



California  
Community  
Colleges

# The State of Apprenticeships in California

## Growth and Learnings from the Golden State

### AT A GLANCE

California's apprenticeship programs are booming, thanks to increased funding and state support. While progress is significant, the California Community College Chancellor's Office aims to do more. This report analyzes the current apprenticeship landscape, identifies promising practices, and recommends strategies to expand access, equity, and economic opportunity for Californians through apprenticeships.

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This report was commissioned by the California Community College Chancellor's Office.

# About JFF

Jobs for the Future (JFF) drives the transformation of the U.S. education and workforce systems to achieve equitable economic advancement for all. For more information, visit [www.jff.org](http://www.jff.org)

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# Methodology

JFF captured information for this report from intensive interviews, desk research, and a statewide survey of apprenticeship leaders and practitioners to share lived experiences that have affected the utilization, implementation, and sustainability of apprenticeships and pre-apprenticeships in California. We refer to the interviewees in this report as pioneers for their ability to navigate through the challenges of setting up new apprenticeship programs in the face of complexities. The statewide survey was administered from December 2023 to January 2024 and was open to all California-based apprenticeship and/or pre-apprenticeship practitioners.



# Foreword from California Community Colleges Chancellor Dr. Sonya Christian



Six years ago, Governor Gavin Newsom laid out his administration's ambitious goal to expand California's apprenticeship system to serve 500,000

apprentices by 2029. While the state has made significant progress towards this goal, California community colleges know we can do more. Our Vision 2030 framework focuses on expanding registered apprenticeship pathways to empower the 6.8 million low-income Californians lacking postsecondary credentials, facilitating access to living wage jobs. And we are establishing apprenticeships beyond the traditional construction and building trades and into high-growth sectors like healthcare, life sciences, and information technology.

This report guides the colleges in designing strategies for expanding apprenticeships to meet Vision 2030 goals and strengthening partnerships with state agency partners, like the California Labor and Workforce Agency, so that we align the state's workforce development objectives for its extensive labor force. Furthermore, California community colleges will advocate to the Governor's Office that California emulate recent Federal Executive Order 14119 by President Biden, calling for

registered apprenticeships in California state and local government agencies, asking for increased interagency and government/business collaboration in progressing policy, and promising an expanded mandate by the Governor and Legislature to require all state and local government contracts provide new and innovative apprenticeship opportunities.

Given their proven track record of allowing learners to earn money, acquire valuable skills, experience, and credentials, while providing employers with the talent they need to remain competitive in the marketplace, apprenticeships must be a cornerstone of California's long-term career development system.

As the primary engine of social and economic mobility, California's 116 community colleges are in nearly every community across the state and are uniquely positioned to adapt to local and regional workforce needs. We encourage colleges, employers, workers, learners, and families to review this report and identify ways to contribute to our state's apprenticeship goals. Together, we will enhance student success, prioritize employment, and close achievement gap and keep our economy strong.

**Dr. Sonya Christian**

California Community Colleges Chancellor



# Contents

- Where We Stand: Apprenticeships are Growing..... 5
- California’s Apprenticeship Investments..... 6
- California’s Current Apprenticeship Landscape ..... 9
- The Road to Scale: Recommendations and Opportunities ..... 13
- Securing Sustainable Funding..... 14
- Build Industry Partnerships and Employer Engagement ..... 19
- The Future of Apprenticeship in California..... 27
- Endnotes..... 29



# Where We Stand: Apprenticeships are Growing

In 2018, California Governor Gavin Newsom set an ambitious goal to expand the apprenticeship system and serve 500,000 apprentices by 2029. Halfway into this endeavor, Jobs for the Future conducted an analysis on California's progress towards meeting this goal and to share best practices gleaned from the field. **Here's what we found:**

- The number of apprentices registered with the Division of Apprenticeship Standards grew 11%, with 93,798 apprentices registered in 2023 versus 84,217 in 2018.
- The most significant increases in apprenticeships over the last five years were in manufacturing (473%), health care (400%), barbers and cosmetologists (95%), and IT (45%).
- The top barriers to apprenticeship growth in California are access to sustainable funding and employer engagement.
- Innovations in employer engagement, apprenticeship models, and funding streams are demonstrating early successes, but need to be replicated at scale.

With a high demand for talent—the state has more than one million unfilled job openings—and with the Governor's commitment to a systemic overhaul of career education and work-based learning, **the conditions for accelerated growth have never been better.**



# California's Apprenticeship Investments

The state of California has invested billions towards bolstering apprenticeships and workforce initiatives, with over \$221 million earmarked in the 2023-2024 state budget alone.<sup>1</sup> **These investments have been directed towards numerous initiatives, including:**

## **California Apprenticeship Initiative (CAI):**

Launched by the California Community College Chancellor's Office in 2016, this grant program supports the development of apprenticeships in nontraditional sectors such as healthcare, education, and technology, and boosts diversity, equity, and inclusion in apprenticeship. For the 2024-2025 budget year, \$30 million is proposed for this program to support apprenticeship planning, implementation, and expansion in secondary institutions and community colleges.

## **Apprenticeship Innovation Funding (AIF):**

Introduced in 2022 under the Interagency Advisory Committee on Apprenticeship (IACA) to develop new and innovative apprenticeship opportunities, this fund earmarks \$135 million over a three-year period. Organizations and firms can apply for support or training funding based on their specific needs. While the funding does not fully cover apprentice expenses, it does offer reimbursements for apprentice enrollment and successful completion. Under the 2024 May budget revise, \$40 million was proposed in cuts.<sup>2</sup>



## **California's Budget Deficit**

For California's 2024-2025 budget year, the state faced a \$38-billion deficit.<sup>3</sup> While the governor anticipated using the "rainy day fund" to cover about half, the state is exploring reductions in its investment in registered apprenticeship. For example, the Apprenticeship Innovation Fund (AIF) and the California Opportunity Youth Apprenticeship (COYA) grant program both saw substantial proposed cuts. However, through the May Revise, only COYA was spared from multi-million dollar funding cuts.

