



2025

LOS RIOS COMMUNITY COLLEGE DISTRICT PROFILE

*Assessment of Postsecondary Educational
Opportunities Aligned with Local Labor Markets*

TABLE OF CONTENTS

INTRODUCTION.....	4
District Profiled.....	4
“Focus” Occupations	4
A Well-Equipped Future Workforce.....	5
OCCUPATIONAL DATA ANALYSIS	6
Occupational Landscape.....	6
District Service Area: Key Facts	6
Historical and Projected Employment	7
Jobs by Skill Level	7
Focus Occupations	8
Focus Occupations by CCCCCO Sector	9
SUPPLY AND DEMAND COMPARISON BY CCCCCO SECTOR.....	11
ADVANCED MANUFACTURING.....	12
Demand.....	13
Supply	15
ADVANCED TRANSPORTATION AND LOGISTICS.....	16
Demand.....	17
Supply	19
AGRICULTURE, WATER, AND ENVIRONMENTAL TECHNOLOGIES	20
Demand.....	21
Supply	22
BUSINESS AND ENTREPRENEURSHIP	23
Demand.....	24
Supply	26
EDUCATION AND HUMAN DEVELOPMENT.....	27
Demand.....	28
Supply	29

ENERGY, CONSTRUCTION, AND UTILITIES	30
Demand.....	31
Supply	34
HEALTH.....	35
Demand.....	36
Supply	38
ICT/ DIGITAL MEDIA	40
Demand.....	41
Supply	42
LIFE SCIENCES AND BIOTECHNOLOGY	44
Demand.....	45
Supply	45
OTHER/ UNASSIGNED	46
Demand.....	47
Supply	48
PUBLIC SAFETY	49
Demand.....	50
Supply	51
RETAIL, HOSPITALITY, AND TOURISM	52
Demand.....	53
Supply	54
STRONG WORKFORCE PROGRAM DATA	55
CONCLUSION	56
APPENDIX A: BLS OCCUPATIONS VS FOCUS OCCUPATIONS.....	57
APPENDIX B: METHODOLOGY AND DATA SOURCES	58
Traditional Labor Market Data	58

INTRODUCTION

The North Far North Center of Excellence (NFN COE) has produced 12 community college district/college profiles to assist with collaborative efforts to enhance career education (CE) programs and facilitate alignment with labor market opportunities specific to each community college district's service area in the North Far North Region, which encompasses 22 counties stretching from the city of Sacramento north to California's border with Oregon. These district/college profiles present an assessment of labor market demand and the supply of community college awards (degrees and certificates) from programs aligned with the 12 sectors designated by the California Community Colleges Chancellor's Office (CCCCO).

District Profiled

The Los Rios Community College District (Los Rios CCD) serves as an educational hub in El Dorado, Placer, Sacramento, and Yolo Counties, offering a wide range of programs to meet the diverse needs of students and the region's workforce. The district operates four community colleges – **American River College, Cosumnes River College, Folsom Lake College, and Sacramento City College** – each providing quality education and career training. Through these institutions, Los Rios CCD provides education and training opportunities that support student success, economic development, and community engagement across urban, suburban, and rural areas of the Greater Sacramento subregion.

"Focus" Occupations

This analysis examines the extent to which district programs are meeting workforce needs through a sector-by-sector analysis that highlights "focus" occupations, middle-skill jobs aligned with district programs that either have robust employment demand or that pay above a living wage threshold, or that meet both criteria.

Requiring education and training beyond a high school diploma but less than a bachelor's degree, middle-skill jobs constitute an essential component of the overall workforce and are considered a vital component of a strong labor market since an insufficient number of middle-skill workers can substantially constrain economic growth. Moreover, these jobs are aligned with community college education and can provide pathways to stable, well-paid employment for students.

By highlighting "focus" occupations, it is possible to measure how effectively students are being prepared for career opportunities that match local labor market needs. Additionally, this type of analysis can be applied toward addressing critical workforce shortages through program development.

For comparison purposes, each profile provides a breakdown showing the share of middle-skill jobs alongside the share of below-middle-skill jobs (those requiring a high school diploma or less) and above-middle-skill jobs (those requiring a bachelor's degree or higher). The analysis presents the occupational titles and Standard Occupational Classification (SOC) codes assigned to the 796 occupations catalogued by the Bureau of Labor Statistics. Also provided are the Taxonomy of Programs codes associated with each community college program that align with these occupations.

A Well-Equipped Future Workforce

By highlighting the district's alignment with local economic needs, this report aims to provide a comprehensive look at how the district supports the prosperity of students and the broader North Far North regional economy. While regional reports produced by the NFN COE offer valuable insights for broad decision making, this series is designed to go a step further by focusing on individual districts and the counties which they serve.

By examining distinct characteristics of each district, these profiles deliver insights tailored to the specific educational and workforce needs of the communities in which the districts are situated. These important findings can inform future investments by community college districts and support strategies implemented through the Strong Workforce Program (SWP) Regional Plan, ensuring that students gain the skills and knowledge necessary to thrive in promising careers.



OCCUPATIONAL DATA ANALYSIS

Occupational Landscape

The district service area (El Dorado, Placer, Sacramento, and Yolo Counties) accounted for 1,185,287 out of nearly 1.7 million jobs in 2023, representing 71% of all jobs in the North Far North Region.¹ The number of jobs in the district service area is expected to grow by 8% through 2028, resulting in 155,413 projected annual openings.

District Service Area: Key Facts



1,185,287

Number of Jobs
in 2023



+95,822

5-Year Change
in Jobs through
2028



8%

5-Year Percent
Change in Jobs



155,413

Annual
Openings
(2023-2028)



97,090

Business
Establishments



320 of 796

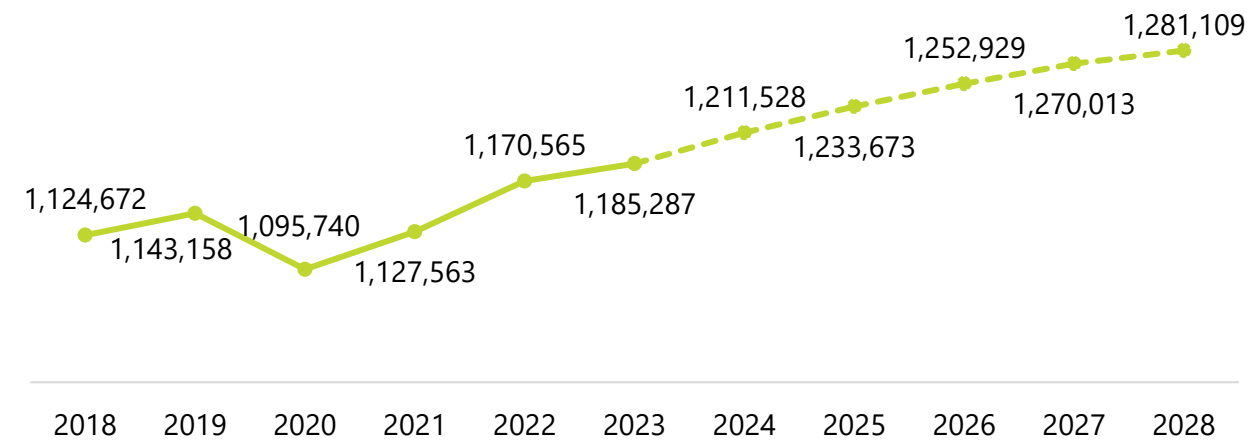
Occupations meet or
exceed the Living Wage
(\$25.19/hour)

¹ Labor market data presented in this profile is sourced from the economic modeling firm and job postings aggregator Lightcast. Data source: Lightcast 2024.3; QCEW, non-QCEW, and Self-Employed.

Historical and Projected Employment

Between 2018 and 2023, employment in the district service area (El Dorado, Placer, Sacramento, and Yolo Counties) increased from 1,124,672 jobs to 1,185,287 (Exhibit 1). Employment is projected to increase to 1,281,109 jobs by 2028, representing the addition of more than 95,000 jobs.

Exhibit 1: Historical employment and projected occupational demand in the district service area, 2018-2028



Source: Lightcast 2024.3, QCEW Employees, Non-QCEW Employees, and Self Employed

Jobs by Skill Level

Of the 796 occupations classified by the Bureau of Labor Statistics, 311 (39%) are middle-skill, 250 (31%) are below middle-skill, and 235 (30%) are above middle-skill occupations (Exhibit 2). In 2023, the 311 middle-skill occupations accounted for 524,905 out of 1,185,287 jobs, constituting 44% of the total workforce in the district service area (El Dorado, Placer, Sacramento, and Yolo Counties) (Exhibit 3).

Exhibit 2: Number of occupations by skill level

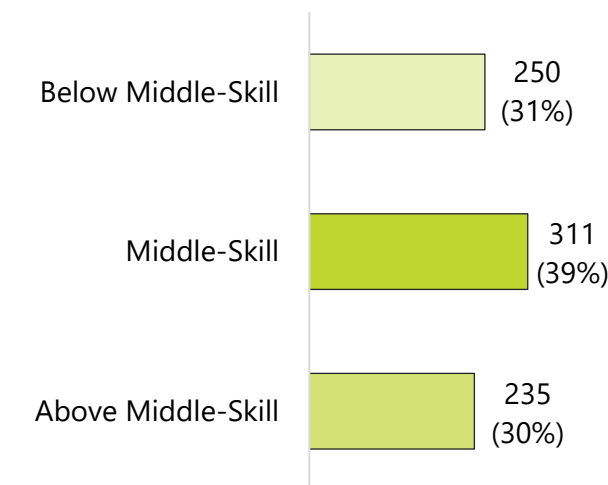
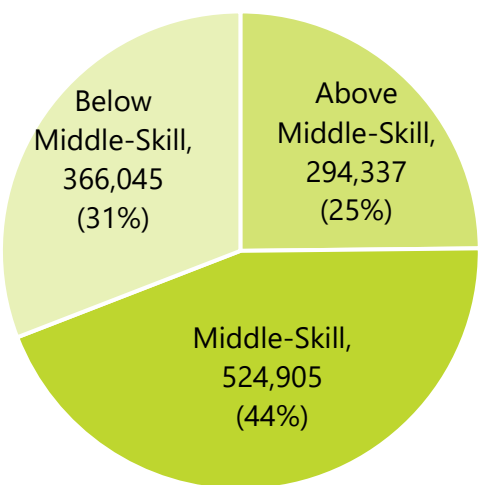


Exhibit 3: Share of 2023 jobs by skill level



Source: Lightcast 2024.3, QCEW Employees, Non-QCEW Employees, and Self Employed

Focus Occupations

This section of the report highlights 224 "focus occupations," representing 28% of all occupations within the district service area that either meet or exceed the median number of jobs (based on sector) in the service area or surpass the living wage of \$25.19/hour in Sacramento County, or both. Collectively, these 224 jobs accounted for 508,029 jobs in 2023, making them a critical component of the district service area (El Dorado, Placer, Sacramento, and Yolo Counties) workforce.

