

# Program Endorsement Brief:

Woodland Community College: Public Safety

**North/Far North Center of Excellence, December 2018**

---

## INTRODUCTION

Woodland Community College is exploring programs related to public safety. The request is not for a specific program recommendation, *per se*, but an exploration of demand for several areas of public safety. Based on the occupations that fall under public safety, this report examines four types of occupations: police, fire, other emergency workers, and other public safety workers.

This report provides an overview of the labor market demand and supply for public safety-related occupations. It provides an overview of the employment opportunities and existing community college programs that prepare students for the profession.

Key findings include:

- Police occupations have grown in the local 3-county college service territory, but declined in employment over the last ten years, declining from pre-recession levels. Fire occupations have seen no growth, similar to Correctional officers. On the other hand, many of these occupations display significant projected annual openings, suggesting ongoing hiring needs due to retirements.
- Median wages for police, fire, and corrections occupations are above the living wage for Yolo County; however, the other emergency worker and other public safety occupations are low.
- American River College dominates the region for award production in several areas, especially in Administration of Justice Awards.

Findings in this report were determined using labor market data from the Bureau of Labor Statistics (BLS), U.S. Census Bureau data from Emsi and job posting data from Burning Glass.

The report contains the following sections:

- Occupational demand,
- Wages and job postings,
- Educational attainment and supply, and
- Findings and recommendations.

# OCCUPATIONAL DEMAND

Twenty-four Standard Occupational Classification (SOC) codes were analyzed in relation to the proposed program, nine in police occupations, four in fire occupations, three in other emergency occupations, and eight in other public safety occupations. Exhibit 1 summarizes job trends per the SOC codes in Yolo County, Lake County, and Colusa County (the 3-county region) and the 7-county greater Sacramento plus Lake and Colusa Counties (the 9-county region). The data includes estimates for self-employed workers.

The six occupations highlighted in green will be the focus for the wages and job postings and the educational attainment and supply sections of this report.

**Exhibit 1a: Employment and projected occupational demand, 3-county region<sup>1</sup>**

| Occupation  | SOC          | 2007 Jobs    | 2017 Jobs    | 2022 Jobs    | 2017-22 Jobs % Change | Annual Openings |
|---|--------------|--------------|--------------|--------------|-----------------------|-----------------|
| <b>Police Occupations</b>   |              | <b>1,148</b> | <b>1,318</b> | <b>1,487</b> | <b>13%</b>            | <b>130</b>      |
| Forensic Science Technicians  | 19-4092      | <10          | <10          | 11           | Insf. Data            | Insf. Data      |
| First-line Supervisors of Correctional Officers                           | 33-1011      | 40           | 56           | 66           | 18%                   | 6               |
| First-line Supervisors of Police and Detectives                           | 33-1012      | 72           | 74           | 82           | 11%                   | 6               |
| Correctional Officers and Jailers   | 33-3012      | 185          | 227          | 258          | 14%                   | 26              |
| Detectives and Criminal Investigators                                     | 33-3021      | 63           | 72           | 87           | 21%                   | 8               |
| Police and Sheriff's Patrol Officers                                      | 33-3051      | 694          | 779          | 873          | 12%                   | 70              |
| Transit and Railroad Police   | 33-3052      | <10          | <10          | <10          | Insf. Data            | Insf. Data      |
| Private Detectives and Investigators                                      | 33-9021      | 63           | 74           | 81           | 9%                    | 9               |
| Gaming Surveillance Officers and Gaming Investigators                     | 33-9031      | 18           | 21           | 23           | 10%                   | 3               |
| <b>Fire Occupations</b>   |              | <b>444</b>   | <b>455</b>   | <b>494</b>   | <b>9%</b>             | <b>39</b>       |
| First-line Supervisors of Fire Fighting and Prevention Workers            | 33-1021      | 45           | 46           | 50           | 9%                    | 4               |
| Firefighters  | 33-2011      | 385          | 395          | 427          | 8%                    | 33              |
| Fire Inspectors and Investigators   | 33-2021      | 13           | 12           | 14           | 17%                   | Insf. Data      |
| Forest Fire Inspectors and Prevention Specialists                         | 33-2022      | <10          | <10          | <10          | Insf. Data            | Insf. Data      |
| <b>Other Emergency Occupations</b>  |              | <b>246</b>   | <b>330</b>   | <b>392</b>   | <b>19%</b>            | <b>37</b>       |
| Emergency Management Directors  | 11-9161      | 24           | 21           | 23           | 10%                   | 2               |
| Emergency Medical Technicians and Paramedics                              | 29-2041      | 131          | 209          | 257          | 23%                   | 23              |
| Police, Fire, and Ambulance Dispatchers                                   | 43-5031      | 91           | 99           | 112          | 13%                   | 12              |
| <b>Other Public Safety Occupations</b>                                    |              | <b>1,063</b> | <b>1,507</b> | <b>1,712</b> | <b>14%</b>            | <b>274</b>      |
| First-line Supervisors of Protective Service Workers, All Other           | 33-1099      | 44           | 62           | 70           | 13%                   | 8               |
| Bailiffs  | 33-3011      | <10          | <10          | <10          | Insf. Data            | Insf. Data      |
| Fish and Game Wardens   | 33-3031      | <10          | <10          | <10          | Insf. Data            | Insf. Data      |
| Parking Enforcement Workers   | 33-3041      | 13           | 19           | 18           | (5%)                  | Insf. Data      |
| Animal Control Workers  | 33-9011      | 21           | 17           | 18           | 6%                    | 2               |
| Security Guards   | 33-9032      | 785          | 1,145        | 1,317        | 15%                   | 191             |
| Lifeguards, Ski Patrol, and Other Recreational Protective Service Workers | 33-9092      | 81           | 99           | 108          | 9%                    | 27              |
| Protective Service Workers, All Other                                     | 33-9099      | 114          | 159          | 173          | 9%                    | 43              |
| <b>3-County Region</b>  | <b>TOTAL</b> | <b>2,901</b> | <b>3,610</b> | <b>4,085</b> | <b>13%</b>            | <b>480</b>      |

<sup>1</sup> Emsi 2018.2; QCEW Employees, Non-QCEW Employees and Self-Employed. 3-County region includes Yolo County, Lake County, and Colusa County.

