

# **APPRENTICESHIP IN THE INLAND EMPIRE**

HOW COMMUNITY COLLEGES AND THEIR PARTNERS ARE EXPANDING APPRENTICESHIP IN RIVERSIDE & SAN BERNARDINO COUNTIES December 2024







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California Community Colleges

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# **EXECUTIVE SUMMARY**

Registered apprenticeships are industry-driven career pathway programs that allow employers to develop and invest in their future workforce and allow individuals to earn wages while learning skills for a specific occupation or trade. The US Department of Labor (US DOL), the federal agency that oversees the US apprenticeship system, provides seven defining features of a registered apprenticeship<sup>1</sup>:

- **Industry Led**: Programs are industry-vetted and approved to ensure alignment with industry standards and that apprentices are trained for highly skilled, high-demand occupations.
- Paid Job: Apprentices are paid employees and earn wage increases as their skills and productivity increase.
- **Structured On-the-Job Learning**: Programs provide structured on-the-job training to prepare for a successful career, which includes instruction from an experienced mentor.
- **Supplemental Education**: Apprentices are provided supplemental classroom education based on the employers' unique training needs to ensure quality and success.
- **Diversity**: Programs are designed to reflect the communities in which they operate through strong nondiscrimination, anti-harassment, and recruitment practices to promote access, equity, and inclusion.
- **Quality & Safety**: Apprentices are afforded worker protections while receiving rigorous training to equip them with the skills they need to succeed and the proper training and supervision they need to be safe.
- Credentials: Apprentices earn a portable, nationally recognized credential within their industry.

There is evidence that the registered apprenticeship model works, although outcomes vary by industry, occupation, geography, and demographics of apprentices. Registered apprenticeships benefit both participants, who have high levels of employment and earnings growth<sup>2</sup> and employers, who can earn a return on investment of over 40%<sup>3</sup>. Citing the model's proven record, California Governor Gavin Newsom set an ambitious goal in 2018 of reaching 500,000 active apprentices by 2029. Public workforce and education policy changes and financial investment followed, led by the California Community College Chancellor's Office and the California Labor and Workforce Development Agency. As a result, the State has significantly increased registered apprenticeship completions and enrollments in recent years.

Creating pathways to high quality jobs through registered apprenticeship expansion is critical to the Inland Empire. As outlined in the *THRIVE Inland SoCal California Jobs First (CJF) Draft Economic Development Plan* released in July of 2024, expanding high-quality apprenticeship opportunities is a key strategy to improve economic competitiveness for the region and to expand opportunities for upward economic mobility for residents. In particular, the draft plan highlights the need for greater access to apprenticeship for residents underrepresented in construction, advanced manufacturing, healthcare, information technology, and jobs related to the energy transition.<sup>4</sup>

The Inland Empire/Desert Center of Excellence for Labor Market Information (COE) produced this report for education, workforce, government, community, labor, and industry professionals to better understand the current state of apprenticeship in the region and lay out how colleges, K-12 public school districts, and their partners can support the growth of apprenticeships that benefit local employers and residents. The report seeks to answer six major questions:

<sup>&</sup>lt;sup>1</sup> Apprenticeship USA Program Fact Sheet. www.apprenticeship.gov/employers/registered-apprenticeship-program. Accessed December 10, 2024.

<sup>&</sup>lt;sup>2</sup> Walton, Douglas, Karen N. Gardiner, and Burt Barnow. 2022. Expanding Apprenticeship to New Sectors and Populations: The Experiences and Outcomes of Apprentices in the American Apprenticeship Initiative. Prepared for the U.S. DOL, Employment and Training Administration. Abt Associates.

<sup>&</sup>lt;sup>3</sup> Kuehn, Daniel, Siobhan Mills De La Rosa, Robert Lerman, and Kevin Hollenbeck. 2022. Do Employers Earn Positive Returns to Investments in

Apprenticeship? Evidence from Registered Programs under the American Apprenticeship Initiative. Report prepared for U.S. Department of Labor, Employment and Training Administration. Abt Associates and Urban Institute.

<sup>&</sup>lt;sup>4</sup> Draft Regional Economic Plan. Thrive Inland SoCal / California Jobs First. <u>https://www.thriveinlandsocal.org/data</u>. Accessed December 10<sup>th</sup>, 2024.

### SECTION 1: WHO ARE THE REGISTERED APPRENTICES IN THE INLAND EMPIRE?

- As of September 2024, there were 13,626 active apprentices in the Inland Empire. Most are in building and construction trades (69%), firefighting (15%), or personal services (e.g., barber or cosmetology) (10%).
- The remaining 7%, or 922 apprentices, were registered in non-traditional programs. 473 were in advanced manufacturing programs. 449 were in other programs, led by health services (128), automotive repair (120), information technology (71), and food and food service (56) programs.
- Only 6% of apprentices in the Inland Empire are women, a smaller share than the 9% of female apprentices in California. The gender gap in the Inland Empire is driven by low rates of women in building and construction apprenticeship programs (2% female) and the CA firefighters' program (3% female).
- 65% of apprentices in the Inland Empire are Hispanic, higher than the 48% of the Inland Empire labor force that is Hispanic. While there are notable exceptions by individual programs, a smaller percentage of White, Black, and Asian individuals are apprentices than the region's labor force overall.
- Most (62%) of apprentices in the Inland Empire are 25 years of age or older. While apprenticeship is sometimes
  presented as an alternative to college after high school, the data suggests this pathway for 16-24 year olds is not
  well developed in the Inland Empire. For example, less than half (46%) of apprentices in the carpenters' program
  and only 14% in the CA Firefighter program are younger than 25 in the Inland Empire.

### SECTION 2: HOW ARE EFFORTS TO EXPAND APPRENTICESHIP GOING?

- Apprenticeship completions are growing in California. In 2023, 17,703 registered apprentices completed programs, up over 10,000 from 2013. There has been significant annual growth from both traditional California Apprenticeship Committee (CAC) programs, established programs overseen by the Interagency Committee on Apprenticeship (IACA), and new and innovative programs overseen by IACA.
- However, the current rate of apprenticeship expansion is insufficient to meet the statewide goal of 500,000 apprentices trained between 2018 and 2029. Since 2018, 91,628 apprentices have completed programs in CA. Based on current trends, an estimated 229,133 apprentices will complete by 2029, well short of the goal.
- The Inland Empire is training more than its fair share of apprentices. While the Inland Empire labor force accounts for 11.2% of all California workers, the region's 13,262 active apprentices represent 14.2% of all apprentices in California.

### SECTION 3: HOW ARE COLLEGES AND PARTNERS ENGAGING IN APPRENTICESHIP?

- Community colleges, in partnership with intermediaries such as the LAUNCH Apprenticeship Network (LAUNCH), are leading growth in non-traditional apprenticeship in the Inland Empire. At the time of this research, colleges are involved in apprenticeships serving 525 active apprentices and have supported 1,307 apprentices since LAUNCH was established in 2018 by the Inland Empire Desert Region Consortium.
- College and K-12 partners contribute to the apprenticeship ecosystem in various ways, guided by their unique strengths, employer requirements, and specific needs of the region. These roles include providing Related Supplemental Instruction (RSI), pre-apprenticeship, apprenticeship placement, employing apprentices, sharing infrastructure, and financial partnership.

### SECTION 4: WHAT OCCUPATIONS SHOULD BE A FOCUS FOR COLLEGE EXPANSION EFFORTS?

• From an initial list of 387 "apprenticeable" Standard Occupational Classification (SOC) codes<sup>5</sup>, this report recommends 47 occupations for colleges and K-12 partners to focus apprenticeship expansion efforts.

<sup>&</sup>lt;sup>5</sup> ApprenticeshipUSA "Approved Occupations for Registered Apprenticeship". Accessed Nov 8<sup>th</sup>, 2024. <u>https://www.apprenticeship.gov/apprenticeship-goccupations</u>

• The occupations have 200 or more annual openings, require 5-years or less of work experience, are related to apprenticeship programs that are or would be overseen by IACA, are aligned with regional economic development priorities as laid out in the Inland Empire's California Jobs First initiative, THRIVE Inland SoCal<sup>6</sup>, and/or are in occupations in which other region's and colleges have developed viable apprenticeships.

### SECTION 5: WHAT SHARE OF APPRENTICESHIP FUNDING IS GOING TO THE INLAND EMPIRE?

- Of the \$108M of California Community College Chancellor's Office California Apprenticeship Initiative (CAI) Funds awarded since 2022, 7% has gone to Inland Empire colleges and their partners. Of the eight community college regions, only the South Central Coast region had a lower share.
- Of the \$15.5M California Division of Apprenticeship Standards (DAS) Apprenticeship Innovation Funding Support (AIF-S) funds awarded in 2022, \$849K (5%), went to Inland Empire sponsors. 75% of AIF-S funds in 2022 went to two established programs not located in the Inland Empire.

### SECTION 6: HOW CAN COLLEGES EXPAND APPRENTICESHIP ADOPTION AND IMPACT?

- Recommendation #1 Expand Participation with Apprenticeship Intermediaries: Due to the administration and expertise required to start and maintain quality registered apprenticeships, colleges, employers, and their partners should continue to invest in and participate in regional apprenticeship "hubs" administered by joint labor-management training trusts, industry associations, or non-profit intermediaries. One such hub is the LAUNCH Apprenticeship Network, where college participation has led to tremendous growth in non-traditional apprenticeship. Colleges should continue to partner with LAUNCH and other apprenticeship networks to explore expansion in the 47 apprenticeship target occupations, collaborate to secure more CAI funding and other recurring public revenue, evaluate impact, and support college faculty and staff that engage in apprenticeship.
- Recommendation #2 Improve Access for Underrepresented Groups through Pre-Apprenticeship: While there
  is ample evidence that getting into apprenticeship programs increases an individual's lifelong earnings<sup>7</sup>, women,
  Black, and younger workers in the Inland Empire are underrepresented in many of the largest, highest paying
  apprenticeships. These groups are often excluded from the intended benefits of the apprenticeship model. Preapprenticeship can be a tool to help close this gap, but it remains unclear how many pre-apprentices are
  entering apprenticeships. Colleges and other regional partners should benchmark the number of preapprentices disaggregated by race/ethnicity, gender, age, and zip code that enter and complete
  apprenticeship programs and work to continuously improve matriculation and outcomes.
- **Recommendation 3 Leverage Employment and Purchasing Budgets:** Inland Empire community colleges and public K-12 school districts hire and train thousands of individuals per year across a range of "apprenticeable" occupations, including in teaching and early childhood education, health care, information technology, food service, transportation, maintenance and facilities management. Riverside City College and the San Bernardino Unified School District have hired apprentices through LAUNCH. If more public schools used apprenticeship for their own hiring needs, the impact would be significant. Colleges and K-12 districts could also drive demand for apprentices by incentivizing or requiring outsourced IT, food service, healthcare, transportation, and other vendors to employ apprentices if an established committee exists, similar to public works contracting.
- Recommendation 4 Partner with the Center of Excellence (COE) on Additional Research: This report is a helpful first step in understanding the local apprenticeship landscape, but there is a range of additional areas of research that could help better understand how the regional apprenticeship system is operating. The COE is interested in partnering with colleges and their partners to conduct further research in apprenticeship outcomes, revenue opportunities, and impact.

<sup>&</sup>lt;sup>6</sup> Draft Regional Economic Plan. Thrive Inland SoCal / California Jobs First. <u>https://www.thriveinlandsocal.org/data</u>. Accessed December 10<sup>th</sup>, 2024. <sup>7</sup> Katz et al. Did Apprenticeships Achieve Faster Earnings Growth Than Comparable Workers? Finding from the American Apprenticeship Initiative Evaluation. Abt Associates. August 2022.

### SECTION 1: WHO ARE THE REGISTERED APPRENTICES IN THE INLAND EMPIRE?

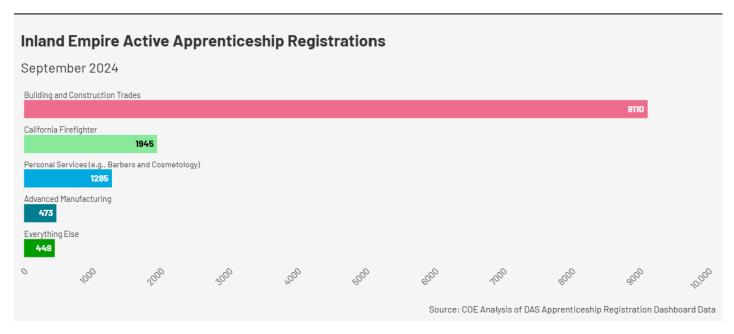
### 1.1: Apprentices by Program in the Inland Empire

According to the Division of Apprenticeship Standards (DAS) Registration Dashboard<sup>8</sup>, there were a total of 13,262, active registered apprentices in Riverside and San Bernardino Counties in September 2024.

Like California overall, most apprentices in the Inland Empire are participating in traditional programs related to building and construction (9,110 or 69%) and the California Firefighter programs (1,945 or 15%). Personal services programs, such as barber and cosmetology programs, had 1,285 people enrolled, or 10% of all apprentices.

That leaves a total of 922 apprentices (7%) enrolled in what could be considered "non-traditional" apprenticeship programs. 479, or 4% of all apprentices in the IE are in advanced manufacturing apprenticeship programs. The remaining 449 (3%) are in fields related to healthcare, education and childcare, transportation and logistics, food service, and information and technology programs. Of those 449 active apprentices in the "everything else" category, most are programs with the following labels given by DAS: Health Services<sup>9</sup> (128), Automotive Repair (120), Information Technology (71), and Food Stores (56) programs.

### Exhibit 1: Active Apprenticeships in the Inland Empire, September 2024



A full list of active registered apprentices, by county and program can be found in *Appendix A: Active Registered Apprentices in the Inland Empire.* 

<sup>&</sup>lt;sup>8</sup> "Registration Dashboard," California Division of Apprenticeships Standards (DAS), accessed September 23, 2024,

public.tableau.com/app/profile/california.apprenticeship/viz/RegistrationDashboard\_16301055851260/RegistrationDashboard.

<sup>&</sup>lt;sup>9</sup> Unfortunately, the DAS Apprenticeship Dashboard does not provide more granular detail on the healthcare occupations apprentices are training for. Based on conversations with our advisory committee, we know there are active Registered Nurse, Licensed Vocational Nurse, and Community Health Worker, and Social and Human Services Assistant programs are operating in the Inland Empire.

### 1.2: Gender of Active Apprentices in the Inland Empire

Most apprentices are men, both in the Inland Empire and statewide. Only 5% of Riverside County apprentices are female, compared to 7% of San Bernardino County apprentices. Both counties are below California; 9% of apprentices are women statewide.

### Exhibit 2: Gender of Active Apprentices in the Inland Empire, September 2024

### Gender of Active Apprentices in the Inland Empire

September 2024



Source: COE Analysis of DAS Apprenticeship Registration Dashboard Data

The traditional building and construction trades programs, advanced manufacturing programs, and the Firefighter program are the primary drivers of the gender gap amongst Inland Empire registered apprentices. Collectively, these programs account for 87% of all registered apprentices in the region, but only 2%, or 240 of the 11,528 apprentices in these programs are female. Across California, 4% of the apprentices in these programs are female.

### Exhibit 3: Share of Female Apprentices in Major Industries, September 2024

# % of Female Active Apprentices

### Share of Active Apprentices that are Female

September 2024, Selected Industries

🛢 California 🧧 Riverside County 📕 San Bernardino County

COE Analysis of DAS Apprenticeship Registration Dashboard Data

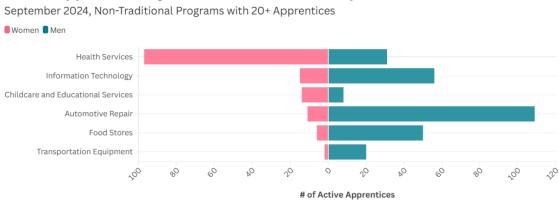
There is a much higher share of female apprentices participating in programs outside of building and construction, firefighting, and advanced manufacturing in the Inland Empire, although regional female participation in apprenticeship still lags state benchmarks. For example, 33% of the 1,285 active apprentices in Personal Services apprenticeship programs, which includes Barbers, Haircutters, and Cosmetology programs, are female in the Inland Empire, compared to 44% statewide (not shown).

