

Labor Market Analysis: 2105.40/Forensics, Evidence, and Investigation

Forensic Photography - Certificate requiring 16 to fewer than 30 semester units; Certificate requiring 8 to fewer than 16 semester units; Certificate requiring 30 to <60 semester units Los Angeles Center of Excellence, October 2023

Summary

Program Endorsement:	Endorsed: All Criteria Met	X	Endorsed: Some Criteria Met		Not Endorsed				
	Program End	orsen	nent Criteria						
Supply Gap:	Yes 🗹		No □						
Living Wage: (Entry-Level, 25th)	Yes 🗹			No □					
Education:	Yes 🗹	No 🗆							
Emerging Occupation(s)									
Yes				No ☑					

The Los Angeles Center of Excellence for Labor Market Research (LA COE) prepared this report to provide regional labor market supply and demand data related to one middle-skill occupation:

• Forensic Science Technicians (19-4092) 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.

Middle-skill occupations typically require some postsecondary education, but less than a bachelor's degree.² Although the occupation in this report 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 occupation.

Based on the available data, there appears to be a supply gap for forensic science technicians in the region. Furthermore, entry-level wages exceed the self-sufficiency standard wage in both Los Angeles and Orange counties, and more than one-third of current workers in the field have completed some college or an associate degree. Therefore, due to all the criteria being met, the LA COE endorses this proposed program. Detailed reasons include:

¹ Forensic Science Technicians (bls.gov)

² 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.

Demand:

- Supply Gap Criteria Over the next five years, 159 jobs are projected to be available
 annually in the region due to new job growth and replacements, which is more than the
 three-year average of 73 awards conferred by educational institutions in the region.
- Living Wage Criteria Within Los Angeles County, typical entry-level hourly wages for forensic science technicians are \$37.14, which is higher than the self-sufficiency standard hourly wage (living wage) for one adult in the region (\$18.10 in Los Angeles County).³
- Educational Criteria The Bureau of Labor Statistics (BLS) lists a bachelor's degree as the typical entry-level education for forensic science technicians.
 - However, the national-level educational attainment data indicates 37% of workers in the field have completed some college or an associate degree.

Supply:

- There are 4 community colleges in the greater LA/OC region that issue awards related to forensics, evidence, and investigation, conferring an average of 73 awards annually between 2019 and 2022.
- Currently, there are no non-community college institutions in the greater LA/OC region that have conferred awards that train for forensic science technicians in the past three years.

Occupational Demand

Exhibit 1 shows the five-year occupational demand projections for forensic science technicians. In the greater Los Angeles/Orange County region, the number of jobs related to this occupation is projected to increase by 9% through 2026. There will be more than 150 job openings per year through 2027 due to job growth and replacements.

Exhibit 1: C	Occupational	demand in	Los Ange	les and (Orange (Counties ⁴
--------------	--------------	-----------	----------	-----------	----------	-----------------------

Geography	2022 Jobs	2027 Jobs	2022-2027 Change	2022-2027 % Change	Annual Openings
Los Angeles	870	941	<i>7</i> 1	8%	125
Orange	232	255	23	10%	34
Total	1,102	1,196	94	9%	159

Wages

The labor market endorsement in this report considers the entry-level hourly wages for forensic science technicians in Los Angeles County as they relate to the county's self-sufficiency standard wage. Orange County wages are included below in order to provide a complete analysis of the greater LA/OC region. Detailed wage information, by county, is included in Appendix A.

³ Self-Sufficiency Standard wage data was pulled from The Self-Sufficiency Standard Tool for California. For more information, visit: http://selfsufficiencystandard.org/california.

⁴ Five-year change represents new job additions to the workforce. Annual openings include new jobs and replacement jobs that result from retirements and separations.

Los Angeles County

The typical entry-level hourly wages for forensic science technicians are \$37.14, which is above the self-sufficiency standard wage for one adult (\$18.10 in Los Angeles County). Experienced workers can expect to earn wages of \$63.78.

Exhibit 2: Earnings for Occupation in LA County

Occupation	Entry-Level	Median	Experienced	Median
	Hourly Earnings	Hourly	Hourly Earnings	Annual
	(25 th Percentile)	Earnings	(75 th Percentile)	Earnings*
Forensic Science Technicians (19-4092)	\$37.14	\$48.14	\$63.78	\$100,100

^{*}Rounded to the nearest \$100

Orange County

The typical entry-level hourly wages for forensic science technicians are \$34.73, which is above the self-sufficiency standard wage for one adult (\$20.63 in Orange County). Experienced workers can expect to earn wages of \$59.66.