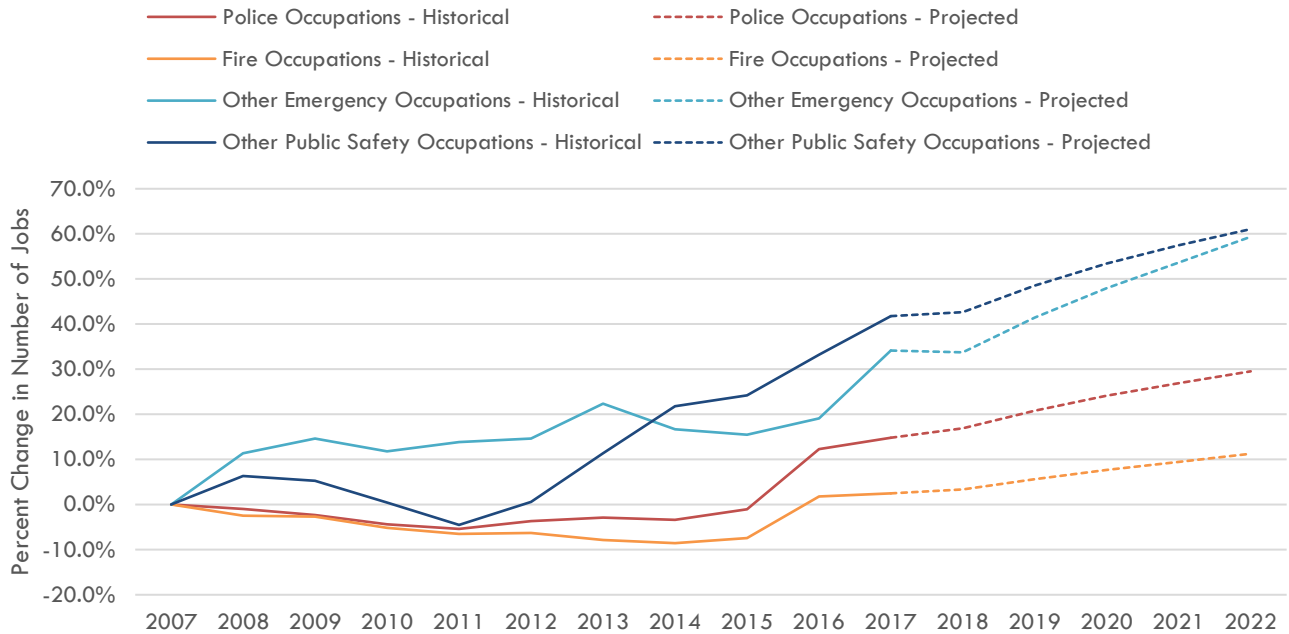
**Exhibit 1b: Employment and projected occupational demand, 9-county region<sup>2</sup>**