508,029

Number of
2023 Jobs in Focus
Occupations

64,922

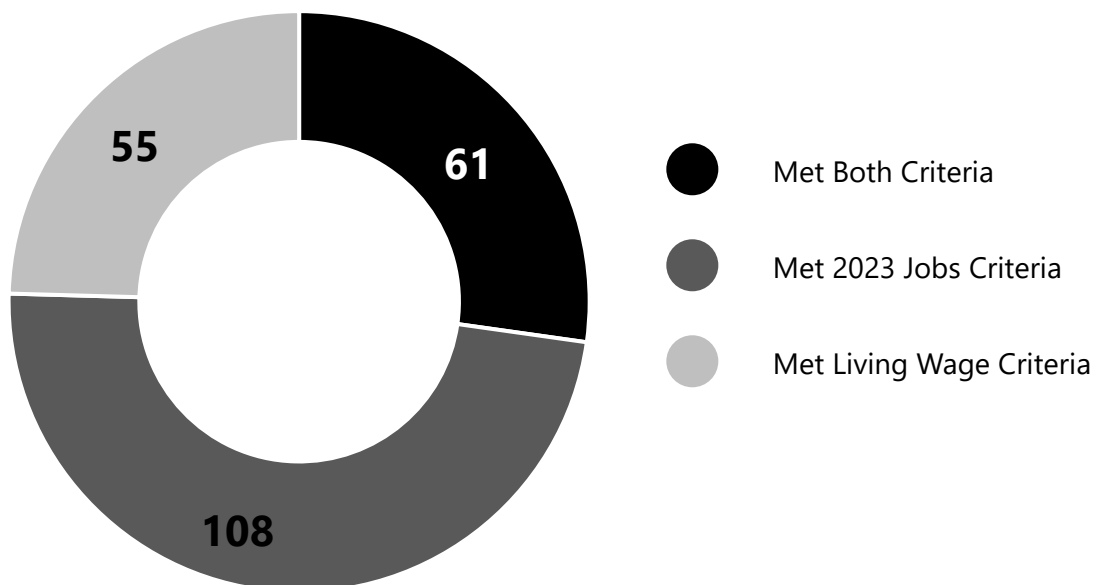
Annual Openings in Focus
Occupations
(2023-2028)

43%

Share of Total Jobs in 2023

These focus occupations underscore their importance by comprising 43% of all jobs in 2023 (El Dorado, Placer, Sacramento, and Yolo Counties) and demonstrating strong growth potential, with 64,922 annual openings projected each year through 2028. By targeting these middle-skill jobs, this report highlights occupations that not only support economic stability and growth but also present significant opportunities for workforce development. This focused analysis provides a roadmap for addressing the labor market needs of the district service area, thereby contributing to subregional and regional competitiveness and the prosperity of students entering employment from community college programs.

224
Occupations



Focus Occupations by CCCCCO Sector

The 224 focus occupations identified in this report span the 12 CCCCCO sectors, with the Energy, Construction, and Utilities sector accounting for 41 occupations, the most of any sector. The Business and Entrepreneurship sector had the highest number of jobs in 2023 (159,277). The Health sector had the highest projected change in jobs (17%) and annual job openings (20,173). The ICT/Digital Media sector had the highest weighted entry-level hourly wage (\$33.43) of all sectors. Exhibit 4 shows the sectors represented by these 224 occupations, sorted alphabetically by sector.

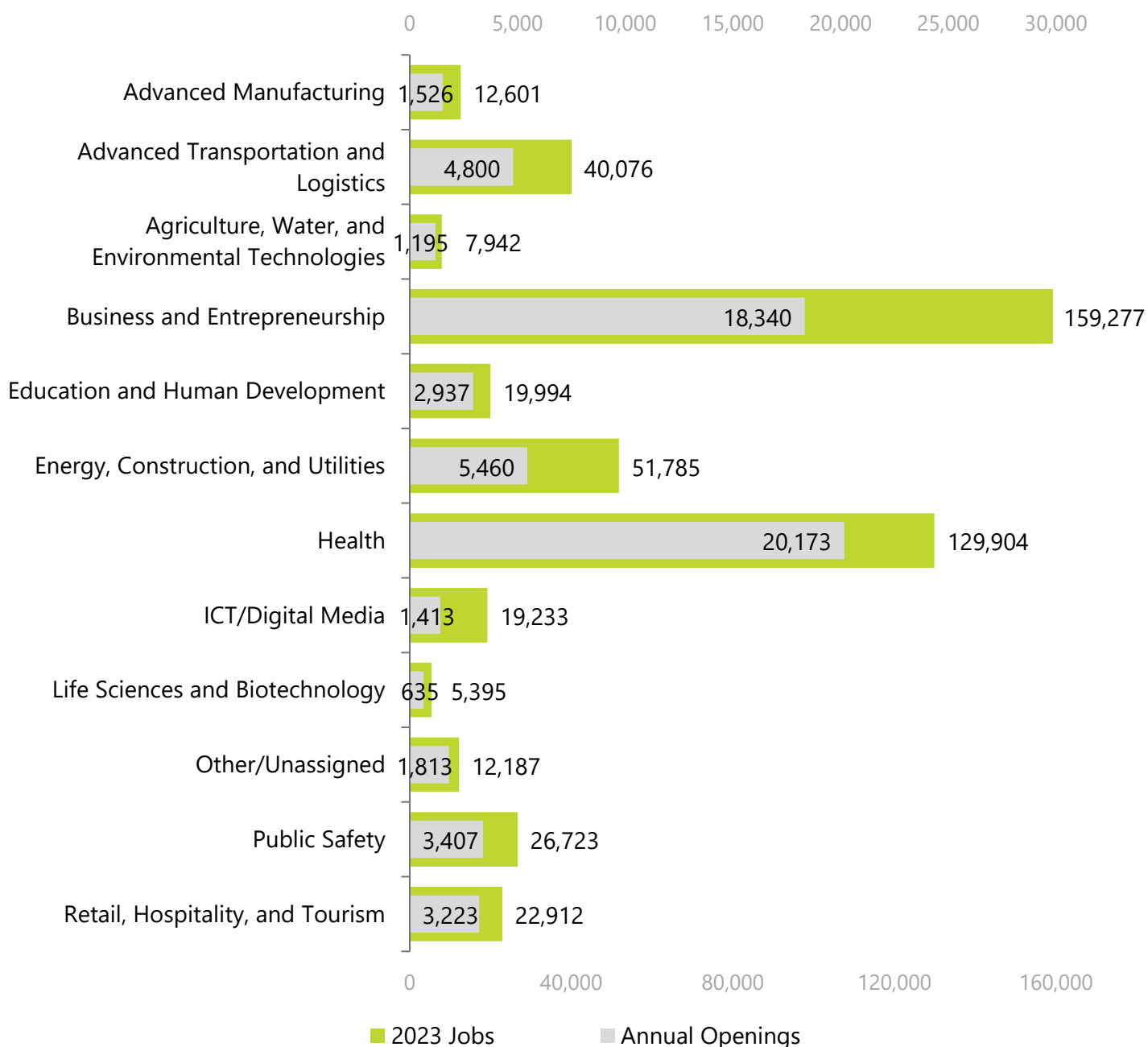
Exhibit 4: Current employment, projected occupational demand, and entry-level wages of focus occupations by CCCCCO sector

Sector	Number of Focus Occupations	2023 Jobs	5-Year Change	5-Year % Change	Annual Openings	Entry-Level Hourly Wage
Advanced Manufacturing	26	12,601	1,328	11%	1,526	\$24.13
Advanced Transportation and Logistics	29	40,076	4,060	10%	4,800	\$24.32
Agriculture, Water, and Environmental Technologies	10	7,942	669	8%	1,195	\$18.57
Business and Entrepreneurship	31	159,277	5,702	4%	18,340	\$24.08
Education and Human Development	4	19,994	733	4%	2,937	\$17.26
Energy, Construction, and Utilities	41	51,785	3,787	7%	5,460	\$25.99
Health	33	129,904	21,741	17%	20,173	\$27.31
ICT/Digital Media	10	19,233	441	2%	1,413	\$33.43
Life Sciences and Biotechnology	4	5,395	509	9%	635	\$22.76
Other/Unassigned	11	12,187	984	8%	1,813	\$23.03
Public Safety	16	26,723	2,924	11%	3,407	\$31.27
Retail, Hospitality, and Tourism	9	22,912	1,885	8%	3,223	\$19.21
Total	224	508,029	44,763	9%	64,922	\$25.24

Source: Lightcast 2024.3, QCEW Employees, Non-QCEW Employees, and Self Employed

Exhibit 5 shows the 2023 job counts and annual openings for each of the 12 CCCC sectors in the district service area. Business and Entrepreneurship had the highest number of jobs (159,277) and Health had the highest number of job openings (20,173), while sectors like Agriculture, Water, and Environmental Technologies and Life Sciences and Biotechnology show the lowest.

Exhibit 5: Total number of 2023 jobs and annual openings by CCCC sector in the district service area



Source: Lightcast 2024.3, QCEW Employees, Non-QCEW Employees, and Self Employed

SUPPLY AND DEMAND COMPARISON

BY CCCCCO SECTOR

In this section, the number of educational awards (degrees and certificates) conferred, otherwise known as supply, by Los Rios Community College District is compared to the annual openings (demand) of the 224 occupations analyzed in this report by sector. Examining the supply in relation to demand is crucial to understanding labor gaps and areas of opportunity that can be addressed by educational programs throughout the local and greater region. Labor gaps are defined as the difference between supply and demand.

Among the 12 sectors, Health boasts the most substantial gap (19,546), followed by Business and Entrepreneurship (16,991). In contrast, the Life Sciences and Biotechnology sector shows the lowest gap (590).

Supply data reflects only community college awards and does not include completions from non-community college institutions, providing a partial view of the total workforce supply. Exhibit 6 shows the breakdown of annual openings compared to supply by sector.

Exhibit 6: Annual openings and awards conferred in the district service area, by CCCCCO sector

Sector	Annual Openings	Los Rios CCD 3-Year Average (2021-2024)
Advanced Manufacturing	1,526	129
Advanced Transportation and Logistics	4,800	181
Agriculture, Water, and Environmental Technologies	1,195	70
Business and Entrepreneurship	18,340	1,349
Education and Human Development	2,937	343
Energy, Construction, and Utilities	5,460	488
Health	20,173	627
ICT/Digital Media	1,413	589
Life Sciences and Biotechnology	635	45
Other/Unassigned	1,813	190
Public Safety	3,407	273
Retail, Hospitality, and Tourism	3,223	77

Source: Lightcast 2024.3, QCEW Employees, Non-QCEW Employees, and Self Employed and California Community Colleges Chancellor's Management Information Systems DataMart

ADVANCED MANUFACTURING



Community College Supply

Employment Demand

12,601

Jobs in 2023

1,526

Annual Openings

129

Awards

26 Advanced Manufacturing Occupations

10

met both criteria

12

met 2023 jobs criteria

4

met living wage criteria

224
Focus
Occupations

Demand

In 2023 in the district service area, there were 12,601 jobs in the 26 focus occupations in Advanced Manufacturing. Exhibit 7 shows the annual openings and wage for each occupation.

Exhibit 7: Current employment, projected occupational demand, and entry-level wages of focus occupations in Advanced Manufacturing

Criteria Met	SOC	Occupation	2023 Jobs	5-Year Change	Annual Openings	Entry-Level Hourly Wage
Both	51-1011	First-Line Supervisors of Production and Operating Workers	2,265	279	278	\$27.48
	49-9041	Industrial Machinery Mechanics	1,153	180	132	\$27.88
	17-3023	Electrical and Electronic Engineering Technologists and Technicians	584	32	64	\$29.21
	49-9012	Control and Valve Installers and Repairers, Except Mechanical Door	304	66	38	\$41.81
	17-3029	Engineering Technologists and Technicians, Except Drafters, All Other	321	27	36	\$29.44
	49-2094	Electrical and Electronics Repairers, Commercial and Industrial Equipment	307	26	32	\$27.71
	17-3013	Mechanical Drafters	258	8	24	\$28.19
	17-3012	Electrical and Electronics Drafters	205	10	19	\$27.03
	49-9043	Maintenance Workers, Machinery	146	24	19	\$26.31
	17-3027	Mechanical Engineering Technologists and Technicians	114	14	14	\$27.63
2023 Jobs	51-4121	Welders, Cutters, Solderers, and Brazers	1,728	207	219	\$22.41
	51-2028	Electrical, Electronic, and Electromechanical Assemblers, Except Coil Winders, Tapers, and Finishers	1,097	74	136	\$18.05
	51-4041	Machinists	928	131	123	\$20.72
	51-5112	Printing Press Operators	799	(16)	87	\$17.48

Criteria Met	SOC	Occupation	2023 Jobs	5-Year Change	Annual Openings	Entry-Level Hourly Wage
2023 Jobs	51-9195	Molders, Shapers, and Casters, Except Metal and Plastic	349	29	52	\$20.85
	51-9161	Computer Numerically Controlled Tool Operators	451	46	52	\$21.61
	51-4031	Cutting, Punching, and Press Machine Setters, Operators, and Tenders, Metal and Plastic	321	37	40	\$20.29
	51-4081	Multiple Machine Tool Setters, Operators, and Tenders, Metal and Plastic	166	43	27	\$18.09
	19-5012	Occupational Health and Safety Technicians	185	28	27	\$22.65
	51-4033	Grinding, Lapping, Polishing, and Buffing Machine Tool Setters, Operators, and Tenders, Metal and Plastic	211	16	26	\$18.25
	49-9031	Home Appliance Repairers	297	(9)	25	\$17.17
	51-9011	Chemical Equipment Operators and Tenders	137	27	19	\$20.13
Living Wage	17-3026	Industrial Engineering Technologists and Technicians	113	23	16	\$28.65
	51-9162	Computer Numerically Controlled Tool Programmers	77	18	11	\$29.20
	17-3024	Electro-Mechanical and Mechatronics Technologists and Technicians	49	3	5	\$31.37
	17-3028	Calibration Technologists and Technicians	36	6	5	\$27.08

Source: Lightcast 2024.3, QCEW Employees, Non-QCEW Employees, and Self Employed

Supply

From 2021 to 2024, community colleges in the North Far North region awarded an average of 497 awards annually across 13 programs aligned with all Advanced Manufacturing occupations. At Los Rios Community College District (CCD), an average of 129 awards were conferred each year, compared to 221 in the Greater Sacramento subregion. The top-producing program at Los Rios CCD was Welding Technology, with an average of 49 awards annually. Approximately 58% of all awards in the Greater Sacramento subregion were conferred by Los Rios CCD.

