Labor Market Analysis for:
0102.10 Veterinary Technician (Licensed)
Inland Empire/Desert Center of Excellence, Aug 2024

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Summary

Program LMI Endorsement	All LMI Criteria Met	Some LMI Criteria Met (Proceed with Caution)	LMI Criteria NOT Met
	✓	☐	☐

Program LMI Endorsement Criteria		
Supply Gap	**Yes** ✓	No ☐
	Comments: There is *projected* to be **435 annual job openings** throughout the Inland Empire/Desert region, which is more than the **101 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 (101).	
Living Wage	**Yes** ✓	No ☐
	Comments: **All (100%) of annual job openings** for these two occupations **have entry-level hourly wages above the IE/D living wage of 13.74.**[1]	
Education	**Yes** ✓	No ☐
	Comments: **Most job postings for target occupations require a high school diploma or equivalent (94%).** See exhibits 8 and 9 for more details.	

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)
  - Veterinary Assistants and Laboratory Animal Caretakers (31-9096)
  - Veterinary Technologists and Technicians (29-2056)

Summary of findings

Demand

- The number of jobs related to the middle-skill occupations is projected to increase 19% through 2028, with 435 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 $17.49 to $21.45 in IE/D.
- There were 575 online job postings from 133 employers over the past 12-months with the highest postings for veterinary technicians and veterinary assistants.
- Most job postings for target occupations require a high school diploma or equivalent (94%), followed by associate degree (4%), and bachelor's degree (2%).

Supply

- On average, there were 101 annual awards conferred by educational institutions over the last 3 years in related fields: 0 from community colleges and 101 from other institutions (e.g., 4-year universities, private schools).
- California community college students that exited these programs in the 2021-22 academic year earned a median annual wage of $33,182 ($15.95 per hour).
- For California community college students, 71% of students that exited their program in 2021-22 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 veterinary technology occupations are Hispanic/Latino or White (85%), "early career" age category (40%), and female (77%). Because of a lack of student demographic data, this report is unable to provide a similar profile of students in the most recent year.

[1] *While the UW self-sufficiency standard is currently used by the CO and other COEs, the self-sufficiency standard was last updated by UW in 2021, does not account for significant increases in the cost of living in the Inland Empire the last three years, and is below the State of California minimum wage of $16.00. For these reasons, 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 Veterinary Technician (Licensed) (TOP 0102.10) programs prepare students for employment Laws and regulations, principles and practices, and licensure requirements that prepare individuals to assist the veterinarian, biological researcher or other scientist in applying knowledge of veterinary medical assisting procedures and techniques. (Taxonomy of Programs, 2023). The knowledge, skills, and abilities trained by Veterinary Technician (Licensed) programs lead to employment in occupations related to veterinary technology.

Job Demand

In 2023, there were 2,102 jobs in occupations related to veterinary technology in the IE/D region. Regional employment for this occupation group is projected to increase by 19% through 2028 with 435 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 veterinary technology, 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)
Veterinary Technologists and Technicians	29-2056	759	934	23%	553	111
Veterinary Assistants and Laboratory Animal Caretakers	31-9096	1,343	1,566	17%	1,619	324
Total		**2,102**	**2,500**	**19%**	**2,171**	**435**

SOURCE: LIGHTCAST 2024.2

Job Postings

The following analysis for occupations related to veterinary technology 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 veterinary technology over the last 12 months and the median posting duration. Over the previous 12 months, there were 575 unique job postings for occupations related to veterinary technology in the region from 133 employers.

Exhibit 2. Job ads and posting duration, IE/D Region, Aug 2023 – Jul 2024

Job Title	Job Ads	Median Posting Duration
Veterinary Technologists and Technicians	336	29 days
Veterinary Assistants and Laboratory Animal Caretakers	239	26 days
Total	**575**	