| Occupation  | SOC          | 2007 Jobs     | 2017 Jobs     | 2022 Jobs     | 2017-22 Jobs % Change | Annual Openings |
|---|--------------|---------------|---------------|---------------|-----------------------|-----------------|
| <b>Police Occupations</b>   |              | <b>13,110</b> | <b>11,365</b> | <b>11,871</b> | <b>2%</b>             | <b>896</b>      |
| Forensic Science Technicians  | 19-4092      | 120           | 106           | 114           | 8%                    | 14              |
| First-line Supervisors of Correctional Officers                           | 33-1011      | 1,048         | 1,000         | 935           | (7%)                  | 67              |
| First-line Supervisors of Police and Detectives                           | 33-1012      | 583           | 552           | 583           | 6%                    | 39              |
| Correctional Officers and Jailers   | 33-3012      | 3,586         | 2,629         | 2,684         | 2%                    | 230             |
| Detectives and Criminal Investigators                                     | 33-3021      | 1,045         | 1,131         | 1,129         | (0%)                  | 76              |
| Police and Sheriff's Patrol Officers                                      | 33-3051      | 5,793         | 5,431         | 5,609         | 3%                    | 385             |
| Transit and Railroad Police   | 33-3052      | 43            | 40            | 42            | 5%                    | 3               |
| Private Detectives and Investigators                                      | 33-9021      | 833           | 673           | 698           | 4%                    | 72              |
| Gaming Surveillance Officers and Gaming Investigators                     | 33-9031      | 60            | 73            | 77            | 5%                    | 11              |
| <b>Fire Occupations</b>   |              | <b>3,154</b>  | <b>3,147</b>  | <b>3,289</b>  | <b>5%</b>             | <b>242</b>      |
| First-line Supervisors of Fire Fighting and Prevention Workers            | 33-1021      | 280           | 253           | 270           | 7%                    | 20              |
| Firefighters  | 33-2011      | 2,707         | 2,761         | 2,880         | 4%                    | 207             |
| Fire Inspectors and Investigators   | 33-2021      | 114           | 92            | 96            | 4%                    | 10              |
| Forest Fire Inspectors and Prevention Specialists                         | 33-2022      | 53            | 40            | 44            | 10%                   | 5               |
| <b>Other Emergency Occupations</b>  |              | <b>1,922</b>  | <b>2,034</b>  | <b>2,265</b>  | <b>11%</b>            | <b>196</b>      |
| Emergency Management Directors  | 11-9161      | 236           | 204           | 208           | 2%                    | 16              |
| Emergency Medical Technicians and Paramedics                              | 29-2041      | 1,081         | 1,267         | 1,459         | 15%                   | 121             |
| Police, Fire, and Ambulance Dispatchers                                   | 43-5031      | 606           | 563           | 598           | 6%                    | 58              |
| <b>Other Public Safety Occupations</b>                                    |              | <b>11,078</b> | <b>13,401</b> | <b>14,223</b> | <b>6%</b>             | <b>2,236</b>    |
| First-line Supervisors of Protective Service Workers, All Other           | 33-1099      | 425           | 546           | 575           | 5%                    | 60              |
| Bailiffs  | 33-3011      | 51            | 33            | 38            | 15%                   | 4               |
| Fish and Game Wardens   | 33-3031      | 150           | 98            | 98            | 0%                    | 9               |
| Parking Enforcement Workers   | 33-3041      | 82            | 53            | 48            | (9%)                  | 5               |
| Animal Control Workers  | 33-9011      | 119           | 93            | 98            | 5%                    | 11              |
| Security Guards   | 33-9032      | 8,122         | 9,973         | 10,664        | 7%                    | 1,483           |
| Lifeguards, Ski Patrol, and Other Recreational Protective Service Workers | 33-9092      | 731           | 945           | 989           | 5%                    | 244             |
| Protective Service Workers, All Other                                     | 33-9099      | 1,400         | 1,661         | 1,713         | 3%                    | 421             |
| <b>9-County Region</b>  | <b>TOTAL</b> | <b>29,264</b> | <b>29,247</b> | <b>31,648</b> | <b>8%</b>             | <b>3,570</b>    |

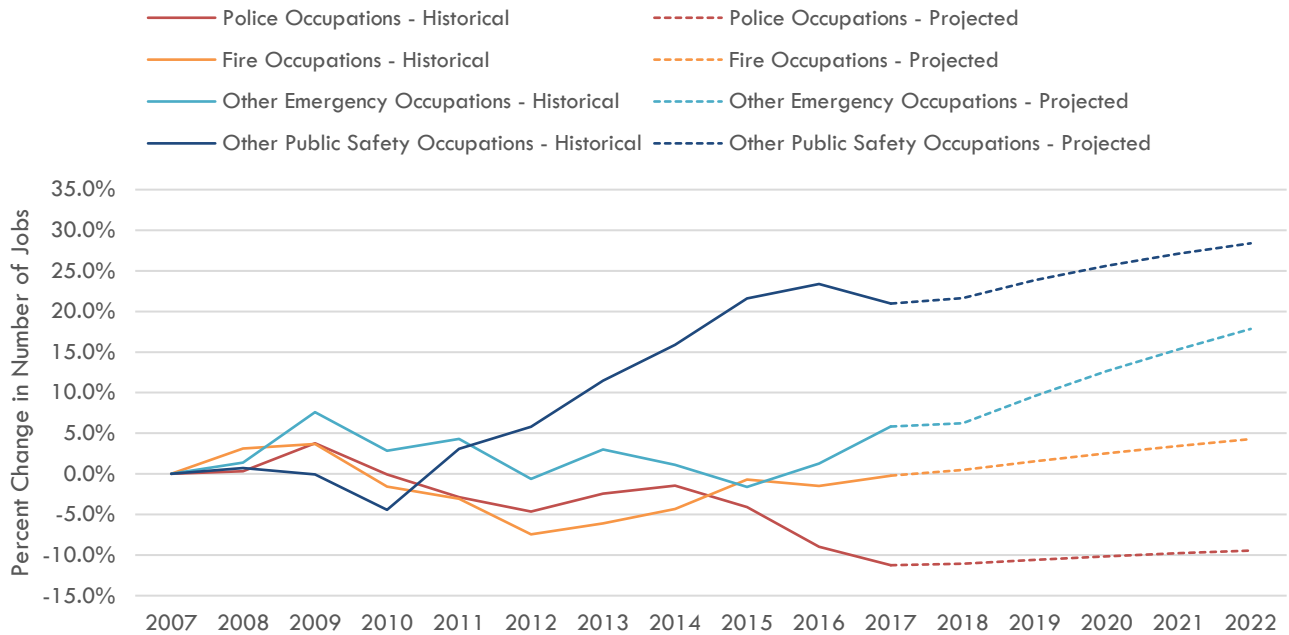
Exhibit 2 shows the percentage change in number of jobs between 2007 through 2017 and occupational projections from 2017 through 2022. The rate of change is indexed to the total number of jobs in 2007 as the base year and compares the occupational categories of police, fire, other emergency, and other public safety occupations for both the 3-county and 9-county regions.

<sup>2</sup> Emsi 2018.2; QCEW Employees, Non-QCEW Employees and Self-Employed. 9-county region includes the 7 counties of the Greater Sacramento Region: El Dorado, Nevada, Placer, Sacramento, Sutter, Yolo, and Yuba, plus Colusa and Lake Counties.