Exhibit 8: Awards (degrees and certificates) from community college programs aligned with the Advanced Manufacturing occupations

Program Name (TOP)	Los Rios CCD 3-Year Average (2021-2024)	Greater Sacramento 3-Year Average (2021-2024)	NFN 3-Year Average (2021-2024)
Aeronautical and Aviation Technology (0950.00)	20	20	20
Computer Electronics (0934.10)	-	-	3
Electrical, Electronic, and Electro-Mechanical Drafting (0953.30)	1	1	1
Electronics and Electric Technology (0934.00)	41	41	41
Engineering Technology, General (requires Trigonometry) (0924.00)	1	2	10
Fashion Production (1303.30)	7	7	7
Industrial Electronics (0934.20)	2	37	37
Industrial Systems Technology and Maintenance (0945.00)	7	7	8
Machining and Machine Tools (0956.30)	-	3	11
Manufacturing and Industrial Technology (0956.00)	1	16	64
Mechanical Drafting (0953.40)	0	4	13
Ocean Technology (1920.00)	-	-	0
Welding Technology (0956.50)	49	83	282

Source: California Community Colleges Chancellor's Management Information Systems DataMart

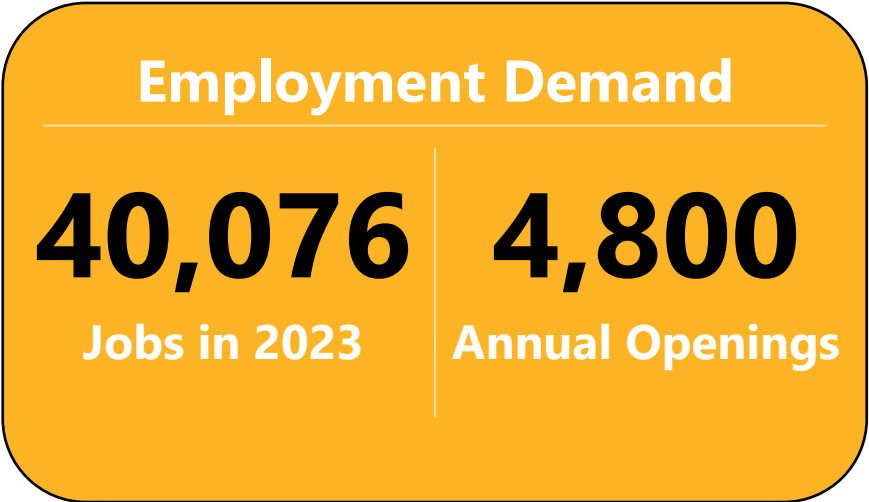
ADVANCED TRANSPORTATION AND LOGISTICS



Community College Supply



29 Advanced Transportation and Logistics Occupations



Demand

In 2023 in the district service area, there were 40,076 jobs in the 29 focus occupations in Advanced Transportation and Logistics. Exhibit 9 shows the annual openings and wage for each occupation.

Exhibit 9: Current employment, projected occupational demand, and entry-level wages of focus occupations in Advanced Transportation and Logistics

Criteria Met	SOC	Occupation	2023 Jobs	5-Year Change	Annual Openings	Entry-Level Hourly Wage
Both	49-1011	First-Line Supervisors of Mechanics, Installers, and Repairers	3,628	380	389	\$31.26
	49-3031	Bus and Truck Mechanics and Diesel Engine Specialists	1,925	201	207	\$27.43
	11-3071	Transportation, Storage, and Distribution Managers	1,549	163	159	\$37.79
	49-3042	Mobile Heavy Equipment Mechanics, Except Engines	1,011	75	101	\$29.07
	49-3011	Aircraft Mechanics and Service Technicians	682	94	71	\$29.11
	53-2012	Commercial Pilots	299	29	41	\$34.82
	53-4031	Railroad Conductors and Yardmasters	284	(1)	25	\$39.13
	17-3021	Aerospace Engineering and Operations Technologists and Technicians	220	19	24	\$28.68
2023 Jobs	53-3032	Heavy and Tractor-Trailer Truck Drivers	13,284	1,480	1,752	\$21.11
	49-3023	Automotive Service Technicians and Mechanics	4,773	355	499	\$19.74
	53-1047	First-Line Supervisors of Transportation and Material Moving Workers, Except Aircraft Cargo Handling Supervisors	3,573	370	446	\$24.06
	43-5061	Production, Planning, and Expediting Clerks	2,365	218	293	\$22.81
	53-3052	Bus Drivers, Transit and Intercity	1,531	158	235	\$22.51
	49-3021	Automotive Body and Related Repairers	1,535	155	170	\$22.27

Criteria Met	SOC	Occupation	2023 Jobs	5-Year Change	Annual Openings	Entry-Level Hourly Wage
2023 Jobs	13-1081	Logisticians	1,422	193	158	\$20.18
	43-5011	Cargo and Freight Agents	437	49	56	\$18.86
	49-3053	Outdoor Power Equipment and Other Small Engine Mechanics	277	19	32	\$18.15
Living Wage	53-6051	Transportation Inspectors	178	21	21	\$34.64
	49-3043	Rail Car Repairers	162	16	18	\$32.58
	53-4041	Subway and Streetcar Operators	139	14	17	\$34.00
	53-4011	Locomotive Engineers	170	(8)	13	\$40.15
	53-2022	Airfield Operations Specialists	108	17	13	\$26.74
	49-2091	Avionics Technicians	103	14	12	\$31.17
	53-5021	Captains, Mates, and Pilots of Water Vessels	91	11	12	\$26.42
	53-7021	Crane and Tower Operators	103	11	12	\$28.74
	53-2021	Air Traffic Controllers	110	5	11	\$80.74
	53-4022	Railroad Brake, Signal, and Switch Operators and Locomotive Firers	68	(3)	7	\$29.80
	53-5031	Ship Engineers	39	3	5	\$47.06
	53-5022	Motorboat Operators	10	1	1	\$27.58

Source: Lightcast 2024.3, QCEW Employees, Non-QCEW Employees, and Self Employed

Supply

From 2021 to 2024, community colleges in the North Far North region awarded an average of 318 awards annually across 14 programs aligned with all Advanced Transportation and Logistics occupations. At Los Rios Community College District (CCD), an average of 181 awards were conferred each year, compared to 198 in the Greater Sacramento subregion. The top-producing program at Los Rios CCD was Automotive Technology, with an average of 120 awards annually. Approximately 91% of all awards in the Greater Sacramento subregion were conferred by Los Rios CCD.

Exhibit 10: Awards (degrees and certificates) from community college programs aligned with the Advanced Transportation and Logistics occupations

Program Name (TOP)	Los Rios CCD 3-Year Average (2021-2024)	Greater Sacramento 3-Year Average (2021-2024)	NFN 3-Year Average (2021-2024)
Air Traffic Control (3020.30)	6	6	6
Alternative Fuels and Advanced Transportation Technology (0948.40)	0	0	0
Automotive Collision Repair (0949.00)	3	5	5
Automotive Technology (0948.00)	120	135	193
Aviation Airframe Mechanics (0950.10)	3	3	3
Aviation and Airport Management (3020.10)	1	1	1
Aviation and Airport Management and Services (3020.00)	2	2	2
Aviation Powerplant Mechanics (0950.20)	3	3	3
Diesel Technology (0947.00)	20	20	33
Heavy Equipment Operation (0947.30)	-	-	49
International Business and Trade (0508.00)	15	15	15
Motorcycle, Outboard and Small Engine Repair (0948.30)	0	0	0
Piloting (3020.20)	7	7	7
Railroad and Light Rail Operations (0947.40)	1	1	1

Source: California Community Colleges Chancellor's Management Information Systems DataMart

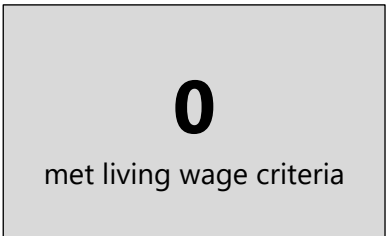
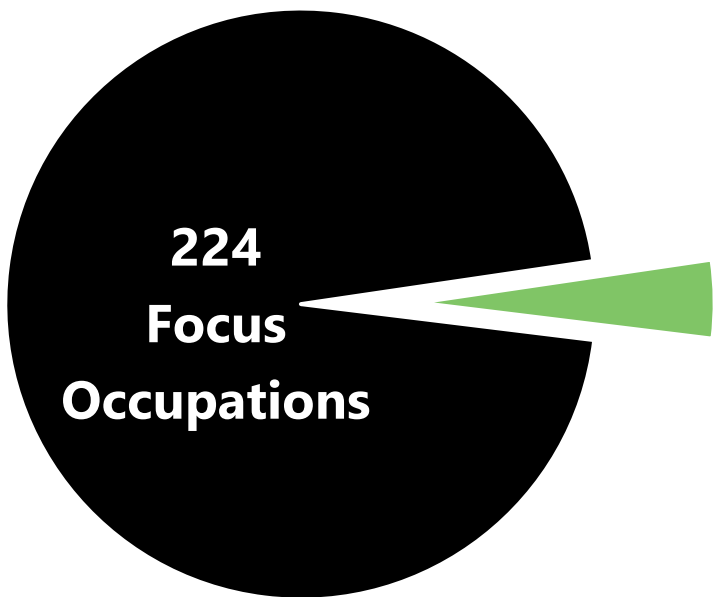
AGRICULTURE, WATER, AND ENVIRONMENTAL TECHNOLOGIES



Community College Supply



10 Agriculture, Water, and Environmental Technologies Occupations



Demand

In 2023 in the district service area, there were 7,942 jobs in the 10 focus occupations in Agriculture, Water, and Environmental Technologies. Exhibit 11 shows the annual openings and wage for each occupation.

Exhibit 11: Current employment, projected occupational demand, and entry-level wages of focus occupations in Agriculture, Water, and Environmental Technologies

Criteria Met	SOC	Occupation	2023 Jobs	5-Year Change	Annual Openings	Entry-Level Hourly Wage
2023 Jobs	31-9096	Veterinary Assistants and Laboratory Animal Caretakers	1,369	187	318	\$17.81
	37-1012	First-Line Supervisors of Landscaping, Lawn Service, and Groundskeeping Workers	1,767	141	214	\$21.25
	11-9013	Farmers, Ranchers, and Other Agricultural Managers	1,494	43	175	\$15.50
	29-2056	Veterinary Technologists and Technicians	784	146	106	\$22.12
	19-4071	Forest and Conservation Technicians	614	40	85	\$18.21
	45-4011	Forest and Conservation Workers	418	19	79	\$15.53
	45-2011	Agricultural Inspectors	388	36	70	\$18.15
	45-1011	First-Line Supervisors of Farming, Fishing, and Forestry Workers	392	26	58	\$16.96
	47-4041	Hazardous Materials Removal Workers	368	25	46	\$21.65
	27-1023	Floral Designers	348	8	44	\$16.40

Source: Lightcast 2024.3, QCEW Employees, Non-QCEW Employees, and Self Employed



Supply

From 2021 to 2024, community colleges in the North Far North region awarded an average of 374 awards annually across 18 programs aligned with all Agriculture, Water, and Environmental Technologies occupations. At Los Rios Community College District (CCD), an average of 70 awards were conferred each year, compared to 161 in the Greater Sacramento subregion. The top-producing program at Los Rios CCD was Natural Resources, with an average of 29 awards annually. Approximately 43% of all awards in the Greater Sacramento subregion were conferred by Los Rios CCD.

