

# PROGRAM ENDORSEMENT BRIEF



**C·O·E**

CENTERS OF EXCELLENCE  
FOR LABOR MARKET RESEARCH

## CASE MANAGEMENT IN THE NORTH AND FAR NORTH

Far North  
Center of Excellence

AUGUST 2021

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# SUMMARY

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The 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 and Far North subregions. 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 - that is, occupations 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 requirements and no requirements for on-the-job training.

Key findings include:

- The North subregion held 8,233 case management jobs in 2019. Case management jobs are projected to increase by 11% over the next five years, adding 878 new jobs to the subregion by 2024. The Far North subregion held 3,313 case management jobs in 2019. Case management jobs are projected to increase by 7% over the next five years, adding 247 new jobs to the subregion by 2024.
- Over the next five years, case management occupations are projected to have 1,119 annual openings in the North subregion and 452 annual openings in the Far North subregion.
- Wage data shows that case management occupations in the North subregion earn approximately \$18 to \$37, above the subregion's living wage of \$13.18 per hour. Wage data shows that case management occupations in the Far North subregion earn approximately \$15 to \$37, above the subregion's living wage of \$12.74 per hour.
- Awards data analysis shows that North/Far North training providers conferred an average of 203 awards (certificates and associate degrees) in case management training programs over the last three academic years.

Recommendations include:

- The Far North Center of Excellence recommends that community colleges move forward with developing formalized case management career pathways.
- The Far North Center of Excellence also recommends that community colleges should consider offering a dedicated transfer pathway to students since advanced positions within this career pathway typically require a minimum of a four-year degree.

# INTRODUCTION

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The Far North 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:
  - Social and Community Service Managers (11-9151)
  - Social and Human Service Assistants (21-1093)
  - Community Health Workers (21-1094)
- Students who transfer and earn a four-year degree could pursue the following high-skill occupations:
  - Substance Abuse and Behavioral Disorder Counselors (21-1011)
    - Demand data for this occupation is collected under the broader occupation of "substance abuse, behavioral disorder, and mental health counselor." Unless otherwise noted, data will focus specifically on substance abuse and behavioral disorder counselors (which excludes mental health counselors).
  - Community and Social Service Specialists, All Other (21-1099)
- Please note that all social worker occupations (including mental health and substance abuse social workers) were excluded from this study as the occupation typically requires a graduate-level degree for entry-level work.

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

- Community Health Care Worker (1261.00)
- Family and Consumer Sciences, General (1301.00)
- Parenting and Family Education (1305.60)
- Family Studies (1308.00)
- Gerontology (1309.00)
- Human Services (2104.00)
- Alcohol and Controlled Substances (2104.40)

The following TOP titles are related to the middle-skill occupations however were excluded from this report since there were no operating programs within the North or Far North subregions:

- Foster and Kinship Care (1305.70)
- Public Administration (2102.00)

- Disability Services (2104.50)

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

- Family and Consumer Sciences/Human Sciences, General (19.0101)
- Adult Development and Aging (19.0702)
- Substance Abuse/Addiction Counseling (51.1501)

The following CIP titles are related to the middle-skill occupations however were excluded from this report since there were no operating programs within the North or Far North subregions:

- Family and Community Services (19.0707)
- Human Services, General (44.0000)
- Public Administration and Social Service Professions, Other (44.9999)
- Community Health and Preventative Medicine (51.2208)