**Exhibit 2a: Rate of change for public safety jobs, 3-county region<sup>3</sup>**



**Exhibit 2b: Rate of change for public safety jobs, 9-county region<sup>4</sup>**



## WAGES AND JOB POSTINGS

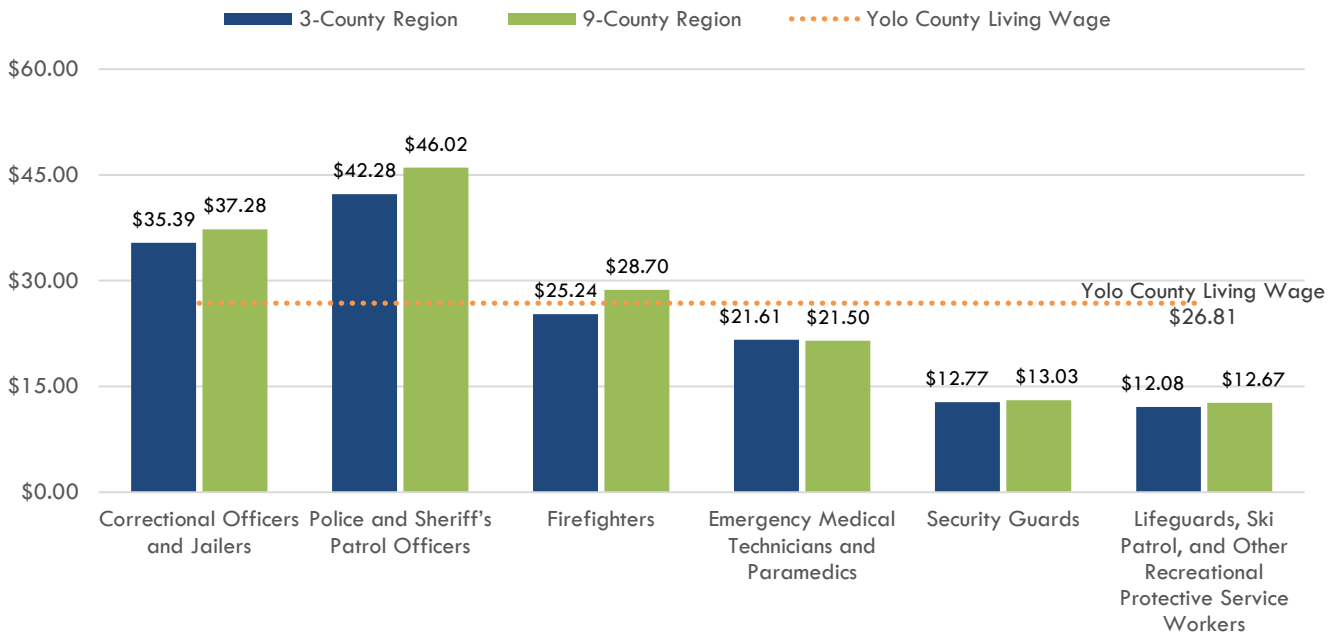
Exhibit 3 displays hourly wages for the six public safety occupations of focus in the study regions compared to the Yolo County living wage for a one-adult, one-child household.<sup>5</sup> The chart highlights the difference between the median wages of the representative occupations.

<sup>3</sup> Ibid.

<sup>4</sup> Ibid.

<sup>5</sup> Living Wage Calculator: Counties and Metropolitan Statistical Areas in California, <http://livingwage.mit.edu/states/06/locations>.

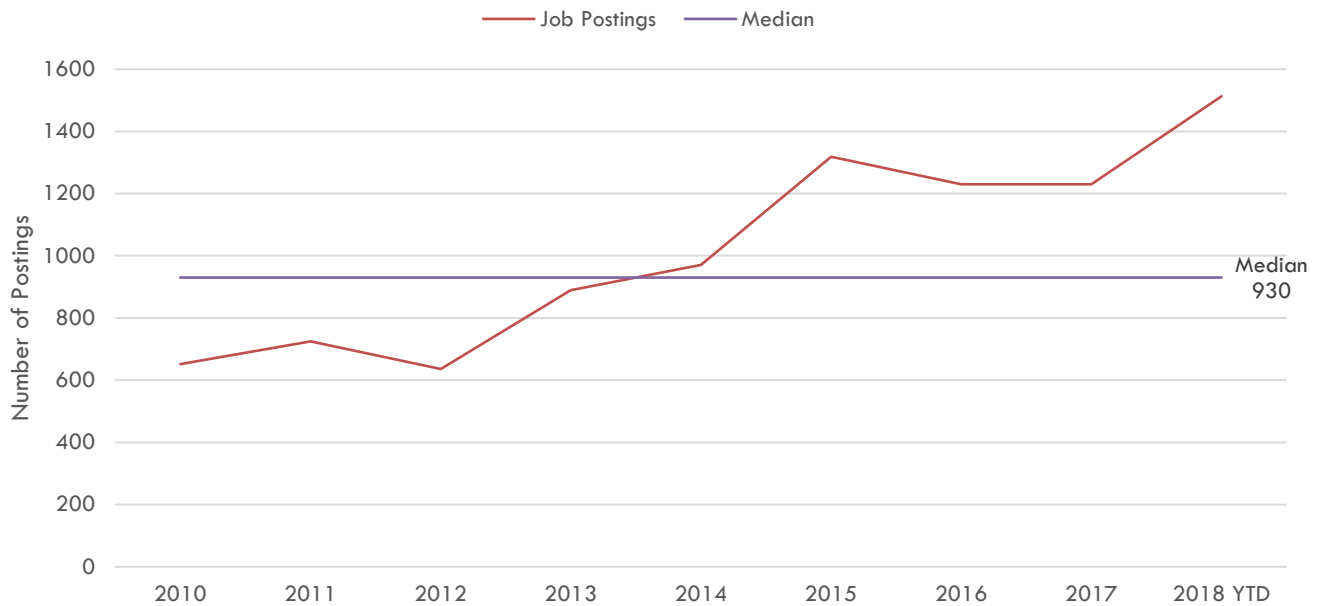
**Exhibit 3: Wages for public safety occupations of focus<sup>6</sup>**



Burning Glass data for job postings identified a pool of 1,635 listings in the 9-County region based on the representative SOC codes. Data was pulled for the last year from November 1, 2017 through October 31, 2018.

