

August 2026

REGIONAL RESPONSES

Overcoming Barriers to Apprenticeship Development

San Diego & Imperial



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Executive Summary

Registered apprenticeships continue to gain attention as a strategy for preparing workers for quality careers while helping employers address workforce shortages. Since 2024, the San Diego & Imperial Center of Excellence (COE) has assessed the apprenticeship landscape to identify opportunities for growth and barriers to expansion. This report examines how the apprenticeship landscape has evolved, the progress colleges have made in building institutional capacity, and the regional resources available to support continued growth.

Four key findings emerged:

- **The apprenticeship landscape is gradually diversifying, but traditional sectors continue to dominate.** Although Energy, Construction, and Utilities (ECU) remains the largest apprenticeship sector, the region has expanded opportunities in Advanced Transportation and Logistics; Education and Human Development; Health; and Agriculture, Water and Environmental Technologies.
- **Institutional capacity remains critical to apprenticeship expansion.** Colleges with dedicated staffing, strong employer partnerships, and supportive leadership reported greater success developing and sustaining apprenticeship programs. These findings reinforce the COE's 2025 recommendation that colleges invest in dedicated apprenticeship staffing and infrastructure.
- **Employer engagement remains the region's most persistent challenge.** Employers outside of the traditional trades often lack familiarity with apprenticeship models or express concerns about administrative requirements and long-term commitments. The Regional Consortium has responded by developing employer outreach resources, technical assistance, and intermediary partnerships to help colleges build and sustain employer relationships.
- **Regional coordination has strengthened the apprenticeship ecosystem.** Since the initial assessment, the region has expanded the infrastructure supporting apprenticeship development by creating practical resources, building supportive networks, improving access to data, and leveraging labor market information. These supports include the Employer Field Guide to Apprenticeships, the LAUNCH Apprenticeship Network, an Apprenticeship Community of Practice, a regional repository of community college programs, and research identifying high-opportunity apprenticeable occupations.

Although challenges related to staffing, employer engagement, data systems, and long-term sustainability remain, the findings suggest that the region has developed a stronger infrastructure of partnerships, technical assistance, and shared resources to support apprenticeship growth. The San Diego & Imperial COE encourages community colleges, employers, and workforce development partners to use this report as a resource for overcoming barriers to apprenticeship development across the region.

Introduction

Registered apprenticeships continue to gain attention as a strategy for preparing workers for quality careers and helping employers address workforce shortages.^{1,2} As apprenticeship investments continue to grow, understanding the region's current landscape is critical to identifying areas of progress and opportunities for improvement.

Since 2024, the San Diego & Imperial Center of Excellence (COE) has annually assessed the apprenticeship landscape in the region and provided recommendations for continuous improvement.^{3,4} **This report builds on the 2024 and 2025 assessments by addressing the following research questions:**

LANDSCAPE



How has the apprenticeship landscape in the San Diego & Imperial region evolved since the initial 2024 assessment?

PROGRESS



What progress have the colleges made in building capacity to develop apprenticeships since the 2025 assessment?

CHALLENGES



What challenges identified in prior studies persist, and what resources are available to the colleges to help address them?

To answer these questions, the COE examined: 1) registered apprenticeship data from the California Division of Apprenticeship Standards (DAS); 2) apprenticeship program information reported by the San Diego & Imperial Community Colleges (see Appendix A for a list of programs); and 3) qualitative findings from interviews that WestEd⁵ conducted with apprenticeship leads and other partners across the region (see Appendix B for additional details on the methodology). The findings integrate these sources to provide a regional view of apprenticeship activity, college capacity and progress in apprenticeship expansion, and continued regional barriers to address.

This report is intended to support community colleges, employers, and workforce development partners in making informed decisions about developing, expanding, and sustaining registered apprenticeship programs across San Diego and Imperial Counties.

¹ Registered apprenticeships are an established work-based learning model that allow individuals to build in-demand skills through paid work experience while earning a credential. U.S. Department of Labor (DOL). dol.gov/agencies/odep/program-areas/apprenticeship.

² "Apprenticeships: Expanding Economic Opportunities," SCAG, June 2025, accessed February 1, 2026, scag.ca.gov/sites/default/files/2025-06/25-429-IERS-0129-ApprenticeshipsReport-Final.pdf.

³ "Opportunities for Apprenticeships in San Diego & Imperial Counties." San Diego & Imperial Center of Excellence (COE). February 2024. coeccc.net/san-diego-imperial/2024/02/opportunities-for-apprenticeships-in-san-diego-imperial-counties.

⁴ "Building Apprenticeship Capacity, San Diego & Imperial Counties," San Diego & Imperial COE. February 2025. coeccc.net/san-diego-imperial/2025/02/building-apprenticeship-capacity.

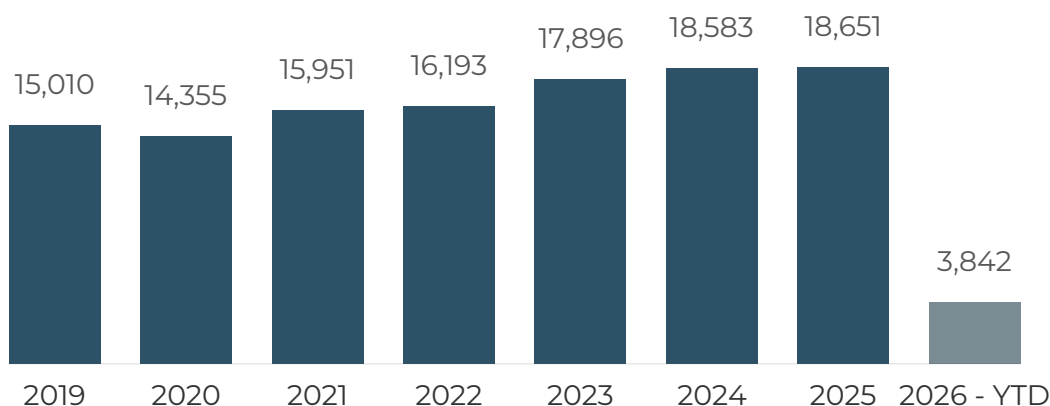
⁵ wested.org.

The Current Apprenticeship Landscape

In 2024, the COE conducted an environmental scan of registered apprenticeships and identified four major findings: 1) the state and region were at risk of missing apprenticeship goals; 2) Energy, Construction, and Utilities (ECU) programs far outnumbered other sectors; 3) equity gaps persisted, particularly by gender; and 4) the region lacked coordinated systems to maximize funding opportunities and diversify apprenticeship offerings.⁶ The COE subsequently recommended expanding apprenticeship programs into new industries, developing pre-apprenticeships, improving apprenticeship data systems, and establishing stronger regional coordination.

Since the initial assessment, the apprenticeship landscape shows both progress and continued challenges. As shown in Exhibit 1, apprenticeship completions in California have generally increased over time. After declining slightly in 2020, completions increased each year thereafter, reaching 18,651 in 2025. From 2019 and 2026 year-to-date, California recorded 120,481 apprenticeship completions (Exhibit 1).⁷

Exhibit 1. Registered Apprenticeship Completions in California⁸



**Note: The Completion Dashboard was last published April 1, 2026.*

⁶ “Opportunities for Apprenticeships in San Diego & Imperial Counties.” San Diego & Imperial COE. February 2024. coecc.net/san-diego-imperial/2024/02/opportunities-for-apprenticeships-in-san-diego-imperial-counties.

⁷ The San Diego & Imperial COE previously evaluated progress toward California’s goal of 500,000 active apprentices by 2029 in the county, but now focuses on completions as the primary indicator of success. Active apprenticeship counts should be interpreted with caution because they fluctuate as individuals enroll, complete programs, or exit apprenticeships. Consequently, a decline in active apprentices does not necessarily indicate weaker performance if apprenticeship completions are increasing. For this reason, this report examines the apprenticeship landscape more broadly by considering program completions, pre-apprenticeship participation, program diversification, and institutional capacity.

⁸ “Completion Dashboard.” California Division of Apprenticeship Standards. April 1, 2026. Accessed June 16, 2026. public.tableau.com/app/profile/california.apprenticeship/viz/CompletionDashboard_16301020658110/CompletionDashboard.

The growth in apprenticeship completions also coincides with an expansion in the number of registered apprenticeship programs available in San Diego County. According to the California Division of Apprenticeship Standards, the number of registered apprenticeship programs increased from 285 in 2024 to 425 in 2026, representing a 49% increase over the three-year period (Exhibit 2). Although the number of active apprentices fluctuates over time as individuals enroll in and complete programs, the increase in registered apprenticeship programs on the DAS website suggests that opportunities for apprenticeship participation have expanded, particularly as colleges and employers explore programs in new industries and occupations.

Exhibit 2. Registered Apprenticeship Programs in San Diego County⁹

	2024	2025	2026
# of Registered Apprenticeship Programs	285	385	425

Despite these gains, active apprenticeship participation has declined since the original assessment. In 2024, the region had 8,902 active registered apprentices, including 8,492 in San Diego County and 410 in Imperial County.¹⁰ As of June 2026, active apprenticeship registrations declined to 7,863 across the two counties, representing a 12% decline in San Diego County and a 7% decline in Imperial County (Exhibit 3). Statewide, active apprenticeships also declined from 94,927 to 88,718 over the same period. At the same time, California reported 9,266 active pre-apprentices, including 319 in the San Diego & Imperial region, suggesting that investments in pre-apprenticeship pathways may help strengthen the future apprenticeship pipeline (Exhibit 3).

