

PUBLIC SAFETY SECTOR PROFILE



**Key Findings from the Los Angeles County
Sector Analysis Project**

April 2021



Prepared by:
Los Angeles County
Center of Excellence
for Labor Market Research

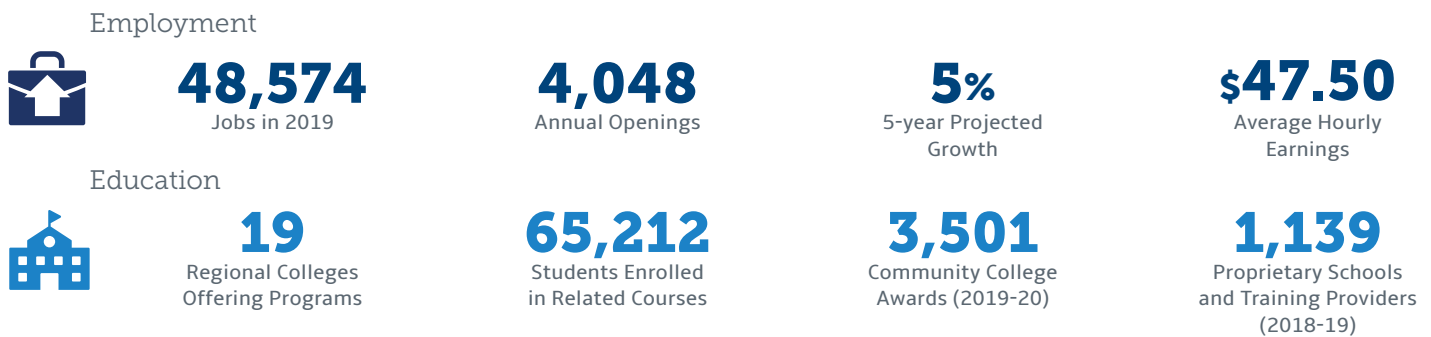
Introduction

To support the collaborative planning and development of career education (CE) programs and to inform regional investments in Los Angeles County, the Los Angeles County Center of Excellence has developed a series of sector profiles highlighting trends in the labor market and postsecondary education and training programs addressing local hiring needs.

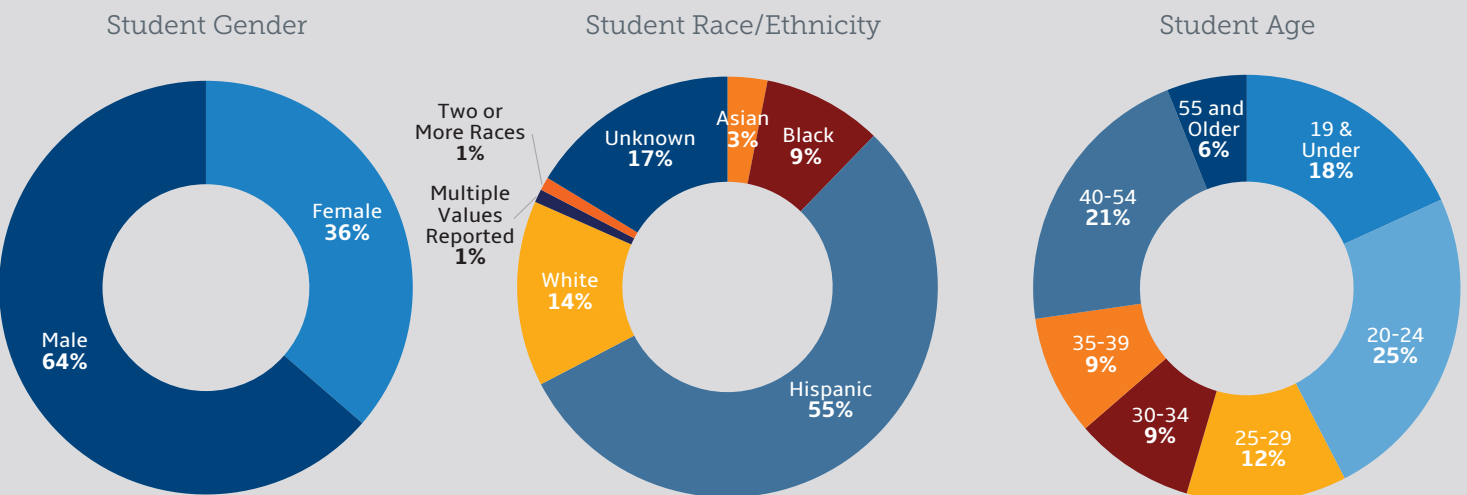
These profiles highlight in-demand, well-paid middle-skill jobs—those jobs that typically require some form of education or training beyond a high school diploma, but less than a bachelor’s degree. These occupations are a critical component of the workforce overall and support the economic vitality of the region and state.