Exhibit 4 presents the job postings trend for the eight SOC code job postings over the past 8 years compared to the median from 2010 to 2017 for the 9-county region.

**Exhibit 4: Job posting trend for public safety occupations<sup>7</sup>**



<sup>6</sup> Emsi 2018.2; QCEW Employees, Non-QCEW Employees and Self-Employed.  
<sup>7</sup> Burning Glass Technologies, "Labor Insight Real-Time Labor Market Information Tool," 2018.

Exhibit 5 shows the top titles for public safety occupations that were present in the job postings in the Far North region.

**Exhibit 5: Top titles for public safety job postings<sup>8</sup>**

| Top Titles               | Number | Percent (n=1,635) |
|--------------------------|--------|-------------------|
| Security Officer         | 730    | 44.6%             |
| Security Guard           | 129    | 7.9%              |
| Police Officer           | 69     | 4.2%              |
| Lifeguard                | 62     | 3.8%              |
| Unarmed Security Officer | 33     | 2.0%              |
| Patrol Officer           | 30     | 1.8%              |

Exhibit 6 shows the top employers for public safety-related jobs postings in the 9-county region.

In the region, of the 1,635 postings, there were 1,481 records that included an employer. As a result, the table below may not be representative of the full sample.

**Exhibit 6: Top Employers among public safety job postings<sup>9</sup>**

| Top Employers                   | Number | Percent (n=1,481) |
|---------------------------------|--------|-------------------|
| Allied Universal Corporation    | 191    | 12.1%             |
| AlliedBarton Security Services  | 156    | 10.5%             |
| G4S                             | 79     | 5.3%              |
| Securitas                       | 53     | 3.6%              |
| State of California             | 45     | 3.0%              |
| Vail Resorts Management Company | 32     | 2.2%              |
| Dignity Health                  | 28     | 1.9%              |
| HSS Incorporated                | 21     | 1.4%              |

Exhibit 7 shows the top skills desired for public safety professionals in the 9-county region.

In the region, of the 1,635 postings, there were 1,217 records that included a skill. As a result, the table below may not be representative of the full sample.

**Exhibit 7: Top specialized skills desired in the public safety job postings<sup>10</sup>**

| Top Skills                                     | Number | Percent (n=1,217) |
|--|--------|-------------------|
| Handling of Crisis or Emergency Situations     | 358    | 29.4%             |
| Deterrence of Rule or Safety Violations        | 287    | 23.6%             |
| Customer Service                               | 260    | 24.4%             |
| Cardiopulmonary Resuscitation (CPR)            | 245    | 20.1%             |
| Prevention of Criminal Activity                | 124    | 10.2%             |
| Public Health and Safety                       | 111    | 9.1%              |
| Law Enforcement or Criminal Justice Experience | 105    | 8.6%              |
| Security Experience                            | 102    | 8.4%              |

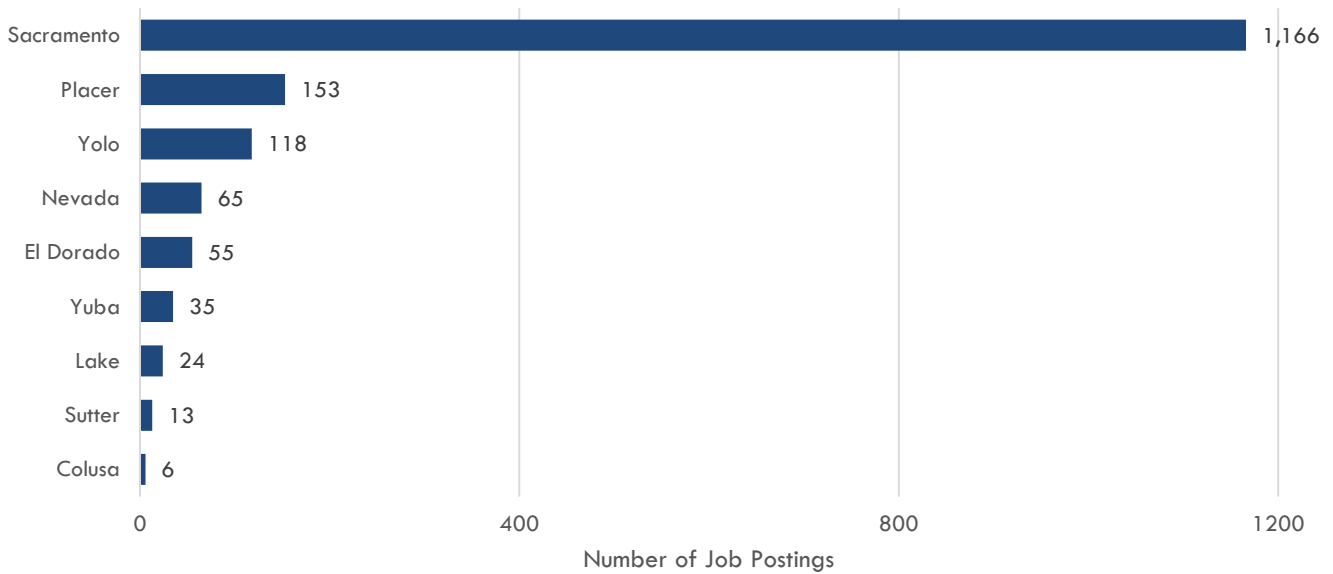
<sup>8</sup> Ibid.

