

# LABOR MARKET ANALYSIS

FOR PROGRAM RECOMMENDATION



**C·O·E**

CENTERS OF EXCELLENCE  
FOR LABOR MARKET RESEARCH

## FAMILY CHILD CARE PROVIDERS IN THE GREATER SACRAMENTO REGION

North (Greater Sacramento)  
Center of Excellence

**FEBRUARY 2022**

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# SUMMARY

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The North/Far North Center of Excellence for Labor Market Research prepared this report to provide a labor market analysis of educational supply and occupational demand for middle-skilled career pathways in the North (Greater Sacramento) subregion. This report aims to determine if demand in the local labor market is unmet by the supply from existing community college programs and other postsecondary training providers.

This report primarily focuses on training that leads to jobs in middle-skilled occupations - jobs that typically require education beyond a high school diploma but less than a Bachelor's degree - but may include higher-skilled occupations for training pathways that lead to a bachelor's degree. Lowered skilled occupations are rarely considered in this type of analysis due to the lessened barriers for entry-level work, such as no formal education and on-the-job training requirements.

Key findings include:

- In 2020, approximately one-third of childcare workers were self-employed. The share of self-employed childcare workers is projected to decline to 26% by 2025.
- Most job openings will be for employed childcare workers (i.e., a center setting), with 920 yearly job openings from 2020 to 2025. There will be an additional 349 annual openings for self-employed childcare workers.
- Wage data shows that childcare workers earn hourly wages below the subregion's living wage of \$14.53 per hour.
- Analysis of data from the California Child Care Resource & Referral Network shows that the North (Greater Sacramento) subregion needs more childcare providers.
- North (Greater Sacramento) community colleges conferred an average of 551 awards (certificates and associate degrees) in Child Development/Early Care and Education programs over the last three academic years.

Recommendations include:

- Community colleges should work with local child care organizations to conduct a wage study of family child care providers' potential and realized earnings. This study should compare wages of childcare workers in different settings and include a comparison to the North (Greater Sacramento) living wage for families of various sizes (i.e., a single adult with no or several children).
- The North/Far North Center of Excellence recommends that community colleges exercise caution in creating new childcare worker training programs.

# INTRODUCTION

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The North (Greater Sacramento) Center of Excellence (COE) was asked to provide labor market information for a proposed program at a regional community college. This report focuses on the following Standard Occupational Classification (SOC) occupations and codes:

- These middle-skill occupations require more education and training beyond a high school diploma but less than a four-year degree:
  - Childcare Workers (39-9011)

A review of related programs revealed the following Taxonomy of Programs (TOP) title(s) and code(s) are appropriate for inclusion in this report:

- Child Development/Early Care and Education (1305.00)

The corresponding Classification of Instructional Program (CIP) title(s) and code(s) are:

- Child Care Provider/Assistant (19.0709)
- Early Childhood Education and Teaching (13.1210)

## Occupation Summary

39-9011.00 - Childcare Workers	
<b>Description</b>	Attend to children at schools, businesses, private households, and childcare institutions. Perform various tasks, such as dressing, feeding, bathing, and overseeing play.
<b>Sample of Reported Job Titles</b>	Caregiver, Child Care Worker, Child Caregiver, Childcare Provider, Childcare Worker, Daycare Teacher, Daycare Worker, Infant Teacher, Toddler Teacher

# OCCUPATIONAL DEMAND

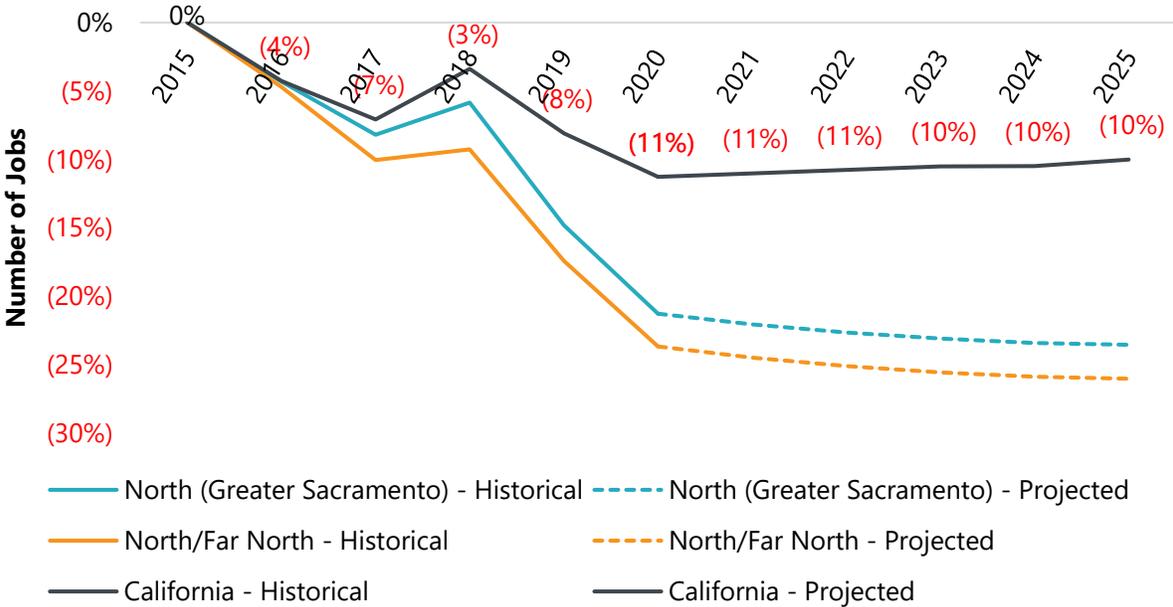
Exhibit 1 summarizes the five-year projected job growth for middle-skill and high-skill occupations in the North, North/Far North, and California.