**The California Opportunity Youth Apprenticeship Grant (COYA):**

Established under 2023's [California Senate Bill 191](#), COYA was established to serve youth who are disconnected from the education, employment, and housing systems. During its inaugural funding year, COYA awarded \$31 million in pre-apprenticeship and apprenticeship grants to organizations serving priority populations in California.<sup>4</sup>

**Related and Supplemental Instruction Reimbursement Program (RSI):**

For the 2023–2024 budget year, \$93 million is proposed for this program to reimburse secondary institutions and community colleges for the hours of instruction that they provide to apprentices.<sup>5</sup>

**In 2018, funding opportunities for new and emerging occupations were not as widely available.**

Over the past 5 years, California has expanded access to funding opportunities that have driven more unique stakeholders to invest in apprenticeship pathways, including workforce boards, K-12 education, and adult education programs. Recognized as a core strategy to connect the state's education and career systems, apprenticeship is receiving special attention from California's leadership by way of expanded funding and access to apprenticeship opportunities.



# The Value of Apprenticeship for California's Economy

California's investments in growing registered apprenticeship have been substantial, and for good reason. Apprenticeship is an internationally proven workforce training model that combines paid on-the-job learning and formal classroom or online instruction to help a worker master the knowledge, skills, and competencies needed for career success. **In return, these programs provide significant benefits to employers, workers, and the California economy, such as:**



## 1. Cost savings for employers

According to a report from the Society for Human Resource Management (SHRM), recruitment can cost three to four times a person's salary<sup>6</sup> so retention of skilled workers is critical for employers' bottom lines. Apprenticeships also enable tailored training for employers and yield a 90% retention rate.<sup>7</sup> For these reasons, and for the productive work of apprentices during their training period, apprenticeships yield a positive return on investment for employers.<sup>8</sup>

## 2. Workforce flexibility

Apprenticeships offer nimble, customized training, that evolve in parallel with the technological changes in the workplace. This enables employers to fill crucial roles and respond effectively to market changes, technological advancements, and industry trends, thus enhancing financial resilience and competitiveness.

## 3. Economic growth

As fears of a recession are fading, California's economy is projected to continue to grow,<sup>9</sup> leading to more opportunities for apprenticeship. Apprenticeships can boost California's economy, offer financial opportunities, and ensure a skilled workforce for industry demands with an emphasis on middle-skill occupations.

## 4. Increased earnings for workers

As a core part of the apprenticeship model, apprentices receive increases in their compensation as they gain practical, on-the-job experience. According to the Urban Institute, apprentices saw their earnings increase 49% on average,<sup>10</sup> with an average national starting wage of \$80,000 annually.<sup>11</sup>



# California's Current Apprenticeship Landscape

California leads the United States in the number of apprentices and apprenticeship programs, with more than double the number of apprentices of the country's runner up, Texas.<sup>12</sup> This is due to the combined strength of the California economy and the value that the state has placed on expanding apprenticeships into new sectors of its economy. According to Governor Newsom as he set the goal to serve 500,000 apprentices, "In an increasingly global world, apprenticeships provide the education and training necessary to prepare Californians for the jobs of today and tomorrow."

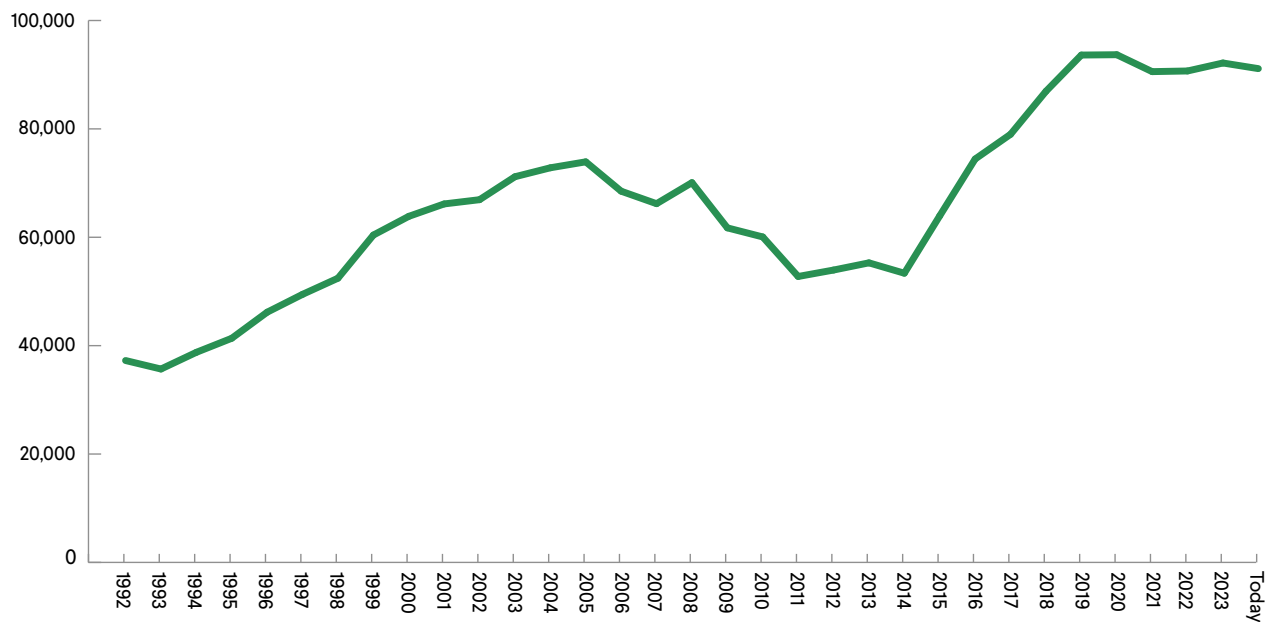
*Our analysis uncovered the following insights into California's current apprenticeship landscape:*

**The number of apprentices in California more than doubled in the last decade.**

FIGURE 1

## California's Increase in Apprentices by Year

In 2023, 96,927 apprentices were registered across both traditional and emerging occupations, almost doubling the number of registered apprentices since 2014.



