

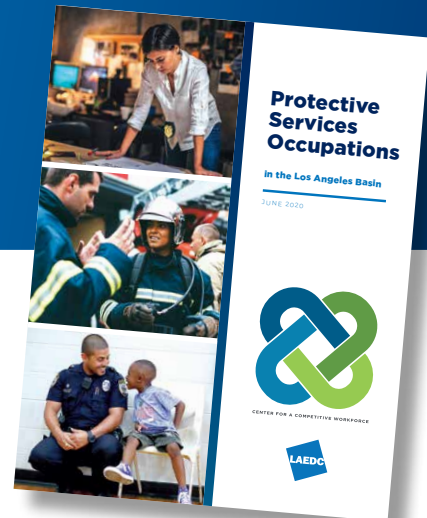


CENTER FOR A COMPETITIVE WORKFORCE



Protective Services Occupations

in the Los Angeles Basin



HIGHLIGHTS OF THE 2020 REPORT

ABOUT CENTER FOR A COMPETITIVE WORKFORCE

CCW is focused on institutionalizing the regular engagement of and partnerships between our 19 community colleges in the Los Angeles region and employers from high-growth industry sectors (i.e. those with productive advantages, deep labor concentrations and projected growth of middle skill jobs). It is through the development, institutionalization and activation of these productive partnerships and real-time “feedback loops” that colleges can adaptively attune their programs, courses and curricula to the workforce needs in a way that is truly responsive, demand-driven and future-forward, while also providing students with the very important real-world experiences that come from work-based learning opportunities such as internships.

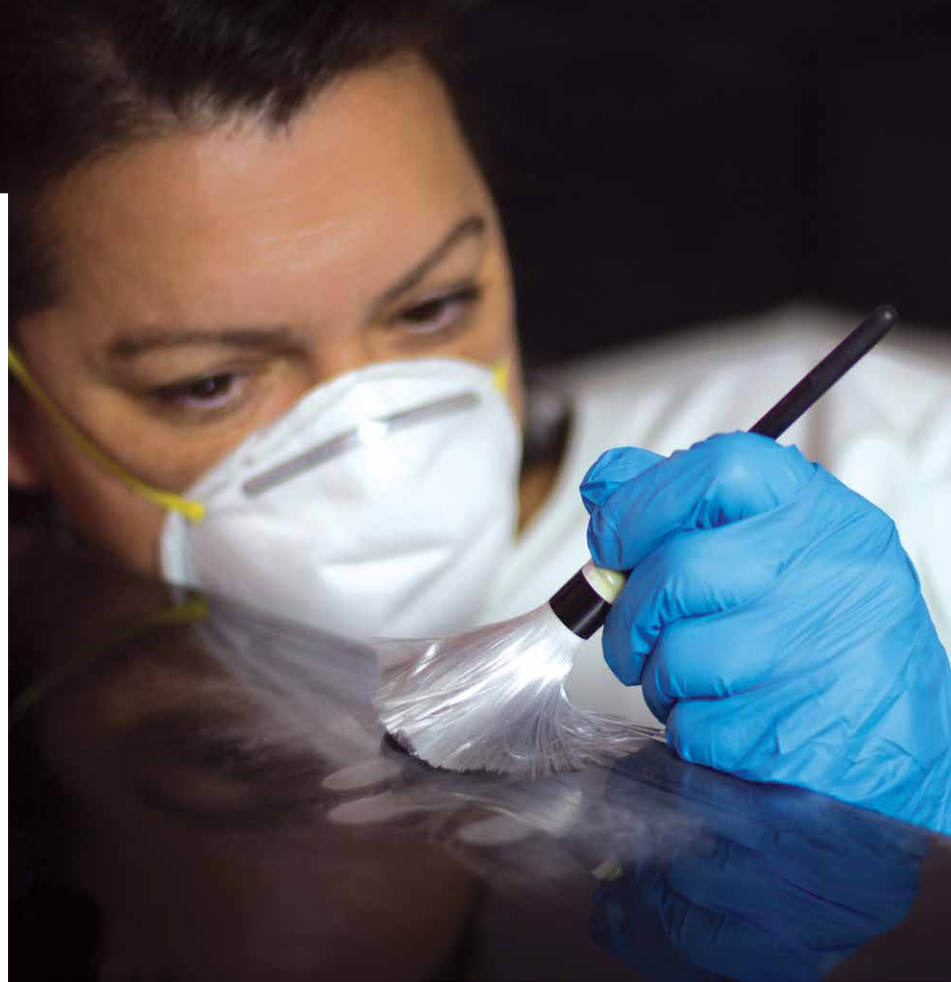
CCW has several work streams:

- Labor Market Analysis
- Industry Councils
- Regional Program Advisory Meetings
- Work-Based Learning Partnerships
- Company Visits and Career Videos
- Workforce and Education Partners Portal
- Bioscience Industry Portal

Learn more about CCW's work!

