



CENTER FOR A  
COMPETITIVE WORKFORCE

# PROTECTIVE SERVICES OCCUPATIONS IN THE LOS ANGELES BASIN

POWERED BY



California  
Community  
Colleges



C·O·E

CENTERS OF EXCELLENCE  
FOR LABOR MARKET RESEARCH



LOS ANGELES COUNTY  
ECONOMIC DEVELOPMENT CORPORATION

*Collectively Advancing Opportunity and Prosperity for All*



**CCW**

**is leading industry-education partnerships to collaboratively strengthen our region's talent development ecosystem**

- 1. Data-driven research on the supply and demand for talent**
- 2. Industry Councils and Regional Program Advisories**
- 3. Developing work-based learning opportunities**
- 4. Workforce & Education Portal**

# PROTECTIVE SERVICES OCCUPATIONS IN THE LOS ANGELES BASIN



Shannon M. Sedgwick

Director, Institute for Applied Economics

Los Angeles County Economic Development Corporation

June 17, 2020

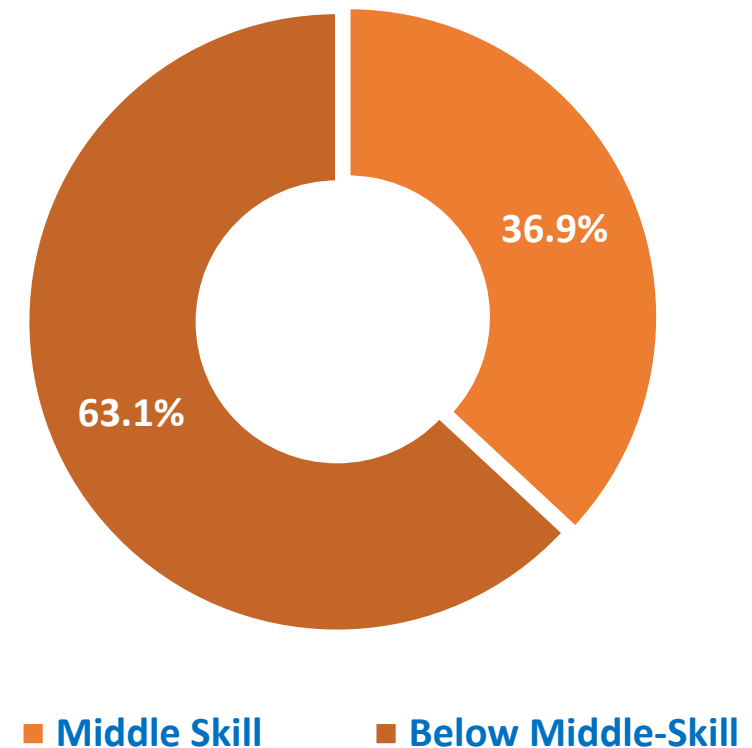


**LOS ANGELES COUNTY**  
ECONOMIC DEVELOPMENT CORPORATION  
*Advancing Opportunity and Prosperity for All*

# Summary of Key Findings

- **37 percent** of protective services occupations are classified as middle-skill
- **9,650 annual openings** are projected in the target protective services occupations
- These occupations are expecting an **undersupply** of about **5,500 workers** annually
- The protective services workforce is under increasing pressure to expand its skillset to respond to:
  - **physical demands**,
  - adapt to **new technologies**, and
  - prioritize **soft skills** when serving communities

Skills Classification for the Region's Protective Services Occupations



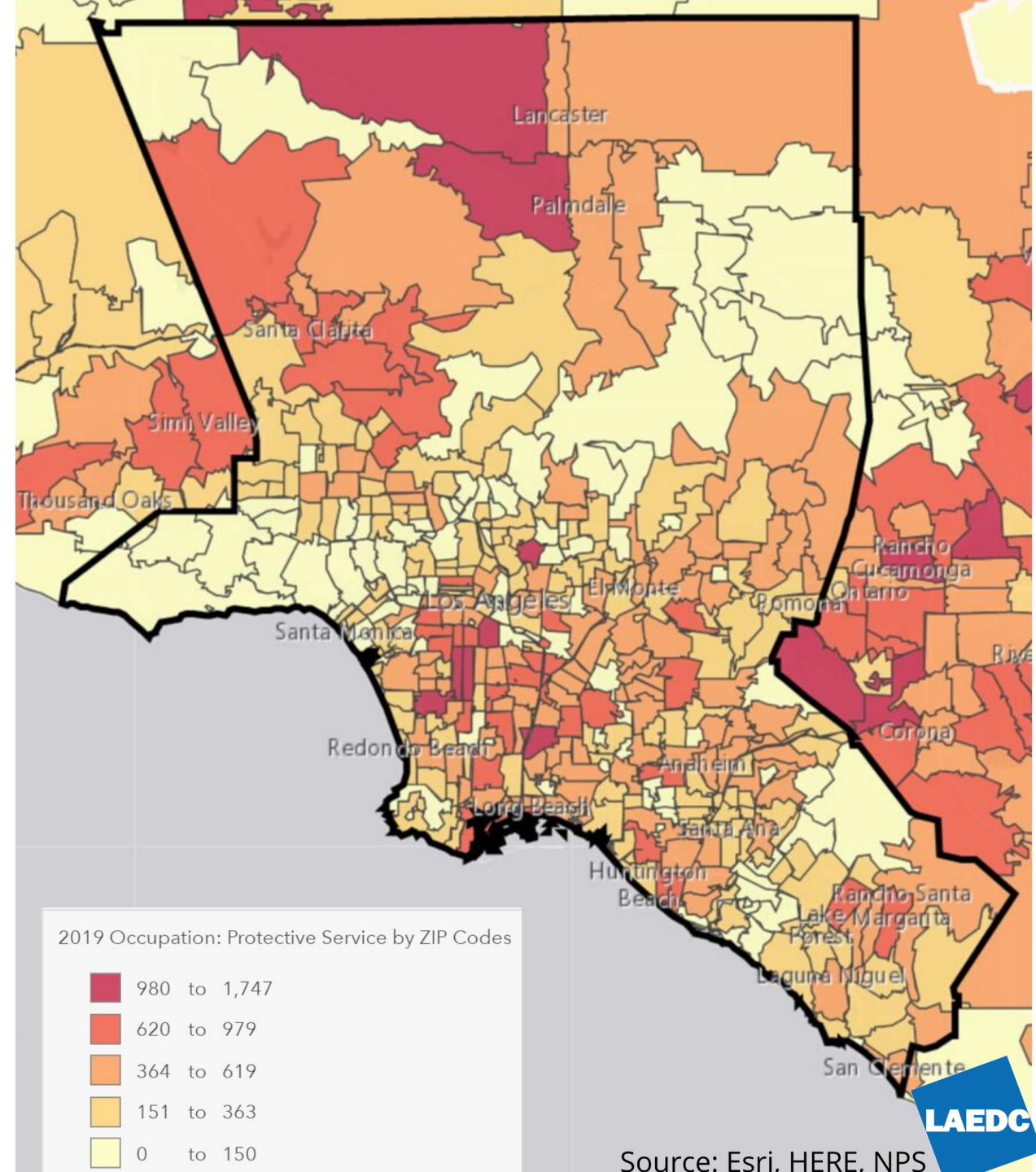
# Why Focus on Protective Services?

