

LABOR MARKET ANALYSIS

FOR PROGRAM RECOMMENDATION



C·O·E

CENTERS OF EXCELLENCE
FOR LABOR MARKET RESEARCH

BUSINESS MANAGEMENT IN THE GREATER SACRAMENTO REGION

North (Greater Sacramento)
Center of Excellence

OCTOBER 2023

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SUMMARY

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

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

Key findings include:

- The Greater Sacramento subregion contained more than 29,000 business management jobs in 2022. These jobs are projected to increase by 10% over the next five years, adding nearly 3,000 new jobs to the subregion by 2027.
- Over the next five years, business management jobs are projected to have more than 3,000 annual openings in the Greater Sacramento subregion.
- Analysis of wage data shows that three of the four occupations earn an entry-level hourly wage equal to or greater than the subregion's living wage of \$18.72 per hour. (See Appendix B for notes about the updated living wage).
- Awards data analysis shows that North (Greater Sacramento) training providers conferred an average of 2,585 awards (certificates, associate and bachelor's degrees) in business administration and management programs over the last three academic years.

Recommendations include:

- The North Far North Center of Excellence recommends moving forward with new program development and existing program modifications.
- The North Far North Center of Excellence also recommends establishing and maintaining community college transfer pathways aligned to four-year business programs so that students can access jobs requiring a four-year degree.

INTRODUCTION

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

- General and Operations Managers (11-1021)
- Administrative Services Managers (11-3012)
- Personal Service Managers, All Other (11-9179)
- Managers, All Other (11-9199)

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

- Business Administration (0505.00)
- Business and Commerce, General (0501.00)
- Business Management (0506.00)

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

- Business Administration and Management, General (52.0201)
- Business/Commerce, General (52.0101)

OCCUPATIONAL DEMAND

Exhibit 1 summarizes the five-year projected job growth for the studied occupations in North (Greater Sacramento)¹, North/Far North, and California.

Exhibit 1. Employment and projected demand, 2022-2027

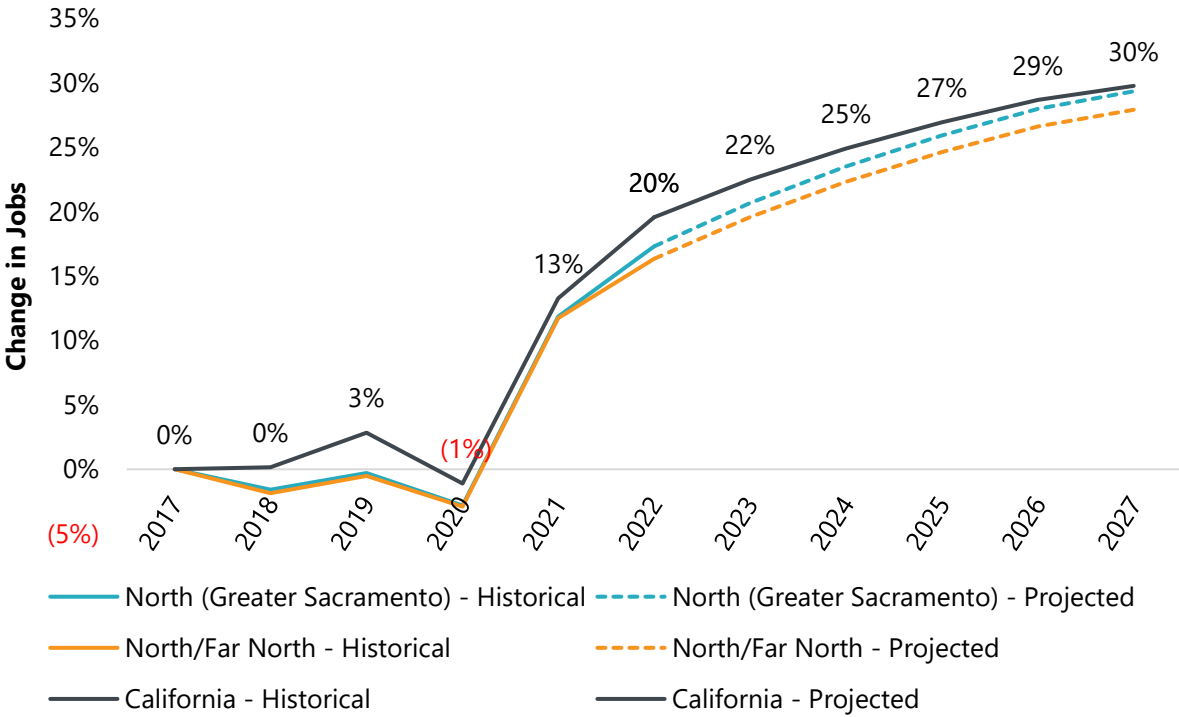
Occupation	2022 Jobs	2027 Jobs	2022-2027 Change	2022-2027 % Change	2022-2027 Annual Openings
General and Operations Managers	17,828	20,075	2,247	13%	2,096
Administrative Services Managers	2,065	2,235	170	8%	212
Personal Service Managers, All Other	232	249	16	7%	22
Managers, All Other	8,915	9,461	546	6%	825
North (Greater Sacramento)	29,040	32,020	2,980	10%	3,155
General and Operations Managers	23,002	25,849	2,847	12%	2,692
Administrative Services Managers	2,603	2,809	207	8%	266
Personal Service Managers, All Other	297	315	18	6%	28
Managers, All Other	11,500	12,147	647	6%	1,051
North/Far North	37,402	41,121	3,719	10%	4,037
General and Operations Managers	290,236	321,053	30,817	11%	32,750
Administrative Services Managers	36,828	39,359	2,532	7%	3,665
Personal Service Managers, All Other	3,556	3,800	244	7%	341