# OCCUPATIONAL DEMAND

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

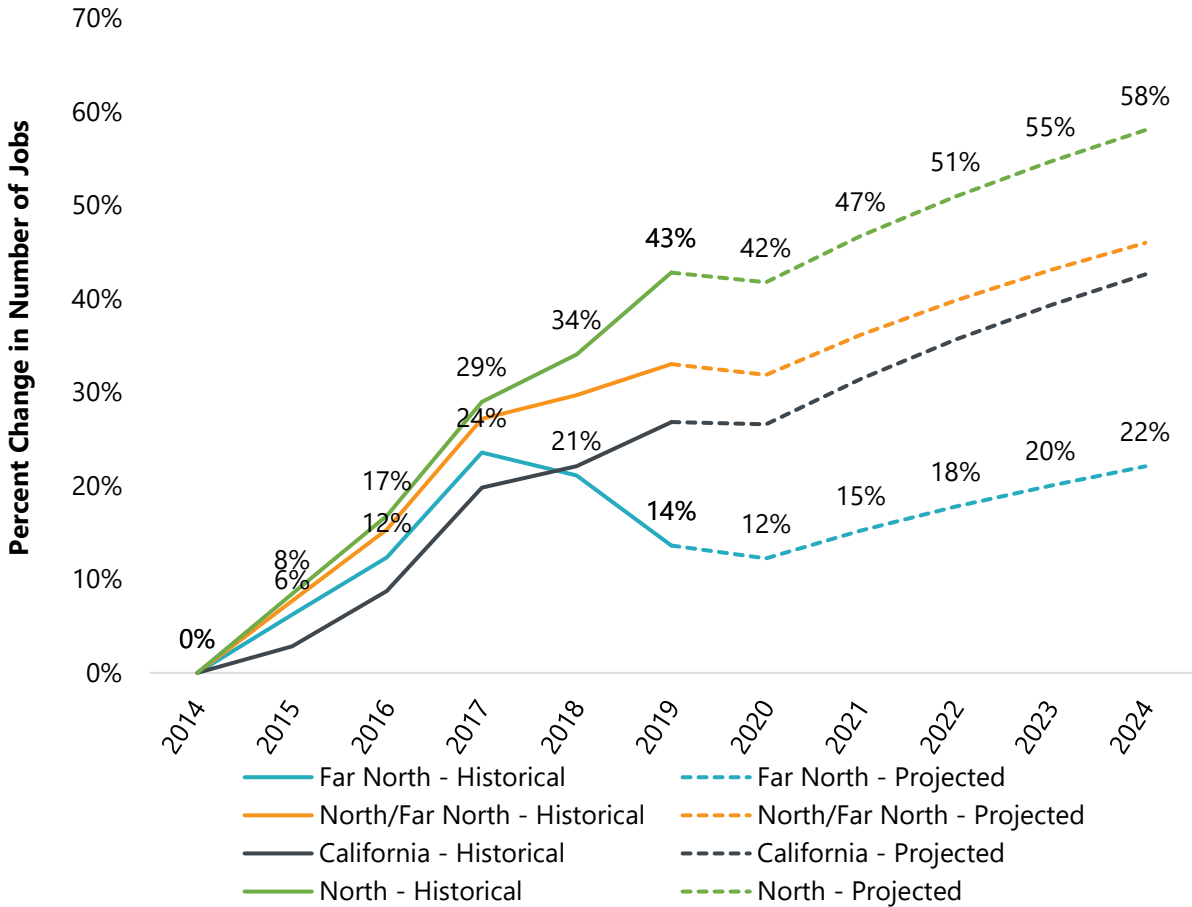
**Exhibit 1. Employment and projected demand, 2019-2024**

Occupation	2019 Jobs	2024 Jobs	2019-2024 Jobs Change	2019-2024 Jobs % Change	2019-2024 Annual Openings
Social and Community Service Managers	948	948	1,081	133	14%
Social and Human Service Assistants	2,180	2,180	2,223	43	2%
Community Health Workers	185	185	256	71	38%
<b>North (Greater Sacramento)</b>	<b>8,233</b>	<b>9,111</b>	<b>878</b>	<b>11%</b>	<b>1,119</b>
Social and Community Service Managers	948	1,081	133	14%	122
Social and Human Service Assistants	2,180	2,223	43	2%	298
Community Health Workers	185	256	71	38%	32
<b>Far North</b>	<b>3,313</b>	<b>3,560</b>	<b>247</b>	<b>7%</b>	<b>452</b>
Social and Community Service Managers	3,354	3,518	164	5%	395
Social and Human Service Assistants	7,479	8,383	904	12%	1,083
Community Health Workers	713	770	57	8%	93
<b>North/Far North</b>	<b>11,546</b>	<b>12,671</b>	<b>1,125</b>	<b>10%</b>	<b>1,571</b>

Occupation	2019 Jobs	2024 Jobs	2019-2024 Jobs Change	2019-2024 Jobs % Change	2019-2024 Annual Openings
Social and Community Service Managers	32,701	36,963	4,262	13%	4,133
Social and Human Service Assistants	56,710	63,501	6,791	12%	7,871
Community Health Workers	6,523	7,425	902	14%	882
<b>California</b>	<b>95,934</b>	<b>107,889</b>	<b>11,955</b>	<b>12%</b>	<b>12,886</b>

Exhibit 2 compares the percent change in jobs between 2014 through 2019 and the projected changes through 2024. The rate of change is indexed to the total number of jobs in 2014.

**Exhibit 2. Changes in employment, 2014-2024**



# WAGES

Exhibit 3a compares the median hourly wages for the selected occupations to the North living wage for a single adult - \$13.18 per hour.<sup>1</sup>