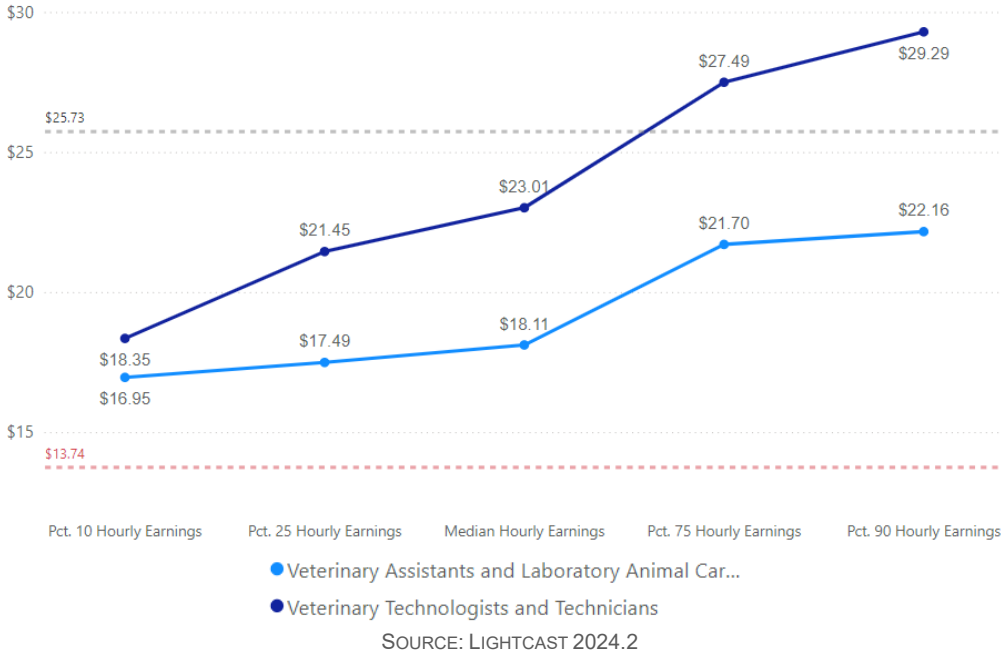
SOURCE: LIGHTCAST 2024.2

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

Earnings

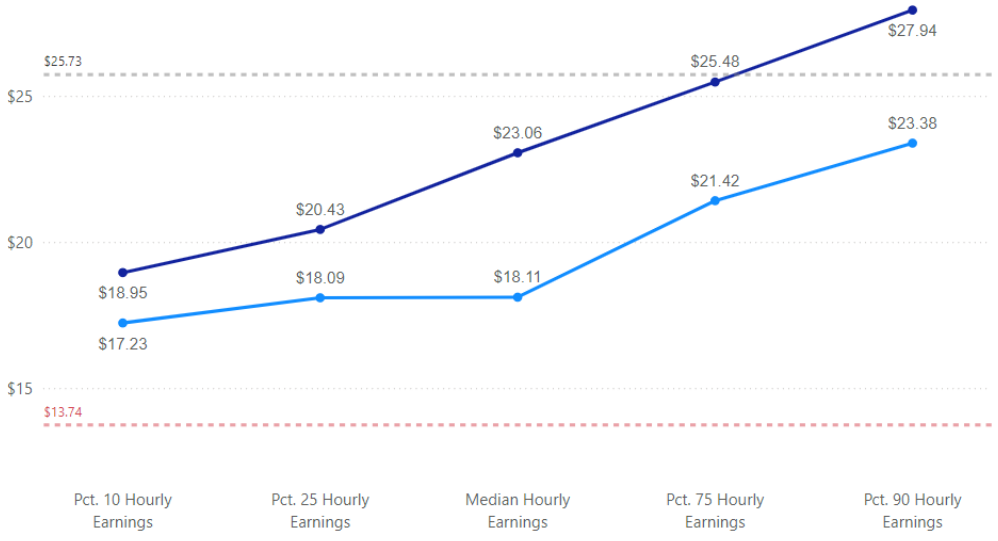
Exhibit 3a displays the hourly earnings for occupations related to medical imaging and Exhibit 3b displays the hourly earnings for job postings of the same occupations and compares both to the UW Self-Sufficiency Standard for the IE/D[3] and the MIT IE/D living wage of $25.73.[4] The living wage criteria is determined 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: LIGHTCAST 2024.2

Exhibit 3b. Hourly earnings of job postings by percentile, IE/D Region, 2023



SOURCE: LIGHTCAST 2024.2

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 occupations listed were below the MIT living wage for an adult with no children ($25.73) in projected wages (see Exhibit 3a).