Overall, there is a slightly higher share of female apprentices in non-traditional programs in the Inland Empire compared to California overall. Of the 449 apprentices in non-traditional apprenticeship programs outside of advanced manufacturing, 35%, or 157 active apprentices were female. 34% of apprentices in those same programs across California are females. Of the six non-traditional apprenticeship programs that had at least 20 active registered

apprentices in September 2024, the highest share of apprentices that were women was in Health Services (76%); 97 of the 128 active healthcare apprentices are female. Childcare and Educational Services was the only other program that had majority women; 14 of the 22 active apprentices (64%) were female.

### Exhibit 4: Gender of Apprentices in Non-Traditional Programs with 20+ Apprentices in the Inland Empire, September 2024

Active Apprentices by Gender in the Inland Empire

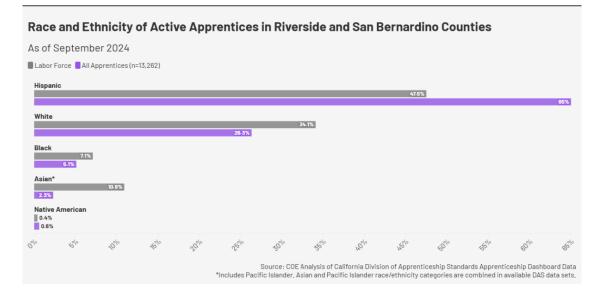


Source: COE Analysis of DAS Apprenticeship Registration Dashboard Data

### 1.3: Race and Ethnicity of Active Apprentices

Most apprentices in Riverside and San Bernardino County are Hispanic, representing 65% of all active apprentices. The share of apprentices that are Hispanic is 18 percentage points higher than the Hispanic share of workers overall in the region. In the national apprenticeship system, there is evidence that Black apprentices are underrepresented and systemically missing out on the intended benefits of registered apprenticeship.<sup>10</sup> Black workers are underrepresented in the Inland Empire as well; 5.1% in the region are Black, compared to 7.1% of all workers. The share of apprentices that are White (26.3%) and Asian (2.3%) are also lower than these groups share of the labor force. 0.6% of apprentices are Native American.

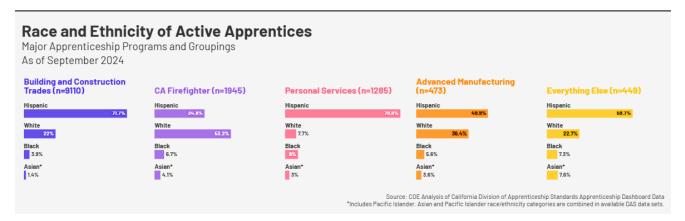
Exhibit 5: Race and Ethnicity of the 13,262 Inland Empire Active Apprentices



<sup>&</sup>lt;sup>10</sup> Camardelle, Alex. Ph.D. Five Charts to Understand Black Registered Apprentices in the United States. Joint Center for Political and Economic Studies. <u>https://jointcenter.org/five-charts-to-understand-black-registered-apprentices-in-the-united-states/</u>

The high share of Hispanic apprentices overall is primarily driven by high rates of Hispanics registered in building and construction trades programs (71.7%), which represent most of the apprentices in the region. Nearly 80% of apprentices in "personal services" programs, which primarily consists of barber and cosmetology programs, are Hispanic. While White workers make up 34% of the Inland Empire labor force, only the firefighter program and advanced manufacturing programs have a higher share of White apprentices than the share of White workers overall. Black apprentices only make up 3.9% of building and construction trades apprentices, but 9% of personal services apprentices. There is a smaller share of Asian apprentices in all five major apprenticeship groupings than the 10.9% of Asian workers overall in Riverside and San Berardino Counties.

### Exhibit 6: Race and Ethnicity of Apprentices by Major Group



Of the 449 apprentices active in apprenticeship programs labeled "everything else" in the chart above, most are in health services apprenticeship programs (128), automative repair, services, and garages programs (120), information technology (71), retail, hospitality, and tourism programs (64), and childcare and educational services (22) apprenticeships.

### Native Hispanic White Black Asian/PI American Unknown # # % # % # # % Apprenticeship Program Total **Health Services** 128 79 62% 19 15% 10% 12 9% 3 2% 2 2% 13 Automotive Repair, Services and 64% 120 29 24% 7 6% 5 4% 0 0% 2 2% Garages 77 Information Technology 71 43 61% 8 5 7% 13 2 11% 18% 0 0% 3% 0% 20 4 2 3% 0 0 Retail, Hospitality & Tourism 64 38 59% 31% 6% 0% 5 Childcare and Educational Services 22 16 73% 0 1 5% 0 0 23% 0% 0% 0%

### Exhibit 7: Race and Ethnicity of Apprentices in Selected Non-Traditional Programs

### 1.4: Age of Active Apprentices in the Inland Empire

Apprenticeship programs can sometimes be communicated as a career and training option for younger, inexperienced workers. However, apprenticeship registration data in California suggests most apprentices are 25 years of age or older. The two largest apprenticeships as of September 2024 were the California firefighter's program, with 11,861 active registrants and carpentry programs, with 11,145 active registrants across California. 86% of apprentices in the firefighter program and 61% of apprentices in carpenters' program are over 25-years old statewide.<sup>11</sup> In the Inland Empire, 38% of active apprentices were 16-24. The share of youth and young adult apprentices in the region is higher than the statewide average of 33%.

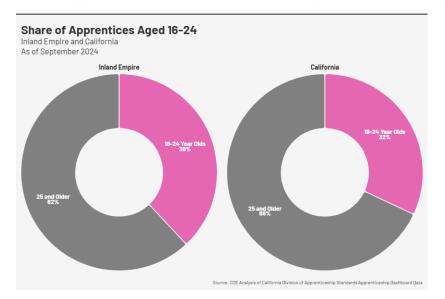


Exhibit 8: Share of Active Apprentices that are 16-24 in the Inland Empire and California, September 2024

Of the 23 programs in the Inland Empire that had at least 100 active registrations in September 2024, automotive repair, services, and garages had the highest share of apprentices aged 16-24 (89%). a very low share of apprentices are 16-24 years old in the elevator (16%), firefighter (14%), and teamster programs (13%).

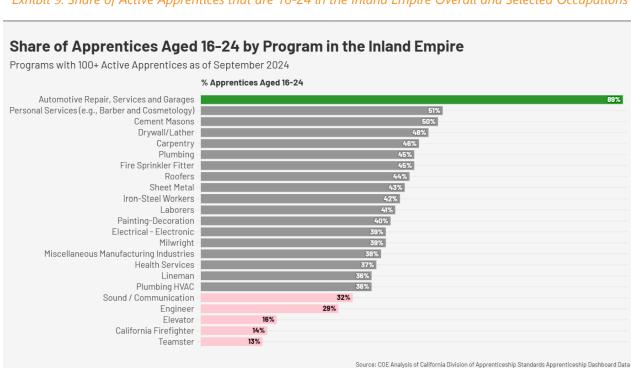


Exhibit 9: Share of Active Apprentices that are 16-24 in the Inland Empire Overall and Selected Occupations

public.tableau.com/app/profile/california.apprenticeship/viz/RegistrationDashboard\_16301055851260/RegistrationDashboard.

<sup>&</sup>lt;sup>11</sup> "Registration Dashboard," California Division of Apprenticeships Standards (DAS), accessed September 23, 2024

### SECTION 2: HOW ARE EFFORTS TO EXPAND APPRENTICESHIP GOING?

The State of California has invested heavily in expanding the number of workers in California who enroll and complete apprenticeships. In 2018, Governor Newsom announced an ambitious plan to establish 500,000 apprenticeships by 2029. In addition to large federal investments to expand apprenticeships, the California legislature has increased funding through efforts such as the California Apprenticeship Initiative (CA), along with large funding packages that established the Apprenticeship Innovation Funding (AIF) and the California Youth Apprenticeship Grant (CYAG) program. Policies, such as AB1809 and AB235 have also been enacted to make it easier for apprentices to access community college courses and programs<sup>12</sup>. This section examines ten years of apprenticeship completion data to understand which types of apprenticeship programs are expanding most rapidly and to what extent the Inland Empire is training its "fair share" of apprentices in pursuit of the goal of training 500,000 apprentices by 2029.

### 2.1: Apprenticeship Expansion in California

Apprenticeship is rapidly growing in California. According to the Division of Apprenticeship Standards (DAS) Apprenticeship Completion Dashboard, the number of workers in California that have completed apprenticeships has more than doubled over the last ten years. 17,703 apprentices completed programs in 2023, up from 7,472 in 2013<sup>13</sup>.

The Division of Apprenticeship Standards (DAS) uses two separate committees to issue rules and regulate programs. Programs in the building and construction trades and firefighting programs are overseen by the California Apprenticeship Committee (CAC). In 2018, the Interagency Advisory Committee on Apprenticeship (IACA) was established to oversee all other programs.

Apprenticeship completions in programs overseen by the California Apprenticeship Committee (CAC) accounted for a higher volume of growth, increasing completions by 6,772 during the last decade. Programs overseen by the Interagency Advisory Committee on Apprenticeships (IACA) have experienced faster annual growth. IACA programs include established programs in Personal Services (e.g., Barbers and Cosmetology), the very large Corrections Peace Officers Standards and Training (CPOST), Electric, Gas, and Sanitary programs, led by a long-established program sponsored by Pacific Gas and Electric, Inmate Programs, as well as other "non-traditional" apprenticeship programs in advanced manufacturing, technology, healthcare, education, and other fields.

	CA Apprenticeship Committee (CAC)		Interagency Advisory Committee on Apprenticeship (IACA)						
YEAR	Building and Construction	CA Firefighter	Personal Services	Correctional Peace Officers (CPOST)	Electric & Gas	Inmate Programs	Non- Traditional	Total	
2013	4,498	1458	343	838	110	0	225	7,472	
2014	4,025	701	303	228	210	0	251	5,718	
2015	4,272	1374	363	445	200	0	276	6,930	
2016	4,930	1158	459	2109	328	0	363	9,347	
2017	6,762	1527	627	2671	254	0	504	12,345	
2018	7,249	1422	686	2268	319	166	633	12,743	
2019	8,632	2253	644	1648	378	551	783	14,889	
2020	8,441	1861	526	2041	195	558	694	14,316	
2021	10,004	2100	464	1810	263	568	697	15,906	
2022	10,199	1963	726	1431	345	433	974	16,071	

### Exhibit 10: California Apprenticeship Completions Annual Growth by Major Groupings, 2013 – 2023

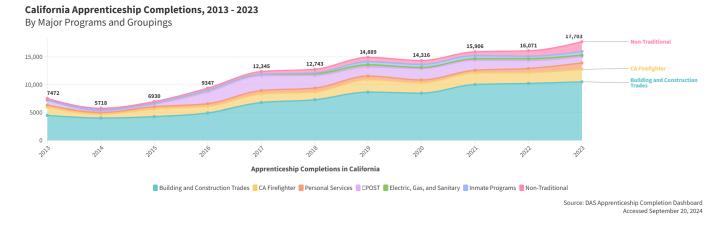
<sup>&</sup>lt;sup>12</sup> AB 1809, passed in 2018 as the Higher Education Trailer Bill, for example, provides colleges with full-time equivalent student (FTES) funding for individuals enrolled in courses as part of an apprenticeship program, helping support RSI costs and allowing colleges to offer tuition-free education as part of apprenticeship programs.

<sup>&</sup>lt;sup>13</sup> DAS Apprenticeship Completions Dashboard, Accessed September 2024

2023	10,485	2243	1153	1147	283	630	1762	17,703
Avg. Annual	100/	110/	100/	250/	470/	E10/	050/	400/
Growth Rate	10%	11%	16%	35%	17%	51%	25%	10%

Over the last decade, California has seen an increase in apprenticeship completions in all major categories of apprenticeships overseen by both CAC and IACA. Non-traditional programs have experienced significant growth since 2013, with a notable increase of nearly 800 apprenticeship completions from 2022 to 2023.





While there has been clear growth over the last decade, the 10% annual growth is not fast enough to hit the 500,000 apprentices trained goal from 2018 to 2029. Using the average annual growth rates for apprenticeship completions overall (10%) from 2013 to 2023, an estimated 229,133 apprentices will complete from 2018 to 2029. Nearly 270,000 short of the goal of 500,000.

Year	Actual Completions	Year	Projected Completions
2018	12,743	2024	19,473
2019	14,889	2025	21,420
2020	14,316	2026	23,562
2021	15,906	2027	25,918
2022	16,071	2028	28,510
2023	17,703	2029	31,361
Actual Total	91,628	Projected Total	150,244

Exhibit 12: Actual and Projected Apprenticeship Completions in California from 2018 - 2029

### 2.2: Inland Empire Active Registrations (Actual vs. Expected)

While region or county-specific apprentice completion data is not available, one way to assess the Inland Empire's performance in training apprentices is to evaluate the share of active apprentices in the region relative to California, both overall and by industry and apprenticeship occupation. Together, Riverside and San Bernardino counties represent 11.3% of the total labor force – people working or looking for work - in California<sup>14</sup>. The region also represents 11.3% of the total number of people employed statewide<sup>15</sup>. Thus, a reasonable benchmark for the Inland Empire's share of the active

<sup>&</sup>lt;sup>14</sup> Lightcast 2024.3, Accessed September 2024

<sup>&</sup>lt;sup>15</sup> Lightcast 2024.3, Accessed September 2024

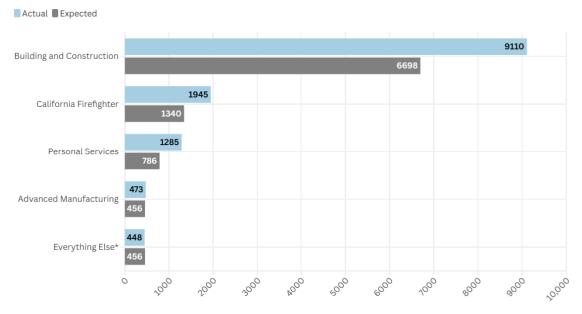
registered apprenticeships would be 11.3% of California apprentices. The region is outperforming this benchmark; as of September 2024, Inland Empire apprentices account for 14.3% of active apprentices in California.

	Inland Empire	California	IE Share (%)
Total Labor Force (2024)	2,184,128	19,394,268	11.3%
# of People Working (2024)	2,063,598	18,315,957	11.3%
Active Apprenticeships (Expected)	10,495	92,876	11.3% (Expected)
Active Apprenticeships (Actual)	13,262	92,876	14.3% (Actual)
Above (Below) Expected	+3,233		+3%

### Exhibit 13: Inland Empire Actual vs. Expected Active Apprentices, September 2024, Overall

The Inland Empire is outperforming the expected benchmark in the four major established apprenticeship areas, including building and construction (+2,412), the California firefighter apprenticeship (+605), personal services apprenticeships (e.g., barber and cosmetology programs) (+499) and advanced manufacturing programs (+17). Taken together, the Inland Empire is performing just under expectations in "Everything Else" (-8) which includes apprenticeships related to advanced transportation, healthcare, information technology, education and human development, and retail, hospitality, and tourism.