¹ The North (Greater Sacramento) subregion covers seven counties, including El Dorado, Nevada, Placer, Sacramento, Sutter, Yolo, and Yuba.

Occupation	2022 Jobs	2027 Jobs	2022-2027 Change	2022-2027 % Change	2022-2027 Annual Openings
Managers, All Other	177,156	186,862	9,706	5%	16,124
California	507,776	551,074	43,299	9%	52,880

Exhibit 2 compares the net changes in jobs between 2017 through 2022 and the projected changes through 2027. The rate of change is indexed to the total number of jobs in 2017.

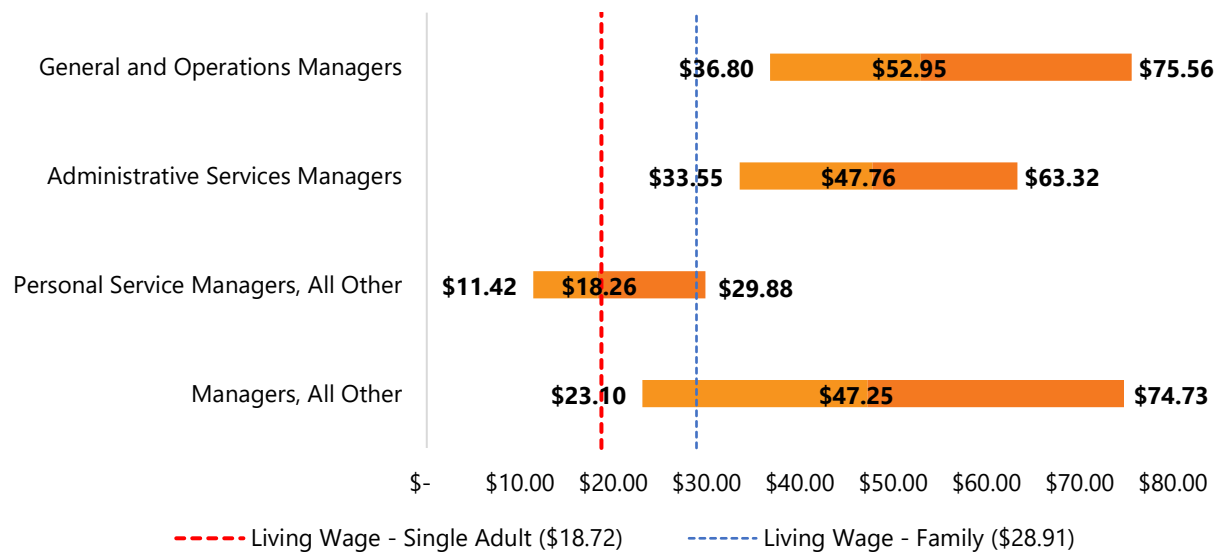
Exhibit 2. Changes in employment, 2017-2027