**Exhibit 3a. Comparison of wages by occupation, 2019**

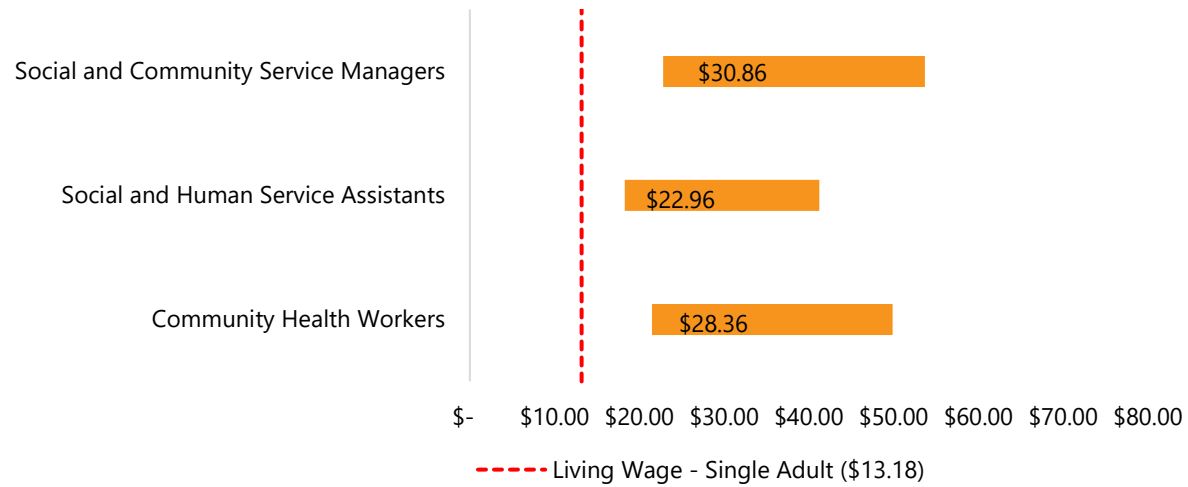
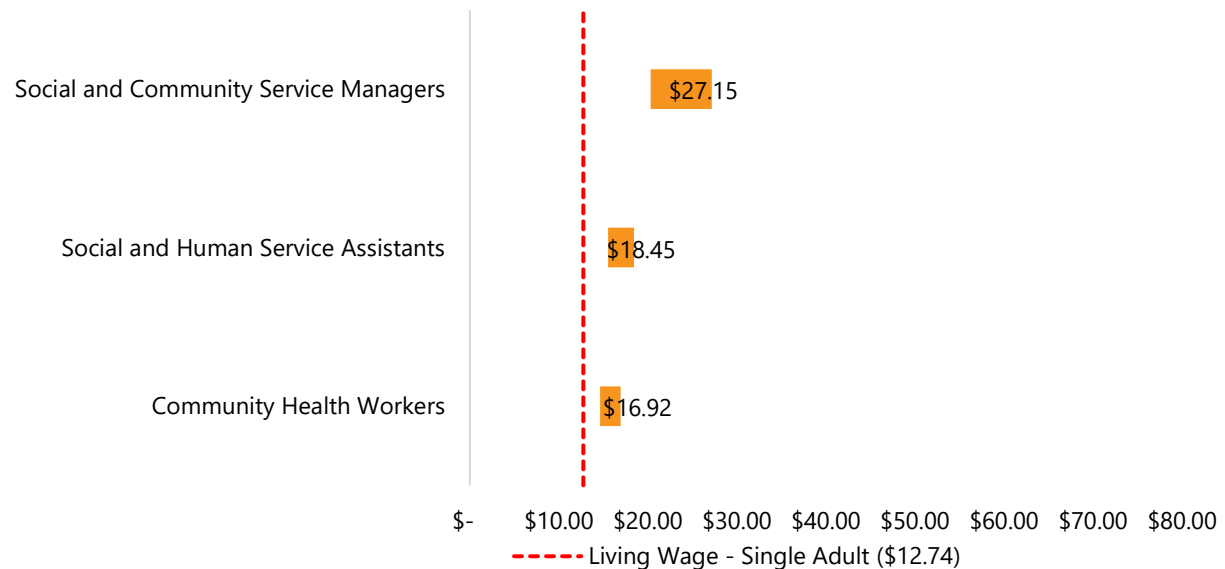


Exhibit 3b compares the median hourly wages for the selected occupations to the Far North living wage for a single adult - \$12.74 per hour.

**Exhibit 3b. Comparison of wages by occupation, 2019**



<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.



# JOB POSTINGS

This section of the report 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.

The Far North COE identified 793 and 166 online job postings for the selected occupations in the North and Far North subregions, respectively. Job postings data comes from Burning Glass Labor Insights and represents new listings posted online within the last year, from August 1, 2020, to July 31, 2021.

## Occupations and Job Titles

Exhibit 4 details the number of online job postings for the selected occupations.

**Exhibit 4. Number of job postings by occupation**

Occupation	Job Postings	Share of Job Postings
Social and Community Service Managers	341	43%
Social and Human Service Assistants	401	51%
Community Health Workers	51	6%
<b>North (Greater Sacramento)</b>	<b>793</b>	<b>100%</b>
Social and Community Service Managers	65	39%
Social and Human Service Assistants	91	55%
Community Health Workers	10	6%
<b>Far North</b>	<b>166</b>	<b>100%</b>

Exhibit 5 shows the top 10 job titles with the most job postings and the share of job postings. All job postings included a job title.