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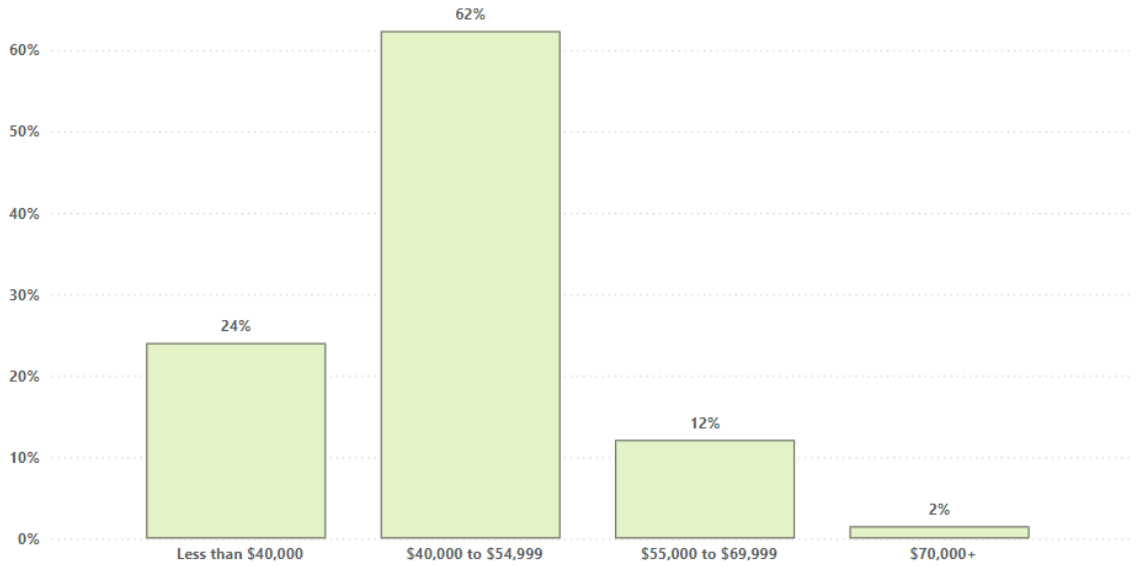
[3] *While the UW self-sufficiency standard is currently used by the CO and other COEs, the self-sufficiency standard was last updated by UW in 2021, does not account for significant increases in the cost of living in the Inland Empire the last three years, and is below the State of California minimum wage of $16.00. While the COE uses this standard for the LMI Wage criteria. For these reasons, this report provides an alternative living wage calculation from MIT in the analysis 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.*

[4] *ibid.*

Advertised Salary from Online Job Ads

Exhibit 4 displays the regional online advertised salaries for the occupations related to veterinary technology over the last 12 months. Online job ad salary information data suggests most employers (62%) advertise an annual salary between $40,000 and $54,999 (between $19.23 - $26.44 per hour).

Exhibit 4. Online advertised salaries occupations related to veterinary technology, IE/D Region, Aug 2023 – Jul 2024



SOURCE: LIGHTCAST 2024.2

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 veterinary technology 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, Aug 2023 – Jul 2024

Job Title	Unique Postings
Veterinary Technicians	185
Veterinary Assistants	147
Registered Veterinary Technicians	106
Veterinary Technician Assistants	18
Veterinary Assistants/Receptionists	12
Lead Veterinary Technicians	10
Veterinary Hospital Managers	10
Animal Care Technicians	9
Veterinary Technician Externs	9
Animal Technicians	6

SOURCE: LIGHTCAST 2024.2

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. Banfield Pet Hospital and VCA Animal Hospitals 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, Aug 2023 – Jul 2024

