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Labor Market Analysis

Administration of Justice Including Corrections, Law Enforcement, and Police Science



POWERED BY



Prepared by the Central Valley/Mother Lode Center of Excellence

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

If for any reason this document is not accessible or if you have specific needs for readability, please contact us and we will do our utmost to accommodate you with a modified version. To make a request, contact Nora Seronello by phone at (209) 575-6894 or by email seronellon@mjc.edu.

Summary

Please note the COVID-19 statement on page 2 when considering this report's findings.

This study conducted by the Central Valley/Mother Lode Center of Excellence examines labor market demand, wages, skills, and postsecondary supply for Administration of Justice Including Corrections, Law Enforcement, and Police Science. Four occupations related to Administration of Justice Including Corrections, Law Enforcement, and Police Science were identified for College of the Sequoias:

- 33-1011, First-Line Supervisors of Correctional Officers
- 33-1012, First-Line Supervisors of Police and Detectives
- 33-3021, Detectives and Criminal Investigators
- 33-3051, Police and Sheriffs Patrol Officers

Key findings:

- **Occupational demand** — Nearly 6,315 workers were employed in jobs related to Administration of Justice Including Corrections, Law Enforcement, and Police Science in 2020 in the South Central Valley/Southern Mother Lode (SCV/SML) subregion. The largest occupation is police and sheriffs patrol officers with 4,655 workers, a projected growth rate of 3% over the next five years, and 396 annual openings.
- **Wages** — First-line supervisors of police and detectives earn the highest entry-level wage, \$56.13/hour in the subregion.
- **Employers** — Employers with the most job postings in the subregion are US Customs and Border Protection, United States Secret Service, and state of California.
- **Occupational titles** — The most common occupational title in job postings in the subregion is Immigration and Customs Inspectors. The most common job title is Border Patrol Agent.
- **Skills and certifications** — The top baseline skill is writing, the top specialized skill is surveillance, and the top software skill is public administration. The most in-demand certification is a security clearance.
- **Education** — A high school diploma or equivalent is typically required for the four occupations.
- **Supply** — Analysis of postsecondary completions shows that on average 1,140 awards were conferred in the Central Valley/Mother Lode region each year.

Based on a comparison of occupational demand and supply, there is an oversupply of 354 trained workers in the subregion and 318 workers in the region. However, Administration of Justice programs serve to prepare students for a variety of Community College level occupations not included in this report. These programs are also a conduit for transfer students intending to pursue higher-level occupations in the legal professions. Finally, entrance into all of the listed occupations requires successful completion of an academy, and the gap analysis of the academy programs show an undersupply of these workers. Therefore, the Center of Excellence recommends that College of the Sequoias work with the regional directors, the college's advisory board, and local industry in the expansion of programs to address the

shortage of Administration of Justice Including Corrections, Law Enforcement, and Police Science workers in the region.

Introduction

The Central Valley/Mother Lode Center of Excellence was asked by College of the Sequoias to provide labor market information for Administration of Justice Including Corrections, Law Enforcement, and Police Science. The geographical focus for this report is the South Central Valley/Southern Mother Lode (SCV/SML) subregion, but regional demand and supply data has been included for broader applicability and use. The average living wage for a single adult in the SCV/SML subregion is \$11.91/hour.¹ Analysis of the program and occupational data related to Administration of Justice Including Corrections, Law Enforcement, and Police Science resulted in the identification of applicable occupations. The Standard Occupational Classification (SOC) System codes and titles used in this report are:

- 33-1011, First-Line Supervisors of Correctional Officers
- 33-1012, First-Line Supervisors of Police and Detectives
- 33-3021, Detectives and Criminal Investigators
- 33-3051, Police and Sheriffs Patrol Officers

The occupational titles, job descriptions, sample job titles, and knowledge and skills from the Bureau of Labor Statistics and O*NET OnLine are shown below.

First-Line Supervisors of Correctional Officers

Job Description: Directly supervise and coordinate activities of correctional officers and jailers.

Knowledge: Public safety and Security, Law and Government, Administration and Management, Psychology, English Language

Skills: Active Listening, Coordination, Critical Thinking, Monitoring, Social Perception

First-Line Supervisors of Police and Detectives

Job Description: Directly supervise and coordinate activities of members of police force.

