CENTER OF EXCELLENCE
FOR LABOR MARKET RESEARCH
INLAND EMPIRE/DESERT

LABOR MARKET ASSESSMENT

Computer Network Operations Occupations

Inland Empire/Desert Region

Publication Month: October 2026

POWERED BY

California Community Colleges

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Introduction

Purpose

The Inland Empire-Desert Region Center of Excellence for Labor Market Research (COE) plays a pivotal role in helping communities in the Inland Empire/Desert region understand and contextualize labor market data so they can actively address their current and future workforce needs. Proposed curriculum changes require labor market information and analysis to show that jobs are available for program completers within the local service area, ensuring an alignment between regional training and labor market needs.[1]

The COE prepared this report to provide an analysis of the labor market and educational supply related to the proposed program in the region. Occupational characteristics, employment demand, wages, employer job advertisements, and program awards and outcomes are used in this report to determine the alignment of regional training programs to the labor market. A regional supply or labor gap is derived by comparing the projected occupational demand to the projected supply from educational institutions.

This report seeks to understand employer demand for Computer Network Operations Occupations in the region and to inform strategic decisionmakers regarding recruitment, compensation, workforce development, and policymaking by businesses, government agencies, and educational institutions.

Report Scope

This report assesses the occupational demand and educational supply of the following regions:

- Inland Empire/Desert region (San Bernardino and Riverside counties combined)

Taxonomy of Programs (TOP) title and code and program definition:

- TOP 0708.00 Computer Infrastructure and Support
- Definition: Network and operation systems design and administration, including certification preparation (Taxonomy of Programs, 2023).

Classification of Instructional Program (CIP) title and code and program definition:

- CIP 11.1003 Computer and Information Systems Security/Auditing/Information Assurance (CTE)
- Definition: A program that prepares individuals to assess the security needs of computer and network systems, recommend safeguard solutions, and manage the implementation, auditing, and maintenance of security devices, systems, and procedures. Includes instruction in computer architecture, programming, and systems analysis; networking; telecommunications; cryptography; security system auditing and design; applicable law and regulations; risk assessment and policy analysis; contingency planning; user access issues; investigation techniques; and troubleshooting (The Classification of Instructional Program, 2020).

[1] California Community College Chancellor's Office (CCCCO). Program and Course Approval Handbook. 8th Edition. Retrieved from: https://www.cccco.edu/-/media/CCCCO-Website/docs/curriculum/program-course-approval-handbook-8th-edition.pdf

Standard Occupational Classification (SOC) occupations and codes:

- Computer and Information Systems Managers (11-3021)
- Information Security Analysts (15-1212)
- Computer Network Support Specialists (15-1231)
- Computer User Support Specialists (15-1232)
- Computer Network Architects (15-1241)
- Network and Computer Systems Administrators (15-1244)

Program Design Window

The COE uses BLS' Occupational Employment and Wage Statistics (OEWS) data to create occupational estimates, and this dataset is updated annually. Therefore, the COE considers this data to be most useful, from a program design point of view, only within a 12-month window starting at the publication month. Refer to the dates below to identify this report's applicable program request consideration window. For those submitting a CTE program for the IEDRC program review process beyond this publication window, please reach out to the COE to obtain the most current version of this report.

Publication Month: October 2026

End of Program Design Window: September 3, 2027

Acknowledgements

The following team member(s) of the COE authored this report:

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Executive Summary

Based on the data analyzed by the COE, the following program **has fully met** all of the four criteria required to receive a full endorsement for program development.

LMI Criteria Summary

Criteria	Decision	Finding
Demand	✓	There are 728 annual job openings in the region for this occupational group, which is greater than the upper threshold (450). This indicates that there is high demand for new workers from regional employers hiring for this occupational group.
Supply Gap	✓	Existing regional community college programs related to this proposed program and conferring awards are multiple, found in multiple subregions, and issue approximately 137 awards annually. Additionally, other non-community college institutions conferring awards in related programs are less numerous, found in one subregion, and issue approximately four awards annually.
Living Wage	✓	All occupations are found to have entry-level hourly wages above the IE/D living wage of $20.76. This indicates that new workers in this occupational group are expected to earn a living wage at the start of their careers.
Education	✓	The majority (62%) of annual job openings are related to occupations found to be at a middle skill education level because of their typical education requirements and/or the educational attainment level of its national workforce. This indicates that employers are hiring entry level workers with a middle-skill education level in this occupational group.
Overall	✓	This program is given a **full endorsement** from the IED COE to proceed.

Other Key Findings/Takeaways

- **LMI Criteria Assessment**
    - Educational Supply: Existing regional community college programs related to this proposed program and conferring awards are multiple, found in multiple subregions, and issuing approximately 137 awards annually. Additionally, other non-community college institutions conferring awards in related programs are less numerous, found in one subregion, and issue approximately four awards annually.
- **Job Posting Analysis**
    - Demand: The number of job postings (1,715) is much more than the projected number of annual job openings (728), with 608 companies posting, and it appears that no single job title is overwhelmingly (+50%) found in job ads.
    - Education and Experience: Job postings indicate that the largest grouping of employers (46%) sought candidates with a bachelor's degree when a minimum

education level was listed, and the largest grouping of ads (50%) prefer workers with 2-3 years of experience when experience requirements were listed.

- Wages: Employers posting jobs in the region are offering entry-level hourly wages between $24 and $62.28 for this occupational group, meaning job posts for all six occupations have wages above the IE/D living wage of $20.76.