Company	Total/Unique (Aug 2023 - Jul 2024)	Posting Intensity	Median Posting Duration
Banfield Pet Hospital	220 / 73	3 : 1	32 days
VCA Animal Hospitals	169 / 41	4 : 1	16 days
PetCo	106 / 24	4 : 1	43 days
Corona Animal Emergency Center	123 / 21	6 : 1	25 days
County Of Riverside	23 / 11	2 : 1	29 days
Ethos Veterinary Health	15 / 10	2 : 1	3 days
Nuevo Road Animal Hospital	28 / 8	4 : 1	23 days
Amerivet	16 / 8	2 : 1	33 days
California Veterinary Specialists	18 / 7	3 : 1	37 days
Baseline Animal Hospital	30 / 7	4 : 1	33 days

SOURCE: LIGHTCAST 2024.2

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]

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

Exhibit 7. Top 10 in-demand skills from employer job ads, IE/D Region, Aug 2023 – Jul 2024

Common skills	Total Postings	Skill Growth Relative to Market
Communication	249	Lagging
Customer Service	138	Stable
Compassion	105	Growing
Detail Oriented	93	Stable
Multitasking	78	Growing
Management	75	Stable
Lifting Ability	58	Growing
Computer Literacy	57	Lagging
Willingness To Learn	54	Growing
Problem Solving	48	Growing

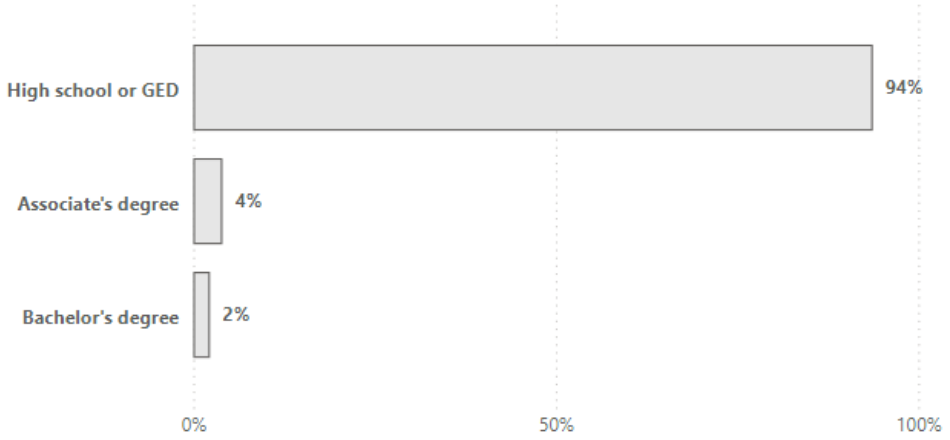
Specialized skills	Total Postings	Skill Growth Relative to Market
Surgery	181	Stable
Anesthesias	121	Stable
Medication Administration	110	Growing
Vital Signs	108	Growing
Phlebotomy	102	Growing
Safe Restraining Techniques (Veterinary)	92	Lagging
Medical Records	90	Growing
Radiography	87	Stable
Laboratory Testing	80	Growing
Animal Care	79	Rapidly Growing

Computer Skills	Total Postings	Skill Growth Relative to Market
Microsoft Outlook	15	Rapidly Growing
Microsoft Excel	11	Growing
Microsoft Word	7	Stable
Medical Software	6	Growing
Inventory Control Systems	3	Growing
Microsoft Access	3	Lagging
Microsoft Office	3	Growing
Practice Management Software	3	Lagging
Productivity Software	2	Growing
Project Management Software	2	Stable

SOURCE: LIGHTCAST 2024.2

Exhibit 8 includes the minimum educational requirements from job postings for this occupational group with bachelor's degree (2%) significantly lesser than associate degree (4%) or High school diploma or equivalent (94%).