- ❖ 13 million residents in the Los Angeles Basin in need of a qualified workforce to promote public well being
- ❖ Los Angeles County is home to the nation's largest correctional institution system
- ❖ Tens of millions of tourists visiting the region each year require emphasis on transportation security
- ❖ Susceptibility to natural disasters
  - Wildfires
  - Earthquakes



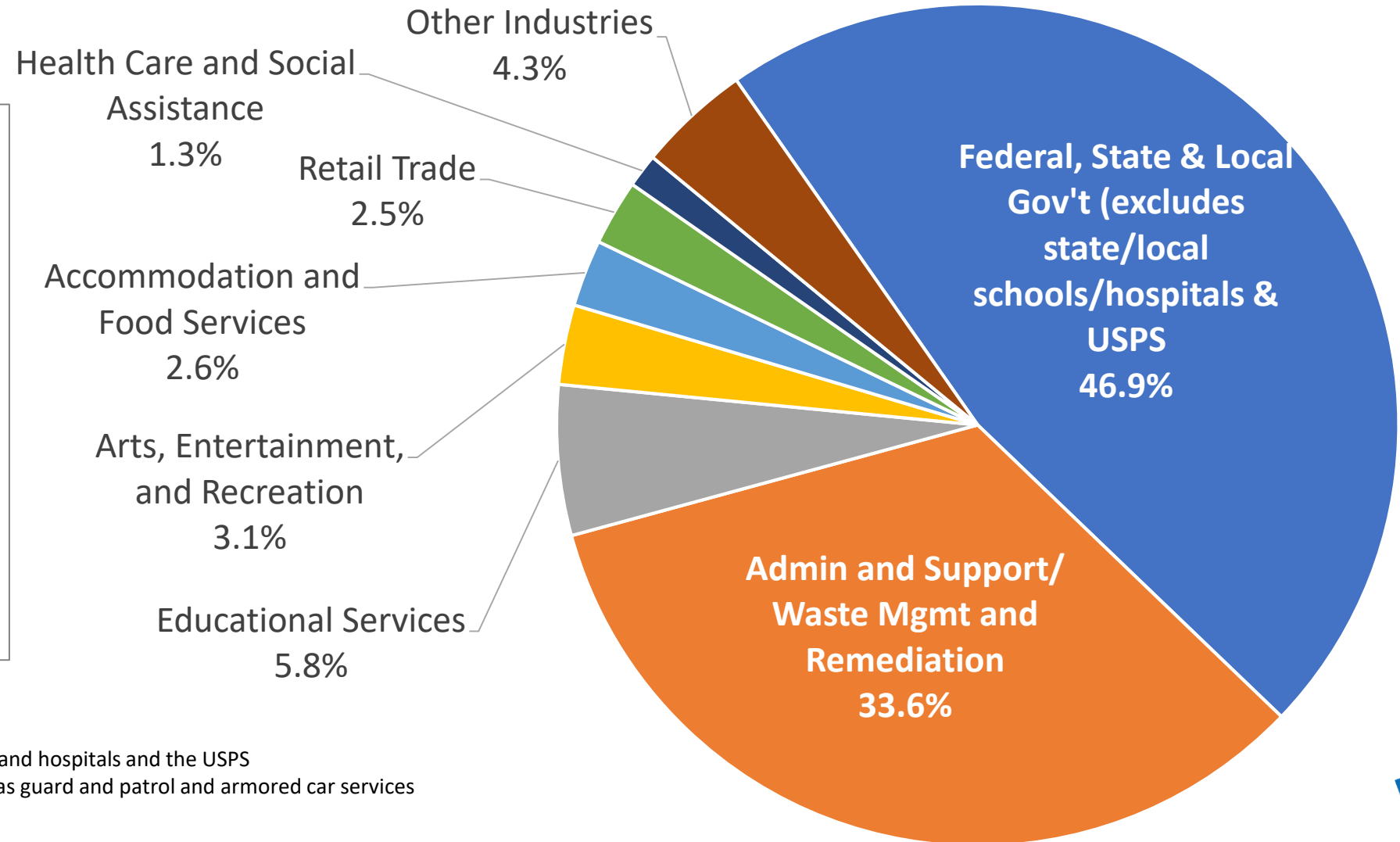
# L.A. Basin Residents Employed in Protective Services by Zip Code

Over **140,000** LA County residents are employed in protective service occupations



# Industries that Employ Protective Services Occupations

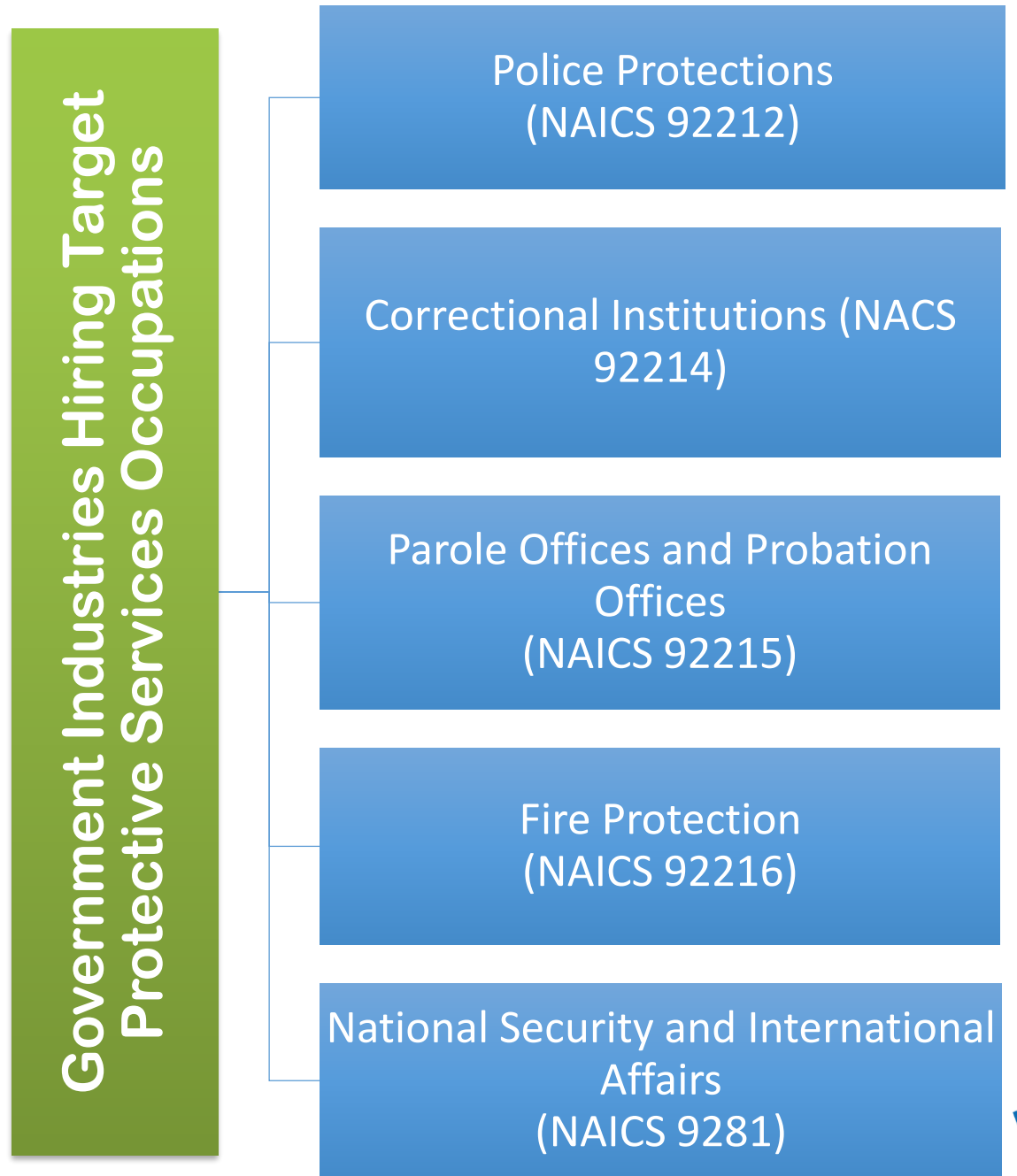
**Federal, state and local government agencies employ 47% of protective service occupations**



