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Labor Market Analysis

Administration of Justice



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Prepared by the Central Valley/Mother Lode Center of Excellence

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COVID-19 Statement: This report includes employment projection data by Lightcast. Lightcast’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. Six occupations related to Administration of Justice were identified for Merced College:

- 33-1011, First-Line Supervisors of Correctional Officers
- 33-1012, First-Line Supervisors of Police and Detectives
- 33-3011, Bailiffs
- 33-3021, Detectives and Criminal Investigators
- 33-3051, Police and Sheriff's Patrol Officers
- 33-9021, Private Detectives and Investigators

Key findings:

- **Occupational demand** — There were 3,378 workers employed in jobs related to Administration of Justice in 2021 in the North Central Valley/Northern Mother Lode (NCV/NML) subregion. The largest occupation is Police and Sheriff's Patrol Officers with 2,310 workers, a projected growth rate of 5% over the next five years, and 204 annual openings.
- **Wages** — First-line supervisors of correctional officers earn the highest entry-level wage, \$48.48/hour in the subregion.
- **Employers** — Employers with the most job postings in the subregion are US Customs and Border Protection, San Joaquin County, and Allied Universal.
- **Occupational titles** — The most common occupational title in job postings in the subregion is Private Detectives and Investigators. The most common job title is Border Patrol Agent.
- **Skills and certifications** — The top baseline skill is writing, the top specialized skill is law enforcement or criminal justice experience, and the top software skill is word processing. The most in-demand certification is a police officer.
- **Education** — A high school diploma or equivalent is typically required for the six 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 63 trained workers in the subregion and 231 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 Merced College 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 workers in the region.

Introduction

The Central Valley/Mother Lode Center of Excellence was asked by Merced College to provide labor market information for Administration of Justice. The geographical focus for this report is the North Central Valley/Northern Mother Lode (NCV/NML) 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 NCV/NML subregion is \$12.65/hour.¹ Analysis of the program and occupational data related to Administration of Justice 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
- 33-3011, Bailiffs
- 33-3021, Detectives and Criminal Investigators
- 33-3051, Police and Sheriff's Patrol Officers
- 33-9021, Private Detectives and Investigators

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. There was no O*Net data available for private detectives and investigators.

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 Perceptiveness

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

Bailiffs

Job Description: Maintain order in courts of law.

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

Skills: Social Perceptiveness, Monitoring, Speaking, Active Listening, Judgment and Decision Making

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, English Language, Customer and Personal Service, Psychology

Skills: Active Listening, Speaking, Critical Thinking, Complex Problem Solving, Reading Comprehension

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/>.

Police and Sheriff's 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: Law and Government, Public Safety and Security, English Language, Psychology, Customer and Personal Services

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

Occupational Demand

The NCV/NML subregion employed 3,378 workers in Administration of Justice occupations in 2021 (Exhibit 1). The largest occupation is Police and Sheriff's Patrol Officers with 2,310 workers in 2021. This occupation is projected to grow by 5% over the next five years and has the greatest number of projected annual openings, 204.

Exhibit 1. Administration of Justice employment and occupational projections in the NCV/NML subregion

Occupation	2021 Jobs	2026 Jobs	5-Year Change	5-Year % Change	Annual Openings
Police and Sheriff's Patrol Officers	2,310	2,431	121	5%	204
First-Line Supervisors of Correctional Officers	420	431	11	3%	36
First-Line Supervisors of Police and Detectives	242	260	18	7%	19
Private Detectives and Investigators	184	195	11	6%	19
Detectives and Criminal Investigators	166	176	10	6%	14
Bailiffs	56	57	1	3%	6
TOTAL	3,378	3,550	172	5%	298

Wages

Exhibit 2a shows the hourly wages of the Administration of Justice occupations. First-line supervisors of correctional officers earn the highest entry-level wage, \$48.48/hour in the subregion². Please note 10th and 25th percentiles are considered entry-level wages while 75th and 90th are considered experienced wages, either by gained by long term employment, received extra training, etc.