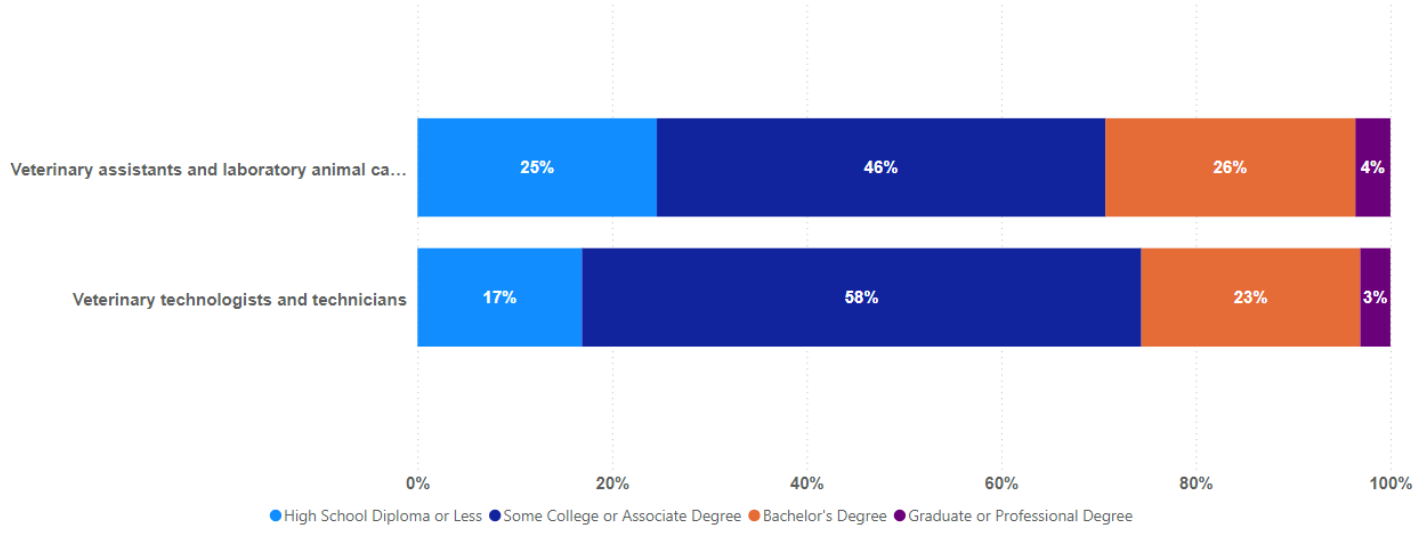
Exhibit 8 Minimum educational requirements in job postings for this occupational group, IE/D Region, Aug 2023 – Jul 2024



SOURCE: LIGHTCAST 2024.2

For the middle-skill occupations, the Bureau of Labor Statistics (BLS) education attainment data in Exhibit 9 for current professionals in the occupations of interest indicates that between 46% and 58% of workers have completed some college or an associate degree as their highest level of education. For the above middle-skill occupations, between 23% and 26% have completed a bachelor's degree.

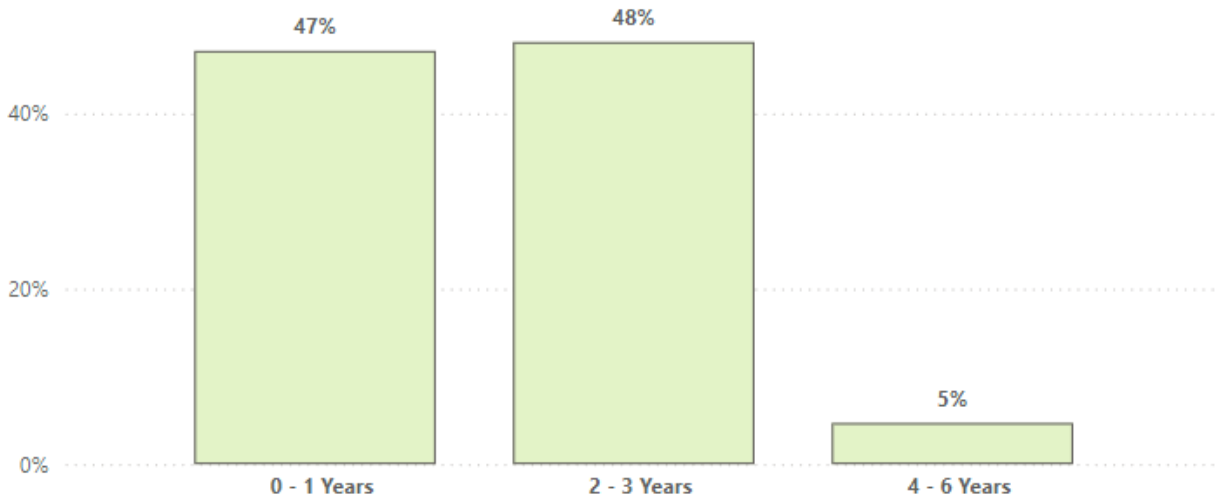
Exhibit 9 National-level Education Attainment for Occupations



SOURCE: BLS 2021

Exhibit 10 displays the work experience typically required from employer job ads for this occupational group. The plurality (48%) of employers listing minimum experience requirements sought candidates with 2-3 years of previous work experience.