**Exhibit 5. Top job titles**

Job Title	Job Postings	Share of Job Postings
Program Supervisor	20	3%

Job Title	Job Postings	Share of Job Postings
Outreach Specialist	17	2%
Social Services Assistant	16	2%
Director Of Social Services	15	2%
Mortgage Field Services	14	2%
Home Visitor	12	2%
Resident Care Coordinator	12	2%
Community Liaison	11	1%
Youth Advocate	9	1%
Care Coordinator	8	1%
<b>North (Greater Sacramento)</b>	<b>134</b>	<b>17%</b>
Home Visitor	13	8%
Case Worker	6	4%
Director Of Social Services	6	4%
Family Services Coordinator	4	2%
Program Services Clinical Coordinator	4	2%
Recertification Coordinator	4	2%
Social Services	4	2%
Social Services Aide	3	2%
Social Work Coordinator	3	2%
Advocate	2	1%
<b>Far North</b>	<b>49</b>	<b>30%</b>

## Employers

Exhibit 6 shows the top 10 employers with the most job postings for the selected occupations. In the North region, Eight percent (n = 66) of job postings did not include an employer. In the Far North region, twenty-six percent (n = 43) of job postings did not include an employer.

### Exhibit 6. Employers with the most job postings

Employer	Job Postings	Share of Job Postings
The Mentor Network	21	3%
Lifesteps Incorporated	20	3%
Sacramento Childrens Home	18	2%
Weave Incorporated	18	2%
Volunteers of America	15	2%
Calhr	13	2%
Oakmont Senior Living	12	2%
Management Trust	11	2%
Turning Point Community Programs	11	2%
University Of California	11	2%
<b>North (Greater Sacramento)</b>	<b>150</b>	<b>21%</b>
The Mentor Network	13	11%
The GEO Group, Inc	8	7%
Tehama County	7	6%
California Tribal Tanf Partnership	6	5%
Shasta County Head Start Child Development Inc	5	4%
County Of Del Norte	5	4%
Salvation Army	4	3%
County Humboldt	4	3%

Employer	Job Postings	Share of Job Postings
Shasta County Head Start Child Development	3	2%
Lifesteps Incorporated	3	2%
<b>Far North</b>	<b>58</b>	<b>47%</b>

## Certifications, Skills, and Experience

Exhibit 7 shows the most relevant certifications requested by employers for the selected occupations. In the North region, forty-seven percent (n = 370) of job postings did not include certification information. In the Far North region, forty-five percent (n = 74) of job postings did not include certification information.

### Exhibit 7. Most in-demand certifications

Certification	Job Postings	Share of Job Postings
Driver's License	354	60%
First Aid Cpr Aed	71	12%
Social Work License	17	3%
Counseling Certification	14	2%
Licensed Clinical Social Worker (LCSW)	14	2%
Cdl Class C	10	2%
Licensed Professional Counselor	10	2%
Addiction Treatment Counselor	8	1%
Licensed Marriage and Family Therapist	8	1%
Board Certified Behavior Analyst (BCBA)	7	1%
<b>North (Greater Sacramento)</b>	<b>513</b>	<b>87%</b>
Driver's License	82	69%
First Aid Cpr Aed	13	11%

Certification	Job Postings	Share of Job Postings
Typing Certification	3	3%
Domestic Violence	3	3%
Counseling Certification	2	2%
Community Health Certificate	2	2%
Certified Alcohol and Drug Abuse Counselor	2	2%
Social Worker Certification	1	1%
ServSafe	1	1%
Registered Environmental Health Specialist	1	1%
<b>Far North</b>	<b>110</b>	<b>93%</b>

Exhibit 8 shows the specialized skills most requested by employers for the selected occupations.

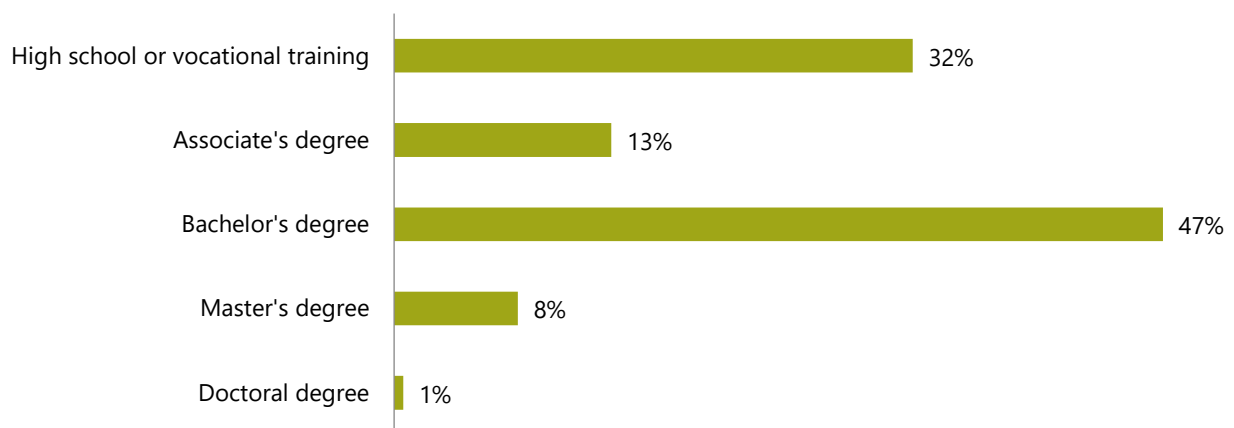
**Exhibit 8. Most in-demand specialized skills**

