

**APPENDIX C: CALIFORNIA CLEAN ENERGY JOBS ACT
(PROPOSITION 39): FINAL REPORT ON CALIFORNIA WORKFORCE
DEVELOPMENT BOARD PRE-APPRENTICESHIP PROGRAM**

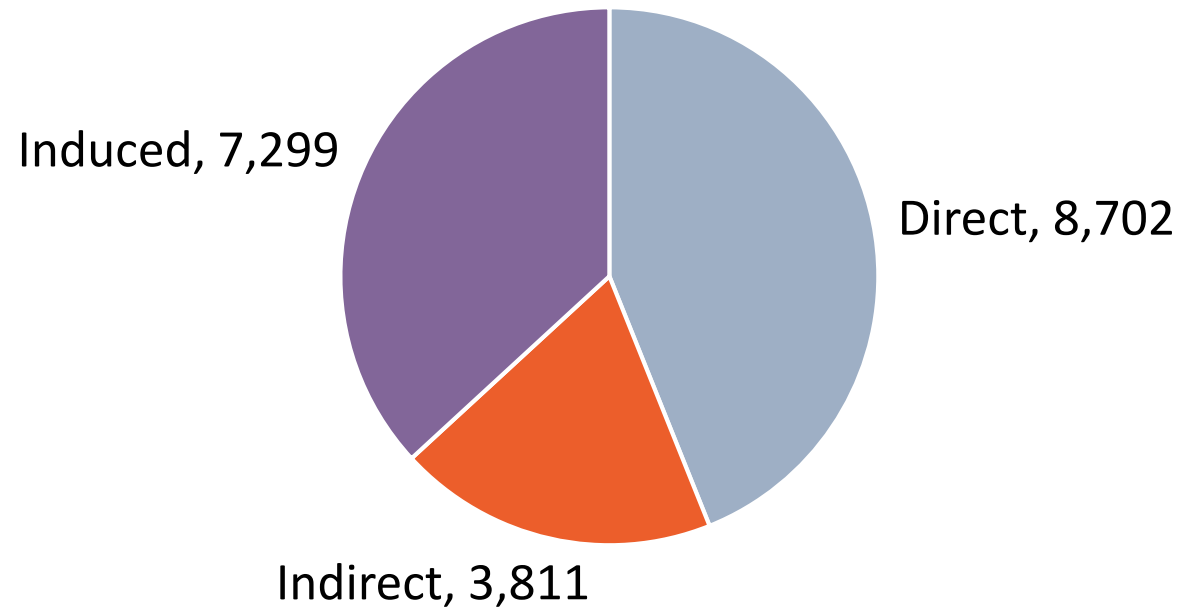


HIGH ROAD CONSTRUCTION CAREERS

Final Jobs and Training Report to the Prop 39 Citizens Oversight Board

Clean energy retrofits of K-12 schools are estimated to create nearly 20,000 jobs.

**19,812 Jobs Created by Prop 39 K-12 Projects
(cumulative through 6/30/2018)**



Prop 39 created quality jobs thanks to legal requirements and type of work.

Figure 2: Distribution of Hours Worked by Building System Type, K-12 LEA Projects.

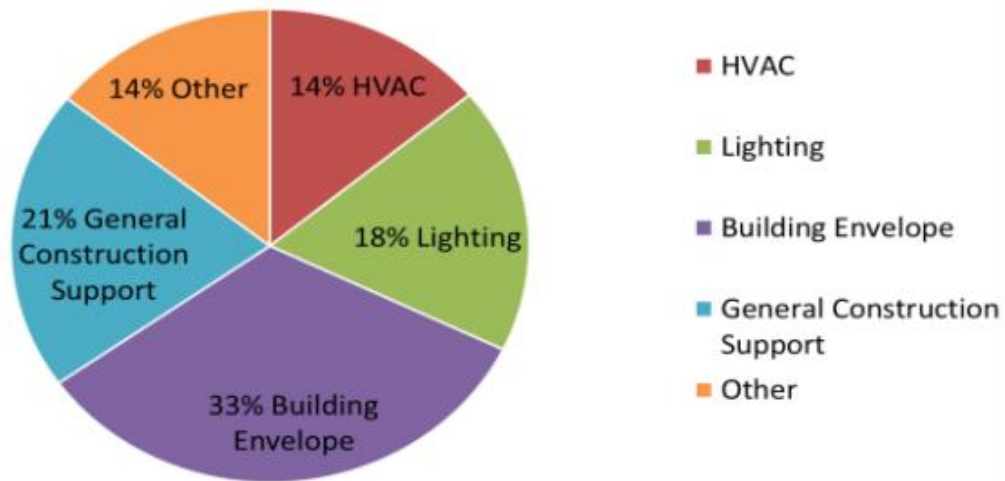


Table 3: Average Hourly Wage Rate for Apprentices and Selected Trades, K-12 LEA Projects.