Knowledge: Law and Government, Public Safety and Security. Administration and Management, English Language, Psychology

Skills: Active Listening, Coordination, Critical Thinking, Management of Personnel Resources, Monitoring

Detectives and Criminal Investigators

Job Description: Conduct investigations related to suspected violations of federal, state, or local laws to prevent or solve crimes.

Knowledge: Law and Government, Public Safety and Security, Customer and Personal Service, English Language, Psychology

Skills: Active Listening, Critical Thinking, Speaking, Complex Problem Solving, Social Perceptiveness

Police and Sheriffs Patrol Officers

Job Description: Maintain order and protect life and property by enforcing local, tribal, state, or federal laws and ordinances. Perform a combination of the following duties: patrol a specific area; direct traffic; issue traffic summonses; investigate accidents; apprehend and arrest suspects, or serve legal processes of courts. Includes police officers working at educational institutions.

Knowledge: Public Safety and Security, Law and Government, English Language, Psychology, Customer and Personal Service

¹ The term "living wage" in Center of Excellence reports is calculated by averaging the self-sufficiency wages from the Insight Center's California Family Needs Calculator for each county in the subregion: <https://insightccd.org/tools-metrics/self-sufficiency-standard-tool-for-california/>.

Skills: Active Listening, Critical Thinking, Speaking, Social Perceptiveness, Negotiation

Occupational Demand

The SCV/SML subregion employed 6,309 workers in Administration of Justice Including Corrections, Law Enforcement, and Police Science occupations in 2020 (Exhibit 1). The largest occupation is police and sheriffs patrol officers with 4,655 workers. This occupation is projected to grow by 3% over the next five years and has the greatest number of projected annual openings, 396.

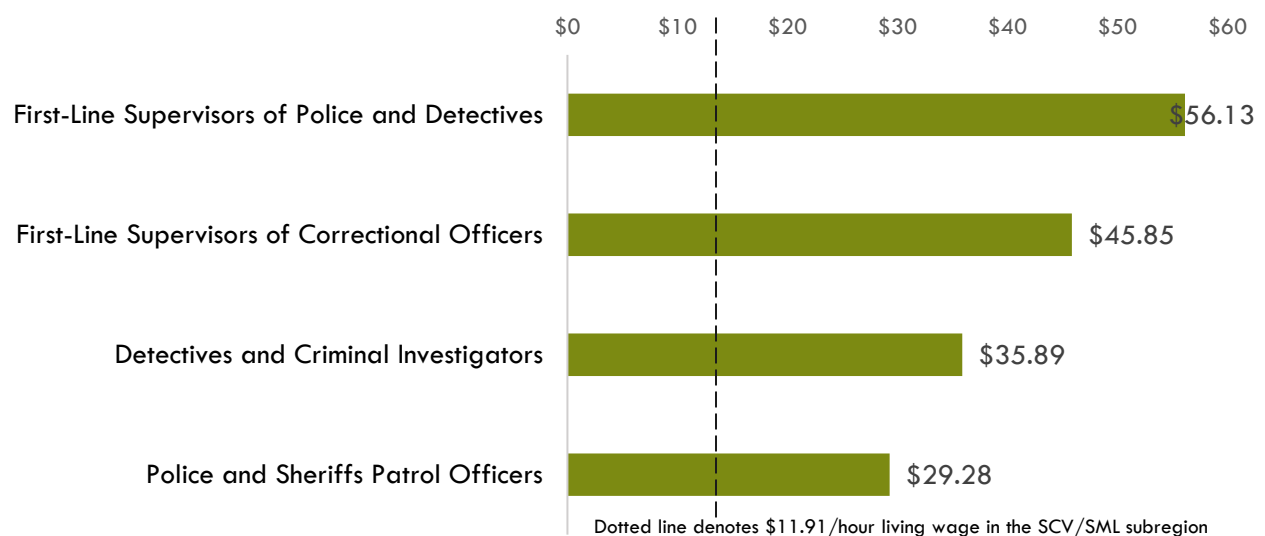
Exhibit 1. Administration of Justice Including Corrections, Law Enforcement, and Police Science employment and occupational projections in the SCV/SML subregion