Source: Division of Apprenticeship Standards



## The resilient response of California's apprenticeship programs to COVID-19.

The COVID-19 pandemic, while presenting significant challenges, has underscored the resilience and adaptability of apprenticeship programs in California. Lockdowns and social distancing disrupted on-the-job training, making it difficult for apprentices to gain essential hands-on experience. While, many industries faced financial strain, leading to reduced hiring or layoffs, this period of adversity was met with innovative solutions, such as increased digitization of work. Programs integrated more digital tools into apprenticeship training that enabled remote learning and expanded access to educational resources, and established a new norm in meeting students where they are. As a result, apprenticeships have not only rebounded but emerged stronger and taken market share in the academic space as a valuable pathway for skills development and workforce participation in the post-pandemic era.



## Youth and young adults benefit from the growing apprenticeship system.

According to our statewide survey, approximately 67% of California's pre-apprenticeship and apprenticeship programs focus on serving youth ages 16 to 24. [According to the state's Division of Apprenticeship Standards \(DAS\) dashboard](#), 46% of all new apprentices in 2023 were ages 16 to 24, showing a notable focus on this age range. In addition, apprenticeships for high school-age youth got a major boost with the SB 191-funded COYA grant program and the California Youth Apprenticeship Committee which is developing a comprehensive youth apprenticeship plan for California.

## Women are woefully underrepresented within the apprenticeship ecosystem.

Females made up approximately 10% of all new DAS registered apprentices in 2023.<sup>13</sup> Regardless of the uptick in new and emerging occupations, historically male-dominated sectors continue to comprise the majority of all new programs. Unless apprenticeships become more prevalent in occupations where women make up at least half of the workforce, we will not see a substantial correction to the gender imbalance.

## Practitioners focus on supporting underrepresented populations.

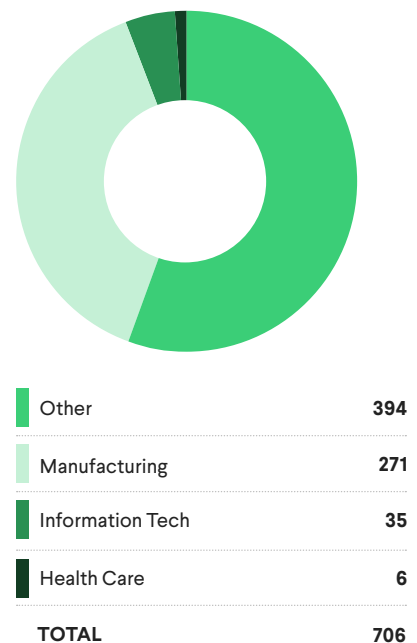
Survey data revealed apprenticeship practitioners are intentional about serving underrepresented populations. For example, 30% of apprenticeship practitioners focused on serving individuals with disabilities and 32% prioritized serving veterans. In addition, the majority of programs in California concentrate their efforts on serving individuals of color, including those who identify as African American, Latine, Native American, and Asian American. It is premature to determine whether the increased funding and focus on underrepresented populations within new and emerging apprenticeship programs have increased participation and completion rates; nonetheless, it remains a critical area for California's practitioners and employers to deliberately prioritize.

## New monitoring of pre-apprenticeships gives insight into a vibrant market.

A new and important addition to California's dataset is the monitoring of pre-apprenticeship programs, which according to the DAS dashboard, over 1,210 such programs were registered as of December 2023. There is more gender balance amongst pre-apprentices, with 42% identifying as female or nonbinary. However, not all regions of the state have registered pre-apprentices, as this is a new opportunity within California. New and emerging occupations are still slow to grow, however with CAI and COYA grants providing funding for pre-apprenticeship, there is time and opportunity to increase access to pre-apprenticeships in these sectors.



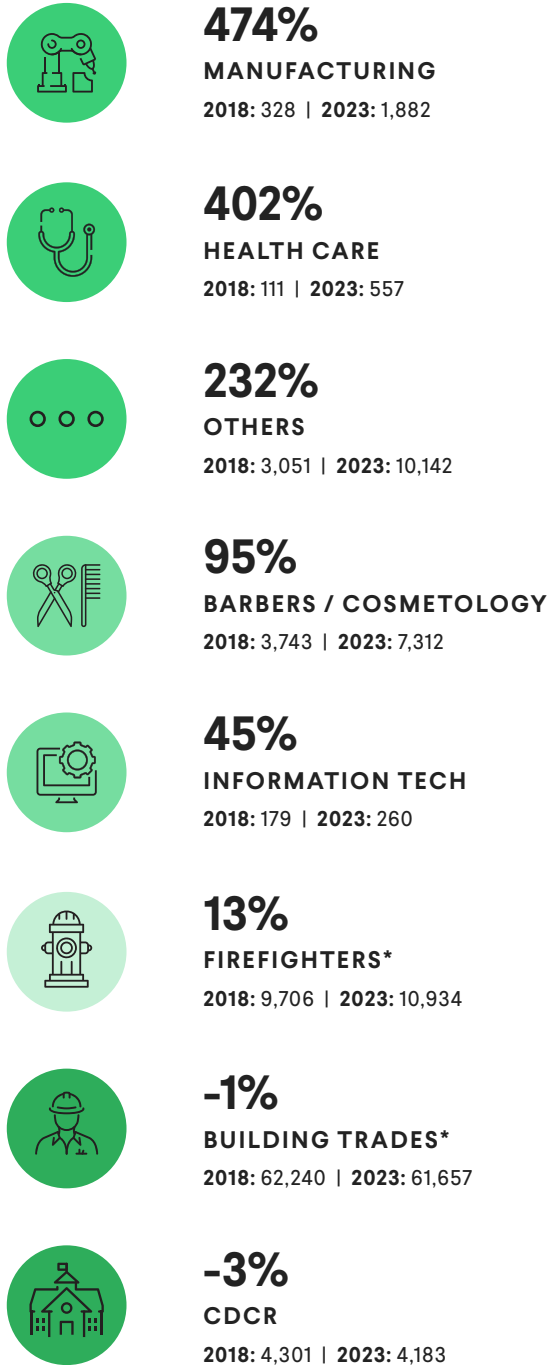
FIGURE 2  
Pre-Apprenticeship Program Registration in 2023 (by IACA sector)



Source: Division of Apprenticeship Standards

FIGURE 3

## California's Apprenticeship Growth (2018–2023)



## Apprenticeships are increasing in new and emerging occupations.

Manufacturing, information technology, barbers/ cosmetology, and health care apprenticeships together saw an increase of over 5,500 apprentices from 2018 to 2023. Most of the growth in the last 5 years occurred in non-traditional (non-building trades and non-firefighting) apprenticeships which grew from 13,602 to 24,336 and now make up a quarter of all apprenticeships in California. The “other” category includes emerging occupations such as teaching, automotive repair, and food service. The California Department of Corrections and Rehabilitation (CDCR) hosts different occupations under IACA from within the justice, public order, and safety industry, including state park officers, sheriffs, police officers, correctional officers, and other occupations.