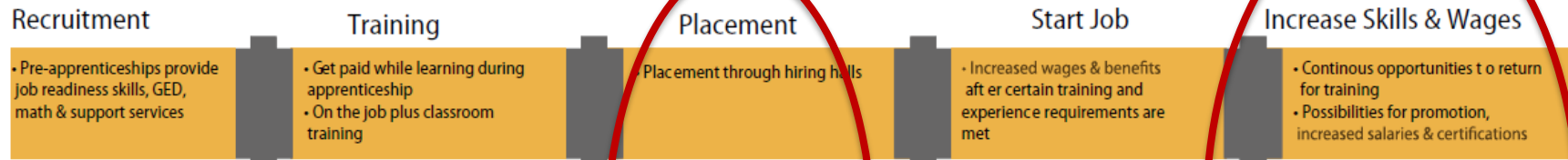
Job Category	Average Wage Rate
Electricians	\$48.22
Carpenters	\$44.47
Sheetmetal Workers	\$44.73
Plumbers/Pipefitters	\$45.87
Laborers	\$36.32
Other	\$40.39
Apprentices	\$24.75

*Average wages weighted by hours worked, adjusted to 2016 dollars.
 Source: Authors' analysis of certified payroll records for K-12 LEA projects obtained from the Department of Industrial Relations.

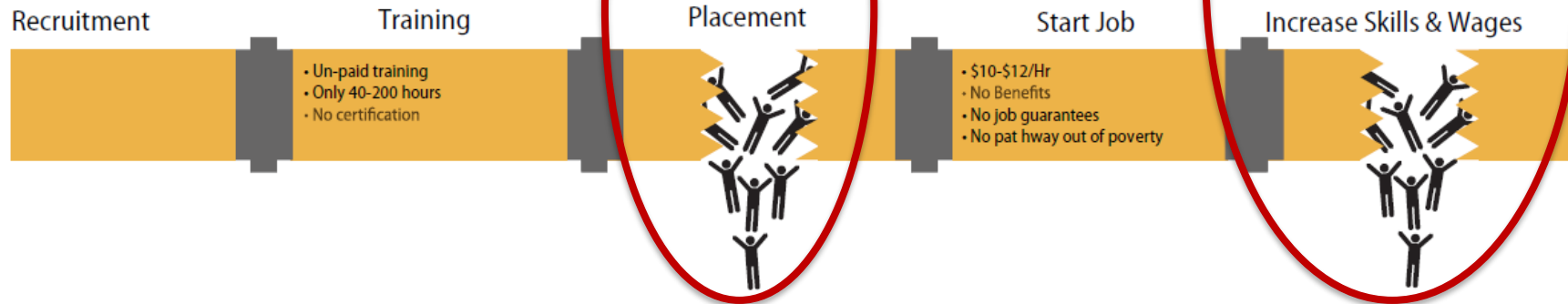


Apprenticeship is the best career pathway in the construction trades.

