Labor Market Assessment: Computer Systems Analysts & Computer Network Support Specialists (0707.30 Computer Systems Analysis)



Inland Empire/Desert Center of Excellence, Oct 2025

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Program LMI Endorsement		Ali Limi Criteria Met		ith Caution)	LMI Criteria NOT Met
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		Program LMI Endorsem	ent Criteria		
Supply Gap Yes ✓ No □				No □	
Comments: There is projected to be 240 annual job openings throughout the Inland Empire/Desert region, which is more than the 40 annual average awards conferred by educational institutions over the last 3 years. Supply data includes both community college awards (0) and non-community college awards (40).					itutions over the last 3
Living Wage		Yes ✓ No □			No □
	Comments: All occup	ations have entry-level hourl	y wages \$7-\$24	above the IE/D	D living wage of 20.42.1
Education		Yes □			No 🗸
	associate degree as	rity (26%) of annual job openi their typical entry-level educ d some college or an associa ails.	ation level, and	less than 33%	of all workers in the field

The Inland Empire/ Desert (IE/D) Center of Excellence for Labor Market Research (IE/D COE) reviewed the following occupations to prepare this report:

- Middle-Skill (typically require training/education above a HS diploma but less than a bachelor's degree)
 - Computer Network Support Specialists (15-1231)
- Above Middle-Skill (typically require a bachelor's degree)
 - Computer Systems Analysts (15-1211)

Summary of findings

Demand

- The number of jobs related to the assessed occupations is projected to increase 8% through 2029, with 240 annual job openings (new and replacement jobs).
- Hourly entry-level wages for all occupations are above living wage at the 25th percentile hourly wage ranging from \$27.95 to \$44.50 in IE/D.
- There were 497 online job postings from 185 employers over the past 12 months with the highest postings for it technicians and systems analysts.
- Most job postings for target occupations require a bachelor's degree (48%), followed by a high school diploma or equivalent (37%), an associate degree (11%), and above a bachelor's degree (4%).

Supply

- On average, there were 40 annual awards conferred by educational institutions over the last 3 years in related fields: 0 from community colleges and 40 from other institutions (e.g., 4-year universities, private schools).
- IE/D community college students that exited these programs in the 2022-23 academic year earned a median annual wage of \$43,440 (\$20.88 per hour).
- 47% of students that exited their program in 2022-23 reported that they are now earning a living wage.

¹ The <u>UW self-sufficiency standard</u> is currently used by the CO and other COEs, the self-sufficiency standard was last updated by UW in 2024. To provide an alternative perspective, the COE will provide an alternative living wage calculation from MIT in the analysis below as an additional reference point. MIT estimates, the living wage for an adult with no kids living in 2024 is \$26.30 in Riverside County and \$25.17 in San Bernadino County.

Introduction

California Community College Computer Systems Analysis (TOP 0707.30) programs prepare students for employment in systems analysis and design, including the recognition, definition, and improvement of processes through the use of computer technology and methodologies (Taxonomy of Programs, 2023). The knowledge, skills, and abilities trained by Computer Systems Analysis programs lead to employment in occupations related to systems analysis.

Job Demand

In 2024, there were 3,149 jobs in occupations related to systems analysis in the IE/D region. Regional employment for this occupation group is projected to increase by 8% through 2029 with 240 openings projected annually. Exhibit 1 displays the job count, five-year projected job growth, and job openings in the region.

Exhibit 1. Five-year projections for occupations related to systems analysis, IE/D Region, 2024-2029

Occupation	soc	2024 Jobs	2029 Jobs	2024 - 2029 % Change	5-Yr Openings (New + Replacement Jobs)	Annual Openings (New + Replacement Jobs)
Computer Systems Analysts	15-1211	2,412	2,591	7%	893	179
Computer Network Support Specialists	15-1231	737	800	9%	307	61
Total		3,149	3,391	8%	1,199	240

SOURCE: LIGHTCAST 2025.4

Job Postings

The following analysis for occupations related to systems analysis using online job posting data.