Exhibit 10 Work experience requirements, IE/D Region, Aug 2023 – Jul 2024



SOURCE: LIGHTCAST 2024.2

Student Completions and Program Outcomes

There were no awards for Veterinary Technician (Licensed) (TOP 0102.10) programs over the last three academic years (2020-2023) in the region.

Non-Community College Supply

Award completion data is available for Veterinary/Animal Health Technology/Technician and Veterinary Assistant (CIP 01.8301) in the IE/D for non-community college programs.

In the previous three academic years, four regional non-community colleges institutions issued an average of 101 awards in relevant programs.

CIP	Program	College	2019-2020 Awards	2020-2021 Awards	2021-2022 Awards	3-Year Award Average
01.8301	Veterinary/Animal Health Technology/Technician and Veterinary Assistant	Carrington College-Ontario	46	39	29	38
01.8301	Veterinary/Animal Health Technology/Technician and Veterinary Assistant	Platt College-Ontario	27	30	28	28
01.8301	Veterinary/Animal Health Technology/Technician and Veterinary Assistant	Platt College-Riverside	27	49	28	35
01.8301	Veterinary/Animal Health Technology/Technician and Veterinary Assistant	San Joaquin Valley College-Ontario	0	0	0	0
Total			**100**	**118**	**85**	**101**

SOURCE: IPEDS

Strong Workforce Program Outcomes

California 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 Veterinary Technician (Licensed) strong workforce program outcomes, most recent academic year

Program metric title	Statewide
Attained a living wage (completers and skills-builders)	43%
Completed 9+ career education units in one year	34%
Job closely related to the field of study	71%
Median annual earnings (all exiters)	$33,182
Students who earned a degree, certificate, or attained apprenticeship	220
Unduplicated count of enrolled students	2,340