\* Excludes state and local schools and hospitals and the USPS

\*\* Includes security services such as guard and patrol and armored car services

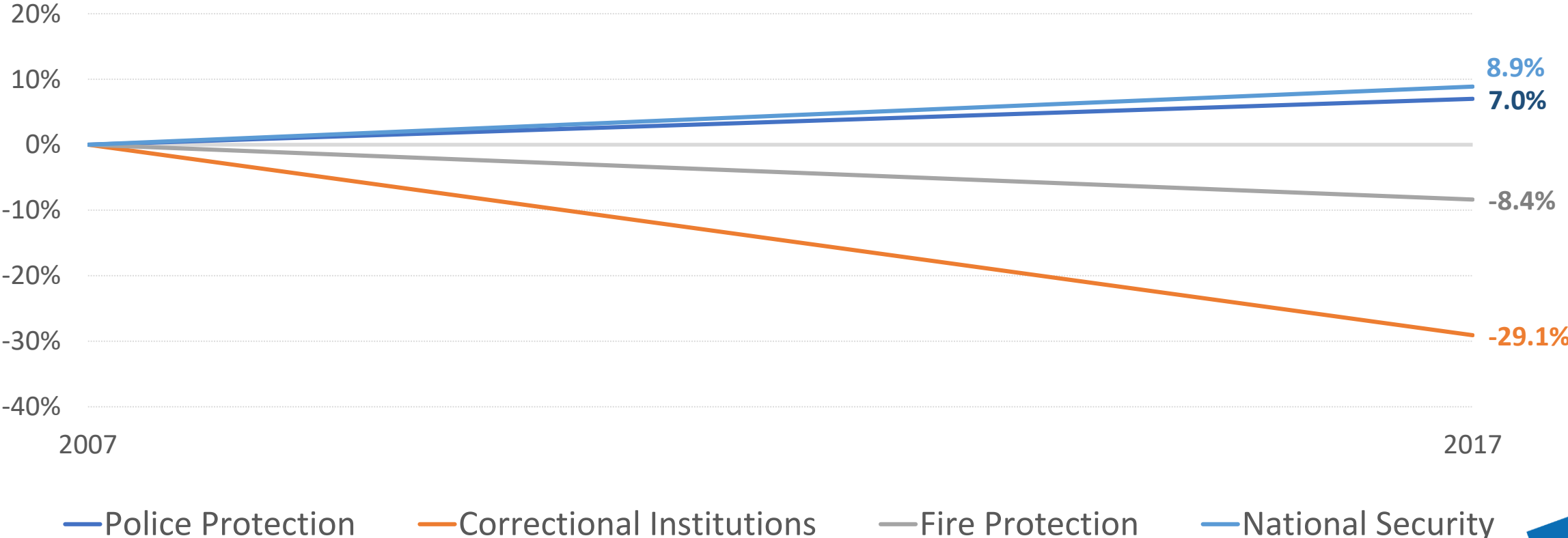
# Government Industries That Hire Protective Service Workers





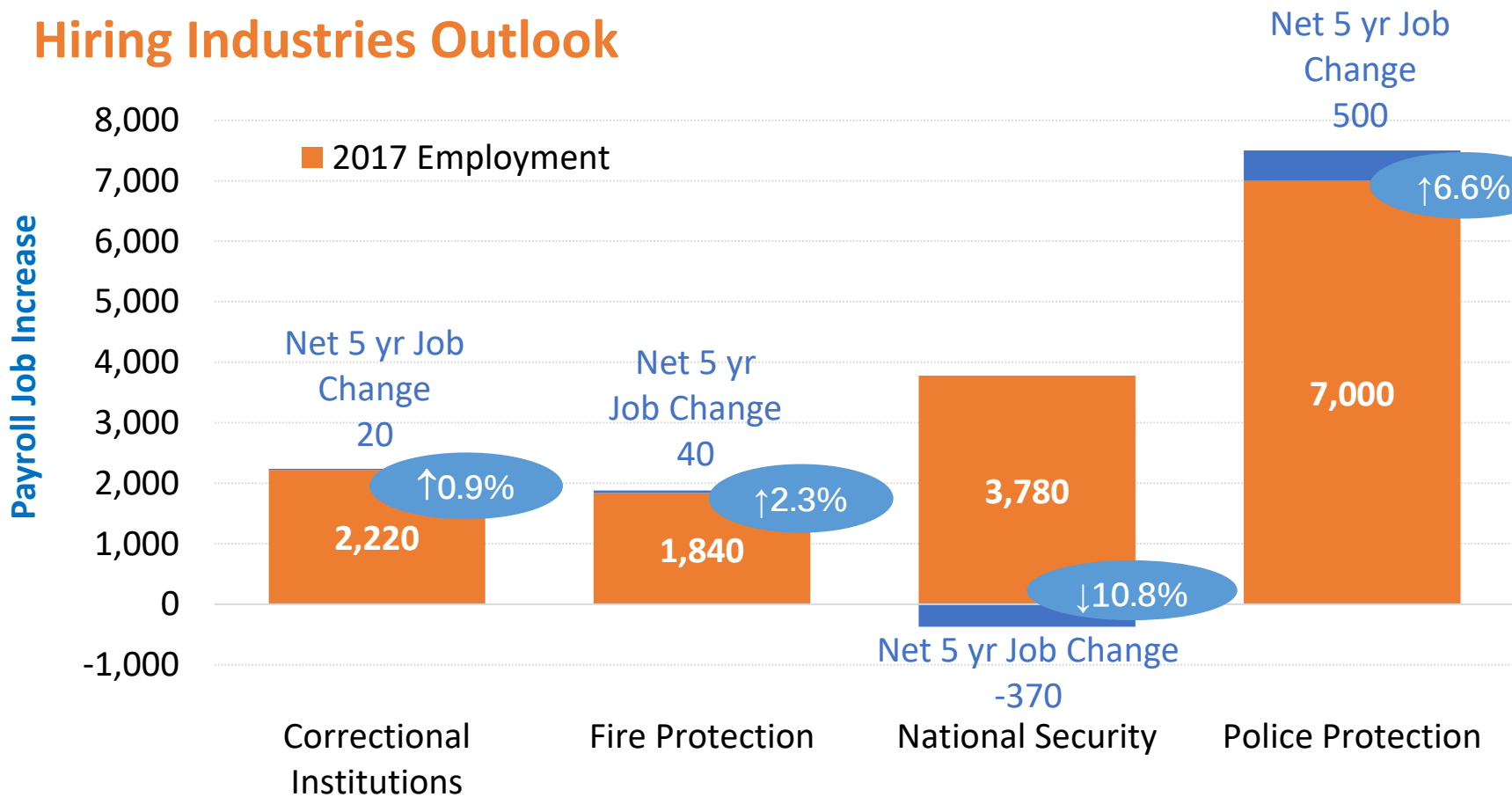
# Job Growth in Government Industries Hiring the Protective Services Target Occupations

## Change in Payroll Employment Over the Last Decade



# Forecasting the Protective Service Hiring Industries

## Hiring Industries Outlook



While projections indicate mostly positive growth across three of the main hiring industries, each of these industry's workforces are vulnerable to changes in government budgets.