<sup>9</sup> Ibid.

<sup>10</sup> Ibid.

Exhibit 8 shows the counties where public safety postings were located throughout the 9-county region.

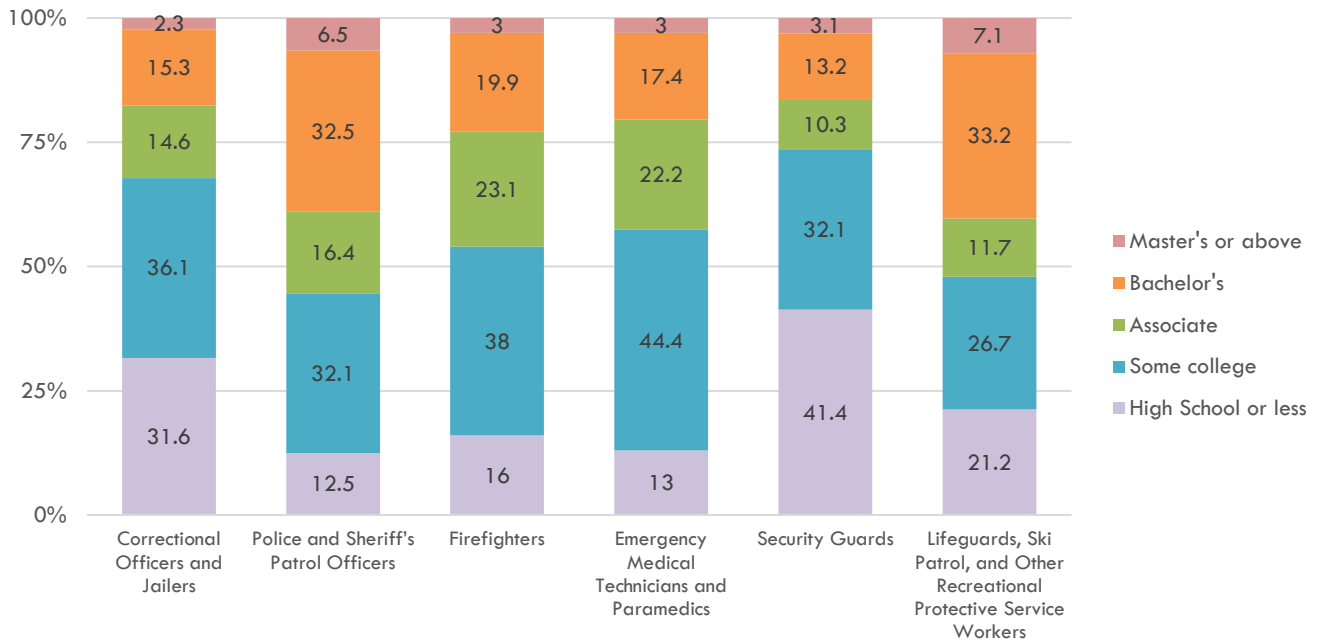
**Exhibit 8: Top county locations listed in public safety job postings<sup>11</sup>**



## EDUCATIONAL ATTAINMENT AND SUPPLY

At the national level, the typical education required for public safety jobs is some high school, postsecondary non-degree award, and bachelor's degree. Exhibit 5 breaks down the educational attainment percentages by degree type.

**Exhibit 5: Typical educational attainment for public safety occupations nationally<sup>12</sup>**



<sup>11</sup> Ibid.

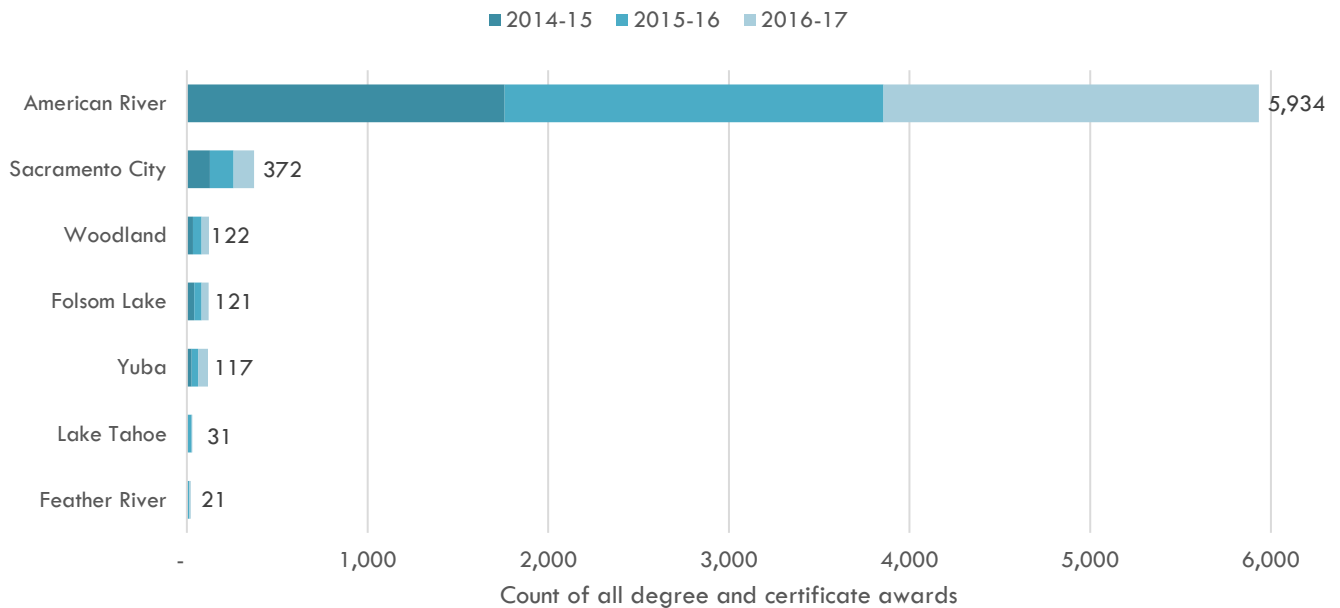
<sup>12</sup> Current Population Survey, Educational Attainment for Workers 25 Years and Older by Detailed Occupation, 2014-2015, [https://www.bls.gov/emp/ep\\_table\\_111.htm](https://www.bls.gov/emp/ep_table_111.htm).