Exhibit 3. Active Registered Apprentices and Pre-apprentices¹¹

	2024 Assessment	2026 Assessment*	Change
Apprentices			
San Diego County	8,492	7,483	-12% ↓
Imperial County	410	380	-7% ↓
California	94,927	88,718	-7% ↓
Pre-apprentices			
San Diego County	N/A	301	N/A
Imperial County	N/A	18	N/A
California	N/A	9,266	N/A

**Note: The Registration Dashboard was last published February 19, 2026.*

9 “Program Search.” California Division of Apprenticeship Standards. Accessed June 16, 2026. dir.ca.gov/databases/das/aigstart.asp?VarType=san+diego&Submit=Search&VarCounty=All.

10 “Opportunities for Apprenticeships in San Diego & Imperial Counties.” San Diego & Imperial COE. February 2024. coeccc.net/san-diego-imperial/2024/02/opportunities-for-apprenticeships-in-san-diego-imperial-counties.

11 “Registration Dashboard.” California Division of Apprenticeship Standards. February 19, 2026. Accessed June 16, 2026. public.tableau.com/app/profile/california.apprenticeship/viz/RegistrationDashboard_16301055851260/RegistrationDashboard.

Consistent with prior findings, Energy, Construction, and Utilities remained the dominant apprenticeship sector in San Diego County.¹² As of June 2026, the county had 7,483 active registered apprentices, with 5,190 (69%) concentrated in ECU programs (Exhibit 4). For comparison, Public Safety and Government represented the second largest sector, with 1,063 active registered apprentices in 2026 (14%).¹³

While apprenticeship participation remains concentrated in ECU, the growth of apprenticeships in Advanced Transportation and Logistics; Education and Human Development; Health; and Agriculture, Water and Environmental Technologies suggests that the region is gradually diversifying into sectors that traditionally do not have apprenticeship programs.

Exhibit 4. Active Registered Apprentices by Sector, San Diego County¹⁴

Sector	2024 Assessment	2026 Assessment*	% Change
Energy, Construction and Utilities	5,159	5,190	+1% ↑
Public Safety and Government	1,304	1,063	-18% ↓
Retail, Hospitality and Tourism	43	389	+805% ↑
Advanced Manufacturing	1,264	231	-82% ↓
Business and Entrepreneurship	444	207	-53% ↓
ICT and Digital Media	155	141	-9% ↓
Advanced Transportation and Logistics	97	121	+25% ↑
Education and Human Development	22	49	+123% ↑
Health	-	39	New
Agriculture, Water and Environmental Technologies	4	23	+475% ↑
Other / Unassigned	-	30	New
Total	8,492	7,483	-12%

*Note: The Registration Dashboard was last published February 19, 2026.

¹² "Opportunities for Apprenticeships in San Diego & Imperial Counties." San Diego & Imperial COE. February 2024. coecc.net/san-diego-imperial/2024/02/opportunities-for-apprenticeships-in-san-diego-imperial-counties.

¹³ As of June 2026, these industries were represented in the "Industry Breakdown" list in the [DAS Registration Dashboard](#). The San Diego & Imperial COE converted these 73 industries into one of the 11 [California Community Colleges Chancellor's Office \(CCCCO\) sectors](#).

¹⁴ "Registration Dashboard." California Division of Apprenticeship Standards. February 19, 2026. Accessed June 16, 2026. public.tableau.com/app/profile/california.apprenticeship/viz/RegistrationDashboard_16301055851260/RegistrationDashboard.

In Imperial County, ECU accounted for 306 of the county's 380 active registered apprentices in 2026 (81%). In addition, four of the 11 sectors had no registered apprentices in 2026 (Exhibit 5).

Exhibit 5. Active Registered Apprentices by Sector, Imperial County¹⁵

Sector	2024 Assessment	2026 Assessment	# Change*	
Energy, Construction and Utilities	309	306	-3	↓
Public Safety and Government	2	53	+51	↑
Business and Entrepreneurship	40	9	-31	↓
Health	0	9	+9	↑
Advanced Manufacturing	58	1	-57	↓
Advanced Transportation and Logistics	0	1	+1	↑
Agriculture, Water and Environmental Technologies	0	1	+1	↑
ICT and Digital Media	1	0	-1	↓
Education and Human Development	0	0	--	
Retail, Hospitality and Tourism	0	0	--	
Other / Unassigned	0	0	--	
Total	410	380	-30	↓

*Note: Counts are reported instead of percentages due to small subgroup size.

In terms of demographics, DAS data reveal that gender and race/ethnic representation have remained relatively consistent since the 2024 report. Male apprentices continue to account for more than 90% of all registered apprentices in both counties,¹⁶ and the racial/ethnic composition remains nearly identical to the 2024 assessment in San Diego County: 56% Hispanic/Latino(a), 32% White, 6% Black or African American, 3% Asian or Pacific Islander, 2% Filipino, and 1% Native American or Alaska Native.¹⁷

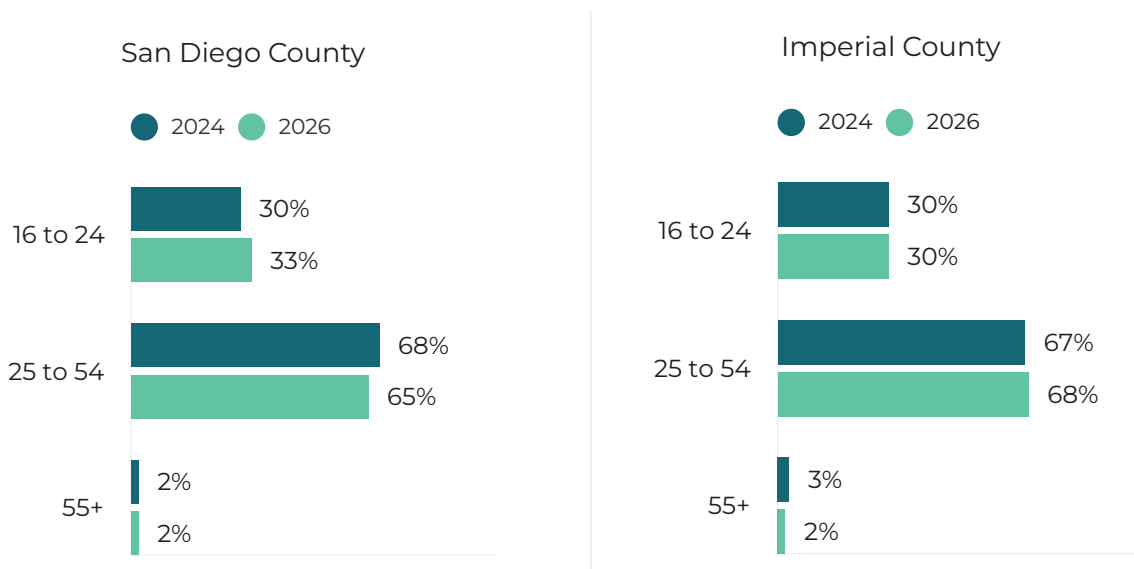
Age distribution also remained relatively stable between the 2024 and 2026 assessments, with the share of younger apprentices (ages 16 to 24) increasing from 30% to 33% in San Diego County, while the proportion ages 25 to 54 declined from 68% to 65% (Exhibit 6). In Imperial County, the age distribution remained nearly identical to the initial assessment. In both counties, apprentices ages 55 and older represented a very small share of the total registered apprentice population (Exhibit 6).

¹⁵ "Registration Dashboard." California Division of Apprenticeship Standards. February 19, 2026. Accessed June 16, 2026. public.tableau.com/app/profile/california.apprenticeship/viz/RegistrationDashboard_16301055851260/RegistrationDashboard.

¹⁶ In 2026, males accounted for 92% of apprentices, females 8%, and non-binary 1% in San Diego County; males accounted for 94% of apprentices in Imperial County, and females 6%.

¹⁷ Race/ethnicity for Imperial County was not reported in the 2024 assessment. In 2026, 91% of apprentices identified as Hispanic/Latino(a), 7% White, 1% Black or African American, 0% Asian or Pacific Islander, <1% Filipino, and 1% Native American or Alaska Native.

Exhibit 6. Active Registered Apprentices by Age, 2024 vs. 2026 Assessment^{18,19}



Overall, these findings suggest that the apprenticeship landscape has evolved gradually since the 2024 assessment. Although active apprenticeship registrations declined and ECU remains the dominant sector, the region has made progress in diversifying apprenticeship opportunities into additional industries, including Health; Education and Human Development; Agriculture, Water and Environmental Technologies; and Advanced Transportation and Logistics. At the same time, demographic patterns have remained largely stable, with modest growth among apprentices aged 16 to 24 in San Diego County. The following sections examine how the San Diego & Imperial Community Colleges are contributing to this evolving landscape through the development of registered apprenticeship and pre-apprenticeship programs.

¹⁸ "Opportunities for Apprenticeships in San Diego & Imperial Counties." San Diego & Imperial COE. February 2024. coeccc.net/san-diego-imperial/2024/02/opportunities-for-apprenticeships-in-san-diego-imperial-counties.