Wages

Exhibit 3 compares the 25th percentile, median, and 75th percentile hourly wages for the selected occupations to the Greater Sacramento living wage for one working adult (\$18.72 per hour) and a small family (\$28.91 per hour).^{2,3} The 25th and 75th percentile hourly wages are used to estimate entry-level and experienced worker wages.

Exhibit 3. Hourly wages by occupation, 2022



JOB POSTINGS

About Job Postings Analysis

This section analyzes recent data from online job postings. Online job postings may provide additional insight into recent changes in the labor market that are not captured by historical trends. However, job postings differ from labor market demand; demand is based on projected annual openings. Job postings should be used to inform community college curriculum development and identify potential employers for targeted experiential learning opportunities.

Please note several limitations to analyzing and interpreting online job postings. Employers may post a position multiple times to increase the number of job applicants. Job postings may remain online after a business chooses not to fill a position. Employers may advertise one posting to fill multiple vacancies. And not all jobs are posted online.

² Living wage is defined as the level of income one working adult with no children must earn to meet basic needs, including food, housing, transportation, healthcare, taxes, and other miscellaneous basic needs. Please note that the 25th-percentile and 75th-percentile hourly wages are used as proxy for entry-level and experienced-level wages.

³ A small family is defined as one working adult and one school aged child (between the ages of 5 and 12 years).

The North COE identified 9,902 online job postings for the selected occupations in the seven-county Greater Sacramento subregion. Job posting data comes from Lightcast (formerly Emsi Burning Glass) and represents unique advertisements newly posted online during the last 12 months, from October 2022 through September 2023.

Top Employers and Job Titles

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

Exhibit 4. Job postings by occupation

Occupation	Unique Job Postings	Share of Job Postings
Managers, All Other	5,777	58%
General and Operations Managers	3,087	31%
Administrative Services Managers	752	8%
Personal Service Managers, All Other	286	3%
Total Job Postings	9,902	100%

Exhibit 5 shows the top 10 relevant job titles with the most job postings.

Exhibit 5. Top jobs titles

Job Title	Number of Job Postings
Operations Managers	268
Program Managers	205
Project Coordinators	184
General Managers	182
Assistant Operations Managers	107
Operations Supervisors	107
Assistant General Managers	85
Managers-in-Training	68

Job Title	Number of Job Postings
Business Office Managers	64
Managers	63

Exhibit 6 shows the top 10 relevant employers with the most job postings for the selected occupations.

Exhibit 6. Top Employers

Employer	Number of Job Postings
University of California	470
State of California	339
UC Davis Health	144
Palisades Tahoe Resort (Celo in postings)	105
CVS Health	82
PricewaterhouseCoopers	80
Deloitte	79
Elevance Health	76
Great Clips	67
Dollar Tree	64

Top Skills and Qualifications

Exhibit 7 shows the most relevant certifications requested by employers for the selected occupations.