Registered Apprenticeship Pipeline: A Pathway to Better Opportunities



Without Apprenticeship Training: A Broken Pipeline

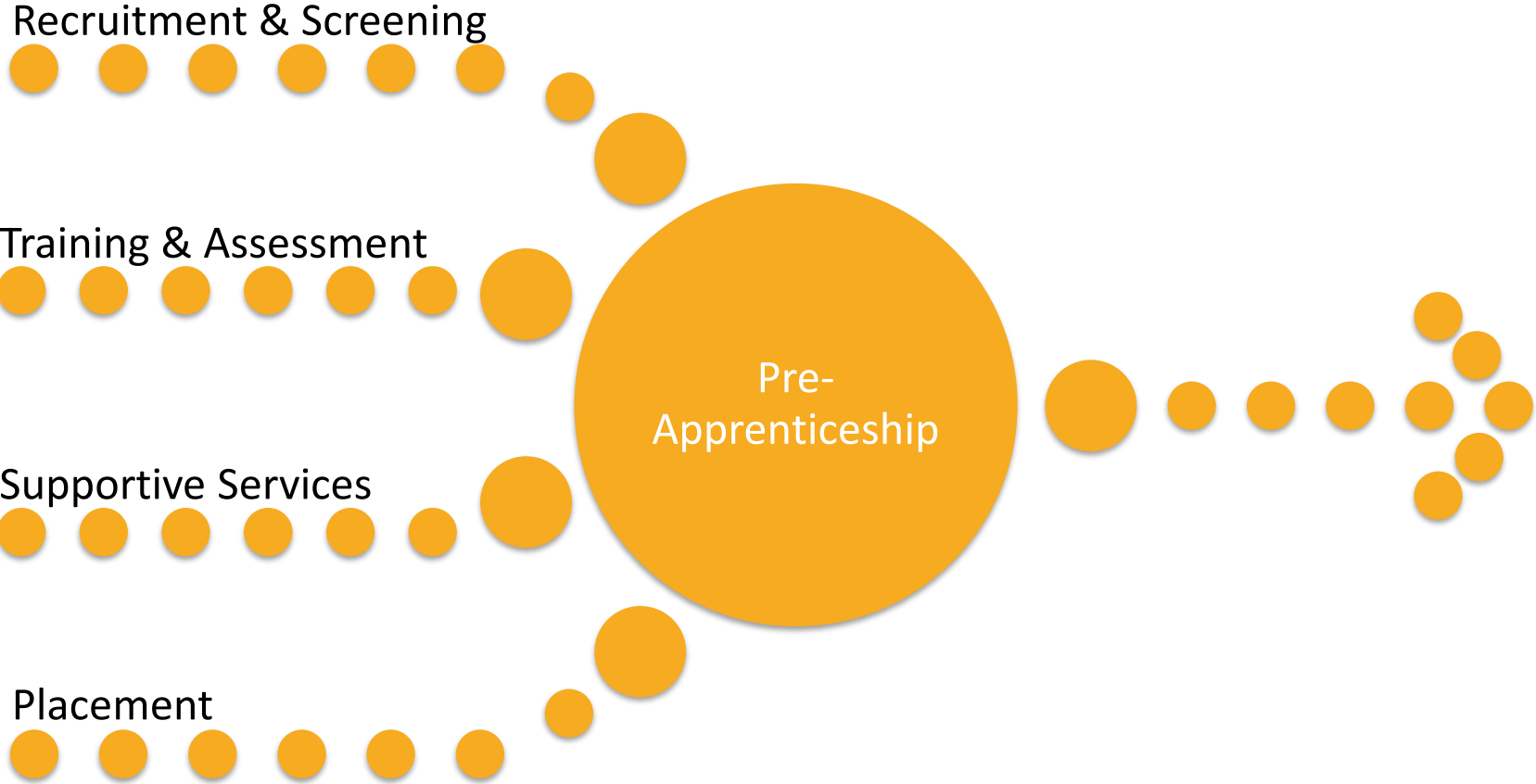


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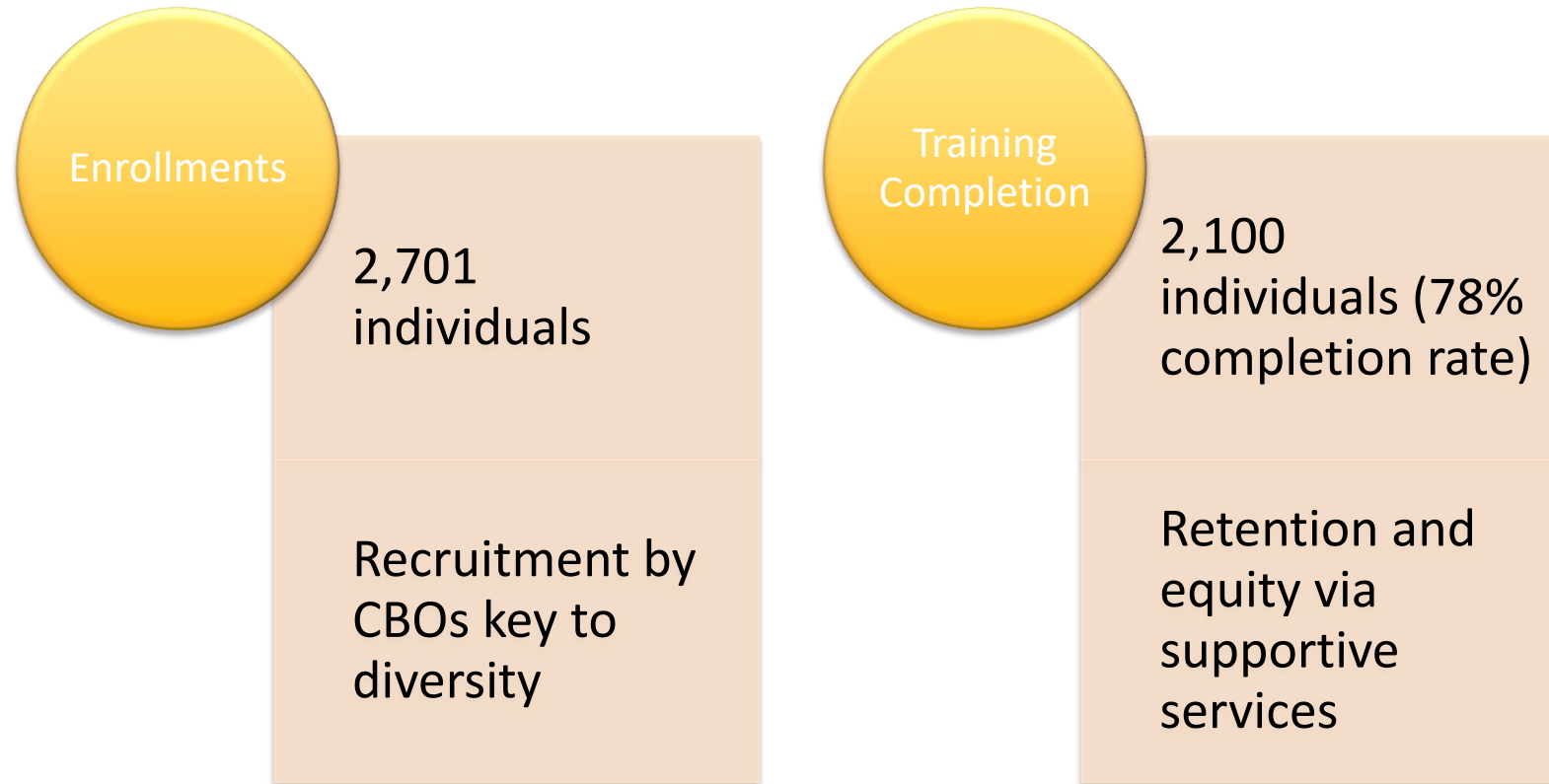