Exhibit 14: Active vs Expected Apprentices in the Inland Empire, by Major Types of Apprenticeship



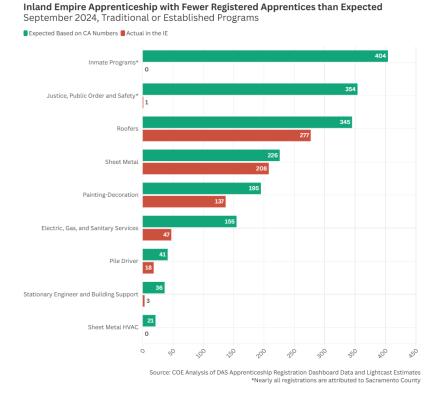
### Actual vs Expected Active Registrations in the Inland Empire

Comparing Riverside and San Bernardino to Statewide Numbers in September 2024

Source: COE Analysis of DAS Apprenticeship Registration Dashboard Data and Lightcast Estimates \*Does not include "Inmate Programs" and "Justice, Public Order, and Safety" programs

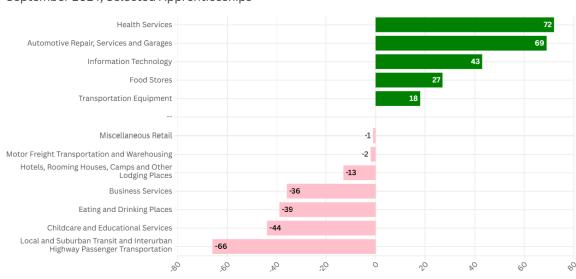
Apprentices in what the DAS labels as "Inmate Programs" and "Justice, Public Order, and Safety" programs had 3,579 and 3,132 active apprentices registered in California, but 0 and 1 apprentice in the Inland Empire respectively and were removed from the "Everything Else" calculations. Other notable areas with fewer than expected active registrations Electrical, Gas, and Sanitary Services (-108), Roofers (-68), and the Painting/Decoration trade (-58).

### Exhibit 15: Inland Empire Traditional or Established Apprenticeships with Fewer than Expected Active Registrations



Of the apprenticeship programs in this report labeled as "everything else", there were some areas where the Inland Empire was outperforming the expected benchmark and other areas below the expected benchmark. The areas of underperformance could indicate occupations where apprenticeship programs in other parts of the State are having success that may represent growth opportunities in the Inland Empire, such as Childcare and Educations services (-44) and Highway Passenger Transportation (-66).

### Exhibit 16: Active vs Expected Apprentices in the Inland Empire, Notable Programs in the "Everything Else" Category



**Difference in Actual vs Expected Active Registrations in the Inland Empire** September 2024, Selected Apprenticeships

Source: COE Analysis of DAS Apprenticeship Registration Dashboard Data and Lightcast Estimates

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### SECTION 3: HOW ARE COLLEGES AND PARTNERS ENGAGING IN APPRENTICESHIP?

### 3.1: Opportunities for College and K-12 Engagement in Apprenticeship

Community colleges across California are participating in the statewide push to increase the number of registered apprentices. How they are engaging with the apprenticeship model differs by occupation, participating employer preferences, regional needs, available funding, and the assets, strengths, and bandwidth of each college. This section provides an inventory of how community colleges and K-12 school districts in the Inland Empire are participating in apprenticeship in different ways and explores how colleges are engaging with the LAUNCH Apprenticeship Network, an apprenticeship hub for non-traditional apprenticeship programs overseen by IACA.

As documented by the San Diego and Imperial Center of Excellence in a report published in February of 2024, fragmented data from multiple systems make it challenging to get a full picture of how colleges are engaging with apprenticeship<sup>16</sup>. Building on that work, multiple data sources were used to create an inventory of college and K-12 participation in apprenticeship, from program sponsorship, to training and education delivery, leveraging funding and infrastructure, providing employment services, and even serving as employers. To supplement data gaps, the research team used subject matter expert interviews and an advisory committee of Inland Empire apprenticeship experts and partners representing community colleges, the Inland Empire Labor Institute, community-based organizations, K-12 partners, the LAUNCH Apprenticeship Network, and employers interested in apprenticeship.

The below table provides a list of roles Inland Empire colleges and K-12 partners are playing in the region's apprenticeship ecosystem and the data source(s) used to identify them.

### Exhibit 17: Roles Community Colleges and K-12 Partners Can Play in the Apprenticeship Ecosystem

Rol	e	Data Source(s)
Des	scription	
Rol Stat dev	e #1: Related Supplemental Instruction (RSI) Provider te law requires that related and supplemental instruction (RSI) for registered apprentices is reloped, coordinated, and provided through local education agencies, which includes community eges, K-12 public school systems, and county offices of education <sup>17</sup> . Colleges provide RSI in two ways: Colleges can serve as the Local Education Agency (LEA) for an apprenticeship sponsor and provide RSI cooperatively through an instructional agreement <sup>18</sup> . In these cases, the sponsor may employ instructors, operate the training facility, and manage enrollment of apprentices. Minimum qualifications of instructors remain in place for all credit and non-credit courses, even in cases where apprentice instructors are employed by the sponsor. LEAs process RSI funding with a contract outlining the revenue-share agreement with the sponsor to reimburse the sponsor for delivering the instruction to apprentices. Colleges can also provide instruction directly to apprentices. This was less common historically,	The Chancellor's Office Curriculum Inventory System (COCI) <sup>20</sup> LAUNCH Apprenticeship Network Internal Data Shared with the COE and Subject
	because attendance accounting required colleges to separate apprentice attendance from non- apprentice students use RSI allocations from the Chancellor's Office to fund the instruction. However, beginning in 2018-2019, state law permitted colleges to provide instruction to apprentices through courses and programs that also serve non-apprentice students <sup>19</sup> . In these cases, colleges work with program sponsors to agree on curriculum and apprentices attend courses and programs	Matter Expert Interviews

<sup>&</sup>lt;sup>16</sup> Opportunities for Apprenticeships in San Diego & Imperial Counties. San Diego & Imperial Center of Excellence for Labor Market Information. February 2024. <u>https://coeccc.net/san-diego-imperial/2024/02/opportunities-for-apprenticeships-in-san-diego-imperial-counties/</u>

<sup>&</sup>lt;sup>17</sup> State of CA Labor Code 3074

<sup>&</sup>lt;sup>18</sup> CCCCO Student Attendance Accounting Manual (1-22) https://www.cccco.edu/-/media/CCCCO-Website/College-Finance-and-Facilities/Manuals/SAAM/2022/cccco-saamreport-2022-a11y-Edit-100522.pdf

<sup>&</sup>lt;sup>19</sup> California Apprentice Council Policy on Common Administrative Practices and Treatment of Costs and Practices Related to RSI

<sup>&</sup>lt;sup>20</sup> The Chancellor's Office Curriculum Inventory System (COCI). Accessed September 28, 2024. https://coci2.ccctechcenter.org/

Role	Data Source(s)
Description	
that are offered by the college. Typically, colleges use existing CTE certificate and degree programs that align with the learning needs of the occupation. At a minimum, apprenticeships must provide at least 144 classroom hours for every 2,000 hours of on-the-job training. RSI providers deliver training through a combination of classroom instruction, online or in-person courses, and laboratory or simulated environments. Courses and programs delivered using this method may be eligible for RSI or FTES apportionment funding.	
Role #2: Participating in a Regional "Apprenticeship Hub"	
Apprenticeship Hubs provide regional resources, subject matter expertise, apprenticeship opportunities, and networking opportunities for employers, labor organizations, education institutions, trade associations, workforce boards, community-based organized, and other partners in the apprenticeship ecosystem to develop and expand apprenticeship programs. Colleges and K-12 partners can support regional apprenticeship hubs by providing funding, facilities, tuition-free training, apprenticeship recruitment and job placement services, and student wrap around services to apprentices and employer engaged in the hub.	LAUNCH Apprenticeship Network Internal Data Shared with the COE and Subject Matter Expert Interviews
Role #3: Pre-Apprenticeship Provider California Division of Apprenticeship Standards (DAS) registered Pre-apprenticeship programs prepare individuals to enter and succeed in DAS Registered Apprenticeship programs. A DAS registered Pre- Apprentice program must be formally associated with at least one DAS Registered Apprenticeship program sponsor through a signed "linkage agreement", or MOU that outlines the nature of the pre- apprenticeship and apprenticeship referral relationship.	CA Building Trades Pre-Apprenticeship Finder <sup>21</sup> Subject Matter Expert Interviews
<b>Role #4: Program Sponsor</b> Sponsors design and execute apprenticeship programs, provide jobs to apprentices, oversee training development, and provide hands-on learning and technical instruction for apprentices. This entity assumes full responsibility for administration and operation of the apprenticeship program. Any employer, education institution, association, committee, or organization can be a sponsor.	DAS "Find an Apprenticeship Program" Website <sup>22</sup>
Role #5: Employer	
Community colleges and K-12 school districts are large employers of teachers, early education professionals, healthcare professionals, IT professionals, and other apprenticeable occupations. A handful of Inland Empire college and K-12 districts are working with the regional local apprenticeship hubs for their own hiring needs.	LAUNCH Apprenticeship Network Internal Data Shared with the COE and Subject Matter Interviews

### 3.2: Colleges Providing Related Supplement Instruction

One role Inland Empire colleges play in the apprenticeship system is serving as the Local Education Agency (LEA) for an apprenticeship sponsor, providing oversight to the Related Supplemental Instruction (RSI) portion of a program and/or delivering the RSI directly. In many cases, the LEA will also process RSI funding from the State and pass along a share to the Program Sponsor and/or the RSI provider to offset the costs of the classroom training. Of programs listed as "Active" with "apprenticeship" in the program title in the Chancellor's Office Curriculum Inventory (COCI) system, the COE identified Norco College as the only institution providing this service for a range of building and construction apprenticeship and advanced manufacturing apprenticeship sponsors.

<sup>&</sup>lt;sup>21</sup> CA Building Trades Pre-Apprenticeship Finder, Accessed September 28, 2024. https://apprenticeship.cabuildingtrades.org/pre-apprenticeship/pre-apprenticeship-program-directory/

<sup>&</sup>lt;sup>22</sup>DAS "Find an Apprenticeship Program" website. Accessed September 28, 2024. https://www.dir.ca.gov/databases/das/aigstart.asp

### Exhibit 18: Active Courses with Apprenticeship Program Titles in Chancellors Office Curriculum Inventory (COCI)

College	Program Title	TOP Code	Award Type	Approved
Norco College	Electrician Apprenticeship	0952.20* Electrical	1) A.S. Degree 2) Certificate	2/29/2016
Norco College	Sound and Comms Systems Installer	0934.30* Telecomms Technology	1) A.S. Degree 2) Certificate	1/11/2017
Norco College	Apprenticeship: Manufacturing Technician 1	0946.00* Env. Control Technology	Certificate	8/11/2020
Norco College	Apprenticeship: Manufacturing Technician 2	0946.00* Env. Control Technology	1) Certificate 2) A.S. Degree	8/25/2020
Norco College	Apprenticeship Carpentry, Acoustical Install	0952.80* Drywall and Insulation	A.S. Degree	7/18/2023
Norco College	Apprenticeship Carpentry, Drywall Finisher	0952.80* Drywall and Insulation	A.S. Degree	7/19/2023
Norco College	Apprenticeship Carpentry, Drywall/Lather	0952.80* Drywall and Insulation	A.S. Degree	7/20/2023
Norco College	Apprenticeship Carpentry, Concrete	0952.10* Carpentry	A.S. Degree	7/19/2023
Norco College	Apprenticeship Carpentry, Finish Carpentry	0952.10* Carpentry	A.S. Degree	7/20/2023
Norco College	Apprenticeship Carpentry, Framing	0952.10* Carpentry	A.S. Degree	7/20/2023
Norco College	Apprenticeship Carpentry, Tilt-Up	0952.10* Carpentry	A.S. Degree	7/20/2023
Norco College	Apprenticeship Carpentry, Framing	0952.10* Carpentry	Certificate	11/6/2023
Norco College	Apprenticeship Carpentry, Tilt-Up	0952.10* Carpentry	Certificate	11/6/2023

### 3.3: College Participation in the LAUNCH Apprenticeship Network

One of the primary ways Inland Empire community colleges and K-12 partners have expanded apprenticeship over the last six years is through the development of, and participation in, the LAUNCH Apprenticeship Network (LAUNCH). LAUNCH acts as an intermediary for businesses and education institutions adopting the apprenticeship model, working with colleges, K-12 partners, workforce development boards, and other partners to cooperatively sponsor new apprenticeship programs with employers. Interested colleges work with LAUNCH to identify available apprenticeship tracks already in place within education institutions to align with and begin offering immediately, or schools work with LAUNCH to develop new apprenticeship pathways. By embedding apprenticeship into the regional educational system, LAUNCH provides a systematic framework for directly linking educational pathways with career success both in K-12 and higher education. LAUNCH was originally formed in 2018 by the Inland Empire/Desert Regional Consortium (IEDRC) and is now a self-sustaining entity fiscally sponsored by the Foundation for California Community Colleges.

Inland Empire colleges participate in the apprenticeship hub LAUNCH has set up in one or more of the following ways:

- **Provide Related Supplemental Instruction (RSI):** Colleges provided the related-supplemental instruction (RSI) for apprentices in each LAUNCH pathway. This is typically at least 144 classroom hours for every 2,000 hours of on-the-job training. This training and education at Inland Empire college takes one of the following forms:
  - **For-Credit Courses**: Students earn college credits toward a degree or certificate. Credit courses are usually graded with a letter grade and appear on student transcripts.
  - Noncredit courses: Students take noncredit sometimes call continuing ed courses to learn new skills, gain general knowledge, or develop personal interests. Noncredit courses are not applicable toward a degree and do not appear on a transcript. Some noncredit courses can lead to a license or certification.
  - **Not-for-credit courses**: Students complete not-for-credit training hours provided by the community college districts. Often, this training is completed in coordination with the contract education and customized training services of the districts.
- **Pre-Apprenticeship:** Some colleges and K-12 partners have developed DAS registered pre-apprenticeships that help recruit and provide career awareness and baseline knowledge, skills and competencies needed to succeed in an apprenticeship program. The programs have signed linkage agreements with registered apprenticeship programs sponsored by LAUNCH or another partner active in the apprenticeship hub.
- Apprentice Employment Services: In traditional apprenticeship programs, LEAs typically do not engage with employers directly and refer potential apprentices and applicants to programs sponsors. However, in non-traditional program areas, several Inland Empire colleges now recruit potential apprentices from their existing

education programs, refer them to the relevant LAUNCH supported apprenticeship pathway, and help place them with employer partners. This has included using college staff that engage directly with employers or using industry intermediaries and contracted services. While the LAUNCH team registers the apprentice in both the California (DAS) and the federal apprenticeship systems, manages tracking and data reporting, and oversees all the compliance requirements, college faculty and staff help get more apprentices into and through the program by leveraging their relationships, network, and college-funded student and employer services. This represents one of the major advancements Inland Empire colleges have made in increasing access to apprenticeships for residents. In the program areas where the Inland Empire has outperformed in apprenticeship registration, there appears to be a correlation between this service and program's growth.

- **Employer:** Community colleges and K-12 school districts are large employers of teachers, early education professionals, healthcare professionals, IT professionals, and other apprenticeable occupations. A handful of Inland Empire college and K-12 school districts partner with LAUNCH for their own hiring needs.
- Sharing of Facilities / Physical Training Centers: Employers and program sponsors participating in apprenticeships do not always have available space or equipment to provide the classroom or simulated work environments needed for effective training. Public education institutions in the Inland Empire sometimes provide the facilities, physical infrastructure, and/or equipment to serve apprentices placed with multiple employers using facilities and training centers that are established off of the main campus. These facilities may include employer owned buildings or publicly accessible training centers.
- Financial Partnership: The Inland Empire Desert Regional Consortium provided initial seed funding through the Strong Workforce Program (SWP) between 2018 and 2020 to help establish the LAUNCH program. Now, LAUNCH is self-sustaining, and partners with colleges, K-12 districts, and other partners to pursue competitive federal, state, local, and philanthropic grants and formula funding opportunities to support administration costs, provide employer incentives, and offset costs of education partners.