Specialized Skill	Skill Postings	Share of Skill Postings
Social Services	218	4%
Case Management	189	3%
Scheduling	152	3%
Psychology	137	3%
Mental Health	125	2%
Customer Service	119	2%
Budgeting	110	2%
Crisis Intervention	108	2%
Staff Management	93	2%
Cardiopulmonary Resuscitation (CPR)	86	2%

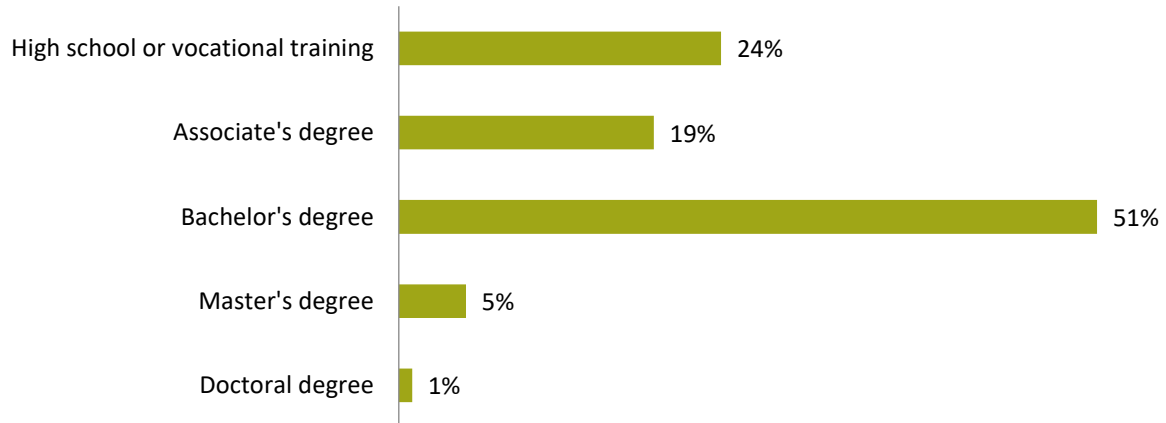
Specialized Skill	Skill Postings	Share of Skill Postings
<b>North (Greater Sacramento)</b>	<b>1,337</b>	<b>25%</b>
Case Management	52	5%
Social Services	49	5%
Budgeting	26	3%
Psychology	25	3%
Scheduling	24	2%
Customer Service	23	2%
Social Services Industry Knowledge	21	2%
Child Development	20	2%
Data Entry	19	2%
Staff Management	17	2%
<b>Far North</b>	<b>276</b>	<b>28%</b>

Exhibits 9a and 9b show the minimum level of education required by employers for job postings for the selected occupations. In the North region, thirty-two percent (n = 250) of job postings did not include a preferred education level. In the Far North region, thirty-nine percent (n = 65) of job postings did not include a preferred education level.