LMI Criteria Analysis

Occupational Demand Criteria Assessment

In an effort to understand this occupational group's employment outlook in the Inland Empire/Desert region, this section analyzes current and projected employment from 2025-2030.

Exhibit 1 displays the job count, five-year projected job growth, and job openings in the region for this occupational group. In 2025, there were 9,708 jobs for Computer Network Operations Occupations in the IE/D region. Regional employment for this occupational group is projected to increase 7% by 2030, with 728 job openings projected annually.

Exhibit 1: Projected Job Growth and Annual Job Openings, IE/D Region, 2025-2030

Occupation	2025 Jobs	2030 Jobs	2025-2030 % Change	Avg. Annual Openings
Computer User Support Specialists	3,896	4,015	3%	269
Computer and Information Systems Managers	2,472	2,770	12%	224
Network and Computer Systems Administrators	1,680	1,748	4%	97
Computer Network Support Specialists	642	691	8%	51
Information Security Analysts	550	645	17%	50
Computer Network Architects	468	533	14%	37
Total	**9,708**	**10,402**	**7%**	**728**

Source: Lightcast 2026.4

Based on the number of assessed occupations (six), the COE determines that there should be at least 450 annual job openings in the region for this occupational group to be considered in high demand, or at least 300 to be considered in moderate demand. Based on the number of annual job openings (728), which is substantially greater than 450, there is high demand for new workers in this field.

Key Takeaway: There are 728 annual job openings in the region for this occupational group, which is greater than the upper threshold (450). This indicates that there is high demand for new workers from regional employers hiring for this occupational group.

Educational Supply

This section analyzes trends in student awards related to Computer Network Operations Occupations to project the supply of workers from existing regional postsecondary education institutions.

Exhibit 2 displays student completions for the Computer Infrastructure and Support (TOP 0708.00) programs over the last three academic years for which there is data (2022-2025). In the previous three academic years, four regional community colleges issued an average of 137 awards in relevant programs.

Exhibit 2: Annual Average Community College Awards for Computer Infrastructure and Support (TOP 0708.00) Programs, IE/D Region, 2022-2025

Top Code	Program	College	2022-23 Awards	2023-24 Awards	2024-25 Awards	3-Year Award Average
0708.00	Computer Infrastructure and Support	Riverside	28	94	106	75
0708.00	Computer Infrastructure and Support	Chaffey	47	52	57	51
0708.00	Computer Infrastructure and Support	Moreno Valley	4	4	23	9
0708.00	Computer Infrastructure and Support	Crafton Hills	0	0	8	2
Total			**79**	**150**	**194**	**137**

Source: MIS Data Mart

Exhibit 3 displays award completion data available for the following IE/D non-community college programs over the last three academic years for which there is data (2021-2024): Computer Systems Networking and Telecommunications (CIP 11.0901). In the previous three academic years, one regional non-community college institution issued an average of four awards in relevant programs.

Exhibit 3: Annual Average Non-Community College Awards for Programs Related to Computer Network Operations Occupations, IE/D Region, 2021-2024

CIP Code	Program	College	2021-22 Awards	2022-23 Awards	2023-24 Awards	3-Year Award Average
11.0901	Computer Systems Networking and Telecommunications	DeVry University-California	2	4	7	4

Source: IPEDS

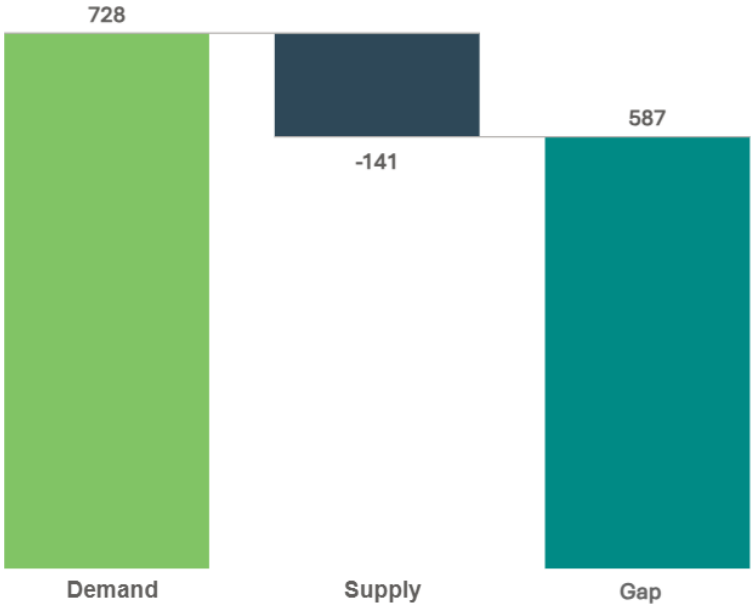
Educational institutions in the region conferred an average of 137 awards per year over the past three years in relevant programs, combining the number of community college awards (137) and non-community college awards (4).

Key Takeaway: Existing regional community college programs related to this proposed program and conferring awards are multiple, found in multiple subregions, and issuing approximately 137 awards annually. Additionally, other non-community college institutions conferring awards in related programs are less numerous, found in one subregion, and issue approximately four awards annually.

Supply Gap Criteria Assessment

A gap analysis compares the occupational demand and educational supply, outlined in the above sections, and determines if there is an over or under-supply of new workers entering the occupational group. Exhibit 4 demonstrates that there is a supply gap of 587 annual job openings, meaning that regional employers are projected to require more workers than educational institutions are currently supplying to the labor market. Based on this analysis, the need for workers by regional employers in this occupational group has not been met by the current supply.