**Exhibit 1. Employment and projected demand, 2020-2025**

Occupation	2020 Jobs	2025 Jobs	2020-2025 Change	2020-2025 % Change	2020-2025 Annual Openings
Childcare Workers	8,634	8,386	(249)	(3%)	1,269
<b>North (Greater Sacramento)</b>	<b>8,634</b>	<b>8,386</b>	<b>(249)</b>	<b>(3%)</b>	<b>1,269</b>
Childcare Workers	11,457	11,104	(353)	(3%)	1,684
<b>North/Far North</b>	<b>11,457</b>	<b>11,104</b>	<b>(353)</b>	<b>(3%)</b>	<b>1,684</b>
Childcare Workers	198,957	201,781	2,824	1%	30,256
<b>California</b>	<b>198,957</b>	<b>201,781</b>	<b>2,824</b>	<b>1%</b>	<b>30,256</b>

Exhibit 2 compares the percent change in jobs between 2015 through 2020 and the projected changes through 2025. The rate of change is indexed to the total number of jobs in 2015.

**Exhibit 2. Changes in employment, 2015-2025**



## Self-Employment of Family Child Care Providers

Exhibits 3 and 4 estimates the self-employed workers' share for the selected occupations.

### Exhibit 3. Estimated employment levels by occupation and worker type

Occupation	Worker Type	2020 Jobs	2025 Jobs	2020-2025 % Change	2020-2025 Annual Openings
Childcare Workers	Employed	5,805	6,165	6%	920
	Self-Employed	2,830	2,221	(22%)	349
<b>Totals</b>	<b>All</b>	<b>8,635</b>	<b>8,386</b>	<b>(3%)</b>	<b>1,269</b>

Note: Due to rounding, some totals may not correspond with the sum of the separate figures here or those in exhibit 1.

### Exhibit 4. Estimated share of employment levels by occupation and worker type

Occupation	Worker Type	Share of 2020 Jobs	Share of 2025 Jobs
Childcare Workers	Employed	67%	73%
	Self-Employed	33%	26%
<b>Totals</b>	<b>All</b>	<b>100%</b>	<b>100%</b>

Note: Due to rounding, some totals may not correspond with the sum of the separate figures.

# WAGES

Exhibit 5 compares the entry-level, median, and experienced wages for the selected occupations to the North (Greater Sacramento) living wage for a single adult - \$14.53 per hour.<sup>1</sup>

**Exhibit 5. Comparison of wages by occupation, 2020**

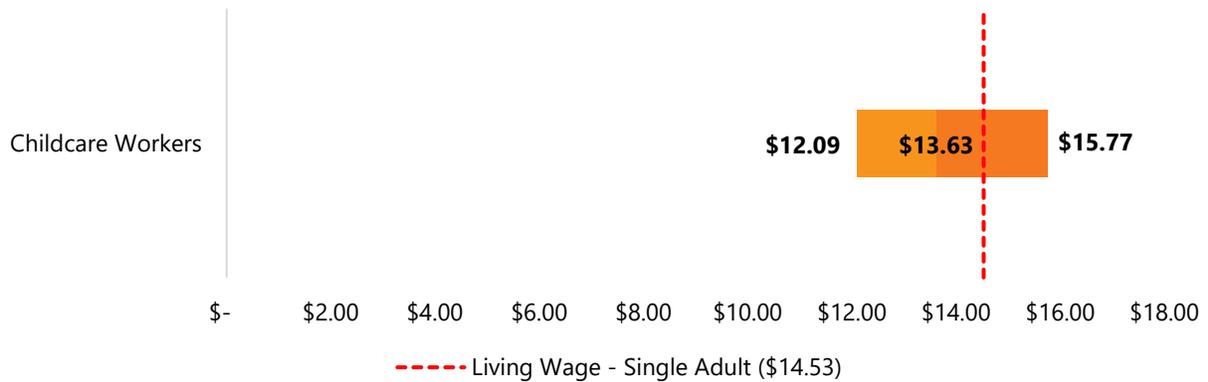


Exhibit 6 compares the entry-level, median, and experienced wages of employed and self-employed childcare workers.