Important note: The data produced in this section were generated by leveraging online job posting data sourced from Lightcast, which is the labor market analytics software tool COEs use to produce these briefs. The job posting data is collected from scraping online job boards such as LinkedIn, Indeed, Glassdoor and many others. The process Lightcast uses to assemble this data does have some limitations due to methods that recruitment professionals sometimes use (e.g., posting one job to fill multiple positions). For example, the number of jobs posted is not necessarily the same as the number of job vacancies.² While not perfect, Lightcast leverages machine learning and other AI technologies to enrich, deduplicate and aggregate this information to make it a meaningful dataset.

Exhibit 2 displays the number of job ads posted for occupations related to systems analysis over the last 12 months and the median posting duration. Over the previous 12 months, there were 497 unique job postings for occupations related to systems analysis in the region from 185 employers.

Exhibit 2. Job ads and posting duration, IE/D Region, Oct 2024 - Sep 2025

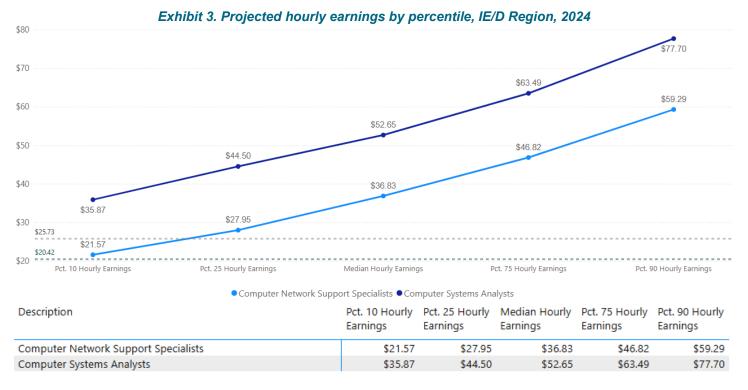
Job Title	Job Ads ▼	Median Posting Duration
Computer Systems Analysts	374	23 days
Computer Network Support Specialists	123	25 days
Total	497	

SOURCE: LIGHTCAST 2025.4

² "Job Posting Analytics (JPA) Methodology." Lightcast Knowledge Base, https://kb.lightcast.io/en/articles/6957446-job-posting-analytics-jpa-methodology

Earnings

Exhibit 3 displays the hourly earnings for occupations related to systems analysis compared to both the UW Self-Sufficiency Standard for the IE/D of \$20.42³ and the MIT IE/D living wage of \$25.73.⁴



SOURCE: 2025.4

All projected entry-level earnings (that is, the earnings of the lowest paid 25% of employees in the IE/D) were above the UW Self-Sufficiency Standard for the IE/D (see Exhibit 3). The occupations listed was also above the MIT living wage for an adult with no children (\$25.73) in projected entry-level earnings (see Exhibit 3).

4 ibid.

³ The <u>UW self-sufficiency standard</u> is currently used by the CO and other COEs, the self-sufficiency standard was last updated by UW in 2024. To provide an alternative perspective, the COE will provide an alternative living wage calculation from MIT in the analysis below as an additional reference point. MIT estimates, the living wage for an adult with no kids living in 2024 is \$26.30 in Riverside County and \$25.17 in San Bernadino County.

Advertised Salary from Online Job Ads

Exhibit 4 displays the regional online advertised salaries for the occupations related to systems analysis over the last 12 months. The salary information of online job ad data suggests employers advertise entry level hourly wages between \$25.85 and \$35.32 (estimated to be equal to an annual salary between \$53,768 and \$73,466).

\$55.26 \$50.09 \$42.46 \$38.52 \$40 \$35.32 \$34.34 \$31.38 \$30 \$29.17 \$25.85 \$21.91 \$20 Pct. 10 Hourly Earnings Pct. 25 Hourly Earnings Median Hourly Earnings Pct. 75 Hourly Earnings Pct. 90 Hourly Earnings Computer Network Support Specialists
 Computer Systems Analysts Description Pct. 10 Hourly Pct. 25 Hourly Median Hourly Pct. 75 Hourly Pct. 90 Hourly Earnings Earnings Earnings Computer Network Support Specialists \$21.91 \$25.85 \$31.38 \$34.34 \$38.52 Computer Systems Analysts \$29.17 \$35.32 \$42.46 \$50.09 \$55.26

Exhibit 4. Hourly earnings of job postings by percentile, IE/D Region, Oct 2024 - Sep 2025

Online Job Advertisements: top job titles, skills, education & work experience.