Exhibit 3: Earnings for Occupation in Orange County

Occupation	Entry-Level Hourly Earnings (25th Percentile)	Median Hourly Earnings	Experienced Hourly Earnings (75th Percentile)	Median Annual Earnings*
Forensic Science Technicians (19-4092)	\$34.73	\$45.01	\$59.66	\$93,600

^{*}Rounded to the nearest \$100

On average across the greater LA/OC region, the entry-level earnings for forensic science technicians are \$36.58; this is above the living wage for one single adult in Los Angeles County (\$18.10). Exhibit 4 shows the average wage for the occupation in this report, from entry-level to experienced workers.

Exhibit 4: Average Hourly Earnings for Forensic Science Technicians in LA/OC



Job Postings

There were 32 online job postings related to forensic science technicians listed in the past 12 months. The highest number of job postings were for forensic specialists, examiners, fingerprint

examiners, and forensic technicians. The top skills were forensic sciences, fingerprint identification and classification, law enforcement, crime scene investigation, and biology. The top three employers, by number of job postings, in the region were City of Irvine, City of Santa Ana, and City of Torrance.

Educational Attainment

The Bureau of Labor Statistics (BLS) lists a bachelor's degree as the typical entry-level education for forensic science technicians. However, the national-level educational attainment data indicates 37% of workers in the field have completed some college or an associate degree. Of the 53% of forensic science technician job postings listing a minimum education requirement in the greater Los Angeles/Orange County region, 12% (2) requested high school or vocational training, 59% (10) requested an associate degree, and 29% (5) requested a bachelor's degree.

Educational Supply

Community College Supply

Exhibit 5 shows the annual and three-year average number of awards conferred by community colleges in the related TOP code: Forensics, Evidence, and Investigation (2105.40). The colleges with the most completions in the region are East LA and Long Beach. Currently, there are no non-community college institutions in the greater LA/OC region that have conferred sub-baccalaureate awards that train for forensic science technicians in the past three years. CSU-LA offers a Master of Science degree in Criminalistics as well as a Forensic Specialist certificate program that requires an associate degree for admission (or currently enrolled in an associate degree program).⁵

Exhibit 5: Regional community college awards (certificates and degrees), 2019-2022

ТОР	Program	College	2019-20 Awards	2020-21 Awards	2021-22 Awards	3-Year Average
Forensics.	East LA	31	28	63	41	
	Forensics,	El Camino	4	6	10	7
2105.40	Evidence, and	Long Beach	23	22	19	21
	Investigation	Rio Hondo	-	-	13	4
		LA Subtotal	58	56	105	73
Supply Total/Average			58	56	105	7 3

⁵ California Forensic Science Institute | Cal State LA

Appendix A: Occupational demand and wage data by county

Exhibit 6. Los Angeles County

Occupation (SOC)	2022 Jobs	2027 Jobs	5-Yr Change	5-Yr % Change	Annual Openings	Entry- Level Hourly Earnings (25 th Percentile)	Median Hourly Earnings	Experienced Hourly Earnings (75th Percentile)
Forensic Science Technicians (19-4092)	870	941	71	8%	125	\$37.14	\$48.14	\$63.78

Exhibit 7. Orange County

Occupation (SOC)	2022 Jobs	2027 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)	232	255	23	10%	34	\$34.73	\$45.01	\$59.66

Exhibit 8. Los Angeles and Orange Counties

Occupation (SOC)	2022 Jobs	2027 Jobs	5-Yr Change	5-Yr % Change	Annual Openings	% Age 55 and older*	Typical Entry-Level Education
Forensic Science Technicians (19-4092)	1,102	1,196	94	9%	159	19%	Bachelor's degree

*The average percentage of workers age 55 and older across all occupations in the greater LA/OC region is 27%. This occupation has a smaller share of older workers, which typically indicates fewer replacements needed to offset the amount of impending retirements.

Appendix B: Sources

- O*NET Online
- Lightcast (formerly Emsi)
- Bureau of Labor Statistics (BLS)
- California Employment Development Department, Labor Market Information Division, OES
- California Community Colleges Chancellor's Office Management Information Systems (MIS)
- Self-Sufficiency Standard at the Center for Women's Welfare, University of Washington
- Chancellor's Office Curriculum Inventory (COCI 2.0)

For more information, please contact:

Luke Meyer, Director
Los Angeles Center of Excellence
Lmeyer7@mtsac.edu