Exhibit 7. Most in-demand certifications

Certification	Job Postings
Project Management Professional Certification	216
Master Of Business Administration (MBA)	215

Exhibit 8 shows the top 10 skills across three categories for the studied occupations: specialized, essential, and software skills.⁴

Exhibit 8. Most in-demand skills

Specialized Skills	Common Skills	Software Skills
Project Management	Management	Microsoft Office (Access, Excel, Office, Outlook, PowerPoint, Word)
Auditing	Communications	Salesforce
Marketing	Operations	Dashboard
Operations Management	Leadership	Microsoft SharePoint
Accounting	Customer Service	SAP Applications
Finance	Planning	Project Management Software
Workflow Management	Problem-Solving	Microsoft Project
Process Improvement	Sales	Zoom (Video Conferencing Tool)
Billing	Coordinating	Microsoft Teams
Performance Appraisal	Writing	Power BI

⁴ Specialized skills are those primarily required to perform specific tasks in an occupation. Essential skills are typically related to employability. These are skills that are prevalent across many occupations, and include both interpersonal attributes and learned skills (aka “soft skills”). Software skills are specific to any software tool or programming component used to support a job.

Exhibit 9 shows the minimum education level preferred by employers for related job postings in the Greater Sacramento subregion.⁵

Exhibit 9. Employer-preferred education

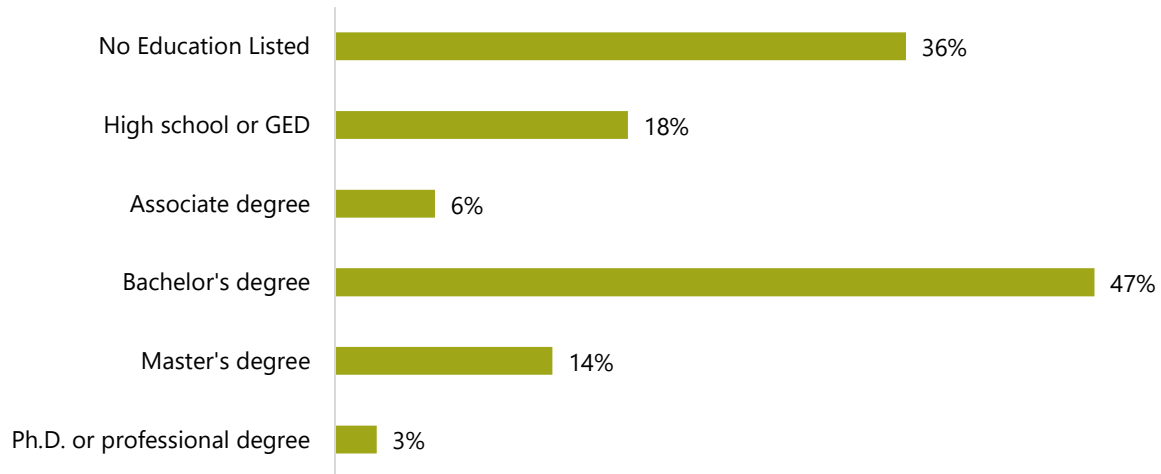
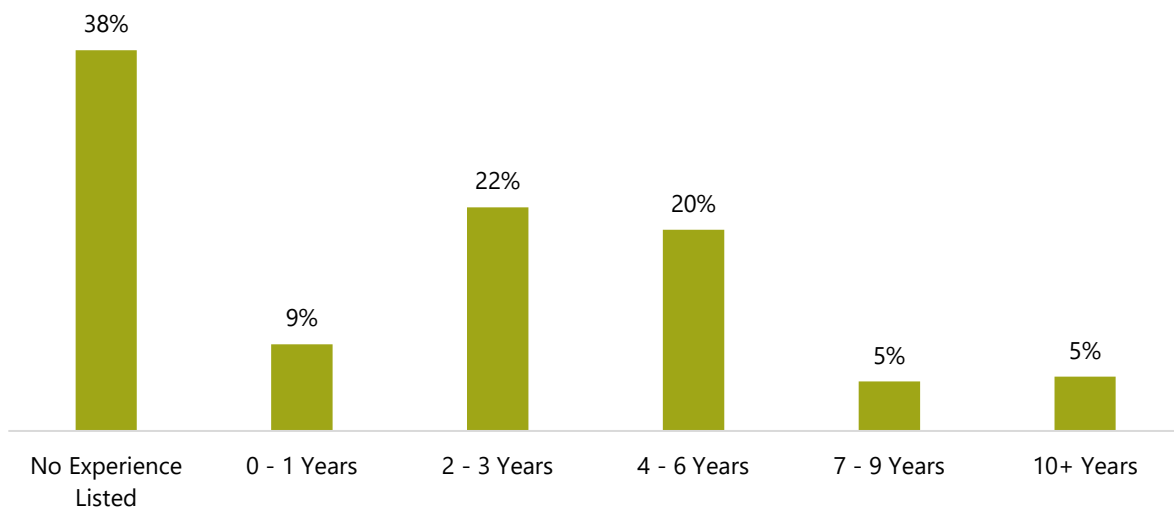