Exhibit 12: Awards (degrees and certificates) from community college programs aligned with the Agriculture, Water, and Environmental Technologies occupations

Program Name (TOP)	Los Rios CCD 3-Year Average (2021-2024)	Greater Sacramento 3-Year Average (2021-2024)	NFN 3-Year Average (2021-2024)
Agricultural Pest Control Adviser and Operator (Licensed) (0103.10)	-	1	2
Agricultural Power Equipment Technology (0116.00)	-	-	41
Agriculture Business, Sales and Service (0112.00)	3	7	38
Agriculture Technology and Sciences, General (0101.00)	1	29	79
Animal Science (0102.00)	-	9	32
Environmental Technology (0303.00)	7	19	19
Equine Science (0102.40)	1	1	12
Floriculture / Floristry (0109.20)	-	-	3
Forestry (0114.00)	-	17	28
Horticulture (0109.00)	7	8	17
Landscape Design and Maintenance (0109.10)	8	8	9
Natural Resources (0115.00)	29	32	47
Nursery Technology (0109.30)	0	0	1
Parks and Outdoor Recreation (0115.10)	-	0	2
Plant Science (0103.00)	-	0	10
Veterinary Technician (Licensed) (0102.10)	13	29	29
Viticulture, Enology, and Wine Business (0104.00)	1	1	1
Wildlife and Fisheries (0115.20)	-	-	4

Source: California Community Colleges Chancellor's Management Information Systems DataMart

BUSINESS AND ENTREPRENEURSHIP

Community College Supply

Employment Demand

159,277

Jobs in 2023

18,340

Annual Openings

1,349

Awards

31 Business and Entrepreneurship Occupations

8

met both criteria

18

met 2023 jobs criteria

5

met living wage criteria

224
Focus
Occupations

Demand

In 2023 in the district service area, there were 159,277 jobs in the 31 focus occupations in Business and Entrepreneurship. Exhibit 13 shows the annual openings and wage for each occupation.

Exhibit 13: Current employment, projected occupational demand, and entry-level wages of focus occupations in Business and Entrepreneurship

Criteria Met	SOC	Occupation	2023 Jobs	5-Year Change	Annual Openings	Entry-Level Hourly Wage
Both	11-1021	General and Operations Managers	17,380	1,753	1,790	\$39.58
	43-1011	First-Line Supervisors of Office and Administrative Support Workers	11,989	375	1,236	\$28.90
	43-9021	Data Entry Keyers	4,444	(444)	495	\$25.34
	11-3012	Administrative Services Managers	5,307	295	473	\$40.69
	43-6011	Executive Secretaries and Executive Administrative Assistants	3,579	(105)	364	\$29.74
	13-1028	Buyers and Purchasing Agents	2,296	69	226	\$27.98
	13-1051	Cost Estimators	2,093	110	199	\$28.93
	13-1031	Claims Adjusters, Examiners, and Investigators	2,783	(160)	185	\$29.77
2023 Jobs	43-9061	Office Clerks, General	24,796	627	3,135	\$18.17
	43-4051	Customer Service Representatives	13,791	277	1,928	\$18.23
	43-6014	Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	11,252	246	1,341	\$20.04
	43-3031	Bookkeeping, Accounting, and Auditing Clerks	10,224	301	1,272	\$21.39
	43-4171	Receptionists and Information Clerks	5,676	625	920	\$17.38
	39-5012	Hairdressers, Hairstylists, and Cosmetologists	4,862	487	787	\$13.95
	41-3021	Insurance Sales Agents	6,250	478	614	\$21.80
	41-4012	Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	6,019	296	611	\$23.91

Criteria Met	SOC	Occupation	2023 Jobs	5-Year Change	Annual Openings	Entry-Level Hourly Wage
2023 Jobs	39-5092	Manicurists and Pedicurists	3,566	502	542	\$15.70
	11-9141	Property, Real Estate, and Community Association Managers	4,622	247	427	\$21.57
	41-9022	Real Estate Sales Agents	3,594	225	352	\$19.34
	41-9099	Sales and Related Workers, All Other	2,227	54	303	\$18.85
	43-9041	Insurance Claims and Policy Processing Clerks	2,649	(158)	234	\$20.22
	43-3051	Payroll and Timekeeping Clerks	2,103	(83)	209	\$24.07
	41-1012	First-Line Supervisors of Non-Retail Sales Workers	1,682	(22)	141	\$22.54
	43-3071	Tellers	1,470	(301)	135	\$19.12
	41-9021	Real Estate Brokers	1,102	66	107	\$20.98
	43-4131	Loan Interviewers and Clerks	1,127	(159)	86	\$22.05
Living Wage	11-3013	Facilities Managers	984	84	94	\$38.21
	13-2028	Property Appraisers and Assessors	519	(2)	51	\$29.72
	23-2093	Title Examiners, Abstractors, and Searchers	506	2	50	\$28.28
	11-9171	Funeral Home Managers	331	21	29	\$31.55
	13-1032	Insurance Appraisers, Auto Damage	54	(4)	4	\$33.46

Source: Lightcast 2024.3, QCEW Employees, Non-QCEW Employees, and Self Employed



Supply

From 2021 to 2024, community colleges in the North Far North region awarded an average of 2,799 awards annually across 15 programs aligned with all Business and Entrepreneurship occupations. At Los Rios Community College District (CCD), an average of 1,349 awards were conferred each year, compared to 2,046 in the Greater Sacramento subregion. The top-producing program at Los Rios CCD was Business Administration, with an average of 754 awards annually. Approximately 66% of all awards in the Greater Sacramento subregion were conferred by Los Rios CCD.

Exhibit 14: Awards (degrees and certificates) from community college programs aligned with the Business and Entrepreneurship occupations

Program Name (TOP)	Los Rios CCD 3-Year Average (2021-2024)	Greater Sacramento 3-Year Average (2021-2024)	NFN 3-Year Average (2021-2024)
Accounting (0502.00)	223	344	476
Advertising (0509.10)	0	0	0
Business Administration (0505.00)	754	1,154	1,406
Business and Commerce, General (0501.00)	102	176	329
Business Management (0506.00)	69	113	175
Cosmetology and Barbering (3007.00)	58	58	139
Customer Service (0518.00)	-	-	6
E-Commerce (Business emphasis) (0509.70)	-	-	1
Legal Office Technology (0514.10)	2	3	11
Management Development and Supervision (0506.30)	3	3	4
Marketing and Distribution (0509.00)	19	36	50
Mortuary Science (1255.00)	24	24	24
Real Estate (0511.00)	48	69	81
Small Business and Entrepreneurship (0506.40)	39	57	80
Tax Studies (0502.10)	8	9	17

Source: California Community Colleges Chancellor's Management Information Systems DataMart

EDUCATION AND HUMAN DEVELOPMENT

Community College Supply

Employment Demand

19,994

Jobs in 2023

2,937

Annual Openings

343

Awards

4 Education and Human Development Occupations

0

met both criteria

3

met 2023 jobs criteria

1

met living wage criteria

224
Focus
Occupations

Demand

In 2023 in the district service area, there were 19,994 jobs in the 4 focus occupations in Education and Human Development. Exhibit 15 shows the annual openings and wage for each occupation.

Exhibit 15: Current employment, projected occupational demand, and entry-level wages of focus occupations in Education and Human Development

Criteria Met	SOC	Occupation	2023 Jobs	5-Year Change	Annual Openings	Entry-Level Hourly Wage
2023 Jobs	25-9045	Teaching Assistants, Except Postsecondary	9,229	735	1,259	\$17.94
	39-9011	Childcare Workers	6,974	(271)	1,202	\$15.50
	25-2011	Preschool Teachers, Except Special Education	3,442	220	427	\$17.87
Living Wage	25-2012	Kindergarten Teachers, Except Special Education	349	49	49	\$28.28

Source: Lightcast 2024.3, QCEW Employees, Non-QCEW Employees, and Self Employed



Supply

From 2021 to 2024, community colleges in the North Far North region awarded an average of 1,194 awards annually across 13 programs aligned with all Education and Human Development occupations. At Los Rios Community College District (CCD), an average of 343 awards were conferred each year, compared to 833 in the Greater Sacramento subregion. The top-producing program at Los Rios CCD was Child Development/Early Care and Education, with an average of 284 awards annually. Approximately 41% of all awards in the Greater Sacramento subregion were conferred by Los Rios CCD.

Exhibit 16: Awards (degrees and certificates) from community college programs aligned with the Education and Human Development occupations

Program Name (TOP)	Los Rios CCD 3-Year Average (2021-2024)	Greater Sacramento 3-Year Average (2021-2024)	NFN 3-Year Average (2021-2024)
Child and Adolescent Development (1305.10)	8	28	52
Child Development Administration and Management (1305.80)	19	21	21
Child Development/Early Care and Education (1305.00)	284	717	1,030
Children with Special Needs (1305.20)	3	3	3
Family Studies (1308.00)	-	-	10
Infants and Toddlers (1305.90)	13	18	18
Other Education (0899.00)	-	1	1
Parenting and Family Education (1305.60)	-	-	7
Recreation (0836.00)	1	11	15
Recreation Assistant (0836.10)	-	1	1
Sign Language Interpreting (0850.10)	12	29	29
Special Education (0809.00)	-	-	3
The School Age Child (1305.50)	3	4	4

Source: California Community Colleges Chancellor's Management Information Systems DataMart

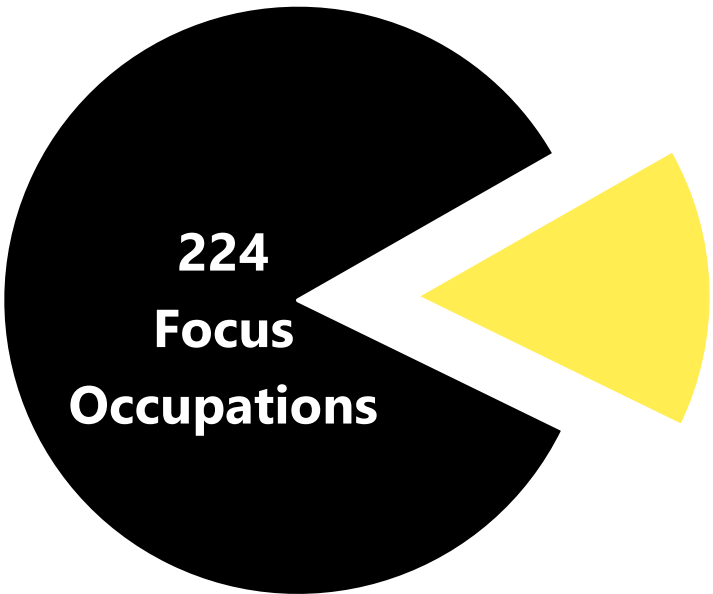
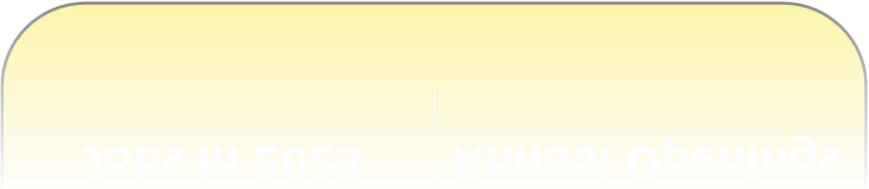
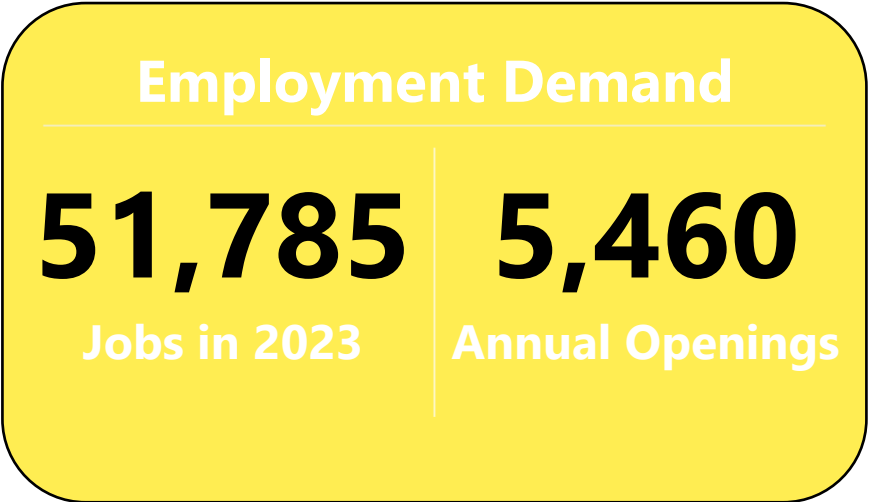
ENERGY, CONSTRUCTION, AND UTILITIES



Community College Supply



41 Energy, Construction, and Utilities Occupations



Demand

In 2023 in the district service area, there were 51,785 jobs in the 41 focus occupations in Energy, Construction, and Utilities. Exhibit 17 shows the annual openings and wage for each occupation.