¹⁹ "Registration Dashboard." California Division of Apprenticeships Standards (DAS). February 19, 2026. Accessed June 16, 2026, public.tableau.com/app/profile/california.apprenticeship/viz/RegistrationDashboard_16301055851260/RegistrationDashboard.

Assessing Capacity and Growth

In 2025, the San Diego & Imperial COE examined why apprenticeship growth had not kept pace with the availability of state funding, employer interest, and regional investments.²⁰ The report concluded that the primary barrier was not a lack of resources, but rather a lack of institutional capacity within the community colleges to develop, implement, and sustain apprenticeship programs. As a result, the report offered a singular recommendation: each college should establish a dedicated apprenticeship lead. This individual would be responsible for pursuing grant opportunities, coordinating employer partnerships, registering apprenticeship programs, tracking outcomes, and aligning apprenticeship activities with regional and state initiatives. The report cautioned that without dedicated staff many existing resources would continue to be underutilized.

To better understand how colleges are building apprenticeship capacity, WestEd conducted semi-structured qualitative interviews between November 2025 and March 2026 with CTE deans, apprenticeship coordinators, and other stakeholders representing all 10 San Diego & Imperial Community Colleges. The interviews examined current apprenticeship programs, development efforts, employer partnerships, institutional supports, barriers, and opportunities for regional collaboration. For information about the interviews, see Appendix B: College Interview Profiles and Appendix C: Methodology.

To summarize the qualitative insights, WestEd synthesized interview results across four dimensions that emerged as critical to apprenticeship growth:

- **Active registered apprenticeship programs enrolling students**—the extent to which a college currently operates DAS-registered apprenticeship programs, including the number, industry diversity, longevity, and enrollment in active apprenticeships
- **Dedicated staffing and institutional infrastructure**—whether the college has designated personnel and processes supporting apprenticeship operations (e.g., registration, fee waivers, coding, and reporting), which can persist with turnover
- **Sustained employer engagement**—the breadth and depth of active employer partnerships for apprenticeship, including formalized agreements and ongoing recruitment of new employers in high-need industries
- **Apprenticeship development is an institutional priority**—the degree to which college leadership treats apprenticeship as a strategic priority, as reflected in discretionary resource allocation, explicit policy support, and integration into institutional planning

²⁰ “Building Apprenticeship Capacity, San Diego & Imperial Counties.” San Diego & Imperial COE. February 2025. coecc.net/san-diego-imperial/2025/02/building-apprenticeship-capacity.

Exhibit 7 summarizes apprenticeship-related strengths and challenges across each dimension. **Note that the exhibit reflects qualitative findings specific to registered apprenticeship programs and does not represent a college's broader workforce development efforts.**

Exhibit 7. Apprenticeship Capacity Across the San Diego & Imperial Community Colleges

Rating	
Established strength	●
Emerging or mixed progress	▲
Early stages or limited progress	○

College	(1) Active Registered Apprenticeships	(2) Dedicated Staff	(3) Employer Partnerships	(4) Institutional Priority
Cuyamaca	○	○	▲	○
Grossmont	○	▲	▲	●
Imperial Valley	●	▲	▲	▲
MiraCosta	▲	●	▲	●
Palomar	●	●	●	●
San Diego City	●	●	●	▲
San Diego Continuing Ed.	▲	▲	▲	●
San Diego Mesa	○	○	●	○
San Diego Miramar	●	●	●	●
Southwestern	▲	▲	▲	▲

Exhibit 7 illustrates that colleges with dedicated staffing, strong employer partnerships, and institutional prioritization tend to have more apprenticeship programs. Palomar College and San Diego Miramar College demonstrated established strengths across all dimensions, reflecting mature apprenticeship ecosystems built over years of institutional investment. San Diego City College showed strengths in staffing and employer partnerships, while institutional priority was emerging. See Appendix B for a summary of qualitative findings by college.

These findings reinforce the central conclusion of the 2025 assessment: institutional capacity is needed to develop, sustain, and scale programs.²¹ The interviews suggest that colleges generally fall along a continuum ranging from mature apprenticeship systems with dedicated staffing and employer partnerships to institutions that are still exploring apprenticeship opportunities and building foundational infrastructure.

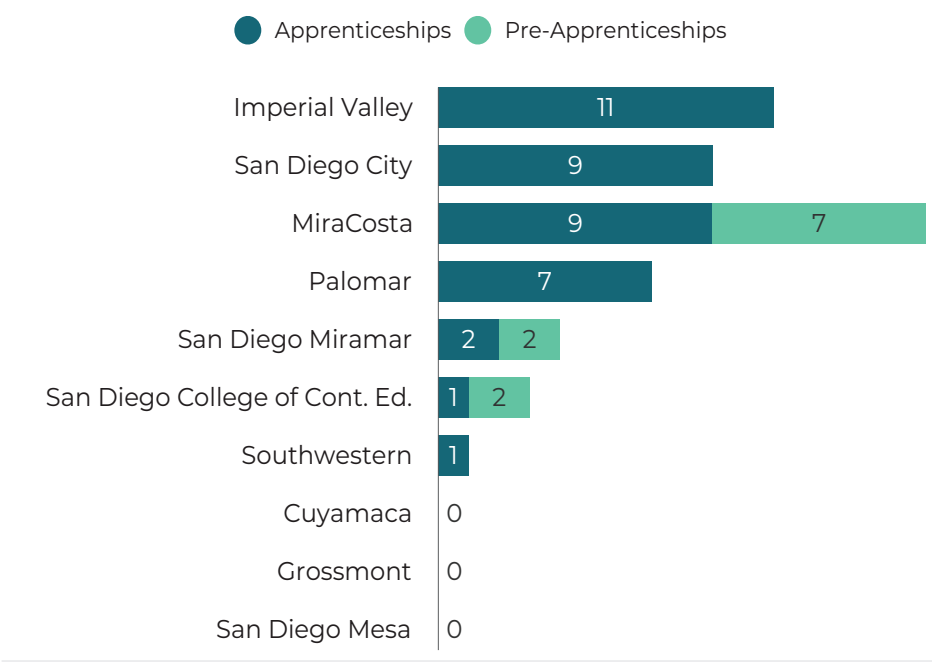
²¹ "Building Apprenticeship Capacity, San Diego & Imperial Counties." San Diego & Imperial COE. February 2025. coecc.net/san-diego-imperial/2025/02/building-apprenticeship-capacity.

Community College Apprenticeship Program Distribution

While institutional capacity influences a college’s ability to develop and sustain apprenticeship programs, examining the programs themselves provides additional insight into how apprenticeship opportunities are expanding across the region.

Although the region has made progress in expanding apprenticeship opportunities, program development varied considerably across colleges. Imperial Valley College reported the largest number of registered apprenticeship programs, while MiraCosta College reported the largest number of pre-apprenticeship programs (Exhibit 8). For a list of apprenticeship programs reported by college, see Appendix A.

Exhibit 8. Registered Apprenticeships and Pre-Apprenticeship Programs by College²²



Note: The data reflect a snapshot of programs at the time of publication and are subject to change.

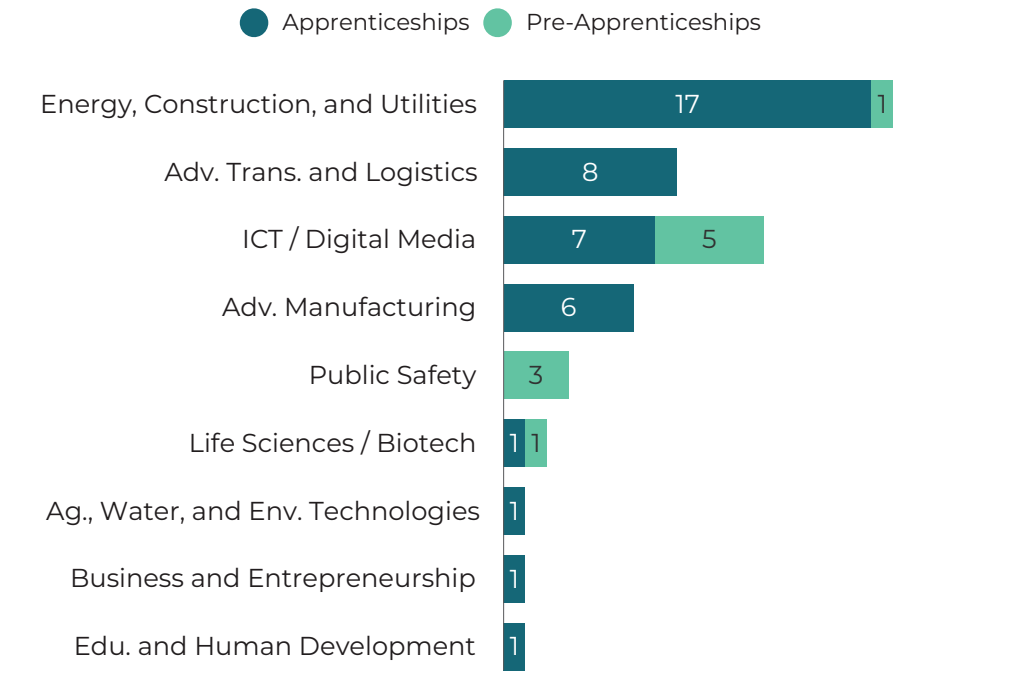
The region has also made progress in diversifying apprenticeships in different sectors. As of June 2026, the San Diego & Imperial Community Colleges reported 40 registered apprenticeship programs and 11 pre-apprenticeship programs (Exhibit 9). Programs were distributed across several sectors, although Energy, Construction, and Utilities remained the dominant field, accounting for 17 apprenticeship programs. Advanced Transportation and Logistics followed with eight programs, while Information and Communication

²² “San Diego & Imperial Apprenticeship Program Repository.” San Diego & Imperial COE. Accessed June 2026. docs.google.com/spreadsheets/d/1lMcZswbr6Q2sl8yb22Z7Ses7lOdpIV3j/edit?gid=1566986676#gid=1566986676.