Exhibit 2a. Administration of Justice hourly wages in the NCV/NML subregion

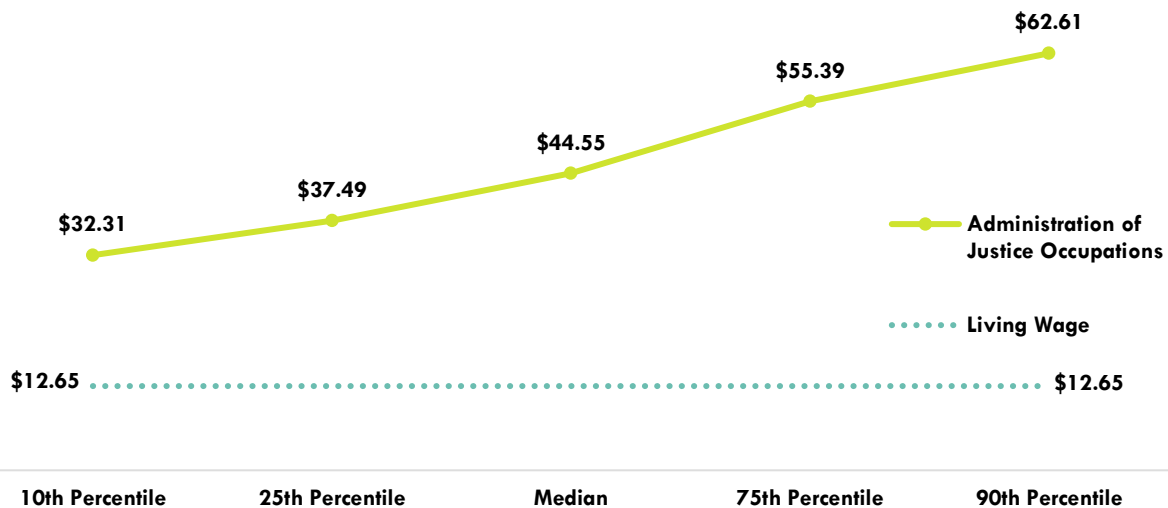
Occupation	Pct. 25 Hourly Earnings	Median Hourly Earnings	Pct. 75 Hourly Earnings
First-Line Supervisors of Correctional Officers	\$48.48	\$51.63	\$55.33
Detectives and Criminal Investigators	\$47.64	\$49.04	\$51.23
First-Line Supervisors of Police and Detectives	\$45.89	\$62.43	\$77.31
Police and Sheriff's Patrol Officers	\$35.30	\$46.57	\$51.89

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

Occupation	Pct. 25 Hourly Earnings	Median Hourly Earnings	Pct. 75 Hourly Earnings
Bailiffs	\$26.15	\$26.18	\$56.24
Private Detectives and Investigators	\$21.47	\$31.46	\$40.33

Exhibit 2b shows the average hourly wages for Administration of Justice occupations, the average entry-level wage exceeds the average living wage for the North Central Valley/Northern Mother Lode NCV/NML subregion.

Exhibit 2b. Administration of Justice average hourly wages in the NCV/NML subregion



Job Postings

There were 261 job postings for the six occupations in the NCV/NML subregion from March 2022 to August 2022.³ The employers with the most job postings are listed in Exhibit 3.

Exhibit 3. Top employers of Administration of Justice by number of job postings

Employer	Job Postings	% Job Postings
US Customs and Border Protection	59	26%
San Joaquin County	17	7%
Allied Universal	12	5%
City of Modesto	10	4%
City of Turlock	8	3%
University of the Pacific	8	3%
United States Secret Service	7	3%
Veracity Research Company	6	3%
Anthem Blue Cross	5	2%
City of Stockton	5	2%

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.

Exhibit 4 shows how job postings for the targeted occupations in the NCV/NML subregion are distributed across 10 O*NET OnLine occupations. The occupational title Private Detectives and Investigators is listed in 70 job postings. Note how this occupational title dominates the job posting results. Common job titles in postings include Border Patrol Agent in 29 job postings, Surveillance Investigator in 24 job postings, and Marine Interdiction Agent in 18 job postings.