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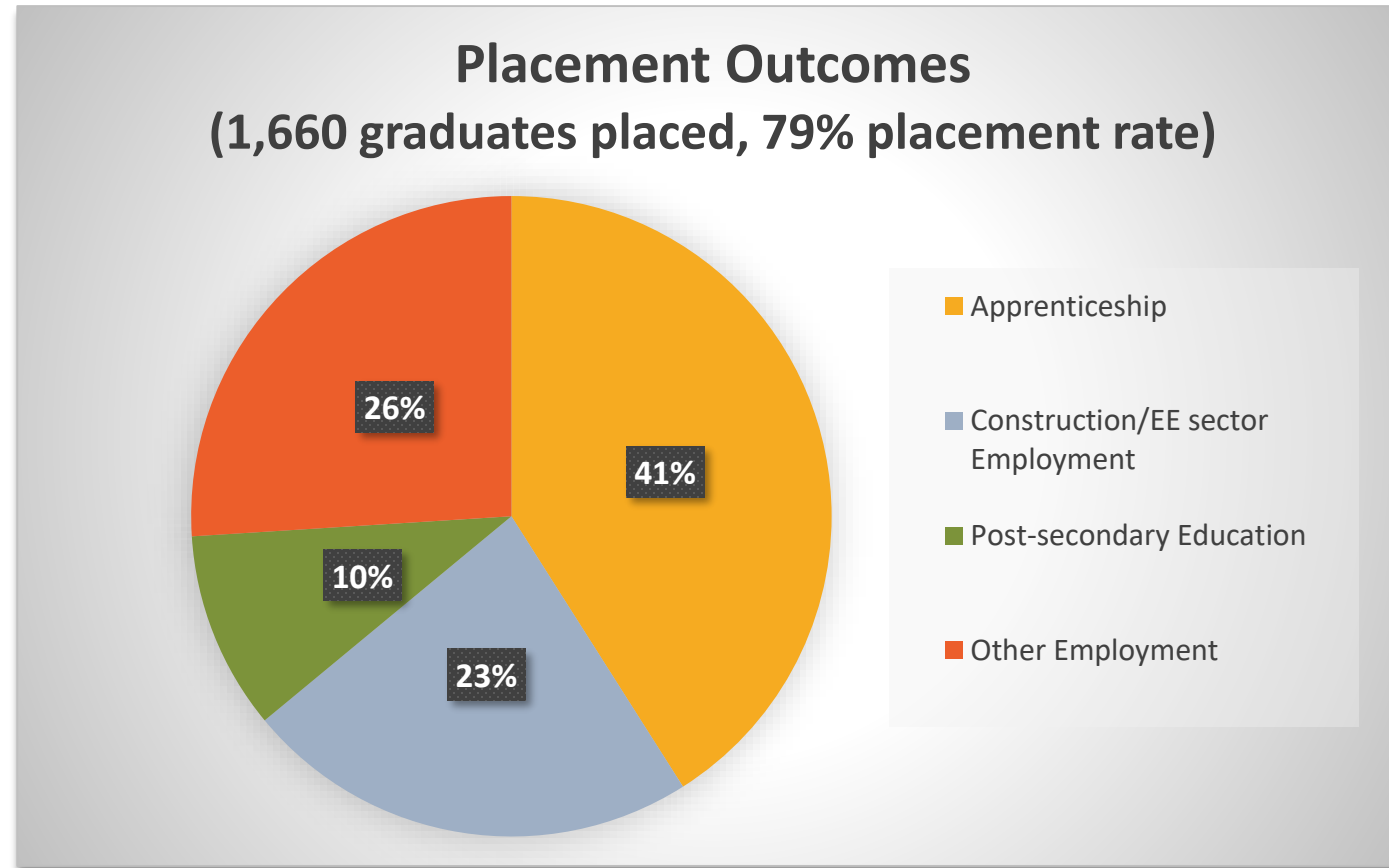
Delivering quality pre-apprenticeship is multi-faceted and resource-intensive.



Prop 39 grew and diversified California's apprenticeship candidate pool.



Graduates secured apprenticeship slots and other meaningful placements.



Prop 39 helped develop a scalable model for pre-apprenticeship in California.



Hearing from pre-apprentices is the best way to appreciate the program's impact.





February 13, 2020



California Clean Energy Jobs Act (Proposition 39): Final Report on California Workforce Development Board (CWDB) Pre-Apprenticeship Program

Contents

Introduction	2
Cumulative Results.....	3
Lessons Learned.....	5
Scaling Up Pre-Apprenticeship in California	7
Conclusion.....	8

Introduction

From 2014 through 2018, the California Workforce Development Board (CWDB) invested \$13.3 million of California Clean Energy Jobs Act (Proposition 39, or Prop 39) funds to build twelve construction pre-apprenticeship training partnerships across the state. These pilot projects – the foundation of the CWDB’s High Road Construction Careers (HRCC) initiative – created a coherent system of energy efficiency focused job-training and placement programs serving disadvantaged Californians.

The Prop 39-funded training partnerships built regional pipelines to middle class careers for at-risk youth, women, justice-involved, and other disadvantaged or under-represented job seekers. Using the industry-recognized Multi-Craft Core Curriculum (MC3), these twelve pilot projects prepared more than 2,000 disadvantaged Californians for a future in construction industry careers. Partnering with local Building Trades Councils and the state-registered apprenticeship community, Prop 39-funded projects brought together community, education, and workforce organizations to create the critical link between pre-apprenticeship and apprenticeship programs. Pre-apprenticeship graduates earned an industry-valued credential (i.e., the MC3 certificate) and were connected to joint labor-management state-registered apprenticeship programs in the construction trades, or found placement in other meaningful employment and educational opportunities.