This profile of the public safety sector summarizes key findings on current and projected workforce demand, hourly wages, job postings, and program and training data from area community colleges and proprietary schools. The public safety sector encompasses three related fields—law enforcement, firefighting, and specialized public safety roles—that provide direct protection to the public against crime, fire, disasters, and other threats.¹

Quick Facts



Student Demographics



¹ **Impact of the COVID-19 pandemic:** This profile relies largely on 2019 employment and education data preceding the pandemic. The exception is job posting data from 2020. Due to severe economic impacts from the pandemic, job posting data should not be considered an accurate depiction of employer demand; however, the frequency of certain data points can provide insights into the types of workers and skill sets that employers are seeking. Annual job openings are derived from the labor market analytics firm Emsi whose 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. At this time, it is not possible to quantify the economic impact of COVID-19 on projections of occupational employment.

Student Employment Outcomes

Data on community college students who exiting public safety programs in Los Angeles County shows that approximately 68% in the 2016-17 academic year obtained employment is a job closely related to their field of study. On average, these students earned a median income of \$31,716 after exiting a public safety program.

Exhibit 1. Students with a job closely related to their field of study

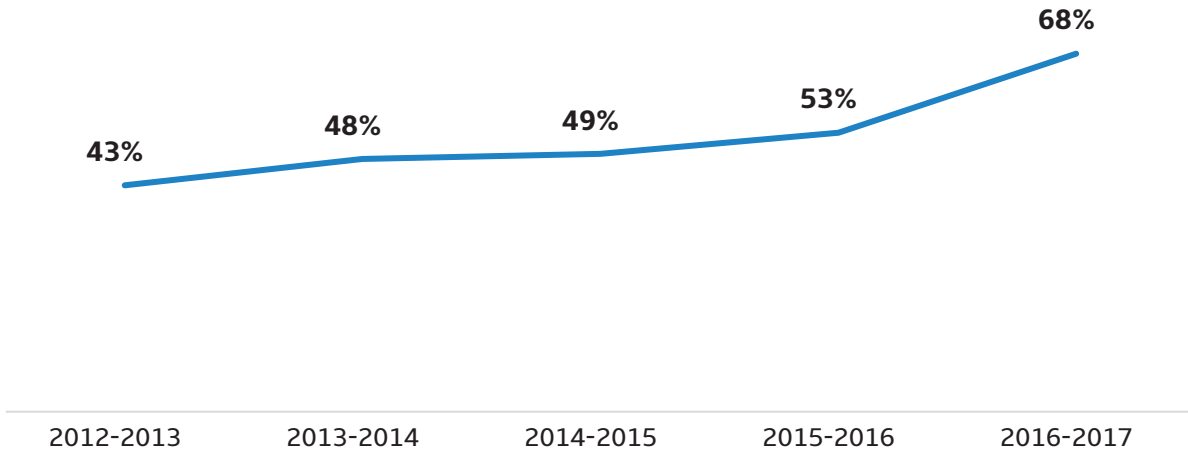
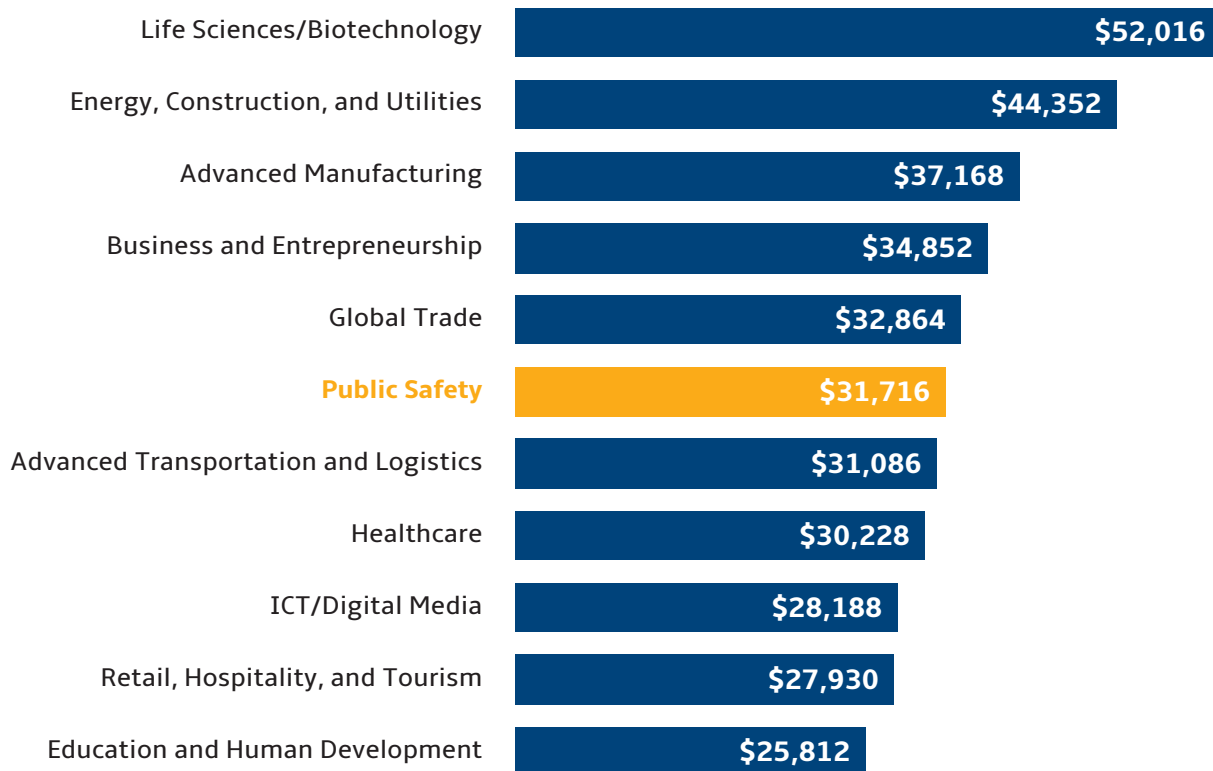


