First-Line Supervisors of Mechanics, Installers, and Repairers
First-Line Supervisors of Transportation and Material Moving Workers, Except Aircraft Cargo Handling Supervisors	Heating, Air Conditioning, and Refrigeration Mechanics and Installers	Heavy and Tractor-Trailer Truck Drivers	Licensed Practical and Licensed Vocational Nurses
Pharmacy Technicians	Plumbers, Pipefitters, and Steamfitters	Project Management Specialists and Business Operations Specialists, All Other*	Property, Real Estate, and Community Association Managers
Registered Nurses	Training and Development Specialists	Police and Sheriff's Patrol Officers	

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Occupations			
Pathway/Transfer (2+ Years)			
Accountants and Auditors	Child, Family, and School Social Workers	Civil Engineers	Compliance Officers
Computer and Information Systems Managers	Computer Systems Analysts	Educational Instruction and Library Workers, All Other	Educational, Guidance, and Career Counselors and Advisors
Elementary School Teachers, Except Special Education	Financial and Investment Analysts, Financial Risk Specialists, and Financial Specialists, All Other	Financial Managers	General and Operations Managers
Human Resources Specialists	Lawyers	Management Analysts	Market Research Analysts and Marketing Specialists
Marketing Managers	Marriage and Family Therapists	Medical and Health Services Managers	Middle School Teachers, Except Special and Career/Technical Education
Personal Service Managers, All Other; Entertainment and Recreation Managers, Except Gambling; and Managers, All Other	Postsecondary Teachers	Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products	Secondary School Teachers, Except Special and Career/Technical Education
Securities, Commodities, and Financial Services Sales Agents	Social and Community Service Managers	Software Developers and Software Quality Assurance Analysts and Testers	Substance Abuse, Behavioral Disorder, and Mental Health Counselors
Tutors and Teachers and Instructors, All Other			

There is projected to be just under 673,000 annual job openings in these occupations through 2024. These occupations make up only 9% of the total number of occupations, but are projected to account for 30% of all annual openings in California. Exhibit 10 shows the number of annual job openings for the occupations by the typical length of time it would take to complete a related training program. The highest number of annual openings are for Pathway/Transfer occupations, followed by Short-Term Training occupations, Long-Term Training occupations, and Moderate-Term Training occupations.

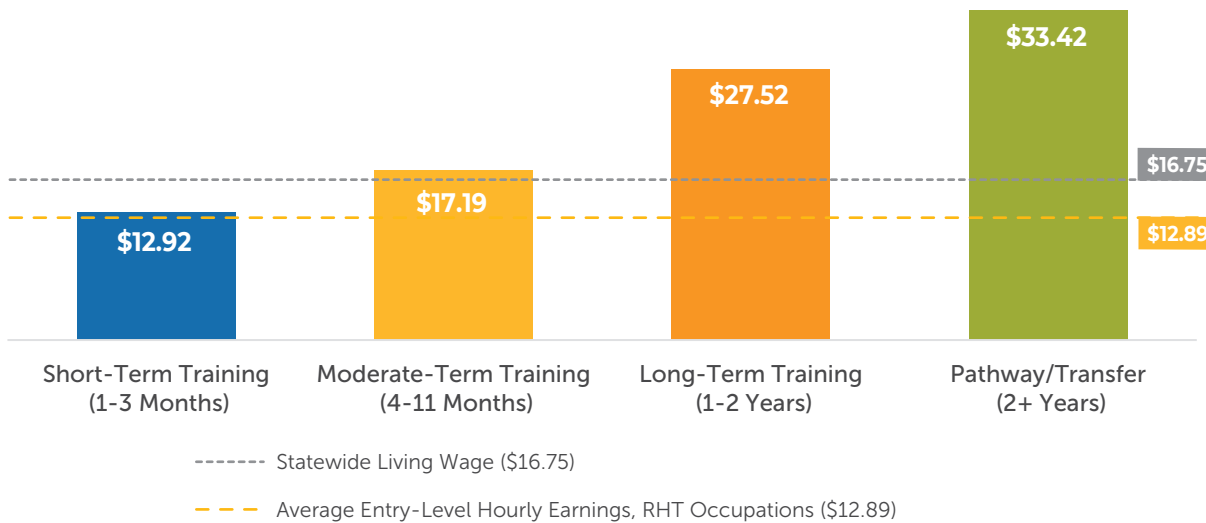
Exhibit 10: Annual Openings in California by Typical Length of Training Program



Source: EMSI

With more education and training, jobseekers can expect to earn higher wages. The typical entry-level hourly earnings that workers entering these occupations can expect increases along with the length of time it would take to complete the corresponding training program. Entry-level hourly earnings for these occupations range from \$12.92 for occupations that fall into the Short-Term Training bucket to \$33.42 for occupations in the Pathway/Transfer Training bucket. Exhibit 11 shows the average entry-level hourly earnings by training bucket.

