# Labor Market Analysis for: 1230.20 Licensed Vocational Nursing

Inland Empire/Desert Center of Excellence, January 2025

Prepared by: Paul Vaccher, paulvaccher@trailheadstrat.com



LMI Criteria NOT Met

Summary
Program LMI Endorsement

	(Proceed v	vith Caution)
	✓	
	Program LMI Endorsement Criteria	
Supply Gap	Yes ✓	No □
	Comments: There is projected to be <b>846 annual job openings</b> through over the next five years, which is more than the <b>520 annual averaginstitutions over the last 3 years.</b> Supply data includes both community college awards (373).	e awards conferred by educational
Living Wage	Yes ✓	No □
	Comments: All annual job openings (100%) for this occupation has IE/D living wage of 20.42.1	ave entry-level hourly wages above the
Education	Yes ✓	No □
	Comments: Approximately 73% of workers have completed degree as their highest level of education. See Exhibit 8 for more	•

Some LMI Criteria Met

All LMI Criteria Met

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)
  - Licensed Practical and Licensed Vocational Nurses (29-2061)

#### **Summary of findings**

#### Demand

- The number of jobs related to the middle-skill occupation Licensed Practical and Licensed Vocational Nurses is projected to increase by 9% through 2028, with 846 annual job openings (new and replacement jobs).
- Hourly entry-level wages for this occupation are above living wage at the 25<sup>th</sup> percentile hourly wage at \$30.35 in IE/D.
- There were 1,916 online job postings from 356 employers over the past 12 months with the highest postings for licensed vocational nurses.
- The Bureau of Labor Statistics (BLS) education attainment data indicates that approximately 73% of workers have completed some college or an associate degree as their highest level of education.

#### Supply

- On average, there were 520 annual awards conferred by educational institutions over the last 3 years in related fields: 147 from community colleges and 373 from other institutions (e.g., 4-year universities, private schools).
- IE/D community college students that exited these programs in the 2021-22 academic year earned a median annual wage of \$38,338 (\$18.43 per hour).
- 100% of students that exited their program in 2021-2022 reported that they are working in a job closely related to their field of study.
- Community college programs play an important role diversifying the talent pipeline in these occupations. Most IE/D professionals in the licensed vocational nursing occupation are Hispanic or Latino (38%) or White (28%), "Mid career" category (48%) or "Late career" category (25%), and female (87%). Most community college students in related programs are Hispanic or Latino (67%), "Pre-career/College" category (41%) or "Early Career" category (37%), and female (88%).

<sup>1</sup> 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 Licensed Vocational Nursing (TOP 1230.20) programs prepare students for vocational nurse licensure by the Board of Vocational Nursing and Psychiatric Technicians through instruction that equips students with the technical and manual nursing skills, practiced under the direction of a registered nurse, physician, or other medical staff, specific to the scope of practice of the licensed vocational nurse (Taxonomy of Programs, 2023). The knowledge, skills, and abilities trained by licensed vocational nursing programs lead to employment as licensed practical and licensed vocational nurses.

#### Job Demand

In 2023, there were 8,654 jobs in the occupation related to licensed vocational nursing in the IE/D region. Regional employment for this occupation is projected to increase by 9% through 2028 with 846 job 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 licensed vocational nursing, IE/D Region, 2023-2028

Occupation	soc	2023 Jobs	2028 Jobs	2023 - 2028 % Change	5-Yr Openings (New + Replacement Jobs)	Annual Openings (New + Replacement Jobs)
Licensed Practical and Licensed Vocational Nurses	29-2061	8,654	9,451	9%	4,231	846

SOURCE: LIGHTCAST 2024.4

# **Job Postings**

The following analysis for occupations related to licensed vocational nursing 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. 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 licensed vocational nursing over the last 12 months and the median posting duration. Over the previous 12 months, there were 1,916 unique job postings for occupations related to licensed vocational nursing in the region from 356 employers.