**Exhibit 6. Comparison of employed and self-employed wages for childcare workers, 2020**

Occupation	Worker Type	Entry-Level Hourly Wage (25 <sup>th</sup> pct.)	Median	Experienced Hourly Wage (75 <sup>th</sup> pct.)
Childcare Workers	Employed	\$12.84	\$13.91	\$15.50
	Self-Employed	\$5.56	\$10.53	\$17.75
<b>North (Greater Sacramento) Averages</b>		<b>\$12.09</b>	<b>\$13.63</b>	<b>\$15.77</b>

<sup>1</sup> Living wage is defined as the level of income a single adult with no children must earn to meet basic needs, including food, housing, transportation, healthcare, taxes, and other miscellaneous basic needs. The 25th-percentile and 75th-percentile hourly wages are used as proxy for entry-level and experienced-level wages.

# JOB POSTINGS

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This section analyzes recent data from online job postings (real-time LMI). Online job postings may provide additional insight into recent changes in the labor market that are not captured by historical trends.

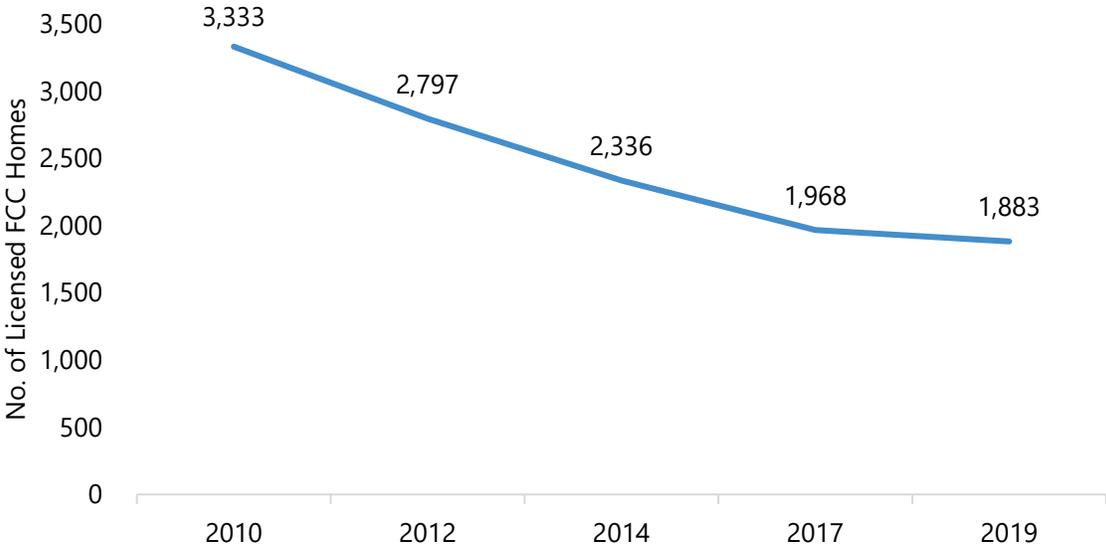
Family child care is typically home-based. Individuals providing these services usually do so out of their own homes. For this reason, family child care providers are considered self-employed.

Instead of job postings, the North COE provides data about the availability and capacity of child care in the subregion.