Exhibit 11: Average Entry-Level Hourly Earnings by Training Bucket



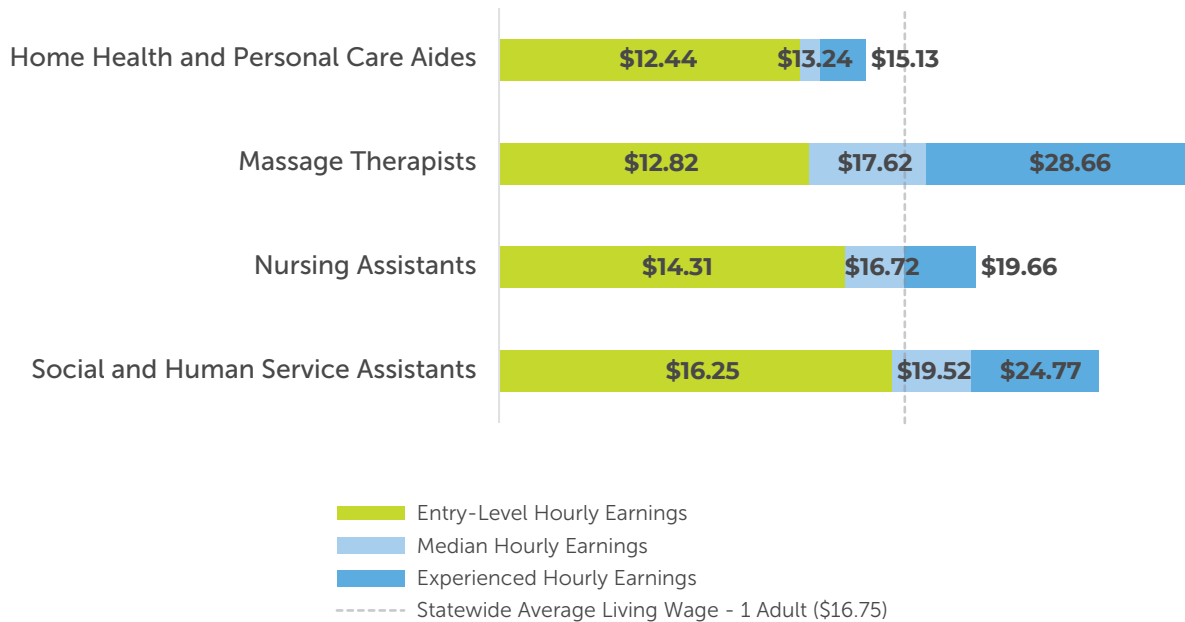
Source: EMSI

These in-demand, growing occupations are viable options to consider especially for RHT workers if they lost their job due to the pandemic or are considering leaving the industry. While additional training and education require time and resources to complete, the subsequent increase in earnings potential and job stability should be considered. The following sections provide an overview of the occupations for each training category, as well as the typical entry-level, median, and experienced earnings workers in these occupations can expect to earn. Additional information regarding these occupations, including the projected growth and the projected number of annual job openings, are included in Appendix B.

Short-Term Training Occupations

The Short-Term Training bucket includes four occupations, all of which are related to health. While these four occupations have the lowest wages of all the in-demand, growing occupations, they can also serve as pathway occupations to other, higher-paying in-demand, growing occupations such as Registered Nurses, Licensed Practical and Licensed Vocational Nurses, Medical and Health Services Managers, and Social and Community Service Managers. Throughout California, 85 different community colleges offer programs training programs for these four occupations. Additionally, some programs are noncredit programs which are tuition-free, though there may be material and/or textbook fees. Exhibit 12 shows the range of hourly earnings workers in each of these occupations can expect to earn.

Exhibit 12: Short-Term Training Occupations in California



Source: EMSI

While these four occupations have the lowest wages of all the in-demand, growing occupations, they can also serve as pathway occupations to other, higher-paying in-demand, growing occupations such as Registered Nurses, Licensed Practical and Licensed Vocational Nurses, Medical and Health Services Managers, and Social and Community Service Managers.