Exhibit 2. Median annual earnings for exiting students, 2017-18

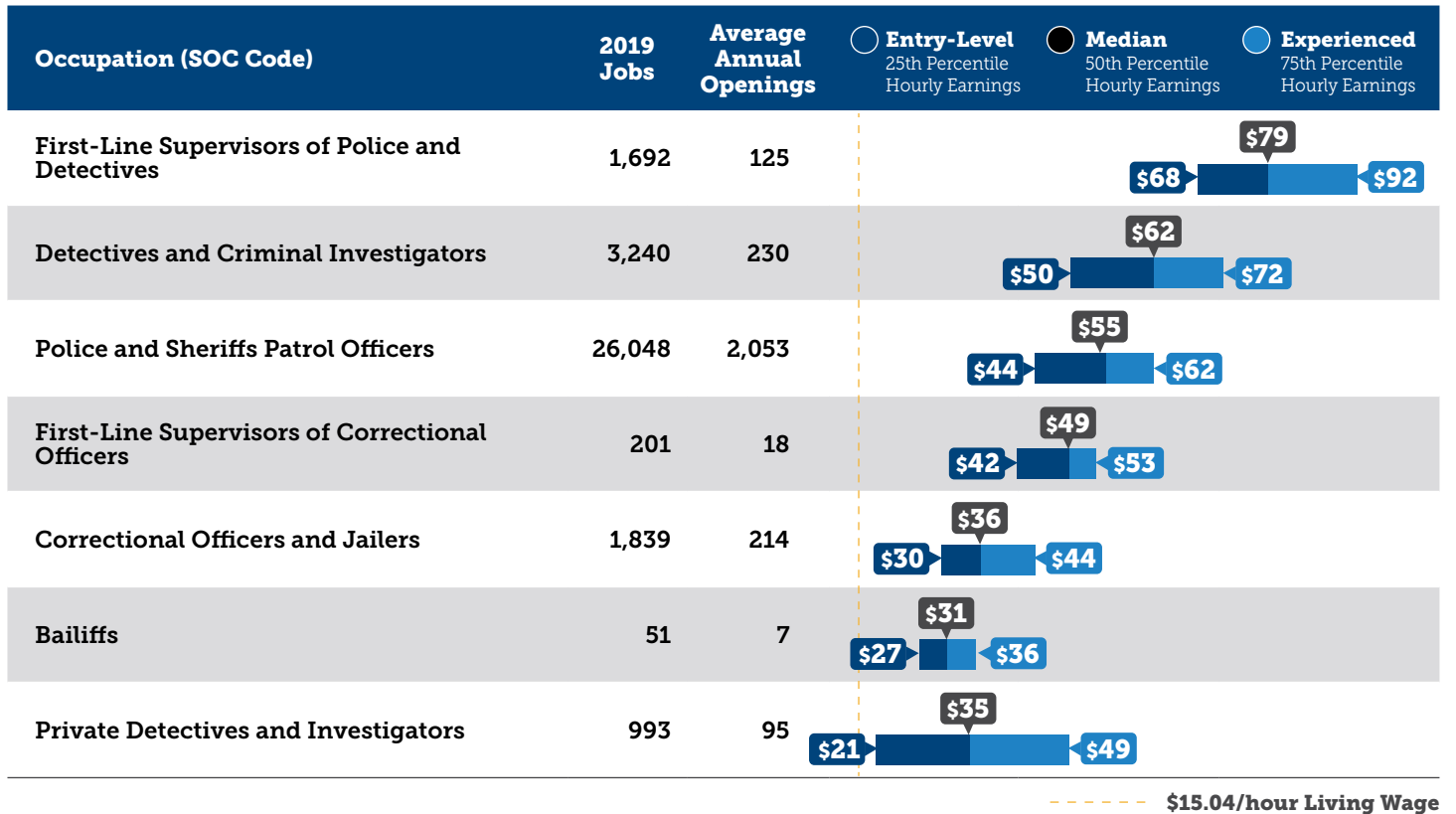


Law Enforcement

🔍 Employment Demand Analysis

Seven middle-skill occupations account for 34,065 jobs in law enforcement and combined have 2,742 projected annual openings (new + replacement jobs). The largest occupation, by far, is police and sheriff's patrol officers. This occupation is projected to have the most job openings, 2,053.

Exhibit 3. Law enforcement occupational employment, annual openings, and wages



A search of online job postings shows 1,851 postings related to law enforcement in 2020 in Los Angeles County. The top five law enforcement occupations were listed in 1,842 out of 1,851 postings.

Exhibit 4. Top occupations in job postings

Occupational Title	Job Postings
Police and Sheriff's Patrol Officer	647
Private Detectives and Investigators	554
Detectives and Criminal Investigators	419
Correctional Officers and Jailers	145
First-Line Supervisors of Police and Detectives	77

Law Enforcement

Job Posting Finding

Indicating an occupational niche related to port operations in the county, there were 30 postings for import specialists and 15 postings for ocean import specialists. These job titles are typically associated with the occupation of immigration and customs inspectors, which falls within detectives and criminal investigators.

Police officer and investigator comprise the two most common job titles in job postings.

Exhibit 5. Top job titles in job postings

Job Title	Job Postings
Police Officer	47
Investigator	41
Police Cadet	37
Criminal Investigator	32
Post Commander	31

In Los Angeles County, employers who posted the most ads for law enforcement job vacancies were healthcare providers, and local and federal government agencies. Deloitte appears as a top employer due to job postings for intelligence analysts, an occupation typically grouped under detectives and criminal investigators.