# Risk of Automation

Very Little Automation	Slightly Automated	Moderately Automated	Highly Automated
<ul style="list-style-type: none"><li>• Security Guards</li><li>• Crossing Guards</li></ul>	<ul style="list-style-type: none"><li>• Criminal Investigators and Special Agents</li><li>• Forest Fire Inspectors and Prevention Specialists</li></ul>	<ul style="list-style-type: none"><li>• Immigration and Customs Inspectors</li><li>• Transportation Security Screeners</li></ul>	<ul style="list-style-type: none"><li>• <b>None</b></li></ul>

# Technologies Transforming Protective Services

## Police Protection

- ❖ Advancements in **Body-worn cameras** (BWCs) and **vehicle sensors** provide recordings of officer interactions with the public
- ❖ Streamlining **databases** improve efficiencies



## Fire Protection

- ❖ **Real-time data** tracks and projects wildfires
- ❖ Advanced **detection systems** save time and predict the path of fires
- ❖ Improved **telemetry systems** provide remote access to life-saving systems, such as air pressure and evacuation signals

# Technologies Transforming Protective Services

## Correctional Institutions

- ❖ Integrate AI into surveillance
- ❖ Machine learning software is working with speech recognition to monitor calls and conversation

## Parole and Probation

- ❖ GPS monitoring
- ❖ Mobile applications emphasizing positive behaviors

## Forensic Science

- ❖ Genealogical tracing
- ❖ Gait analysis



# In Demand Skills for New Hires



## Tech Skills

Real time data, sensory data, analytics and AI are playing a critical role across all target occupations



## Physical Fitness

Speed, agility and strength are extremely important in physically demanding protective services occupations



## Soft Skills

De-escalation  
Cultural Competency  
Spanish Language Skills

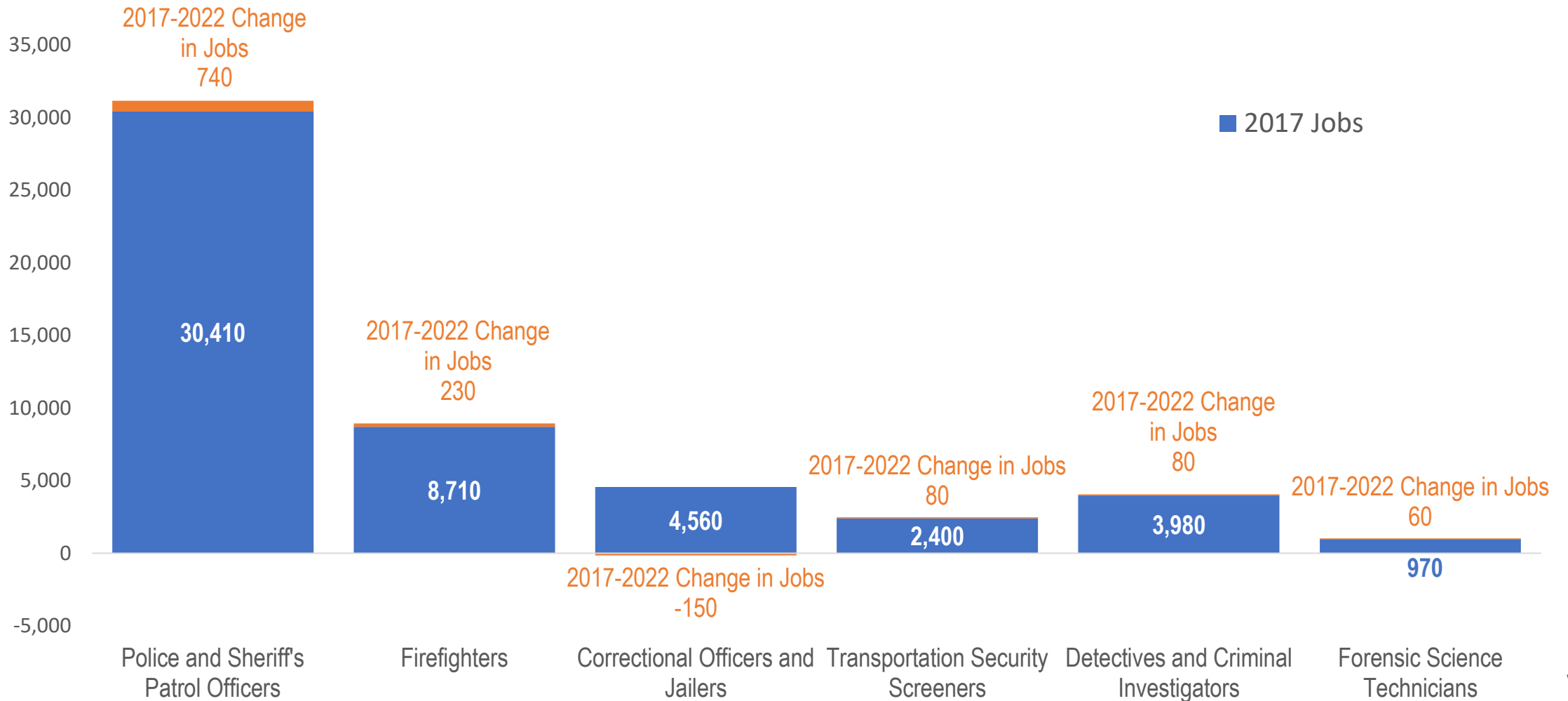
# Target Occupations

*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:*

SOC	Occupation	Protective Service Industries		Median Hourly Wage
		2017 Employ.	Annual Openings	
19-4092	Forensic Science Technicians	970	130	\$44.51
33-2011	Firefighters	8,710	1,950	\$38.77
33-3012	Correctional Officers and Jailers	4,560	630	\$30.58
33-3021	Detectives and Criminal Investigators	3,980	290	\$57.93
33-3051	Police and Sheriff's Patrol Officers	30,410	6,320	\$49.95
33-9093	Transportation and Security Screeners	2,400	330	\$18.28
<b>Total Employment</b>		<b>51,030</b>	<b>9,650</b>	<b>\$40.00</b>



