

**Program Endorsement Brief: 2105.00/Administration of Justice
Crime Scene Investigation Certificate**
Orange County Center of Excellence, February 2022

Summary Analysis

Program Endorsement:	Endorsed: All Criteria Met <input type="checkbox"/>	Endorsed: Some Criteria Met <input checked="" type="checkbox"/>	Not Endorsed <input type="checkbox"/>
Program Endorsement Criteria			
Supply Gap:	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/> (Supply met)	
Living Wage: (Entry-Level, 25th)	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Education:	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Emerging Occupation(s)			
	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	

The Orange County Center of Excellence for Labor Market Research (COE) prepared this report to provide Los Angeles/Orange County regional labor market supply and demand data related to four middle-skill occupations: *forensic science technicians* (19-4092), *detectives and criminal investigators* (33-3021), *police and sheriff's patrol officers* (33-3051), and *private detectives and investigators* (33-9021). Middle-skill occupations typically require some postsecondary education, but less than a bachelor's degree.¹ Although the occupation *forensic science technicians* (19-4092) typically requires a bachelor's degree, it is considered middle-skill because approximately one-third of workers in the field have completed some college or an associate degree. This report is intended to help determine whether there is demand in the local labor market that is not being met by the supply from community college programs that align with the relevant occupations.

Based on the available data supply appears to be met for these Crime Scene Investigation occupations in the region. Additionally, while the majority of annual openings for the occupations in this report typically require a high school diploma or equivalent, between 31.5% and 47.4% of workers in the field have completed some college or an associate degree as their highest level of education. Furthermore, the majority of annual job openings have entry-level wages that exceed the living wage in both Los Angeles and Orange counties. **Therefore, due to some of the criteria being met, the COE endorses this proposed program.** Detailed reasons include:

Demand:

- **Supply Gap Criteria** – Over the next five years, there is projected to be **3,219 jobs available annually** in the region due to new job growth and replacements, **which is less than the 3,292 awards conferred annually** by educational institutions in the region.

¹ The COE classifies middle-skill jobs as the following:

- All occupations that require an educational requirement of some college, associate degree or apprenticeship;
- All occupations that require a bachelor's degree, but also have more than one-third of their existing labor force with an educational attainment of some college or associate degree; or
- All occupations that require a high school diploma or equivalent or no formal education, but also require short- to long-term on-the-job training where multiple community colleges have existing programs.

- However, the labor market information suggests that the **supply has been met for this occupation within the LA/OC region** since the average number of annual awards (supply) is within the COE's 25% margin of annual job openings (demand).
- **Living Wage Criteria** –Within Orange County, the majority (97%) of annual job openings for these Crime Scene Investigation occupations have entry-level wages above the county's living wage (\$20.63/hour).²
- **Educational Criteria** –Within the LA/OC region, 95% of the annual job openings for occupations related to Crime Scene Investigation typically require a high school diploma or equivalent.
 - However, the national-level educational attainment data indicates between 31.5% and 47.1% of workers in the field have completed some college or an associate degree as their highest level of education.

Supply:

- There are **26 community colleges** in the LA/OC region that issue awards related to these Crime Scene Investigation occupations, conferring an average of **3,282 awards annually** between 2017 and 2020.
- Between 2016 and 2019, there was an average of **10 awards conferred annually** in related training programs by non-community college institutions, all of which were generated by **one individual Regional Occupational Program (ROP)**.

Occupational Demand

Exhibit 1 shows the five-year occupational demand projections for these four Crime Scene Investigation occupations. In Los Angeles/Orange County, the number of jobs related to these occupations is projected to increase by 2% through 2025. There will be more than 3,200 job openings per year through 2025 due to job growth and replacements.

This report includes employment projection data by Emsi which uses EDD information. Emsi'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. To the extent that a recession or labor shock, such as the economic effects of COVID-19, can cause long-term structural change, it 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. Therefore, the projections included in this report do not take the impacts of COVID-19 into account.

² Living wage data was pulled from California Family Needs Calculator on 1/10/2022. For more information, visit the California Family Needs Calculator website: <https://insightcced.org/family-needs-calculator/>.

Exhibit 1: Occupational demand in Los Angeles and Orange Counties³

Geography	2020 Jobs	2025 Jobs	2020-2025 Change	2020-2025 % Change	Annual Openings
Los Angeles	31,298	32,019	721	2%	2,646
Orange	6,913	6,992	79	1%	573
Total	38,211	39,012	800	2%	3,219

Wages

The labor market endorsement in this report considers the entry-level hourly wages for these Crime Scene Investigation occupations in Orange County as they relate to the county’s living wage. Los Angeles County wages are included below in order to provide a complete analysis of the LA/OC region. Detailed wage information, by county, is included in Appendix A.