Exhibit 4. Top occupational titles in job postings for Administration of Justice

Occupational Title	Job Postings	% of Job Postings
Private Detectives and Investigators	70	27%
Police Patrol Officers	69	26%
Immigration and Customs Inspectors	60	23%
Sheriffs and Deputy Sheriffs	26	10%
Criminal Investigators and Special Agents	15	6%
First-Line Supervisors of Police and Detectives	14	5%
Police Identification and Records Officers	3	1%
Intelligence Analysts	2	1%
First-Line Supervisors of Correctional Officers	1	0%
Police Detectives	1	0%

Salaries

Exhibit 5 shows the “Market Salaries” for Administration of Justice 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 occupations

Market Salary Percentile	Salary Amount
10th Percentile	\$35,146
25th Percentile	\$39,760
50th Percentile	\$49,694
75th Percentile	\$62,174
90th Percentile	\$72,436

Education

Of the 261 job postings, 52 listed an education level preferred for the positions being filled. Among those, 67% requested a bachelor’s degree, 44% requested high school or vocational training, and 21% requested an associate 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%.

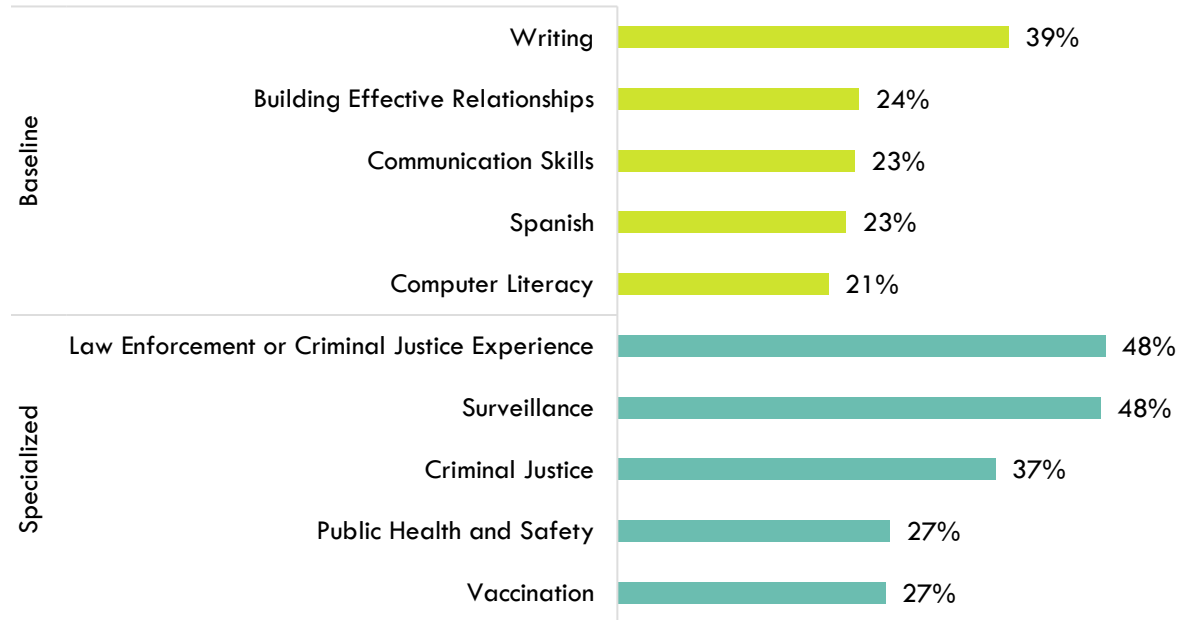
Exhibit 6. Education levels requested in job postings for Administration of Justice

Education Level	Job Postings	% of Job Postings
Bachelor's degree	119	67%
High school or vocational training	78	44%
Associate's degree	37	21%
Master's degree	35	20%
Doctoral degree	29	16%

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, 39% of job postings, building effective relationships, 24%, and communication skills, 23%. The top three specialized skills are law enforcement or criminal justice experience, 48% of job postings, surveillance, 48%, and criminal Justice, 37%.