# Occupational Outlook





# From Where Protective Services Talent Will Come



*Currently,  
there are 26  
community  
college  
programs in  
the LA Basin*



*4,164  
certificates  
and associate  
degrees  
conferred in  
2018-19*



*preparing  
students to  
enter  
protective  
services  
occupations*

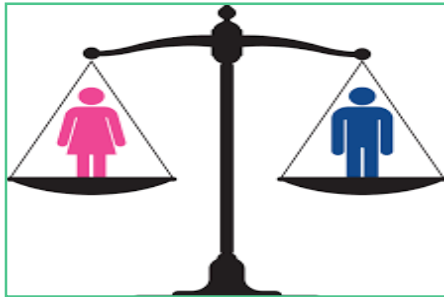
# Workforce Demographics in Protective Services Occupations

Target Middle-Skill Occupation	Share of Workforce <39 years old	Share of Workforce Male
Firefighters	48.5%	95.3%
Police & Sheriff's Patrol Officers	47.5%	81.4%
Correctional Officers & Jailers	45.0%	68.3%
Detectives & Criminal Investigators	22.3%	64.5%
Forensic Science Technicians	69.6%	55.0%
Transportation Security Screeners	56.8%	64.3%

# Recommendations & Opportunities



Adapt Traditional Programs to Meet Modern Needs



Address Demographic trends in Workforce Shortages



Harness Changes in Technology to Advance Programs and Protect Students from Automation

# Supply-Side Analysis



Luke Meyer

Director, Los Angeles/Orange County Region

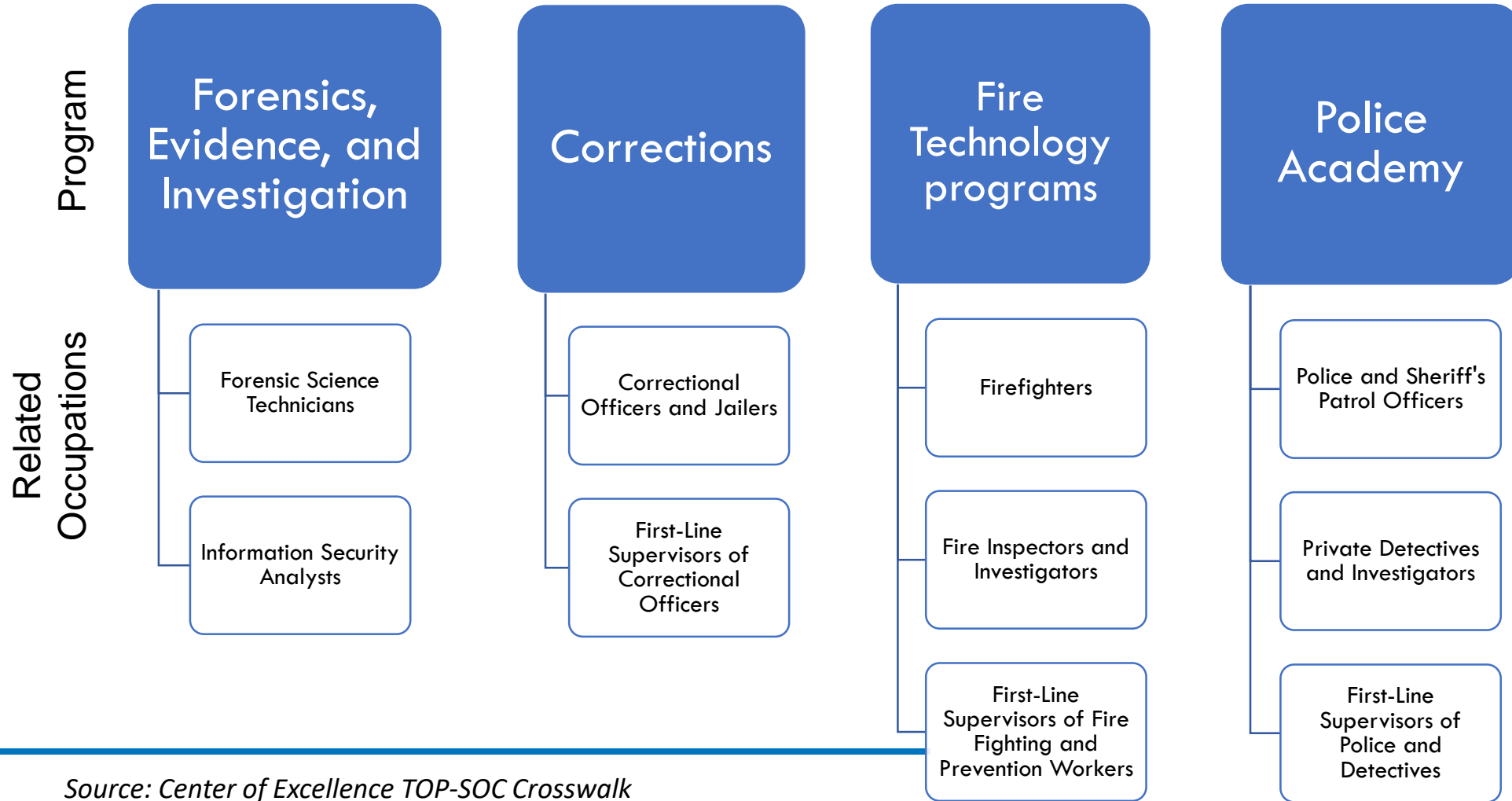
Center of Excellence for Labor Market Research