Orange County: The majority (95%) of annual openings for these Crime Scene Investigation occupations have entry-level wages above the living wage for one adult (\$20.63 in Orange County). Typical entry-level hourly wages are in a range between \$19.84 and \$47.17. Experienced workers can expect to earn wages between \$49.97 and \$69.22, which are higher than the living wage estimate. Orange County’s average wages are below the average statewide wage of \$50.92 for these occupations.

Los Angeles County: All annual openings for these Crime Scene Investigation occupations have entry-level wages above the living wage for one adult (\$18.10 in Los Angeles County). Typical entry-level hourly wages are in a range between \$19.58 and \$51.54. Experienced workers can expect to earn wages between \$50.67 and \$75.60, which are higher than the living wage estimate. Los Angeles County’s average wages are above the average statewide wage of \$50.92 for these occupations.

Job Postings

There were 2,377 online job postings related to these Crime Scene Investigation occupations listed in the past 12 months. The highest number of job postings were for US Secret Service criminal investigators, import specialists, police cadets, public safety officers, and surveillance investigators. The top skills were surveillance, public health and safety, criminal justice, customer service, and law enforcement or criminal justice experience. The top three employers, by number of job postings, in the region were US Customs and Border Protection, United States Secret Service, and Prime Healthcare Services.

It is important to note that the job postings data included in this section reflects online job postings listed in the past 12 months and does not yet demonstrate the impact of COVID-19. While employers have generally posted fewer online job postings since the beginning of the pandemic, the long-term effects are currently unknown.

³ Five-year change represents new job additions to the workforce. Annual openings include new jobs and replacement jobs that result from retirements and separations.

Educational Attainment

The Bureau of Labor Statistics (BLS) lists the following awards as the typical entry-level education for these Crime Scene Investigation occupations:

- **High school diploma or equivalent:** *detectives and criminal investigators, police and sheriff's patrol officers, and private detectives and investigators*
- **Bachelor's degree:** *forensic science technicians*

In the LA/OC region, the majority of annual job openings (95%) typically require a high school diploma or equivalent. However, the national-level educational attainment data indicates between 31.5% and 47.4% of workers in the field have completed some college or an associate degree as their highest level of education. Of the 72% of job postings related to Crime Scene Investigation listing a minimum education requirement in Los Angeles/Orange County, 52% (887) requested high school or vocational training, 4% (65) requested an associate degree, and 42% (720) requested a bachelor's degree.

Educational Supply

Community College Supply—Exhibit 2 shows the three-year average number of awards conferred by community colleges in the related TOP codes: Administration of Justice (2105.00), Corrections (2105.10), Forensics, Evidence, and Investigation (2105.40), and Police Academy (2105.50). The colleges with the most completions in the region are: East LA, Citrus, and Rio Hondo. Over the past 12 months, there were two other related program recommendation requests from regional community colleges.

Exhibit 2: Regional community college awards (certificates and degrees), 2017-2020

TOP Code	Program	College	2017-2018 Awards	2018-2019 Awards	2019-2020 Awards	3-Year Award Average
2105.00	Administration of Justice	Cerritos	103	115	111	110
		Citrus	176	199	224	200
		Compton	37	22	16	25
		East LA	869	964	786	873
		El Camino	120	116	117	118
		Glendale	43	38	33	38
		LA City	38	38	39	38
		LA Harbor	37	60	39	45
		LA Mission	49	44	51	48
		LA Pierce	63	117	117	99
		LA Southwest	39	36	39	38
		LA Trade	17	13	21	17
		LA Valley	40	37	54	44
		Long Beach	117	129	152	133
		Mt San Antonio	72	96	87	85

TOP Code	Program	College	2017-2018 Awards	2018-2019 Awards	2019-2020 Awards	3-Year Award Average
		Pasadena	93	120	145	119
		Rio Hondo	100	127	156	128
		Santa Monica	-	14	22	12
		West LA	123	68	108	100
		LA Subtotal	2,136	2,353	2,317	2,269
		Coastline	30	32	23	28
		Cypress	1	14	40	18
		Fullerton	95	123	111	110
		Golden West	158	139	182	160
		Irvine	28	58	59	48
		Santa Ana	109	104	97	103
		OC Subtotal	421	470	512	468
		Supply Subtotal/Average			2,557	2,823
2105.10	Corrections	Citrus	17	5	18	13
		East LA	29	35	31	32
		LA Trade	14	-	6	7
		Rio Hondo	6	-	6	4
		LA Subtotal	66	40	61	56
		Golden West	-	2	-	1
		Saddleback	-	1	1	1
		Santa Ana	7	5	-	4
		OC Subtotal	7	8	1	5
Supply Subtotal/Average			73	48	62	61
2105.40	Forensics, Evidence, and Investigation	East LA	34	35	31	33
		El Camino	6	6	4	5
		Long Beach	8	15	23	15
		LA Subtotal	48	56	58	54
Supply Subtotal/Average			48	56	58	54
2105.50	Police Academy	East LA	466	370	354	397
		LA Mission	-	-	3	1
		Rio Hondo	-	-	66	22
		West LA	1	-	-	0
		LA Subtotal	467	370	423	420
		Golden West	4	4	23	10
		OC Subtotal	4	4	23	10