Exhibit 17: Current employment, projected occupational demand, and entry-level wages of focus occupations in Energy, Construction, and Utilities

Criteria Met	SOC	Occupation	2023 Jobs	5-Year Change	Annual Openings	Entry-Level Hourly Wage
Both	47-1011	First-Line Supervisors of Construction Trades and Extraction Workers	6,394	505	638	\$34.27
	47-2073	Operating Engineers and Other Construction Equipment Operators	3,075	276	325	\$30.24
	47-4011	Construction and Building Inspectors	1,044	71	137	\$33.30
	49-2022	Telecommunications Equipment Installers and Repairers, Except Line Installers	1,116	(1)	119	\$28.24
	51-8031	Water and Wastewater Treatment Plant and System Operators	853	61	94	\$32.97
	49-9051	Electrical Power-Line Installers and Repairers	858	124	94	\$38.35
	17-3011	Architectural and Civil Drafters	828	29	84	\$28.55
	49-9052	Telecommunications Line Installers and Repairers	758	51	79	\$29.27
	17-3022	Civil Engineering Technologists and Technicians	508	69	62	\$32.05
	17-3031	Surveying and Mapping Technicians	425	25	56	\$26.97
2023 Jobs	47-2031	Carpenters	12,089	254	1,079	\$22.02
	47-2111	Electricians	6,291	958	780	\$24.77
	49-9021	Heating, Air Conditioning, and Refrigeration Mechanics and Installers	3,748	387	406	\$23.31
	47-2152	Plumbers, Pipefitters, and Steamfitters	3,609	347	393	\$22.75

Criteria Met	SOC	Occupation	2023 Jobs	5-Year Change	Annual Openings	Entry-Level Hourly Wage
2023 Jobs	49-9099	Installation, Maintenance, and Repair Workers, All Other	2,043	100	217	\$18.39
	47-2231	Solar Photovoltaic Installers	718	159	101	\$21.66
	51-8021	Stationary Engineers and Boiler Operators	824	50	98	\$22.60
	51-7011	Cabinetmakers and Bench Carpenters	779	(28)	77	\$19.34
	47-2211	Sheet Metal Workers	603	59	70	\$22.85
	47-2121	Glaziers	630	25	68	\$23.96
	49-2098	Security and Fire Alarm Systems Installers	582	20	66	\$24.82
	47-2221	Structural Iron and Steel Workers	583	26	57	\$23.80
	47-2021	Brickmasons and Blockmasons	431	60	51	\$21.62
	19-4042	Environmental Science and Protection Technicians, Including Health	408	32	49	\$19.68
	17-3025	Environmental Engineering Technologists and Technicians	314	12	31	\$23.63
	49-2097	Audiovisual Equipment Installers and Repairers	294	(13)	29	\$24.81
	47-2022	Stonemasons	270	8	25	\$22.59
	47-2171	Reinforcing Iron and Rebar Workers	279	6	25	\$22.93
Living Wage	51-8013	Power Plant Operators	188	23	22	\$46.39
	49-2095	Electrical and Electronics Repairers, Powerhouse, Substation, and Relay	177	18	19	\$46.40
	47-4021	Elevator and Escalator Installers and Repairers	173	15	18	\$39.57
	47-2071	Paving, Surfacing, and Tamping Equipment Operators	172	13	18	\$28.52
	17-3019	Drafters, All Other	153	0	13	\$26.21
	51-8012	Power Distributors and Dispatchers	130	4	12	\$53.04

Criteria Met	SOC	Occupation	2023 Jobs	5-Year Change	Annual Openings	Entry-Level Hourly Wage
Living Wage	47-4061	Rail-Track Laying and Maintenance Equipment Operators	133	4	11	\$26.12
	49-2021	Radio, Cellular, and Tower Equipment Installers and Repairers	83	4	9	\$27.59
	47-2132	Insulation Workers, Mechanical	63	9	7	\$35.58
	19-4044	Hydrologic Technicians	66	0	7	\$27.24
	51-8092	Gas Plant Operators	15	16	5	\$46.66
	49-9081	Wind Turbine Service Technicians	36	7	5	\$27.80
	47-2011	Boilermakers	42	3	4	\$35.47

Source: Lightcast 2024.3, QCEW Employees, Non-QCEW Employees, and Self Employed



Supply

From 2021 to 2024, community colleges in the North Far North region awarded an average of 623 awards annually across 16 programs aligned with all Energy, Construction, and Utilities occupations. At Los Rios Community College District (CCD), an average of 488 awards were conferred each year, compared to 511 in the Greater Sacramento subregion. The top-producing program at Los Rios CCD was Carpentry, with an average of 169 awards annually. Approximately 95% of all awards in the Greater Sacramento subregion were conferred by Los Rios CCD.

Exhibit 18: Awards (degrees and certificates) from community college programs aligned with the Energy, Construction, and Utilities occupations

Program Name (TOP)	Los Rios CCD 3-Year Average (2021-2024)	Greater Sacramento 3-Year Average (2021-2024)	NFN 3-Year Average (2021-2024)
Architectural Drafting (0953.10)	2	14	15
Architecture and Architectural Technology (0201.00)	24	24	24
Carpentry (0952.10)	169	169	182
Civil and Construction Management Technology (0957.00)	21	25	25
Construction Crafts Technology (0952.00)	8	9	20
Construction Inspection (0957.20)	4	4	4
Drafting Technology (0953.00)	13	16	36
Drywall and Insulation (0952.80)	79	79	79
Electrical (0952.20)	43	43	60
Energy Systems Technology (0946.10)	-	-	7
Environmental Control Technology (0946.00)	51	51	84
Mill and Cabinet Work (0952.50)	3	3	10
Painting, Decorating, and Flooring (0952.70)	0	0	0
Plumbing, Pipefitting and Steamfitting (0952.30)	30	30	30
Sheet Metal and Structural Metal (0956.40)	36	36	36
Water and Wastewater Technology (0958.00)	5	8	11

Source: California Community Colleges Chancellor's Management Information Systems DataMart

HEALTH



Community College Supply



33 Health Occupations



Demand

In 2023 in the district service area, there were 129,904 jobs in the 33 focus occupations in Health. Exhibit 19 shows the annual openings and wage for each occupation.

Exhibit 19: Current employment, projected occupational demand, and entry-level wages of focus occupations in Health

Criteria Met	SOC	Occupation	2023 Jobs	5-Year Change	Annual Openings	Entry-Level Hourly Wage
Both	29-1141	Registered Nurses	22,915	2,736	1,855	\$58.52
	29-2061	Licensed Practical and Licensed Vocational Nurses	4,663	630	503	\$31.83
	29-1292	Dental Hygienists	2,648	248	229	\$52.77
	29-2034	Radiologic Technologists and Technicians	1,486	202	123	\$39.91
	31-2021	Physical Therapist Assistants	449	81	82	\$35.02
	29-1126	Respiratory Therapists	965	123	75	\$47.49
	29-2055	Surgical Technologists	620	96	58	\$35.92
	29-2032	Diagnostic Medical Sonographers	620	94	53	\$53.99
	29-2043	Paramedics	440	48	31	\$26.42
2023 Jobs	31-1128	Home Health and Personal Care Aides	53,460	11,981	11,083	\$15.52
	31-9092	Medical Assistants	7,770	1,105	1,272	\$22.22
	31-1131	Nursing Assistants	6,334	1,051	1,180	\$19.28
	43-6013	Medical Secretaries and Administrative Assistants	7,299	734	942	\$20.85
	31-9091	Dental Assistants	3,221	344	532	\$23.38
	21-1093	Social and Human Service Assistants	3,752	607	529	\$19.48
	29-2052	Pharmacy Technicians	2,692	160	278	\$22.42
	31-9011	Massage Therapists	1,387	208	239	\$15.68
	29-2099	Health Technologists and Technicians, All Other	1,498	276	163	\$23.65

Criteria Met	SOC	Occupation	2023 Jobs	5-Year Change	Annual Openings	Entry-Level Hourly Wage
2023 Jobs	31-9099	Healthcare Support Workers, All Other	955	109	156	\$20.75
	31-9097	Phlebotomists	786	159	141	\$21.87
	29-2072	Medical Records Specialists	1,267	135	115	\$23.04
	29-2042	Emergency Medical Technicians	1,165	98	105	\$18.70
	29-2053	Psychiatric Technicians	708	170	98	\$19.59
	31-9093	Medical Equipment Preparers	572	57	91	\$24.07
	29-2081	Opticians, Dispensing	658	53	67	\$22.06
	21-1094	Community Health Workers	433	85	63	\$21.47
Living Wage	29-2031	Cardiovascular Technologists and Technicians	344	35	29	\$28.97
	31-2011	Occupational Therapy Assistants	143	29	27	\$34.34
	29-9021	Health Information Technologists and Medical Registrars	204	32	19	\$35.36
	29-2035	Magnetic Resonance Imaging Technologists	223	33	19	\$48.24
	29-2033	Nuclear Medicine Technologists	115	11	8	\$65.64
	29-1124	Radiation Therapists	94	11	6	\$73.21
	29-2036	Medical Dosimetrists	18	3	2	\$82.74

Source: Lightcast 2024.3, QCEW Employees, Non-QCEW Employees, and Self Employed



Supply

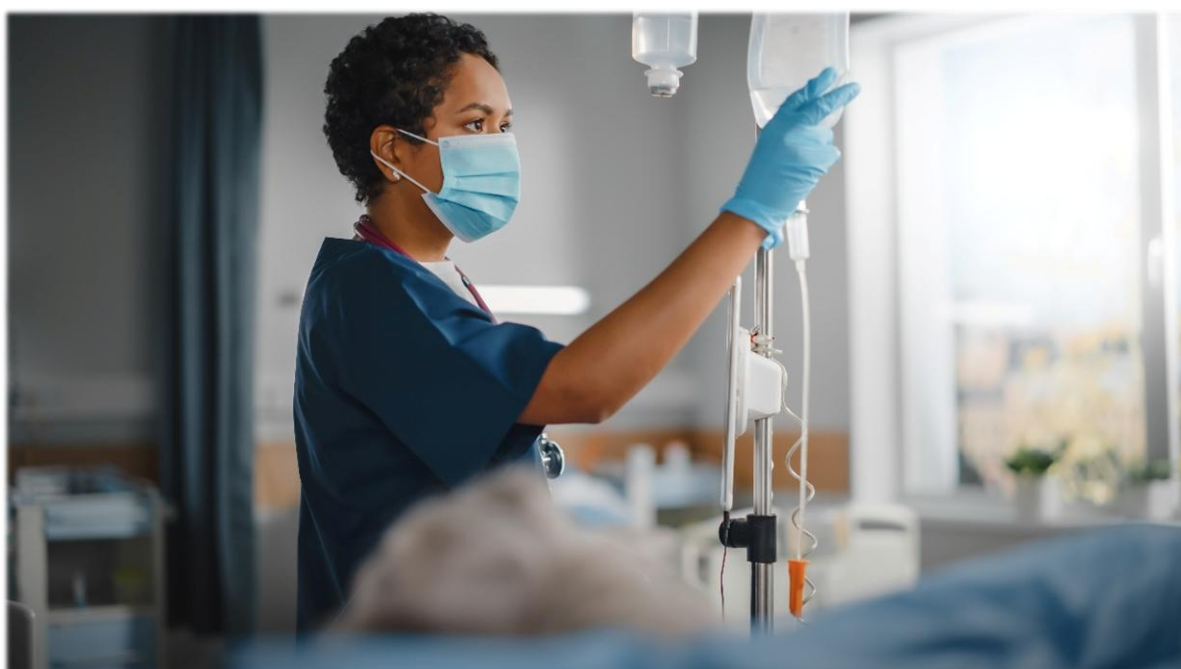
From 2021 to 2024, community colleges in the North Far North region awarded an average of 2,309 awards annually across 29 programs aligned with all Health occupations. At Los Rios Community College District (CCD), an average of 627 awards were conferred each year, compared to 1,406 in the Greater Sacramento subregion. The top-producing program at Los Rios CCD was Health Occupations, General, with an average of 130 awards annually. Approximately 45% of all awards in the Greater Sacramento subregion were conferred by Los Rios CCD.