Exhibit 2. Job ads and posting duration, IE/D Region, January 2024 – December 2024

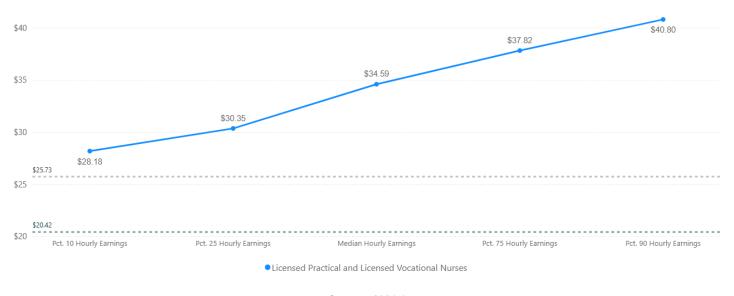
Job Title	Job Ads ▼	Median Posting Duration
Licensed Practical and Licensed Vocational Nurses	1,916	28 days
Source: Lightcast 2024	4	

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

## **Earnings**

Exhibit 3a displays the hourly earnings for occupations related to licensed vocational nursing and Exhibit 3b displays the hourly earnings for job postings of the same occupations and compares both to the UW Self-Sufficiency Standard for the IE/D of \$20.42³ and the MIT IE/D living wage of \$25.73.⁴ The living wage criteria is determined by using the data in Exhibit 3a but Exhibit 3b is also shown to provide regional context using job posting data.

Exhibit 3a. Projected hourly earnings by percentile, IE/D Region, 2023



Source: 2024.4

Exhibit 3b. Hourly earnings of job postings by percentile, IE/D Region, January 2024 – December 2024



SOURCE: 2024.4

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 3a). The occupation listed was also above the MIT living wage for an adult with no children (\$25.73) in projected entry-level earnings (see Exhibit 3a).

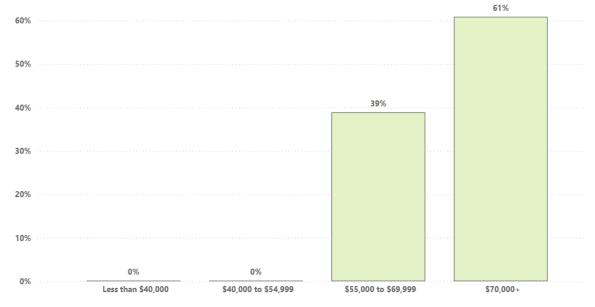
<sup>&</sup>lt;sup>3</sup> The <u>UW self-sufficiency standard</u> is currently used by the CO and other COEs, the self-sufficiency standard was last updated by UW in 2024. To provide an alternative perspective, the COE will provide an alternative living wage calculation from MIT in the analysis below 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.

<sup>4</sup> ibid.

## **Advertised Salary from Online Job Ads**

Exhibit 4 displays the regional online advertised salaries for the occupations related to licensed vocational nursing over the last 12 months. The salary information from online job ad data suggests most employers (61%) advertise an annual salary greater than \$70,000 (\$33.65 per hour).

Exhibit 4. Online advertised salaries for occupations related to licensed vocational nursing, IE/D Region, January 2024 - December 2024



Source: Lightcast 2024.4

# 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 licensed vocational nursing over the last 12 months. Assessing the top advertised job titles may provide insight into the types of positions sought by employers.

Exhibit 5. Job titles most frequently used in job ads, IE/D Region, January 2024 - December 2024

Job Title	Unique Postings
Licensed Vocational Nurses	733
Licensed Practical Nurses/Licensed Vocational Nurses	121
Correctional Licensed Vocational Nurses	115
Hospice Licensed Vocational Nurses	69
Licensed Practical Nurses	42
Home Health Managers	37
Hospice Licensed Practical Nurses/Licensed Vocational Nurses	36
Private Duty Managers	33
Home Care Registered Nurses	27
Home Health Licensed Practical Nurses	27

Source: LIGHTCAST 2024.4

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. Maxim Healthcare Services 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, January 2024 - December 2024

Company	Total/Unique (Jan 2024 - Dec 2024)	Posting Intensity	Median Posting Duration
Maxim Healthcare Services	973 / 140	7:1	34 days
Loma Linda University	258 / 78	3:1	16 days
Kaiser Permanente	157 / 55	3:1	20 days
Aveanna Healthcare	195 / 46	4:1	23 days
Telecare	85 / 42	2:1	29 days
Tarlani Healthcare	57 / 37	2:1	38 days
Prime Home Health	65 / 36	2:1	15 days
Universal Health Services	191 / 33	6:1	20 days
Riverside Medical Clinic	222 / 30	7:1	32 days
AccentCare	127 / 25	5:1	27 days