In this report, CCW

- Identifies the jobs that represent the best targets for community college students in the region
- Forecasts regional employment in target occupations, and compares supply to demand
- Analyzes the major trends occurring in the industry
- Identifies key skills that are valued by employers

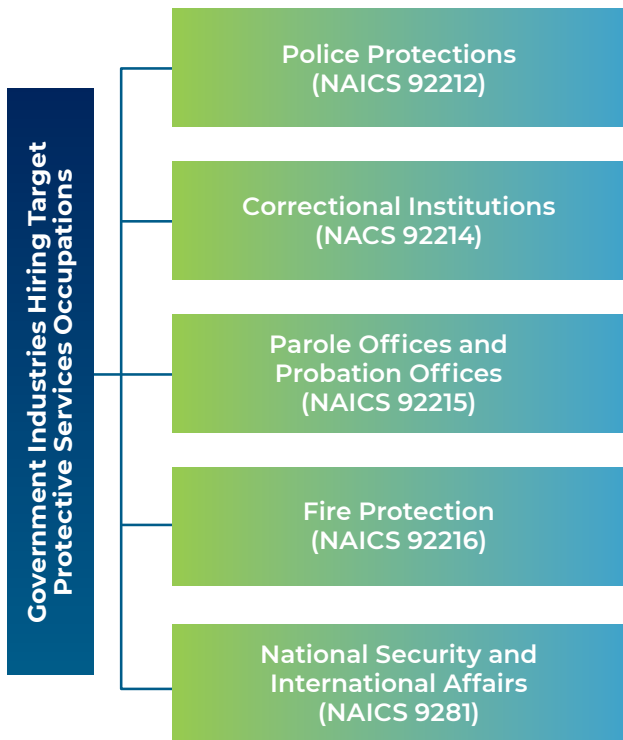


Protective Services Occupations in the Los Angeles Basin

141,000 workers were employed in protective services occupations in the LA Basin; of these, **37 percent are middle-skill occupations**, which are attainable for workers with an associate degree or postsecondary nondegree award or certification. No protective services occupations are classified as above middle-skill. It is projected that there will be **9,650 annual openings in the six target occupations** profiled in this report, but government budget changes will affect these projections.

Based on regional community college completions, there will be a projected undersupply of about 5,500 workers each year over the next five years in the LA Basin in the identified occupations, as the supply of awards from the community colleges is not meeting workforce demand in most of the targeted middle-skill occupations.

Protective Services Defined: In each of these occupations, the safety of the community being served is of utmost concern. From crossing guards and lifeguards to police officers and firefighters, students seeking training in these occupations must be prepared for the great responsibility and compassion expected of these jobholders.



Local, state, and/or federal government employ close to half of all protective services occupations. The target occupations identified in this report are most commonly employed in these six public industries.

In 2017, **141,060 workers** were employed in protective services occupations in the LA Basin; of these, **36.9 percent** are classified by the community colleges as middle-skill occupations, which are attainable for workers with an associate degree or postsecondary nondegree award or certification. No protective services occupations are classified as above middle-skill.

Risk of Automation

Technologies in the protective services industry have affected some positions more than others, such as security screeners and correctional officers. But generally, demand for protective services workers will not decline substantially due to technology, and technology familiarity is generally important and supports worker productivity.