Source: Division of Apprenticeship Standards, 2018 and 2023

\* These occupations are not governed by IACA.

# The Road to Scale: Recommendations and Opportunities

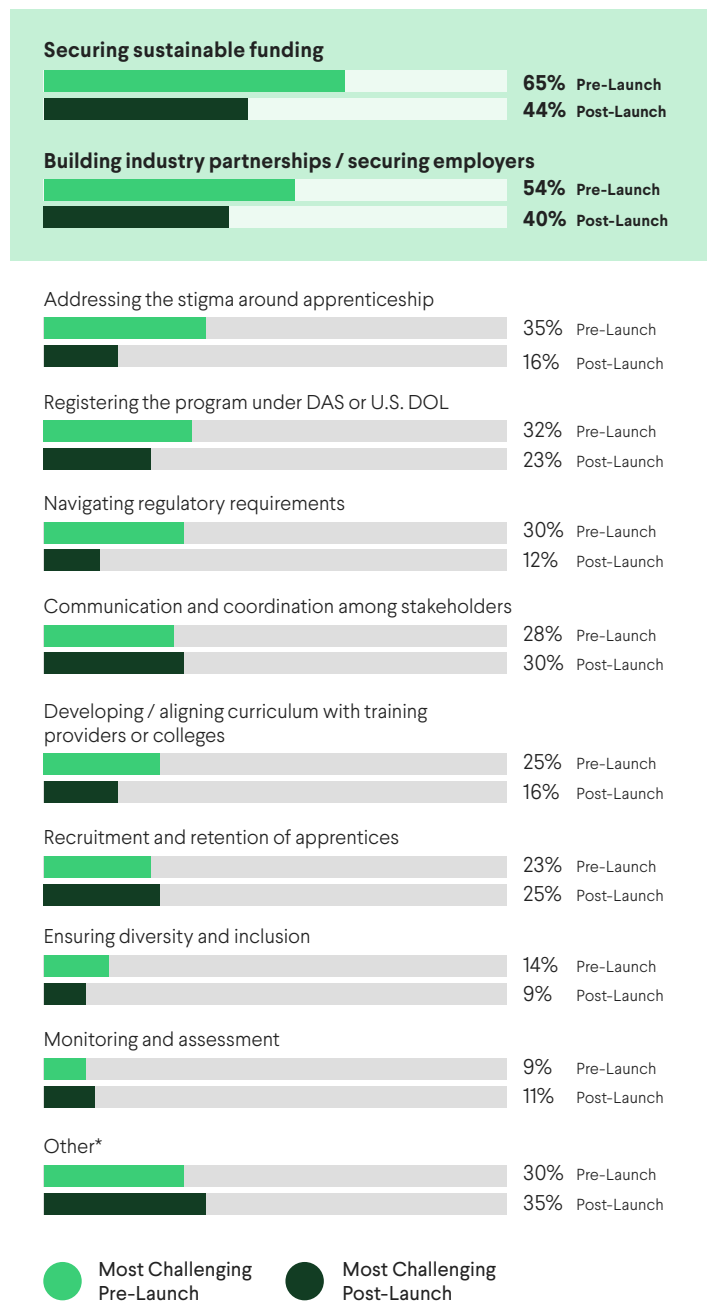
California has taken significant strides to broaden the pool of apprenticeship providers and to increase accessibility to these gold-star programs. Yet despite this progress in accessibility, there remains a recognized need to facilitate scaling and attract new partners to further expand the reach and impact of apprenticeship initiatives.

JFF interviewed 12 pioneer apprenticeship leaders, or individuals who have been working to advance nontraditional apprenticeships over multiple years. JFF also conducted a survey by which more than 100 respondents weighed in on the challenges they faced in launching and sustaining their apprenticeship programs. **From these efforts, JFF learned that the largest perceived barriers for practitioners in the field to launch and sustain apprenticeship and pre-apprenticeship programming are the ability to secure sustainable funding and to build employer and industry partnerships.**

Source: JFF's Field Survey: Informing the California Apprenticeship Landscape" distributed on December 11, 2023. All respondents could select multiple options.

\* Other pre-launch challenges cited include: challenges with union pushback; delays from program registration under DAS and contracting under CAI; aligning the needs of apprentices with a college's operations; Grant and program management capacity at college levels. Other post-launch challenges cited include: navigating organizational bureaucracy to ensure programs are sustained; continual delays in program registration and contracts under CAI funding; retaining apprentices; trying to utilize WIOA and other funds to sustain apprenticeship programming.

FIGURE 4  
Challenges Affecting Apprenticeship Programs, 2023



# Securing Sustainable Funding

According to our survey, the funding landscape is challenging for most apprenticeship and pre-apprenticeship practitioners in California. Each pioneer interview confirmed this notion, despite their shared and deep understanding of the funding landscape in California. While the state has multiple funding opportunities for unique grantees, the sheer multitude of funding streams themselves raises the overall complexities. While grantees expressed gratitude for the funding they secured, they also shared concern about the time and staff requirements that come with each new solicitation.

The chart below lists the wide variety of unique funding streams used by many California apprenticeship practitioners.