Exhibit 4: Supply Gap Analysis for Computer Network Operations Occupations, IE/D Region, 2025-2030



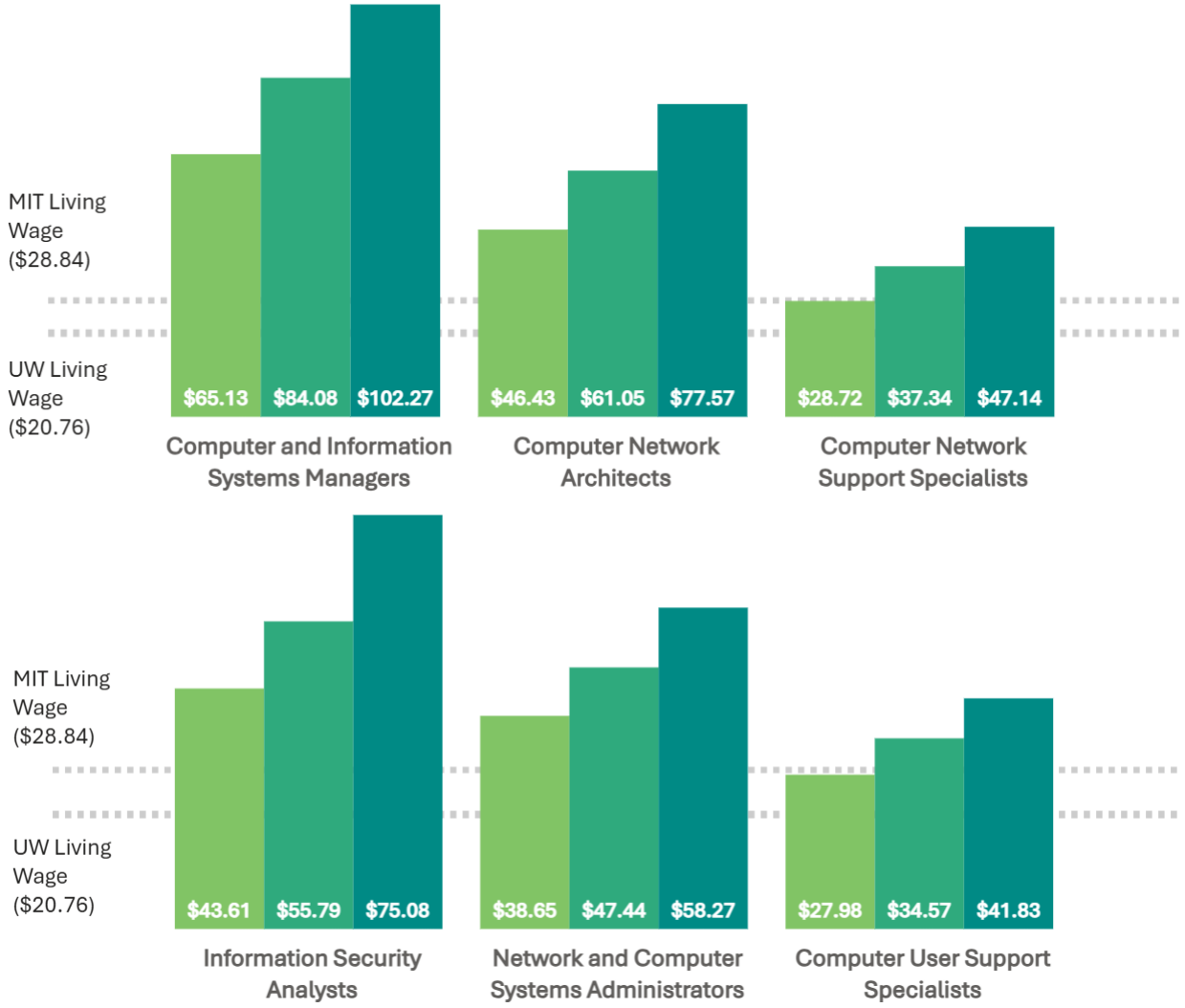
Sources: Lightcast 2026.4; MIS Data Mart; IPEDS

Key Takeaway: There are 728 annual job openings projected across all occupations, exceeding the 141 average annual awards conferred by postsecondary educational institutions over the last three years. Supply data includes both community college awards (137) and non-community college awards (4). This indicates that employers require 587 more workers than current programs are supplying, which is considered an undersupply of workers.

Living Wage Criteria Assessment

The following section assesses the occupation wage estimates for this occupational group and whether they meet or exceed a self-sufficiency standard in the Inland Empire/Desert region. Exhibit 5 displays the hourly earnings by quartile for Computer Network Operations Occupations and compares those to the UW Self-Sufficiency Standard for the IE/D for one adult, $20.76[2]. Compare this standard against the 25th percentile hourly earnings, considered to be entry level wages for an occupation. Median and experienced (75th percentile) wages are also shown to demonstrate expected career progression.

Exhibit 5: Hourly Wages by Occupation, IE/D Region, 2025



Source: Lightcast 2026.4

[2] The UW self-sufficiency standard is currently used by the CCCCO and COE; the self-sufficiency standard was last updated by UW in 2024. UW estimates the living wage for an adult in 2024 is $20.76 in Riverside County and $20.07 in San Bernadino County. The higher of the two is considered the living wage for the IE/D, $20.76. See Appendix A for more information.

Based on Exhibit 5, all six assessed occupations have entry level wages at or above the UW Self-Sufficiency Standard for the IE/D for one adult. These qualifying occupations account for all projected annual job openings over the next five years. The proportion of annual job openings is key to understanding the jobs students exiting related programs will be accepting and, in this context, whether they can expect to earn a living wage at the start. Additionally, five of six occupations have entry level wages above the MIT living wage[3] for one adult ($28.84) in projected entry-level wages.