Technologies accounted for seven programs. The emergence of programs in Life Sciences and Biotechnology; Education and Human Development; Agriculture, Water and Environmental Technologies; and Business and Entrepreneurship demonstrates continued diversification beyond the traditional trades, which was one of the primary recommendations from the COE’s previous apprenticeship studies (Exhibit 9).

At the same time, opportunities for expansion remain. The regional community colleges did not report any registered apprenticeship programs in Health or Public Safety, despite strong workforce demand in these sectors (Exhibit 9).²³ This finding suggests that opportunities remain to expand formal registered apprenticeship pathways into occupations that have historically relied on other education and training models.

Exhibit 9. Registered Apprenticeships and Pre-Apprenticeship Programs by Sector²⁴



Although the region has made meaningful progress in expanding apprenticeship opportunities, the findings also reveal persistent challenges that continue to affect program development and growth. The following section examines the barriers identified across the WestEd interviews, including staffing limitations, employer engagement, funding, and administrative capacity. It also highlights the resources and technical assistance developed by the San Diego & Imperial Community Colleges Regional Consortium to help colleges address these challenges and strengthen the region’s apprenticeship ecosystem.

²³ “Expanding Apprenticeships: High-Opportunity Occupations, San Diego County.” San Diego & Imperial COE. April 2026. coecc.net/san-diego-imperial/2026/04/expanding-apprenticeships-in-san-diego-county-high-opportunity-occupations.

²⁴ “San Diego & Imperial Apprenticeship Program Repository.” San Diego & Imperial COE. Accessed June 2026. docs.google.com/spreadsheets/d/1Mcswbr6Q2sl8yb22Z7Ses7lOdpIV3j/edit?gid=1566986676#gid=1566986676.

Regional Resources to Address Barriers to Apprenticeship Growth

The COE's previous apprenticeship studies identified several persistent barriers to apprenticeship expansion, including employer engagement, limited institutional capacity, fragmented data systems, and challenges sustaining programs beyond grant funding. Although the region has made progress in expanding apprenticeship opportunities, interviews conducted by WestEd indicate that many of these barriers remain. At the same time, the San Diego & Imperial Community Colleges Regional Consortium has invested in new tools, technical assistance, and regional partnerships designed to help colleges address these challenges more effectively.

The following sections describe the challenges most frequently identified by colleges and highlight regional resources that can support apprenticeship development, expansion, and long-term sustainability, summarized below:

Employer Field Guide to Increase Engagement
with Businesses

LAUNCH and Community of Practice to Support
Limited Staff

Program Repository and Regional Convenings to
Improve Data Quality

Peer Learning and Employer-Led Sessions to Build
Leadership Buy-In



Employer Field Guide to Increase Engagement with Businesses

Across the WestEd interviews, employer engagement emerged as a persistent challenge to apprenticeship expansion. This finding is consistent with barriers identified nationally, where employers outside of the traditional trades often lack familiarity with apprenticeship models or express concerns about administrative requirements, long-term commitments, and program costs.^{25,26} These challenges are especially pronounced among small and midsized businesses, which make up most employers in San Diego County and may have limited capacity to establish structured training programs.

In response, colleges have adopted a variety of engagement strategies, including introducing apprenticeships through internships and work-based learning, participating in Chamber of Commerce and economic development meetings, and partnering with community organizations such as the Metropolitan Area Advisory Committee (MAAC)²⁷ and Rise Up Industries²⁸ that have already embraced apprenticeship models.²⁹

To support these efforts, the San Diego & Imperial Regional Consortium partnered with the James Irvine Foundation to develop the [Employer Field Guide to Apprenticeships](#),³⁰ which provides employers with a practical overview of apprenticeship benefits, implementation steps, and return-on-investment considerations. Additional statewide support is available through Grow Apprenticeship California and the Southern California Apprenticeship Network (SCAN), which connects businesses, educators, workforce agencies, community-based organizations, and labor groups across the region.^{31,32} Together, these resources help colleges communicate the value of apprenticeships while addressing common employer concerns.



25 "The State of Apprenticeships in California." Jobs for the Future. August 2024. Accessed June 16, 2026. jff.org/wp-content/uploads/2024/08/jff-apprenticeshipreport-final.pdf.

26 "Policy Blueprint to Modernize and Expand Apprenticeship Nationwide." Jobs for the Future. April 2025. Accessed June 16, 2026. jff.org/wp-content/uploads/2025/04/JFF-Policy-Blueprint-to-Modernize-and-Expand-Apprenticeship-Nationwide.pdf.

27 maacproject.org.

28 riseupindustries.org/helping-them-rise-up.

29 jff.org/work/apprenticeship-work-based-learning.

30 "Employer Field Guide to Apprenticeships," San Diego & Imperial Regional Consortium, 2026, sdiregionalconsortium.org/wp-content/uploads/2026/03/Employer-Field-Guide-Apprenticeships_Final.pdf.

31 "Apprenticeship Funding Matrix," Grow Apprenticeship California, accessed June 1, 2026, growapprenticeshipca.org/wp-content/uploads/2025/06/GAC-Funding-Matrix-Graphic-DRAFT-2.pdf.

32 sbwib.org/scan.

LAUNCH and Community of Practice to Support Limited Staff

The interviews also reinforced a finding from the 2025 assessment: dedicated staffing remains one of the strongest predictors of apprenticeship growth.³³ Colleges with dedicated apprenticeship personnel reported greater success establishing employer partnerships, pursuing grants, and navigating the administrative requirements associated with registered apprenticeship programs. In contrast, colleges without dedicated staff often relied on a small number of employees balancing apprenticeship responsibilities alongside other duties.

Regional intermediaries can help address these capacity gaps.³⁴ Colleges consistently cited the LAUNCH Apprenticeship Network as a valuable partner that provides technical assistance and guidance through the process.³⁵ LAUNCH also offers support for employer engagement, program sponsorship, funding, and institutional processes. Several colleges described LAUNCH as instrumental in reducing burdens and accelerating program development.^{36,37}

In addition to LAUNCH, the regional Apprenticeship Community of Practice (CoP) supports colleges in designing, scaling, and sustaining apprenticeship programs by providing professional development for coordinators and practitioners, while addressing equity barriers that affect access for underrepresented groups.^{38,39} The CoP also serves as a key resource for colleges navigating applications and helps reduce the isolation that apprenticeship staff may experience when managing programs independently. During interviews, colleges described uncertainty regarding Division of Apprenticeship Standards timelines and application processes. The CoP helps address these concerns by sharing best practices, lessons learned, and technical guidance. For example, a DAS representative attended a regional meeting in March 2026 to provide updates on the DAS Compliance Checklist and answer questions from colleges.⁴⁰ These meetings create valuable opportunities for colleges and regional partners to strategize, build shared understanding, and collectively advance apprenticeship expansion.

Additional support is available through the Chancellor's Office Apprenticeship Pathway Demonstration Project, which provides tools to streamline the process and reduce administrative barriers. The Apprenticeship Toolkit (Phases I and II)^{41,42} offers guidance for colleges at all stages of development, including strategies for converting existing apprenticeship programs into for-credit pathways.

33 "Building Apprenticeship Capacity, San Diego & Imperial Counties," San Diego & Imperial COE. February 2025. coecc.net/san-diego-imperial/2025/02/building-apprenticeship-capacity.

34 "California Regional Intermediaries," Jobs for the Future, August 2024, accessed June 1, 2026, cccco.edu/-/media/CCCCO-Website/docs/report/jffregionalintermediariespres4finalally.pdf.

35 launchapprenticeship.org.

36 drive.google.com/file/d/1scqxeFjvc_ASpdL2suOaJRwZEaYSWYQX/view.

37 "LAUNCH Apprenticeship Network Information Sheet." LAUNCH Apprenticeship Network. Accessed June 16, 2026. drive.google.com/file/d/1mMD6JwzKdZUKOWIMR2La_zJkM5FEeNVN9.

38 sdiregionalconsortium.org/resources/resource-library/april-15-2026-apprenticeship-cop.

39 sdiregionalconsortium.org/wp-content/uploads/2025/10/DRAFT-Apprenticeship-COP-info.pdf.

40 "Required Documents & Records for Program and Individual Apprentice Files." Division of Apprenticeship Standards. Accessed June 16, 2026. drive.google.com/file/d/1IIPFhBD566jtlrxmLWzP5WfMDVOh0zZu/view.

41 cccco.edu/-/media/CCCCO-Website/docs/toolkit/apdp-toolkit-phase-1-2024-ally.pdf.

42 cccco.edu/-/media/CCCCO-Website/docs/toolkit/apdp-toolkit-phase-2-2024-ally.pdf.