Exhibit 6. Top employers in job postings

Employer	Job Postings
Anthem Blue Cross	193
Prime Healthcare Services	48
City of Glendale	42
US Customs and Border Protection	41
Deloitte	25

Top skills requested in job postings were surveillance, and public health and safety. Quantitative abilities also figured highly with 515 postings for skills such as financial analysis, statistical reporting, and data mining.

Exhibit 7. In-demand law enforcement skills



Education & Training Supply Analysis

In Los Angeles County, 19 community colleges and 12 proprietary schools offer programs related to law enforcement. In the 2019-20 academic year, community colleges conferred 2,810 awards and proprietary schools conferred 1,003 awards.

Exhibit 8. Total awards by academic year²

	2016-17	2017-18	2018-19	2019-20
Community Colleges	–	2,669	2,763	2,810
Proprietary Schools and Training Providers	664	762	1,003	–

Exhibit 9. Law enforcement programs

Community Colleges	<ul style="list-style-type: none"> · Administration of Justice (TOP 2105.00) · Corrections (TOP 2105.10) · Probation and Parole (TOP 2105.20) · Police Academy (TOP 2105.50)
Proprietary Schools and Training Providers	<ul style="list-style-type: none"> · Criminal Justice/Law Enforcement Administration (CIP 43.0103) · Criminal Justice/Safety Studies (CIP 43.0104) · Criminal Justice/Police Science (CIP 43.0107)



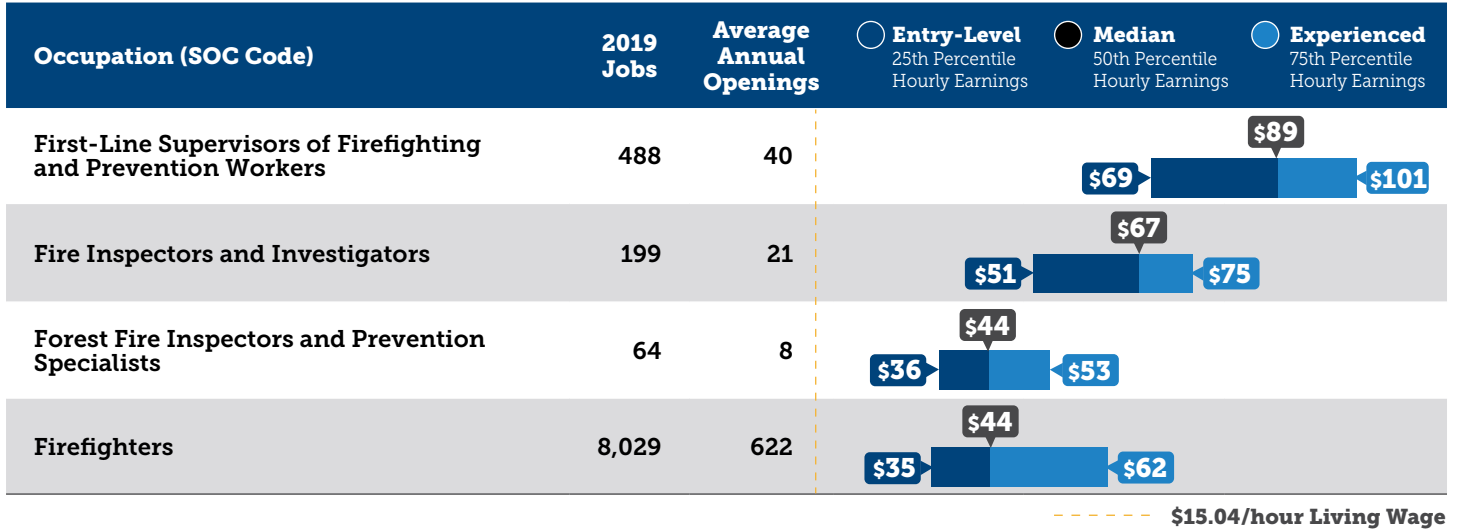
² Due to different data collection periods, the most recent three-year period of available data for community colleges is 2017-18 to 2019-20 while the three-year period for proprietary schools and other training providers is 2016-17 to 2018-19.