## Family Child Care Capacity

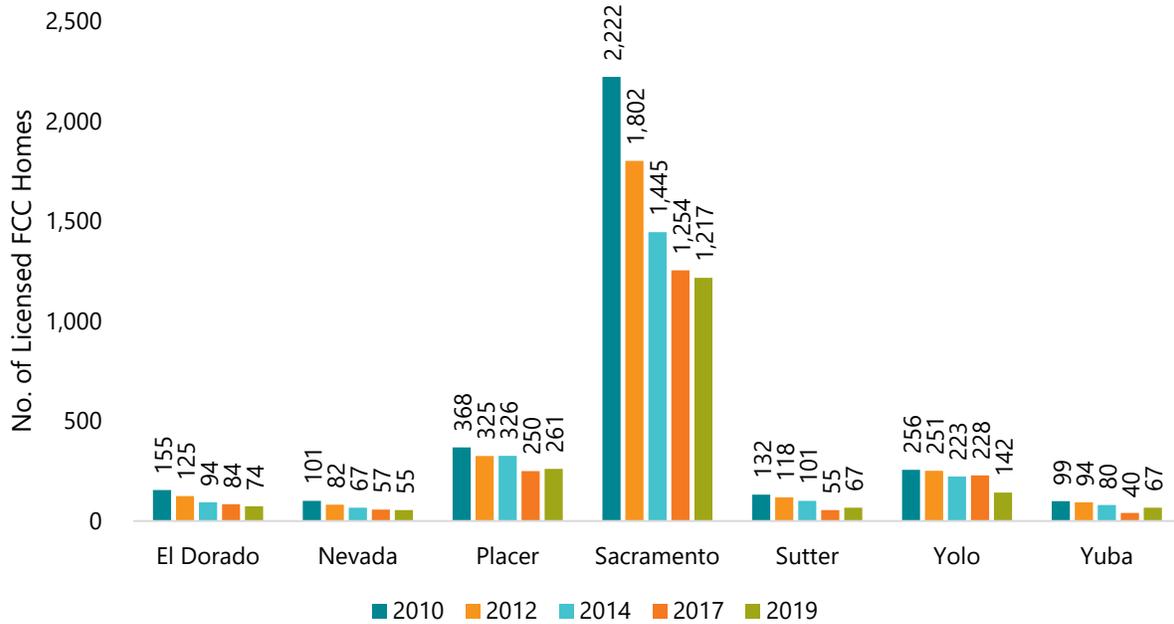
Exhibits 7 and 8 show the count of licensed family child care homes available in the North (Greater Sacramento) subregion and for each county.

**Exhibit 7. Count of North (Greater Sacramento) Licensed Family Child Care Homes**



Source: California Child Care Resource & Referral Network, Child Care Data Tool, 2021

**Exhibit 8. Count of North (Greater Sacramento) Licensed Family Child Care Homes by County**



Source: California Child Care Resource & Referral Network, Child Care Data Tool, 2021

**Availability of Child Care**

Exhibit 9 estimates the share of children aged 0-12 with parents in the workforce for whom licensed childcare spaces are available. Please note that there are several caveats to this data, which may impact the accuracy of these values through either over-or under-estimation: 1) this is calculated by dividing the total number of licensed child care spaces (in both family child care homes and child care centers) by an estimated number of children with parents in the workforce, 2) this data only counts single-parent families with one working parent and two-parent families with two working parents; it does not include unmarried two-parent families or families with same-sex parents, and 3) families are counted regardless of the need for childcare.

**Exhibit 9. North (Greater Sacramento) Availability of Child Care in 2019**

County	Percentage of Children for Whom Spaces are Available	Percentage of Children for Whom Spaces Are Not Available
El Dorado	26.6%	73.4%
Nevada and Sierra	33.7%	66.3%

County	Percentage of Children for Whom Spaces are Available	Percentage of Children for Whom Spaces Are Not Available
Placer	31.6%	68.4%
Sacramento	26.4%	73.6%
Sutter and Yuba	19.6%	80.4%
Yolo	31.4%	68.6%
<b>North (Greater Sacramento) average estimates</b>	<b>27.6%</b>	<b>72.4%</b>

Source: Population Reference Bureau (PBR) Kids Data, Early Care and Education "Availability of Child Care for Working Families," 2019

## Cost of Child Care

Exhibit 10 gives the monthly average cost of child care in the North (Greater Sacramento) area. These costs are calculated using annual rate data for each of the seven counties in the North (Greater Sacramento) subregion and assume full-time care at 30 hours or more per week for 12 months in a year.

### Exhibit 10. Average Monthly Cost of Child Care in North (Greater Sacramento), 2019

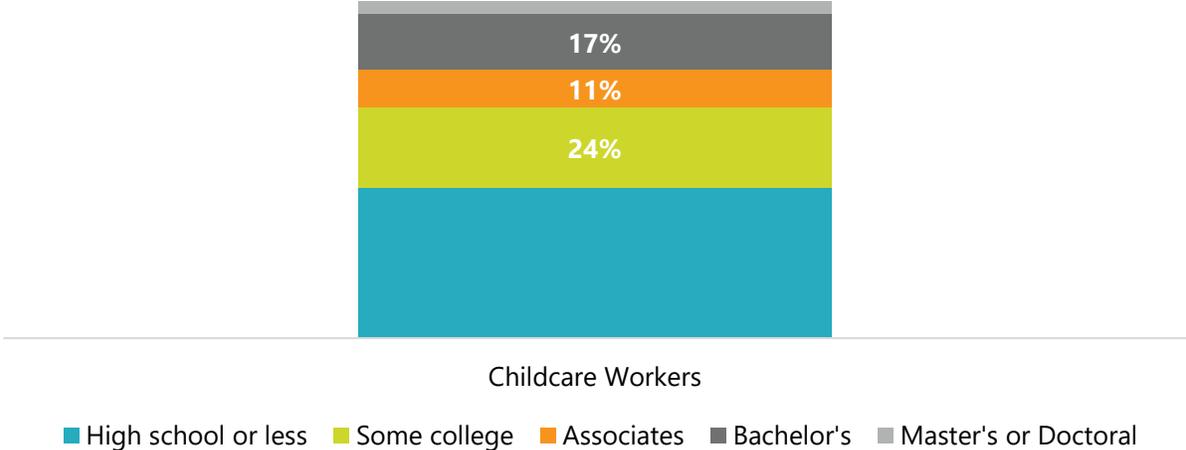
Age Group	Family Child Care Home	Center
Infant (0-23 months)	\$796	\$1,208
Preschool (2-5 years)	\$748	\$841