Exhibit 10 shows the minimum level of experience employers prefer for related job postings in the Greater Sacramento subregion.⁶

Exhibit 10. Employer-preferred job experience



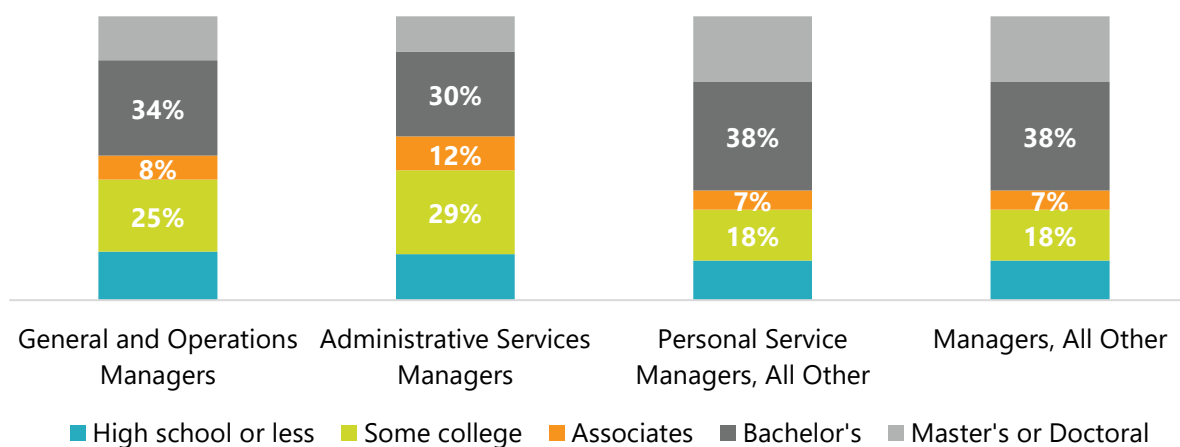
⁵ Employers may include more than one level of education as a hiring requirement in a job posting. As a result, the values in exhibit 9 may sum to greater than 100%.

⁶ Employers may include more than one level of experience as a hiring requirement in a job posting. As a result, the values in exhibit 10 may sum to greater than 100%.

EDUCATION AND TRAINING REQUIREMENTS

The U.S. Census Bureau collects data on the highest education level achieved by workers across all occupations. Exhibit 11 shows California's educational attainment of the current workforce in the selected occupations.

Exhibit 11. California educational attainment for selected occupations, 2019



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

Exhibit 12. Typical entry-level job requirements

Occupation	Entry-level Education Requirements	Work Experience Requirements	On-The-Job Training Requirements
General and Operations Managers	Bachelor's degree	Five years or more	None
Administrative Services Managers	Bachelor's degree	Less than five years	None
Personal Service Managers, All Other	Bachelor's degree	Less than five years	None
Managers, All Other	Bachelor's degree	Less than five years	None

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
Business Management (0506.00)	Business Administration and Management, General (52.0201)
Business Administration (0505.00)	Business Administration and Management, General (52.0201)
Business and Commerce, General (0501.00)	Business/Commerce, General (52.0101)