SOURCE: LIGHTCAST 2024.4

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, January 2024 - December 2024

Common skills	Total Postings  ▼	Skill Growth Relative to Market
Communication	598	Lagging
Writing	264	Growing
Coordinating	248	Growing
Management	234	Stable
Customer Service	233	Stable
Organizational Skills	157	Growing
Compassion	155	Growing
Detail Oriented	154	Stable
English Language	152	Growing
Interpersonal Communications	151	Growing
Teaching	149	Growing
Critical Thinking	139	Rapidly Growing
Ethical Standards And Conduct	106	Growing
Specialized skills	Total Postings	Skill Growth
	-	Relative to Market
Nursing	1,049	Rapidly Growing
Medication Administration	535	Growing
Home Health Care	504	Growing
Nursing Care	490	Growing
Medical Records	383	Growing
Vital Signs	333	Growing
Nursing Homes	267	Growing
Infection Control	263	Growing
Direct Patient Care	241	Growing
Intravenous Therapy	230	Growing
Patient Education And Counseling	219	Growing
Patient Treatment	188	Growing
Computer Skills	Total Postings ▼	Skill Growth Relative to Market
Microsoft Office	42	Growing
Microsoft Outlook	41	Rapidly Growing
Microsoft Excel	27	Growing
Microsoft Word	15	Stable
Microsoft PowerPoint	13	Rapidly Growing
Medical Software	11	Growing
Document-Oriented Databases	9	Growing
eClinicalWorks (ECW)	9	Rapidly Growing
Spreadsheets	6	Rapidly Growing
` '	6 5	Rapidly Growing Growing
Spreadsheets	_	

SOURCE: LIGHTCAST 2024.4

Stable

Slack (Software)

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

For this middle-skill occupation, the Bureau of Labor Statistics (BLS) education attainment data in Exhibit 8 for current professionals in the occupation of interest indicates that approximately 73% of workers have completed some college or an associate degree as their highest level of education. Minimum advertised education requirements are not included in this report due to an error in the job advertisement information.

Exhibit 8 National-level Education Attainment for Occupations

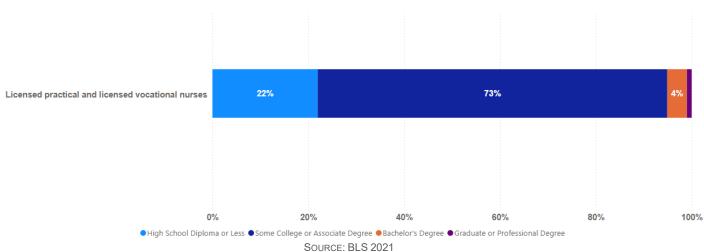
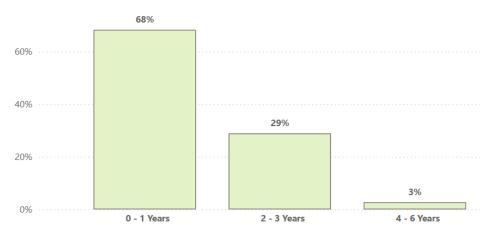


Exhibit 9 displays the work experience typically required from employer job ads for this occupation. The majority (68%) of employers listing minimum experience requirements sought candidates with 0 to 1 year of previous work experience.

Exhibit 9 Work experience requirements, IE/D Region, January 2024 - December 2024



SOURCE: LIGHTCAST 2024.4

## **Student Completions and Program Outcomes**

Exhibit 10 displays student completions for the Licensed Vocational Nursing (TOP 1230.20) programs over the last three academic years (2020-2023). In the previous three academic years, five regional community colleges issued an average of 147 awards in relevant programs.