Key Takeaway: All occupations are found to have entry-level hourly wages above the IE/D living wage of $20.76. This indicates that new workers in this occupational group are expected to earn a living wage at the start of their careers.

Education and Work Experience Criteria Assessment

In an effort to identify the preferred education and training levels for workers in this occupational group, Exhibit 6 includes the typical education, work experience, and on-the-job training needed for Computer Network Operations Occupations. To be considered a middle skill occupation requires either a typical entry level education of less than a "bachelor's degree" and greater than a "high school diploma" ("some college, no degree" or "postsecondary nondegree award" or "associate degree") or on-the-job training required is an apprenticeship. Based on the below chart, two of six occupations would qualify as middle skill.

Exhibit 6: Typical Entry-Level Education, Experience, and Job Requirements

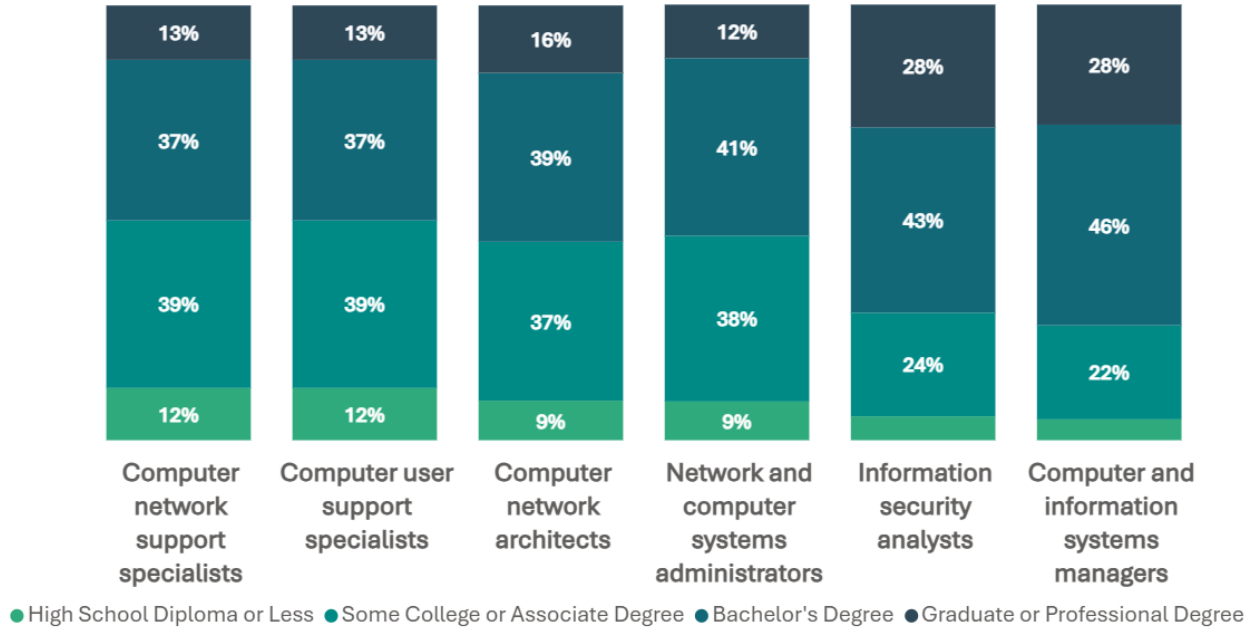
Occupation	SOC	Typical Entry Level Education	Typical On-The-Job Training	Work Experience Required
Network and Computer Systems Administrators	15-1244	Bachelor's degree	None	None
Computer Network Architects	15-1241	Bachelor's degree	None	5 years or more
Computer User Support Specialists	15-1232	Some college, no degree	None	None
Computer Network Support Specialists	15-1231	Associate's degree	None	None
Information Security Analysts	15-1212	Bachelor's degree	None	Less than 5 years
Computer and Information Systems Managers	11-3021	Bachelor's degree	None	5 years or more

Source: BLS Training and Education Levels

[3] To provide an alternative perspective, the COE also utilizes the living wage calculation from MIT in the analysis above as an additional reference point. MIT estimates the living wage for an adult with no kids living in 2024 is $28.84 in Riverside County and $27.62 in San Bernadino County. The higher of the two is considered the living wage for the IE/D, $28.84. See Appendix A for more information.

The Bureau of Labor Statistics (BLS) education attainment data, as presented in Exhibit 7, indicates that among current Computer Network Operations Occupations professionals, between 22% and 39% have completed some college or an associate degree as their highest level of education. To be considered a middle skill occupation in this analysis, 33% or more workers in an occupation must have completed some college or an associate degree as their highest level of education. Based on the chart below, four of six occupations would be considered middle skill in this analysis.

Exhibit 7: National-Level Education Attainment by Occupation



Source: BLS 2024

Based on Exhibits 6 and 7, four of six occupations are considered middle skill because they have one or more of the following attributes:

- "Some college" or "postsecondary nondegree award" or "associate degree" as its typical entry-level education level
- More than 33% of national workers have attained "some college" or an "associate degree" as their highest level of education attainment
- "Apprenticeship" is its typical on-the-job training type

These qualifying occupations account for 62% of all projected annual job openings over the next five years. The proportion of annual job openings is crucial in understanding the jobs which students exiting related programs will be pursuing and whether they can expect to be hired based on their middle skill education attainment level.