Community College Supply

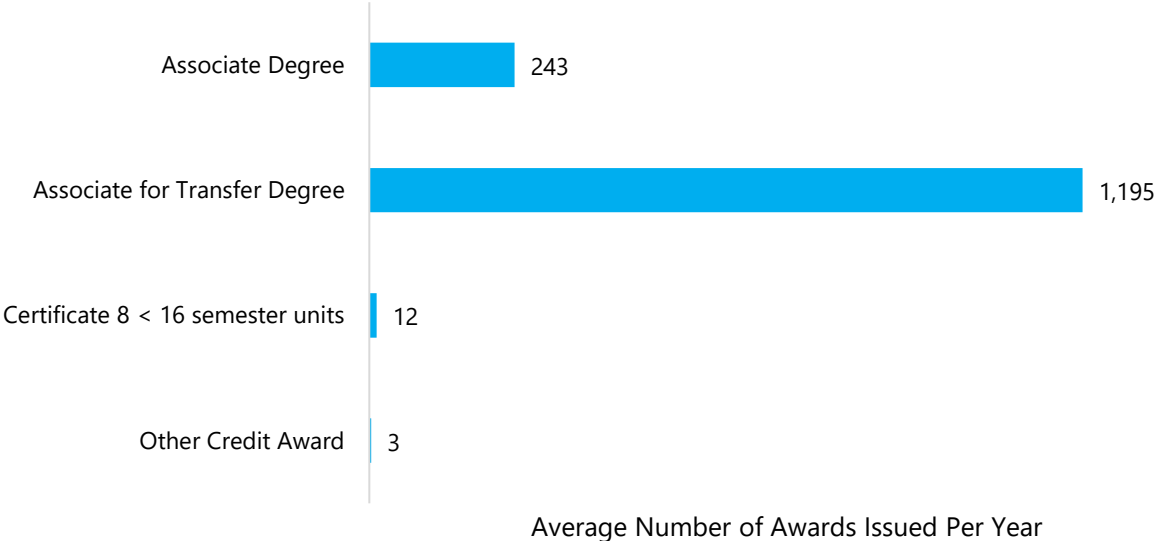
Exhibits 14 and 15 compare the average number of certificates and degrees from selected Greater Sacramento community college programs over the last three academic years.

Exhibit 14. Annual average community college awards by program

Program - TOP Code	College	Annual Awards 2019-20	Annual Awards 2020-21	Annual Awards 2021-22	3-Yr Annual Awards Average
Business Management (0506.00)	American River	16	36	25	26
	Cosumnes River	2	2	5	3
	Folsom Lake		30	8	19
	Lake Tahoe	1	1	1	1
	Sacramento City	8	10	21	13
	Sierra	39	31	29	33
	Woodland	5	7	3	5

Program - TOP Code	College	Annual Awards 2019-20	Annual Awards 2020-21	Annual Awards 2021-22	3-Yr Annual Awards Average
	Yuba	7	12	18	12
	Subtotal	78	129	110	106
Business Administration (0505.00)	American River	235	259	226	240
	Cosumnes River	208	225	219	217
	Folsom Lake	140	148	151	146
	Lake Tahoe	15	20	28	21
	Sacramento City	189	199	177	188
	Sierra	385	340	294	340
	Woodland	34	42	25	34
	Yuba	69	48	64	60
	Subtotal	1,275	1,281	1,184	1,247
Business and Commerce, General (0501.00)	American River	26	31	25	27
	Cosumnes River	32	39	31	34
	Folsom Lake	9	15	8	11
	Lake Tahoe	2	0	2	1
	Sacramento City	24	17	20	20
	Sierra	97	77	88	87
	Subtotal	190	179	174	181
	Grand Total	1,543	1,589	1,468	1,533

Exhibit 15. Annual average community college awards by type, 2019-20 through 2021-22



Other Postsecondary Supply

Exhibit 16 compares the average number of degrees that non-community college training providers conferred in the Greater Sacramento subregion over the last two academic years.

Please note that non-community college data often lags by one year, and other postsecondary awards data covers a two-year average due to taxonomy updates from the 2010 to 2020 CIP codes.