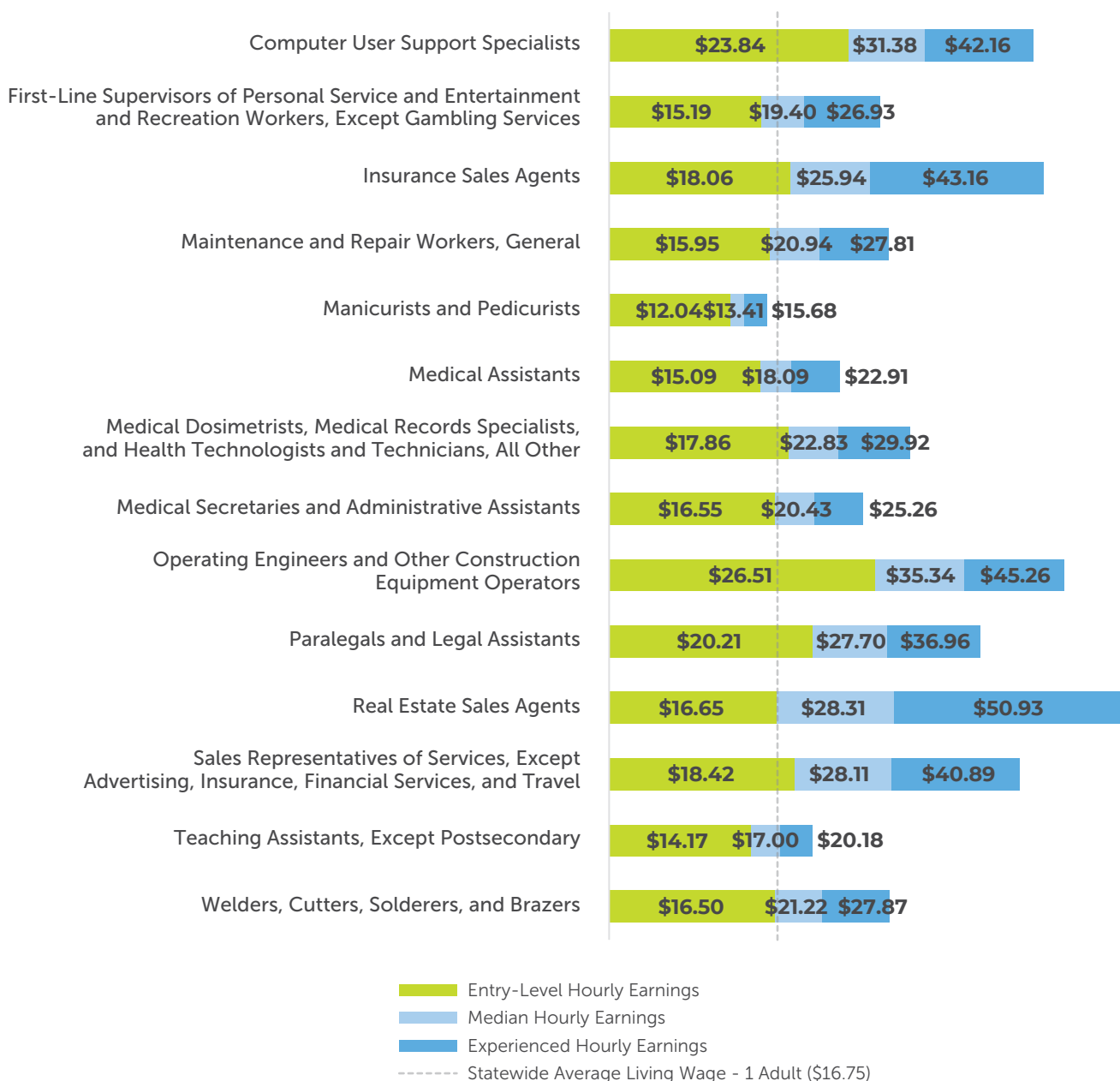


Moderate-Term Training Occupations

There are 14 occupations in the Moderate-Term Training bucket. These 14 occupations cut across a variety of fields, including advanced manufacturing, business, health, and information technology. Of the 14 occupations, 14% (2) are considered recession-resilient occupations. Like the Short-Term Training bucket, many occupations in the Moderate-Term Training bucket can be pathway occupations to other, higher-paying, in-demand occupations. For example, Maintenance and Repair Workers, General can become Electricians or Heating, Air Conditioning, and Refrigeration Mechanics and Installers with additional training; while Teaching Assistants, Except Postsecondary can become Elementary School Teachers with additional education.

All 115 community colleges in California have a training program related to at least one of the Moderate-Term Training occupations. Some programs that prepare for these occupations are noncredit programs which are tuition-free, but may have material and/or textbook fees. Exhibit 13 shows the range of hourly earnings workers in each of these occupations can expect to earn.

Exhibit 13: Moderate-Term Training Occupations in California




Source: EMSI

Long-Term Training (1-2 Years) Occupations

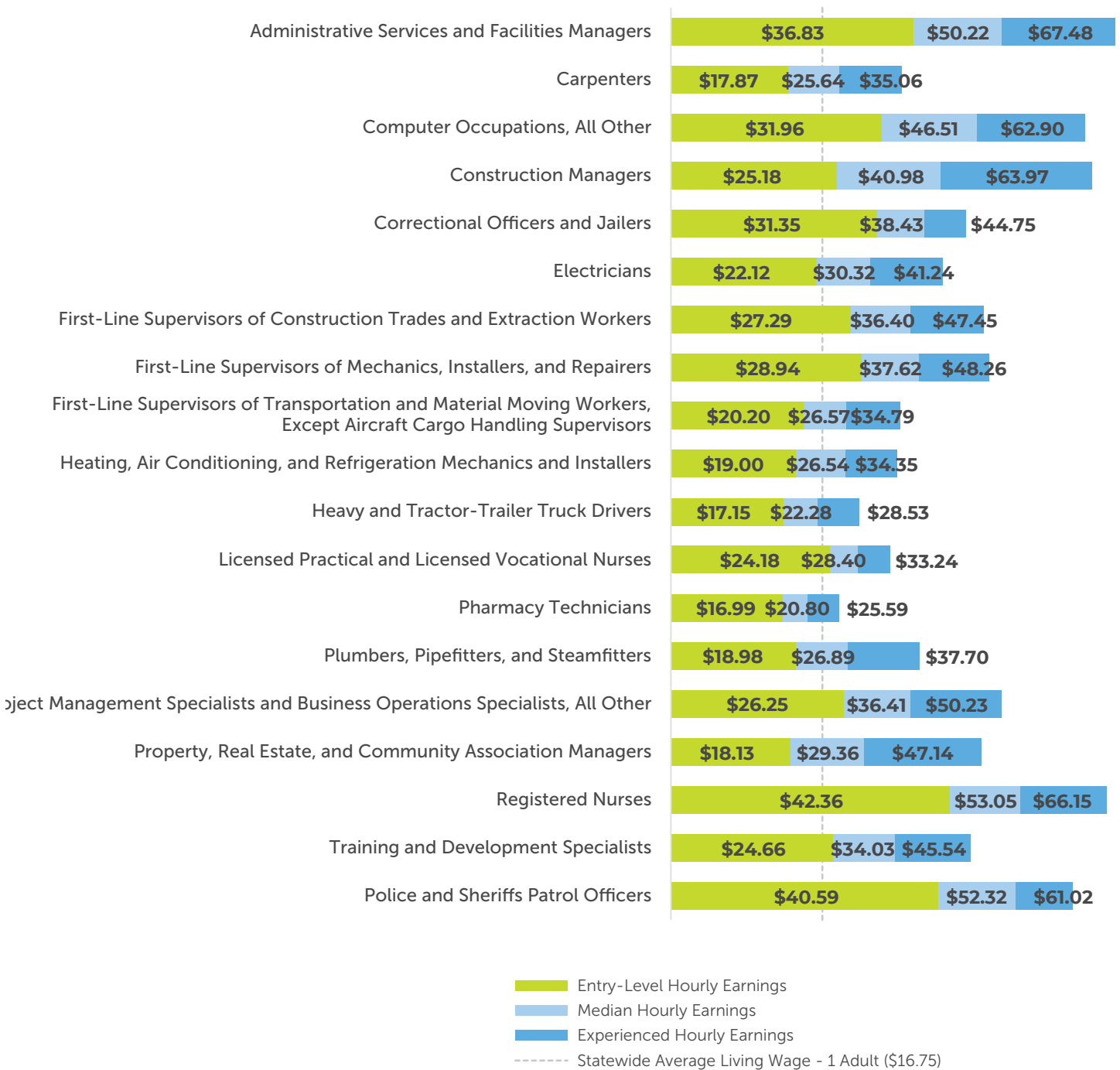
There are 19 occupations in the Long-Term training bucket. These 19 occupations cut across numerous sectors, including advanced transportation, business, construction, health, information technology, and public safety. All of these occupations have entry-level hourly earnings above the average statewide living wage of \$16.75. Of the 19 occupations, 21% (4) are considered recession-resilient jobs in California. It is also important to note that some of these occupations, such as Carpenters; Electricians; Heating, Air Conditioning and Refrigeration Mechanics and Installers; and Plumbers, Pipefitters, and Steamfitters typically require an apprenticeship that may take more than two years to complete. However, students in apprenticeships earn college credit while receiving on-the-job training and earning an hourly wage that increases each year. Apprenticeships provide a unique “earn while you learn” opportunity that are not typically available in other programs.