Key Takeaway: The majority (62%) of annual job openings are related to occupations found to be at a middle skill education level because of their typical education requirements and/or the

educational attainment level of its national workforce. This indicates that employers are hiring entry level workers with a middle-skill education level in this occupational group.

What Do Regional Job Posts Tell Us?

Job Posting Demand

Exhibit 8 displays the number of job ads posted for Computer Network Operations Occupations over the last 12 months and the median posting duration. Over the previous 12 months, there were 1,715 unique job postings for Computer Network Operations Occupations in the region from 608 employers. This is much more than the projected number of annual job openings (728).

Exhibit 8: Job ads and posting duration, IE/D Region, Oct 2025 – Sep 2026

Occupation	Job Ads	Median Posting Duration
Computer User Support Specialists	738	18 days
Network and Computer Systems Administrators	475	22 days
Computer Network Architects	277	19 days
Computer Network Support Specialists	95	29 days
Computer and Information Systems Managers	87	19 days
Information Security Analysts	43	24 days
Total	**1,715**	

Source: Lightcast 2026.4

Exhibit 9 displays the job titles most frequently used in job postings for Computer Network Operations Occupations over the last 12 months, with the predominate ones being IT specialists and automation engineers. Assessing the top advertised job titles may provide insight into the types of positions sought by employers.

Exhibit 9: Job Titles Most Frequently Used in Job Ads, IE/D Region, Oct 2025 – Sep 2026

Job Title	Unique Postings
IT Specialists	58
Automation Engineers	55
Systems Administrators	46
IT Technicians	42
IT Support Technicians	40
Geek Squad Managers	36
Network Engineers	36
IT Support Specialists	35
Network Administrators	27
Help Desk Technicians	24
Desktop Support Technicians	23

Source: Lightcast 2026.4

Exhibit 10 displays the employers posting the most job ads for Computer Network Operations Occupations 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.

EdJoin.org and Best Buy posted the most 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 de-duplicated. 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 10: Top Employers by Number of Job Posts, IE/D Region, Oct 2025 – Sep 2026

Company	Total/Unique (Oct 2025 - Sep 2026)	Posting Intensity	Median Posting Duration
Edjoin.Org	48 / 40	1 : 1	17 days
Best Buy	281 / 39	7 : 1	14 days
Esri	68 / 36	2 : 1	27 days
Amazon	83 / 30	3 : 1	18 days
Kaiser Permanente	42 / 27	2 : 1	11 days
County Of Riverside	135 / 26	5 : 1	47 days
HD Supply	80 / 26	3 : 1	23 days
California State University-San Bernardino	53 / 24	2 : 1	18 days
Logicalis	47 / 23	2 : 1	12 days
San Bernardino County	55 / 22	3 : 1	44 days

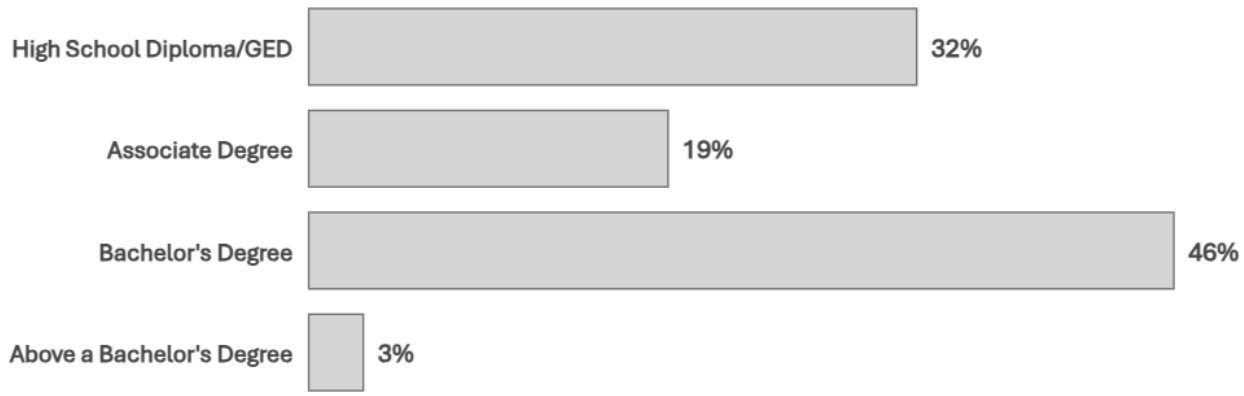
Source: Lightcast 2026.4

Key Takeaway: The number of job postings (1,715) is much more than the projected number of annual job openings (728), with 608 companies posting, and it appears that no single job title is overwhelmingly (+50%) found in job ads.

Job Posting Education and Experience

Exhibit 11 includes the minimum educational requirements from job postings for this occupational group with bachelor's degree (46%) greater than high school diploma/GED (32%) or associate degree (19%) or above a bachelor's degree (3%).