Program Repository and Regional Convenings to Improve Data Quality

Data quality and reporting continue to present challenges across the region. Colleges described difficulties tracking apprentices, coding courses correctly in the Chancellor's Office Management Information System (MIS), documenting apprenticeship hours, and aligning local records with statewide reporting systems. These findings underscore the 2024 recommendation to improve apprenticeship data infrastructure and create a more comprehensive inventory of apprenticeship programs.⁴³

In the 2024 assessment, the San Diego & Imperial COE found that the DAS and the Chancellor's Office Curriculum Inventory (COCI) tracked different apprenticeship programs, with some programs appearing in one system but not the other.⁴⁴ In response, the COE partnered with institutional research offices at each college to develop a regional apprenticeship repository that consolidates apprenticeship and pre-apprenticeship program information across colleges and fills gaps left by existing state databases.⁴⁵ The repository provides a more complete picture of apprenticeship activity across the region.⁴⁶ A list of apprenticeship programs included in the repository is provided in Appendix A.

Interviewees also noted that knowledge of apprenticeship coding and reporting remains limited; yet, tracking apprenticeship data is critical for securing funding and assessing the efficacy of programs. Colleges reported challenges related to registrar coding, fee waivers, hour documentation, and full-time equivalent student (FTES) reporting. Commonly, apprenticeship data are managed across multiple departments, making it difficult to establish centralized processes or consistent practices. To address these challenges, some colleges have created shared tracking systems, including spreadsheets that allow multiple staff members to monitor apprentices and outcomes, as well as standardized guides and procedures. For example, the San Diego Community College District developed the [Apprenticeship Handbook](#)⁴⁷ to standardize processes and preserve institutional knowledge when key staff transition.

Recognizing these needs, the Regional Consortium convened apprenticeship program leads, institutional researchers, faculty, and staff for the *Data Tracking: Apprentice and Course Coding Regional Convening* in April 2026. The working session focused on strengthening apprenticeship MIS reporting practices and aligning regional efforts with the Chancellor's Office Course and Student Coding Guidance. Moving forward, continued convenings and technical assistance can help improve data quality, strengthen reporting consistency, and ensure colleges have the data needed to secure funding and evaluate program effectiveness.

43 "Opportunities for Apprenticeships in San Diego & Imperial Counties." San Diego & Imperial Center of Excellence (COE). February 2024. coeccc.net/san-diego-imperial/2024/02/opportunities-for-apprenticeships-in-san-diego-imperial-counties.

44 Ibid.

45 "San Diego & Imperial Apprenticeship Program Repository." San Diego & Imperial COE. Accessed June 2026. docs.google.com/spreadsheets/d/1McZswbr6Q2sl8yb22Z7Ses7lOdpLV3j/edit?gid=1566986676#gid=1566986676.

46 In the 2024 assessment, the San Diego & Imperial Center of Excellence found that the Division of Apprenticeship Standards and the Chancellor's Office Curriculum Inventory (COCI) tracked different apprenticeship programs, with DAS programs missing in COCI and COCI programs missing in DAS.

47 "Apprenticeship Handbook," San Diego Community College District, January 5, 2026, accessed June 2026, sdccd.edu/docs/ISPT/workforce/docs/SDCCD-Apprenticeship-Handbook.pdf.

Peer Learning and Employer-Led Sessions to Build Institutional Support

Institutional support and prioritization emerged as one of the most important factors influencing apprenticeship development across the region. Colleges that prioritized apprenticeship development were more likely to invest in dedicated staffing, cultivate employer partnerships, and pursue new apprenticeship opportunities. In contrast, colleges with limited institutional buy-in often described challenges securing resources, prioritizing apprenticeship alongside competing institutional initiatives, or advancing programs beyond the planning stage. These findings suggest that apprenticeship expansion depends not only on employer demand or available funding, but also on whether institutions view apprenticeships as a strategic investment in workforce development.⁴⁸

Institutions are more inclined to invest in apprenticeships when employers articulate hiring and workforce challenges

At the same time, institutional prioritization may be one of the most difficult challenges to address directly. Unlike staffing, funding, or technical assistance, institutional priorities are shaped by local leadership, strategic plans, and competing campus needs. During the WestEd interviews, one participant noted that employer demand could be a stronger lever for change than internal advocacy alone. This observation is consistent with broader apprenticeship research, which has found that institutions are more likely to invest in apprenticeship programs when employers articulate hiring and workforce challenges and demonstrate a commitment to hiring apprentices.⁴⁹

As a result, the Regional Consortium may have the greatest impact by strengthening the connection between employers and institutional leadership. One promising strategy is to convene employers and college leaders to discuss workforce shortages, hiring challenges, and the role apprenticeships can play in building talent pipelines.⁵⁰ Hearing directly from employers may help college leaders better understand workforce needs and position apprenticeships as a strategic investment rather than a stand-alone program. The region also developed a strategic guide for community college CEOs, [Learn and Earn: Apprentice as a Strategic Imperative for Community College CEOs](#),⁵¹ that outlines the benefits of registered apprenticeships as an institutional strategy to build equitable pathways to quality jobs, increase student enrollment, and strengthen employer partnerships.

48 "Establishing a Registered Apprenticeship Program at a Community College." American Association of Community Colleges. Accessed June 2026. aacc.nche.edu/programs/workforce-economic-development/expanding-community-college-apprenticeships/intro-virtual-apprenticeship-network/implementing-a-registered-apprenticeship-program/establishing-a-registered-apprenticeship-program-at-a-community-college.

49 "Apprenticeship & Work-Based Learning for Opportunity Youth." Jobs for the Future. Accessed June 2026. jff.org/apprenticeship-wbl-opportunity-youth.

50 "Expanding Apprenticeship: Return on Investment and the Value Proposition for Employers." Urban Institute. Accessed June 2026. urban.org/projects/small-and-medium-business-tech-apprenticeship-project/lessons-learned.

51 "Learn and Earn: Apprentice as a Strategic Imperative for Community College CEOs." San Diego & Imperial Regional Consortium. April 2026. Accessed June 2026. sdiregionalconsortium.org/wp-content/uploads/2026/04/SDIRC-Apprentice_FINAL-ADA.pdf.



Labor market information can help build the business case for apprenticeship investment

Peer learning may provide another effective strategy. Research on organizational change consistently finds that leaders are more likely to adopt new practices when they observe similar institutions succeeding.⁵² Regional examples already exist. MiraCosta College hired a dedicated Director of Apprenticeship Program Development to coordinate employer engagement and program expansion. Palomar College has developed apprenticeship infrastructure over several decades, while Grossmont College pursued a first-in-California artificial intelligence apprenticeship proposal. Leadership forums and peer exchanges can help colleges learn from these examples and identify strategies aligned with their own institutional priorities. These convenings could provide a forum to share effective practices, discuss common challenges, and identify pitfalls to avoid.

Finally, labor market information (LMI) can help build the business case for apprenticeship investment. College leaders often ask whether apprenticeship programs align with workforce demand, provide quality career opportunities, and represent a sustainable institutional investment. The San Diego & Imperial COE's recent report identifies apprenticeable occupations that are high-wage, high-demand, resilient to AI disruption, and affected by retirement pressure.⁵³ LMI, employer engagement, and peer learning may therefore represent some of the strongest tools available to build leadership commitment and guide future apprenticeship investments across the region.

Although leadership buy-in remains one of the most difficult barriers to address directly, the Regional Consortium is uniquely positioned to bring together employers, college leaders, and regional partners to build the business case for apprenticeships, share successful models, and expand apprenticeship opportunities across San Diego and Imperial Counties.

⁵² "Center for Apprenticeship & Work-Based Learning." Jobs for the Future. Accessed June 2026. jff.org/resources/scaling-apprenticeship-through-community-colleges.

⁵³ "Expanding Apprenticeships: High-Opportunity Occupations, San Diego County." San Diego & Imperial COE. April 2026. coecc.net/san-diego-imperial/2026/04/expanding-apprenticeships-in-san-diego-county-high-opportunity-occupations.

Summary of Regional Responses to Persistent Challenges

Although many of the barriers identified in prior apprenticeship studies persist, the San Diego & Imperial Community Colleges Regional Consortium has made substantial investments to help colleges address these challenges. In developing practical solutions that support apprenticeship growth, the Regional Consortium created resources designed to help colleges build capacity, strengthen employer engagement, improve data quality, and expand apprenticeship opportunities.

Exhibit 10 summarizes the most persistent challenges identified across prior COE studies and the WestEd interviews, along with the regional responses developed to address them. Taken together, these findings suggest that while apprenticeship expansion remains challenging, the region has developed a stronger infrastructure of partnerships, technical assistance, research, and shared resources to support continued growth.

Exhibit 10. Persistent Challenges to Apprenticeship Expansion and Regional Responses

Persistent Challenge	Evidence	Regional Response
 Employer Engagement	WestEd interviews identified employer engagement as the most frequently cited barrier to apprenticeship expansion. Employers often lacked familiarity with apprenticeship models or expressed concerns about administrative requirements and long-term commitments.	Employer Field Guide to Apprenticeships; employer panels; LAUNCH Apprenticeship Network technical assistance
 Limited Staffing and Institutional Capacity	The 2025 COE report ⁵⁴ identified institutional capacity as the primary barrier to apprenticeship growth. WestEd interviews reinforced that dedicated staffing is one of the strongest predictors of apprenticeship success and sustainability.	LAUNCH Apprenticeship Network; Apprenticeship Community of Practice; regional technical assistance

54 “Building Apprenticeship Capacity, San Diego & Imperial Counties,” San Diego & Imperial COE. February 2025. coeccc.net/san-diego-imperial/2025/02/building-apprenticeship-capacity.