Community colleges, in partnership with LAUNCH and K-12 partners, have been primarily responsible for the growth in non-traditional apprenticeship over the last six years. Since 2018, LAUNCH sponsored and supported apprenticeships have registered 1,307 apprentices. As of October 2024, there were 525 active apprentices enrolled in LAUNCH apprenticeships. This represents 57% of the 921 active apprentices of the advanced manufacturing and other non-traditional apprenticeship programs in the Inland Empire.

### Exhibit 19: Inland Empire Community Colleges Involved in the Launch Apprenticeship Network<sup>23</sup>

				strations Oct. 2024)		Supplem	ental		ting Apprentices rough the Pathwa			Funding and structure
College	Program	Sponsor	Active	Total (Since 2018)	For Credit	Non- Credit	Not- for- credit	Pre- Apprentice ship	Apprentice Employment Services <sup>24</sup>	Employer	Share Facilities	Revenue or Grant Partner
Chaffey	Adv. Manufacturing <sup>25</sup>	IDEA Committee <sup>26</sup>	81	276				$\checkmark$			$\checkmark$	$\checkmark$
	Automotive	LAUNCH	28	32	<ul> <li></li> </ul>				$\checkmark$			$\checkmark$
Crafton Hills	Paramedic	AMR <sup>27</sup>	2	2	<ul> <li></li> </ul>							
Moreno	IT/Cyber Security	LAUNCH	12	76	<ul> <li></li> </ul>			$\checkmark$	$\checkmark$	$\checkmark$		$\checkmark$
Valley	Social & Human Services	LAUNCH	2	2	$\checkmark$			$\checkmark$				
Mt. San	Automotive	LAUNCH	23	35	$\checkmark$			$\checkmark$	$\checkmark$			$\checkmark$
Jacinto	IT/Cyber	LAUNCH	6	9	$\checkmark$			$\checkmark$	$\checkmark$	$\checkmark$		
Norco	Adv. Manufacturing <sup>28</sup>	LAUNCH	15	240	$\checkmark$		$\checkmark$				$\checkmark$	$\checkmark$
NOICO	Early Childhood Edu.	LAUNCH	0	0	$\checkmark$			$\checkmark$				$\checkmark$
Palo Verde	Automotive	LAUNCH	2	3	$\sim$				$\checkmark$			
	Automotive	LAUNCH	80	124	$\checkmark$				$\checkmark$			$\checkmark$
Riverside	Early Childhood Edu29	LAUNCH	22	26	$\checkmark$					$\checkmark$		
City	Healthcare (LVN & RN)	LAUNCH	96	125	$\checkmark$				$\checkmark$			$\checkmark$
	IT/Cyber Security	LAUNCH	28	96	$\checkmark$				$\checkmark$	$\checkmark$		$\checkmark$
San	Automotive	IDEA Committee	3	3	$\checkmark$							
Bernardino	Healthcare (RN)	LAUNCH	2	5	$\checkmark$							
Valley	Social & Human Services	LAUNCH	19	19								

<sup>29</sup> Teacher, Master Teacher, Site Supervisor

<sup>&</sup>lt;sup>23</sup> Source: LAUNCH Apprenticeship Network Internal Data Shared with the COE and Subject Matter Expert Interviews

<sup>&</sup>lt;sup>24</sup> Apprentices Employment Services may refer to a spectrum of services that provide employment placement support to apprentices and apprentice candidates. Colleges implement these services in coordination with LAUNCH. Programs that do not provide this service typically serve incumbent worker apprentices (meaning the apprentices are already employed at the time the college begins serving them). These services are maintained specifically to serve residents seeking employment as an apprentice.

<sup>&</sup>lt;sup>25</sup>Programs include Electrical & Electronics Repairers, Commercial & Industrial Equipment, Electro-Mechanical Supply Chain Technician, Electro-Mechanical Technicians

<sup>&</sup>lt;sup>26</sup> IDEA Committee stands for the Inland/Desert Employers Apprenticeship, affiliated with the overall hub. The IDEA Committee and the LAUNCH sponsored Regional Industrial Technology Apprenticeship Committee voted to operate under a consolidated committee composed of participating employers from both programs in 2024.

<sup>&</sup>lt;sup>27</sup> In addition to sponsoring college-coordinated programs, through LAUNCH, the hub also provides administrative support to program sponsors seeking partnerships with community colleges. LAUNCH serves as a technical assistance intermediary to the colleges and program sponsors through "Administrative Service Contracts."

<sup>&</sup>lt;sup>28</sup> CNC Tool Programmer, Computer Controlled Machine Tool Operators, Metal & Plastic, Craft Artist, Electrical & Electronics Repairers, Commercial & Industrial Equipment, Electro, Mechanical Technicians, Manufacturing Technician, Multiple Machine Tool Setters, Operators & Tenders, Metal & Plastic, Quality Technician

		Registrations (As of Oct. 2024)		Related Supplemental Instruction		Supporting Apprentices To and Through the Pathway			Shared Funding and Infrastructure			
College	Program	Sponsor	Active	Total (Since 2018)	For Credit	Non- Credit	Not- for- credit	Pre- Apprentice ship	Apprentice Employment Services <sup>24</sup>	Employer	Share Facilities	Revenue or Grant Partner
	Pharmacy Technician	CVS <sup>30</sup>	4	14							~	
Victor Valley	Adv. Manufacturing <sup>31</sup>	LAUNCH & IDEAS Committee	43	102	$\checkmark$						$\checkmark$	
	Healthcare (CHW & RN)	LAUNCH	57	118			$\checkmark$		<ul> <li></li> </ul>			$\checkmark$
Totals			525	1307	16	1	4	6	9	4	4	11

 <sup>&</sup>lt;sup>30</sup> Program sponsor is supported by the hub through an Administrative Services Agreement.
 <sup>31</sup> Avionics Technician, Industrial Machinery Mechanics

The Inland Empire Desert Regional Consortium provided initial seed funding through the Strong Workforce Program (SWP) regional funds between 2018 and 2020 to help establish the LAUNCH program. Today, LAUNCH is a self-sustaining organization, fiscally sponsored by the Foundation for California Community Colleges. Notable financial support for LAUNCH includes philanthropic grants, federal and state competitive grants, contracted services, and recurring state and federal revenue streams. LAUNCH and its partner colleges use these funds to support ongoing operations and distribute revenue across the apprenticeship network to financial support and offset costs for partners to participate.

Funder	Source / Initiative	Funding Type
US Department of Labor	Apprenticeship Building America "Hub" Grant	Federal (Competitive)
CA Division of Apprenticeship Standards	Opportunity Youth Apprenticeship Grant	State (Competitive)
CA Community College Chancellor's Office	California Apprenticeship Initiative	State (Competitive)
CA Division of Apprenticeship Standards	Apprenticeship Innovation Funds (AIF) <sup>32</sup>	State (Formula)
James Irvine Foundation	Better Careers Initiative	Philanthropy
The Eli & Edythe Broad Foundation	N/A	Philanthropy
New America	Partnership to Advance Youth Apprenticeship	Philanthropy

### Exhibit 20: Significant Funding Sources Sustaining LAUNCH, the Inland Empire Apprenticeship Hub

One of the other benefits colleges and K-12 partners gain from working with the LAUNCH regional apprenticeship hub is that it helps centralize employer engagement activities by creating a streamlined method for employers to begin participating in registered apprenticeship. While each college still maintains individual employer relationships through their faculty and staff, employers participating in apprenticeships in the Inland Empire can participate in a LAUNCH supported regional apprenticeship committee that can oversee the program. This means that employers and colleges do not need to register a new program with each new employer.

Instead, through the expanding network of employers involved in the regional hub, programs become more plug-andplay as they grow. As employers engage with LAUNCH and select the college program(s) that best meet their needs, LAUNCH helps connect those employers to specific colleges. Similarly, as colleges engage with employers that are interested in an apprenticeship, they can refer them to LAUNCH to walk them through the basic responsibilities and requirements they need to perform as part of participating in a program.

As of **October 2024, over 160 employers** have signed industry partnership agreements to work with colleges through the LAUNCH apprenticeship hub in the Inland Empire. This means they have or plan to hire apprentices and/or are participating in employer advisory committees to review and approve apprenticeship standards. A full list of employers engaging with Inland Empire community colleges through the LAUNCH apprenticeship can be found in Appendix B.

### 3.4: Colleges Serving as Program Sponsors

Apprenticeship sponsors design and execute apprenticeship programs, provide jobs to apprentices, oversee training development, and provide hands-on learning and technical instruction for apprentices. This entity assumes full responsibility for administration and operation of the apprenticeship program. Any employer, education institution, association, committee, or organization can be a sponsor. Currently, two local programs are sponsored by a college.

<sup>&</sup>lt;sup>32</sup> The Apprenticeship Innovation Funding (AIF) is a new funding source in the state of California as of 2022 for new and innovative apprenticeship programs, defined as apprenticeships associated with the Interagency Advisory Committee on Apprenticeships (IACA). Eligible recipients of AIF funding are program sponsors of apprenticeship programs in "IACA occupations" which are occupations outside the building and construction trades and firefighter occupations. The funding amount is \$3500 per active apprentice per year, prorated to the month, along with a completion bonus of \$1000 per apprentice. <u>https://www.dir.ca.gov/DAS/Grants/Apprenticeship-Innovation-Funding.html</u>

Colleges and K-12 Districts Participating	Program	Data Source
Riverside City College	Pastry Chef	DAS Website "Find an Apprenticeship Program" Website
Riverside City College	Cook	DAS Website "Find an Apprenticeship Program" Website

### 3.5: Colleges and K-12 Registered Pre-Apprenticeship Providers

Another role Inland Empire college and K-12 school districts play is developing and operating pre-apprenticeship programs to prepare individuals to enter and succeed in DAS registered apprenticeship programs. A DAS registered pre-apprentice program must be formally associated with at least one DAS registered apprenticeship program sponsor through a signed "linkage agreement", or MOU, which outlines how the pre-apprenticeship program and partner apprenticeship program will work together and confirming the sponsor acknowledges the pre-apprenticeship program is in alignment with their entry requirements.

DAS is in the early stages of registering, tracking, and reporting on pre-apprenticeship registration, and it is challenging to get an accurate picture of the region's pre-apprenticeship completion and registration data. For example, Inland Empire subject matter experts and advisory committee members shared many of the pre-apprentices in local automative technician programs are classified in manufacturing programs on DAS's apprenticeship dashboard. With these data challenges in mind, DAS listed 336 active registered pre-apprentices in the Inland Empire as of September 2024.

### Exhibit 22: Active Registered Pre-Apprentices in the Inland Empire, as of September 21, 2024

	Active Registrations		
Pre-Apprenticeship Programs	Riverside	San Bernardino	Total
Fabricated Metal Products, Except Machinery and Transportation <sup>33</sup>	73	196	269
Information Technology	31	1	32
Construction	4	19	23
California Firefighter	3	3	6
Eating and Drinking Places	2	3	5
Health Services	0	1	1
Total	113	223	336

In the Inland Empire, the San Bernardino County Superintendent of Schools administers a pre-apprenticeship hub on behalf of the K-12 districts, called IE Connect. The IE Connect program operates five pre-apprenticeship programs linked to area apprenticeship sponsors, including mechatronics, building and construction trades, culinary, masonry, and automotive.

Interviews and internal college and program partner data sources also noted Chaffey College, Moreno Valley College, Mt. San Jacinto College, and Victor Valley College also operate pre-apprenticeship programs, although no definitive list of all the registered pre-apprenticeship programs in the region or in California is available. An area of further research is to inventory all registered pre-apprenticeship programs in the Inland Empire, their related program sponsors with signed linkage agreements, the number of pre-apprentices that completed, and the number that matriculated into apprenticeship programs.

<sup>&</sup>lt;sup>33</sup> Subject matter experts shared that the CA Division of Apprenticeship standards classified many automative technician pre-apprentices in the "Fabricated Metal Products, Except Machinery and Transportation"

### SECTION 4: WHAT OCCUPATIONS SHOULD BE A FOCUS FOR COLLEGE EXPANSION EFFORTS?

### 4.1. A Regional Framework for Exploring Non-Traditional Apprenticeship Expansion

This section provides a list of occupations that could be a focus for college faculty and staff to prioritize apprenticeship expansion efforts over the next five years. Through the below steps, the COE narrowed 796 Standard Occupational Classification (SOC) codes available in Lightcast to 47 potential targets using labor market information, public funding award information from the California Apprenticeship Initiative, analysis of active apprenticeship data from DAS in Section 2 of this report, regional economic development planning documents, and key informant interviews.

- **Step 1 "Apprenticeable":** Of the 796 Standard Occupational Classification (SOC) codes available in Lightcast, **387 occupations** are approved by the US Department of Labor for registered apprenticeship<sup>34</sup>.
- Step 2 Growth and opportunity: From those 387, *111 occupations* are projected to add jobs over the next five years and have 200 or more annual openings. Employers of these high-growth jobs in the region are projected to have a steady demand for new talent in future years.
- Step 3 5-years or less of work experience required: While apprenticeship programs can last up to 6-years, most are between 1 and 5 years. Jobs that require more than five years of work experience are challenging for apprenticeships to bridge this experience gap for most individuals. This removed 6 additional occupations.
- Step 4 Occupations overseen by the Interagency Council on Apprenticeship (IACA): While section 5 includes some recommendations related to established CA Firefighter programs and Building and Trades apprenticeships overseen by the California Apprenticeship Committee (CAC), the existing policy framework makes it difficult for college faculty and staff to initiate new programs or expand the number of apprentices in existing programs overseen by CAC. This removes 13 additional occupations.
- **Step 5 Regional priorities and statewide examples:** From the remaining 92 occupations, there are 47 remaining occupations that meet at least one of the following criteria:
  - A community college received a CAI implementation or expansion grant for the occupation: After going through a feasibility and planning period, at least one California community college and its partners was awarded over \$500,000 to implement the apprenticeship program, suggesting there may be a roadmap for replication for Inland Empire community colleges. Appendix C has a full listing of CAI grants awarded by occupation, region, and college since 2022.
  - Alignment with regional economic growth strategy: The occupation is in a traded industry cluster prioritized by the Inland Empire California Jobs First strategy, which translated to the Chancellor's Offices sectors, includes occupations in Advanced Manufacturing, Advanced Transportation and Logistics, Energy, Construction, and Utilities, Business and Entrepreneurship, and Information and Communication Technologies (ICT)/Digital Media<sup>35</sup>.
  - **The Inland Empire is trailing other parts of the state in active apprentices**: Based on the analysis in Section 2, employers in other regions have developed pathways in the occupation, suggesting employer adoption and potential for replication in Riverside or San Bernardino Counties.

<sup>&</sup>lt;sup>34</sup> ApprenticeshipUSA "Explore Approved Occupations for Registered Apprenticeship". Access November 8<sup>th</sup>, 2024. https://www.apprenticeship.gov/apprenticeship-occupations

<sup>&</sup>lt;sup>35 35</sup> Draft Regional Economic Plan. Thrive Inland SoCal / California Jobs First. <u>https://www.thriveinlandsocal.org/data</u>. Accessed December 10<sup>th</sup>, 2024.