**Exhibit 9a. Employer-preferred minimum education levels, North region**

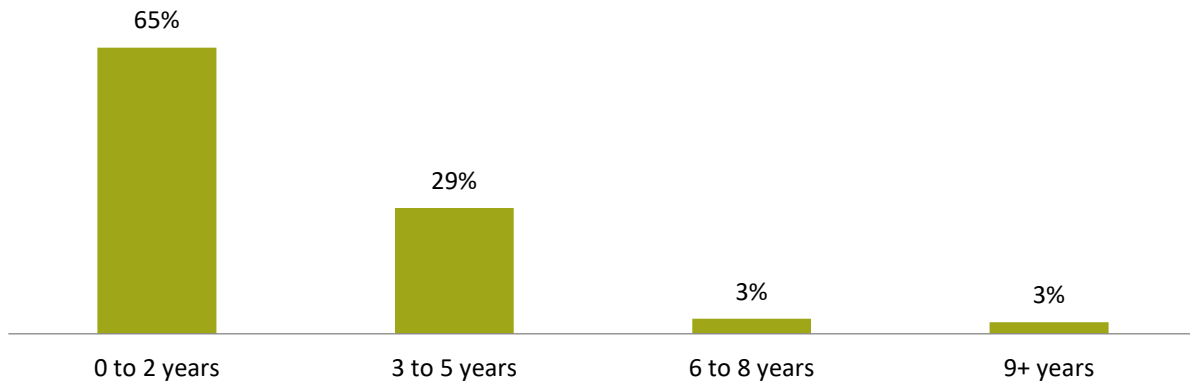


**Exhibit 9b. Employer-preferred minimum education levels, Far North region**

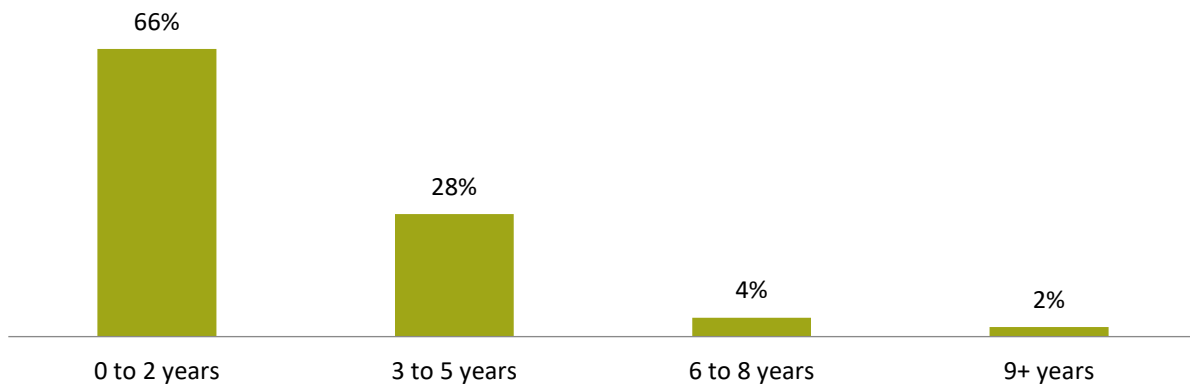


Exhibits 10a and 10b show the experience levels required by employers for job postings for the selected occupations. In the North region, thirty-seven percent (n = 295) of job postings did not include a preferred education level. In the Far North region, forty-four percent (n = 73) of job postings did not include a preferred education level.

**Exhibit 10a. Employer-preferred experience levels, North region**



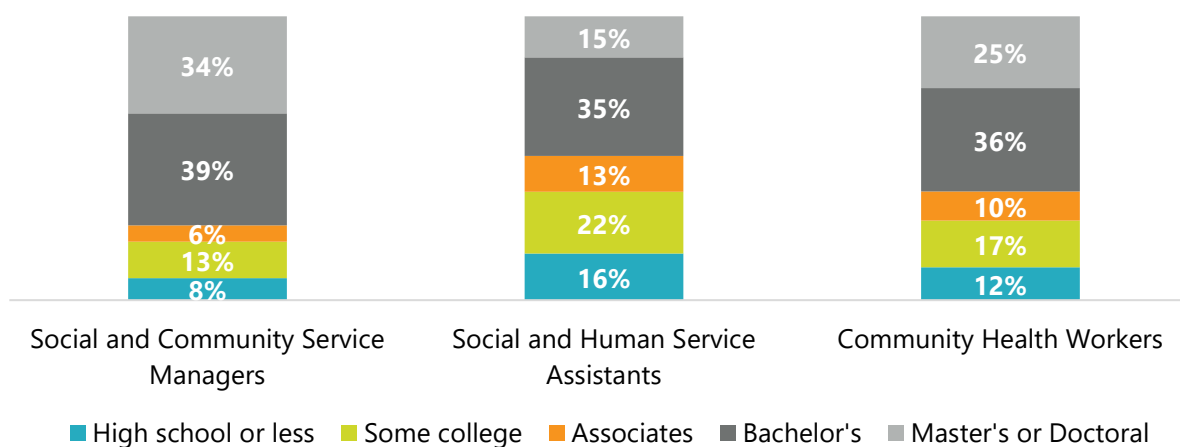
**Exhibit 10b. Employer-preferred experience levels, Far North region**



## EDUCATION AND TRAINING

The U.S. Census Bureau and Bureau of Labor Statistics collects 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
Social and Community Service Managers	Bachelor's degree	Less than 5 years	None
Social and Human Service Assistants	High school diploma or equivalent	None	Short-term on-the-job training
Community Health Workers	High school diploma or equivalent	None	Short-term on-the-job training



## 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 13 shows the TOP and CIP codes for educational programs related to the selected occupations.

**Exhibit 13. TOP and CIP codes for training programs related to the selected occupations**

TOP Programs and Codes	Aligned CIP Programs and Codes
Community Health Care Worker (1261.00)	Community Health and Preventative Medicine (51.2208)*
Family and Consumer Sciences, General (1301.00)	Family and Consumer Sciences/Human Sciences, General (19.0101)
Parenting and Family Education (1305.60)	Family and Community Services (19.0707)*
Family Studies (1308.00)	Family and Community Services (19.0707)*
Gerontology (1309.00)	Adult Development and Aging (19.0702)
Human Services (2104.00)	Human Services, General (44.0000)*
Alcohol and Controlled Substances (2104.40)	Substance Abuse/Addiction Counseling (51.1501)

\*There were no active programs within the North/Far North subregion for these CIP codes.

### Community College Supply

Exhibits 14 and 15 compare the average number of certificates and degrees conferred in selected community college programs over the last three academic years.