C·O·E

CENTERS OF EXCELLENCE  
FOR LABOR MARKET RESEARCH

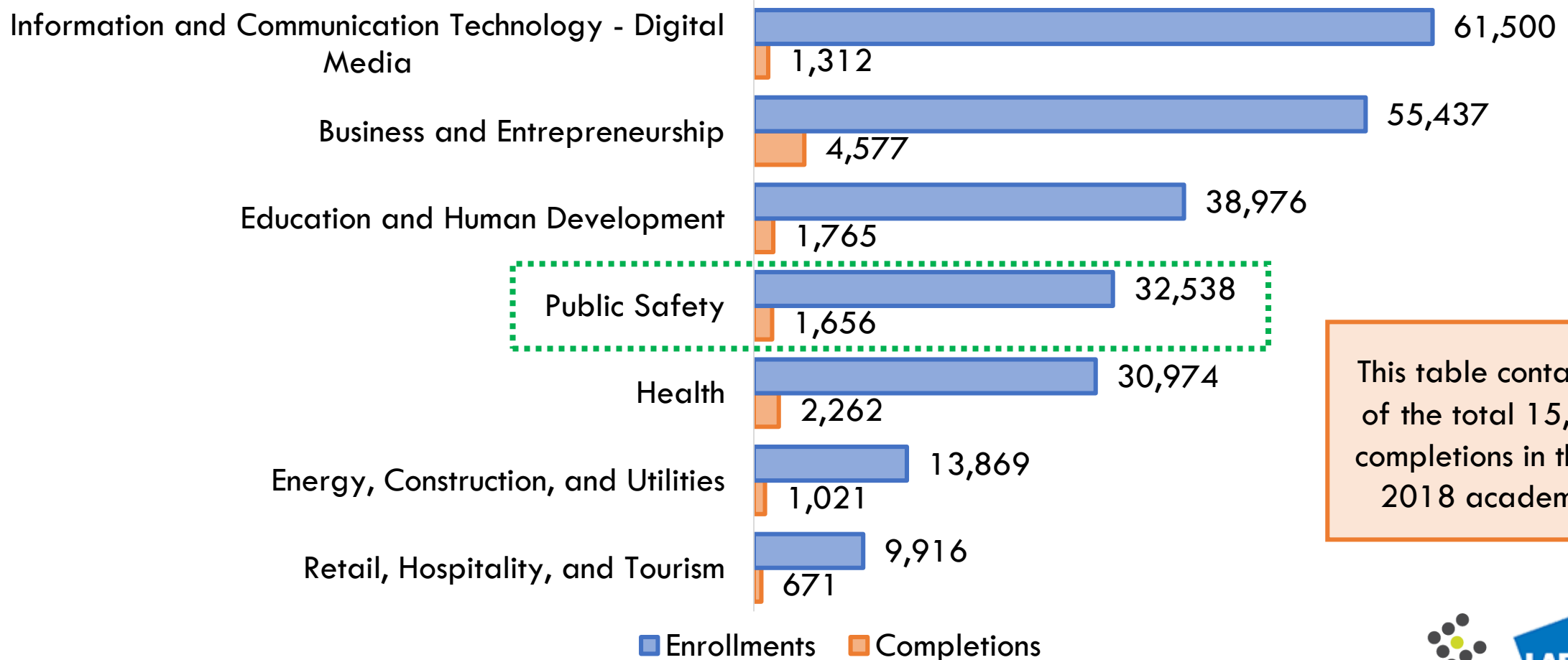
## Program to Occupation Crosswalk



Source: Center of Excellence TOP-SOC Crosswalk



## Sector Comparison, 2017-18



This table contains **87%** of the total 15,302 CTE completions in the 2017-2018 academic year

## LA Protective Services Programs

Programs	2016-2017 Awards	2017-2018 Awards	2018-2019 Awards	Latest 3 Year Average
Administration of Justice	1,962	2,136	2,353	2,150
Fire Technology	523	554	612	563
Police Academy	543	467	370	460
Industrial and Transportation Security	120	86	67	91
Corrections	42	66	40	49
Forensics, Evidence, and Investigation	41	48	56	48
Fire Academy	13	28	43	28
Wildland Fire Technology	10	8	22	13
Other Public and Protective Services	6	4	2	4
<b>Total</b>	<b>3,260</b>	<b>3,397</b>	<b>3,565</b>	<b>3,407</b>

Protective Services awards have **increased 9.4%** between 2016-2017 and 2018-2019

Administration of Justice awards accounted for **63%** of awards over the last three academic years, **growing by 19.9%**



# CCW Report Release Webinar

Programs	2016-2017 Awards	2017-2018 Awards	2018-2019 Awards	Latest 3 Year Average
East LA	1,704	1,670	1,634	1,669
Rio Hondo	205	250	317	257
Citrus	129	201	210	180
El Camino	141	189	196	175
Mt. San Antonio	136	169	214	173
Long Beach	144	169	202	172
West LA	213	126	70	136
Pasadena	83	111	128	107
Cerritos	88	103	115	102
LA Pierce	61	63	117	80
Glendale	53	51	72	59
LA Valley	60	56	58	58
LA Southwest	58	39	36	44
LA Mission	38	49	44	44
LA Harbor	29	40	62	44
LA City	45	38	38	40
Compton	41	38	23	34
LA Trade	32	35	15	27
Santa Monica	-	-	14	5
<b>Total</b>	<b>3,260</b>	<b>3,397</b>	<b>3,565</b>	<b>3,407</b>