Nearly 30 community colleges in California offer apprenticeship programs related to some of these occupations, while all 115 community colleges in California have a training program related to at least one of the Long-Term Training occupations. The majority of these programs are credit programs that charge tuition, however some are noncredit programs that are tuition-free, but may have material and/or textbook fees. Exhibit 14 shows the range of hourly earnings workers in each of these occupations can expect to earn.



Nearly 30 community colleges in California offer apprenticeship programs related to some of these occupations, while all 115 community colleges in California have a training program related to at least one of the Long-Term Training occupations. The majority of these programs are credit programs that charge tuition, however some are noncredit programs that are tuition-free, but may have material and/or textbook fees.

Exhibit 14: Long-Term Training Occupations in California



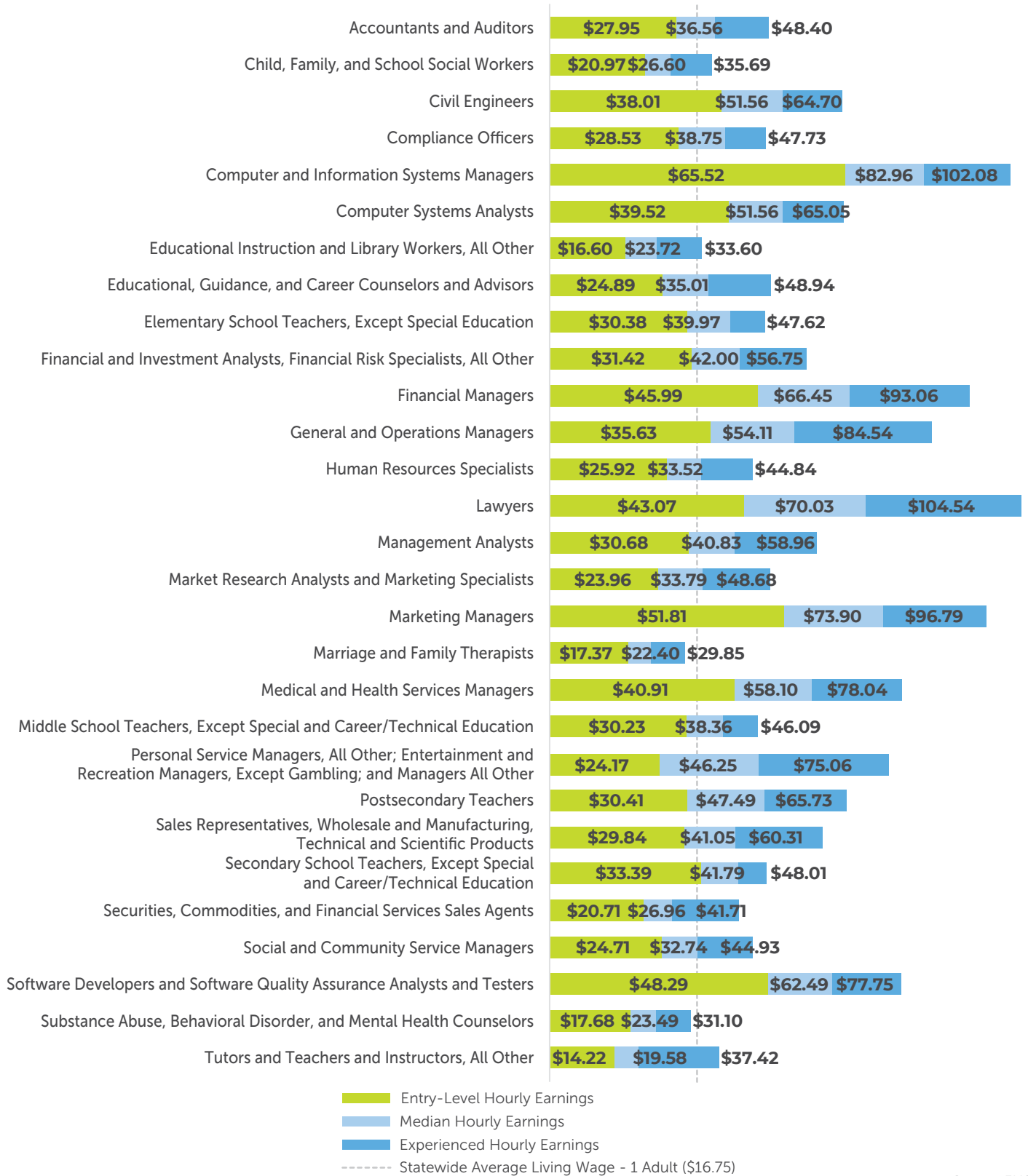
Source: EMSI

Pathway/Transfer (2+ Years) Occupations

There are 29 occupations in the Pathway/Transfer Training bucket. These 29 occupations typically require at least a bachelor's degree and, in some cases, may require a master's, professional, or doctoral degree. Of the 29 occupations, 34% (10) are related to business, including accounting, finance, management, and marketing; 24% (7) are related to education and teaching; and 17% (5) are related to health and social services. The remaining 24% (7) of occupations are in areas related to engineering, information technology, law, and personal services.

Though all of these occupations typically require a bachelor’s degree, all 115 community colleges in California have training or transfer programs that can lead to employment in these occupations. While training programs for these occupations take the most time to complete, these occupations also have high earnings potential. Exhibit 15 shows the range of hourly earnings workers in each of these occupations can expect to earn.

Exhibit 15: Pathway/Transfer Training Occupations in California



Source: EMSI

Limitations and Considerations for Educators

The analysis included in this report is based on data available from proprietary and publicly available sources, as well as a review of research regarding occupational changes. It is important to note that the findings included in this report are based on a statewide analysis and the occupations that were most affected by COVID-19, in-demand, growing occupations, and recession-resilient jobs may be different in each region.

While all 115 community colleges have at least one training program for the 67 in-demand, growing occupations, no single college has a training program for all in-demand, growing occupations. While new programs that train for these occupations can be created, educators should consider the time-consuming process it takes to create new programs relative to their current regional need of getting students employed or re-employed. Some RHT workers that are looking to immediately transition to a non-RHT occupation may be better served via existing programs that are preparing students to meet current labor market needs.