Exhibit 10 Annual average community college awards for Licensed Vocational Nursing (TOP 1230.20), IE/D, 2020-

Top Code	Program	College	2020-2021 Awards	2021-2022 Awards	2022-2023 Awards	3-Year Award Average
1230.20	Licensed Vocational Nursing	Chaffey	29	42	11	27
1230.20	Licensed Vocational Nursing	College of the Desert	41	1	6	16
1230.20	Licensed Vocational Nursing	Copper Mountain	23	25	24	24
1230.20	Licensed Vocational Nursing	Palo Verde	0	7	9	5
1230.20	Licensed Vocational Nursing	Riverside	68	89	66	74
Total			161	164	116	147

SOURCE: MIS DATA MART

#### Non-Community College Supply

Exhibit 11 displays award completion data available for these IE/D non-community college programs: Licensed Practical/Vocational Nurse Training (51.3901).

In the previous three academic years six regional non-community colleges institutions issued an average of 373 awards in relevant programs.

Exhibit 11 Annual average non-community college awards for licensed vocational nursing programs, IE/D, 2019-2022

CIP	Program	College	2019-2020 Awards	2020-2021 Awards	2021-2022 Awards	3-Year Award Average
51.3901	Licensed Practical/Vocational Nurse Training	American Career College- Ontario	195	229	232	219
51.3901	Licensed Practical/Vocational Nurse Training	Baldy View Regional Occupational Program	20	0	0	7
51.3901	Licensed Practical/Vocational Nurse Training	Beaumont Adult School	40	54	20	38
51.3901	Licensed Practical/Vocational Nurse Training	California Nurses Educational Institute	64	33	63	53
51.3901	Licensed Practical/Vocational Nurse Training	North-West College-Riverside	67	45	37	50
51.3901	Licensed Practical/Vocational Nurse Training	San Joaquin Valley College- Rancho Mirage	0	0	21	7
Total			386	361	373	373

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 Licensed Vocational Nursing strong workforce program outcomes, IE/D & California, most recent academic year

Program metric title	Inland Empire/Desert	Statewide
Attained a living wage (completers and skills-builders)	63%	59%
Completed 9+ career education units in one year	45%	46%
Job closely related to the field of study	100%	91%
Median annual earnings (all exiters)	\$38,338	\$41,824
Students who attained a noncredit workforce milestone in a year	96%	9%
Students who earned a degree, certificate, or attained apprenticeship	96	652
Unduplicated count of enrolled students	504	3,131

Source: Launchboard

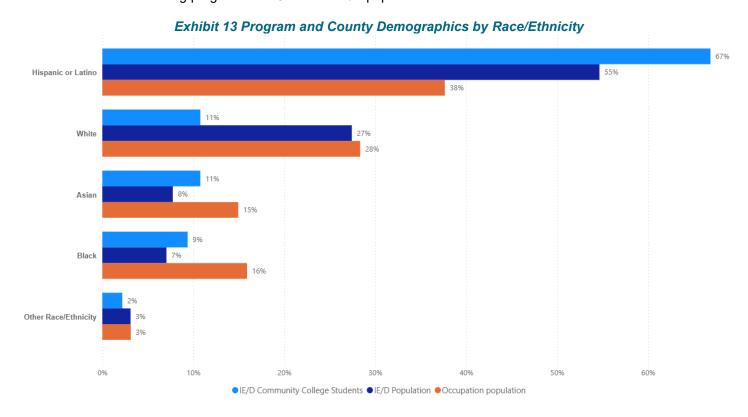
## **Building an Inclusive Economy**

This section examines demographic data for IE/D community college students in Licensed Vocational Nursing programs compared to the IE/D population. We include demographics for occupation data for the occupation related to licensed vocational nursing. This analysis can be used to:

- Understand the community college system's current or potential role supporting a diverse talent pipeline into the
  occupations of interest.
- Inform students (and the faculty and staff working with them) the extent to which individuals from similar demographic groups are over or underrepresented in the professions related to their field of study.
- Inform employers of the diverse talent pipeline coming from the community college system for the occupations analyzed.

Exhibit 13 compares the race/ethnicity of IE/D community college students enrolled in Licensed Vocational Nursing programs compared to the IE/D population.