In addition to overseeing program implementation, the CWDB developed resources to inform future investments in construction pre-apprenticeship based on the experiences and accomplishments of Prop 39-funded training partnerships. These resources – described in greater detail below – include best practices reports and a series of short videos highlighting Prop 39-funded pilot projects, as well as guidelines for MC3-based pre-apprenticeship. By distributing these resources widely and presenting on the work with Prop 39-funded partnerships over the years, the CWDB has not only increased awareness of successful construction pre-apprenticeship training among practitioners and policymakers, but also has secured tens of millions of dollars for the High Road Construction Careers initiative to expand efforts and impact.

Cumulative Results

The CWDB considers the Prop 39-funded pre-apprenticeship program a success in terms of the number of people served, the increasing diversity and preparedness of candidates for apprenticeship in the building and construction trades, and the outcomes achieved by training partnerships and program participants. In addition to presenting the cumulative results of Prop 39-funded pre-apprenticeship, this section provides a brief explanation of the data in order to clarify the meaning and significance of each category and how the results came to fruition.

The information presented below reflects additional and corrected data available after the CWDB submitted its training report to the Prop 39 Citizens Oversight Board in February 2019. Also, one grantee, the Flintridge Center located in Pasadena, is continuing its pre-apprenticeship program with Prop 39 funding and anticipates expending all funds by the end of March 2020. Accordingly, the participant and outcome data presented below is nearly final and will be updated to reflect additional participants and outcomes.

Enrollment. 2,701 individuals were enrolled in a Prop 39-funded, multi-craft pre-apprenticeship program and received some level of training as well as various supportive services. Ten of the 12 programs exceeded their targets for enrollment, with the others reaching 90%-95% of their target.

Demographics of enrollees. The CWDB advances equity in workforce development by focusing on individuals and communities with high need – namely, people with barriers to employment and populations that are under-represented in an industry and/or occupation. Implementing an equity agenda has many facets, targeted recruitment and retention being one critical component. To that end, community-based organizations (CBOs) played an essential role in effectively recruiting and serving participants from the priority populations listed below. Some participant characteristics were undercounted, because programs were required to report on age, gender, and veteran status only whereas most, but not all, programs reported on income, homelessness, and involvement with the criminal justice system as well. It should also be noted that figures below add up to more than 100 percent, as individuals identified with and were counted under more than one category.

- Total participants enrolled: 2,701
 - Low-Income: 51% (1,367)
 - Youth (ages 18-24): 27% (742)
 - Women: 17% (471)
 - Formerly-incarcerated and justice-involved: 16% (419)
 - Homeless: 6% (165)
 - Veteran: 3% (93)

Training Completion. Training partnerships sustained high graduation rates over the course of the Prop 39-funded program, which is notable considering the challenges with trainee retention and program completion in the construction industry. About 78%, or nearly 2,100 of the

individuals enrolled completed the training and earned the Multi-Craft Core Curriculum (MC3) certificate. The high completion rate was attributable to an emphasis on meeting the needs of pre-apprentices by offering or coordinating a variety of supportive services that enabled individuals to complete training (e.g., stipends and counseling), be prepared for apprenticeship requirements (e.g., remedial math and reading courses and addiction treatment), and gain employability skills and support systems for the long haul (e.g., anger management and financial literacy). Addressing supportive services is as much a participant retention strategy as it is an equity strategy.

Placement. Earning an MC3 certificate, an industry-recognized credential, was fundamental to creating structured pathways to state-registered apprenticeship, one of the CWDB's main goals of the program. Planning for placement was an essential element of Prop 39-funded programs nonetheless, because entry into apprenticeship is neither guaranteed nor instantaneous. For that reason, Prop 39-funded training partnership involved key labor organizations – local Building & Construction Trades Councils (BTCs) as well as state-registered apprenticeship program coordinators – to leverage industry and trade- or craft-specific knowledge and decision-making power over hiring new apprentices. While apprenticeship was the ideal outcome for many pre-apprentices, training partnerships facilitated and tracked other meaningful placement opportunities as listed below.