Exhibit 5 displays the job titles most frequently used in job postings for the occupations related to systems analysis over the last 12 months. Assessing the top advertised job titles may provide insight into the types of positions sought by employers.

Source: Lightcast 2025.4

Exhibit 5. Job titles most frequently used in job ads, IE/D Region, Oct 2024 - Sep 2025

Job Title	Unique Postings
IT Technicians	19
Systems Analysts	11
IT Application Analysts	10
SAP Solution Architects	9
Automated Systems Technicians	8
Field Service Technicians	8
Management Analysts	8
Utilization Coordinators	8
EHR Application Analysts	7
Support Technicians	7

Source: Lightcast 2025.4

Exhibit 6 displays the employers posting the most job ads for this occupational group during the last 12 months. Showing employer names can provide insight into where students may find employment after completing a program and may inform job development and other employer engagement targets for faculty and staff involved in related programs. Prime Healthcare Services and Loma Linda University had the highest unique job posts for this occupational group in the last 12 months. Posting intensity is the ratio of total job posts to unique job posts which are deduplicated. A higher posting intensity can represent the level of effort and activity the organization is putting into hiring for that position. The following report comes directly from Lightcast's Job Posting Analytics dashboard.

Exhibit 6. Employers posting the most job ads, IE/D Region, Oct 2024 - Sep 2025



Source: LIGHTCAST 2025.4

Exhibit 7 displays the top common, specialized and computer skills that were included in the job postings over the last 12 months. Today's demand is an important indicator of which skills employers are looking for in the current market. Analyzing skills from a historical perspective as well as projecting the future needs of employers may provide insight into how the job posting skills demand compares to the market as a whole. Rapidly growing skills are those that are increasing in demand at a faster rate than the market as a whole. 5

Exhibit 7. Top 10 in-demand skills from employer job ads, IE/D Region, Oct 2024 - Sep 2025

Common skills	Total Postings ▼	Skill Growth Relative to Market
Communication	269	Lagging
Management	195	Stable
Troubleshooting (Problem Solving)	194	Growing
Operations	161	Stable
Problem Solving	144	Growing
Customer Service	132	Stable
Microsoft Excel	104	Growing
Information Technology	103	Rapidly Growing
Research	103	Growing
Leadership	100	Stable

⁵ "What are Lightcast Skill Projects", Lightcast Knowledge base, https://kb.lightcast.io/en/articles/8496296-what-are-lightcast-skill-projections

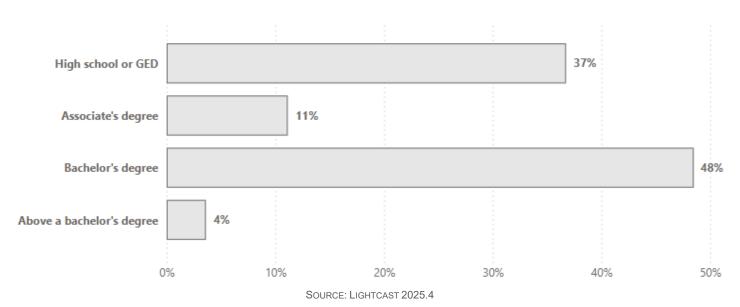
Specialized skills	Total Postings ▼	Skill Growth Relative to Market
Computer Science	104	Rapidly Growing
Technical Support	80	Rapidly Growing
Data Analysis	71	Rapidly Growing
Information Systems	63	Rapidly Growing
Auditing	62	Rapidly Growing
Project Management	61	Rapidly Growing
Operating Systems	54	Rapidly Growing
Systems Analysis	52	Rapidly Growing
SQL (Programming Language)	48	Stable
Workflow Management	44	Growing
Computer Skills	Total Postings	Skill Growth Relative to Market