### *Exhibit 23: Target Occupations for Colleges to Consider Initiating Apprenticeship Expansion Efforts*

SOC Code	Occupational Title	Annual Openings	% Growth (2023-	Median Earnings	Entry-Level Earnings	CAI Grant	Align with CJF	Inland Empire
	ed Manufacturing	opennigo	2027)	Lunnigo	Lunnigo			Behind CA
51-9199	Production Workers, All Other	479	0.9%	\$17.43	\$16.48	1	Yes	
49-9041	Industrial Machinery Mechanics	380	9.5%	\$30.20	\$25.22	Yes	Yes	
51-3092	Food Batchmakers	258	14.0%	\$17.96	\$16.08	103	Yes	
51-4041	Machinists	200	2.8%	\$23.45	\$19.60		Yes	
51-4121	Welders, Cutters, Solderers, and Brazers	485	2.9%	\$23.93	\$21.48		Yes	
	d Transportation & Logistics	400	2.570	Ψ20.00	ψ2 1.40	I	103	
53-7065	Stockers and Order Fillers	9,726	10.9%	\$20.35	\$17.70		Yes	
53-3032	Heavy and Tractor-Trailer Truck Drivers	6,716	9.3%	\$27.93	\$21.46		Yes	
49-3023	Automotive Service Technicians and Mechanics	1,053	5.7%	\$26.66	\$18.13	Yes	Yes	
49-1011	First-Line Sup. of Mechanics, Installers, & Repairers	689	7.5%	\$37.69	\$29.88	100	Yes	
49-3031	Bus and Truck Mechanics & Diesel Engine Specialists	602	7.4%	\$30.32	\$25.60	Yes	Yes	
13-1081	Logisticians	283	14.5%	\$35.04	\$25.99	Yes	Yes	
49-3042	Mobile Heavy Equipment Mechanics, Except Engines	270	6.9%	\$33.82	\$28.64	Yes	Yes	
49-3011	Aircraft Mechanics and Service Technicians	252	8.4%	\$37.34	\$30.30		Yes	
49-3021	Automotive Body and Related Repairers	240	9.3%	\$24.52	\$18.61		Yes	
43-5011	Cargo and Freight Agents	224	19.6%	\$23.73	\$18.99		Yes	
53-3052	Bus Drivers, Transit and Intercity	450	9.9%	\$29.59	\$23.38		Yes	Yes
43-5061	Production, Planning, and Expediting Clerks	627	7.3%	\$25.58	\$21.64		Yes	
43-5032	Dispatchers, Except Police, Fire, and Ambulance	357	6.6%	\$22.85	\$18.64		Yes	
	and Entrepreneurship	001	0.070	<b>Q</b> 22.00	<b></b>	1	100	
43-4051	Customer Service Representatives	2,927	2.4%	\$21.14	\$17.66	Yes	I I	Yes*
43-3031	Bookkeeping, Accounting, and Auditing Clerks	2,012	1.7%	\$23.54	\$19.78	Yes		Yes*
13-1161	Market Research Analysts and Marketing Specialists	685	9.7%	\$31.57	\$23.17	Yes		Yes*
	n and Human Development	000	0.170	φ01.07	φ20.17	105	1 1	100
25-9045	Teaching Assistants, Except Postsecondary	2,772	6.2%	\$22.32	\$18.53	Yes	Г	Yes*
25-2021	Elementary School Teachers, Except Special Edu.	1,859	6.4%	\$47.86	\$36.83	Yes		Yes*
25-3099	Teachers and Instructors, All Other	296	4.9%	\$32.33	\$23.18	Yes		Yes*
25-2011	Preschool Teachers, Except Special Education	544	7.2%	\$20.01	\$17.46	Yes		Yes*
21-1012	Edu., Guidance, and Career Counselors and Advisors	304	5.9%	\$41.51	\$28.68	103		Yes*
Health		004	0.070	φ+1.01	φ20.00	1	1 1	100
21-1018	Substance Use, Behavioral Disorder, MH Counselors	607	16.0%	\$27.51	\$21.50	Yes	Г	
29-1141	Registered Nurses	2,760	9.7%	\$60.93	\$50.59	Yes		
31-9091	Dental Assistants	971	7.3%	\$22.96	\$18.90	Yes		
31-9092	Medical Assistants	1,882	10.1%	\$18.99	\$17.76	Yes		
31-1131	Nursing Assistants	1,828	12.6%	\$20.83	\$18.55	Yes		
29-2061	Licensed Vocational Nurses	893	8.2%	\$34.59	\$30.35	Yes		
21-1093	Social and Human Service Assistants	756	11.5%	\$22.45	\$18.19	Yes		
29-2052	Pharmacy Technicians	518	6.6%	\$23.11	\$21.97	Yes		
	Construction, and Utilities	510	0.070	Ψ20.11	ψ2 1.57	103		
49-9071	Maintenance and Repair Workers, General	1,794	8.1%	\$23.73	\$18.98	[	Yes	
49-9099	Installation, Maintenance, Repair Workers, All Other	390	3.6%	\$21.93	\$17.75		Yes	
	on and Communication Technologies (ICT)/Digital Me		01070	¢21100	<i><i><i></i></i></i>	1		
15-1299	Computer Occupations, All Other	333	7.0%	\$35.58	\$25.34	Yes	Yes	
27-1024	Graphic Designers	219	2.4%	\$27.63	\$20.33	Yes	Yes	
15-1252	Software Developers	477	16.9%	\$63.82	\$49.36	Yes	Yes	
15-1232	Computer User Support Specialists	331	6.7%	\$30.98	\$23.84	Yes	Yes	
15-1232	Computer Systems Analysts	203	7.5%	\$48.00	\$39.69	Yes	Yes	
	Ind Protective Services	200	1.070	ψ10.00	<del>4</del> 00.00	103	100	
33-3051	Police and Sheriff's Patrol Officers	798	11.4%	\$51.11	\$42.79			Yes
33-3012	Correctional Officers and Jailers	414	3.1%	\$44.52	\$36.22			Yes
	ospitality, and Tourism	714	0.170	ψ <del>, 1</del> .02	ψ00.2Z	I	I	103
35-2014	Cooks, Restaurant	3,274	16.6%	\$18.16	\$16.70	Yes		
43-4081	Hotel, Motel, and Resort Desk Clerks	430	4.2%	\$17.78	\$16.10	165		Yes*
51-3011	Bakers	513	8.5%	\$17.48	\$15.98	Yes		Yes*
35-2012	Cooks, Institution and Cafeteria	498	0.5% 11.8%	\$17.40	\$15.96	Yes		165
35-2012		490	11.0%	<b>⊅∠1.14</b>	φ17.90	res		

### 4.2. Labor Market Information is Necessary, but Not Sufficient | Exploring Apprenticeship for Truck Drivers

While the list above is a useful starting point for exploring non-traditional apprenticeship expansion in the Inland Empire, a detailed understanding of the industry, employer hiring practices, and other factors related to each occupation is needed to determine the viability of sustaining a successful apprenticeship that works for residents and employers.

One example from the list above is the *Heavy and Tractor-Trailer Truck Drivers* (SOC 53-3032) occupation. This occupation is included on the list above due to its high number of annual openings in the region (6,716), high job growth (9%), good median wages (\$27.93), and important role the regional transportation and logistics industry plays in economic development planning and strategy. The profession also has a well-established "earn and learn" model for long-haul trucking; many drivers attend Commercial Driver's License (CDL) schools operated by national carriers at no-cost and are paid to complete training. However, major challenges to apprenticeship adoption and sustainability were highlighted through qualitative discussions and input from individuals familiar with the industry, including:

- **Current industry structure:** The current "earn and learn" model to enter truck driving is part of many national long-haul trucking carrier business models. Large companies provide training at no cost at least upfront and pay trainees a small amount while getting their CDL license at affiliated schools. In exchange, the companies require the trainee to contract with the carrier for a year or more to "pay off" their training after getting their CDL license, sometimes at below-market rates.<sup>36</sup> Companies that do not offer training often require at least one year of experience and hire drivers from national carriers after the trainees complete their pay-back period.
- **Challenges connecting training and employment:** Because of the dynamics outlined above, it is difficult for a training program not affiliated with a national carrier, such as a community college, to connect any classroom or simulated training with on-the-job training and/or employment, a requirement for apprenticeship.
- **Costs of operating a training program:** The costs of offering behind-the-wheel training are prohibitive due to equipment purchase and insurance, especially without an established employer carrying these costs and liability.

While there are a few examples of Trucking Driving apprenticeship programs in California and the US, it will remain difficult to stand up an alternative training model – such as registered apprenticeship – in the Inland Empire in the absence of significant industry shifts or regulatory changes.

The Labor Market Information data suggests a Truck Driving apprenticeship in the Inland Empire may be viable. But qualitative data – gathered through discussions with local industry and community leaders - highlight significant challenges. The COE recommends colleges and partners explore apprenticeship for Truck Drivers with caution.

<sup>&</sup>lt;sup>36</sup> Steve Viscelli, The Big Rig: Trucking and the Decline of the American Dream. Oakland: University of California Press, 2016, pp. 39-40

### SECTION 5: WHAT SHARE OF STATE APPRENTICESHIP FUNDING IS GOING TO THE INLAND EMPIRE?

There are several different federal, state, local, and private sources of revenue that have helped start, pilot, expand, and sustain apprenticeship programs in California. This section examines the share of State of California funding the Inland Empire colleges and college affiliated apprenticeship programs have secured from two funding streams established to support and expand non-traditional apprenticeships— the California Community College Chancellor's Office California Apprenticeship Initiative (CAI) and the DAS Apprenticeship Innovation Funding (AIF).

### 5.1: Chancellor's Office California Apprenticeship Initiative (CAI) Fund Since 2022

The CAI grant program's purpose is to create new pathways for students to gain training and employment in industries that need skilled workers through apprenticeship by supporting the launch and expansion of innovative apprenticeship and pre-apprenticeship initiatives. The grant program was originally launched in 2016, and provides planning grants up to \$120,000, implementation grants up to \$1,500,000, and expansion grants up to \$1,000,000 for colleges and their partners to expand non-traditional apprenticeship programs in regions across California.

Based on a review and analysis of public funding announcements from February 28<sup>th</sup>, 2022, to May 9<sup>th</sup>, 2024<sup>37</sup>, the Chancellor's office has awarded \$108,348,625 in CAI funds to colleges and K-12 partners. The Inland Empire / Desert region has received \$7,534,942, or 7% of these funds. Only the South Central Coast received less funds. In the Amended Notice Of Intent to Award (NOIA) for Year 2023-2024, the Inland Empire secured less than 1% of the \$37.9M awarded.

### Amended NOIA (Fiscal NOIA NOIA Regions **Grand Total** Year 2023-24) (March 10, 2023) (February 28, 2022) Bay Area \$11,594,310 \$13,272,215 \$8,651,425 \$33,517,950 31% \$13,268,161 \$11,200,298 \$1,269,345 \$25,737,804 24% Los Angeles \$1,080,000 Central/Mother Lode \$10,375,383 \$2,000,000 \$13,455,383 12% Orange County \$5,130,000 \$4,370,000 \$499,994 \$9,999,994 9% \$374,720 8% San Diego / Imperial \$3,573,084 \$4,901,808 \$8,849,612 North / Far North \$2,682,937 \$2,645,032 \$2,500,000 \$7,827,969 7% Inland Empire/Desert \$299,608 \$3,374,478 \$3,860,856 \$7,534,942 7% South Central Coast \$240,000 \$660,000 \$524,971 \$1,424,971 1% Grand Total \$37,868,100 \$50,799,214 \$19,681,311 \$108,348,625

### Exhibit 24: CAI Fund Awards Per Region Since February 2022

A full list of CAI grants awarded during these three cycles can be found in Appendix C.

### 5.2: Division of Apprenticeship Standards Apprenticeship Innovation Funding (AIF)

On July 1, 2022, Apprenticeship Innovation Funding (AIF) was established as a funding source for new and innovative apprenticeship programs - defined as apprenticeships associated with the Interagency Advisory Committee on Apprenticeship (IACA). The AIF aims to support industry-led, sector and/or regionally based, multiple employer IACA apprenticeship programs. In the initial 2022-2023 round of AIF Funding, \$17.3 million was awarded in two categories:

Apprenticeship Innovation Funding – Support (AIF-S): The AIF-S covers the cost of running an apprenticeship program, aggregating employer demand, and recruiting, supporting and placing apprentices. Only program sponsors are eligible. The funding amount is \$3500 per active apprentice per year, prorated to the month, along

<sup>&</sup>lt;sup>37</sup> California Apprenticeship Initiative Overview. Accessed September 28, 2024. https://www.cccco.edu/About-Us/Chancellors-Office/Divisions/Workforceand-Economic-Development/apprenticeship/ca-apprenticeship-initiative

with a completion bonus of \$1000 per apprentice. \$15,476,407 AIF-S funds in 2022. Inland Empire sponsors received a total of \$848,917, or 5% of the AIF-S funds awarded.

Program Name	Funding Amount (\$)	Unique Apprentices	Completed
LAUNCH Apprenticeship Network Manufacturing, Engineering	\$284,542	112	55
Inland/Desert Employers Apprenticeship	\$233,042	101	21
LAUNCH Apprenticeship Network Healthcare	\$112,792	48	25
LAUNCH Apprenticeship Network Automotive	\$77,583	29	0
LAUNCH Apprenticeship Network IT	\$55,708	22	0
Launch Apprenticeship Network Avionics Technician (GA Electronic Tech.)	\$49,292	32	7
CCHS, SEIU Local 1000, and Riverside City College LVN-to-RN Apprenticeship JAC	\$31,000	9	3
Inland/Desert Employers Apprenticeship Mechatronics	\$4,958	16	0
Total	\$848,917	369	111

### Exhibit 25: CA DAS Standards AIF-Support (AIF-S) Funds Awarded to Inland Empire Sponsors, 2022

On the surface, Inland Empire sponsors receiving only 5% of the AIF-S funds seems low given the maturity of the local apprenticeship ecosystem discussed in *Section 3*. A closer look at the funding shows that 75% of the AIF-S funds – which have a stated purpose to support "new and innovative" programs – went to two programs that have been operating for decades. The Commission on Correction Peace Officer Standards and Training (CPOST) program received \$8.5M and the long established Pacific Gas & Electric program received \$3.1M. Of the remaining \$3,862,866, Inland Empire sponsors were awarded 22%.

Of the \$3.862M AIF-S funds awarded for 2022 apprenticeships that did not go to the long established, very large CPOST and PG&E apprenticeship programs, Inland Empire sponsors received 22%. All of the recipient sponsors are connected to Inland Empire community colleges, suggesting the region's colleges and their partners are leaders in expanding new and innovative apprenticeships using AIF-S funding to sustain them.

Apprenticeship Innovation Funding – Training (AIF-T): The AIF-T covers the cost of training IACA apprentices and allows for new training programs to develop in a more agile manner. The reimbursement rate for training reimbursed under AIF-T is proposed to be equivalent to the reimbursement rate established under Section 8152 and 79149.3 of the Education Code for RSI Funding. For FY 2023-2024, the RSI and the AIF-T rate is \$9.98 per training hour per apprentice. \$1,881,791 AIF-T funds were awarded in 2022.

Of the four LEAs that were awarded AIF-T funds for 2022 apprenticeship training, two were Inland Empire colleges. Together, Norco College and Chaffey Community College received 42% of the total AIF-T funds awarded.