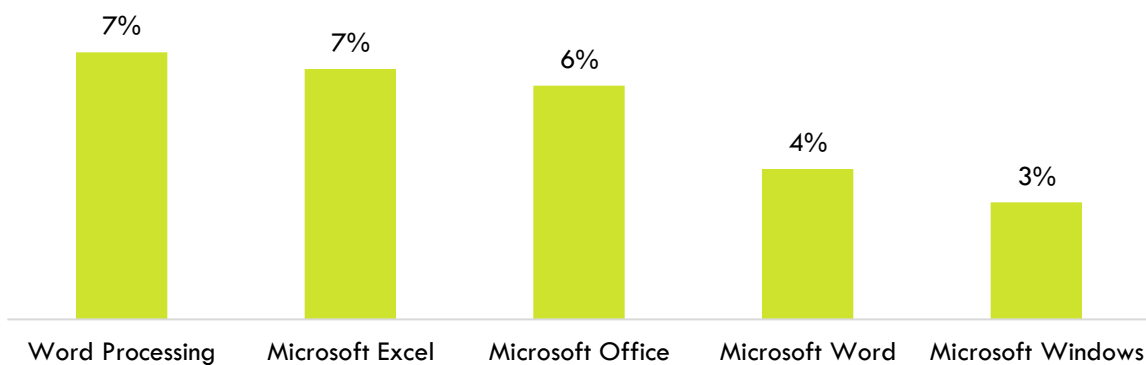
Exhibit 7. In-demand Administration of Justice baseline and specialized skills



Software Skills

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

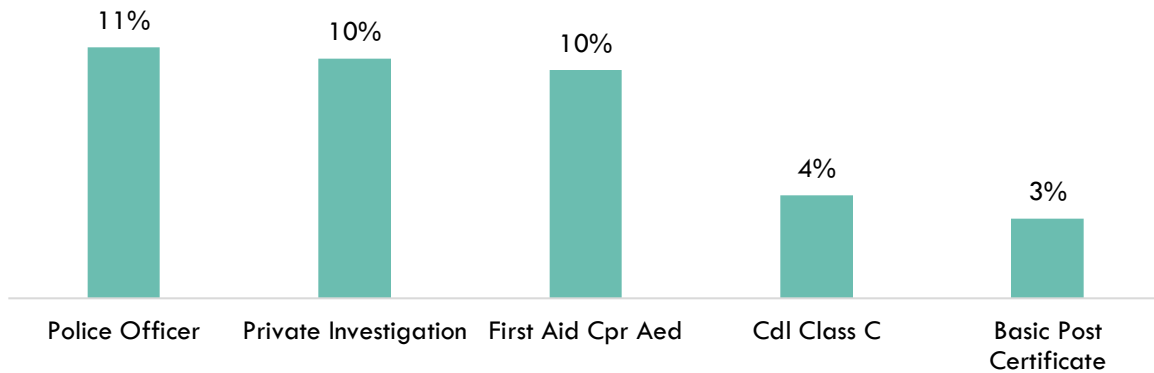
Exhibit 8. In-demand Administration of Justice software skills



Certifications

Of the 261 job postings, 204 contained certification data. Among those, 11% indicated a need for a police officer. The next top certifications are private investigation and First Aid Cpr Aed (Exhibit 9). Please note 91% of job postings indicated a need for a driver's license, but it is not a certification.