Colleges should also review existing programs and the knowledge, skills, and abilities taught in those programs to ensure they are aligned with the local labor market including new skill demands that arose, or were accelerated, as a result of the COVID-19 pandemic, such as automation, cybersecurity, virtual technologies, and numerous others. According to a study from Burning Glass Technologies, these skills will continue to be in-demand in the post-COVID-19 labor market.⁹ Additionally, existing career education programs should be designed to provide students the most opportunity to obtain employment after completing their training. Colleges should consider which existing programs can prepare students by teaching a breadth of skills that will lead to employment in multiple occupations and at different employers rather than narrowly preparing students for the needs of an individual employer or requiring them to obtain additional skills at a later date.

Conclusion

Workers employed in Retail, Hospitality, and Tourism occupations that lost their jobs due to the COVID-19 pandemic, or those that are considering leaving the industry altogether, have numerous options when contemplating their next career move. Though it is not impossible for an RHT worker to transition to a higher-paying, more stable, non-RHT job, it is unlikely without additional training and education. Currently, returning to the RHT industry would be relatively easy due to the recent uptick in demand for workers with RHT skills. However, workers should also consider the benefits they could gain from viable in-demand, growing occupations that they can enter with additional training and education. These occupations span a variety of fields, typically require some form of education beyond a high school diploma, generally have entry-level earnings that are higher than those for RHT occupations, and have higher earnings potential.

Community colleges throughout California have training programs for these in-demand, growing occupations or transfer programs that can lead to employment in these occupations, that can be completed in various time frames ranging from 1-3 months to 2 or more years. Some of these programs are noncredit programs that are tuition-free (but may require materials fees), some are apprenticeship programs in which students can earn wages while completing coursework and hands-on training, while others are credit programs that can fulfill requirements for licensing, prepare students to enter the job market, and/or transfer to a four-year college or university. For more information about these programs, interested individuals can go to <https://www.cccco.edu/Students/Find-a-College> to explore colleges and available programs near them.

⁹ <https://www.burning-glass.com/identifying-jobs-skills-will-lead-post-pandemic-recovery/>

Appendix A: RHT Occupations Most Impacted by COVID-19 Pandemic

Exhibit 16 shows the RHT occupations that were most impacted by COVID-19, as well as the number of jobs for each occupation within the RHT industry in 2019 and 2020, the change in the number of jobs from 2019 to 2020 as an actual number and percentage, and the typical entry-level hourly earnings for each occupation.

Exhibit 16: RHT Occupations Most Impacted by COVID-19 Pandemic in California¹⁰

Industry	Occupation (SOC)	2019 Jobs	2020 Jobs	2019-2020 Change	2019-2020 % Change	Entry-Level Hourly Earnings
Retail	Retail Salespersons (41-2031)	407,993	381,477	(26,516)	(6%)	\$12.60
	Cashiers (41-2011)	339,361	328,026	(11,335)	(3%)	\$12.47
	Stockers and Order Fillers (53-7065)	162,910	159,263	(3,646)	(2%)	\$12.80
	First-Line Supervisors of Retail Sales Workers (41-1011)	142,851	136,388	(6,463)	(5%)	\$14.97
	Customer Service Representatives (43-4051)	32,822	31,989	(833)	(3%)	\$15.11
Retail Subtotal		1,085,936	1,037,142	(48,793)	(4%)	
Hospitality and Tourism	Waiters and Waitresses (35-3031)	278,864	241,720	(37,144)	(13%)	\$12.46
	Cooks, Restaurant (35-2014)	177,146	156,222	(20,924)	(12%)	\$12.97
	Fast Food and Counter Workers (35-3023)	388,564	370,837	(17,727)	(5%)	\$12.43
	Dishwashers (35-9021)	75,332	63,977	(11,355)	(15%)	\$12.41
	Dining Room and Cafeteria Attendants and Bartender Helpers (35-9011)	66,766	57,088	(9,678)	(14%)	\$12.40
	Cooks, Fast Food (35-2011)	120,418	110,897	(9,522)	(8%)	\$12.40
	Bartenders (35-3011)	61,229	52,603	(8,626)	(14%)	\$12.46
Hospitality and Tourism Subtotal		1,168,320	1,053,344	(114,976)	(10%)	
Total		2,254,255	2,090,486	(163,769)	(7%)	

¹⁰The data presented in Exhibit 16 represents RHT industry staffing patterns data and includes occupational employment within only the RHT industry.

Appendix B: Methodology

This section provides an overview of the methodologies used to identify the in-demand, growing occupations, training buckets, and recession-resilient occupations.

In-Demand Growing Occupations

The in-demand, growing occupations included in this report were identified using the following criteria:

- **Employment – Greater than 0.49% projected employment increase between 2019 and 2024:** On average, employment across all occupations in California is projected to increase 0.49% from 2019 to 2024.
- **Annual Job Openings – Projected annual openings above the average in California between 2019 and 2024.** The average labor market demand for occupations throughout the state is projected to be 3,014 annual job openings.
- **Wages – Entry-level hourly earnings at or above \$16.75:** The average living wage for a single adult in California is \$16.75. This figure measures the cost of basic expenses, including housing, food, health care, and transportation. Generally, the living wage increases as family size increases; however, for the purpose of this study, only occupations that provide entry-level hourly earnings at or above the living wage for a single adult were included in the analysis

Training Buckets

The following methodology was used to determine the typical length of time it would take to complete a training program for each in-demand, growing occupation.

- **Short-Term Training (1-3 Months)**
 - › All occupations that:
 - Typically require no formal education or a high school diploma.
 - Do not require on-the-job training or short-term on-the-job training.
 - › All occupations for which license or certification requirements can be completed in less than 3 months.
- **Moderate-Term Training (4-11 Months)**
 - › All occupations that typically require some college, no degree or a postsecondary nondegree award.
 - › All occupations for which license or certification requirements can be completed in 4-11 months.
- **Long-Term Training (1-2 Years)**
 - › All occupations that typically require an associate degree.
 - › All occupations that typically require a bachelor's degree but have about 33% of workers in the field that have completed some college or an associate degree as their highest level of education.
 - › All occupations for which license or certification requirements can be completed in 1-2 years.
- **Pathway/Transfer (2+Years)**
 - › All occupations that typically require a bachelor's degree or higher and that are not included in the Long-Term Training bucket.