Firefighting

Employment Demand Analysis

Four middle-skill occupations account for 8,780 jobs in firefighting and combined have 691 projected annual openings. The largest occupation, firefighters, has substantially more jobs than any other occupation in this category. This occupation also is projected to have the most job openings, 622.

Exhibit 10. Firefighting occupational employment, annual openings, and wages



A search of online job postings shows 277 postings related to firefighting in 2020 in Los Angeles County. The most advertised occupations were firefighters and supervisors of firefighters, appearing in 196 postings.

Exhibit 11. Top occupations in job postings

Occupational Title	Job Postings
Firefighters	102
First-Line Supervisors of Fire Fighting and Prevention Workers	94
Fire Inspectors and Investigators	60
Forest Fire Inspectors and Prevention Specialists	21



Firefighting

Job Posting Finding

Among the traditional employers like city, county, and other government agencies, National Testing Network shows up as the entity with the most number of job postings. They act as a placement agency for firefighters and other public safety occupations, providing testing and other screening services for employers.

Firefighting occupations are described by a variety of job titles in job postings, including wildland firefighter and airport firefighter. These two common job titles may indicate airports and government agencies are the leading employers for these jobs.

Exhibit 12. Top job titles in job postings

Job Title	Job Postings
Firefighter	22
Firefighter/Paramedic	17
Wildland Firefighter	12
Entry Level Airport Firefighter	5
Deputy Chief	5

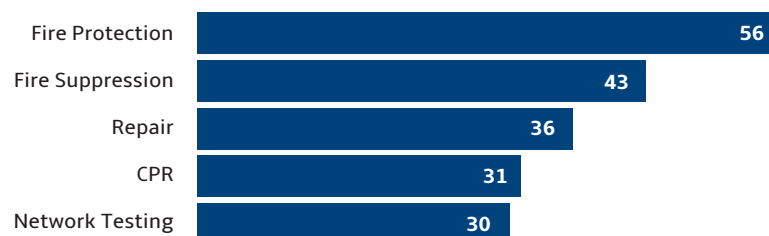
In Los Angeles County, the employers who posted the most advertisements for firefighting job vacancies were a federal government agency and a statewide public safety agency. The city and county of Los Angeles were among the top 10 employers in job postings.

Exhibit 13. Top employers in job postings

Employer	Job Postings
National Testing Network	23
California Conservation Corps	9
Northrop Grumman	8
Allied Universal	8
University Of California	7

Top skills requested in job postings were fire protection and suppression. In addition to firefighting and first aid skills, employers also are looking for candidates with budgeting, scheduling, and network testing skills.

Exhibit 14. In-demand firefighting skills



Firefighting

Education & Training Supply Analysis

In Los Angeles County, 11 community colleges and 2 proprietary schools offer programs related to firefighting. In the 2019-20 academic year, community colleges conferred 598 awards and proprietary schools conferred 45 awards.

Exhibit 15. Total awards by academic year³

	2016-17	2017-18	2018-19	2019-20
Community Colleges	–	590	677	598
Proprietary Schools and Training Providers	47	51	45	–

Exhibit 16. Firefighting programs

Community Colleges

- Fire Technology (TOP 2133.00)
- Wildland Fire Technology (TOP 2133.10)
- Fire Academy (TOP 2133.50)

Proprietary Schools and Training Providers

- Fire Services Administration (CIP 43.0202)
- Fire Science/Fire-fighting (CIP 43.0203)