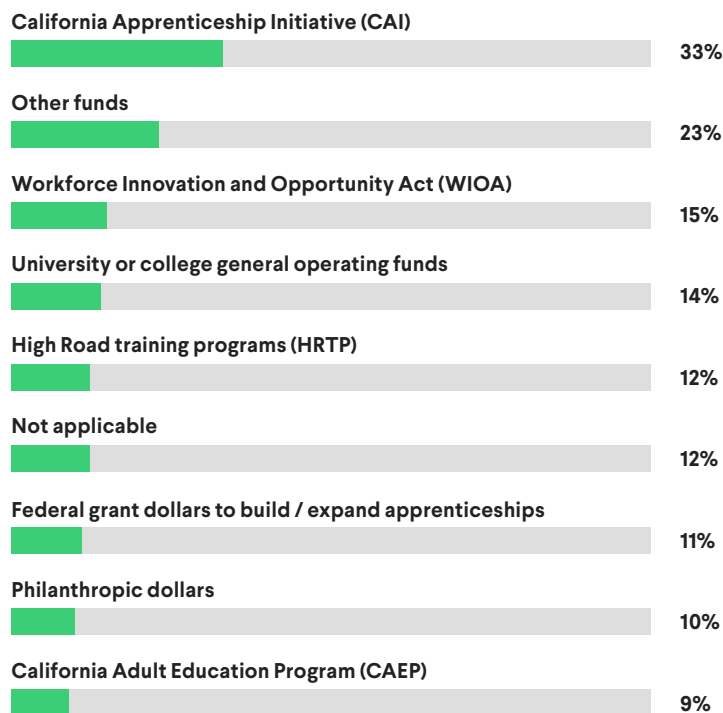


*“[There is] quite a bit of public funding that could be leveraged towards apprenticeship that just isn’t...the first step would be to maximize what we already spend, especially while we’re in a deficit. This is a moment that’s probably critical.”*

**Charles Henkels**  
Executive Director, LAUNCH

FIGURE 5

## Percentage of Programs Utilizing Fund Types



CAI funding has reached a large portion of the state’s IACA apprenticeship programs. “Other funds,” which includes Strong Workforce, AIF, RSI reimbursements, subgrantee CAI funding, donations, and grants from local government, such as county supervisors and the district attorney, are significant support dollars that help amplify apprenticeship programming. However, the sheer depth of apprenticeship support funding and the requirements for each funding bucket has created confusion and challenges amongst the state’s apprenticeship practitioners.



As per the survey results, **over 75% of apprenticeship sponsors and intermediaries in California manage an annual operating budget for their apprenticeship program alone of \$500,000 or less.** This places an even higher premium on creatively funding programs and leveraging staff time and resources to ensure low turnover and consistent staffing. Pioneer programs also reported using grant funds to staff strong marketing efforts including events and community forums to garner partnership support and employer engagement. Meanwhile, new programs tend to focus on core staffing and are less likely to be able to afford a broader set of funded activities. **The case studies below review four pioneers and how each program sustains itself with unique funding models.**

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## Case Studies: Each Funding Ecosystem Is Unique

*Each pioneer has a unique funding ecosystem based on their region, fiscal agent, previous experience, and organizational capabilities.*



### Los Angeles

Chris Cagle, director of the South Bay Workforce Board (SBWIB), identified 13 unique funding

sources he leverages

to implement and sustain apprenticeship programming, including CAI funding, U.S. DOL competitive grant dollars, WIOA, and the Los Angeles general fund among others. For example, The SBWIB oversees over \$20 million of apprenticeship funding across multiple CAI grants and a \$12 million DOL Scaling H-1B grant. To be strategic, Director Cagle **intentionally finds partnerships to subgrantee across other federal and state grants, which gives him the freedom to leverage staff time and universal resources.** “The SBWIB,” he notes “is always applying for grants, and does not use any entire grants to cover a single staff person—they leverage staff time across funding buckets.”



### Central Valley

Ashley Land is the director of apprenticeships at the College of the Sequoias,

a Minority Serving Institution, which has three Central Valley campuses in Visalia, Tularia, and Hanford. She oversees pre-apprenticeship and apprenticeship programming focused on six occupations, including nursing. Ashley points to using **Strong Workforce to fund staff who support apprenticeship programming, the Learning-Aligned Employment Program (LAEP) to cover apprentice wages, and WIOA to fund apprentice training, which is through a partnership with their local workforce investment board.** “It [WIOA] pays for the entire cost of their education. So, for my nursing students, it’ll pay for their uniforms, their books, their nursing exams, their fees, their licenses,” Ashley explained. She also uses LAEP to “pay a percentage of their [apprentice] wages, and it is a comparable wage. And the goal of the grant is [so]... individuals that are in the workforce have a comparable wage, and the job that they’re doing relates to their career.”



### Shasta

Lisa Hoveman,  
the director of

apprenticeship programs at Shasta College, disclosed that **industry organizations provided seed funding for apprenticeship startup costs** for a forestry and logging program, which secured industry support from the beginning. Shasta's other apprenticeship programs are grant-funded. Lisa also pointed out the value of other workforce partners: "We partner with workforce boards, when possible, to secure supplemental funding for wraparound services that can be provided to apprentices." Shasta College refers apprentices to their workforce board WIOA partners, which offer funding for professional attire, job-required equipment, books, supplies, and transportation assistance like gas cards, as well as aid for tuition and certification or licensing fees.



### San Diego

Mike Roberts is the  
CEO of Creating Coding

Careers, a nonprofit with a dual U.S.DOL and DAS registered apprenticeship and pre-apprenticeship program in software engineering and quality assurance (QA). Mike focuses heavily on ensuring a diverse representation of candidates for his programs, including a strong focus on veterans. Because Mike's organization started as a high-intervention intermediary program, the organization acts as the employer of record for many companies. **As an employer of record, fee-based services comprise about two-thirds of his organizational revenue**, with the remaining third deriving from a range of philanthropic, state, federal, and national intermediaries such as Appteon. Mike uses the full national apprenticeship ecosystem, with a full fee-for-service intermediary model to help justify costs and bring in unrestricted revenue.





## Recommendations for California on Funding

### Continue financial investments with increased flexibility and visibility for field practitioners.

- Ensure that state grant funding is on multi-year cycles and allows grantees to budget for a long runway of program development with built-in nice-to-have costs, as well as required full-time staff. For example, since most apprenticeship programs in California are operating on less than \$500,000 annually in operation and staff costs, programs should not have to decide between hiring full-time staff and funding other important startup activities as well as marketing, employer engagement, and participant outreach activities.
- Practitioners should use a wide range of private, public, and philanthropic dollars to start and sustain their programs. Likewise, the state should create a streamlined central funding portal that contains links to funding opportunities, trainings, webinars, toolkits, etc., and share them universally with apprenticeship practitioners, regardless of their fiscal agent.