Recession-Resilient Jobs

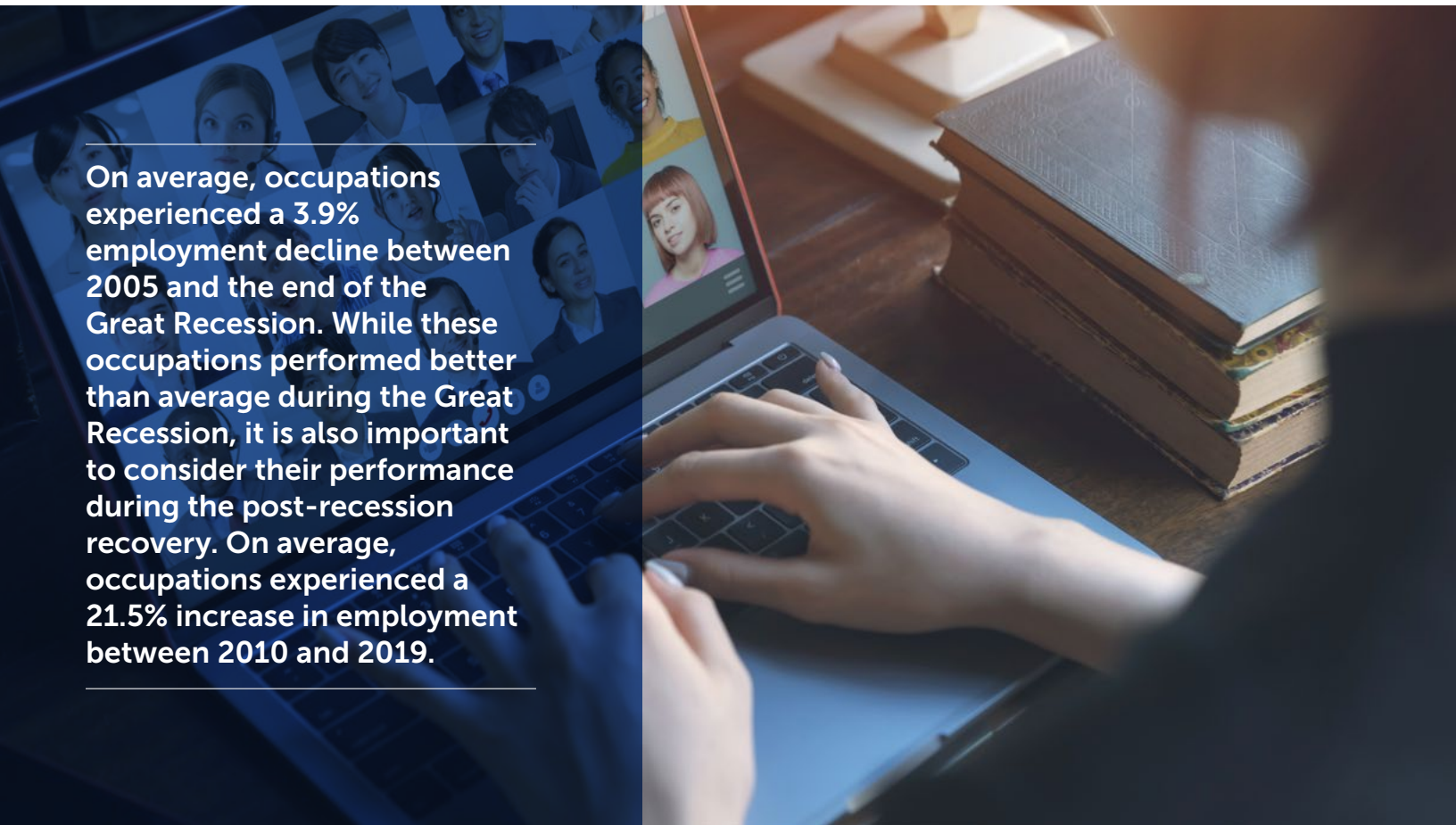
Recession-resilient jobs are occupations that meet the following criteria:

- **Employment – Less than 3.9% employment decline between 2005 and 2009, as well as greater than 21.5% employment growth between 2010 and 2019 in California:** On average, occupations experienced a 3.9% employment decline between 2005 and the end of the Great Recession. While these occupations performed better than average during the Great Recession, it is also important to consider their performance during the post-recession recovery. On average, occupations experienced a 21.5% increase in employment between 2010 and 2019.
- **Annual Job Openings – Annual openings at or above the median in California during the Great Recession (2007-2009), as well as at or above the median between 2010 and 2019:** The median labor market demand for all occupations in California during the Great Recession was 770 annual job openings. During the post-recession period, the median labor market demand was 888 annual job openings. This study excludes occupations that did not have labor market demand above the median in both periods.
- **Wages – Entry-level hourly earnings at or above \$16.75:** The average living wage for a single adult in California is \$16.75. This figure measures the cost of basic expenses, including housing, food, health care, and transportation. Generally, the living wage increases as family size increases; however, for the purpose of this study, only occupations that provide entry-level hourly earnings at or above the living wage for a single adult were included in the analysis.

Data providers

EMSI – Where indicated, employment data provided by Economic Modeling Specialists, Intl. (www.economicmodeling.com); dataset: Emsi 2021.1: QCEW Employees, Non-QCEW Employees, and Self-Employed.

Labor Insight/Burning Glass – Where indicated, job posting data provided by Burning Glass Technologies. “Labor Insight™ Real-Time Labor Market Information Tool” (www.burning-glass.com). Accessed May 21, 2021.



On average, occupations experienced a 3.9% employment decline between 2005 and the end of the Great Recession. While these occupations performed better than average during the Great Recession, it is also important to consider their performance during the post-recession recovery. On average, occupations experienced a 21.5% increase in employment between 2010 and 2019.

Appendix C: In-Demand, Growing Occupations

The following exhibits show the number of jobs in 2019, projected number of jobs in 2024, five-year change as both a number and percentage, number of annual job openings, and the range of earnings workers can expect to earn in each in-demand, growing occupation in California.