Exhibit 9. Top Administration of Justice certifications requested in job postings



Education, Work Experience & Training

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

Exhibit 10. Education, work experience, training, and Current Population Survey results for Administration of Justice occupations⁴

Occupation	Typical Entry-level Education	Work Experience Required	Typical On-The-Job Training	CPS
Police and Sheriff's 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%
First-Line Supervisors of Police and Detectives	High school diploma or equivalent	Less than 5 years	Moderate-term	41.0%
Private Detectives and Investigators	High school diploma or equivalent	Less than 5 years	Moderate-term	32.7%
Detectives and Criminal Investigators	High school diploma or equivalent	Less than 5 years	Moderate-term	32.0%
Bailiffs	High school diploma or equivalent	None	Moderate-term	38.7%

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

Supply

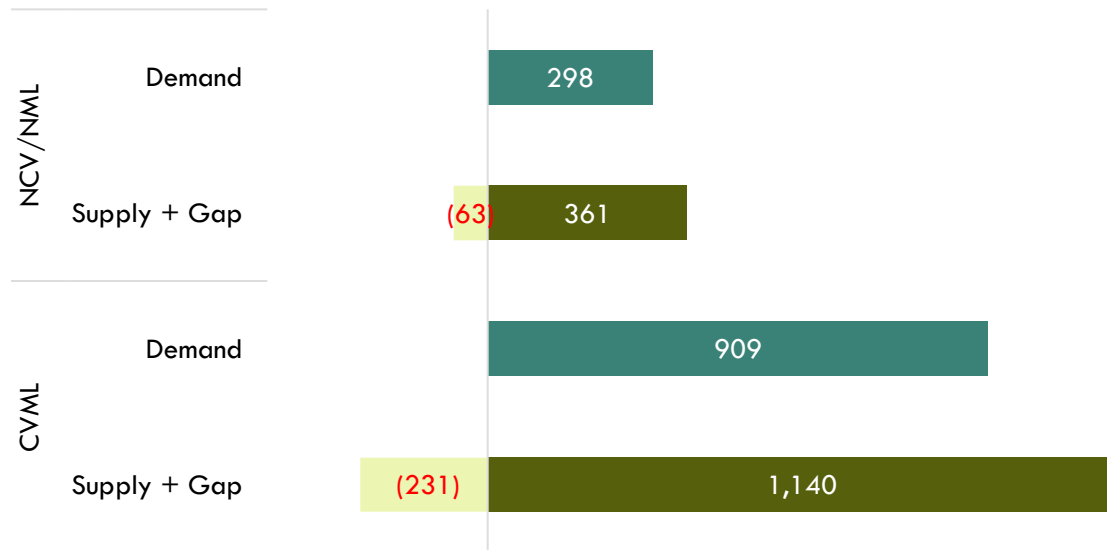
Analysis of program data from the Integrated Postsecondary Education Data System (IPEDS) included the TOP and CIP codes and titles: 210500 - Administration of Justice, 43.0103 - Criminal Justice/Law Enforcement Administration, and 43.0107 - Criminal Justice/Police Science. Analysis of the last three 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 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	1,140

There is an oversupply of 63 Administration of Justice workers in the NCV/NML subregion and 231 workers in the region (Exhibit 12).

Exhibit 12. Administration of Justice workforce demand (annual job openings), postsecondary supply of students (awards), and additional students needed to fill gap in the NCV/NML 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. Of note, 282 students received a degree or certificate or attained apprenticeship journey status; 280 students transferred; 54% of students obtained a job closely related to their field of study; 56% had a median change in earnings; and 56% of students attained a living wage.

Exhibit 13. Regional metrics for the TOP code related to Administration of Justice

Metric	Administration of Justice 210500
Students Who Got a Degree or Certificate or Attained Apprenticeship Journey Status	282
Number of Students Who Transferred	280
Job Closely Related to Field of Study	54%
Median Change in Earnings	56%
Attained a Living Wage	56%
* denotes data not available.	

Conclusion

The entry-level wages of the six occupations exceed the NCV/NML subregion's average living wage. There were 261 job postings in the past six months for occupations related to Administration of Justice 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 law enforcement or criminal justice experience.
- The top software skill is word processing.
- The top certification is a police officer.

There is an oversupply of trained workers, a surplus of 63 in the NCV/NML subregion and 231 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 63 trained workers in the subregion and 231 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 Merced College 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 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. (Lightcast). Lightcast occupational employment data are based on final Lightcast industry data and final Lightcast 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 Lightcast 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. (Lightcast) 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.