Exhibit 20: Awards (degrees and certificates) from community college programs aligned with the Health occupations

Program Name (TOP)	Los Rios CCD 3-Year Average (2021-2024)	Greater Sacramento 3-Year Average (2021-2024)	NFN 3-Year Average (2021-2024)
Administrative Medical Assisting (1208.20)	13	18	18
Alcohol and Controlled Substances (2104.40)	20	38	54
Certified Nurse Assistant (1230.30)	12	12	126
Community Health Care Worker (1261.00)	12	12	12
Dental Assistant (1240.10)	15	19	37
Dental Hygienist (1240.20)	17	17	27
Diagnostic Medical Sonography (1227.00)	7	7	7
Emergency Medical Services (1250.00)	15	38	79
Gerontology (1309.00)	13	13	13
Health Information Coding (1223.10)	5	5	10
Health Information Technology (1223.00)	18	18	39
Health Occupations, General (1201.00)	130	698	719
Home Health Aide (1230.80)	4	4	4
Licensed Vocational Nursing (1230.20)	45	45	153
Medical Assisting (1208.00)	31	47	63
Medical Laboratory Technology (1205.00)	12	12	12
Medical Office Technology (0514.20)	-	3	58

Program Name (TOP)	Los Rios CCD 3-Year Average (2021-2024)	Greater Sacramento 3-Year Average (2021-2024)	NFN 3-Year Average (2021-2024)
Nutrition, Foods, and Culinary Arts (1306.00)	20	23	30
Occupational Therapy Technology (1218.00)	16	16	16
Optical Technology (1219.00)	1	1	1
Other Health Occupations (1299.00)	10	15	15
Paramedic (1251.00)	6	9	188
Pharmacy Technology (1221.00)	12	12	12
Physical Therapist Assistant (1222.00)	21	21	43
Psychiatric Technician (1239.00)	-	11	11
Radiologic Technology (1225.00)	6	27	27
Registered Nursing (1230.10)	120	219	473
Respiratory Care/Therapy (1210.00)	13	13	29
Speech/Language Pathology and Audiology (1220.00)	33	33	33

Source: California Community Colleges Chancellor's Management Information Systems DataMart



ICT/ DIGITAL MEDIA

Community College Supply

Employment Demand

19,233

Jobs in 2023

1,413

Annual Openings

589

Awards

10 ICT/Digital Media Occupations

224
Focus
Occupations

6

met both criteria

3

met 2023 jobs criteria

1

met living wage criteria

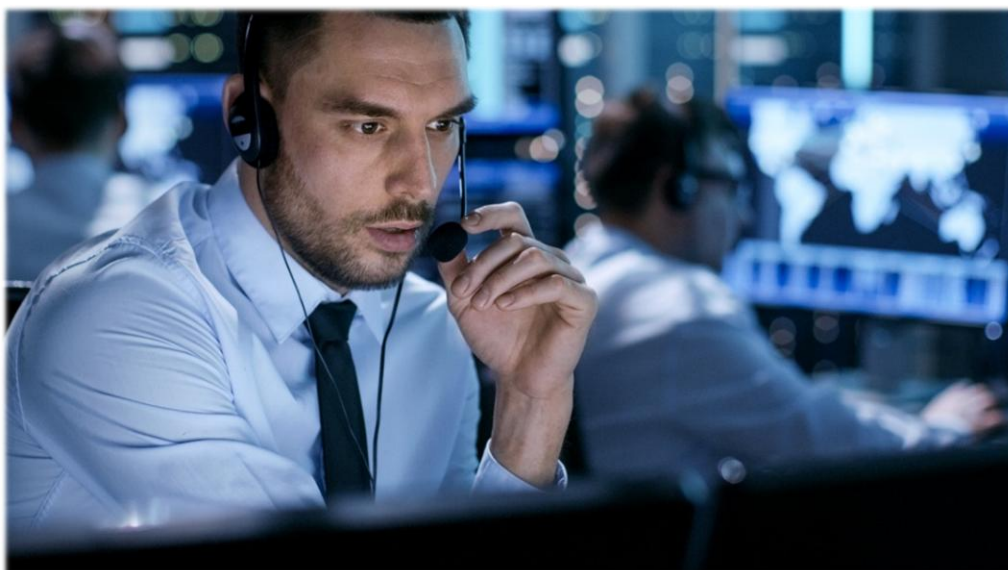
Demand

In 2023 in the district service area, there were 19,233 jobs in the 10 focus occupations in ICT/Digital Media. Exhibit 21 shows the annual openings and wage for each occupation.

Exhibit 21: Current employment, projected occupational demand, and entry-level wages of focus occupations in ICT/Digital Media

Criteria Met	SOC	Occupation	2023 Jobs	5-Year Change	Annual Openings	Entry-Level Hourly Wage
Both	15-1232	Computer User Support Specialists	13,398	170	926	\$35.10
	15-1244	Network and Computer Systems Administrators	1,662	92	113	\$36.47
	15-1231	Computer Network Support Specialists	683	53	58	\$30.94
	15-1255	Web and Digital Interface Designers	615	42	53	\$27.43
	15-1241	Computer Network Architects	632	11	36	\$46.84
	15-1254	Web Developers	448	37	36	\$28.78
2023 Jobs	27-4021	Photographers	988	(37)	90	\$16.69
	27-2011	Actors	376	51	56	\$15.62
	27-4011	Audio and Video Technicians	380	26	40	\$20.11
Living Wage	43-9031	Desktop Publishers	51	(4)	5	\$28.52

Source: Lightcast 2024.3, QCEW Employees, Non-QCEW Employees, and Self Employed



Supply

From 2021 to 2024, community colleges in the North Far North region awarded an average of 1,139 awards annually across 31 programs aligned with all ICT/Digital Media occupations. At Los Rios Community College District (CCD), an average of 589 awards were conferred each year, compared to 884 in the Greater Sacramento subregion. The top-producing program at Los Rios CCD was Computer Infrastructure and Support, with an average of 81 awards annually. Approximately 67% of all awards in the Greater Sacramento subregion were conferred by Los Rios CCD.

Exhibit 22: Awards (degrees and certificates) from community college programs aligned with the ICT/Digital Media occupations

Program Name (TOP)	Los Rios CCD 3-Year Average (2021-2024)	Greater Sacramento 3-Year Average (2021-2024)	NFN 3-Year Average (2021-2024)
Animation (0614.40)	11	11	11
Applied Photography (1012.00)	15	39	43
Broadcast Journalism (0604.30)	0	0	0
Commercial Art (1013.00)	-	0	0
Commercial Music (1005.00)	36	38	45
Computer Graphics and Digital Imagery (0614.60)	4	4	4
Computer Information Systems (0702.00)	26	31	56
Computer Infrastructure and Support (0708.00)	81	84	108
Computer Networking (0708.10)	57	95	140
Computer Programming (0707.10)	67	104	104
Computer Software Development (0707.00)	20	20	20
Computer Support (0708.20)	16	16	18
Computer Systems Analysis (0707.30)	8	15	15
Database Design and Administration (0707.20)	18	18	18
Digital Media (0614.00)	62	62	65
Electronic Game Design (0614.20)	7	7	7
Film Production (0612.20)	10	19	19
Geographic Information Systems (2206.10)	13	16	25
Graphic Art and Design (1030.00)	-	71	92

Program Name (TOP)	Los Rios CCD 3-Year Average (2021-2024)	Greater Sacramento 3-Year Average (2021-2024)	NFN 3-Year Average (2021-2024)
Information Technology, General (0701.00)	41	41	42
Journalism (0602.00)	16	24	28
Multimedia (0614.10)	-	34	44
Office Technology/Office Computer Applications (0514.00)	16	54	121
Other Information Technology (0799.00)	-	0	0
Radio (0604.10)	1	1	1
Radio and Television (0604.00)	10	19	33
Software Applications (0702.10)	17	22	22
Telecommunications Technology (0934.30)	7	7	7
Television (including combined TV/Film/Video) (0604.20)	14	14	32
Website Design and Development (0614.30)	12	14	14
World Wide Web Administration (0709.00)	4	4	5

Source: California Community Colleges Chancellor's Management Information Systems DataMart



LIFE SCIENCES AND BIOTECHNOLOGY

Community College Supply

Employment Demand

5,395

Jobs in 2023

635

Annual Openings

45

Awards

4 Life Sciences and Biotechnology Occupations

224
Focus
Occupations

1

met both criteria

2

met 2023 jobs criteria

1

met living wage criteria

Demand

In 2023 in the district service area, there were 5,395 jobs in the 4 focus occupations in Life Sciences and Biotechnology. Exhibit 23 shows the annual openings and wage for each occupation.

Exhibit 23: Current employment, projected occupational demand, and entry-level wages of focus occupations in Life Sciences and Biotechnology

Criteria Met	SOC	Occupation	2023 Jobs	5-Year Change	Annual Openings	Entry-Level Hourly Wage
Both	29-2018	Clinical Laboratory Technologists and Technicians	1,993	269	188	\$25.65
2023 Jobs	51-9061	Inspectors, Testers, Sorters, Samplers, and Weighers	1,996	156	268	\$18.95
	19-4099	Life, Physical, and Social Science Technicians, All Other	970	34	127	\$21.86
Living Wage	49-9062	Medical Equipment Repairers	436	50	52	\$28.99

Source: Lightcast 2024.3, QCEW Employees, Non-QCEW Employees, and Self Employed

Supply

From 2021 to 2024, community colleges in the North Far North region awarded an average of 45 awards annually across 3 programs aligned with all Life Sciences and Biotechnology occupations. Within the Greater Sacramento subregion, the same average of 45 awards per year was observed—all of which were conferred by Los Rios Community College District (CCD). The top-producing program at Los Rios CCD was Laboratory Science Technology, with an average of 30 awards annually.

Exhibit 24: Awards (degrees and certificates) from community college programs aligned with the Life Sciences and Biotechnology occupations

Program Name (TOP)	Los Rios CCD 3-Year Average (2021-2024)	Greater Sacramento 3-Year Average (2021-2024)	NFN 3-Year Average (2021-2024)
Biomedical Instrumentation (0934.60)	10	10	10
Biotechnology and Biomedical Technology (0430.00)	5	5	5
Laboratory Science Technology (0955.00)	30	30	30

Source: California Community Colleges Chancellor's Management Information Systems DataMart

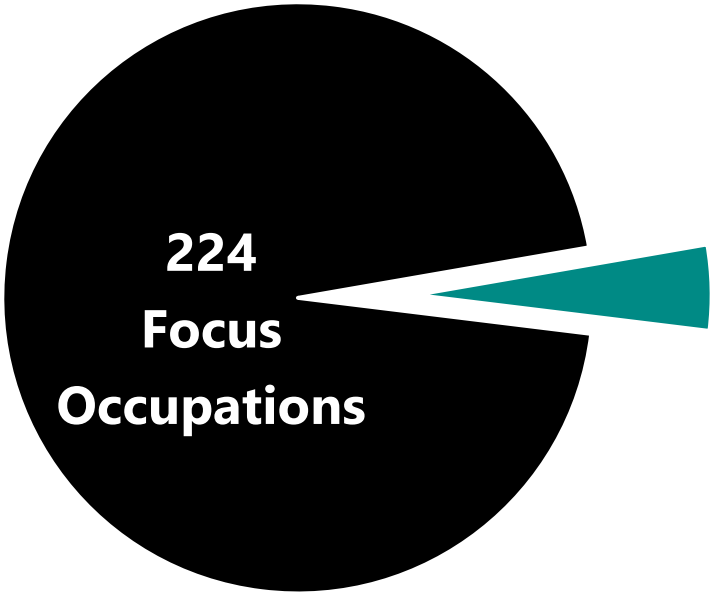
OTHER/ UNASSIGNED



Community College Supply



11 Other/Unassigned Occupations



Demand

In 2023 in the district service area, there were 12,187 jobs in the 11 focus occupations in Other/Unassigned. Exhibit 25 shows the annual openings and wage for each occupation.