Exhibit 17: Short-Term Training Occupations in California

Occupation (SOC)	2019 Jobs	2024 Jobs	5-Yr Change	5-Yr % Change	Annual Openings	Entry-Level Hourly Earnings	Median Hourly Earnings	Experienced Hourly Earnings
Home Health and Personal Care Aides (31-1128)	713,862	881,164	167,301	23%	136,378	\$12.44	\$13.24	\$15.13
Massage Therapists (31-9011)	29,271	30,835	1,564	5%	3,627	\$12.82	\$17.62	\$28.66
Nursing Assistants (31-1131)	113,128	123,964	10,836	10%	14,236	\$14.31	\$16.72	\$19.66
Social and Human Service Assistants (21-1093)	56,958	64,952	7,994	14%	8,028	\$16.25	\$19.52	\$24.77
Total	913,220	1,100,915	187,695	21%	162,269			

Exhibit 18: Moderate-Term Training Occupations in California

Occupation (SOC)	2019 Jobs	2024 Jobs	5-Yr Change	5-Yr % Change	Annual Openings	Entry-Level Hourly Earnings	Median Hourly Earnings	Experienced Hourly Earnings
Computer User Support Specialists (15-1232)	88,742	95,871	7,130	8%	7,616	\$23.84	\$31.38	\$42.16
First-Line Supervisors of Personal Service and Entertainment and Recreation Workers, Except Gambling Services (39-1098)	32,674	33,548	874	3%	3,299	\$15.19	\$19.40	\$26.93
Insurance Sales Agents (41-3021)	74,881	78,492	3,611	5%	7,372	\$18.06	\$25.94	\$43.16
Maintenance and Repair Workers, General (49-9071)	152,482	156,497	4,015	3%	14,409	\$15.95	\$20.94	\$27.81
Manicurists and Pedicurists (39-5092)	34,604	34,903	299	1%	4,195	\$12.04	\$13.41	\$15.68
Medical Assistants (31-9092)	99,854	108,081	8,226	8%	11,944	\$15.09	\$18.09	\$22.91
Medical Dosimetrists, Medical Records Specialists, and Health Technologists and Technicians, All Other (29-2098)*	42,769	47,003	4,234	10%	3,955	\$17.86	\$22.83	\$29.92
Medical Secretaries and Administrative Assistants (43-6013)	96,680	99,614	2,933	3%	10,922	\$16.55	\$20.43	\$25.26

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Occupation (SOC)	2019 Jobs	2024 Jobs	5-Yr Change	5-Yr % Change	Annual Openings	Entry-Level Hourly Earnings	Median Hourly Earnings	Experienced Hourly Earnings
Operating Engineers and Other Construction Equipment Operators (47-2073)	31,138	32,313	1,175	4%	3,409	\$26.51	\$35.34	\$45.26
Paralegals and Legal Assistants (23-2011)*	37,737	40,453	2,716	7%	4,297	\$20.21	\$27.70	\$36.96
Real Estate Sales Agents (41-9022)	54,987	55,840	853	2%	4,879	\$16.65	\$28.31	\$50.93
Sales Representatives of Services, Except Advertising, Insurance, Financial Services, and Travel (41-3091)	142,021	145,687	3,666	3%	16,322	\$18.42	\$28.11	\$40.89
Teaching Assistants, Except Postsecondary (25-9045)	166,739	167,633	895	1%	16,792	\$14.17	\$17.00	\$20.18
Welders, Cutters, Solderers, and Brazers (51-4121)	33,125	33,457	332	1%	3,296	\$16.50	\$21.22	\$27.87
Total	1,088,432	1,129,392	40,960	4%	112,708			

*Denotes a recession-resilient job

Exhibit 19: Long-Term Training Occupations in California

Occupation (SOC)	2019 Jobs	2024 Jobs	5-Yr Change	5-Yr % Change	Annual Openings	Entry-Level Hourly Earnings	Median Hourly Earnings	Experienced Hourly Earnings
Administrative Services and Facilities Managers (11-3011)	44,009	45,322	1,314	3%	3,657	\$36.83	\$50.22	\$67.48
Carpenters (47-2031)	156,149	157,549	1,400	1%	14,517	\$17.87	\$25.64	\$35.06
Computer Occupations, All Other (15-1299)	90,337	94,461	4,124	5%	7,055	\$31.96	\$46.51	\$62.90
Construction Managers (11-9021)	56,931	60,833	3,902	7%	4,455	\$25.18	\$40.98	\$63.97
Correctional Officers and Jailers (33-3012)	36,324	36,693	369	1%	3,281	\$31.35	\$38.43	\$44.75
Electricians (47-2111)	85,050	91,994	6,944	8%	10,298	\$22.12	\$30.32	\$41.24
First-Line Supervisors of Construction Trades and Extraction Workers (47-1011)	68,823	70,140	1,316	2%	6,766	\$27.29	\$36.40	\$47.45
First-Line Supervisors of Mechanics, Installers, and Repairers (49-1011)	43,835	44,442	607	1%	3,792	\$28.94	\$37.62	\$48.26
First-Line Supervisors of Transportation and Material Moving Workers, Except Aircraft Cargo Handling Supervisors (53-1047)	51,758	54,292	2,533	5%	5,448	\$20.20	\$26.57	\$34.79