### Exhibit 26: CA Division of Apprenticeship Standards AIF-Training (AIF-T) Funds Awarded, 2022

Program Name	Funding Amount (\$)	Unique Apprentices	# of RSI Hours	Industry
San Joaquin County Office of Ed.	\$1,423,556	1,102	161,401	Public Sector
Norco College	\$344,174	82	39,022	Advanced Manufacturing
Chaffey Community College	\$93,368	64	10,586	Advanced Manufacturing
Butte County Office of Ed.	\$20,691	37	2,346	Education
Total	\$470,449	1,285	213,355	

### SECTION 6: WHAT CAN COLLEGES DO TO EXPAND APPRENTICESHIP ADOPTION AND IMPACT?

### 6.1: Recommendation 1 - Expand Participation with Apprenticeship Intermediaries

Due to the administration and expertise required to start and maintain quality registered apprenticeships, colleges, employers, and their partners should continue to invest in and participate in regional apprenticeship "hubs" administered by joint labor-management training trusts, industry associations, or non-profit intermediaries. The goals of college participation in these hubs could include reducing training costs for employers or students, expanding access for individuals often excluded from the apprenticeship pathway, increasing employer adoption of the apprenticeship model, and/or improving student employment and education outcomes in a given college program.

One such "hub" or apprenticeship network active in the Inland Empire is LAUNCH. The IEDRC and partner colleges established LAUNCH in 2018. College participation in the LAUNCH network has led to tremendous growth in non-traditional apprenticeships locally and LAUNCH is held up as a statewide model as one way colleges can meaningfully participate in regional apprenticeship expansion in non-traditional occupations. Many Inland Empire colleges are engaging as training providers through credit or non-credit programs. Others are providing pre-apprenticeship, student support, or employer placement. Some colleges provide access to their facilities and psychical infrastructure, and most have mutually beneficial financial partnerships. Colleges and K-12 partners can continue to build and support this regional hub with LAUNCH by:

- Expanding the number of colleges departments, programs, faculty, and staff are aware of and actively participating in the LAUNCH apprenticeship hub, while maintaining flexibility in how different colleges and partners engage.
- Exploring program start-up or expansion efforts in the 47 apprenticeship target occupations in Section 4.
- Increasing the Inland Empire's share of CAI funding going forward. The region only secured 7% of the \$108M awarded since 2022.
- Explore additional recurring revenue sources, including funds from WIOA Title I, Employment Training Panel, and CalFresh E&T funds.

As the LAUNCH model continues to mature in the Inland Empire, a third-party evaluation of outcomes and impact could inform continuous improvement efforts across the network, local public funding and investment decisions, and statewide policy and practice discussions. More information about this evaluation can be found in section 6.4.

Additionally, there are examples of California community colleges participating with unions and their affiliated joint labor-management training trusts under California's High Road Training Partnership framework.<sup>38</sup> For example, there are multiple initiatives underway focused on public sector employment, healthcare and behavioral health occupations in partnership with the Service Employees International Union (SEIU), local workforce boards, employers and community based providers in the planning and implementation stages, with publicly available documents showing colleges across California playing similar roles in the apprenticeship model as those outlined in section 3.<sup>39</sup> For example, the Riverside City College, in partnership with SEIU Local 1000 have enrolled 9 apprentices according to AIF-S funding allocations outlined in the previous section.

<sup>&</sup>lt;sup>38</sup> Essential Elements of High Road Training Partnerships. California Workforce Development Board. <u>https://cwdb.ca.gov/wp-content/uploads/sites/43/2020/01/HRTP-Essential-Elements\_ACCESSIBLE.pdf</u>

<sup>&</sup>lt;sup>39</sup> HRTP Projects. CA Workforce Development Board. <u>https://cwdb.ca.gov/initiatives/high-road-training-partnerships/</u>. Accessed December 11, 2024

Finally, the Inland Empire is at the forefront of the changing infrastructure and energy needs as the State continues to move toward a decarbonized economy. The California building trades unions are bringing new areas of training online, that may represent opportunities for partnership with local colleges. For example, California chapters of the International Brotherhood of Electrical Workers (IBEW) unions announced the creation of the *Clean Transportation and Advanced Manufacturing Electrical Training Trust in June of 2024*.<sup>40</sup> According to the press release, IBEW has committed national resources to build custom training for individual employers related to medium/heavy duty clean vehicle mechanics, industrial manufacturing technicians, and other battery and advanced manufacturing careers. Colleges and their partners should keep abreast of this development and look for opportunities to support and participate with IBEW in the Inland Empire where possible.

In partnership with regional apprenticeship hubs, college faculty, staff, and executive leadership in advocacy efforts for streamlined DAS apprenticeship standards approval is also critical. Inland Empire subject matter experts shared it typically takes DAS 6-12 months to approve new program standards (compared to the federal system, which can talk 1-2 weeks). The lengthy state approval process is a significant barrier to college and employer participation as partnerships can lose momentum and because colleges only get FTES funding for apprentices registered by DAS (not US DOL).

### 6.2: Recommendation 2 – Improve Access for Underrepresented Groups through Pre-Apprenticeship

Only 2% of Inland Empire apprentices in the building and construction trades are women and only 3% are Black. 2% of CA firefighter apprentices are women. Most (63%) apprentices in the Inland Empire are over 25 years old. While there is ample evidence that getting into apprenticeship programs increases an individual's lifelong earnings<sup>41</sup>, women, Black, and younger workers in the Inland Empire are underrepresented in some of the largest, highest paying apprenticeships. While pre-apprenticeship is often viewed as a major way to close this gap, it remains unclear how many pre-apprentices are progressing into apprenticeships, both statewide and in the Inland Empire.

While there is no public listing of approved registered pre-apprenticeships, 11 registered pre-apprentices operated by colleges or K-12 institutions were identified in partnership with advisory committee members. The San Bernardino Superintendent of Schools has taken on the administration and management responsibility for registering and reporting on pre-apprenticeship programs offered by public school partners for both Riverside and San Bernardino under the banner of IE Connect. IE Connect currently administers pre-apprenticeship programs in mechatronics, building and construction trades, culinary, masonry, and automotive in partnership with local schools in the two-county region.

One major way colleges and other regional partners could support this pre-apprenticeship activity – and potentially increase diversity and inclusion in the apprenticeship ecosystem – would be to regularly measure the number and percentage of pre-apprentices that complete, transition to registered apprenticeships, and complete apprenticeships, retention, and wages, disaggregated by key demographics (e.g., gender, race/ethnicity, age). Working with DAS data on registered pre-apprentices and apprenticeship registrations would be an important step at the state level. Locally, partnering with IE Connect and the apprenticeships they have linkages with to create automated reporting and matriculation tracking would help evaluate the transition and inform continuous quality improvement efforts.

After initial benchmarking, policy changes could help expand pre-apprenticeship activity in the region. As one advisory committee member put it, "there is no free-tuition carrot" for students to register and enroll in pre-apprenticeship programs in California. The lack of a clear value proposition for the student, the committee member shared, makes college faculty and staff hesitant to establish pre-apprenticeship programs. Free tuition for credit and non-credit courses that are part of a DAS registered pre-apprenticeship program could help increase the availability of pre-apprenticeship across the Inland Empire and the State of California.

<sup>&</sup>lt;sup>40</sup> Press release: IBEW Local Unions Announce New Apprenticeship Initiative for Battery and Advanced Manufacturing Sectors. June 2024. https://csaew.com/ibew-local-unions-announce-new-apprenticeship/

<sup>&</sup>lt;sup>41</sup> Katz et al. Did Apprenticeships Achieve Faster Earnings Growth Than Comparable Workers? Finding from the American Apprenticeship Initiative Evaluation. Abt Associates. August 2022.

### 6.3: Recommendation 3 - Leverage Employment and Purchasing Budgets

Community colleges and K-12 school districts are often anchor institutions in their communities, playing a key role in economic and community development that goes beyond their immediate mission to educate students. There are two ways the regional colleges and public school districts can expand apprenticeship in San Bernardino and Riverside Counties in addition their core education missions:

- Internal employment and training: Inland Empire community colleges and public school districts hire and train thousands of individuals per year across a range of "apprenticeable" occupations, including teaching, early childhood education, health care, social service, information technology, food service, transportation, maintenance and facilities management, and more. Riverside City College, Mt. San Jacinto College, and the San Bernardino Unified School District have hired apprentices through LAUNCH, along with UC Riverside. Public education institutions hire a lot of people; the impact would be significant if more were hired from local apprenticeship programs.
- Procurement and purchasing: Most apprentices in California and the Inland Empire are in the building and construction trades. Demand for these apprentices is driven through public works construction contracting; all public works contracts valued at \$30,000 or more carry an obligation to hire apprentices, unless the craft or trade does not require the use of apprentices. This applies to all subcontracts on a public works construction job as well<sup>42</sup>. In some instances, public entities also use project labor agreements and/or community benefits agreements legally enforceable contracts that require hiring apprentices along with other job quality and/or community investments for contractors.

Colleges and K-12 districts could consider applying some of these same concepts to additional outsourced goods and services in which contractors employ occupations where there is an active committee and apprenticeship pipeline in the region. For example, many K-12 school districts outsource contracts for school nursing to third-party staffing agencies to provide licensed practical nurses or registered nurses. These procurements could include either extra points, incentive funds, and/or requirements to interview or hire apprentices in the active LVN or RN apprenticeship programs in Victor Valley or Riverside City Colleges.

### 6.4: Recommendation 4 - Partner with the COE on Additional Apprenticeship Research

This report is a helpful first step in understanding the local apprenticeship landscape. The COE is interested in supporting future research efforts and topics, such as:

- Conducting a third-party evaluation and economic impact assessment on the LAUNCH Apprenticeship Network, the hub which serves as the primary way colleges engage with non-traditional apprenticeship in the Inland Empire. This could include the following research questions, benchmarked against other community college and workforce programs:
  - What percentage of apprentices who enroll in LAUNCH programs complete the apprenticeship?
  - What percentage of apprentices are employed in a full-time position with the host employer in their occupation 1, 2, and 5 years after completion? With other employers?
  - How do these outcomes differ by income, gender, race/ethnicity, zip code, prior education, and age?
  - How do participating employers in the LAUNCH network perform on key job quality metrics such as wage, advancement opportunities, health benefits, retirement plans, compared to industry standards?

<sup>&</sup>lt;sup>42</sup> Public Works Apprenticeship Requirements. Department of Industrial Relations. Accessed October 18<sup>th</sup>, 2024. https://www.dir.ca.gov/das/publicworks.html

This research could inform continuous improvement efforts across the network, local public funding and investment decisions, and statewide policy and practice discussions.

- Setting up the data infrastructure and reporting on the share of Inland Empire pre-apprentices that transition into local apprenticeship programs. Working with DAS data on registered pre-apprentices and apprenticeship registrations would be an important step at the state level. Locally, partnering with IE Connect and the LAUNCH Network to create automated reporting and matriculation tracking would help evaluate the transition and inform continuous quality improvement efforts.
- Documenting successes, challenges, and opportunities for Inland Empire colleges and partner sponsors with additional sources of recurring revenue for apprenticeship, including WIOA Title I Funds, Employment Training Panel Funds, and CalFresh E&T Funds. This could be done in partnership with local workforce development boards and county health and human services agencies.

### **APPENDIX A: ACTIVE REGISTERED APPRENTICES IN THE INLAND EMPIRE BY PROGRAM**

SOURCE: DIVISION OF APPRENTICESHIP STANDARD REGISTRATION DASHBOARD, ACCESSED SEPTEMBER 23, 2024

	Rivers	ide County	San Bernar	dino County	Inland Em	pire (Total)	California
	#	% of CA	#	% of CA	#	% of CA	#
Advanced Manufacturing	204	5.0%	269	6.0%	473	11.7%	4,031
Electric, Gas, and Sanitary Services	23	1.7%	24	1.8%	47	3.4%	1370
Fabricated Metal Products, Except Machinery and Transportation	15	8.4%	19	10.7%	34	19.1%	178
Food and Kindred Products	0	0.0%	0	0.0%	0	0.0%	71
Machinery, Except Electrical	4	7.5%	22	41.5%	26	49.1%	53
Millwright	80	11.1%	73	10.2%	153	21.3%	719
Miscellaneous Manufacturing Industries	60	6.8%	108	12.2%	168	19.0%	882
Miscellaneous Services	13	4.5%	17	5.9%	30	10.5%	287
Primary Metal Industries	0	0.0%	0	0.0%	0	0.0%	22
Printing, Publishing and Allied Industries	0	0.0%	0	0.0%	0	0.0%	5
Rubber and Miscellaneous Plastics Products	1	4.3%	0	0.0%	1	4.3%	23
Stationary Engineer and Building Support	1	0.3%	2	0.6%	3	0.9%	323
Tester Manufacturing/Aerospace	7	7.1%	4	4.1%	11	11.2%	98
Advanced Transportation & Logistics	96	8.5%	50	4.4%	146	12.9%	1130
Automotive Repair, Services and Garages	95	20.9%	25	5.5%	120	26.4%	454
Local/Suburban Transit & Interurban Highway Passenger Transport	1	0.2%	3	0.5%	4	0.6%	618
Motor Freight Transportation and Warehousing	0	0.0%	0	0.0%	0	0.0%	19
Transportation Equipment	0	0.0%	22	56.4%	22	56.4%	39
Agriculture, Water & Environmental Technologies	2	1.1%	0	0.0%	2	1.1%	181
Administration of Environmental Quality and Housing Programs	0	0.0%	0	0.0%	0	0.0%	39
Agricultural Production - Crops	0	0.0%	0	0.0%	0	0.0%	40
Agricultural Production - Livestock	0	0.0%	0	0.0%	0	0.0%	7
Agricultural Services	1	16.7%	0	0.0%	1	16.7%	6
Forestry	0	0.0%	0	0.0%	0	0.0%	7
Lumber and Wood Products, Except Furniture	1	1.6%	0	0.0%	1	1.6%	62
Mining and Quarrying of Nonmetallic Minerals, Except Fuels	0	0.0%	0	0.0%	0	0.0%	1
Water Transportation	0	0.0%	0	0.0%	0	0.0%	19
Business & Entrepreneurship	384	5.3%	904	12.4%	1288	17.6%	7314
Administration of Human Resources Programs	0	0.0%	0	0.0%	0	0.0%	4
Business Services	2	0.6%	1	0.3%	3	0.9%	344
Insurance	0	0.0%	0	0.0%	0	0.0%	6
Personal Services	382	5.5%	903	13.0%	1285	18.5%	6960
Education & Human Development	17	2.9%	5	0.9%	22	3.7%	587
Childcare and Educational Services	17	2.9%	5	0.9%	22	3.7%	587
Energy, Construction & Utilities	4707	7.9%	4,403	7.4%	9110	15.4%	59,274
Asbestos Workers	22	5.4%	34	8.4%	56	13.8%	405
Boilermaker	18	7.2%	19	7.6%	37	14.7%	251
Bricklayer	17	7.1%	35	14.6%	52	21.8%	239
Carpentry	1164	10.4%	1120	10.0%	2284	20.5%	11145
Carpet, Linoleum-Soft Tile	34	4.8%	40	5.6%	74	10.4%	710