Occupation	2021 Jobs	2026 Jobs	5-Year Change	5-Year % Change	Annual Openings
Police and Sheriffs Patrol Officers	4,655	4,790	135	3%	396
First-Line Supervisors of Correctional Officers	681	688	6	1%	57
Detectives and Criminal Investigators	584	601	17	3%	48
First-Line Supervisors of Police and Detectives	389	407	18	5%	29
TOTAL	6,309	6,485	176	3%	530

Wages

Exhibit 2 shows the entry-level hourly wages of the Administration of Justice Including Corrections, Law Enforcement, and Police Science occupations. First-line supervisors of police and detectives earn the highest entry-level wage, \$56.13/hour in the subregion².

Exhibit 2. Administration of Justice Including Corrections, Law Enforcement, and Police Science entry-level wages in the SCV/SML subregion



² Entry-level wages are derived from the 25th percentile.

Job Postings

There were 358 job postings for the four occupations in the SCV/SML subregion from January 2022 to June 2022.³ The employers with the most job postings are listed in Exhibit 3.

Exhibit 3. Top employers of Administration of Justice Including Corrections, Law Enforcement, and Police Science by number of job postings

Employer	Job Postings	% Job Postings
US Customs and Border Protection	124	40%
United States Secret Service	14	5%
state of california	11	4%
City Fresno	8	3%
County Kern	6	2%
Kern County	6	2%
California State University	5	2%
City Coalinga	5	2%
Commander	5	2%
Table Mountain Rancheria	5	2%

Exhibit 4 shows how job postings for the targeted occupations in the SCV/SML subregion are distributed across nine O*NET OnLine occupations. The occupational title Immigration and Customs Inspectors is listed in 139 job postings. Note how this occupational title dominates the job posting results. Common job titles in postings include Border Patrol Agent in 42 job postings, Marine Interdiction Agent in 37 job postings, and Police Officer in 15 job postings.

Exhibit 4. Top occupational titles in job postings for Administration of Justice Including Corrections, Law Enforcement, and Police Science

Occupational Title	Job Postings	% of Job Postings
Immigration and Customs Inspectors	131	37%
Police Patrol Officers	109	30%
Criminal Investigators and Special Agents	36	10%
Sheriffs and Deputy Sheriffs	32	9%
First-Line Supervisors of Police and Detectives	31	9%
Intelligence Analysts	7	2%
Police Detectives	6	2%
First-Line Supervisors of Correctional Officers	4	1%
Police Identification and Records Officers	2	1%

³ Other than occupation titles and job titles, the categories below can be counted one or multiple times per job posting, and across several areas in a single posting. For example, a skill can be counted in two different skill types, and an employer can indicate more than one education level.

Salaries

Exhibit 5 shows the “Market Salaries” for Administration of Justice Including Corrections, Law Enforcement, and Police Science occupations. These are calculated by Burning Glass using a machine learning model built off of millions of job postings every year. This accounts for adjustments based on locations, industry, skills, experience, education requirements, among other variables

Exhibit 5. Salaries for Administration of Justice Including Corrections, Law Enforcement, and Police Science occupations

Market Salary Percentile	Salary Amount
10th Percentile	\$39,005
25th Percentile	\$45,972
50th Percentile	\$55,857
75th Percentile	\$66,697
90th Percentile	\$77,496

Education

Of the 358 job postings, 219 listed an education level preferred for the positions being filled. Among those, 56% requested a bachelor’s degree, 46% requested high school or vocational training, and 32% requested a master’s degree (Exhibit 6). A job posting can indicate more than one education level. Hence, the percentages shown in the chart below may total more than 100%.