**Exhibit 14a. Annual average community college awards by program, North subregion, 2017-18 through 2019-20**

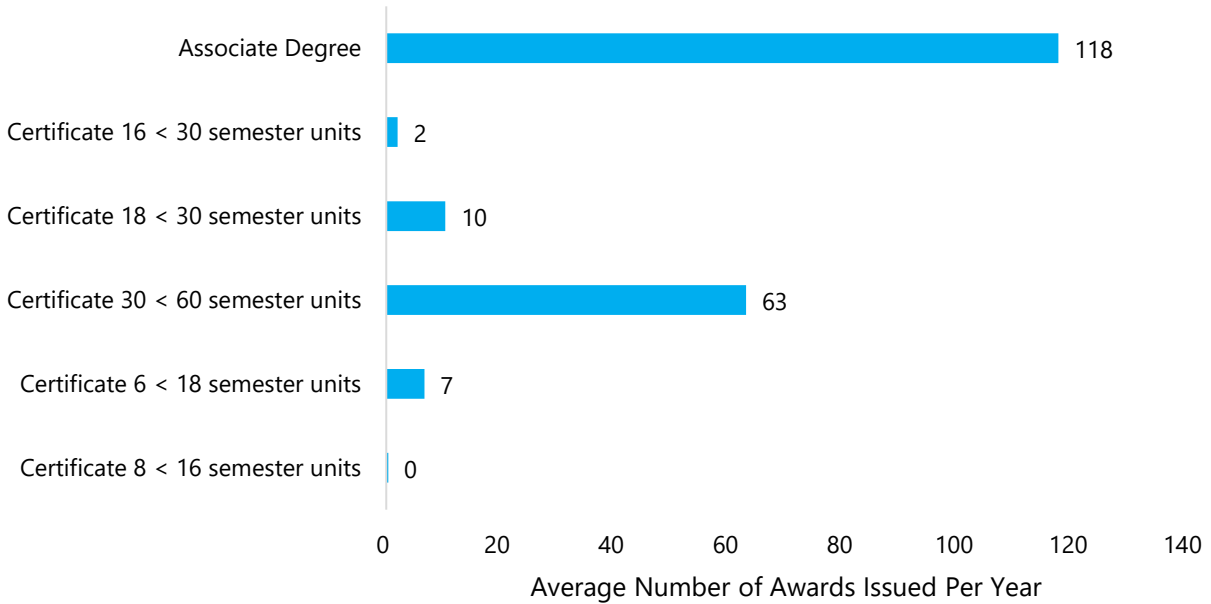
Program - TOP Code	College	Annual Awards 2017-18	Annual Awards 2018-19	Annual Awards 2019-20	3-Yr Annual Awards Average
Community Health Care Worker (1261.00)	Sacramento City	0	0	12	4
	<b>Subtotal</b>	<b>0</b>	<b>0</b>	<b>12</b>	<b>4</b>

Program - TOP Code	College	Annual Awards 2017-18	Annual Awards 2018-19	Annual Awards 2019-20	3-Yr Annual Awards Average
Gerontology (1309.00)	American River	3	21	8	11
	Folsom Lake	0	1	0	0
	Sacramento City	8	9	3	7
	<b>Subtotal</b>	<b>11</b>	<b>31</b>	<b>11</b>	<b>18</b>
Human Services (2104.00)	American River	29	20	24	24
	Cosumnes River	16	19	22	19
	Folsom Lake	13	12	10	12
	Sacramento City	3	7	5	5
	Woodland	8	4	3	5
	Yuba	9	5	5	6
	<b>Subtotal</b>	<b>78</b>	<b>67</b>	<b>69</b>	<b>71</b>
Alcohol and Controlled Substances (2104.40)	American River	21	14	14	16
	Cosumnes River	3	7	10	7
	Lake Tahoe	0	3	1	1
	Woodland	6	9	9	8
	Yuba	10	12	15	12
	<b>Subtotal</b>	<b>40</b>	<b>45</b>	<b>49</b>	<b>45</b>
	<b>Grand Total</b>	<b>129</b>	<b>143</b>	<b>141</b>	<b>138</b>

**Exhibit 14b. Annual average community college awards by program, Far North subregion, 2017-18 through 2019-20**

Program - TOP Code	College	Annual Awards 2017-18	Annual Awards 2018-19	Annual Awards 2019-20	3-Yr Annual Awards Average
Family and Consumer Sciences, General (1301.00)	Shasta	19	17	19	18
	<b>Subtotal</b>	<b>19</b>	<b>17</b>	<b>19</b>	<b>18</b>
Parenting and Family Education (1305.60)	Butte	0	2	2	1
	<b>Subtotal</b>	<b>0</b>	<b>2</b>	<b>2</b>	<b>1</b>
Family Studies (1308.00)	Shasta	3	3	3	3
	<b>Subtotal</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>
Human Services (2104.00)	Lassen	4	6	1	4
	Mendocino	28	11	12	17
	Siskiyou	3	3	5	4
	<b>Subtotal</b>	<b>35</b>	<b>20</b>	<b>18</b>	<b>24</b>
Alcohol and Controlled Substances (2104.40)	Lassen	2	6	0	3
	Mendocino	4	1	7	4
	Redwoods	9	15	12	12
	<b>Subtotal</b>	<b>15</b>	<b>22</b>	<b>19</b>	<b>19</b>
	<b>Grand Total</b>	<b>72</b>	<b>64</b>	<b>61</b>	<b>66</b>

**Exhibit 15. Annual average community college awards by type, 2017-18 through 2019-20**



### Other Postsecondary Supply

Exhibit 16 compares the average number of degrees conferred by non-community college training providers in the North/Far North over the last three academic years. Please note that non-community college data lags by one year.