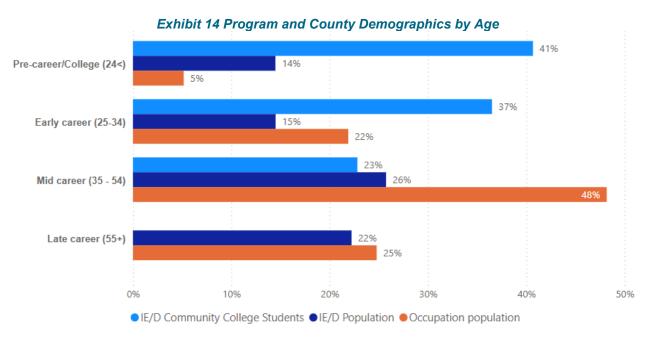
Notably, 67% of students enrolled in Licensed Vocational Nursing programs are Hispanic or Latino which is significantly higher than 38% workers in occupations related to licensed vocational nursing in the IE/D region 55%. Additionally, 28% of the IE/D population that are employed in occupations related to licensed vocational nursing are White, which is significantly higher than both IE/D community college students 11% and slightly higher than the IE/D population 27%. Also, 15% of the workers employed in occupations related to licensed vocational nursing are Asian, only 11% students in Licensed Vocational Nursing programs and 8% of the IE/D population are Asian.



SOURCE: LIGHTCAST 2024.4 AND LAUNCHBOARD

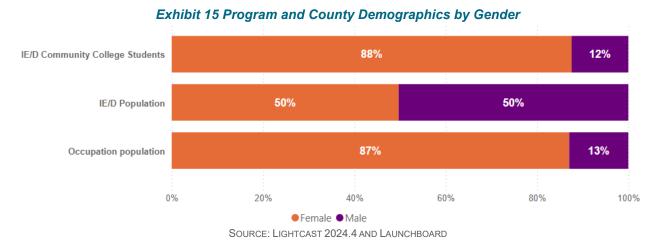
Exhibit 14 compares the age of IE/D community college students enrolled in Licensed Vocational Nursing programs compared to the IE/D population.

The majority of students enrolled in Licensed Vocational Nursing programs are either in the "Pre-career/College" category (41%) or "Early Career" category (37%) as compared to IE/D population (29%) and workforce (27%) in this occupation related to licensed vocational nursing. These programs are an important entry point for young licensed vocational nursing professionals.



SOURCE: LIGHTCAST 2024.4 AND LAUNCHBOARD

Exhibit 15 compares the gender of IE/D Region community college students enrolled in Licensed Vocational Nursing programs compared to the IE/D population. We also include demographics for this occupation related to licensed vocational nursing to identify potential diversity and equity issues addressable by community college programs.



Most IE/D professionals in the licensed vocational nursing occupation are Hispanic or Latino (38%) or White (28%), "Mid career" category (48%) or "Late career" category (25%), and female (87%). Most community college students in related programs are Hispanic or Latino (67%), "Pre-career/College" category (41%) or "Early Career" category (37%), and female (88%). Major takeaways:

- Community colleges are an important talent source for employers committed to greater racial/ethnic diversity, especially Hispanic/Latino professionals.
- College programs may want to consider strategies to engage more men into these programs.

## **Appendix: Methodology**

Exhibit 10 displays the average annual California Community College (CCC) awards conferred during the three academic years between 2020 and 2023 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 done to minimize the effect of atypical variations that might be present in a single year.

Community college student outcome information is from LaunchBoard 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 LaunchBoard's Strong Workforce Program Metrics Data Element Dictionary in the References section (LaunchBoard, 2023a). Finally, employment in a job closely related to the field of study comes from self-reported student responses on the CTE Employment Outcomes Survey (CTEOS) administered by Santa Rosa Junior College (LaunchBoard, 2023a).

# **Appendix: References**

Type of Data	Source
Occupational Projections, Wages, and Job Postings	Traditional labor market information data is sourced from Lightcast, a
Occupational Frojections, wages, and too Fostings	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/.
	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
Living NA/2 are (NAIT)	represent Inland Empire/Desert is \$20.42 per hour (\$43,123 annually).
Living Wage (MIT)	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,	The Bureau of Labor Statistics (BLS) provides information about
and Educational Attainment	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
F1 (1 10 1	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
	<u>components///completions</u>

Type of Data	Source
Student Metrics and Demographics	LaunchBoard, a statewide data system supported by the California Community Colleges Chancellor's Office and hosted by Cal-PASS Plus, provides data on progress, success, employment, and earnings
	outcomes for California community college students. For more information, see: https://www.calpassplus.org/LaunchBoard/Home.aspx