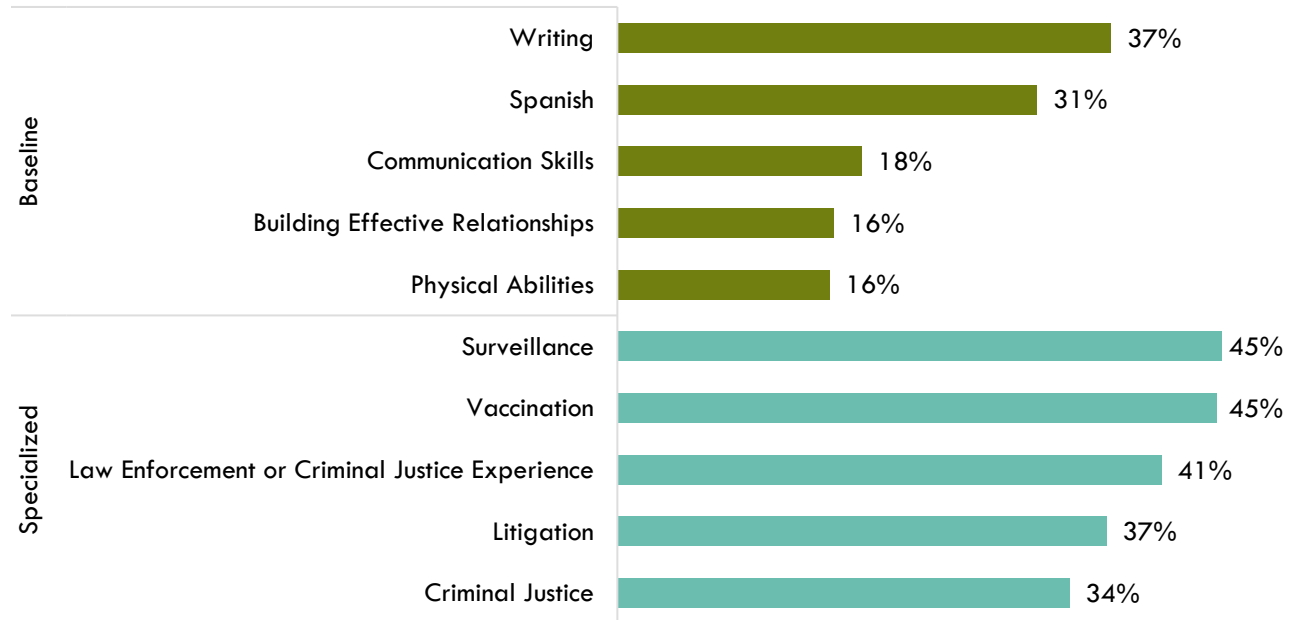
Exhibit 6. Education levels requested in job postings for Administration of Justice Including Corrections, Law Enforcement, and Police Science

Education Level	Job Postings	% of Job Postings
Bachelor's degree	123	56%
High school or vocational training	100	46%
Master's degree	71	32%
Doctoral degree	61	28%
Associate's degree	13	6%

Baseline and Specialized Skills

Exhibit 7 depicts the top baseline and specialized skills for the targeted occupations. The three most important baseline skills are writing, 37% of job postings, Spanish, 31%, and communication skills, 18%. The top three specialized skills are surveillance, 45% of job postings, vaccination, 45%, and law enforcement or criminal justice experience, 41%.

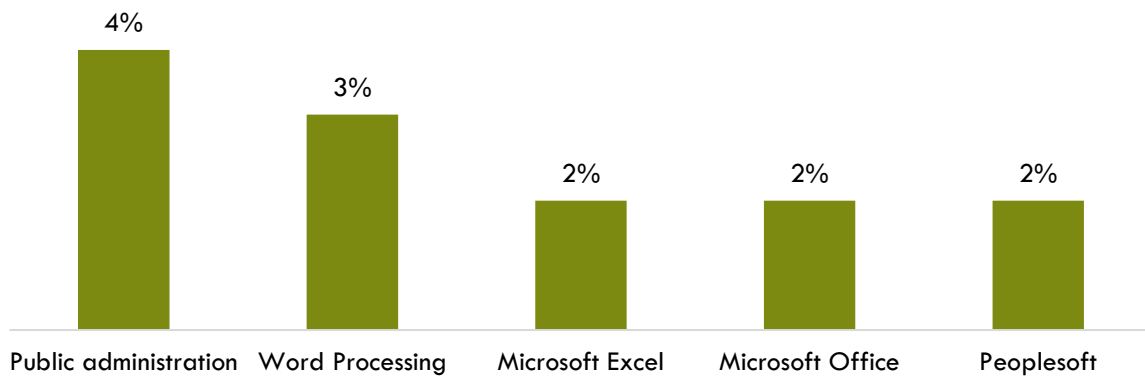
Exhibit 7. In-demand Administration of Justice Including Corrections, Law Enforcement, and Police Science baseline and specialized skills



Software Skills

Analysis also included the software skills most in demand by employers. Public administration and Word Processing were the top two software skills identified in job postings (Exhibit 8).