	Rivers	ide County	San Bernar	dino County	Inland Em	pire (Total)	California
	#	% of CA	#	% of CA	#	% of CA	#
Cement Masons	153	10.6%	158	11.0%	311	21.6%	1441
Drywall Finishing (Taping)	19	3.7%	20	3.9%	39	7.5%	518
Drywall/Lather	532	9.9%	396	7.4%	928	17.3%	5361
Electrical - Electronic	648	8.5%	522	6.9%	1170	15.4%	7602
Electrical and Electronic Machinery, Equipment and Supplies	8	11.0%	30	41.1%	38	52.1%	73
Elevator	69	7.8%	105	11.9%	174	19.7%	884
Engineer	184	10.6%	117	6.8%	301	17.4%	1732
Fire Sprinkler Fitter	67	7.1%	52	5.5%	119	12.6%	947
Glazier-Glass Workers	43	5.7%	33	4.4%	76	10.2%	748
Inspector/Tester	21	9.4%	14	6.3%	35	15.6%	224
Iron-Steel Workers	222	8.1%	284	10.3%	506	18.4%	2752
Laborers	566	7.3%	428	5.5%	994	12.8%	7795
Lineman	92	15.8%	91	15.7%	183	31.5%	581
Painting-Decoration	62	3.6%	75	4.3%	137	7.9%	1729
Pile Driver	9	2.5%	9	2.5%	18	5.0%	363
Plasterers	13	5.8%	16	7.1%	29	12.9%	224
Plumbing	324	6.8%	231	4.9%	555	11.7%	4736
Plumbing HVAC	70	4.9%	84	5.8%	154	10.7%	1439
Roofers	92	3.0%	185	6.1%	277	9.1%	3054
Sheet Metal	97	4.9%	111	5.6%	208	10.4%	1997
Sheet Metal HVAC	0	0.0%	0	0.0%	0	0.0%	185
Stone, Clay, Glass, and Concrete Products	0	0.0%	0	0.0%	0	0.0%	34
Surveyor	35	9.5%	24	6.5%	59	15.9%	370
Teamster	41	24.1%	59	34.7%	100	58.8%	170
Tiler Laver/Setter	11	2.8%	28	7.0%	39	9.8%	400
Sound / Communication	74	6.4%	83	7.1%	157	13.5%	1165
Health*	60	12.0%	68	13.6%	128	25.6%	500
Health Services (*Note: DAS does not provide specific health occupations)	60	12.0%	68	13.6%	128	25.6%	500
CT & Digital Media	49	17.0%	23	8.0%	72	25.0%	288
Information Technology	48	19.5%	23	9.3%	71	28.9%	246
Motion Pictures	1	2.4%	0	0.0%	1	2.4%	42
Public Safety & Government	1058	5.6%	899	4.8%	1957	10.4%	18759
California Firefighter	1055	8.9%	890	7.5%	1945	16.4%	11861
Executive, Legislative, and General Government, Except Finance	2	1.1%	9	5.1%	11	6.3%	176
Inmate Programs	0	0.0%	0	0.0%	0	0.0%	3579
Justice, Public Order and Safety	1	0.0%	0	0.0%	1	0.0%	3132
National Security and International Affairs	0	0.0%	0	0.0%	0	0.0%	11
Retail, Hospitality & Tourism	37	4.6%	27	3.3%	64	7.9%	812
Eating and Drinking Places	4	1.0%	1	0.3%	5	1.3%	393
Food Stores	31	11.9%	25	9.6%	56	21.5%	260
Hotels, Rooming Houses, Camps and Other Lodging Places	1	0.7%	1	0.7%	2	1.5%	137
Miscellaneous Retail	1	4.5%	0	0.0%	1	4.5%	22
Grand Total	6614	4.5% 7.1%	6648	0.0% 7.2%	13262	4.5% 14.3%	92876

### **APPENDIX B: EMPLOYERS WITH SIGNED INDUSTRY PARTNERSHIP AGREEMENTS TO HIRE FROM LAUNCH APPRENTICESHIP NETWORK**

SOURCE: LAUNCH APPRENTICESHIP NETWORK INTERNAL DATA, PROVIDED OCTOBER 2024

INLAND EM	PIRE COMMUNITY COLLEGE APPRENTICESHIP	EMPLOYER PARTNERS (VIA LAUNCH APPRENTI	CESHIP NETWORK)
AAMCO	Dynamic Computer Specialists	Mitsubishi Cement Corporation	Riverside Volkswagen
Acorn Technology Services	East Valley Technical (EVT)	Mold Vision, Inc.	Riverwalk Post Acute (PACS site)
Active IT Solution	Eden Lutheran Preschool	Morongo Basin Healthcare District	Road Safe Traffic (A Cone Zone Inc)
Affordable Plastics & Packaging, Inc.	Eibach	Moses House Ministries	Sabert
All Auto Mobile Mechanics	EKC Enterprises	Moss Bros Buick-GMC, Moreno Valley	San Bernardino City USD
Anderson Chevrolet	EPAC Flexible Packaging	Moss Bros Chevrolet, Moreno Valley	San Manuel Band of Mission Indians
Arlington Gardens Care Center	Exquadrum, Inc.	Moss Bros. CJDR, Moreno Valley	Sigma Beta Xi Youth and Family Services
Asturies Manufacturing	Fairview Ford	Moss Bros. CJDR, Riverside	Sorenson Engineering
Audi Ontario	Family Services Association	Moss Bros. CJDR, San Bernardino	SR Machining
B Braun Medical	Fender Musical Instruments	Moss Bros. Honda, Moreno Valley	Steelscape
Bear Valley Community Hospital	Filipino American MH Resource Center	Moss Bros. Toyota, Moreno Valley	Stronghold Engineering, Inc.
Bestway Laundry Solutions	Finn Auto Group	Moss Bros. Volkswagen of Moreno Valley	Symba Center
Biztek Solutions, Inc.	Fleetwood USA	Motivating Action Leadership Opportunity	Target
BJ Manufacturing	Fontana Nissan	MSM Industries, inc.	TC Transcontinental
BMW of Riverside	Fritts Ford	MTNA Inc - Eternity Systems	Team Logic IT Riverside
BrassCraft	GAF Roofing	Nestle	Tech Docs LLC - CS2K
Bravo Auto Collection	General Atomics	Niagara	Temecula Hyundai
Brenner Fiedler	Goodwill Southern California	Nissan of Riverside	Temecula Valley Buick GMC
CAL Precision, Inc.	Gosch Auto Group	Omnitrans	Temecula Valley Toyota
Cal-draulics	Hello Mazda of Temecula	Onsite Computing, Inc	The Carolyn E. Wylie Center
California Steel Industries	Hello Subaru of Temecula	Optiva IT	The Mom and Dad Project
California Tool and Welding Supply	Hemborg Ford	Paradise Chevrolet Cadillac	Thinkwise Credit Union
Cardinale Way Hyundai/Volkswagen	Howmet Engine Systems	Parkview Community Hospital Medical Center	Tomorrow's Talent
Cedar House Life Change Center	Inland Empire Fleet Maintenance	Penske Truck Leasing	Toyota of Redland
Chino Hills Ford	Jaguar Land Rover (IndiGo)	Performance Auto Care	Toyota of Riverside
Church & Dwight	Jiffy Lube, Najjar Lube Centers	Perris Valley Auto Center (KIA, CDJR)	Trademark Plastics, Inc.
Citrus Motors	Jurupa Community Services District	Phenix Technologies, Inc.	Unity Hope
City of Moreno Valley	Keen IT Services	Porsche Ontario	University of California, Riverside
Computer Pro2call, Inc.	Kemira Water Solutions	Porsche Riverside	Valley Star Community Services
County of Riverside	Ken Grody Ford	Price Manufacturing	Vantage LED
Cryoquip	Larry H. Miller Toyota Corona	Providence Health St Mary Medical Center	VARP Inc
Currie Enterprises, Inc	Las Colinas Post-Acute (PACS site)	Raceway Ford	Ventura Foods
D1 Defend	LAUNCH Apprenticeship Network	Reach Out	Victor Valley Global Medical Center
DCH CJDR of Temecula	Loma Linda University Health	Rexco Development	Walter's Audi
Del Rosa Villa Post-Acute (PACS site)	Luxfer Superform	Rio Tinto	Walters Mercedes Benz of Riverside
Desert Valley Hospital	Lynam	Riverside City College	Walters Mercedes Benz-Sprinter
Developlus	Making Hope Happen	Riverside Community Hospital	WB Powell
DeVoll Rubber	MARS/Nutro Pet Food	Riverside Complete Auto Repair (RCAR)	West Coast Corporation
Diamond Chevrolet, Buick, GMC	MCP Services LLC	Riverside County Black Chamber of Commerce	Youth Action Project (YAP)
Diversity Auto Repair	Mercedes Benz of Ontario	Riverside Nissan	
Dutton Motor Company	Midas (PB Auto DBA Midas)	Riverside University Health System	

### **APPENDIX C: CALIFORNIA APPRENTICESHIP INTIATIVE AWARDS**

SOURCE: CAI PUBLIC NOTICE OF INTENT TO AWARD (NOIA), FEBRUARY 2022 - MAY 2024

	FY 2023-24 (Amended NOIA)	NOIA (March 10, 2023)	NOIA (February 28, 2022)	Total
Bay Area	\$11.594.310	\$13,272,215	\$8,651,425	\$33,517,950
Biological Technician	\$360,000	\$120,000	φ0,0J1,42J	\$480,000
Ohlone CCD	\$300,000	ψ120,000		\$360.000
Ohlone College	\$360,000	\$120,000		\$480,000
Childcare Worker	\$000,000	\$370,000		\$370,000
Oakland Unified		\$250,000		\$250,000
Santa Clara Co. Office of Education		\$120,000		\$120,000
Community Health Worker	\$1,686,000	\$960,000		\$2,646,000
Berkeley City College	\$1,350,000	\$120,000		\$1,470,000
Cabrillo CCD	\$336,000	\$120,000		\$456,000
San Francisco CCD		\$720,000		\$720,000
Computer User Support Specialist	\$280,000	\$240,000		\$520,000
Cabrillo CCD		\$120,000		\$120,000
Cabrillo College	\$280,000			\$280,000
San Francisco Unified		\$120,000		\$120,000
Dental Assistant	\$2,387,095	\$240,000		\$2,627,095
Eden Area ROP	\$1,367,501	\$120,000		\$1,487,501
Santa Cruz Co. Office of Education	\$1,019,594	\$120,000		\$1,139,594
Education Administrators	\$120,000			\$120,000
Alameda Co. Office of Education	\$120,000			\$120,000
Electro-Mechanical and Mechatronics Technician		\$120,000		\$120,000
Mission College		\$120,000		\$120,000
Elementary School Teacher	\$1,500,000			\$1,500,000
Alameda Co. Office of Education	\$1,500,000			\$1,500,000
Environmental Sustainability Tech Electrician		\$120,000		\$120,000
Santa Clara Co. Office of Education		\$120,000		\$120,000
First Line Supervisors of Retail Sales Workers	\$120,000			\$120,000
Foothill College	\$120,000			\$120,000
General and Operations Manager	\$999,717			\$999,717
Design Tech High School	\$499,875			\$499,875
Winters Joint Unified	\$499,842			\$499,842
Information Security Analysts	\$240,000			\$240,000
Pleasanton Unified	\$240,000			\$240,000
Motion Capture Technician	\$120,000			\$120,000
Diablo Valley College	\$120,000			\$120,000
Registered Nurse	\$199,040			\$199,040
Cabrillo College	\$120,000			\$120,000
Evergreen Valley College	\$79,040			\$79,040
Software Developer		\$499,786		\$499,786
Butte Co. Office of Education		\$499,786		\$499,786
Special Education Teacher, Kinder/Elementary		\$120,000		\$120,000
Santa Clara Co. Office of Education		\$120,000		\$120,000
Teacher		\$1,500,000		\$1,500,000
San Jose City College	¢4 004 000	\$1,500,000		\$1,500,000
Teacher Assistant	\$1,284,893	\$4,153,738		\$5,438,631
Berkeley City College	¢600.000	\$1,500,000		\$1,500,000
College of Marin Contra Costa Co. Office of Education	\$600,000			\$600,000
De Anza College	\$499,996	\$1,153,800		\$499,996 \$1,153,800
Eden Area ROP	\$184,897	φ1,100,000		\$1,153,800
Merritt College	\$10 <del>4</del> ,037	\$1,499,938		\$1,499,938
Teacher Assistant, Preschool		\$1,498,844		\$1,499,938 \$1,498,844
Contra Costa Co. Office of Education		\$1,498,844		\$1,498,844
Wellness Coach	\$165,000	ψ1,430,044		\$1,490,044 \$165,000
Alameda Co. Office of Education	\$120,000			\$120,000
Santa Clara Co. Office of Education	\$45,000			\$45,000
Unknown Occupation	ψτ0,000		\$8,651,425	\$8,651,425
Canada College			\$1,000,000	\$1,000,000
Chabot-Las Positas CCD			\$979,578	\$979,578
College of Marin			\$500,000	\$500,000
Foothill College			\$1,000,000	\$1,000,000
Hartnell CCD			\$493,910	\$493,910
Merritt College			\$416,509	\$416,509

	FY 2023-24 (Amended NOIA)	NOIA (March 10, 2023)	NOIA (February 28, 2022)	Total
Mission College	(Amended NOIA)	(Warch 10, 2023)	(February 28, 2022) \$499.905	\$499,905
Mission Concept Mt. Diablo Unified			\$500,000	\$500,000
San Francisco Unified			\$1,000,000	\$1,000,000
San Jose City College			\$490,900	\$490,900
Santa Cruz Co. Office of Education			\$500,000	\$500,000
Santa Rosa Junior College			\$770,623	\$770,623
Skyline College			\$500,000	\$500,000
Automotive Service Technician		\$1,500,000		\$1,500,000
Chabot-Las Positas CCD		\$1,500,000		\$1,500,000
Customer Service Representative		\$900,000		\$900,000
Foothill-DeAnza CCD		\$900,000		\$900,000
Early Childhood Education Assistant		\$90,767		\$90,767
Salinas Union High Electrical and Electronic Engineering		\$90,767		\$90,767
Technologist		\$239,080		\$239,080
Evergreen Valley College		\$119,080		\$119,080
Pleasanton Unified		\$120,000		\$120,000
Hardware Technician	\$947,565	<b>*</b> · <b>-</b> · <b>,</b> · · · · ·		\$947,565
Mission College	\$947,565			\$947,565
Maintenance and Repair Workers		\$120,000		\$120,000
San Mateo Co. Office of Education		\$120,000		\$120,000
Social and Human Services Assistant	\$810,000	\$240,000		\$1,050,000
Berkeley City College		\$120,000		\$120,000
Santa Clara Co. Office of Education	\$810,000	\$120,000		\$930,000
Special Education Teacher	\$375,000			\$375,000
Santa Clara Co. Office of Education	\$375,000	<b>*</b> 100.000		\$375,000
Substance Use and BH Counselor		\$120,000		\$120,000
Santa Clara Co. Office of Education Water and Wastewater Technician		\$120,000 <b>\$120,000</b>		\$120,000 <b>\$120,000</b>
Santa Clara Co. Office of Education		\$120,000		\$120,000
Central/Mother Lode	\$1,080,000	\$10,375,383	\$2,000,000	\$13,455,383
Auto Collision Repair Technician	\$1,000,000	\$1,048,902	φ2,000,000	\$1,048,902
Visalia Unified		\$1,048,902		\$1,048,902
Certified Peer Provider		\$119,991		\$119,991
San Joaquin Co. Office of Education		\$119,991		\$119,991
Community Health Worker		\$120,000		\$120,000
Porterville Unified		\$120,000		\$120,000
Computer User Support Specialist	\$120,000			\$120,000
Merced College	\$120,000			\$120,000
Dealership Service Technician	\$500,000			\$500,000
Kern CCD	\$500,000			\$500,000
Nursing Assistant	\$120,000			\$120,000
Kern CCD	\$120,000	¢00.000		\$120,000
Paramedic College of the Sequoias		\$80,000 \$80,000		<b>\$80,000</b> \$80,000
Pharmacy Technician		\$1,224,282		\$00,000 \$1,224,282
College of the Sequoias		\$225,000		\$225,000
Porterville Unified		\$999,282		\$999,282
Preschool Teacher	\$220,000	<i>\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\</i>		\$220,000
Merced Union High	\$100,000			\$100,000
Tulare Co. Office of Education	\$120,000			\$120,000
Registered Nurse		\$2,011,158		\$2,011,158
Bakersfield College		\$1,233,158		\$1,233,158
College of the Sequoias		\$778,000		\$778,000
Staff Services Analyst		\$553,276		\$553,276
Bakersfield College		\$553,276		\$553,276
Surgical Technologist		\$1,471,282		\$1,471,282
Porterville Unified		\$1,471,282		\$1,471,282
Teacher Assistant	\$120,000	\$1,500,000		\$1,620,000
Orange Co. Department of Education	¢100.000	\$1,500,000		\$1,500,000
West Hills College Lemoore	\$120,000	\$120,000		\$120,000 \$120,000
Teacher Assistant, Preschool Merced Co. Office of Education		\$120,000		<b>\$120,000</b> \$120,000
Unknown Occupation		φ120,000	\$2,000,000	\$120,000 \$2,000,000
Columbia College			\$500,000	\$500,000
San Joaquin Co. Office of Education			\$500,000	\$500,000
State Center CCD			\$500,000	\$500,000
West Hills College Lemoore			\$500,000	\$500,000
Host(ess), Restaurant, Lounge, and Coffee Shop				