Source: California Child Care Resource & Referral Network, Child Care Data Tool

# EDUCATION AND TRAINING

The U.S. Census Bureau and Bureau of Labor Statistics collected data on education achieved by workers employed in occupations. Exhibit 11 shows the national-level educational attainment of the current workforce in the selected occupations.

**Exhibit 11. National worker educational attainment for selected occupations, 2019**



The Bureau of Labor Statistics (BLS) uses a system to assign categories for entry-level education, work experience in a related occupation, and typical on-the-job training to each occupation for which the BLS publishes projections data. Exhibit 12 shows the skill level and entry-level job requirements for the selected occupations.

**Exhibit 12. Typical education, work experience, and on-the-job training requirements**

Occupation	Typical Entry-level Education	Work Experience Required	On-the-job Training Required
Childcare Workers	High school diploma or equivalent	None	Short-term on-the-job training

## Licensing and Certifications

Licensing is an essential component of California's child care service infrastructure. The [Community Care Licensing Division \(CCLD\)](#) of California's Department of Social Services licenses and monitors family child care homes and child care centers to ensure they meet minimum health and safety standards. Licensing laws and regulations for family child care homes are separate and distinct from other types of community care facilities.

Title 22 of California's Code of Regulations establishes the licensing requirements for family child care homes. Exhibit 13 summarizes those requirements.

### Exhibit 13. California Family Child Care Licensing Requirements

California Community Care Licensing Division Child Care Licensing	
Home Provider Qualifications	<ul style="list-style-type: none"><li>• At least 18 years of age</li><li>• Must live in the home where the service is offered</li><li>• Criminal record clearance</li><li>• Tuberculosis (TB) test clearance</li><li>• Complete 16 hours of pediatric health and safety training from an approved vendor or an accredited college or university. This includes pediatric health practices, CPR, and first aid certifications.</li><li>• Applicants for a large family child care home (up to 14 children) must show proof of at least one year of previous experience as either an FCC provider or a teacher or director of a licensed child care center.</li></ul>
Capacity Regulations	<ul style="list-style-type: none"><li>• Small Family Child Care Home Capacity<ul style="list-style-type: none"><li>• Licensed for six to eight children</li><li>• Four infants (aged up to 24 months) only OR six children with no more than three infants and three children over the age of 2</li></ul></li><li>• Large Family Child Care Home Capacity<ul style="list-style-type: none"><li>• At least one year of experience as a family child care home</li><li>• Licensed for 12 to 14 children</li><li>• 12 children, with no more than four infants and eight children over the age of 2</li><li>• Must hire a qualified assistant</li></ul></li></ul>

Source: "[How to Become Licensed](#)," California Department of Social Services Child Care Licensing, Accessed February 2, 2022.

## EDUCATIONAL SUPPLY

Educational supply for an occupation can be estimated by analyzing the number of awards issued in related Taxonomy of Programs (TOP) or Classification of Instructional Programs (CIP) codes. Exhibit 14 shows the TOP and CIP codes for educational programs related to the selected occupations.

**Exhibit 14. TOP and CIP codes for training programs related to the selected occupations**

TOP Programs and Codes	Aligned CIP Programs and Codes
Child Development/Early Care and Education (1305.00)	Child Care Provider/Assistant (19.0709) Early Childhood Education and Teaching (13.1210)

### Community College Supply

Exhibits 15 and 16 compare the average number of certificates and degrees conferred in selected community college programs over the last three academic years.