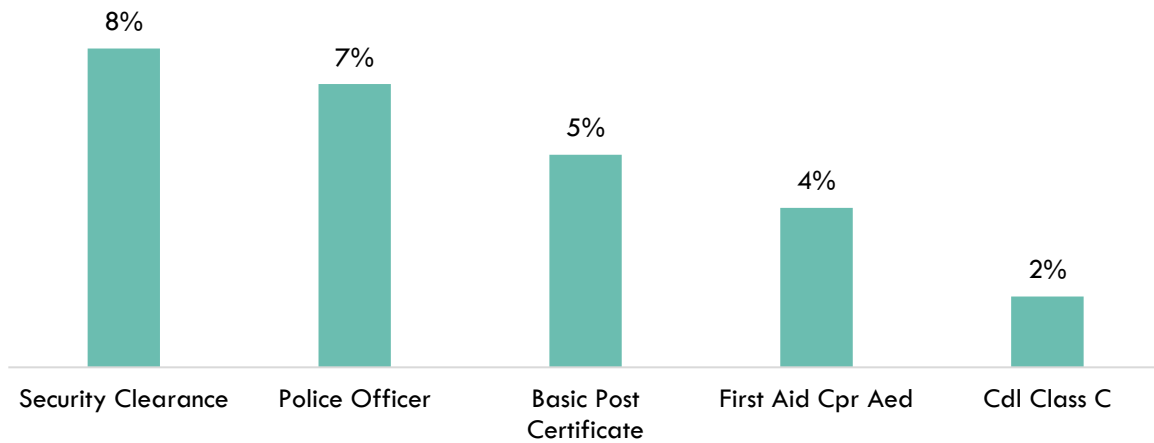
Exhibit 8. In-demand Administration of Justice Including Corrections, Law Enforcement, and Police Science software skills



Certifications

Of the 358 job postings, 238 contained certification data. Among those, 8% indicated a need for a security clearance. The next top certifications are police officer and basic post certificate (Exhibit 9). Please note 92% of job postings indicated a need for a driver’s license even though it is not a certification.

Exhibit 9. Top Administration of Justice Including Corrections, Law Enforcement, and Police Science certifications requested in job postings



Education, Work Experience & Training

A high school diploma or equivalent is typically required for the four occupations (Exhibit 10); however, successful completion of an academy is required for entrance into the listed occupations.

Exhibit 10. Education, work experience, training, and Current Population Survey results for Administration of Justice Including Corrections, Law Enforcement, and Police Science occupations⁴

Occupation	Typical Entry-level Education	Work Experience Required	Typical On-The-Job Training	CPS
Police and Sheriffs Patrol Officers	High school diploma or equivalent	None	Moderate-term	46.4%
First-Line Supervisors of Correctional Officers	High school diploma or equivalent	Less than 5 years	None	42.4%
Detectives and Criminal Investigators	High school diploma or equivalent	Less than 5 years	Moderate-term	32.0%
First-Line Supervisors of Police and Detectives	High school diploma or equivalent	Less than 5 years	Moderate-term	41.0%

⁴ "Labor Force Statistics from the Current Population Survey," Bureau of Labor Statistics, <https://www.bls.gov/cps/>.