	FY 2023-24 (Amended NOIA)	NOIA (March 10, 2023)	NOIA (February 28, 2022)	Total
San Joaquin Co. Office of Education		\$150,000		\$150,000
Industrial Maintenance Mechanic		\$1,499,945		\$1,499,945
Bakersfield College		\$1,499,945		\$1,499,945
Industrial Maintenance Mechanic		\$357,000		\$357,000
College of the Sequoias		\$357,000		\$357,000
Public Health Informatics Technician		\$119,547		\$119,547
Bakersfield College	4000.000	\$119,547	A0.000.050	\$119,547
Inland Empire/Desert	\$299,608	\$3,374,478	\$3,860,856	\$7,534,942
Bookkeeping, Accounting, and Auditing Clerk Riverside City College	<b>\$86,682</b> \$86,682			<b>\$86,682</b> \$86,682
Community Health Worker	\$00,002	\$675,000		\$675,000
San Bernardino City Unified		\$675,000		\$675,000
Computer User Support Specialist		\$120,000		\$120,000
Moreno Valley College		\$120,000		\$120,000
Drone Operator		\$120,000		\$120,000
Mt. San Jacinto College		\$120,000		\$120,000
Emergency Management Director	\$92,926			\$92,926
Moreno Valley College	\$92,926			\$92,926
Information Security Analyst		\$120,000		\$120,000
Chaffey CCD		\$120,000		\$120,000
Logistician		\$120,000		\$120,000
San Bernardino City Unified		\$120,000		\$120,000
Medical Assistant		\$1,200,000		\$1,200,000
Mt. San Antonio College Preschool Teacher		\$1,200,000		\$1,200,000
Fontana Unified		\$120,000 \$120,000		\$120,000 \$120,000
Registered Nurse	\$120,000	\$899,478		\$1,019,478
Mt. San Jacinto CCD	\$120,000	\$055,470		\$120,000
Victor Valley CCD	\$120,000	\$899,478		\$899,478
Unknown Occupation		φ000,470	\$3,860,856	\$3,860,856
Chaffey CCD			\$500,000	\$500,000
Hemet Unified			\$939,388	\$939,388
Moreno Valley College			\$500,000	\$500,000
Mt. San Jacinto College			\$500,000	\$500,000
Norco College			\$500,000	\$500,000
Riverside City College			\$424,998	\$424,998
San Bernardino Co. Office of Education			\$496,470	\$496,470
Los Angeles	\$13,268,161	\$11,200,298	\$1,269,345	\$25,737,804
Accountant and Auditor	\$1,497,591			\$1,497,591
Downey Unified	\$1,497,591	\$120.000		\$1,497,591
Audio & Video Equipment Technician Culver City Unified	\$375,000 \$375,000	\$120,000		\$495,000 \$375,000
Inglewood Unified	\$375,000	\$120,000		\$120,000
Chef		\$120,000		\$120,000 \$120,000
Pasadena City College		\$120,000		\$120,000
Childcare Worker	\$120,000	ψ120,000		\$120,000
Los Angeles Unified	\$120,000			\$120,000
Community Health Worker	\$500,000			\$500,000
Los Angeles Valley College	\$500,000			\$500,000
Computer User Support Specialist		\$120,000		\$120,000
Los Angeles Region		\$120,000		\$120,000
Cook	\$675,000			\$675,000
Pasadena City College	\$675,000			\$675,000
Digital Marketer		\$1,499,984		\$1,499,984
El Camino CCD		\$1,499,984		\$1,499,984
Drafting Technician		\$120,000		\$120,000 \$120,000
Lynwood Unified Electrical Trainee		\$120,000		\$120,000
Cerritos CCD	+	<b>\$494,597</b> \$494,597		<b>\$494,597</b> \$494,597
Film and TV Assistant		\$494,597 \$120,000		\$494,597 \$120,000
Pasadena City College		\$120,000		\$120,000
General and Operations Manager	\$1,619,118	φ120,000		\$1,619,118
Glendale Unified	\$1,499,118			\$1,499,118
Los Angeles Pierce College	\$120,000			\$120,000
HVAC		\$120,000		\$120,000
Covina-Valley Unified		\$120,000		\$120,000
Instructional Aide		\$119,954		\$119,954
Hacienda la Puente Unified		\$119,954		\$119,954
Machinist	\$120,000	\$120,000		\$240,000

	FY 2023-24 (Amended NOIA)	NOIA (March 10, 2023)	NOIA (February 28, 2022)	Total
Los Angeles Valley College		\$120,000		\$120,000
Pasadena City College	\$120,000			\$120,000
Marketing Coordinator		\$1,463,605		\$1,463,605
Harbor College		\$1,463,605		\$1,463,605
Marketing Specialist		\$1,456,378		\$1,456,378
Long Beach City College	<b>A</b> 100.000	\$1,456,378		\$1,456,378
Medical Assistant	\$120,000			\$120,000
West Los Angeles College Nursing Assistant	\$120,000 <b>\$1,499,994</b>			\$120,000 <b>\$1,499,994</b>
Los Angeles Co. Office of Education	\$1,499,994			\$1,499,994
Risk Management	\$1,433,334	\$119,808		\$119,808
Cerritos CCD		\$119,808		\$119,808
Sales Representative, Services	\$1,499,118	¢		\$1,499,118
Downey Unified	\$1,499,118			\$1,499,118
Sound Engineering Technician		\$78,855		\$78,855
Culver City Unified		\$78,855		\$78,855
Teacher		\$120,000		\$120,000
Pasadena City College		\$120,000		\$120,000
Teacher Assistant	\$2,827,500			\$2,827,500
East Los Angeles College	\$1,125,000			\$1,125,000
Hacienda la Puente Unified	\$390,000			\$390,000
Pasadena City College	\$1,312,500	¢000.000		\$1,312,500
Teacher Assistant, Preschool		\$900,000 \$900,000		\$900,000
Los Angeles Pierce College Vocational Nurse		\$900,000 <b>\$120,000</b>		\$900,000 <b>\$120,000</b>
Mt. San Antonio College		\$120,000		\$120,000
Web Developer		\$120,000		\$120,000
Paramount Unified		\$120,000		\$120,000
Unknown Occupation		¢ .20,000	\$1,269,345	\$1,269,345
East Los Angeles College			\$269,345	\$269,345
El Camino College			\$500,000	\$500,000
West Los Angeles College			\$500,000	\$500,000
Compensation, Benefits, and Analysis Specialist	\$825,000			\$825,000
Cerritos CCD	\$825,000			\$825,000
Automotive Service Technician		\$276,421		\$276,421
El Camino College		\$38,181		\$38,181
Long Beach City College		\$120,000		\$120,000
Los Angeles Pierce College	<u> </u>	\$118,240		\$118,240
Automotive Service Technician and Mechanic Los Angeles Pierce College	\$165,000 \$165,000			\$165,000
Digital Production Assistant	\$749,840			\$165,000 <b>\$749,840</b>
Pasadena City College	\$749,840			\$749,840
Electric Vehicle Charger Repair Technician	\$743,040	\$120,000		\$120.000
Pasadena City College		\$120,000		\$120,000
Electric Vehicle Supply Equipment Technician	\$675,000	<i>\\</i> 120,000		\$675,000
Pasadena City College	\$675,000			\$675,000
Facility Management and Construction Inspector		\$120,000		\$120,000
West Los Angeles College		\$120,000		\$120,000
Film & Video Editor		\$120,000		\$120,000
Covina-Valley Unified		\$120,000		\$120,000
IT Systems User Support Specialist		\$120,000		\$120,000
Rio Hondo College		\$120,000		\$120,000
Software Application Developer		\$1,490,696		\$1,490,696
Long Beach City College		\$1,490,696		\$1,490,696
Sterile Processing and Distribution Technician		\$120,000		\$120,000
Pasadena City College		\$120,000		\$120,000 <b>\$1,500,000</b>
Substance Use and BH Counselor East Los Angeles College		<b>\$1,500,000</b> \$1,500,000		\$1,500,000
North / Far North	\$2,682,937	\$2,645,032	\$2,500,000	\$7,827,969
Advanced Manufacturing	¥2,002,307	\$84,768	Ψ2,000,000	\$84,768
Folsom Lake College		\$84,768		\$84,768
Agricultural and Food Science Technician	\$120,000			\$120,000
Butte Co. Office of Education	\$120,000			\$120,000
Bookkeeping, Accounting, and Auditing Clerk		\$375,000		\$375,000
Shasta-Tehama-Trinity Joint CCD		\$375,000		\$375,000
Dental Assistant	\$450,000	\$120,000		\$570,000
Butte Co. Office of Education	\$450,000	\$120,000		\$570,000
Farmer, Rancher, Ag Manager	\$98,835			\$98,835
Mendocino College	\$98,835			\$98,835

	FY 2023-24 (Amended NOIA)	NOIA (March 10, 2023)	NOIA (February 28, 2022)	Total
General and Operations Manager	\$1,499,769	(march 10, 2023)	(February 20, 2022)	\$1,499,769
Davis Joint Unified	\$1,499,769			\$1,499,769
Integrated Health & Wellness Director	\$120,000			\$120,000
Capital College & Career Academy	\$120,000			\$120,000
Software Developer	\$155,563			\$155,563
Butte Co. Office of Education Teacher Assistant	\$155,563 <b>\$238,770</b>			\$155,563 <b>\$238,770</b>
Sonora High School District	\$118,770			\$118,770
Yolo Co. Office of Education	\$120,000			\$120,000
Teacher Assistant, Preschool		\$445,264		\$445,264
El Dorado Co. Office of Education		\$445,264		\$445,264
Unknown Occupation			\$2,500,000	\$2,500,000
American River College			\$1,000,000	\$1,000,000
Butte Co. Office of Education			\$500,000	\$500,000
Sacramento City College			\$500,000	\$500,000
Shasta-Tehama-Trinity Joint CCD Customer Service Representative		\$120,000	\$500,000	\$500,000 <b>\$120,000</b>
Shasta-Tehama-Trinity Joint CCD		\$120,000		\$120,000
Software Application Developer		\$1,500,000		\$1,500,000
Sutter Co. Office of Education		\$1,500,000		\$1,500,000
Orange County	\$5,130,000	\$4,370,000	\$499,994	\$9,999,994
Biological Technician	\$120,000			\$120,000
Santiago Canyon College	\$120,000			\$120,000
Bookkeeping, Accounting, and Auditing Clerk	\$120,000			\$120,000
Santiago Canyon College	\$120,000	<b>*</b> 100.000		\$120,000
Chef Saddleback College		\$120,000 \$120,000		<b>\$120,000</b> \$120,000
CNC Programmer/Operator Machinist	\$120,000	\$120,000		\$120,000 \$120,000
Fullerton College	\$120,000			\$120,000
Forensic Science Technician	\$120,000			\$120,000
Santa Ana College	\$120,000			\$120,000
Human Resources Assistant		\$120,000		\$120,000
Santa Ana College		\$120,000		\$120,000
Information Security Analyst		\$300,000		\$300,000
Coast CCD		\$300,000		\$300,000
Legal Interpreter and Translator	\$120,000			\$120,000
Santa Ana College Licensed Vocational Nurse	\$120,000 <b>\$120.000</b>			\$120,000
Santiago Canyon College	\$120,000			<b>\$120,000</b> \$120,000
Logistician	\$1,050,000			\$120,000
Coastline Community College	\$1,050,000			\$1,050,000
Mechatronics Technician 2	<i><i><i>ϕ</i></i>,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,</i>	\$1,350,000		\$1,350,000
South Orange County CCD		\$1,350,000		\$1,350,000
Medical Assistant	\$120,000			\$120,000
Santiago Canyon College	\$120,000			\$120,000
Preschool Teacher		\$2,250,000		\$2,250,000
Santa Ana College		\$1,125,000		\$1,125,000
Santiago Canyon College Restaurant Cook	¢1 500 000	\$1,125,000		\$1,125,000
Orange County Department of Education	<b>\$1,500,000</b> \$1,500,000			<b>\$1,500,000</b> \$1,500,000
Teacher Assistant	\$1,620,000			\$1,620,000
Coastline Community College	\$120,000			\$120,000
Santa Ana College	\$1,500,000			\$1,500,000
Unknown Occupation	· · ·		\$499,994	\$499,994
Fullerton College			\$499,994	\$499,994
Automotive Service Technician and Mechanic	\$120,000			\$120,000
Santa Ana College	\$120,000			\$120,000
Industrial Production Manager		\$110,000		\$110,000
Coastline Community College Network and Computer Systems Administrator		\$110,000 <b>\$120,000</b>		\$110,000 <b>\$120,000</b>
North Orange County CCD		\$120,000		\$120,000
San Diego / Imperial	\$3,573,084	\$4,901,808	\$374,720	\$8,849,612
Baker	+0,010,004	\$206,306	çor iji <b>20</b>	\$206,306
Grossmont Union High		\$206,306		\$206,306
Biological Technician		\$1,500,000		\$1,500,000
MiraCosta College		\$1,500,000		\$1,500,000
Cook		\$715,400		\$715,400
Grossmont Union High	<b>.</b>	\$715,400		\$715,400
Data Analyst	\$119,998			\$119,998

	FY 2023-24 (Amended NOIA)	NOIA (March 10, 2023)	NOIA (February 28, 2022)	Total
Grossmont Union High	\$119,998			\$119,998
Food Service Manager		\$1,497,600		\$1,497,600
MiraCosta CCD		\$1,497,600		\$1,497,600
General and Operations Manager	\$499,395			\$499,395
Bonsall Unified	\$499,395			\$499,395
Medical Scientist		\$120,000		\$120,000
MiraCosta College		\$120,000		\$120,000
Software Developer	\$2,453,691			\$2,453,691
Grossmont Union High	\$953,691			\$953,691
MiraCosta College	\$1,500,000			\$1,500,000
Teacher Assistant		\$862,502		\$862,502
Palomar CCD		\$862,502		\$862,502
Unknown Occupation			\$374,720	\$374,720
San Diego Co. Office of Education			\$374,720	\$374,720
Clinical Laboratory Technologist, Technician	\$500,000			\$500,000
MiraCosta College	\$500,000			\$500,000
South Central Coast	\$240,000	\$660,000	\$524,971	\$1,424,971
Biological Technician	\$120,000			\$120,000
Moorpark College	\$120,000			\$120,000
Teacher		\$120,000		\$120,000
Santa Barbara Co. Office of Education		\$120,000		\$120,000
Teacher Assistant	\$120,000			\$120,000
Allan Hancock Joint CCD	\$120,000			\$120,000
Unknown Occupation			\$524,971	\$524,971
College of the Canyons			\$250,000	\$250,000
Cuesta College			\$274,971	\$274,971
Computer User Support Specialist		\$120,000		\$120,000
Antelope Valley Union High		\$120,000		\$120,000
Early Care & Education Associate Teacher		\$300,000		\$300,000
College of the Canyons		\$300,000		\$300,000
Miscellaneous Assembler and Fabricator		\$120,000		\$120,000
Antelope Valley Union High		\$120,000		\$120,000
Grand Total	\$37,868,100	\$50,799,214	\$19,681,311	\$108,348,625