**Exhibit 15. Annual average community college awards by program, 2018-19 through 2020-21**

Program - TOP Code	College	Annual Awards 2018-19	Annual Awards 2019-20	Annual Awards 2020-21	3-Yr Annual Awards Average
Child Development/Early Care and Education (1305.00)	American River	185	83	151	140
	Cosumnes River	48	23	74	48
	Folsom Lake	131	115	76	107
	Lake Tahoe	8	4	4	5
	Sacramento City	50	38	27	38
	Sierra	51	39	68	53
	Woodland	84	58	63	68
	Yuba	105	84	84	91
<b>Grand Total</b>		<b>662</b>	<b>444</b>	<b>547</b>	<b>551</b>

**Exhibit 16. Annual average community college awards by type, 2018-19 through 2020-21**

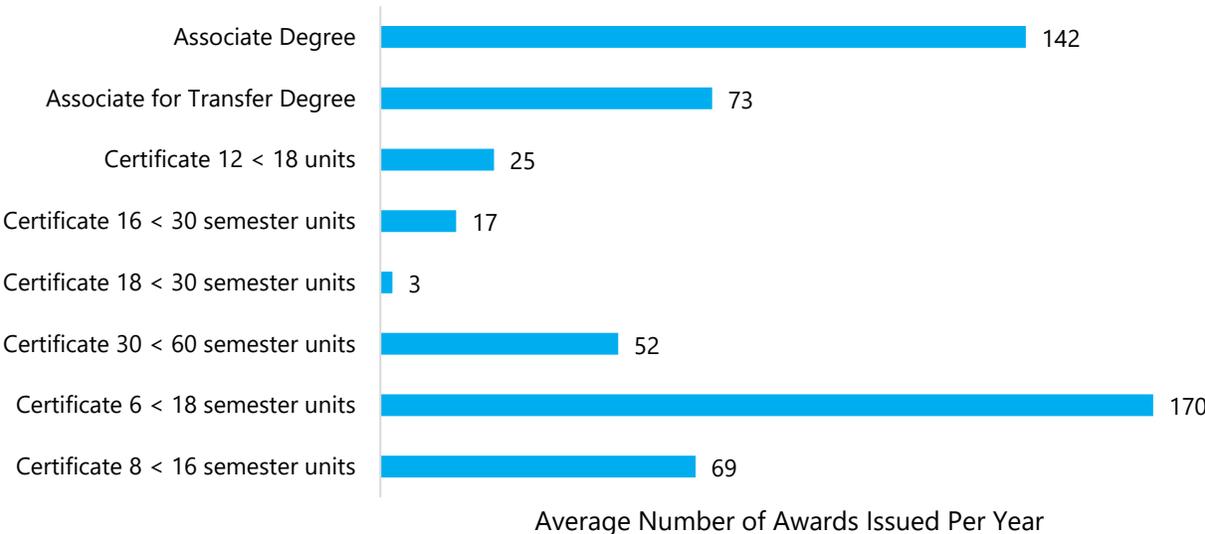


Exhibit 17 summarizes North (Greater Sacramento) Child Development/Early Care and Education community college programs, active as of February 7, 2022.

**Exhibit 17. Annual average community college awards by program, 2018-19 through 2020-21**

College	Program Title	Award
American River	Associate Teacher	Certificate
	Early Childhood Education	A.S. T Degree
		A.A. Degree
	ECE: Culture and Diversity Specialist	Certificate
	Master Teacher	Certificate
Teacher	Certificate	
Cosumnes River	Early Childhood Education	A.S. T Degree
	Early Childhood Education - Master Teacher	Certificate

College	Program Title	Award
	Early Childhood Education - Teacher	Certificate
	ECE, Associate Teacher	Certificate
	ECE, Early Childhood Education	A.A. Degree
Folsom Lake	Early Childhood Education	A.S. T Degree A.A. Degree
	Early Childhood Education Teacher	Certificate
	ECE-Master Teacher	Certificate
Lake Tahoe	Early Childhood Education	A.S. T Degree A.A. Degree Certificate
	Child Development with ECE Emphasis	A.A. Degree
	Early Childhood Education	A.S. T Degree
Sacramento City	Early Childhood Education Teacher	A.A. Degree
	Family Child Care	Certificate
	Early Childhood Education	A.S. T Degree A.S. Degree A.A. Degree
Sierra	Early Childhood Education	A.S. T Degree A.S. Degree A.A. Degree
	Child Development Associate Teacher	Certificate
	Child Development Master Teacher	Certificate
	Child Development Teacher	Certificate
Woodland	Early Childhood Education	A.S. T Degree A.S. Degree
	Arts Specialization	Certificate
Yuba	Arts Specialization	Certificate

College	Program Title	Award
	Child Development Teacher	Certificate
	Diversity in ECE	Certificate
	Early Childhood Education	A.S. T Degree A.S. Degree
	Foundations in ECE Specialization	Certificate
	Language and Literacy Specialization	Certificate
	Site Supervisor	Certificate
	Teacher/Family Relationships Specialization	Certificate
	Transitional Kindergarten and Early Education	Certificate

### Other Postsecondary Supply

Exhibit 18 compares the average number of degrees that non-community college training providers conferred in the North (Greater Sacramento) subregion over the last three academic years. Please note that non-community college data lags by one year.