## LA Protective Services Programs By College

Source: CCCCO Management Information Systems (MIS) Data Mart

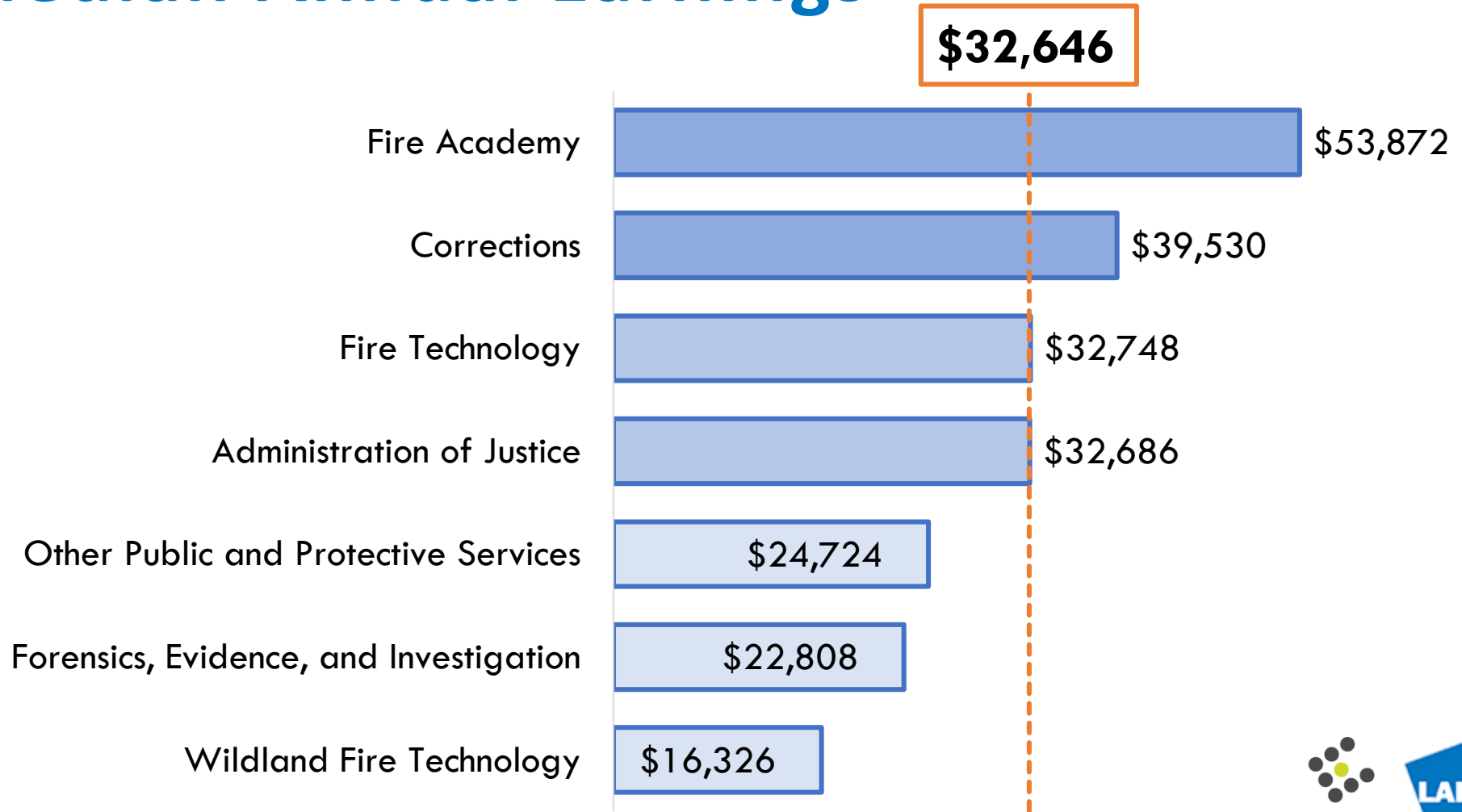




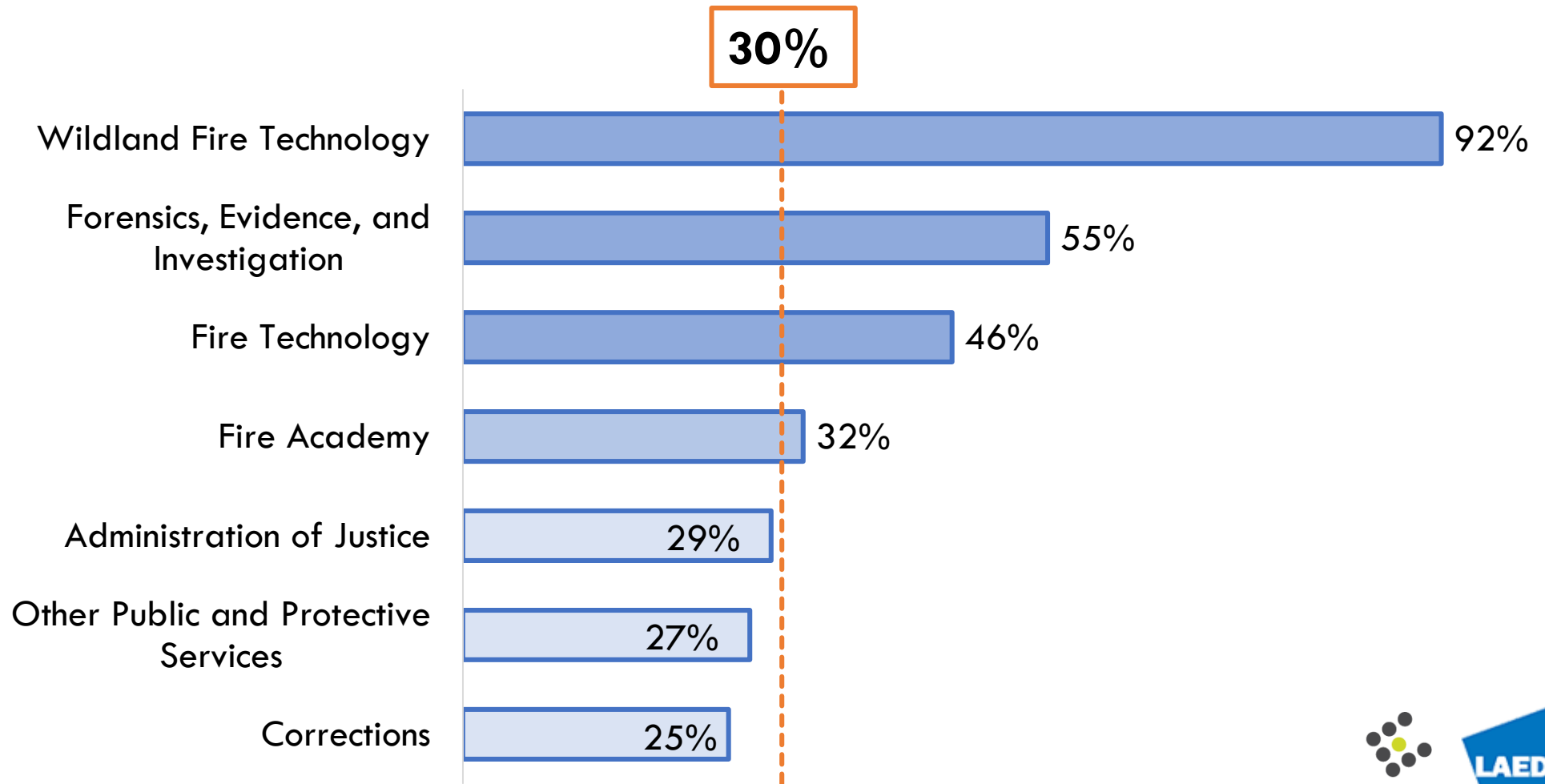
## Strong Workforce Program Metrics

Strong Workforce Program Metrics	Public Safety Sector	Best Outcome	Program Producing the Best Outcome
<b>Unduplicated count of enrolled students (2017-18)</b>	32,538	24,689	Administration of Justice
<b>Students who earned a degree, certificate, or attained apprenticeship (2017-18)</b>	1,656	1,247	Administration of Justice
<b>Median annual earnings (2016-17)</b>	\$32,646	\$53,872	Fire Academy
<b>Median change in earnings (2016-17)</b>	30%	92%	Wildland Fire Technology
<b>Attained a living wage (2016-17)</b>	51%	73%	Fire Academy
<b>Job closely related to the field of study (2015-16)</b>	61%	63%	Administration of Justice