### Mirror state apprenticeship funding with the real cost per apprentice.

- According to the pioneer interviews and survey results, the average real cost across all programs is \$22,500 per apprentice. Yet some programs claimed their cost per apprentice was over \$100,000 due to training materials and machinery costs. As a result, pioneers and respondents recommended the state recognize that some high-demand occupations incur higher costs per apprentice due to training equipment costs, heavy machinery or equipment, licensure requirements, and costs of finding trained instructor personnel, and allow for costs to be incurred through grant opportunities with justification, even if the costs are one-time costs.



**Any state-funded work-based learning initiatives should lead to, incentivize, or encourage apprenticeships.**

- The state provides billions annually to support the creation, implementation, and expansion of work-based learning programs in both education and workforce initiatives. However, apprenticeships are not required, unless within apprenticeship-specific funding, as noted in this report, and other work-based learning vessels (such as internships) are often utilized. Because registered apprenticeships are the gold standard in talent development, with the highest return on investment and the best career outcomes, career pathways that incorporate work-based learning strategies should incorporate registered apprenticeships. As many sectors, including the public sector, grapple with sustaining employees, **any state-funded, work-based learning initiatives, especially those in the public sector, should require a portion of new hires or trainees to join via apprenticeships.**
- Apprenticeship practitioners spend much of their time engaging different industries, however many of the institutions themselves, while interested in providing apprenticeships for entry-level or upskilling eligible employees, may not have opportunities to train up the future of the workforce and education systems. As per the interviews and survey results, attrition in apprenticeship coordination and administration roles is high, particularly within colleges. One important way to ensure that the future of the workforce is maintained is to train up staff through a coordinated apprenticeship program that ensure consistency and sustainability among apprenticeship practitioners.

**Ensure all components of the apprenticeship ecosystem are appropriately invested in and accountable.**

- In August 2023, Governor Newsom signed the “Freedom to Succeed” executive order, which calls for an integrated career education system for the state’s residents.<sup>14</sup> As the order calls for California’s top leaders in education, workforce development, and economic development to formulate a master plan on career education by October 2024 that strengthens career pathways, emphasizes hands-on learning, and enhances universal access and affordability through streamlined collaboration across government departments and the private sector, the state should use this opportunity to ensure data systems align, funding opportunities are available to a wide array of stakeholders across workforce and education, and that ecosystem partners are encouraged to collaborate rather than compete.
- Like all systems, apprenticeship requires layers of investments to be successful. Apprenticeship thrives when practitioners are supported to solve talent supply issues with optimal funding, employers, and infrastructure support, and with a cohesive effort from unified partners in secondary and postsecondary education, as well as employer networks, chambers of commerce, leaders in philanthropy, and workforce development leaders. Ensuring that apprenticeship grantees are incentivized and supported in building robust relationships across a vast ecosystem of stakeholders (rather than competing with them), will ensure apprenticeships scale at a faster rate and with less duplication costs.

# Build Industry Partnerships and Employer Engagement

Our survey and interviews found that employer buy-in and engagement are persistent challenges, regardless of the tenure of your program. **However, the pioneers found success when they utilized the following techniques below.**

FIGURE 6  
**Successful Strategies for Employer Engagement**

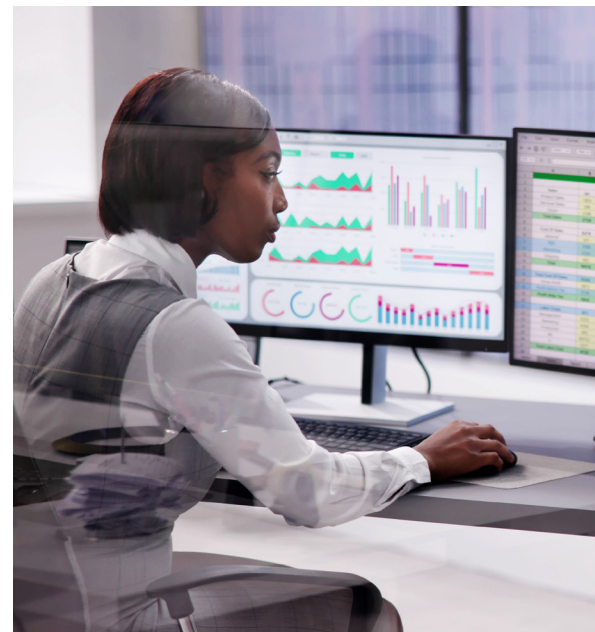


\*Practitioners revealed a wide range of engagement tactics under “Other” such as partnering with intermediaries, organizing specialized events, and connecting through advisory committees. These strategies foster sustained employer dialogues and are complemented by networking efforts at various community and educational events.



*“I would suggest for new folks that they make sure they have a really strong employer base, and understand how they’re going to continue to solicit employers to maintain the rate of employer adoption to sustain their program.”*

**Mike Roberts**  
CEO, Creating Coding Careers



While practitioners use unique mechanisms to build successful employer relationships, mixed information exists on the benefits to industry engagement and buy-in when financial incentives are included. Historically, some U.S. DOL grant funding has allowed industry partners to access financial incentives to support related technical instruction costs on a per-apprentice basis, but not all employers felt this was a valuable incentive. **While financial incentives produce mixed results in apprenticeship adoption, incentivizing employers with friendly, risk-averse policies and other incentives offer promising alternatives.**

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## Case Study: LAUNCH Apprenticeship Network’s Best Practices for Employer Engagement



### About the LAUNCH Apprenticeship Network

Functioning as both an intermediary and education provider, the LAUNCH Apprenticeship Network, which was initiated in 2018 by the Inland Empire Desert Region College Consortium, focuses on simplifying the apprenticeship process for businesses and career builders in the Inland Empire region of Southern California.

### The Challenge

LAUNCH faced challenges in employer engagement, in part because they were the first to embrace apprenticeship in the region as self-described guinea pigs. LAUNCH also shared a common among employers—the administrative burdens of early adopters’ paperwork. Executive Director Charles Henkels stated that he “literally had a year of zero results... 12 months going out... I must have sat at the desk of 50 different employers working on this thing, and at the end of the year, no one had signed any apprenticeship agreements. It was that level of soul-crushing. Like, what did I do?” Charles was not alone in these challenges. But unlike his counterparts, he proved agile in how he shapeshifted his program to move forward.