Exhibit 16. Other postsecondary awards by program

Program - CIP Code	Provider	Annual Awards 2019-20	Annual Awards 2020-21	2-Yr Annual Awards Average
Business Administration and Management, General (52.0201)	CSU Sacramento (Bachelor's degree)	1,007	983	995
	William Jessup (Bachelor's degree)	59	54	57
Grand Total		1,066	1,037	1,052

FINDINGS

This report focuses on four occupations in the business management career pathway: General and Operations Managers, Administrative Services Managers, Personal Service Managers, All Other, and Managers, All Other.

Occupational Demand

- The Greater Sacramento subregion contained more than 29,000 business management jobs in 2022. These jobs are projected to increase by 10% over the next five years, adding nearly 3,000 new jobs to the subregion by 2027.
- Business management jobs are projected to grow at nearly the same rate in the Greater Sacramento subregion as in California.
- Over the next five years, business management jobs are projected to have more than 3,000 annual openings in the Greater Sacramento subregion.

Wages

- Analysis of wage data shows that entry-level hourly wages for three of the four business management occupations exceed the living wage for one working adult. Hourly wages range from \$23.10 for managers, all other to \$36.80 for general and operations managers.
- Entry-level hourly wages are particularly low for personal service managers and do not meet the living wage threshold. A significant proportion of personal service manager jobs come from self-employment – about 47% of jobs (or 109 of 232). 25th percentile hourly wages for self-employed personal service managers are lower than their employed counterparts, reported at \$5.84 vs. \$17.32 per hour.⁷

Job Postings

- Between October 2022 and September 2023, 9,902 online job postings were posted for the four business management occupations. Nearly 60% of job postings were for the managers, all other occupation.
- Employers with the most job postings for business management occupations in the last 12 months include the University of California, the State of California, UC Davis Health, and the Palisade Tahoe Resorts.

Education and Training Requirements

- Between 25% and 41% of incumbent workers in business management occupations have educational attainment levels consistent with community college offerings (some college

⁷ Lightcast 2023.3; QCEW Employees, Non QCEW Employees, and Self Employed workers.

or associate degrees). Another 30% to 38% of workers in these occupations hold a bachelor's degree.

- About 47% of online job postings listed a bachelor's degree as the preferred level of education for the position. Twenty-four percent of postings listed either a high school diploma, its equivalent, or an associate degree as a preference.

Postsecondary Supply

- All eight Greater Sacramento community colleges offer at least one degree or certificate program that aligns with the studied business management occupations. These programs conferred an average of 1,533 awards across all business programs over the last three academic years (2019-20 through 2021-22).
- CSU Sacramento and the private university William Jessup offer bachelor's degrees aligned to business management occupations. Between 2019-20 and 2020-21, these two universities conferred an average of 1,052 awards in business administration programs over the last two years. Please note that non-community college awards data often lags by one year and covers a two-year average (rather than three years) due to a taxonomy update from the 2010 to 2020 CIP codes.

RECOMMENDATIONS

- Based on a comparison of annual openings to average annual awards in the Greater Sacramento subregion, there seems to be an undersupply of workers in business management.
- Establishing and maintaining community college transfer pathways aligned to four-year business programs will be essential so students can access business management job opportunities requiring a four-year degree.
- The North Far North Center of Excellence recommends moving forward with new program development and existing program modifications.

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

Program Modification	
Move forward with program modifications	Program modifications are not recommended
<input checked="" type="checkbox"/>	<input type="checkbox"/>

APPENDIX A. METHODOLOGY AND SOURCES

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

"The Chancellor's Office Curriculum Inventory System (COCI)." California Community Colleges Curriculum Inventory (COCI), 2023. <https://coci2.ccctechcenter.org/>.

Glasmeier, Amy K. "Living Wage Calculator." Living Wage Calculator, 2023. <https://livingwage.mit.edu/>.

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

Labor Market Information Division. California Employment Development Department. <https://labormarketinfo.edd.ca.gov/>.

Lightcast (Formerly EMSI/Burning Glass) 2023.3; QCEW Employees, Non-QCEW Employees, and Self-Employed. <https://www.economicmodeling.com/>. (Note: 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)).