- Total placements secured¹: 1660 (79% of pre-apprenticeship graduates)
 - State-registered apprenticeship: 41% (683)
 - Construction or energy-efficiency specific employment: 23% (372)
 - Post-secondary education: 10% (166)
 - Other employment: 26% (439)

Increasing the representation of women in the building and construction trades continues to be a major goal for the industry and apprenticeship community, both in California and across the country. In fact, this goal was added to California's Unemployment Insurance Code, in the section pertaining to rules for pre-apprenticeship programs in the building and construction trades. Therefore, it is remarkable that the percentage of women placed in state-registered apprenticeship exceeded the share of total apprenticeship placements under Prop 39 (56% for women compared to 41% overall). Put another way, nearly 1 in 3 graduates placed in state-registered apprenticeship were women whereas women constituted only about 1 in 6 pre-apprenticeship enrollments.

¹ The CWDB expects placements to increase over time as some Prop 39-funded programs continue serving participants with other funding and as pre-apprenticeship graduates participate in other workforce development programs. Many factors impact placement rates, including staggered cohorts; gaps between training completion date and the timing of apprenticeship openings; and postponed placement for Conservation Corps members who choose to finish their term.

Lessons Learned

For the CWDB, Prop 39 funding represented an investment in the pilot phase of a single, comprehensive High Road Construction Careers (HRCC) initiative that could meet the workforce needs of the construction sector industry-wide. Consequently, the CWDB dedicated some Prop 39 funding to technical assistance to not only support grantees with program implementation, but also to support the CWDB with building a model for construction sector pre-apprenticeship by producing and disseminating several different types of educational resources. This research and development component of the CWDB's Prop 39 program involved hosting Communities of Practice, identifying and sharing key lessons, and producing best practices reports as well as a series of short videos.

The CWDB and its technical assistance provider, the California Labor Federation's Workforce & Economic Development Program (CLF/WED), hosted Communities of Practice regularly over the course of the Prop 39 program from 2014-2018. These convenings enabled grantees to learn from each other's experiences and innovations, identify common challenges and brainstorm possible solutions, and receive training aimed at improving services and outcomes. Developing effective recruitment and retention plans to increase the representation of women in the construction trades and incorporating trauma-informed care among the supportive services available to pre-apprentices are examples of major developments facilitated through the Communities of Practice.

Based on training partnerships' experiences during the first few years of HRCC: Prop 39 implementation, the CWDB and CLF/WED identified three major lessons for the successful design and execution of multi-craft pre-apprenticeship. Stemming from the CWDB's high road principles of equity, climate/environmental sustainability, and job quality, the lessons have been presented in annual reports to the Prop 39 Citizens Oversight Board and include:

1. Active involvement with the local building trades is key to apprenticeship placement, which is the ideal outcome for most graduates of pre-apprenticeship;
2. Placement into state-registered apprenticeship is not an overnight process; and
3. A successful program provides more than just curriculum.

Expanding on these core lessons, the CWDB and CLF/WED then produced a more comprehensive promising practices report featuring pilot projects' learnings and innovations (["Building a Statewide System of High Road Pre-Apprenticeship in California: Lessons from the California Clean Energy Jobs Act" report](#), July 2019). First, the report explains the need for and benefit of broad, industry-based training to develop a skilled and diverse construction workforce in California – one capable of performing the wide array of construction work, including but not limited to clean energy deployment. The report then covers the elements of successful pre-apprenticeship programs, detailing: the roles and contributions of labor, community, workforce, and employer organizations within a training partnership; strategies to orient training to meet industry demand; comprehensive programming (from

recruitment, training and supportive service, to job placement) that serves priority populations and ensures training leads to high-quality career outcomes; and assessments of program evaluation and opportunities for expansion.

To bolster pre-apprenticeship programs' connection to regional labor market demand and advance high road principles of job quality and equity, the CWDB promotes the expanded use of Community Workforce Agreements (CWAs) on major public infrastructure projects, including projects critical to safeguarding the climate and environment. To that end, the CWDB commissioned a report about building effective partnerships between community and building trades organizations as it applies to the development, adoption, and implementation of CWAs. The report, "[Making Collaboration Work: Best Practices for Community-Trades Partnerships](#)," was prepared by the East Bay Alliance for a Sustainable Economy (EBASE) and the Building & Construction Trades Council of Alameda County and outlines strategies for collaboration to overcome challenges stemming from different organizational structures, leadership styles, and cultures. Furthermore, the report describes the major components of strong CWAs, including targeted hire and the value of quality pre-apprenticeship programs to help meet community workforce provisions and targets. Policymakers may also find useful the discussion of the benefits of CWAs for public agencies, contractors, and developers, and relevant case studies of successful CWA policies from across California.