## The Solution

To ease nervousness, LAUNCH strategically shifted the focus towards reducing the workload on employers. They understood the specific qualifications employers sought in their roles, created meaningful, paid, work-based learning opportunities, and did what employers hoped they would do—eased paperwork burdens. But this necessitated that employers provide clear, detailed job descriptions for entry-level roles to facilitate a better match between apprentices and job opportunities and that LAUNCH employees prep the required documentation aligned with the roles. All in all, the most compelling value proposition for these employer partners was access to a steady flow of students, candidates, and talent—a direct solution to their major pain point—to fill job vacancies with qualified individuals.

A key example of LAUNCH's innovative approach involved leveraging a high school credit recovery program to introduce students to apprenticeship opportunities in janitorial work. By providing comprehensive career navigation support and directly engaging with employers, LAUNCH facilitated the transition and convinced seven companies to commit to hiring this emerging pool of talent. The success of LAUNCH lies in its departure from administratively intensive approaches and in their creative and malleable solutions to a universal challenge. LAUNCH instead recognizes that the value of apprenticeship programs lies in their ability to meet the urgent demand for skilled workers.

## Outcomes

With approximately 150 industry partners engaged at varying levels, LAUNCH's adaptability and flexibility in business engagement strategies underscore the importance of tailoring apprenticeship programs to the specific needs of employers. For example, when interviewed, Charles showcased multiple industry-friendly materials that were vetted by industry and spoke their language. He is also the first person to say that “this took time to build.” Nonetheless, through cooperation, adaptability, and strategic engagements, LAUNCH serves as a model for developing future apprenticeship programs that effectively bridge the gap between educational institutions and the workforce.

# Case Study: TechSF Demonstrates Return on Investment to Employers



## About TechSF

TechSF blends on-the-job training, education, and mentorship, which in turn allows apprentices to acquire industry-recognized skills for occupations such as cybersecurity analyst, data science analyst, IT project manager and administrator, Salesforce business analyst, software engineer, and developer, as well as amass skills in digital marketing and graphic and web design. TechSF connects companies with highly talented and motivated apprentices who reflect the diverse demographics of San Francisco. Participants in TechSF are diverse; more than 50% are female, nearly two-thirds are African American, Latine, Asian American, or Native American, and there is a strong focus on serving transitional-aged youth (ages 17 to 24) and incumbent apprentices from within tech companies.

## The Challenge

TechSF apprenticeships started in 2017 when San Francisco’s tech hiring culture was crippling elite and jarringly fast. Apprenticeships were then a new and unproven solution for tech, commonly seen as a government-backed solution that lacked agility and brought the government into big tech. As a result, the tech industry continued to use the same methods of recruitment they always used: highly competitive internships, elite recruiting practices, and stealing talent from their competition—all techniques that had no focus on utilizing or growing the local talent pool. Therefore TechSF, whose mission was to serve San Francisco’s talented tech trainees and workforce, needed to prove that apprenticeships were an entry point to include local, diverse talent who were usually excluded from normal tech hiring practices, and that apprenticeships were agile, talent development strategies that supported immediate talent needs.



*“The assumption that university recruits will outperform nontraditional talent is negated by apprenticeship. It’s the best kept secret that’s in plain sight.”*

**Orrian Willis**  
Manager, TechSF





## The Solution

The TechSF apprenticeship program makes big returns on investment to employers. To do this, they reduce recruitment costs, enhance productivity, and facilitate rapid scaling. In turn, 91% of apprentices retain employment with their invested company after their apprenticeship term and 86% of U.S. companies that sponsor apprentices say it's an effective strategy for meeting labor demands. TechSF shopped these data points with tech employers, however, their best sell was bringing local tech talent teams together to talk about pain points, how to diversify their hiring pool, and where apprenticeship in tech has worked.

TechSF's employer partner, Twilio, is a notable example. For five years between 2017 and 2022, Twilio offered 65 paid apprenticeships, of which 91% were retained as software engineers after one year, and 90% were retained after two years,<sup>15</sup> which demonstrated an incredible return on investment. Furthermore, the company didn't need to recruit from crowded talent pools for new engineering talent and had maintained a low attrition rate, which within tech, is notoriously high. While university graduates tended to stay with the company for an average of 18 months, apprentices generally remained for several years. A detailed analysis compared the performance of these apprentices to those of new hires from university recruitment programs in software engineering and revealed that the apprentices matched or exceeded the technical proficiency of university recruits in just a quarter of the time.

## Outcomes

This data strongly suggests that investing more in apprenticeships and potentially less in other forms of recruiting can be a highly effective strategy for companies. When TechSF shared this data in partnership with Twilio with other tech companies it sparked national conversations about apprenticeships in big tech firms, the adoption of additional programs, and the creation of more opportunities for local and diverse tech talent to thrive in San Francisco.

# Recommendations for California to Support Industry Engagement

## Activate industry through incentives and campaigns: California should learn what the industry needs to sustain apprenticeship programs.

- DAS and CA DOL should conduct focus groups with the industry to better understand barriers to adopting apprenticeships.
- Educating employers on apprenticeship was deemed the most time-consuming and challenging part of building apprenticeship programs. The state should invest in and create an employer-facing, designed-by-industry, educational campaign on apprenticeships as a talent pathway with touch points on how to access apprenticeship intermediaries and providers.
- Utilize tax credits and rebates for employers who partner with publicly funded workforce apprenticeship programs and hire apprentices. In a state like California, where taxes are comparatively higher than the rest of the United States, mirroring tax incentive structures similar to how the Inflation Reduction Act incentivized employer partnership would encourage business engagement.<sup>16</sup>
- If the state is investing in apprenticing vulnerable or underrepresented populations, including BIPOC, women, individuals with disabilities, or veterans, the state should have a plan for how to ensure these populations are also prioritized by employers and receiving services to sustain retention throughout employment.