Current Degree of Automation

HIGHLY AUTOMATED

- none

MODERATELY AUTOMATED

- Immigration and Customs Inspectors
- Transportation Security Screeners

SLIGHTLY AUTOMATED

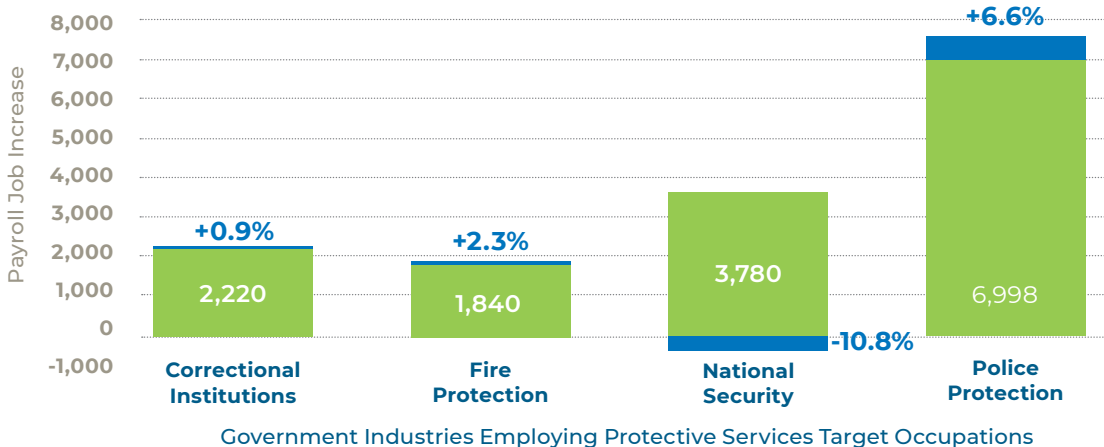
- Criminal Investigators and Special Agents
- Forest Fire Inspectors and Prevention Specialists

VERY LITTLE AUTOMATED

- Security Guards
- Crossing Guards

Hiring Industries Outlook

2017 Employment Net 5 yr Job Change



Target Occupations Within the Protective Services Industry:

Six target middle-skill occupations that have significant job prospects over the next five years and that stand to benefit from investment in apprenticeship and non-degree and certificate training programs include:

5-Year Outlook for Six Target Occupations:

Over the next five years, the LA Basin can expect **48,250 job openings** across the six identified target middle-skill occupations in protective services. These middle-skill job openings provide both identifiable opportunities for workers to earn a living wage and well-defined “career ladders” to move up the economic opportunity chain.

Target Middle-Skill Occupations

SOC	Occupation	2017 Employ.	2017 to 2022 Across All Industries			Annual Openings	Median Annual Wage
			Net Job Change	Replacement Jobs	Total Openings		
33-3051	Police and Sheriff's Patrol Officers	30,410	740	30,850	31,590	6,320	\$103,850
33-2011	Firefighters	8,710	230	9,510	9,740	1,950	\$80,630
33-3012	Correctional Officers and Jailers	4,560	-150	3,320	3,170	630	\$63,590
33-9093	Transportation Security Screeners	2,400	80	1,580	1,660	330	\$38,020
33-3021	Detectives and Criminal Investigators	3,980	80	1,350	1,430	290	\$120,490
19-4092	Forensic Science Technicians	970	60	600	660	130	\$92,590
Total Employment		51,030	1,040	47,210	48,250	9,650	

From Where the Talent Will Come:

Currently, there are nine community college programs, which conferred **4,164 certificates and associate degrees** (2018-19 academic year), that prepare students to enter these occupations in protective services.

Community college awards related to six protective services occupations

Program	2018-19 Awards
Administration of Justice	2,410
Corrections	48
Probation and Parole	-
Industrial and Transportation Security	76
Forensics, Evidence, and Investigation	56
Police Academy	374
Fire Technology	1,136
Wildland Fire Technology	22
Fire Academy	43
Total	4,164

Five-Year Industry Workforce Shortage in the LA Basin

Based on regional community college completions, a looming workforce shortage appears to exist. More than **9,600 annual openings** are projected for the six middle-skill target occupations assayed in this report. However, community college **completions only totaled about 4,100 awards** in the 2018-19 academic year, potentially creating an annual **undersupply of 5,500 workers** to fill job openings in the region.

WORKER SKILLS IN DEMAND

SOFT SKILLS LIKE CULTURAL COMPETENCY, RELATIONSHIP-BUILDING, NEGOTIATION, DE-ESCALATION, CONFLICT RESOLUTION AND STRESS MANAGEMENT.

TECHNOLOGICAL SKILLS, INCLUDING DATA ANALYSIS, UNDERSTANDING OF AI, AND OTHER NEW TECHNOLOGIES BEING INTRODUCED IN THE VARIOUS OCCUPATIONS

SPANISH LANGUAGE SKILLS

PHYSICAL SKILLS AND STAMINA NECESSARY FOR CERTAIN OCCUPATIONS SUCH AS FIREFIGHTING







TECHNOLOGIES BEING ADOPTED THAT ARE AFFECTING THE WORKFORCE:

- Firefighters are using real-time intelligence for tracking and projecting wildfires, advanced detection systems, and improvements in analyzing firefighter's physiological metrics during emergencies.
 - Real-time data of shifting wind and weather patterns, and increased emphasis on infrared imagery of wildfires and shapefile updates of fires are all becoming more essential for battling wildfires.
 - There is increasing use of wildfire detection systems using computer aided sensors in the sky that are programmed to alert dispatch systems when ignition is detected, and real-time data used in predicting the path of a wildfire once ignition has been detected.
 - Telemetry systems are fitted into breathing apparatuses to report vital physiological data from firefighters. Combining physiological data with GPS tracking and building plans will allow controllers and fellow firefighters to track movements and map out action courses.
- Correction facilities are adopting advancements in surveillance systems and AI to analyze situations automatically, and speech recognition software to monitor phone calls. Adoption of these technologies has been a factor driving the decline in correctional officers and jailers, and also requires new skills.
- Transportation security scanners are similarly being affected by advancements in surveillance systems and AI, which generally has reduced the size of the workforce and requires worker training. Such workers also may need familiarity with 3D security scanners which allow workers to digitally rotate an image to examine items.
- Real-time traffic analytics are increasingly important for firefighters and other first-responders.
- Electronic monitoring of parolees is shifting to include emphasis on identifying patterns that suggest a need for resources to positively impact physical and mental health, help build a working relationship with parolees and assist with re-integration into society.
- Forensic science is starting to adopt forensic genealogy, which allows scientists to match DNA against genetic databases, which may identify a suspect or find relatives. Similarly, DNA phenotyping allows scientists to generate certain attributes of a person's physical appearance using biological materials left at a crime scene. Familiarity with these technologies will helpful to job seekers.

JOBS WITH A BRIGHT FUTURE

6 Middle-Skill Protective Services Occupations with Potential

	JOB TITLE	“WHAT THEY DO”	5-YEAR TOTAL JOB OPENINGS	HOURLY WAGE
	Firefighters	Control and extinguish fires or respond to emergency situations where life, property, or the environment is at risk. Duties may include fire prevention, emergency medical service, hazardous material response, search and rescue, and disaster management.	9,740	\$39/hr.
	Correctional Officers and Jailers	Guard inmates in penal or rehabilitative institution in accordance with established regulations and procedures. May guard prisoners in transit between jail, courtroom, prison, or other point. Include deputy sheriffs and police who spend the majority of their time guarding prisoners in correctional institutions.	3,170	\$31/hr.
	Detectives and Criminal Investigators	Conduct investigations related to suspected violations of Federal, State, or local laws to prevent or solve crimes.	1,430	\$58/hr.
	Police and Sheriff's Officers	Maintain order, enforce laws and ordinances, and protect life and property in an assigned patrol district. Perform combination of following duties: patrol a specific area on foot or in a vehicle; direct traffic; issue traffic summonses; investigate accidents; apprehend and arrest suspects, or serve legal processes of courts.	31,590	\$50/hr.
	Forensic Science Technicians	Collect, identify, classify, and analyze physical evidence related to criminal investigations. Perform tests on weapons or substances, such as fiber, hair, and tissue to determine significance to investigation. May testify as expert witnesses on evidence or crime laboratory techniques. May serve as specialists in area of expertise, such as ballistics, fingerprinting, handwriting, or biochemistry.	660	\$45/hr.
	Transportation Security Screeners	Conduct screening of passengers, baggage, or cargo to ensure compliance with Transportation Security Administration (TSA) regulations. May operate basic security equipment such as x-ray machines and hand wands at screening checkpoints.	1,660	\$18/hr.

KEY CAREER EDUCATION FINDINGS AND RECOMMENDATIONS

Additional intelligence for college faculty



Addressing an Impending Worker Shortage: Recommendations & Opportunities

- When workforce demand is considered, there is some urgency for the creation and expansion of programs targeting protective services occupations. The aging workforce means that younger workers completing community college are in a key position to get a head start in learning the new technologies that are now being used.
- The demographic composition also shows that females are vastly underrepresented, so strategies to involve women in firefighting, law enforcement and forensic positions from a young age may be helpful in building a stronger pipeline of qualified entrants.
- There are several ways in which the protective services industry can adapt to address looming challenges like the workforce gap and automation trends. A primary solution is to invest in programs that connect young workers with technological positions, as college completions have trended towards the knowledge- and analysis-based side of these target occupations.
- For the various enforcement positions, building positive community relationships has never been more important, hence greater emphasis on soft skills like cultural competency, negotiation, de-escalation, conflict resolution and stress management will help ensure that workers are properly equipped to handle the complex and dangerous situations they may face every day. Colleges and academies must prepare future officers for the interpersonal relationships and cultural competencies they must build with the residents they are tasked to protect. Spanish language skills and human relations, such as cultural sensitivity, are strongly emphasized.
- Attention should be placed on programs that emphasize advancements in technology and equip workers with the tools to perform in conjunction with it, such as with analyzing surveillance data.
- To support investigative and forensic career paths, creating labs, building programs emphasizing data analysis, and introducing students to AI are additional ways to help students adapt to industry trends.
- All the occupations benefit from scenario-based training that replicates real-life complexities which provide recruits the opportunity to enhance their instincts and problem-solving skills. This and other program elements can help new recruits to be better emotionally and technically prepared to meet complicated present-day policing challenges, especially with the deployment of BWCs that put officer actions in the public eye.
- It is more important than ever that protective services workers act professionally on the job and maintain clarity of mind in stressful situations. Training programs must adapt to provide them the necessary tools to deal with the current cultural, social, and political climate that surrounds their jobs.