The dominant Taxonomy of Programs (TOP) code identified that relates to public safety is Administration of Justice (TOP 2105.00). There are 7 community colleges in the 7-county Greater Sacramento region that offer related training: American River College, Feather River College, Folsom Lake College, Lake Tahoe College, Sacramento City College, Woodland College, and Yuba College.

Additionally, there are seven community colleges that offer administration of justice programs in the Far North region: Butte College, Lassen College, Mendocino College, College of the Redwoods, Shasta College, Sierra College, and Siskiyou College.

In the 7-county Greater Sacramento region, there were on average 2,268 awards earned by students each year over the past three years, most of which were credit awards (1,743 average), with a few associate degrees (340 average) and certificates (185 average). Exhibit 6 shows the total number of awards by colleges during the past three academic years in the Greater Sacramento region.

**Exhibit 6: Total Administration of Justice awards conferred by Greater Sacramento community colleges, 2014-2017<sup>13</sup>**



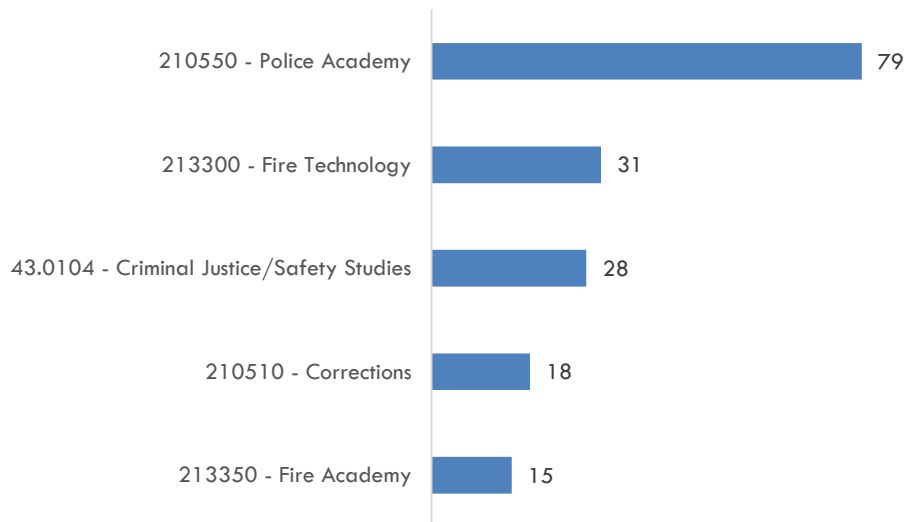
<sup>13</sup> COE Supply Tables, California Community Colleges Chancellor's Office DataMart, Integrated Postsecondary Education Data System (IPEDS).



Regional colleges provide education and training in other public safety TOP codes including, TOP 2105.50 Police Academy; 2133.00 Fire Technology; CIP 43.0104 Criminal Justice/Safety Studies; TOP 2105.10 Corrections; and 2133.50 Fire Academy. The region has produced the most awards in Police Academy (mostly ARC); followed by Fire Technology (again ARC dominates; Yuba, CRC, FLC and LTCC have programs); Corrections (SCC has the strongest program); and Fire Academy (Yuba College and LTCC have programs).

Keep in mind, the supply analysis does not explore Solano Community College, the Contra Costa District, or Sonoma County (Napa Valley College) that may have relevant feeder programs.

**Exhibit 7: Other public safety awards conferred by Greater Sacramento community colleges, 2014-2017<sup>14</sup>**



## FINDINGS

- The occupational demand picture is positive for the local college service territory, but mixed for the wider region, indicating the variation between local jurisdictions’ public finance picture. Occupational growth related to police workers was strong in the last 10 years in the 3-county region; every occupation had employment gains. The smaller region has 5-year projected growth of 13 percent with 130 annual openings. The larger region has a different picture, however, showing a ten-year decline of nearly 2,000 workers, mostly Correctional Officers and Police and Sherriff’s Patrol Officers. The larger region shows a projected growth rate of just 2 percent; it does show a projection of 900 annual openings, including new jobs and replacement jobs, probably owing in large part to retirements.
- Fire-related occupations showed practically no growth in either region over the last 10 years. The local, 3-county region has 7 percent projected growth over the next five years, with 40 annual openings. The wider region has a 5 percent projected growth rate, with 250 annual openings.
- Other emergency services has a very strong historical growth trend over the last 10 years, owing mostly to growth of the numbers of Emergency Medical Technicians (EMTs) and Dispatchers. The local area shows a 19 percent projected growth rate, but just 40 annual openings projected. The wider region is quite different; most growth in the past decade is attributable to the 3-county region. The projected growth overall is 11 percent, with 200 annual openings; again the demand is mostly for EMTs.