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Occupation (SOC)	2019 Jobs	2024 Jobs	5-Yr Change	5-Yr % Change	Annual Openings	Entry-Level Hourly Earnings	Median Hourly Earnings	Experienced Hourly Earnings
Heating, Air Conditioning, and Refrigeration Mechanics and Installers (49-9021)	35,918	37,379	1,461	4%	3,471	\$19.00	\$26.54	\$34.35
Heavy and Tractor-Trailer Truck Drivers (53-3032)	187,688	198,750	11,062	6%	21,821	\$17.15	\$22.28	\$28.53
Licensed Practical and Licensed Vocational Nurses (29-2061)*	72,672	79,113	6,441	9%	6,514	\$24.18	\$28.40	\$33.24
Pharmacy Technicians (29-2052)*	37,157	38,443	1,285	3%	3,076	\$16.99	\$20.80	\$25.59
Plumbers, Pipefitters, and Steamfitters (47-2152)	56,322	58,493	2,171	4%	6,000	\$18.98	\$26.89	\$37.70
Project Management Specialists and Business Operations Specialists, All Other (13-1198)*	220,093	227,551	7,458	3%	20,948	\$26.25	\$36.41	\$50.23
Property, Real Estate, and Community Association Managers (11-9141)	53,466	53,954	488	1%	4,024	\$18.13	\$29.36	\$47.14
Registered Nurses (29-1141)*	316,256	338,709	22,453	7%	20,077	\$42.36	\$53.05	\$66.15
Training and Development Specialists (13-1151)	32,182	34,360	2,178	7%	3,440	\$24.66	\$34.03	\$45.54
Police and Sheriffs Patrol Officers (33-3051)	78,044	81,192	3,148	4%	5,996	\$40.59	\$52.32	\$61.02
Total	1,723,015	1,803,669	80,654	5%	154,636			

*Denotes a recession-resilient job

Exhibit 20: Pathway/Transfer Training Occupations in California

Occupation (SOC)	2019 Jobs	2024 Jobs	5-Yr Change	5-Yr % Change	Annual Openings	Entry-Level Hourly Earnings	Median Hourly Earnings	Experienced Hourly Earnings
Accountants and Auditors (13-2011)	175,095	179,151	4,056	2%	15,498	\$27.95	\$36.56	\$48.40
Child, Family, and School Social Workers (21-1021)*	33,957	37,139	3,181	9%	3,645	\$20.97	\$26.60	\$35.69
Civil Engineers (17-2051)*	52,827	54,187	1,360	3%	3,901	\$38.01	\$51.56	\$64.70
Compliance Officers (13-1041)*	41,156	42,828	1,671	4%	3,531	\$28.53	\$38.75	\$47.73
Computer and Information Systems Managers (11-3021)	79,579	85,325	5,746	7%	6,561	\$65.52	\$82.96	\$102.08
Computer Systems Analysts (15-1211)*	69,839	75,978	6,139	9%	5,761	\$39.52	\$51.56	\$65.05

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Occupation (SOC)	2019 Jobs	2024 Jobs	5-Yr Change	5-Yr % Change	Annual Openings	Entry-Level Hourly Earnings	Median Hourly Earnings	Experienced Hourly Earnings
Educational Instruction and Library Workers, All Other (25-9099)	36,917	37,132	215	1%	3,262	\$16.60	\$23.72	\$33.60
Educational, Guidance, and Career Counselors and Advisors (21-1012)*	39,177	40,670	1,493	4%	3,894	\$24.89	\$35.01	\$48.94
Elementary School Teachers, Except Special Education (25-2021)	167,208	168,054	845	1%	12,006	\$30.38	\$39.97	\$47.62
Financial and Investment Analysts, Financial Risk Specialists, and Financial Specialists, All Other (13-2098)*	63,517	65,660	2,142	3%	5,114	\$31.42	\$42.00	\$56.75
Financial Managers (11-3031)	99,518	105,805	6,286	6%	7,972	\$45.99	\$66.45	\$93.06
General and Operations Managers (11-1021)	272,574	278,570	5,996	2%	22,362	\$35.63	\$54.11	\$84.54
Human Resources Specialists (13-1071)	79,733	82,992	3,259	4%	7,868	\$25.92	\$33.52	\$44.84
Lawyers (23-1011)*	118,289	121,679	3,390	3%	6,189	\$43.07	\$70.03	\$104.54
Management Analysts (13-1111)*	136,922	144,429	7,507	5%	13,357	\$30.68	\$40.83	\$58.96
Market Research Analysts and Marketing Specialists (13-1161)*	106,929	116,295	9,366	9%	11,800	\$23.96	\$33.79	\$48.68
Marketing Managers (11-2021)	45,043	46,632	1,589	4%	3,905	\$51.81	\$73.90	\$96.79
Marriage and Family Therapists (21-1013)*	33,070	36,472	3,402	10%	3,709	\$17.37	\$22.40	\$29.85
Medical and Health Services Managers (11-9111)*	40,458	48,308	7,850	19%	4,563	\$40.91	\$58.10	\$78.04
Middle School Teachers, Except Special and Career/ Technical Education (25-2022)	42,503	43,365	862	2%	3,154	\$30.23	\$38.36	\$46.09
Personal Service Managers, All Other; Entertainment and Recreation Managers, Except Gambling; and Managers, All Other (11-9198)*	142,960	146,884	3,924	3%	10,367	\$24.17	\$46.25	\$75.06
Postsecondary Teachers (25-1099)	217,528	226,226	8,697	4%	19,345	\$30.41	\$47.49	\$65.73
Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products (41-4011)	41,648	42,644	996	2%	4,095	\$29.84	\$41.05	\$60.31
Secondary School Teachers, Except Special and Career/Technical Education (25-2031)*	113,858	114,849	992	1%	7,894	\$33.39	\$41.79	\$48.01

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Occupation (SOC)	2019 Jobs	2024 Jobs	5-Yr Change	5-Yr % Change	Annual Openings	Entry-Level Hourly Earnings	Median Hourly Earnings	Experienced Hourly Earnings
Securities, Commodities, and Financial Services Sales Agents (41-3031)	61,604	62,718	1,113	2%	5,466	\$20.71	\$26.96	\$41.71
Social and Community Service Managers (11-9151)*	31,805	35,604	3,799	12%	3,227	\$24.71	\$32.74	\$44.93
Software Developers and Software Quality Assurance Analysts and Testers (15-1256)*	261,689	300,933	39,244	15%	24,469	\$48.29	\$62.49	\$77.75
Substance Abuse, Behavioral Disorder, and Mental Health Counselors (21-1018)*	36,408	43,118	6,710	18%	4,772	\$17.68	\$23.49	\$31.10
Tutors and Teachers and Instructors, All Other (25-3097)	85,777	88,851	3,074	4%	10,151	\$14.22	\$19.58	\$37.42
Total	2,727,591	2,872,499	144,908	5%	237,835			

*Denotes a recession-resilient job

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