**Exhibit 18. Other postsecondary awards by program, 2017-18 through 2019-20**

Program - CIP Code	College	Annual Awards 2017-18	Annual Awards 2018-19	Annual Awards 2019-20	3-Yr Annual Awards Average
Early Childhood Education and Teaching (13.1210)	CSU Sacramento (Bachelor's Degree)	377	498	479	451
	<b>Grand Total</b>	<b>377</b>	<b>498</b>	<b>479</b>	<b>451</b>

## FINDINGS

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- This report focuses on Family child care providers - individuals who privately own and operate a home-based child care facility and provide services to more than two families. The occupation which best describes workers who provide this service is childcare workers.
  - Please note that education and childcare administrators, preschool and daycare (11-9031) were considered for inclusion in this report. The occupation was ultimately excluded due to the mismatch of educational training requirements and educational attainment. Education and childcare administrators, preschool and daycare typically require a bachelor's degree and less than five years of experience for entry-level jobs. Twenty-five percent of education and childcare administrators, preschool and daycare hold a bachelor's degree, while another 58% of workers have a post-baccalaureate degree.<sup>2</sup>
- The North (Greater Sacramento) subregion held 8,634 childcare worker jobs in 2020. These jobs are projected to decrease by 3% over the next five years, losing 249 jobs across the subregion by 2025. Jobs for childcare workers are projected to decline at a faster rate in the North (Greater Sacramento) subregion than in California.
  - In 2020, approximately one-third of childcare workers were self-employed. The share of self-employed childcare workers is projected to decline to 26% by 2025.
- Over the next five years, childcare workers are projected to have 1,269 annual openings in the North (Greater Sacramento) subregion.
  - Most job openings will be for childcare workers in a center setting, with 920 yearly job openings from 2020 to 2025. There will be an additional 349 annual openings for self-employed childcare workers.
- Wage data shows that childcare workers earn hourly wages below the subregion's living wage of \$14.53 per hour.
  - Hourly wages are even more depressed for self-employed childcare workers. Data analysis shows that self-employed childcare workers make \$2-\$7 per hour less than employed childcare workers.
- According to the IRS, family child care providers are considered independent contractors and thus are self-employed. As a result, this report does not include job postings data analysis.

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<sup>2</sup> Source: U.S. Bureau of Labor Statistics, Educational Attainment for Workers 25 years and older by detailed occupation, 2019.

- Analysis of data from the California Child Care Resource & Referral Network shows that the North (Greater Sacramento) subregion needs more child care providers.
  - Between 2010 and 2019, the number of licensed family child care homes declined by 43%, with the most significant drops occurring in Sacramento County.
  - Analysis of additional data from PRB's Kid Data shows that, on average, there is only enough childcare space (in FCC homes and centers) for 28% of children in the North (Greater Sacramento) subregion.
- Thirty-five percent of incumbent childcare workers have educational attainment levels consistent with community college offerings (some college or associate degrees). Another 44% of childcare workers hold a high school diploma or less.
- All North (Greater Sacramento) community colleges offer degrees and certificates in Child Development/Early Care and Education programs. Together, these programs conferred an average of 551 awards (certificates and associate degrees) in Child Development/Early Care and Education programs over the last three academic years (2018-19 through 2020-21).
  - Further analysis of program titles within the community college's Child Development/Early Care and Education training pathways revealed a single program focused on the training of family child care providers.
- CSU Sacramento also offers a bachelor's degree related to early childhood education and training. Between 2017-18 and 2019-20, CSU Sacramento conferred an average of 451 bachelor degrees in its early childhood education and training program over the last three years. Please note that non-community college awards data lags by one year.