SOURCE: LAUNCHBOARD

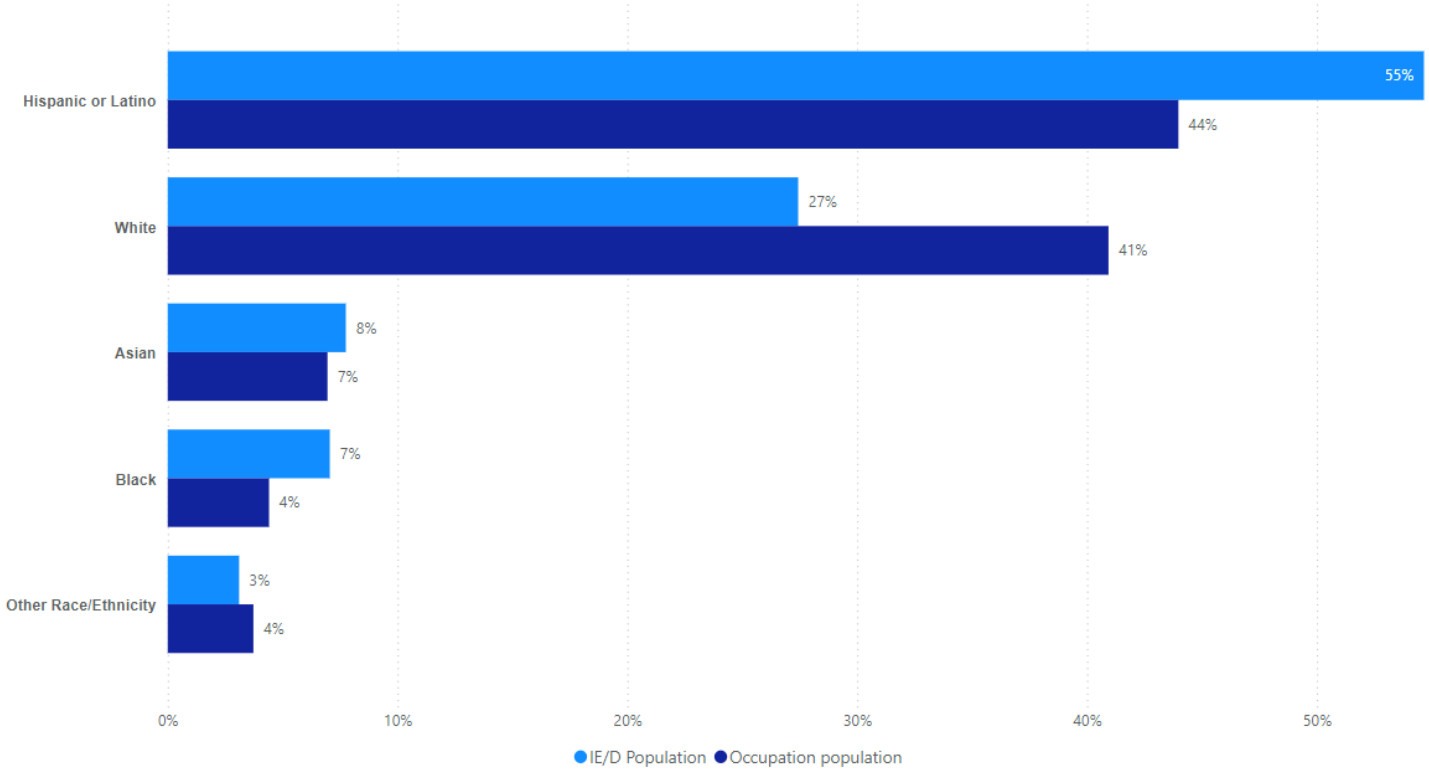
Building an Inclusive Economy

This section is intended to examine demographic data for IE/D community college students Veterinary Technician (Licensed) programs compared to the IE/D population. However, there were no students in the most recent year, so this report is unable to provide any details about IE/D students for this program in the most recent year. However, demographics for related occupation data for this occupation related to veterinary technology are available. 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.

Notably, 41%of the IE/D population that are employed in occupations related to veterinary technology are White, which is significantly higher than the IE/D population (27%). Though 55% of the of the IE/D population are Hispanic/Latino, only 44% of workers employed in occupations related to veterinary technology are Hispanic/Latino.

Exhibit 13 Occupation and County Demographics by Ethnicity



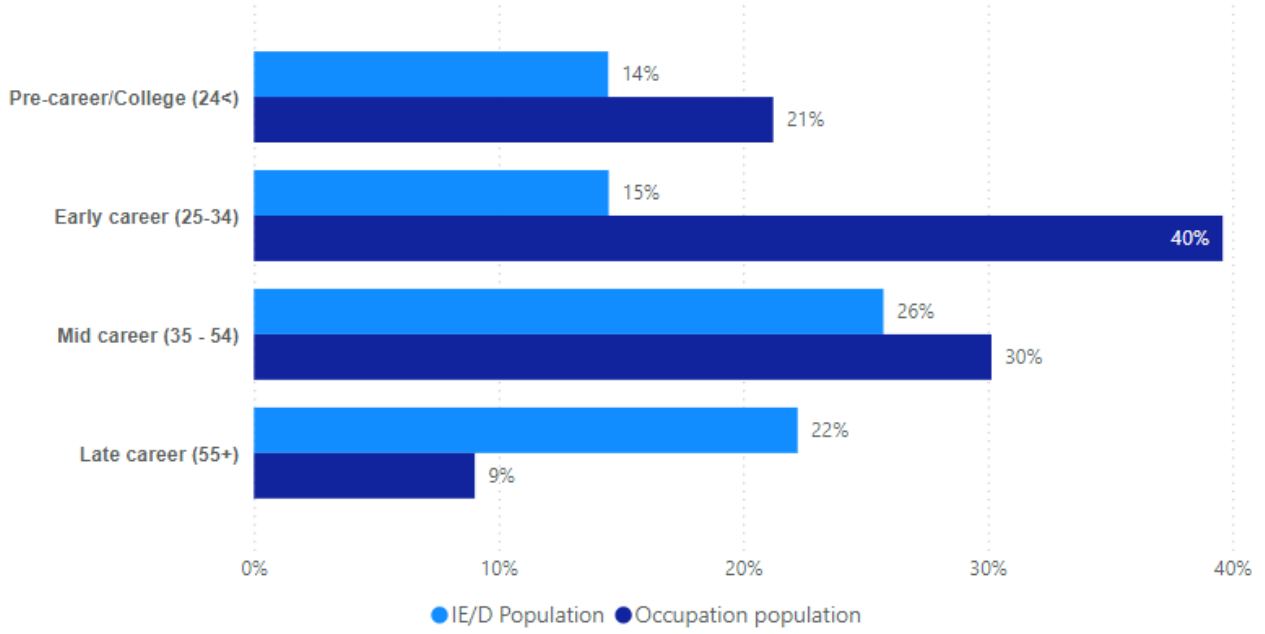
SOURCE: LIGHTCAST 2024.2 AND LAUNCHBOARD