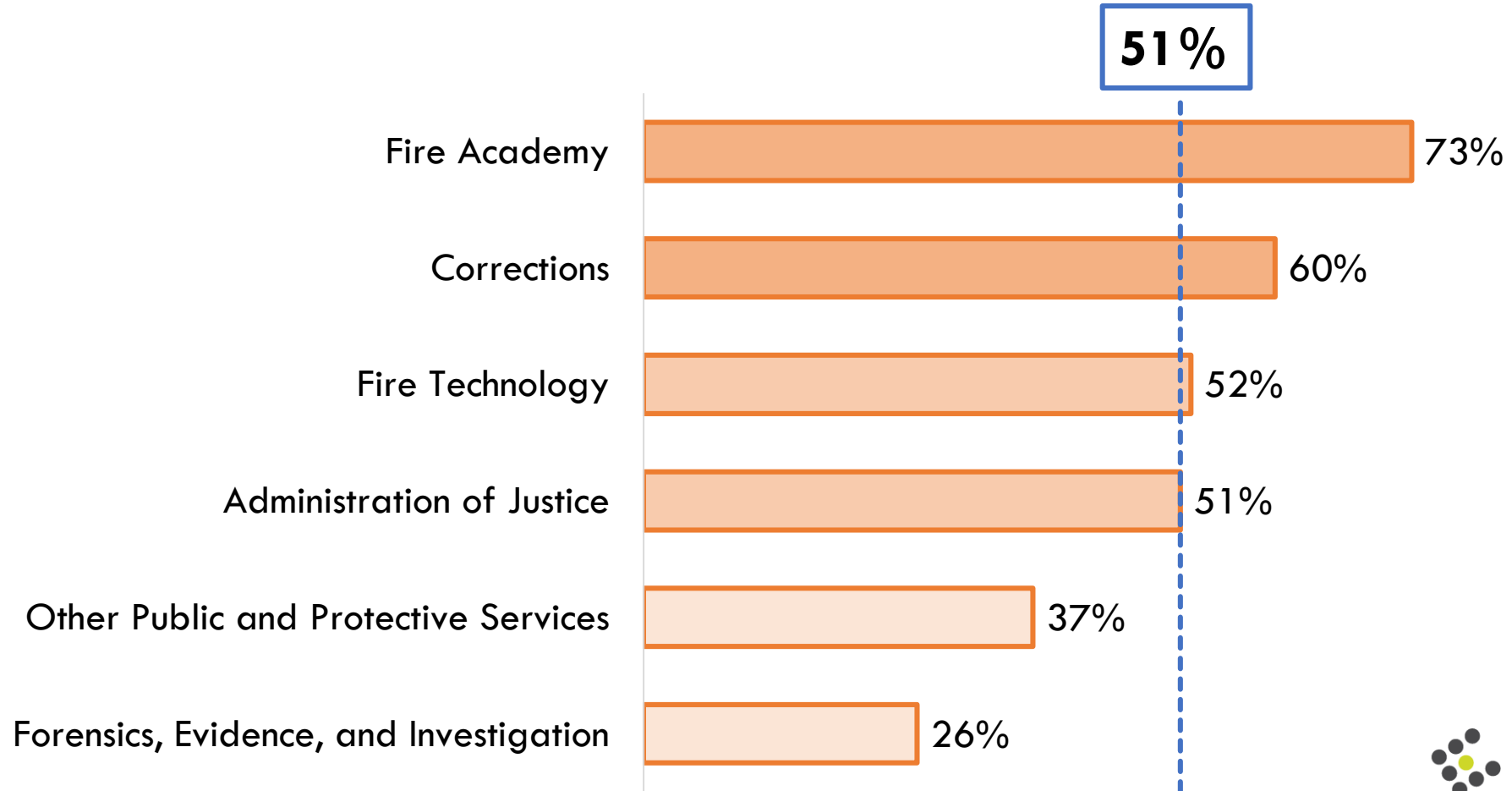
## Median Annual Earnings



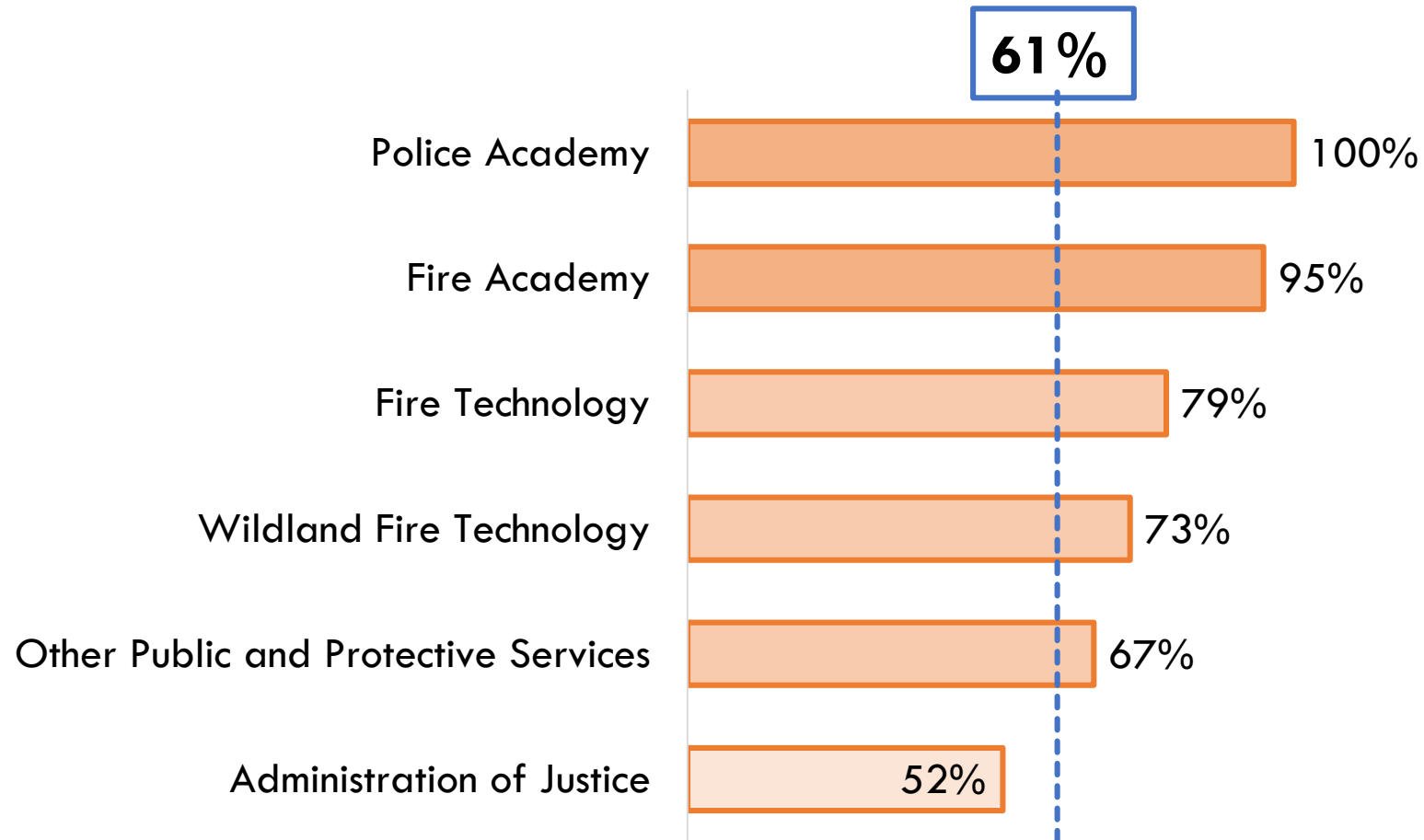
## Median Change in Earnings



## Attained a Living Wage



## Job Related to Field of Study



# What about COVID-19?



**LOS ANGELES COUNTY**  
ECONOMIC DEVELOPMENT CORPORATION  
*Advancing Opportunity and Prosperity for All*

# Protective Services and COVID-19: Negative Impacts

High Exposure to COVID-19

Government Budget Shortfalls  
resulting in job cuts

Less prepared to deal with COVID-19  
and other emergencies

High unemployment leading to less  
funding for volunteer fire departments

A stylized sun graphic on the left side of the slide. It consists of a solid yellow circle at the bottom left, with several short, curved yellow dashes above it, suggesting rays of light. The background is a gradient from orange at the top to white at the bottom, with a large white semi-circle on the right side.

# Final Thoughts on COVID-19



[WWW.COMPETITIVEMWORKFORCE.LA/PROTECTIVE](http://WWW.COMPETITIVEMWORKFORCE.LA/PROTECTIVE)



CENTER FOR A  
COMPETITIVE WORKFORCE

- About CCW
- Regional Industry Councils & Regional Program Advisories
- Labor Market Reports
- Occupational Profiles
- CCW Meetings / Calendar
- Workforce & Education Partner Portal
- Bioscience Portal (coming soon)
- Career Pathway Videos
- Contact Us



DOWNLOAD HIGHLIGHTS OF PROTECTIVE SERVICES REPORT



DOWNLOAD THE FULL-LENGTH PROTECTIVE SERVICES REPORT



## Occupational Outlook

L.A.'s protective services occupations represent opportunity because these positions pay well, employ a sizable percentage of middle-skill workers, and the demand created by job openings is forecast to be substantial.

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.

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.



# THANK YOU!

**The full-length Protective Services and  
Protective Services Highlight Report  
are available for download here:**

**[WWW.COMPETITIVELABORFORCE.LA](http://WWW.COMPETITIVELABORFORCE.LA)**