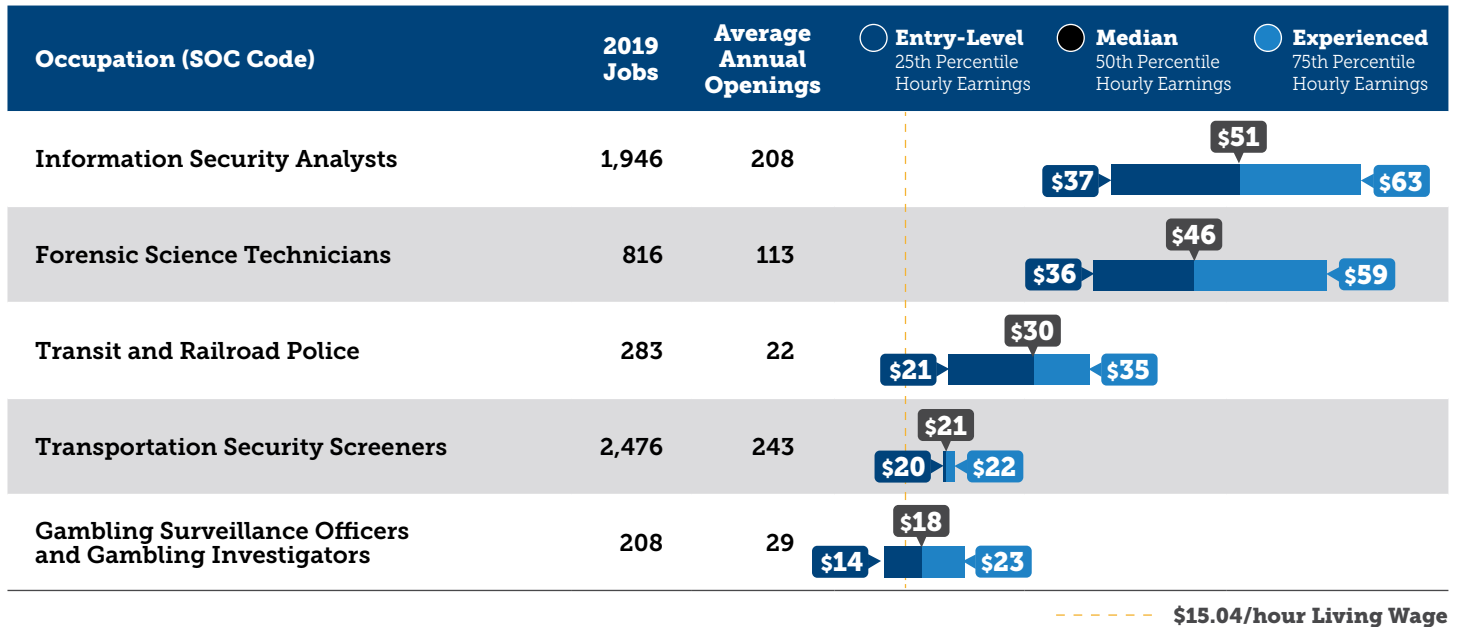
³ Due to different data collection periods, the most recent three-year period of available data for community colleges is 2017-18 to 2019-20 while the three-year period for proprietary schools and other training providers is 2016-17 to 2018-19.

Specialized Public Safety Occupations

🔍 Employment Demand Analysis

Five middle-skill occupations account for 5,729 jobs in specialized public safety occupations which combined have 615 projected annual openings. The largest occupation is transportation security screeners. This occupation also is projected to have the most job openings, 243, followed by information security analysts, 208.

Exhibit 17. Specialized public safety employment, annual openings, and wages



A search of online job postings shows 4,262 postings related to specialized public safety occupations in 2020 in Los Angeles County. Nearly all advertisements (96%) were for information security analysts.

Exhibit 18. Top occupations in job postings

Occupational Title	Job Postings
Information Security Analysts	4,077
Transportation Security Screeners	98
Gaming Surveillance Officers and Gaming Investigators	40
Forensic Science Technicians	34
Transit and Railroad Police	13



Specialized Public Safety Occupations



Job Posting Finding

Because information security analysts account for 96% of the occupations listed in job postings, the analysis took a closer look at hiring requirements for this career. Top requested specialized skills are Microsoft Office, Linux, Python, JavaScript, and vulnerability assessment. Top certifications in job postings are SANS/GIAC (Global Information Assurance Certification), Cisco, and CompTIA Security+.