Supply

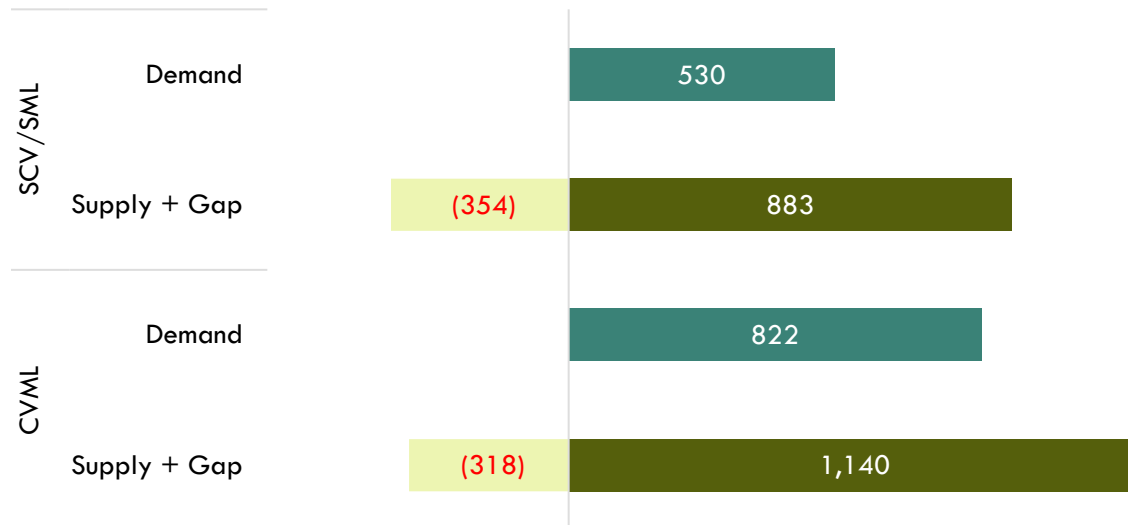
Analysis of program data from the Integrated Postsecondary Education Data System (IPEDS) included the TOP and CIP codes and titles: 210500 - Administration of Justice, 43.0103 - Criminal Justice/Law Enforcement Administration, and 43.0107 - Criminal Justice/Police Science. Analysis of the last three years of data shows that, on average, 1,140 awards were conferred in the Central Valley/Mother Lode region each year (Exhibit 11).

Exhibit 11. Postsecondary supply for Administration of Justice Including Corrections, Law Enforcement, and Police Science occupations in the region

TOP/ CIP Code- Title	College	Associate Degree	Associate for Transfer Degree	Certificate 16 < 30 Semester Units	Certificate 18 < 30 Semester Units	Certificate 30 < 60 Semester Units	Certificate 6 < 18 Semester Units	Certificate 60+ Semester Units	Subtotal
210500 - Administration of Justice	Bakersfield	54	116						170
	Cerro Coso		14						14
	Clovis	1	34	0	1				37
	Fresno City	13	133	2	1	23			173
	Merced	24	78			3			104
	Modesto	25	75				0		101
	Porterville	1	46			12			58
	Reedley College	6	66	10	19				101
	San Joaquin Delta	34	59			2		7	101
	Sequoias	11	86						97
	Taft	19	22						41
	West Hills Coalinga	2	19						21
	West Hills Lemoore	23	43						67
43.0103 - Criminal Justice/Law Enforcement Administration	Humphreys University-Stockton and Modesto Campuses	10							10
43.0107 - Criminal Justice/Police Science	Institute of Technology	44							44
TOTAL		268	792	13	22	39	0	7	1140

There is an oversupply of 354 Administration of Justice Including Corrections, Law Enforcement, and Police Science workers in the SCV/SML subregion and 318 workers in the region (Exhibit 12).

Exhibit 12. Administration of Justice Including Corrections, Law Enforcement, and Police Science workforce demand (annual job openings), postsecondary supply of students (awards), and additional students needed to fill gap in the SCV/SML subregion and region



Student Outcomes

Exhibit 13 summarizes employment and wage outcomes from the California Community College Chancellor’s Cal-PASS Plus LaunchBoard for the TOP code related to Administration of Justice Including Corrections, Law Enforcement, and Police Science. Of note, 779 students received a degree or certificate or attained apprenticeship journey status; 460 students transferred; 37% of students obtained a job closely related to their field of study; 24% had a median change in earnings; and 59% of students attained a living wage.