CALIFORNIA COMMUNITY COLLEGES
CAREER EDUCATION

19 COMMUNITY COLLEGES IN L.A. COUNTY

- 1**
Cerritos College
www.cerritos.edu/cte
11110 Alondra Blvd.
Norwalk, CA 90650
562.860.2451
- 2**
Citrus College
www.citruscollege.edu/academics/cte
1000 West Foothill Blvd.
Glendora, CA 91741
626.914.8700
- 3**
Compton College
www.compton.edu/academics/cte
1111 E. Artesia Blvd.
Compton, CA 90221
310.900.1600 ext 2273
- 4**
East Los Angeles College
www.elac.edu/academics/workforce/cte
1301 Avenida Cesar Chavez
Monterey Park, CA 91754
323.265.8610
- 5**
El Camino College
www.elcamino.edu/academics/cte/
16007 Crenshaw Blvd.
Torrance, CA 90506
310.660.3593 ext 3778
- 6**
Glendale Community College
www.glendale.edu/CareerEd
1500 Verdugo Road
Glendale, CA 91208
818.240.1000 ext 5158
- 7**
Long Beach City College
www.lbcc.edu
Liberal Arts Campus
4901 East Carson Street
Long Beach, CA 90808
562.938.4624
- 8**
Los Angeles City College
<https://www.lacitycollege.edu/Academics/Workforce-Education/>
855 N. Vermont Avenue
Los Angeles, CA 90029
323.953.4000 ext 1523
- 9**
Harbor College
www.lahc.edu/cte
1111 Figueroa Place
Wilmington, CA 90744
310.233.4042
- 10**
Los Angeles Mission College
www.lamission.edu/careereducation
13356 Eldridge Ave.
Sylmar, CA 91342
818.364.7729
- 11**
Los Angeles Pierce College
www.piercecollege.edu/pierce_career.asp
6201 Winnetka Ave.
Los Angeles, CA 91371
818.710.2249
- 12**
Los Angeles Southwest College
www.lasc.edu/cte
1600 W. Imperial Hwy.
Los Angeles, CA 90047
323.241.5388
- 13**
Los Angeles Trade Tech
pathways.lattc.edu
400 W. Washington Blvd.
Los Angeles, CA 90015
213.763.7385
- 14**
Los Angeles Valley College
www.lavc.edu/techeducation
5800 Fulton Ave.
Valley Glen, CA 91401
818.778.5747
- 15**
Mt. San Antonio College
www.mtsac.edu/cte
1100 N. Grand Ave.
Walnut, CA 91789
909.274.5140
- 16**
Pasadena City College
www.pasadena.edu/ewd
1570 E. Colorado Blvd.
Pasadena, CA 91106
626.585.7693
- 17**
Rio Hondo College
www.riohondo.edu/career-and-technical-education
3600 Workman Mill Rd.
Whittier, CA 90601
562.463.7368
- 18**
Santa Monica College
www.smc.edu/cte
1900 Pico Blvd.
Santa Monica, CA 90405
310.434.4040
- 19**
West Los Angeles College
www.wlac.edu/Academic/areas-of-study.aspx
9000 Overland Ave.
Culver City, CA 90230
310.287.4464
- 20**
Los Angeles Community College District
www.laccd.edu
707 Wilshire Blvd
Los Angeles, CA 90017
213.891.2000

Previous CCW labor market reports about the Los Angeles region include:

- Powering Economic Opportunity
- High Growth Occupations
- Health Care Services
- Professional Services
- Entertainment and the Rise of Digital Media
- Manufacturing: A Changing Middle-skill Workforce
- The Information and Communications Technology (ICT) Industry and its Workforce
- Construction: An Industry Facing Middle-skill Workforce Shortages

View them online at CompetitiveWorkforce.LA