Persistent Challenge	Evidence	Regional Response
 Data fragmentation and reporting	The 2024 COE report⁵⁵ identified gaps in apprenticeship data systems, while colleges interviewed by WestEd reported challenges with MIS coding, tracking apprentices, and maintaining program inventories.	Regional Apprenticeship Repository; MIS convenings; shared reporting guidance and peer learning
 Leadership buy-in and institutional commitment	WestEd interviews found that apprenticeship programs are more likely to expand when leaders actively prioritize apprenticeship development and understand the value proposition for employers and students.	Labor market reports for apprenticeship opportunities; employer-college leadership forums; peer case studies from regional colleges
 Program sustainability and funding	Colleges reported challenges sustaining apprenticeship and pre-apprenticeship programs after grant funding ends, particularly when RSI funding alone is insufficient to support ongoing operations.	Grant development support; Communities of Practice; intermediary partnerships such as LAUNCH; regional coordination of apprenticeship resources

⁵⁵ “Opportunities for Apprenticeships in San Diego & Imperial Counties.” San Diego & Imperial Center of Excellence (COE). February 2024. coeccc.net/san-diego-imperial/2024/02/opportunities-for-apprenticeships-in-san-diego-imperial-counties.

Conclusion: Promising Practices and Future Considerations

Although the previous sections focused on persistent barriers and regional responses, the WestEd interviews also highlighted several promising practices and emerging ideas that may help colleges strengthen apprenticeship development in the future. While these strategies vary by institutional context, they provide examples of how colleges are adapting apprenticeship models to meet workforce needs and student demand.

► Expanding Apprenticeships Through Flexible Pathways

Several colleges are exploring how noncredit instruction, Credit for Prior Learning (CPL), and stackable credentials can accelerate apprenticeship development while creating multiple entry and exit points for students. San Diego College of Continuing Education purchases certified curriculum to reduce the time required to launch programs, while MiraCosta College and Grossmont College are building pathways that connect noncredit instruction with credit-bearing coursework. Grossmont College and Imperial Valley College are also exploring educational ladders that allow apprentices to progress from certificates to associate and bachelor's degrees. These approaches demonstrate how colleges can design more flexible pathways while preserving long-term educational opportunities.

► Developing Apprenticeships in Emerging Industries

Interviews revealed growing interest in apprenticeships beyond the traditional trades. Grossmont College pursued a first-in-California artificial intelligence apprenticeship proposal, while San Diego Miramar College is developing programs in aviation and zero-emissions vehicle technology. MiraCosta College is exploring a community and property management apprenticeship that could be among the first of its kind nationally. These efforts suggest that apprenticeships may continue to expand into new industries as employers seek innovative workforce solutions. Additionally, colleges should recognize that apprenticeships may be designed around specific employer and workforce needs; a program that serves several cohorts and concludes due to changes in the labor market still represents a successful outcome, particularly in emerging industries.

► Strengthening Regional Mentorship and Peer Learning

Several interviewees recommended expanding mentorship opportunities across colleges. Experienced institutions could share lessons learned with colleges that are earlier in their apprenticeship journey, while employers with established apprenticeship programs could help other employers understand the benefits and implementation process. A tiered support model, aligned with each college's stage of apprenticeship development, may help target technical assistance more effectively and accelerate regional growth.



Colleges emphasized the importance of connecting apprentices to student support services and campus resources

► Connecting Apprentices Directly to Student Support Services

Colleges emphasized the importance of connecting apprentices to student support services and campus resources. San Diego City College, for example, created a dedicated apprenticeship counselor and regularly connects apprentices with financial aid, basic needs, and disability support services. These practices recognize that apprentices often balance work, family, and educational responsibilities and could benefit from the same wraparound supports offered to other adult learners.⁵⁶

Together, these examples illustrate that apprenticeship expansion is not defined by a single model. As colleges continue to experiment with new pathways, industries, and support strategies, these promising practices may serve as important areas for future discussion, technical assistance, and research. The San Diego & Imperial COE encourages community colleges and regional partners to use this report as a resource to address barriers related to the development of apprenticeship programs.

⁵⁶ "Adult Learner Study: Insights to Strengthen Practices and Policies," San Diego & Imperial Center of Excellence. November 2025. coecc.net/san-diego-imperial/2025/11/san-diego-imperial-community-colleges-adult-learner-study-insights-to-strengthen-practices-and-policies.

Appendix A: San Diego & Imperial Apprenticeship Program Repository

Exhibit A1. San Diego & Imperial Community College Apprenticeship Programs by Sector⁵⁷

College	Apprenticeship Program	SOC Code	SOC Occupation	Degree Type
Advanced Manufacturing				
San Diego City	GKN Aerospace	49-9041	Industrial Machinery Mechanics	N/A
San Diego City	Solar Turbines, Incorporated	51-4041	Machinists	Certificate AS
		49-9041	Industrial Machinery Mechanics	
		47-2211	Sheet Metal Workers	
		51-4111	Tool and Die Makers	
Southwestern	Southwest Regional Apprenticeship Program (SWRAP)	51-4041	Machinists (and other occupations)	Certificate AS
Advanced Transportation and Logistics				
San Diego City	San Diego Transit Electronic Technician Apprenticeship	49-2093	Electrical and Electronics Installers and Repairers, Transportation Equipment	Certificate AS
San Diego City	City of San Diego Fleet Technician Apprenticeship	49-3031	Bus and Truck Mechanics and Diesel Engine Specialists	N/A
San Diego City	San Diego Trolley Inc Revenue Maintainer Apprenticeship	53-1040	First-Line Supervisors of Transportation and Material Moving Workers	Certificate AS

⁵⁷ "San Diego & Imperial Apprenticeship Program Repository." San Diego & Imperial COE. Accessed June 2026. docs.google.com/spreadsheets/d/1IMczswbr6Q2sl8yb22Z7Ses7lOdpIV3j/edit?gid=1566986676#gid=1566986676.

College	Apprenticeship Program	SOC Code	SOC Occupation	Degree Type
San Diego City	San Diego Trolley Inc Light Rail Vehicle Lineman Apprenticeship	49-3043	Rail Car Repairers	Certificate AS
San Diego City	San Diego Trolley Inc Wayside Lineman Apprenticeship	49-2093	Electrical and Electronics Installers and Repairers, Transportation Equipment	AS
San Diego College of Cont. Education	Body Shop Mechanic Apprenticeship	49-3021	Automotive Body and Related Repairers	Certificate
San Diego Miramar	San Diego Transit General Mechanic Apprenticeship	49-3042	Mobile Heavy Equipment Mechanics, Except Engines	Certificate AS
San Diego Miramar	Hawthorne Technician Apprenticeship (HTAP)	49-3031	Bus and Truck Mechanics and Diesel Engine Specialists	Certificate AS
Agriculture, Water, and Environmental Technologies				
MiraCosta	Viticulture and Enology Technician Apprenticeship	11-9013	Farmers, Ranchers, and Other Agricultural Managers	Certificate
Business and Entrepreneurship				
Palomar	Palomar College/United States Marine Corps Apprenticeship Program	11-1021	General Operations Managers	Certificate AS
Education and Human Development				
Palomar	Early Care & Education Pathways to Success (ECEPTS) Program	25-2011	Preschool Teachers, Except Special Education	Certificate
Energy, Construction, and Utilities				
Imperial Valley	Control Operator Apprenticeship	51-8013	Power Plant Operators	Certificate
Imperial Valley	Electrician Apprenticeship	47-2111	Electricians	Certificate AS
Imperial Valley	Generation Mechanic Apprenticeship	49-9051	Electrical Power-Line Installers and Repairers	Certificate AS / AA
Imperial Valley	Hydro Operator Apprenticeship	51-8013	Power Plant Operators	Certificate

College	Apprenticeship Program	SOC Code	SOC Occupation	Degree Type
Imperial Valley	Instrument Technician Apprenticeship	49-9099	Installation, Maintenance, and Repair Workers, All Other	Certificate
Imperial Valley	Meter Technician Apprenticeship	49-9012	Control and Valve Installers and Repairers, Except Mechanical Door	Certificate AS / AA
Imperial Valley	Power Lineman Apprenticeship	49-9051	Electrical Power-Line Installers and Repairers	Certificate AS / AA
Imperial Valley	Relays Technician Apprenticeship	49-2095	Electrical and Electronics Repairers, Powerhouse, Substation, and Relay	Certificate AS / AA
Imperial Valley	SCADA/Telecommunications Technician Apprenticeship	49-2095	Electrical and Electronics Repairers, Powerhouse, Substation, and Relay	Certificate AS / AA
Imperial Valley	Substation Electrician Apprenticeship	49-9099	Installation, Maintenance, and Repair Workers, All Other	Certificate AS / AA
Imperial Valley	Telecommunications Technician Apprenticeship	49-2022	Telecommunications Equipment Installers and Repairers, Except Line Installers	Certificate
Palomar	San Diego Electrical J.A.T.C. Electrician (Inside Wireman)	47-2111	Electricians	Certificate AS
Palomar	San Diego Sound Technician J.A.T.C. Sound Technician	49-2022	Telecommunications Equipment Installers and Repairers, Except Line Installers	Certificate AS
Palomar	San Diego Sheet Metal J.A.T.C. Sheet Metal Worker	47-2211	Sheet Metal Workers	Certificate AS
Palomar	Southwest Carpenter and Affiliated Trades J.A.T.C. (Carpenter) Carpenter	47-2031	Carpenters	Certificate AS
San Diego City	Operating and Maintenance Engineers Apprenticeship	17-3029	Engineering Technologists and Technicians, Except Drafters, All Other	Certificate AS
San Diego City	San Diego Gas & Electric (SDG&E) Lineman Apprenticeship	47-2111	Electricians	Certificate AS
ICT / Digital Media				
MiraCosta	Application Developer Apprenticeship	15-1252	Software Developers	N/A