Computer Skills	Total Postings ▼	Skill Growth Relative to Market
Microsoft Excel	104	Growing
Microsoft Outlook	71	Rapidly Growing
Microsoft Office	70	Growing
Microsoft PowerPoint	65	Rapidly Growing
Operating Systems	57	Rapidly Growing
SQL (Programming Language)	57	Stable
Active Directory	34	Lagging
Microsoft Access	33	Lagging
SAP Applications	33	Rapidly Growing
Firewall	31	Rapidly Growing

SOURCE: LIGHTCAST 2025.4

Exhibit 8 includes the minimum educational requirements from job postings for this occupational group with bachelor's degree (48%) greater than high school diploma or equivalent (37%) or associate degree (11%) or above a bachelor's degree (4%).

Exhibit 8 Minimum educational requirements in job postings for this occupational group, *IE/D Region, Oct 2024 – Sep 2025*



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For the assessed occupations, the Bureau of Labor Statistics (BLS) education attainment data in Exhibit 9 for current professionals in the occupations of interest indicates that between 20% and 39% of workers have completed some college or an associate degree as their highest level of education.

Exhibit 9 National-level Education Attainment for the Occupational Group

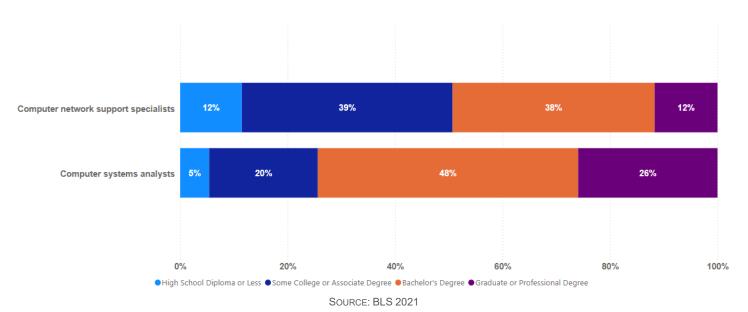
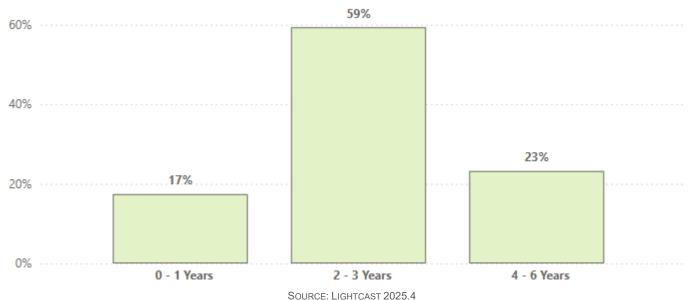


Exhibit 10 displays the work experience typically required from employer job ads for this occupational group. The majority (59%) of employers listing minimum experience requirements sought candidates with 2-3 years of previous work experience.

Exhibit 10 Work experience requirements, IE/D Region, Oct 2024 - Sep 2025



Student Completions and Program Outcomes

No student completions for the Computer Systems Analysis (TOP 0707.30) programs were found over the last three academic years (2021-2024). Based on the lack of data, it appears that in the previous three academic years, 0 regional community colleges issued an average of 0 awards in relevant programs.

Non-Community College Supply

Exhibit 11 displays award completion data available for these IE/D non-community college programs: Computer Systems Analysis/Analyst (CIP 11.0501).

In the previous three academic years, 2 regional non-community college institutions issued an average of 40 awards in relevant programs.

Exhibit 11 Annual average non-community college awards for systems analysis programs, IE/D, 2020-2023

CIP	Program	College	2020-2021 Awards	2021-2022 Awards	2022-2023 Awards	3-Year Award Average
11.0501	Computer Systems Analysis/Analyst	DeVry University-California	46	49	23	39
11.0501	Computer Systems Analysis/Analyst	University of Phoenix- California	1	0	0	0
Total			47	49	23	40

Source: IPEDS

Strong Workforce Program Outcomes

California SWP program outcome data may provide useful insight into the likelihood of success for the proposed program. Community college student outcome information based on the selected TOP code and region is provided in Exhibit 12.