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

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, 6th 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. June 2021 Edition. <http://coecc.net/>

APPENDIX B. GLOSSARY

Key Terms	Definition
Occupation	<p>Occupation refers to a category of jobs, careers, or professions that are similar regarding the work performed and the skills the workers possess. Workers who perform essentially the same tasks are in the same occupation, whether in the same industry. Some occupations are concentrated in a few industries, while others are found in many industries.</p> <p>Occupations differ from jobs in that jobs show the number of positions held in each occupation.</p>
Jobs	<p>A job is a specific instance of employment and includes any position where a worker provides labor for monetary compensation.</p> <p>Job numbers include employees (those who work for businesses) and proprietors (those who work for themselves). Full- and part-time jobs are included and counted equally (i.e., not adjusted to full-time equivalents). Data for jobs, or employment, are annual averages.</p>
Employment	<p>Employment refers to filled jobs, whether full- or part-time, temporary or permanent. The scope of "who" is counted as employed is noted in Appendix A. Methodology and Sources.</p>
Job Change	<p>Job change is the net increase or decrease of jobs over a given timeframe.</p>
Job Opening	<p>Job openings are the projected number of positions available for workers entering an occupation.</p> <p>Openings include growth and replacement job counts. Growth job counts are the positive change in the total number of workers employed. Replacement job counts are the estimates of new workers needed to replace workers permanently leaving the occupation.</p>
Percentile Wage (or wages)	<p>A percentile wage is the value of a wage at which a certain percentage of workers falls below. For example, a 25th percentile hourly wage of \$15.00 indicates that 25% of workers earn less than \$15.00, while 75% earn more. Percentile wages are specific to the geography shown in the report.</p> <p>The 25th-percentile and 75th-percentile hourly wages are used as a proxy for entry-level and experienced-level wages.</p>
Living Wage	<p>The living wage is the level of income a single, working adult with no children must earn to meet basic needs. The living wage is calculated using basic allowances for food, housing, transportation, healthcare, taxes, and other miscellaneous basic needs and assumes full-time employment (40 hours per week, 52 weeks a year).</p>

Key Terms	Definition
	Beginning in 2023-24, NFN COE adopted the MIT calculations for a living wage better aligned to the economic conditions following the pandemic. For additional information, please visit https://livingwage.mit.edu/ .
Educational Attainment	Educational attainment is the highest level of education achieved by workers in an occupation. The data include workers aged 25 years and older.
Typical Entry-level Education	<p>The education level most workers need to gain employment in an occupation. Categories range from "no formal educational credential" and "high school diploma or equivalent" to "doctoral or professional degree." The types most relevant to community training are "some college, no degree," "postsecondary nondegree award," and "associate degree."</p> <p>The typical entry-level education may differ from the actual educational levels attained by workers employed in an occupation.</p>
Typical Work Experience	The relevant prior experience a worker needs to gain employment in an occupation. Categories include "5 years or more", "less than five years," and "none."
Typical On-The-Job (OTJ) Training	The level of on-the-job training a worker needs to obtain for competency in the skills required for an occupation. Categories include "none," "short-term (1 month or less)," "moderate-term (more than one month but less than 12 months)," "long-term (more than 12 months)," "apprenticeship," and "internship/residency."
Awards	Awards are the number of certificates and degrees conferred for a specific course of study each year. Awards count "papers" and, as a result, may be greater than the number of students who complete a program.

Funding Acknowledgement: This report was made available with Strong Workforce Program funding from the North Far North Regional Consortium.

COVID-19 Statement: This report includes employment projection data produced by Lightcast (formerly EMSI). Employment projections are developed using models based on historical data, which in this set of projections covers the period through 2021. Most input data, therefore, precedes the pandemic. Employment projections are long-term projections intended to capture structural changes in the economy, not cyclical fluctuations. As such, projections data are not intended to capture the impacts of the recession that began in February 2020. Cyclical fluctuations, like recessions, impact projections when they become part of the historical data set.

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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Centers of Excellence for Labor Market Research, Economic and
Workforce Development Program



CENTERS OF EXCELLENCE
FOR LABOR MARKET RESEARCH

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