## RECOMMENDATIONS

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- Based on a three-year average of annual awards in North (Greater Sacramento) subregion childcare worker programs and projected yearly openings, the supply gap analysis shows that the region seems to have room for additional training.
  - Together, community colleges issued an average of 551 awards over the last three years.
  - There are 1,269 projected annual openings for childcare workers.
- Although employment levels are projected to decline in the North (Greater Sacramento) area over the next five years, childcare workers are still in demand. However, the primary concern of creating a new training program is the low wages.
  - Entry-level and median hourly wages for childcare workers are \$1-\$2 below the region's hourly living wage for a single adult (\$14.36).
  - Wages are even more depressed for self-employed childcare workers - the group that family child care providers most likely fall into - with entry-level and median wages falling \$4 - \$9 below the living wage.
  - Family child care providers are self-employed and are not a primary beneficiary of California's \$15 per hour minimum wage. However, assistants in family child care homes would benefit because they may be considered employees.
  - Limitations on the capacity of family child care homes create wage income ceilings for family child care providers. Because family child care providers have limits on the number of children they can accept into their homes, they may not be able to increase pay for themselves or their assistants without increasing the rates they charge to parents - who in turn, may not be able to afford the increased rates.
- The North (Greater Sacramento) Center of Excellence recommends that colleges work with local child care organizations to research and publish data on the potential and realized earnings of family child care providers, including a comparison to the North (Greater Sacramento) living wage for families of different sizes (i.e., a single adult with no or several children).
  - A commonly-heard conception is that family care providers earn more in wages than child care workers in a center setting. However, current data on child care workers is limited to traditional wage data and childcare costs for families. There is little to no public information that would allow a meaningful comparison between wages of childcare workers in different settings.

- A completed wage study should also be shared with students in Child Development/Early Care and Education programs - who are more like to be women and a woman of color.
- The North/Far North Center of Excellence recommends that community colleges exercise caution in creating new childcare worker training programs.

<b>COE Recommendation</b>		
<b>Move forward with the program</b>	<b>Proceed with caution</b>	<b>Program is not recommended</b>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

## APPENDIX A. METHODOLOGY AND SOURCES

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This report identified Occupations using the Center of Excellence TOP-to-CIP-to-SOC crosswalk and O\*Net OnLine. This report's findings were determined using labor market data from the Bureau of Labor Statistics (BLS), U.S. Census Bureau data from Emsi, and jobs posting data from Burning Glass.

Cal-PASS Plus LaunchBoard. California Community Colleges Chancellor's Office.

<https://www.calpassplus.org/LaunchBoard/Home.aspx>.

Emsi 2021.4; QCEW Employees, Non-QCEW Employees, and Self-Employed.

<https://www.economicmodeling.com/>. EMSI occupational employment data are based on final EMSI industry data and final EMSI staffing patterns. Wage estimates are based on Occupational Employment Statistics (QCEW and Non-QCEW Employees classes of worker) and the American Community Survey (Self-Employed and Extended Proprietors).

Educational Attainment for Workers 25 Years and Older by Detailed Occupation, 2016-2017.

Bureau of Labor Statistics. <https://www.bls.gov/emp/tables/educational-attainment.htm#>.

Integrated Postsecondary Education Data System (IPEDS). National Center for Education Statistics. U.S. Department of Education. <https://nces.ed.gov/ipeds/>.

"Labor Insight Real-Time Labor Market Information Tool." Burning Glass Technologies.

<http://www.burning-glass.com>.

Labor Market Information Division. California Employment Development Department.

<https://labormarketinfo.edd.ca.gov/>.

Management Information Systems (MIS) Data Mart. California Community Colleges Chancellor's Office. <https://datamart.cccco.edu/>.

Occupational Employment Statistics (OES). Bureau of Labor Statistics.

<https://www.bls.gov/oes/home.htm>.

O\*NET OnLine. U.S. Department of Labor/Employment and Training Administration (DOL ETA).

<https://www.onetonline.org/>.

Self-Sufficiency Standard Tool for California. The University of Washington.

<http://www.selfsufficiencystandard.org/>

"Taxonomy of Programs." California Community Colleges Chancellor's Office. June 2012, 6<sup>th</sup> Edition. <https://www.cccco.edu/-/media/CCCCO-Website/About->

[Us/Divisions/Educational-Services-and-Support/Academic-Affairs/What-we-do/Curriculum-and-Instruction-Unit/Files/TOPmanual6200909corrected12513pdf.aspx](https://www.coecc.net/Us/Divisions/Educational-Services-and-Support/Academic-Affairs/What-we-do/Curriculum-and-Instruction-Unit/Files/TOPmanual6200909corrected12513pdf.aspx)

"TOP-CIP-SOC Crosswalk." Centers of Excellence for Labor Market Research. November 2015 Edition. <http://coecc.net/>

**COVID-19 Statement:** This report includes employment projection data by EMSI. EMSI's projections are modeled on recorded (historical) employment figures and incorporate several underlying assumptions, including the assumption that the economy during the projection period will be at approximately full employment or potential output. To the extent that a recession or labor shock, such as the economic effects of COVID-19, can cause long-term structural change, they may impact the projections. At this time, it is not possible to quantify the impact of COVID-19 on projections of industry and occupational employment. Other measures such as unemployment rates and monthly industry employment estimates will reflect the most recent information on employment and jobs in the state and, in combination with input from local employers, may help validate current and future employment needs as depicted here.

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

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FOR LABOR MARKET RESEARCH

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