College	Apprenticeship Program	SOC Code	SOC Occupation	Degree Type
MiraCosta	Cybersecurity Analyst Apprenticeship	15-1212	Information Security Analyst	N/A
MiraCosta	Data Analyst Apprenticeship	15-2051	Data Scientists	N/A
MiraCosta	Digital Marketer Apprenticeship	13-1161	Market Research Analysts and Marketing Specialists	N/A
MiraCosta	Help Desk Technician Apprenticeship	15-1232	Computer User Support Specialists	N/A
MiraCosta	Marketing Coordinator	27-3031	Marketing Coordinator	N/A
Palomar	San Diego City Civil Service Commission J.A.C. Communication Technician Apprenticeship	15-1231	Computer Network Support Specialists	Certificate
Life Sciences / Biotech				
MiraCosta	Food Safety and Biotechnology Compliance and Quality Registered Apprenticeship Program	13-1041	Compliance Officers	N/A
MiraCosta	South Bay Workforce Investment Board (Bio-Flex) Registered Apprenticeship Program	19-4021	Biological Technicians	N/A

Exhibit A2. Pre-Apprenticeship Programs by Sector

College	Pre-Apprenticeship Program
Energy, Construction, and Utilities	
San Diego College of Cont. Ed.	Multi-Craft Core Curriculum (Pre-Apprenticeship)
ICT / Digital Media	
MiraCosta	Application Developer Pre-Apprenticeship Program
MiraCosta	Cybersecurity Analyst Pre-Apprenticeship Program
MiraCosta	Data Analyst Apprenticeship Pre-Apprenticeship Program
MiraCosta	Digital Marketer Pre-Apprenticeship Program
MiraCosta	Help Desk Technician Pre-Apprenticeship Program
Life Sciences / Biotech	
MiraCosta	Life Sciences and Biotechnology Pre-Apprenticeship Program
MiraCosta	Food Safety and Biotechnology Compliance and Quality Registered Pre-Apprenticeship Program
Public Safety	
San Diego College of Cont. Ed.	Cal-JAC Pre-Apprenticeship
San Diego Miramar	Cal-JAC Pre-Apprenticeship EMT
San Diego Miramar	Cal-JAC Pre-Apprenticeship Fire Academy

Appendix B: College Interview Profiles

Summary of Interviews for Apprenticeship Development

Cuyamaca College

Cuyamaca College is in the early stages of apprenticeship development and is currently exploring opportunities in Early Childhood Education. Interviews suggest that leadership transitions and institutional caution have slowed progress, although interest in apprenticeship remains. College representatives expressed a desire for practical examples, peer mentorship, and employer outreach strategies that could help build internal confidence and momentum. WestEd characterized Cuyamaca College as an emerging college with opportunities to grow through regional partnerships and technical assistance.

Grossmont College

Grossmont College demonstrated strong institutional support for apprenticeships despite having no active registered apprenticeship programs at the time of the interviews. The college pursued a first-in-California artificial intelligence apprenticeship and has intentionally positioned apprenticeship as an innovative workforce strategy. Grossmont College is also developing noncredit-to-credit pathways and exploring stackable credentials that connect apprenticeships to longer educational pathways. WestEd identified Grossmont College as a developing college with strong institutional commitment and significant potential for future growth.

Imperial Valley College

Imperial Valley College has a long-standing apprenticeship partnership with the Imperial Irrigation District and continues to explore expansion into additional sectors. The college is interested in building career ladders, including pathways from Medical Assistant to LVN, RN, and BSN programs. Interviews revealed strong employer relationships in selected industries, although apprenticeship expansion has not yet extended broadly across the institution. WestEd characterized Imperial Valley College as developing, with opportunities to diversify employer partnerships and apprenticeship offerings.

MiraCosta College

MiraCosta College has developed one of the region's strongest apprenticeship infrastructures. The college reported multiple apprenticeship programs in various stages of development and employs a dedicated Director of Apprenticeship Program Development to coordinate employer engagement and program expansion. MiraCosta College is developing mirrored noncredit and for-credit pathways connected through Credit for Prior Learning and is

exploring innovative apprenticeships, including an affordable housing property management program that may be among the first of its kind nationally. WestEd identified MiraCosta College as active and expanding, with strong institutional commitment and employer engagement.

Palomar College

Palomar College is one of the region's most mature apprenticeship institutions, with building trades programs dating back to the late 1970s. The college ranks among the state's leaders in Related and Supplemental Instruction (RSI) hours, driven in part by one of its fastest-growing apprenticeship programs, the new and innovative Military Leadership Apprenticeship Program developed in partnership with Marine Corps University. Palomar College has built a multi-person staffing structure to support apprenticeship programs and partners with organizations such as ECEPTS and MAAC to expand Early Childhood Education apprenticeships and is exploring programs in zero-emissions vehicle technology. WestEd characterized Palomar College as a mature apprenticeship institution with extensive employer partnerships and established infrastructure.

San Diego City College

San Diego City College has developed multiple apprenticeship programs while simultaneously strengthening institutional systems that support long-term sustainability. The college uses shared tracking systems to coordinate apprenticeships across departments and is piloting a process for streamlining enrollment and fee-waiver components. City College has established dedicated counseling support for apprentices, accessible evenings and weekends. WestEd identified City College as active and expanding, with strong employer engagement and institutional infrastructure.

San Diego College of Continuing Education

San Diego College of Continuing Education (SDCCE) operates an Apprenticeship Readiness Program in the building trades and has leveraged noncredit instruction to accelerate program development. The college purchases certified curriculum to reduce approval timelines and uses flexible instructional models to expand access to apprenticeships. SDCCE also participates actively in regional partnerships and Communities of Practice designed to strengthen apprenticeship capacity. WestEd characterized SDCCE as active and expanding, with opportunities to continue growing apprenticeship pathways.

San Diego Mesa College

San Diego Mesa College has taken a distinctive approach to work-based learning (WBL) by making significant investments in paid internships and WBL integrated into the classroom. Over half of San Diego Mesa College students participate in a WBL experience. Rather than focusing primarily on registered apprenticeships, San Diego Mesa College has prioritized

building employer partnerships, expanding access to paid internships, and embedding WBL across the curriculum. WestEd described San Diego Mesa College as an emerging institution whose position reflects a deliberate institutional strategy, noting that the college's employer partnerships and structured internship model may also provide a strong foundation for future apprenticeship development.

San Diego Miramar College

San Diego Miramar College has established mature apprenticeship programs, particularly in diesel technology, through long-standing partnerships with employers such as MTS and Hawthorne Caterpillar. The college is also exploring apprenticeships in aviation and zero-emissions vehicle technology while formalizing existing programs to strengthen DAS registration and funding opportunities. Miramar emphasizes stackable credentials and industry-recognized accreditations that support long-term career advancement. WestEd characterized San Diego Miramar College as one of the region's most mature apprenticeship institutions.

Southwestern College

Southwestern College has developed several apprenticeship-related initiatives and employer partnerships, including the robust U.S. Navy SWRAP program. However, these efforts remain decentralized across the institution and are limited by the lack of dedicated staffing and strong institutional support. The college uses internships and work-based learning to establish employer relationships before introducing apprenticeship opportunities and has leveraged Strong Workforce Program funds to support employers and students. Southwestern College is also investing in marketing and communications strategies to increase awareness of apprenticeship among employers, students, and college leaders. WestEd characterized Southwestern College as a developing institution with opportunities to strengthen coordination and establish a more unified apprenticeship strategy.

Appendix C: Methodology

For this study, the San Diego & Imperial COE 1) examined data on registered apprenticeships from the California Division of Apprenticeship Standards (DAS); 2) collected apprenticeship program information from the San Diego & Imperial Community Colleges; and 3) reviewed qualitative findings from interviews that WestEd conducted with apprenticeship program leads at the regional colleges.

1. Registered Apprenticeship Data

California's Division of Apprenticeship Standards (DAS) is the agency that oversees registered apprenticeship programs statewide, and DAS maintains a [Program Search Tool](#),⁵⁸ [Registration Dashboard](#)⁵⁹ to track registered programs and active registrations, and [Completion Dashboard](#)⁶⁰ to track apprenticeship completions. The San Diego & Imperial COE downloaded data for apprenticeships and pre-apprenticeships from these dashboards in June 2026 to summarize the landscape of programs in the region and statewide. At the time of analysis, the Registration Dashboard indicates that data was last published February 19, 2026, while the Completion Dashboard indicates the last published date was April 1, 2026. Active-registration counts should also be interpreted with caution because they fluctuate as apprentices enter, complete, or leave programs. Please note that these dashboards are updated periodically and provide a snapshot in time, so data may change after the publication of this report.