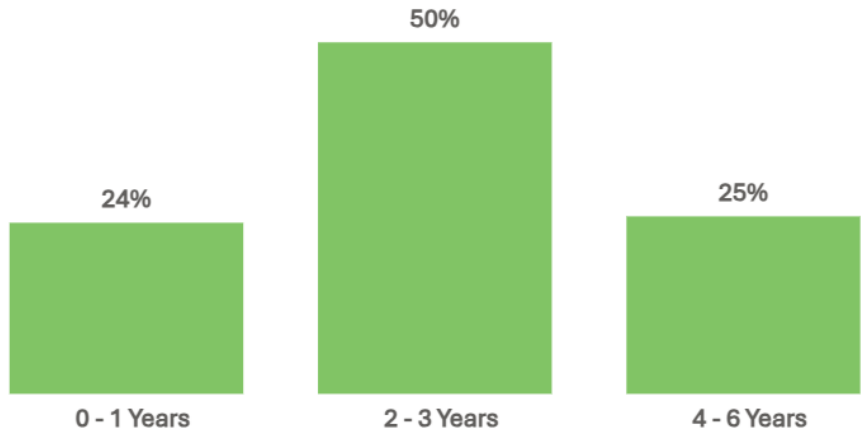
Exhibit 11: Minimum Educational Requirements in Job Posts, IE/D Region, Oct 2025 – Sep 2026



Source: Lightcast 2026.4

Exhibit 12 displays the work experience typically required from employer job ads for this occupational group. The largest grouping (50%) of employers listing minimum experience requirements sought candidates with 2-3 years of previous work experience.

Exhibit 12: Work Experience Requirements in Job Posts, IE/D Region, Oct 2025 – Sep 2026



Source: Lightcast 2026.4

Key Takeaway: Job postings indicate that the largest grouping of employers (46%) sought candidates with a bachelor's degree when a minimum education level was listed, and the largest grouping of ads (50%) prefer workers with 2-3 years of experience when experience requirements were listed.

In-Demand Skills and Certifications

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. Skills are listed as common, specialized, or computer skills. Common skills are applicable to any field of work, specialized skills are focused on specific work activities, and computer skills are focused on software competencies.

Certifications are also shown to provide insight into the top qualifications employers are directly requesting in job postings. Certifications are an important aspect of the job search process for both employers and job applicants, so new workers in this field applying for positions should pay close attention to what certifications are most in-demand in the regional job market.

Exhibit 13 displays the top common, specialized, or computer skills that were included in the job postings over the last 12 months, which are increasing in demand at a faster rate than the market as a whole ("Rapidly Growing" or "Growing"). Program designers should consider incorporating them into the curriculum, because employers are demanding them in workers.

Exhibit 13: Top Growing Skills from Employer Job Ads, IE/D Region, Oct 2025 – Sep 2026

Skills	Skill Type	Number of Postings	% of Total Postings	Skill Growth Relative to Market
Troubleshooting (Problem Solving)	Common	995	58%	Growing
Problem Solving	Common	520	30%	Growing
Computer Science	Specialized	498	29%	Rapidly Growing
Technical Support	Specialized	475	28%	Rapidly Growing
Information Technology	Common	430	25%	Growing
Operating Systems	Software	358	21%	Growing
Operating Systems	Specialized	354	21%	Growing
Leadership	Common	346	20%	Growing
Help Desk Support	Specialized	299	17%	Growing
Microsoft Office	Software	272	16%	Growing

Source: Lightcast 2026.4

Exhibit 14 displays the top common, specialized, or computer skills that were included in the job postings over the last 12 months, which are increasing in demand at a slower rate than the market as a whole ("Lagging"). Program designers should not necessarily remove them from the curriculum but should consider whether to especially focus on them, because employers are becoming less interested in them according to job posting analysis.

Exhibit 14: Top Lagging Skills from Employer Job Ads, IE/D Region, Oct 2025 – Sep 2026

Skills	Skill Type	Number of Postings	% of Total Postings	Skill Growth Relative to Market
Active Directory	Software	238	14%	Lagging
Active Directory	Specialized	234	14%	Lagging
System Administration	Specialized	165	10%	Lagging
Analytical Skills	Common	131	8%	Lagging
Windows Servers	Software	118	7%	Lagging
Windows Servers	Specialized	101	6%	Lagging
ITIL 4	Software	75	4%	Lagging
Microsoft Access	Software	70	4%	Lagging
Microsoft SharePoint	Software	62	4%	Lagging
Computer Literacy	Common	60	3%	Lagging

Source: Lightcast 2026.4

Exhibit 15 displays the top common, specialized, or computer skills that were included in the job postings over the last 12 months, which are stable compared to the market as a whole ("Stable"). Program designers should not necessarily modify the curriculum to focus on them but should consider their continued use, because employers are still interested in them according to job posting analysis.

Exhibit 15: Top Stable Skills from Employer Job Ads, IE/D Region, Oct 2025 – Sep 2026

Skills	Skill Type	Number of Postings	% of Total Postings	Skill Growth Relative to Market
Communication	Common	1,093	64%	Stable
Customer Service	Common	716	42%	Stable
Operations	Common	616	36%	Stable
Management	Common	593	35%	Stable
Detail Oriented	Common	297	17%	Stable
Verbal Communication Skills	Common	142	8%	Stable
Linux	Software	130	8%	Stable
Mac OS	Software	122	7%	Stable
Wide Area Networks	Specialized	118	7%	Stable
Linux	Specialized	116	7%	Stable

Source: Lightcast 2026.4

Exhibit 16 displays the top qualifications/certifications that were included in the job postings over the last 12 months. Program designers should consider incorporating preparation for certification

completion and/or exam preparation into the curriculum, if applicable, because employers are demanding these qualifications in workers. A notable share of employers sought candidates with a CompTIA A+ certification. The CompTIA A+ certification is designed for individuals skilled in foundational skills in hardware, networking, mobile devices, and troubleshooting.[4] Please visit the CompTIA website for more information about the CompTIA A+ certification.