Exhibit 25: Current employment, projected occupational demand, and entry-level wages of focus occupations in Other/Unassigned

Criteria Met	SOC	Occupation	2023 Jobs	5-Year Change	Annual Openings	Entry-Level Hourly Wage
Both	23-2011	Paralegals and Legal Assistants	2,946	288	369	\$28.61
2023 Jobs	39-9031	Exercise Trainers and Group Fitness Instructors	3,114	428	693	\$17.65
	43-4031	Court, Municipal, and License Clerks	2,177	258	279	\$24.02
	43-6012	Legal Secretaries and Administrative Assistants	1,272	(23)	146	\$23.15
	25-4031	Library Technicians	430	22	79	\$21.17
	27-3091	Interpreters and Translators	657	19	72	\$22.72
	49-2011	Computer, Automated Teller, and Office Machine Repairers	681	(62)	63	\$18.43
	23-2099	Legal Support Workers, All Other	390	33	50	\$22.52
	19-4061	Social Science Research Assistants	251	10	33	\$20.92
Living Wage	27-3092	Court Reporters and Simultaneous Captioners	202	10	23	\$32.01
	11-9131	Postmasters and Mail Superintendents	67	3	6	\$38.55

Source: Lightcast 2024.3, QCEW Employees, Non-QCEW Employees, and Self Employed



Supply

From 2021 to 2024, community colleges in the North Far North region awarded an average of 289 awards annually across 6 programs aligned with all Other/Unassigned occupations. At Los Rios Community College District (CCD), an average of 190 awards were conferred each year, compared to 197 in the Greater Sacramento subregion. The top-producing program at Los Rios CCD was Paralegal, with an average of 88 awards annually. Approximately 96% of all awards in the Greater Sacramento subregion were conferred by Los Rios CCD.

Exhibit 26: Awards (degrees and certificates) from community college programs aligned with the Other/Unassigned occupations

Program Name (TOP)	Los Rios CCD 3-Year Average (2021-2024)	Greater Sacramento 3-Year Average (2021-2024)	NFN 3-Year Average (2021-2024)
Fitness Trainer (0835.20)	-	2	4
Human Services (2104.00)	77	81	144
Library Technician (Aide) (1602.00)	19	19	19
Other Engineering and Related Industrial Technologies (0999.00)	1	1	28
Paralegal (1402.00)	88	88	88
Technical Theater (1006.00)	5	6	6

Source: California Community Colleges Chancellor's Management Information Systems DataMart



PUBLIC SAFETY



Community College Supply

Employment Demand

26,723

Jobs in 2023

3,407

Annual Openings

273

Awards

Jobs in 2023

Annual Openings

16 Public Safety Occupations

8

met both criteria

2

met 2023 jobs criteria

6

met living wage criteria

224
Focus
Occupations

Demand

In 2023 in the district service area, there were 26,723 jobs in the 16 focus occupations in Public Safety. Exhibit 27 shows the annual openings and wage for each occupation.

Exhibit 27: Current employment, projected occupational demand, and entry-level wages of focus occupations in Public Safety

Criteria Met	SOC	Occupation	2023 Jobs	5-Year Change	Annual Openings	Entry-Level Hourly Wage
Both	33-3051	Police and Sheriff's Patrol Officers	5,771	652	592	\$41.94
	33-3012	Correctional Officers and Jailers	2,031	501	295	\$27.77
	33-2011	Firefighters	2,456	262	243	\$36.09
	33-3021	Detectives and Criminal Investigators	1,609	155	154	\$40.25
	43-5031	Public Safety Telecommunicators	717	80	91	\$30.72
	33-1012	First-Line Supervisors of Police and Detectives	825	126	83	\$64.45
	33-1011	First-Line Supervisors of Correctional Officers	622	105	74	\$54.39
	33-1021	First-Line Supervisors of Firefighting and Prevention Workers	630	67	53	\$63.65
2023 Jobs	33-9032	Security Guards	10,864	839	1,659	\$18.12
	33-1091	First-Line Supervisors of Security Workers	502	37	55	\$21.43
Living Wage	33-3011	Bailiffs	357	30	57	\$38.19
	19-4092	Forensic Science Technicians	145	30	25	\$39.01
	33-2021	Fire Inspectors and Investigators	73	12	9	\$38.96
	33-3031	Fish and Game Wardens	38	15	8	\$41.87
	33-2022	Forest Fire Inspectors and Prevention Specialists	51	9	6	\$32.09
	33-3052	Transit and Railroad Police	32	3	3	\$52.18

Source: Lightcast 2024.3, QCEW Employees, Non-QCEW Employees, and Self Employed

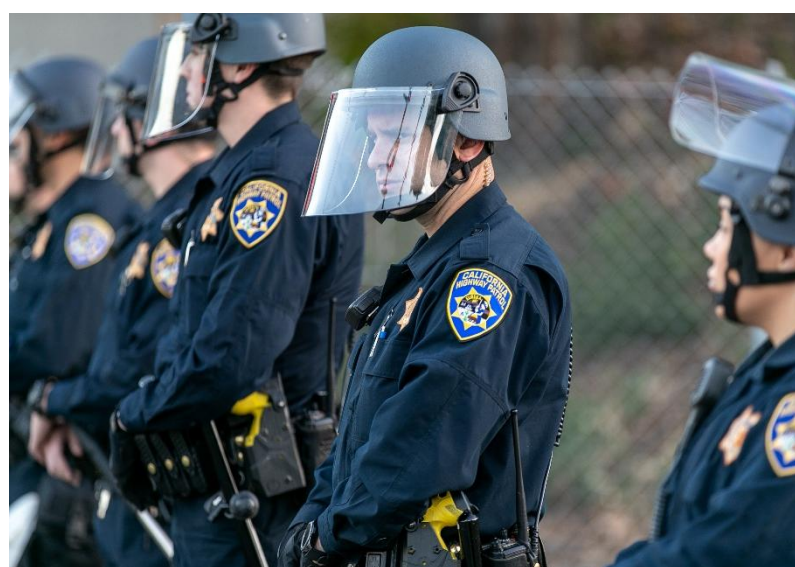
Supply

From 2021 to 2024, community colleges in the North Far North region awarded an average of 1,444 awards annually across 7 programs aligned with all Public Safety occupations. At Los Rios Community College District (CCD), an average of 273 awards were conferred each year, compared to 736 in the Greater Sacramento subregion. The top-producing program at Los Rios CCD was Administration of Justice, with an average of 222 awards annually. Approximately 37% of all awards in the Greater Sacramento subregion were conferred by Los Rios CCD.

Exhibit 28: Awards (degrees and certificates) from community college programs aligned with the Public Safety occupations

Program Name (TOP)	Los Rios CCD 3-Year Average (2021-2024)	Greater Sacramento 3-Year Average (2021-2024)	NFN 3-Year Average (2021-2024)
Administration of Justice (2105.00)	222	438	655
Corrections (2105.10)	-	5	5
Fire Academy (2133.50)	13	94	407
Fire Technology (2133.00)	38	140	191
Forensics, Evidence, and Investigation (2105.40)	-	-	0
Other Public and Protective Services (2199.00)	-	0	0
Police Academy (2105.50)	-	59	186

Source: California Community Colleges Chancellor's Management Information Systems DataMart



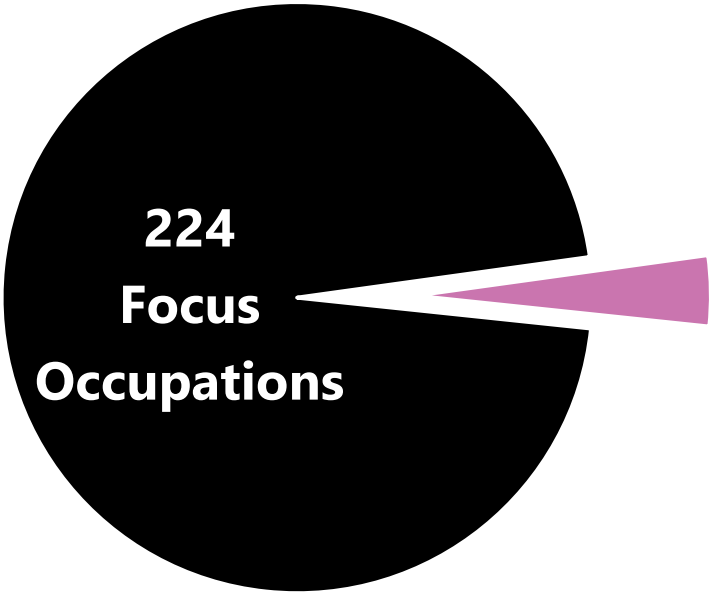
RETAIL, HOSPITALITY, AND TOURISM



Community College Supply



9 Retail, Hospitality, and Tourism Occupations



Demand

In 2023 in the district service area, there were 22,912 jobs in the 9 focus occupations in Retail, Hospitality, and Tourism. Exhibit 29 shows the annual openings and wage for each occupation.

Exhibit 29: Current employment, projected occupational demand, and entry-level wages of focus occupations in Retail, Hospitality, and Tourism

Criteria Met	SOC	Occupation	2023 Jobs	5-Year Change	Annual Openings	Entry-Level Hourly Wage
2023 Jobs	35-1012	First-Line Supervisors of Food Preparation and Serving Workers	7,447	949	1,344	\$18.10
	41-1011	First-Line Supervisors of Retail Sales Workers	7,932	131	827	\$18.29
	11-9051	Food Service Managers	2,828	235	371	\$20.36
	35-1011	Chefs and Head Cooks	1,614	163	232	\$22.36
	37-1011	First-Line Supervisors of Housekeeping and Janitorial Workers	1,638	137	223	\$20.77
	39-1014	First-Line Supervisors of Entertainment and Recreation Workers, Except Gambling Services	1,049	122	143	\$18.62
Living Wage	39-1013	First-Line Supervisors of Gambling Services Workers	262	78	48	\$30.63
	53-2031	Flight Attendants	85	61	27	\$31.83
	11-9071	Gambling Managers	57	10	8	\$39.96

Source: Lightcast 2024.3, QCEW Employees, Non-QCEW Employees, and Self Employed

Supply

From 2021 to 2024, community colleges in the North Far North region awarded an average of 197 awards annually across 10 programs aligned with all Retail, Hospitality, and Tourism occupations. At Los Rios Community College District (CCD), an average of 77 awards were conferred each year, compared to 119 in the Greater Sacramento subregion. The top-producing program at Los Rios CCD was Restaurant and Food Services and Management, with an average of 33 awards annually. Approximately 65% of all awards in the Greater Sacramento subregion were conferred by Los Rios CCD.