<sup>14</sup> COE Supply Tables, California Community Colleges Chancellor’s Office DataMart, Integrated Postsecondary Education Data System (IPEDS).

- The Other Public Safety category shows some historical growth and a 14 percent projected growth rate for the local 3-county area. The 9-county region added more than 2,000 jobs over the last 10 years, and has a projection for more than 2,000 annual openings. Most of the growth is attributable to Security Guards.
- Wages are mostly on par with or above living wage levels. Corrections Officers make \$35 to \$39 per hour. Police and Sheriffs wages are \$42 to \$46. Firefighters are at \$25 to \$28 per hour; EMTs are at \$21 per hour. The lowest wages are in the other categories. Security Guards and other public safety positions pay just above the minimum wage.
- Overall job postings have trended up in the last decade. The most postings in the last year were for security guards and police patrol officers. Top skills in the postings included customer service, public health, and criminal justice.
- Other Protective Service Worker occupations had the highest education levels, followed closely by Police. By and large these occupations do not typically have bachelor's degrees, according to the national educational attainment data. These occupations are characterized by a diversity of education levels: significant shares of workers with high school, some college, associate degrees, and bachelor's degrees, suggesting that pipelines into the occupations are various. Security guards have the lowest education level of any of the occupations.
- American River College is the 800-pound gorilla of education and training providers in the region, graduating, on average, about 2,000 students annually through its Sacramento Regional Public Safety Training Center. Sacramento City College has about 120 awards annually, followed by Woodland Community College, Folsom Lake College, and Yuba College, each conferring about 35 awards a year.

## RECOMMENDATIONS

- **POLICE AND SHERIFFS:** Any program development would almost certainly need to involve collaboration with American River College, at least in an advisory way, to learn how the hiring pipeline is performing. The drastic difference in the labor market between the 3-county and 9-county regions probably reflect the ability of the local jurisdictions to finance positions. In the local 3-county region, the addition of more than 80 officers, and 70 annual openings could suggest a need to train more police and sheriffs at the local level. Woodland Community College should learn how the recruitment pipeline, and training pathways work to see what their role might be for training new entrants, or incumbent officers.
- **CORRECTIONS:** The analysis did not explore the specific training and education requirements for correctional officers. If the training is specific (not generalizable to administration of justice, police academy, or something else), then corrections could represent the clearest opportunity area based on the simple gap analysis. In the 9-county region there is a projected annual demand of nearly 250 Correctional Officers. The region produced just 30 awardees each year in the related TOP code. In addition, the wages for Corrections Officers was the highest of the occupations studied. The COE recommends exploring training and education opportunities for corrections.
- **FIRE:** In spite of the no-growth scenario of fire occupations, the annual openings suggest a replacement need for hiring. However, the average annual awards from Fire Technology and Fire Academy outpaces

the openings projections, suggesting existing regional parity or oversupply. The analysis did not explore the need for incumbent worker training for first responder or para-professional medical training, e.g. Emergency Medical Technicians or Paramedics, credentials that firefighters also earn. There could be a need for first responder medical training for incumbent workers; it appears there is no need to train firefighters according to the baseline programs.

- **OTHER PUBLIC SAFETY or PROTECTIVE SERVICE:** Due to the low wages for other roles, the COE discourages training for other public safety roles. However, due to the sizeable existing workforce in several of these areas, Woodland Community College should explore existing promotion pathways that utilize training and education for advancement. Are security, ski patrol, lifeguarding, ambulance EMTs, or other roles entry-level pathway jobs that lead to a higher paying position with additional training?
- *The COE does not give a formal recommendation for Woodland Community College. This is not a formal program endorsement request.*

| COE Recommendation        |                            |                               |
|---------------------------|----------------------------|-------------------------------|
| Move forward with program | Program is not recommended | Additional information needed |
| <input type="checkbox"/>  | <input type="checkbox"/>   | <input type="checkbox"/>      |

# SUMMARY RECOMMENDATION (FOR RC APPLICATION)

- *The COE does not give a formal recommendation for Woodland Community College. This is not a formal program endorsement request.*

| <b>COE Recommendation</b> |                            |                               |
|---------------------------|----------------------------|-------------------------------|
| Move forward with program | Program is not recommended | Additional information needed |
| <input type="checkbox"/>  | <input type="checkbox"/>   | <input type="checkbox"/>      |

## APPENDIX A: SOURCES

Sources used for data analysis purposes in this report include:

- U.S. Department of Labor/Employment and Training Administration (DOLETA) O\*NET Online
- Burning Glass, Labor Insight/Jobs
- Economic Modeling Specialists, International (EMSI)
- California Employment Development Department, Labor Market Information Division (EDD, LMID)
- Bureau of Labor Statistics, Occupational Employment Statistics (OES)
- California Community Colleges Chancellor's Office, Cal-PASS Plus LaunchBoard
- Living Insight Center for Community Economic Development, Self-Sufficiency Standard Tool for California
- California Community Colleges Chancellor's Office Management Information Systems (MIS Data Mart)
- U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS)

### **For more information, please contact:**

Aaron Wilcher, Director  
Center of Excellence, North-Far North Region  
[wilchea@losrios.edu](mailto:wilchea@losrios.edu)

December 2018