To compare apprenticeship activity across sectors, the San Diego & Imperial COE assigned the 73 industry categories listed in the DAS Registration Dashboard to the 11 California Community Colleges Chancellor's Office (CCCCO) sectors.⁶¹ The analysis compared the 2026 snapshots with results reported in the 2024 assessment.

2. Regional Apprenticeship Program Repository

In 2025, the San Diego & Imperial COE recommended that the region address gaps in apprenticeship program data: DAS and the California Community Colleges Chancellor's Office each had different lists of registered apprenticeship programs in the region. The San Diego & Imperial Community Colleges Regional Consortium funded research experts at the community colleges to support Career Technical Education (CTE)-related data and research needs. The COE guided these experts in developing a regionwide apprenticeship data repository,

58 dir.ca.gov/databases/das/aigstart.asp.

59 "Registration Dashboard." California Division of Apprenticeship Standards. Accessed June 16, 2026. public.tableau.com/app/profile/california.apprenticeship/viz/RegistrationDashboard_16301055851260/RegistrationDashboard.

60 "Completion Dashboard." California Division of Apprenticeship Standards. Accessed June 16, 2026. public.tableau.com/app/profile/california.apprenticeship/viz/CompletionDashboard_16301020658110/CompletionDashboard.

61 cccco.edu/About-Us/Chancellors-Office/Divisions/Workforce-and-Economic-Development/Strong-Workforce-Program/SWP-Archive/Events/K12-SWP-Industry-Sector-Crosswalk.

designed to fill information gaps.⁶² The San Diego & Imperial COE summarized the repository data in May and June 2026, after which the colleges reviewed their information for accuracy. Please note that apprenticeship program data focused on registered apprenticeship programs only, and represent a point-in-time snapshot. The data may change as programs are added, modified, or discontinued. Colleges are encouraged to contact the San Diego & Imperial COE with any updates to their program information.

3. Interviews with Apprenticeship Leads

Commissioned by the San Diego & Imperial Community Colleges Regional Consortium, WestEd conducted qualitative interviews with CTE deans, apprenticeship coordinators, and other interest-holders across the 10 San Diego & Imperial Community Colleges. Before the interviews began, WestEd reviewed publicly available program information such as college websites, catalogs, and the San Diego & Imperial Apprenticeship Program Repository. The scan familiarized interviewers with apprenticeship efforts at each college and helped create the interview protocol used.

Interview design and protocol development. WestEd developed a semi-structured interview protocol organized around six topics: each college's current apprenticeship programming and development efforts, employer partnerships, internal institutional engagement, curriculum issues, enablers and barriers to growth, and ideas for regional support. The protocol was designed to surface both what colleges are doing and what they believe the region could do to accelerate apprenticeship across the area.

Data collection. WestEd conducted interviews via Zoom between November 2025 and March 2026 with CTE leaders, apprenticeship coordinators, and practitioners at all ten community colleges in the San Diego and Imperial region. In most cases, a single lead contact was identified at each college; at several colleges, multiple staff members participated in a joint session. Data collected and perspectives summarized from these interviews reflect those of the interviewees and may not capture the full range of institutional views (e.g., faculty, students, or employers).

The protocol that WestEd used to conduct these interviews is provided below.

Interview Protocol

This initiative will map the current landscape of apprenticeship programs across regional community colleges to identify best practices and develop resources that support program development and expansion.

We recognize that colleges are at very different stages in their apprenticeship journey—some have well-established programs, some are in early development, and others are exploring which apprenticeships might fit their mission and context. All perspectives are valuable.

⁶² "San Diego & Imperial Apprenticeship Program Repository." San Diego & Imperial COE. Accessed June 2026. docs.google.com/spreadsheets/d/1Mczswbr6Q2sl8yb22Z7Ses7lOdp1V3j/edit?gid=1566986676#gid=1566986676.

Through conversations with colleges across the region, we aim to:

- Document existing registered apprenticeships and programs in development
- Understand successful models, essential practices, and lessons learned
- Identify pain points, barriers, and needed supports
- Capture the value of apprenticeships through real stories and outcomes
- Identify practical tools and resources to support colleges at various stages of readiness

Informed Consent

Recording and Use of Information: With your permission, we will audio record this conversation to ensure accuracy in capturing your insights. Recordings will be used only by the project team for analysis and report development and deleted after analysis has been completed.

Confidentiality and Attribution: We want to be transparent about confidentiality limitations. Given the relatively small number of community colleges in the region, individuals familiar with the colleges could potentially infer who participated in this study, even without explicit identification. However, we commit to the following:

- We will not use your name or identifying details in any reports or deliverables without your explicit permission
- Any quotes or specific examples we wish to attribute directly to you or your college will be shared with you for review and approval before being included in external reports
- You will have the opportunity to clarify, modify, or withdraw any attributed statements
- Aggregated findings and themes will not identify individual participants

Your Participation: Your participation is voluntary. You may decline to answer any question or end the interview at any time. Do you consent to participate in this recorded interview under these conditions?

Interview Questions

Duration: Approximately 60 minutes

- Please share your role at the college, and how you're connected to the college's apprenticeship programs (or workforce development/CTE if not directly involved with apprenticeships).
- How would you describe apprenticeship to someone who's not familiar with the idea? Note, when we say 'apprenticeships,' we're referring broadly to registered apprenticeships or those in development.
- Where is your college currently with its apprenticeship programs?

History and Development

- Please share with us the story of how apprenticeships came to be—or didn't—at your college. How did you get to where you are today?

Partnerships and Stakeholder Engagement

- Partnerships are central to apprenticeships. Talk about your experience with employer and training center partnerships.
- For active programs: How did these partnerships form? What makes a partnership work well? Where have there been challenges?
- For programs in development: What employer or industry connections could support apprenticeships? What's hard about building partnerships?
- For colleges with no activity: Are employers asking for apprenticeships? What would it take to build the partnerships needed?
- How have faculty, leadership, and other internal stakeholders been involved?
- For active programs: Who were the champions? How did you get faculty buy-in? How did you navigate any internal resistance?
- For programs in development: How aligned is leadership? What's your strategy for building internal support?
- For colleges with no activity: Where might you find champions if you wanted to move forward? What would leadership need to see?

Curriculum and Implementation

- What's your experience or thinking about developing apprenticeship curricula?
 - For active programs: Did courses already exist or did you create new ones? How did you work through curriculum approval? How do apprentices earn credentials or degrees? How do employers participate in shaping curriculum or mentoring apprentices?
 - For colleges with little/no activity: What programs at your college might have potential to support apprenticeship programs? Why those?
 - For those of you with active programs, help us understand how things actually work on a day-to-day basis.
- Who does what? What happens at the college vs. at the employer/training center?
- How do you coordinate across these different sites?
- How is training sequenced?
- What student supports are in place?
- What's harder than you expected? What's working better than expected?
- Skip this question entirely if no active programs; keep brief if still in early implementation.

Challenges and Success Factors

- What have been—or what do you anticipate being—the biggest barriers or pain points around apprenticeships?
- What factors enable success with apprenticeships—or would enable success if you were to pursue them?

Impact and Value

- For colleges with programs: What impact or value have you observed? Can you share any student or employer stories?

Examples:

- Student success examples or testimonials
- Employer feedback
- Measurable outcomes (completion, employment, wage gains)
- Program growth or expansion
- Unexpected positive outcomes
- For colleges without programs: Skip or pivot to: What outcomes would you hope to see if you had apprenticeship programs?

Regional Support and Future Direction

- What gaps or opportunities do you see where enhanced regional structures or support would be valuable for apprenticeship development, especially given your college's unique needs and challenges?
- What are your next steps or aspirations around apprenticeships?

Closing

Before we wrap up:

- Are there documents, data, or materials you could share with us? (program descriptions, funding applications, course outlines, enrollment data, partnership agreements, etc.)
- Are there current or former apprentices who might be willing to talk with us?
- Are there employer partners or training center representatives we should interview?
- Who else should we talk to—either at your college or at other colleges?
- Is there anything else about apprenticeships at your college—or in the region—that we haven't talked about but should know?

Acknowledgments

San Diego & Imperial Center of Excellence

- » Dr. Tina Ngo Bartel, Executive Director
- » Dr. Priscilla Fernandez, Research Consultant
- » John Edwards, Research Analyst

San Diego & Imperial Regional Consortium

- » Dr. Danene Brown, Regional Chair
- » Dr. Joseph Stark, Regional Director, Apprenticeships

WestEd

- » Greg Hill Jr., Senior Research Associate
- » Dr. Marisa Castellano, Senior Research Associate II
- » Joy W. Lewis, Program Manager

Important Disclaimers and Limitations

All representations included in this report have been produced from primary research and/or secondary review of publicly and/or privately available data and/or research reports. This study examines the most recent data available at the time of the analysis; however, data sets are updated regularly and may not be consistent with previous reports. Efforts have been made to represent data that is available and to qualify and validate the accuracy of the data; however, neither the Centers of Excellence (COE), COE host district, nor California Community Colleges Chancellor's Office are responsible for the applications or decisions made by individuals and/or organizations based on this report or its recommendations.