Lastly, the CWDB and CLF/WED had a series of short videos made to be able to show what pre-apprenticeship entails and let pre-apprentices directly tell their stories about the deep and lasting impact these programs have had in their lives. Most of the videos focus on a particular Prop 39-funded training partnership and highlight their niche or unique contribution, such as a particular population served (e.g., formerly-incarcerated individuals and women) or linkages established with particular energy and transportation projects (e.g., MCE Solar One in Richmond and High Speed Rail in Fresno). The videos can be accessed from the [CWDB's YouTube channel](#).

Scaling Up Pre-Apprenticeship in California

Based on progress developing a model training program under Prop 39 and an ongoing need to develop a skilled and diverse construction industry workforce in California, the Road Repair & Accountability Act of 2017 (Senate Bill 1, or SB 1) directed and funded the CWDB to expand the High Road Construction Careers initiative. Specifically, SB 1 mandated the CWDB to: (1) develop guidelines for local agencies to “participate in, invest in, or partner with” construction pre-apprenticeship programs and (2) establish a pre-apprenticeship program statewide with \$25 million in SB 1 funding.

The CWDB published the [“SB 1 Workforce Guidelines”](#) in 2019, outlining ten standards for multi-craft construction pre-apprenticeship in California. The standards expound on the lessons learned under Prop 39 pertaining to the key elements of successful pre-apprenticeship programs and partnerships to expand the use of Community Workforce Agreements. The Guidelines are relevant and applicable to a wide range of entities involved in executing major construction projects and related workforce development programs, not just local agencies receiving SB 1 transportation program funding that were the designated audience as per SB 1.

Secondly, the CWDB launched the HRCC: SB 1 program in November 2019 by issuing a Request for Applications for the first three years of SB 1 funding available (\$15M out of a total \$25M). This program will look very similar to the one under Prop 39 in terms of goals, activities, priority populations, and an emphasis on training partnerships for project implementation. One key difference is scale, with the CWDB establishing 12 regions of the state and requiring applicants to propose projects that operate region-wide. Applications are under review and the CWDB anticipates announcing awards by May 2020. Notably, virtually all of the entities supported by Prop 39 are expected to continue the work at greater scale under the HRCC: SB 1 program.

In addition, the Legislature appropriated \$10 million from the Greenhouse Gas Reduction Fund (GGRF) in Fiscal Year 2019-20 for the CWDB’s High Road Construction Careers initiative. It is expected, but not guaranteed that the HRCC initiative will receive an additional \$40M from the GGRF over the next four budget years. Again, the CWDB does not anticipate changing the program dramatically with new funding except with respect to two major GGRF requirements – viz., bolstering the nexus with greenhouse gas emission reductions and serving priority populations pursuant to AB 1550² (Gomez, 2016). These issues will be addressed in more detail in the CWDB’s Expenditure Record to the California Air Resources Board which is under development currently.

² Priority populations established under AB 1550 include residents of Disadvantaged Communities (based on CalEnviroScreen 3.0) as well as Low-Income Households and residents of Low-Income Communities based on county-specific median household income levels.

Conclusion

Thanks to dedicated multi-year funding under Prop 39, the CWDB built the foundation of a comprehensive High Road Construction Careers initiative by investing in 12 training partnerships delivering multi-craft pre-apprenticeship. Through targeted recruitment and retention, industry demand-driven training and certification, employer engagement (with clean energy employers and developers and state-registered apprenticeship programs), and multiple popular education efforts, Prop 39-funded training partnerships demonstrated the ability to advance the following goals that address the needs of the construction industry, low-income and other disadvantaged populations, and the State of California:

- Deliver clean energy skills to disadvantaged workers;
- Create structured pathways to apprenticeship;
- Build the energy-efficiency workforce; and
- Align training and supportive services systems and leverage funding.

Moreover, the accomplishments under Prop 39 proved the viability of taking multi-craft construction pre-apprenticeship to a regional scale, thereby increasing access to middle-class careers for more disadvantaged Californians while supporting further clean energy development statewide. With significant funding from SB 1 and the GGFR, the CWDB and Prop 39-funded training partnerships are in the process of launching a more ambitious High Road Construction Careers initiative and building a statewide system of high-road pre-apprenticeship in California.

HIGH ROAD
CONSTRUCTION CAREERS