Exhibit 16: Top Qualifications/Certifications from Employer Job Ads, IE/D Region, Oct 2025 – Sep 2026

Qualification	Number of Postings	Percent of Total Postings
Valid Driver's License	304	18%
CompTIA A+	203	12%
CompTIA Network+	143	8%
CompTIA Security+	107	6%
Cisco Certified Network Associate	80	5%
Security Clearance	76	4%
Microsoft Certified Professional	74	4%
Cisco Certified Network Professional	40	2%
Secret Clearance	37	2%
Certified Information Systems Security Professional	35	2%

Source: Lightcast 2026.4

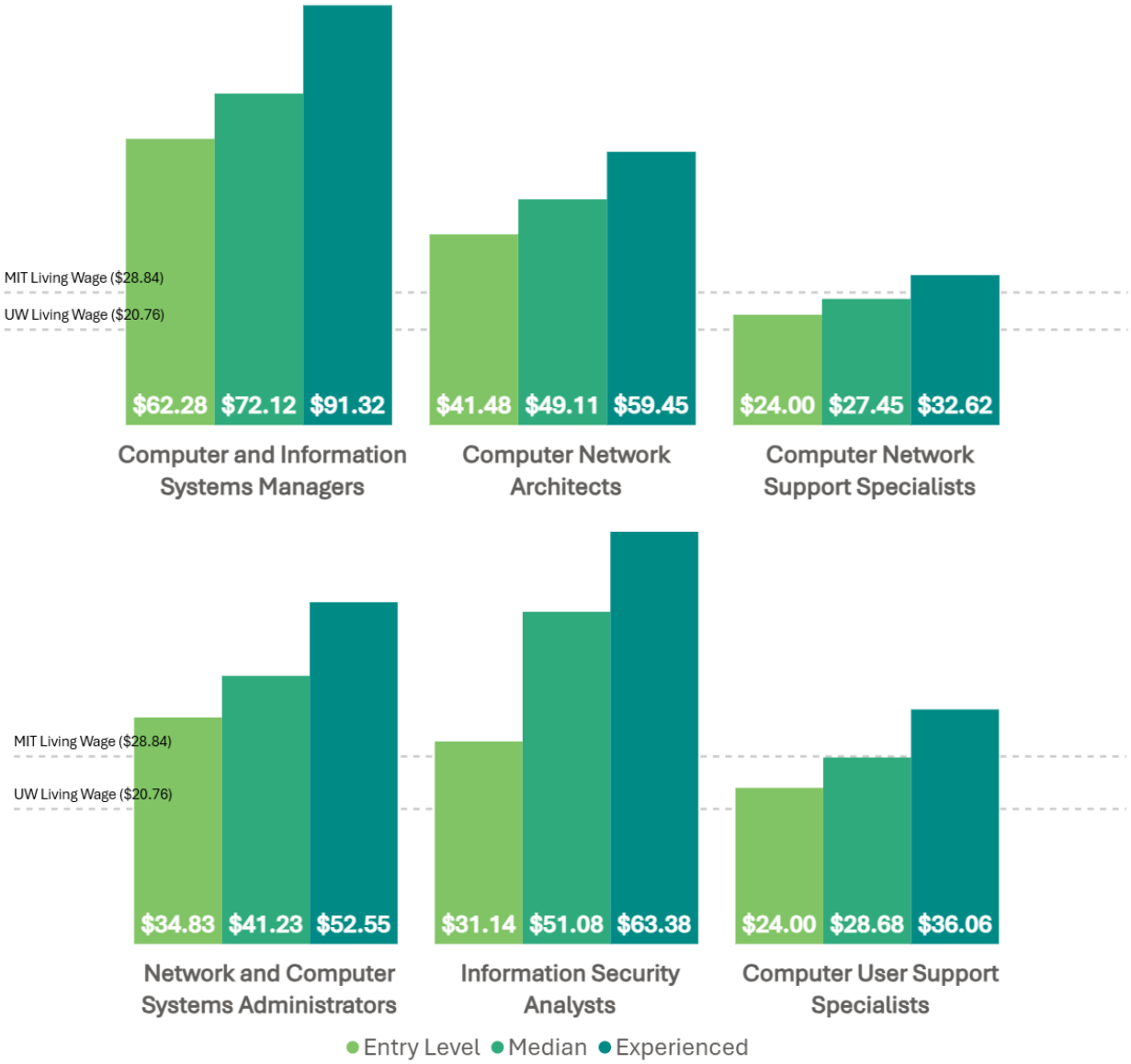
Job Posting Wage Data

Exhibit 17 displays the regional online advertised salaries for Computer Network Operations Occupations over the last 12 months. The salary information of online job ad data suggests employers advertise entry level hourly wages of $24 to $62.28 (estimated to be equal to an annual salary ranging from $49,920 to $129,542), and all six are above the UW Self-Sufficiency Standard for the IE/D for one adult, $20.76.

Additionally, four of six have entry level wages above the MIT living wage for one adult ($28.84) in projected entry-level wages.

[4] A+. CompTIA. Retrieved from: https://www.comptia.org/en-us/certifications/a/.

Exhibit 17: Hourly Wages by Occupation in Job Posts, IE/D Region, Oct 2025 – Sep 2026



Source: Lightcast 2026.4

Key Takeaway: Employers posting jobs in the region are offering entry-level hourly wages between $24 and $62.28 for this occupational group, meaning job posts for all six occupations have wages above the IE/D living wage of $20.76.

Appendix: Methodology and Sources

Endorsement Criteria

Based on the available labor market information, programs may receive a "Full Endorsement" (all criteria met with green checkboxes), a "General Endorsement" to proceed with caution (at most 1 red checkbox, with majority of criteria met with green or yellow checkboxes), and a non-endorsement (1 or 0 criteria met).