Exhibit 30: Awards (degrees and certificates) from community college programs aligned with the Retail, Hospitality, and Tourism occupations

Program Name (TOP)	Los Rios CCD 3-Year Average (2021-2024)	Greater Sacramento 3-Year Average (2021-2024)	NFN 3-Year Average (2021-2024)
Culinary Arts (1306.30)	15	39	50
Family and Consumer Sciences, General (1301.00)	-	-	49
Fashion (1303.00)	-	11	11
Fashion Design (1303.10)	6	8	8
Fashion Merchandising (1303.20)	4	7	10
Hospitality (1307.00)	-	2	5
Interior Design and Merchandising (1302.00)	15	15	15
Office Management (0514.40)	2	2	2
Restaurant and Food Services and Management (1307.10)	33	33	33
Retail Store Operations and Management (0506.50)	2	2	14

Source: California Community Colleges Chancellor's Management Information Systems DataMart



STRONG WORKFORCE PROGRAM DATA

CTE STUDENT COUNTS (2022-2023)

48,235	69,504	92,358
Los Rios CCD	Greater Sac.	North Far North

CTE AWARDS (2021-2024 AVERAGE)

4,361	7,357	11,228
Los Rios CCD	Greater Sac.	North Far North

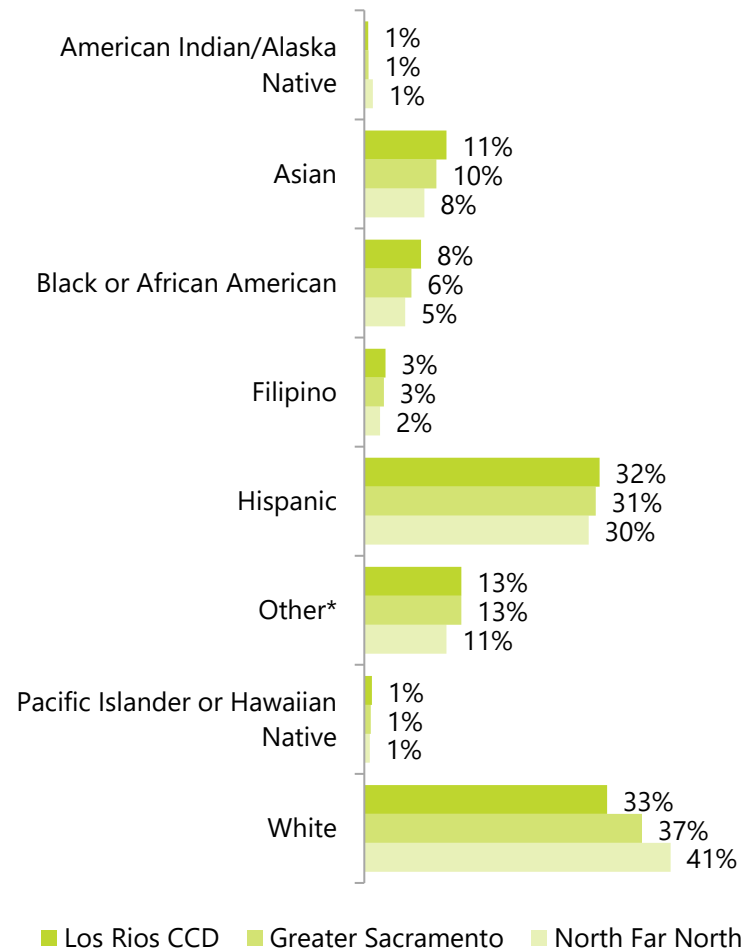
SWP OUTCOMES SUMMARY: TOP PERFORMING PROGRAM AREAS

MEDIAN ANNUAL EARNINGS AFTER EXIT	Computer Support (0708.20)	\$132,832
	Construction Crafts Tech. (0952.00)	\$129,132
	Fire Academy (2133.50)	\$123,972
	Computer Info. Systems (0702.00)	\$121,480
	Registered Nursing (1230.10)	\$120,422
MEDIAN CHANGE IN EARNINGS	Vet. Tech. (Licensed) (0102.10)	344%
	Auto Collision Repair (0949.00)	284%
	Aero. and Aviation Tech. (0950.00)	156%
	Aviation Airframe Mech. (0950.10)	136%
	Dental Hygienist (1240.20)	133%
ATTAINED A LIVING WAGE	Plumbing, Pipefitting and Steamfitting (0952.30)	98%
	Fire Academy (2133.50)	89%
	Registered Nursing (1230.10)	87%
	Medical Laboratory Tech. (1205.00)	86%
	Computer Info. Systems (0702.00)	85%

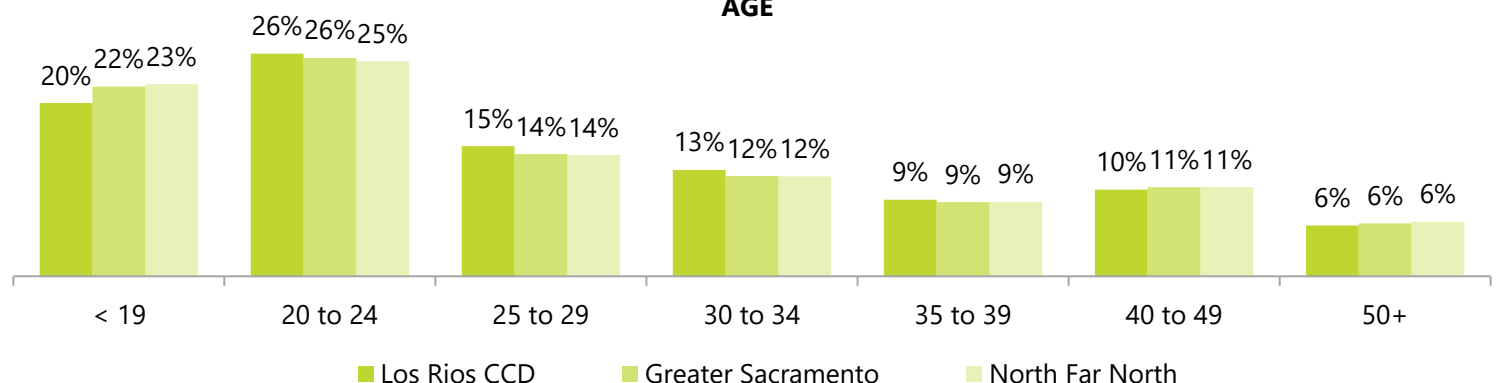
GENDER

	Female	Male	Non-Binary	Unknown/Masked
Los Rios CCD	46%	51%	1%	2%
Greater Sac.	47%	51%	1%	2%
North Far North	48%	50%	1%	2%

RACE/ETHNICITY



AGE



CONCLUSION

This report identifies key focus occupations across each sector in El Dorado, Placer, Sacramento, and Yolo Counties, analyzing both demand and supply data to illuminate workforce gaps. Demand data reflects 2023 job count as well as projected annual job openings through 2028, while supply data compares educational awards across Los Rios Community College District, the Greater Sacramento subregion, and the North Far North region. Together, these insights offer a foundation for targeted workforce development interventions.

The occupational analysis emphasizes the critical role of the 224 focus occupations, which accounted for 43% of all jobs in 2023 and are projected to generate 64,922 annual openings through 2028. These occupations span 12 CCCC sectors, with Energy, Construction, and Utilities representing the largest share (41 occupations). The Health sector had the highest projected change in jobs (17%) and annual job openings (20,173), while ICT/Digital Media offers the highest entry-level wage at \$33.43 per hour.

Notably, all 12 sectors show a partial undersupply of educational awards relative to job openings. Among the sectors, Health boasts the most substantial gap (19,546), followed by Business and Entrepreneurship (16,991); Life Sciences and Biotechnology shows the lowest gap (590).

It should be noted that not all occupations within each sector were studied in this report. Also, supply data does not include non-community college awards. Therefore, both annual openings and the number of awards conferred are undercounted.

When reviewing the data in this report, regional community colleges could consider the following questions:

- How is labor market data being utilized to guide the development of high-wage, high-demand academic and career pathways?
- How is your college ensuring that curriculum design aligns with evolving industry standards while embedding inclusive pedagogy to support success for all students?
- How is your college structuring new or existing programs to attract diverse student populations, foster persistence, and drive equitable outcomes?
- How is your college collaborating with local employers and industry groups to advance inclusive hiring practices?
- What insights has your college gained from previous outreach strategies (e.g., marketing campaigns, grassroots partnerships), and how can those approaches be leveraged to boost enrollment in high demand and/or high-wage career pathways?

APPENDIX A: BLS OCCUPATIONS VS FOCUS OCCUPATIONS

Of the 796 occupations classified by BLS, 224 met one of the three criteria identified for this report, representing 28% of the total number of occupations in the BLS SOC system that qualified.

The 224 occupations analyzed in this report comprise 43% of all El Dorado, Placer, Sacramento, and Yolo Counties' jobs in 2023 and 42% of its annual openings. Exhibit 31 visualizes the total number of occupations compared to those analyzed in this report by CCCCCO sector.

Exhibit 31: Number of BLS Occupations vs. Number Analyzed in this Report by Sector

Sector	Total # of BLS Occupations	Total # of Occupations in this Report	% of Total BLS Occupations
Advanced Manufacturing	104	26	25%
Advanced Transportation and Logistics	62	29	47%
Agriculture, Water, and Environmental Technologies	42	10	24%
Business and Entrepreneurship	101	31	31%
Education and Human Development	35	4	11%
Energy, Construction, and Utilities	113	41	36%
Health	101	33	33%
ICT/Digital Media	49	10	20%
Life Sciences and Biotechnology	8	4	50%
Other/Unassigned	102	11	11%
Public Safety	29	16	55%
Retail, Hospitality, and Tourism	50	9	18%
Grand Total	796	224	28%

APPENDIX B: METHODOLOGY AND DATA SOURCES

Traditional Labor Market Data

This report uses labor market data on job growth, education requirements, and wages to identify occupations in the North Far North (NFN) region that provide economic opportunity for jobseekers.

The data sources used in this study include data from Lightcast (Datarun 2024.3), a labor market analytics firm that specializes in providing insights for workforce development, economic planning, and education. Lightcast compiles its regional and occupational datasets from a variety of federal and state sources. Among these are the Quarterly Census of Employment and Wages (QCEW), which offers detailed industry employment and wage data, and other critical sources such as the U.S. Census Bureau's American Community Survey (ACS) and Quarterly Workforce Indicators, the Bureau of Labor Statistics' Occupational Employment and Wage Statistics and Current Population Survey, and data from the Bureau of Economic Analysis. These combined resources provide comprehensive insights into employment trends, wage patterns, and industry-specific workforce characteristics across the region.

The traditional labor market data analyzed in this report includes:

- 2023 Jobs: the number of jobs by occupation in 2023.
- 2028 Jobs: the projected number of jobs by occupation in 2028. Projections are based on the assumption that past trends will continue into the future, including the assumption that the economy, during the projection period, will be at approximately full employment. Projections do not consider potential recessions or labor shocks, such as natural disasters or pandemics, and are intended to capture structural change in the economy over time.
- Change: the projected change in the number of jobs expressed as an actual number and a percentage.
- Average Annual Openings (Demand): the projected number of annual job openings. This figure is the sum of job growth and replacement jobs. Job growth is the result of job creation while replacement jobs are the result of retirements and workers leaving the field, creating the need to hire a replacement.
- Entry-level (25th percentile) Hourly Wages: the typical entry-level wages for an occupation; 25% of workers earn less than this amount and 75% earn more.
- Typical Entry-Level Education: represents the typical education level workers need to enter an occupation.
- Educational Attainment: the percentage of workers employed in an occupation by their highest level of education attained.

This report analyzed data for middle-skill occupations, which are defined as:

- All occupations that require an educational requirement of some college, associate degree or apprenticeship
- All occupations that require a bachelor's degree, but also have more than one-third of their existing labor force with an educational attainment of some college or associate degree
- All occupations that require a high school diploma or equivalent or no formal education but also require short- to long-term on-the-job training where multiple community colleges have existing programs

To identify career education (CE) programs, the North Far North COE used a crosswalk created by the Centers of Excellence to determine alignment between occupations and Taxonomy of Program (TOP) codes. From that list, we identified TOP codes for which student data was available in DataVista, a statewide data system supported by the California Community Colleges Chancellor's Office (CCCCO) that provides data on progress, success, employment, and earnings outcomes for California community college students.

TOP codes are used to categorize instructional programs offered at community colleges across the state. They are also used to organize and report on program offerings, which enables consistent tracking of enrollment, completion, and other performance metrics. Each TOP code represents a specific discipline or field of study, and colleges assign these codes to their programs to ensure alignment with state reporting requirements and to facilitate analysis of educational trends which aligns each program with a Classification of Instructional Programs (CIP) code.



Important Disclaimers

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. This study examines the most recent data available at the time of the analysis; however, data sets are updated regularly and may not be consistent with previous reports. Efforts have been made to qualify and validate the accuracy of the data and the report findings; however, neither the Centers of Excellence for Labor Market Research (COE), COE host district, nor California Community Colleges Chancellor's Office are responsible for the applications or decisions made by individuals and/or organizations based on this study or its recommendations.

Prepared by the North Far North Center of Excellence for Labor Market Research:

Ebony J. Benzing, Co-Director

ebony.benzing@losrios.edu

Supported by:

Juan Madrigal, Research Consultant

juan@coeccc.net



POWERED BY



California
Community
Colleges