Since information security analysts dominated the job postings, the job titles below are likely directly related to this occupation as all allude to security or information security. Among the top 10 job titles were cloud engineer and cyber security engineer (28 and 26 job postings, respectively).

Exhibit 19. Top job titles in job postings

Job Title	Job Postings
Security Engineer	106
Information Security Analyst	67
Information Security Engineer	60
Senior Security Engineer	58
Security Analyst	49

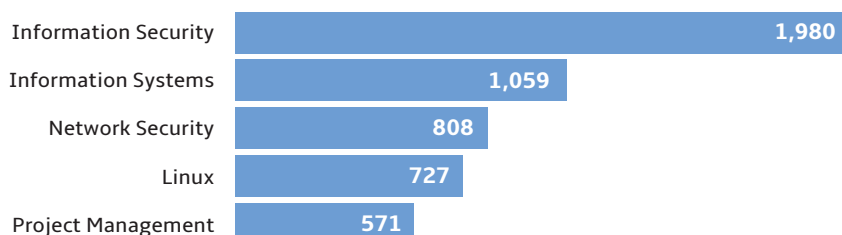
In Los Angeles County, employers with job postings related to specialized public safety represent many different industries, including healthcare, finance, aerospace manufacturing, and entertainment.

Exhibit 20. Top employers in job postings

Employer	Job Postings
Northrop Grumman	149
Deloitte	104
IBM	86
Disney	77
The Boeing Company	71

Information technology, management information systems, and cybersecurity are skills highly desired by employers. Job postings that mentioned information security, information systems, and network security totaled 3,847.

Exhibit 21. In-demand skills for specialized public safety occupations



Specialized Public Safety Occupations

Education & Training Supply Analysis

In Los Angeles County, 7 community colleges and 5 proprietary schools offer programs related to other specialized public safety occupations. In the 2019-20 academic year, community colleges conferred 93 awards and proprietary schools conferred 91 awards related to this field.

Several area colleges provide programs that prepare students to enter specialized public safety occupations:

- Southwestern College offers Cyber-forensic and Forensic Studies
- East Los Angeles College offers Forensic Crime Scene Investigation
- El Camino College offers Forensics
- Rio Hondo College offers Homeland Security

Exhibit 22. Total awards by academic year⁴

	2016-17	2017-18	2018-19	2019-20
Community Colleges	–	134	123	93
Proprietary Schools and Training Providers	134	368	91	–

Exhibit 23. Law enforcement programs

Community Colleges	<ul style="list-style-type: none"> • Industrial and Transportation Security (TOP 2105.30) • Forensics, Evidence, and Investigation (TOP 2105.40) • Other Public and Protective Services (TOP 2199.00)
Proprietary Schools and Training Providers	<ul style="list-style-type: none"> • Corrections and Criminal Justice, Other (CIP 43.0109) • Security and Loss Prevention Services (CIP 43.9999)



⁴ Due to different data collection periods, the most recent three-year period of available data for community colleges is 2017-18 to 2019-20 while the three-year period for proprietary schools and other training providers is 2016-17 to 2018-19.

More About the Centers of Excellence

The Centers of Excellence (COE) for Labor Market Research deliver regional workforce research and technical expertise to California Community Colleges for program decision-making and resource-development. This information has proven valuable to colleges in beginning, revising, or updating economic development and Career Education (CE) programs, strengthening grant applications, assisting in the accreditation process, and in supporting strategic planning efforts.

The Centers of Excellence Initiative is funded in part by the Chancellor's Office, California Community Colleges, Economic and Workforce Development Program. The Centers aspire to be the leading source of regional workforce information and insight for California Community Colleges. More information about the Centers of Excellence is available at coecc.net.

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To download a copy of this, visit LA/Orange County under *Studies by Region* coecc.net.

Sources

Emsi 2021.1, QCEW, non-QCEW, Self-Employed; Centers of Excellence Skill/Occupation Crosswalk; Burning Glass Technologies' Labor Insight Real-time Labor Market Information tool; CalPASS Plus/LaunchBoard; California Community Colleges Chancellor's Office Data Mart; Integrated Postsecondary Education Data System (IPEDS).

Important Disclaimer

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