The table below has a high-level description of the LMI endorsement criteria.

Criteria	Purpose	Measure
Demand	Ensures there is sufficient labor market demand to justify program development.	This criterion is fully met if there are more than 75 annual job openings per occupation, on average.
Supply Gap	Ensures that the number of individuals exiting regional programs is sufficiently less than the regional demand to justify program development.	This criterion subtracts the number of postsecondary awards from the number of annual job openings. The criterion is fully met if the supply is less than 90% of demand.
Living Wage	Ensures that the occupations of interest provide workers with earnings sufficient to support themselves.	This criterion compares the entry-level earnings of the occupations of interest to the regional living wage. The majority of annual job openings need to be related to occupations whose entry level wages exceed the living wage to fully meet this criterion.
Education	Ensures that the occupations of interest are appropriate for community college program development (middle-skill).	This criterion is fully met if a majority of annual job openings need to be related to occupations which typically require a community college-level education or if more than one-third of workers in the field possess a community college degree as their highest educational attainment or whose OJT type is an apprenticeship.

Endorsement Criteria Calculations

The charts below specify how a "Green Rating", a "Yellow Rating", or a "Red Rating" is given to each specific LMA Endorsement Criteria and the associated calculations.

The chart below displays the endorsement criteria calculations for labor market assessments that analyze a **single occupation** (SOC).

Criteria	Green Rating	Yellow Rating	Red Rating
Demand	75+ Annual Job Openings (AJOs)	50-74 Annual Job Openings (AJOs)	Less than 50 Annual Job Openings (AJOs)
Supply Gap	Supply is less than 90% of Demand (AJOs)	Supply is 90%-110% of Demand (AJOs)	Supply is greater than 110% of Demand (AJOs)

Criteria	Green Rating	Yellow Rating	Red Rating
Living Wage	25th Percentile Wages are At or Above the Regional Self-Sufficiency Wage Level (25th percentile earnings > $20.76)	25th Percentile Wages are At or Above 90% of the Regional Self-Sufficiency Wage Level (25th percentile earnings > $18.68)	25th Percentile Wages are Below 90% of the Regional Self-Sufficiency Wage Level (25th percentile earnings < $18.68)
Education	Typical Education Level is "Some College", “Postsecondary Nondegree Award”, or "Associate Degree" OR 33%+ of Education Attainment is "Some College" or "Associate Degree"; OR Typical On-The-Job Training is "Apprenticeship"	Not Applicable	None of the Green Rating criteria are met

The chart below displays the endorsement criteria calculations for labor market assessments that analyze **multiple occupations** (SOCs).

Criteria	Green Rating	Yellow Rating	Red Rating
Demand	Total Annual Job Openings (AJOs) are Greater Than or Equal to the Following Value: [75 * Number of Occupations] Ex: 2 SOCs = 150 AJOs	Total Annual Job Openings (AJOs) are Between the Following Values: [50 * Number of Occupations] to [75 * Number of Occupations] Ex: 2 SOCs = 100 to 150 AJOs	Total Annual Job Openings (AJOs) are Less Than the Following Value: [50 * Number of Occupations] Ex: 2 SOCs = < 100 AJOs
Supply Gap	Supply is less than 90% of Total Demand (AJOs)	Supply is 90%-110% of Total Demand (AJOs)	Supply is greater than 110% of Total Demand (AJOs)
Living Wage	50%+ of Total AJOs are related to SOCs whose 25th Percentile Wages are at or Above the Regional Self-Sufficiency Wage Level	50%+ of Total AJOs are related to SOCs whose 25th Percentile Wages are at or Above 90% of the Regional Self-Sufficiency Wage Level	Less Than 50% of Total AJOs are related to SOCs whose 25th Percentile Wages are at or Above 90% of the Regional Self-Sufficiency Wage Level

Criteria	Green Rating	Yellow Rating	Red Rating
	(25th percentile earnings > $20.76)	(25th percentile earnings > $18.68)	(25th percentile earnings < $18.68)
Education	50%+ of AJOs are related to SOCs whose Typical Education Level is "Some College" or "Associate Degree" or whose Typical On-The-Job Training is "Apprenticeship" OR 33%+ of Education Attainment across all SOCs is "Some College" or "Associate Degree"	Not Applicable	None of the Green Rating criteria are met

Data Sources

The table below displays the average annual California Community College (CCC) awards conferred during the three academic years between 2022 and 2025 from the California Community Colleges Chancellor's Office Management Information Systems (MIS) Data Mart. Awards are the combined total during the timeframe, divided by three in this case to calculate an annual average. This is being done to minimize the effect of atypical variations that might be present in a single year.

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/ 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. While not perfect, Lightcast leverages machine learning and other AI technologies to enrich, deduplicate and aggregate this information to make it a meaningful dataset.

Type of Data	Source
Self-Sufficiency Standard	Center for Women's Welfare, University of Washington. (2024). The self-sufficiency standard for California 2024. http://www.selfsufficiencystandard.org/. 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 higher of the two is used to represent Inland Empire/Desert, which is $20.76 per hour ($43,123 annually).
Living Wage (MIT)	Living wage data sourced from the Living Wage Institute via https://livingwage.mit.edu/counties/06065; https://livingwage.mit.edu/counties/06071, Accessed on June 6, 2026. 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 $27.60 per hour ($52,353.60 annually). The living wage for one adult in Riverside County is $28.84 per hour ($59,987 annually). The higher of the two, $28.84 per hour ($59,987 annually), is used to represent the Inland Empire/Desert living wage.
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.cccco.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