Exhibit 13. Regional metrics for the TOP code related to Administration of Justice Including Corrections, Law Enforcement, and Police Science

Metric	Administration of Justice
	210500
Students Who Got a Degree or Certificate or Attained Apprenticeship Journey Status	779
Number of Students Who Transferred	460
Job Closely Related to Field of Study	37%
Median Change in Earnings	24%
Attained a Living Wage	59%
* denotes data not available.	

Conclusion

The entry-level wages of the four occupations exceed the SCV/SML subregion's average living wage. There were 358 job postings in the past six months for occupations related to Administration of Justice Including Corrections, Law Enforcement, and Police Science in the subregion. Analysis of skills and certification requirements in job postings indicates:

- The top baseline skill is writing, and the top specialized skill is surveillance.
- The top software skill is public administration.
- The top certification is a security clearance.

There is an oversupply of trained workers, a surplus of 354 in the SCV/SML subregion and 318 in the region. These occupations are always in need and typically require an academy certification.

Recommendation

Based on a comparison of occupational demand and supply, there is an oversupply of 354 trained workers in the subregion and 318 workers in the region. However, Administration of Justice programs serve to prepare students for a variety of Community College level occupations not included in this report. These programs are also a conduit for transfer students intending to pursue higher-level occupations in the legal professions. Finally, entrance into all of the listed occupations requires successful completion of an academy, and the gap analysis of the academy programs show an undersupply of these workers. Therefore, the Center of Excellence recommends that College of the Sequoias work with the regional directors, the college's advisory board, and local industry in the expansion of programs to address the shortage of Administration of Justice Including Corrections, Law Enforcement, and Police Science workers in the region.

Appendix A: Methodology & Data Sources

Data Sources

Labor market and educational supply data compiled in this report derive from a variety of sources. Data were drawn from external sources, including the Economic Modeling Specialists, Inc., the California Community Colleges Chancellor's Office Management Information Systems Data Mart and the National Center for Educational Statistics (NCES) Integrated Postsecondary Education Data System (IPEDS). Below is the summary of the data sources found in this study.

Data Type	Source
Labor Market Information/Population Estimates and Projections/Educational Attainment	Economic Modeling Specialists, Intl. (EMSI). 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). Occupational wage estimates also affected by county-level EMSI earnings by industry: economicmodeling.com .
Typical Education Level and On-the-job Training	Bureau of Labor Statistics (BLS) uses a system to assign categories for entry-level education and typical on-the-job training to each occupation for which BLS publishes projections data: https://www.bls.gov/emp/tables/educational-attainment.htm .
Labor Force, Employment and Unemployment Estimates	California Employment Development Department, Labor Market Information Division: labormarketinfo.edd.ca.gov .
Job Posting and Skills Data	Burning Glass: burning-glass.com/ .
Additional Education Requirements/ Employer Preferences	The O*NET Job Zone database includes over 900 occupations as well as information on skills, abilities, knowledge, work activities and interests associated with specific occupations: onetonline.org .

Key Terms and Concepts

Annual Job Openings: Annual openings are calculated by dividing the number of years in the projection period by total job openings.

Education Attainment Level: The highest education attainment level of workers age 25 years or older.

Employment Estimate: The total number of workers currently employed.

Employment Projections: Projections of employment are calculated by a proprietary Economic Modeling Specialists, Intl. (EMSI) formula that includes historical employment and economic indicators along with national, state and local trends.

Living Wage: The cost of living in a specific community or region for one adult and no children. The cost increases with the addition of children.

Occupation: An occupation is a grouping of job titles that have a similar set of activities or tasks that employees perform.

Percent Change: Rate of growth or decline in the occupation for the projected period; this does not factor in replacement openings.

Replacements: Estimate of job openings resulting from workers retiring or otherwise permanently leaving an occupation. Workers entering an occupation often need training. These replacement needs, added to job openings due to growth, may be used to assess the minimum number of workers who will need to be trained for an occupation.

Total Job Openings (New + Replacements): Sum of projected growth (new jobs) and replacement needs. When an occupation is expected to lose jobs, or retain the current employment level, number of openings will equal replacements.

Typical Education Requirement: represents the typical education level most workers need to enter an occupation.

Typical On-The-Job Training: indicates the typical on-the-job training needed to attain competency in the skills needed in the occupation.