## Increase incentivized collaboration and access to networks.

- Funding as it stands now incentivizes individualized apprenticeship programs being built rather than the utilization of an intermediary if that is the right fit. The state should incentivize both—intermediary-supported expansion and individualized program expansion—which will increase partnership-building efforts and unify partners, while also allow for each partner to focus on their specific role in building or expanding an apprenticeship program.
- The Northern California Apprentice Network (NCAN) and Southern California Apprenticeship Network (SCAN) were spurred by the need for regional community-building approaches to support the scaling of apprenticeships. These networks are funded by philanthropic dollars and are not invested in by the state. Additionally, **there are more regional networks needed in the state for a fully comprehensive approach to utilizing these valuable networks.** Once practitioners or employers join these networks, all individuals will have access to best practices, events, strategic alignment, and a menu of programs and practitioners like themselves in the region to connect to.





# Recommendations for Practitioners to Support Industry Engagement

As per the survey results and the pioneer interviews, employer buy-in remains a consistent challenge for new and emerging occupations regardless of the tenure of the apprenticeship program. **The following recommendations were captured through the survey and confirmed in pioneer interviews.**

## **Target small and medium-sized businesses.**

These businesses may benefit most from the flexibility and innovation apprenticeships bring. The time it takes to convert these employers into apprenticeship allies may also be significantly shorter than large corporations.

## **Leverage existing employer networks.**

This facilitates the easier introduction and integration of apprenticeship programs within industries. If you are in [Northern California](#) or [Southern California](#), join your appropriate network.

## **Align communication.**

Before pitching to an employer, understand their needs and industry trends. Your communication should reflect the apprenticeship program's benefits and emphasize in industry-relevant language solutions to skills gaps, talent development, and retention.

## **Reduce barriers to yes.**

Whenever possible, remove reasons for employers to say no. For example, manage overbearing government documents and paperwork away from the employer. In addition, eliminate perfunctory logistical tasks and inflexible timelines.

## **Partnership development.**

Employer engagement should be approached as a partnership that includes Q&A and active listening, and is spoken in the employer's language, not in the language of higher education or apprenticeship. Some industries and employers require patiently cultivating a robust relationship with employer partners to build the necessary trust that enhances an employer's view on apprenticeship.

## **Utilize labor market information (LMI).**

When you utilize LMI, you allow apprenticeship providers to focus on occupations with high demand and an appropriate skill profile. Speak with local employers to understand regional demand so that the LMI is research-based. Make sure to also collect local LMI through employer conversations to build clout for ongoing partnership development.

## **Use incentives.**

Financial mechanisms play a pivotal role in fostering employer participation in apprenticeship programs. Take advantage of state and local funding initiatives to defray the cost to the employer.



# Recommendations for Youth Apprenticeship Practitioners to Support Industry Engagement

Hiring youth or young people can create mixed responses from California's vast employer network, demonstrating unique engagement activities from practitioners. **Pertinent to youth apprenticeship, the pioneers isolated several critical factors for strong industry engagement that benefits youth apprenticeship adoption.**

## Leverage school districts and county offices.

Districts and county offices may well be among the largest employers in certain regions and represent many sectors including mechanics, culinary, IT, sports medicine, and accounting. Therefore, if practitioners align apprenticeship or pre-apprenticeship occupations with existing training and career and technical education (CTE) coursework within a district it can lead to apprenticeable opportunities and prove to be an effective way to fill talent gaps and create streamlined work experiences for youth. To that end, practitioners aiming to work within or leverage districts or county offices, must have a deep familiarity with local secondary education dynamics to tailor an apprenticeship program effectively.

## Help employers with management of actual and perceived risks.

Private employers often hesitate to hire teenagers due to the perceived risks and complexities. But practitioners can minimize perceived risks. You can handle all relevant paperwork, educate employers on labor laws and accountability, and ensure your organization manages the competencies and timeline of apprenticeship training alongside the employer. Some school districts act as the employer of record to further reduce an employer's risk. Overall, the employer should feel they have a partner and a support system when they hire youth.

## Flexibility is key.

Youth apprenticeship programs need to be flexible to accommodate the varied interests and changing minds of high school students as well as the dynamic needs of employers. Several legislative issues affect the implementation of apprenticeship programs in high schools such as rigid school start times, graduation requirements, and the time it takes high school students to complete apprenticeship programs. However, there are creative solutions to tackling pre-apprenticeship and apprenticeship together.



# The Future of Apprenticeship in California

It is important to note that despite ongoing challenges, the outlook on the use of apprenticeships as a key talent development strategy, especially given the level of investment and committed engagement from the pioneers identified in this report, is extremely bright. Compared to most other states in the US, California shines as a state that is working quickly to grow innovation in an otherwise bureaucratic system. The field of pioneers work diligently to share best practices and showcase what they have learned, and new practitioners enter the field regularly. The California apprenticeship landscape is blooming. **In review, JFF learned that:**

**Despite anticipated budget cuts, apprenticeship is still a highly budgeted and prioritized workforce training vessel, particularly for advancing access for diverse learners in all facets of the education and workforce systems.**

**Apprenticeship adoption has increased 16% since 2018, particularly in IACA-regulated, new, and emerging occupations.**

**To reach scale, the funding opportunities, industry engagement, and policy development of apprenticeship programs must be better aligned among the key stakeholders. Program sponsors and intermediaries alike struggle with:**

- A myriad of funding opportunities in the state and solidifying sustainable funding for programs.
- Industry engagement success leading to industry adoption of new and emerging occupations in apprenticeship.
- Ongoing challenges with DAS communications, registration timeliness, and red tape.





Despite these challenges, the state is awarding new funding opportunities, engaging new industries, and building new infrastructures to advance apprenticeship. Yet action to streamline these measures is still needed and in progress.

JFF recommends that in response to this report, the state of California aligns with the Governor's Council on Career Education's preliminary findings to ensure comprehensive policy and implementation decisions are made to:



**Create state and regional coordinating bodies that are informed by statewide data systems and supported through technical assistance networks.**



**Build incentives and improve coordination to provide work-based learning opportunities for K-12 students and adult learners.**



**Align regional and state K-12, postsecondary, and workforce pathways using a skills framework.**



**Accelerate the use of public benefit programs to make education and training affordable and to improve universal access.**

With such alignment and focused support and collaboration, **apprenticeships can be the talent development and equity engine that California's innovation economy needs.**



# Endnotes

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