Exhibit 12 Computer Systems Analysis strong workforce program outcomes, IE/D & California, AY 2022-23

Program Metric Title	Inland Empire	Statewide
Students	270	1,925
Earned 9+ Career Education Units	46%	35%
Completed Noncredit Workforce Preparation Milestone	-	95%
Earned an Award: Degree or Cert or Attained Appren. Journey Level Status	-	12%
Transferred to a Four-Year Institution: Four-Year Postsecondary Institution	-	8%
Median Annual Earnings	\$43,440	\$52,374
Median Change in Earnings	25%	24%
Attained Living Wage	47%	53%

SOURCE: DATAVISTA

Appendix: Methodology

Community college student outcome information is from DataVista and based on the selected TOP code and region. These metrics are based on records submitted to the California Community Colleges Chancellor's Office Management Information Systems (MIS) by community colleges, which come from self-reported student information from CCC Apply and the National Student Clearinghouse. Employment and earnings metrics are sourced from California's Employment Development Department's Unemployment Insurance database. When available, outcomes for completers are reported to demonstrate the impact that earning a degree or certificate can have on employment and earnings. For more information on the types of students included for each metric, please see the web link for DataVista's Strong Workforce Program Metrics Data Element Dictionary in the Resources section (DataVista, 2025).

Appendix: References

Type of Data	Source
Occupational Projections, Wages, and Job Postings	Traditional labor market information data is sourced from Lightcast, a labor market analytics firm. Lightcast occupational employment data are based on final Lightcast industry data and final Lightcast staffing patterns. Wage estimates are based on Occupational Employment. https://lightcast.io/
Living Wage (UW)	Center for Women's Welfare, University of Washington. (2024). The self-sufficiency standard for California 2024. http://www.selfsufficiencystandard.org/California . The COE refers to the Self-Sufficiency Wage as a "living wage." This calculation measures the income necessary for an individual of family to afford basic expenses. The data assesses the cost of housing, food, childcare, health care, transportation, and taxes. The living wage for one adult in San Bernardino County is \$20.07 per hour (\$42,392 annually). The living wage for one adult in Riverside County is \$20.76 per hour (\$43,854 annually). The average living wage to represent Inland Empire/Desert is \$20.42 per hour (\$43,123 annually).
Living Wage (MIT)	Glasmeier, A. K. (2024). <i>Living wage calculator</i> . Massachusetts Institute of Technology. Accessed on April 14, 2025, https://livingwage.mit.edu/states/06/locations The living wage is derived from MITs Living Wage Calculator, which measures the income necessary for an individual of family to afford basic expenses. The data assesses the cost of housing, food, childcare, health care, transportation, and taxes. For more information, see: https://livingwage.mit.edu/pages/methodology The living wage for one adult in San Bernardino County is \$25.17 per hour (\$52,353.60 annually). The living wage for one adult in Riverside County is \$26.30 per hour (\$54,704 annually). The average living wage to represent Inland Empire/Desert is \$25.74 per hour (53,539.20 annually)
Typical Education and Training Requirements, and Educational Attainment	The Bureau of Labor Statistics (BLS) provides information about education and training requirements for hundreds of occupations. BLS uses a system to assign categories for entry-level education, work experience in a related occupation, and typical on-the-job training to each occupation for which BLS publishes projections data. For more information, see https://www.bls.gov/emp/documentation/education/tech.htm
Educational Supply	The CCCCO Data Mart provides information about students, courses, student services, outcomes and faculty and staff. For more information, see: https://datamart.ccco.edu The National Center for Education Statistics (NCES) Integrated Postsecondary Integrated Data System (IPEDS) collects data on the number of postsecondary awards earned (completions). For more information, see https://nces.ed.gov/ipeds/use-the-data/survey-components/7/completions
Student Metrics and Demographics	DataVista aims to provide up-to-date and useful information on students within the California Community Colleges and its Adult

Education partners. DataVista is a modernization of the supporting architecture and visualization of metrics previously available on the LaunchBoard.
DataVista is a collaboration between the California Community Colleges Chancellor's Office and WestEd, see:
https://datavista.cccco.edu/data_views/swp_report