**Exhibit 16. Other postsecondary awards by program, 2016-17 through 2018-19**

Program - CIP Code	College	Annual Awards 2016-17	Annual Awards 2017-18	Annual Awards 2018-19	3-Yr Annual Awards Average
Family and Consumer Sciences/Human Sciences, General (19.0101)	California State University-Sacramento	227	225	229	227
	<b>Subtotal</b>	<b>227</b>	<b>225</b>	<b>229</b>	<b>227</b>
Substance Abuse/Addiction Counseling (51.1501)	InterCoast Colleges - Rancho Cordova	7	19	13	13
	William Jessup University	11	9	8	9
	<b>Subtotal</b>	<b>18</b>	<b>28</b>	<b>21</b>	<b>22</b>
<b>Grand Total</b>		<b>245</b>	<b>253</b>	<b>250</b>	<b>249</b>

## FINDINGS

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This report focuses on four occupations with relevant career pathways in case management and treatment, including social and human service assistants, community health workers, community and social service specialists, and substance abuse/behavioral disorder counselors. Please note that workers in these occupations work in various settings beyond substance abuse treatment. However, the occupational group is referred to as "case management" jobs in this report.

- The North subregion held 8,233 case management jobs in 2019. Case management jobs are projected to increase by 11% over the next five years, adding 878 new jobs to the subregion by 2024.
- The Far North subregion held 3,313 case management jobs in 2019. Case management jobs are projected to increase by 7% over the next five years, adding 247 new jobs to the subregion by 2024.
- Over the next five years, case management occupations are projected to have 1,119 annual openings in the North subregion and 452 annual openings in the Far North subregion.
- Wage data shows that case management occupations in the North subregion earn approximately \$18 to \$37, above the subregion's living wage of \$13.18 per hour. Wage data shows that case management occupations in the Far North subregion earn approximately \$15 to \$37, above the subregion's living wage of \$12.74 per hour.
- According to real-time labor market information, there were 793 and 166 online job postings for case management occupations in the North and Far North subregions, respectively between August 1, 2020, and July 31, 2021.
  - In the North region, 51% of job postings (n = 401) were for social and human service assistants, 43% of job postings (n = 341) were for social and community service managers and 6% of job postings (n = 51) were for community health workers.
  - In the Far North region, 55% of job postings (n = 91) were for social and human service assistants, 39% of job postings (n = 65) were for social and community service managers and 6% of job postings (n = 10) were for community health workers.
- Top job titles and employers hint at the wide variety of settings that the case management occupations work in. Work settings are not limited to case management but instead range from youth and family services, housing, childcare, and health care supports.

- There is a gap between educational attainment of incumbent workers and entry-level work requirements for some of the studied occupations.
  - Between 19% and 35% of incumbent social and human service assistants, community health workers, and social and community service managers have educational attainment levels consistent with community college offerings (some college or associate degrees). Approximately another 35% to 39% of workers in these occupations hold a bachelor's degree.
  - While social and community service managers typically need a bachelor's degree for entry-level work, social and human service assistants and community health workers require a minimum of a high school diploma and short-term (one month or less) on-the-job training.
  - These findings may reflect an employer's preference for workers in these occupations to hold a four-year degree.
- Thirteen North/Far North community colleges offer degrees and certificates in programs related to case management. Together, these programs conferred an average of 203 awards (certificates and associate degrees) in related programs over the last three academic years (2017-18 through 2019-20). Colleges in the North awarded an average of 138 awards while colleges in the Far North awarded an average of 66 awards.
- Local non-community college postsecondary training providers also offer training related to the studied occupations. Between 2016-17 and 2018-19, non-community college training providers conferred an average of 22 awards in substance abuse/addiction counseling programs and 227 awards at a bachelor's degree level 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 the North/Far North region for case management training programs and projected yearly openings, the supply gap analysis shows that the region seems to have room for additional training.
  - Community colleges issued an average of 203 awards annually over the last three years. Other postsecondary training providers issued 249 awards annually.
  - There are 1,571 projected annual openings for case management occupations across the North and Far North regions.
- The Far North Center of Excellence recommends that community colleges develop formalized case management career pathways so that students have clearly articulated options for their futures.
- Advanced positions within this career pathway typically require a minimum of a four-year degree. Community colleges should consider the benefit of offering a dedicated transfer pathway to students.
- The Far North Center of Excellence recommends moving forward with the program.

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

## APPENDIX A. METHODOLOGY AND SOURCES

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Occupations in this report were identified 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. <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.ashx>

"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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