TOP Code	Program	College	2017-2018 Awards	2018-2019 Awards	2019-2020 Awards	3-Year Award Average
Supply Subtotal/Average			471	374	446	430
Supply Total/Average			3,149	3,301	3,395	3,282

Non-Community College Supply—For a comprehensive regional supply analysis, it is also important to consider the supply from other institutions in the region that provide training programs for Crime Scene Investigation. Exhibit 3 shows the annual and three-year average number of awards conferred by this institution in the related Classification of Instructional Programs (CIP) Code: Criminal Justice/Police Science (43.0107). Due to different data collection periods, the most recent three-year period of available data is from 2016 to 2019. Between 2016 and 2019, four-year colleges in the region conferred an average of 10 awards annually in related training programs.

Exhibit 3: Regional non-community college awards, 2016-2019

CIP Code	Program	College	2016-2017 Awards	2017-2018 Awards	2018-2019 Awards	3-Year Award Average
43.0107	Criminal Justice/Police Science	East San Gabriel Valley Regional Occupational Program	21	9	-	10
Supply Total/Average			21	9	0	10

Appendix A: Occupational demand and wage data by county

Exhibit 4. Orange County

Occupation (SOC)	2020 Jobs	2025 Jobs	5-Yr Change	5-Yr % Change	Annual Openings	Entry-Level Hourly Earnings (25th Percentile)	Median Hourly Earnings	Experienced Hourly Earnings (75th Percentile)
Forensic Science Technicians (19-4092)	218	237	19	8%	31	\$31.02	\$41.26	\$54.47
Detectives and Criminal Investigators (33-3021)	719	738	19	3%	58	\$47.17	\$58.69	\$69.22
Police and Sheriffs Patrol Officers (33-3051)	5,784	5,833	48	1%	468	\$40.59	\$51.41	\$58.31
Private Detectives and Investigators (33-9021)	192	185	(7)	(4%)	17	\$19.84	\$34.24	\$49.97

Occupation (SOC)	2020 Jobs	2025 Jobs	5-Yr Change	5-Yr % Change	Annual Openings	Entry-Level Hourly Earnings (25 th Percentile)	Median Hourly Earnings	Experienced Hourly Earnings (75 th Percentile)
Total	6,913	6,992	79	1%	573			

Exhibit 5. Los Angeles County

Occupation (SOC)	2020 Jobs	2025 Jobs	5-Yr Change	5-Yr % Change	Annual Openings	Entry-Level Hourly Earnings (25 th Percentile)	Median Hourly Earnings	Experienced Hourly Earnings (75 th Percentile)
Forensic Science Technicians (19-4092)	853	911	57	7%	117	\$33.09	\$44.04	\$58.18
Detectives and Criminal Investigators (33-3021)	3,311	3,384	74	2%	262	\$51.53	\$64.10	\$75.60
Police and Sheriffs Patrol Officers (33-3051)	26,333	26,904	571	2%	2,187	\$44.79	\$56.73	\$64.33
Private Detectives and Investigators (33-9021)	801	820	19	2%	79	\$19.58	\$34.21	\$50.67
Total	31,298	32,019	721	2%	2,646			

Exhibit 6. Los Angeles and Orange Counties

Occupation (SOC)	2020 Jobs	2025 Jobs	5-Yr Change	5-Yr % Change	Annual Openings
Forensic Science Technicians (19-4092)	1,072	1,147	76	7%	148
Detectives and Criminal Investigators (33-3021)	4,030	4,123	93	2%	320
Police and Sheriffs Patrol Officers (33-3051)	32,117	32,737	620	2%	2,655
Private Detectives and Investigators (33-9021)	992	1,005	12	1%	96
Total	38,211	39,012	800	2%	3,219

Appendix B: Sources

- O*NET Online
- Labor Insight/Jobs (Burning Glass)
- Economic Modeling Specialists, International (Emsi)
- Bureau of Labor Statistics (BLS)
- Employment Development Department, Labor Market Information Division, OES
- California Community Colleges Chancellor’s Office Management Information Systems (MIS)
- California Family Needs Calculator, Insight Center for Community Economic Development
- Chancellor’s Office Curriculum Inventory (COCI 2.0)

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