Most IE/D professionals in veterinary technology occupations are Hispanic/Latino or White (85%), "early career" age category (40%), and female (77%). Because of a lack of student demographic data, this report is unable to provide a similar profile of students in the most recent year. Major takeaways:

- Community colleges are an important talent source for employers committed to greater racial/ethnic diversity, especially Hispanic/Latino professionals.
- Females are overrepresented in the occupation's population in the region.

Exhibit 14 compares the age of the IE/D population against those in Veterinary Technician (Licensed) occupations in the region.

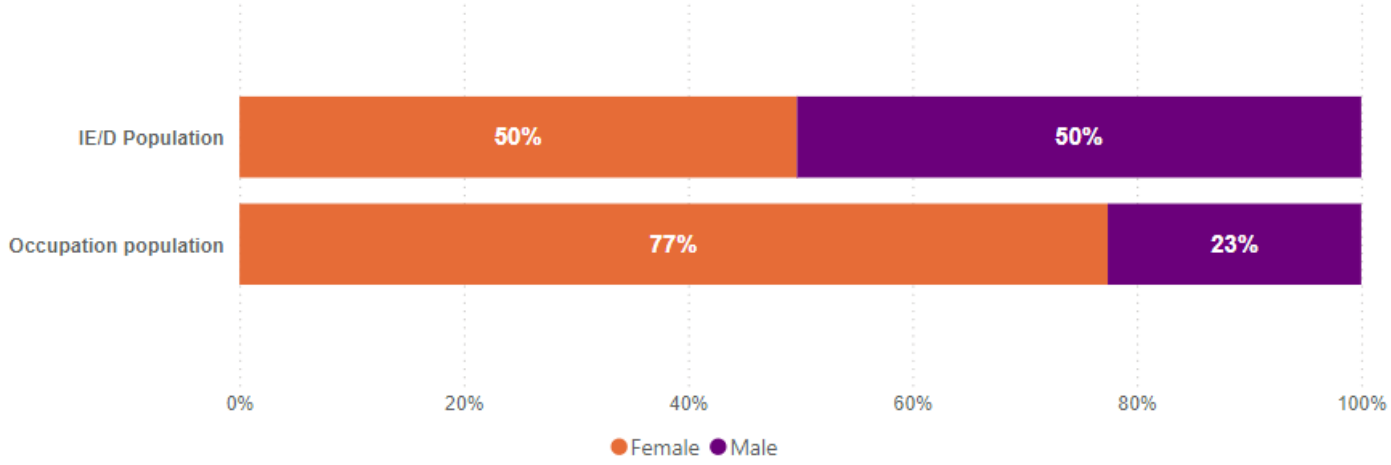
Exhibit 14 Occupation and County Demographics by Age



SOURCE: LIGHTCAST 2024.2 AND LAUNCHBOARD

Exhibit 15 compares the gender of the IE/D population against those in Veterinary Technician (Licensed) occupations in the region.

Exhibit 15 Occupation and County Demographics by Gender



SOURCE: LIGHTCAST 2024.2 AND LAUNCHBOARD

Appendix: Methodology

Exhibit 11 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 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	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.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
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