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Smoothing the Path to the Bachelor's Degree

Exploring Growth, Student Satisfaction, and Racial Equity in California's Community College Baccalaureate Programs

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Introduction

BEGINNING IN 2014, California policymakers paved the way for the state's community colleges to offer baccalaureate degrees, establishing a small but growing new pathway for students to earn bachelor's degrees in applied fields. This brief examines the accessibility and graduates' perceived value of California's Community College Baccalaureate (CCB) programs. Using statewide data and results from student surveys, we describe the geographic and financial accessibility of these programs, their enrollment composition by student subgroup, and graduate perceptions of labor market outcomes. We also examine differences in students' perceptions, experiences, and outcomes across racial/ethnic, gender, and age groups to explore the equity implications of CCB programs. The results provide an opportunity for college leaders, practitioners, and policymakers to evaluate the efficacy of CCB programs during their nascent period. Overall, the findings suggest that these programs are fulfilling their intended purpose of meeting regional workforce demands and promoting student success through an educational experience that is highly accessible and affordable. Our findings also suggest that there are some disparities in perceptions, experiences, and outcomes among different student subgroups. Consequently, work remains to ensure access and positive economic outcomes for Black/African American, Latine/x, and Middle Eastern/North African students in particular.

TOPLINES

- CCB graduates view their programs favorably, with strong returns on investment. Nine out of ten graduates say their degrees were affordable and worth the cost. More than half of graduates indicate they would not have earned a bachelor's degree without this program option.
- CCB programs deliver substantial economic benefits. Graduates report incomes that are 49% higher on average after completing their programs.
- Racial disparities exist in program enrollment, satisfaction, and labor market outcomes. At community colleges that offer the programs, Latine/x students are disproportionally underrepresented in CCB programs relative to campus-wide enrollments. Black/African American and Middle Eastern/North African students report somewhat lower perceptions of their programs and postgraduation outcomes compared to other groups.

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Background and Context

In recent decades, rising tuition costs and stagnant income levels have contributed to a college affordability crisis in the United States. Despite the reputation of California's higher education system for affordability and access, it has not been immune to this trend.[1] Undergraduate tuition at the University of California (UC) system grew at approximately five times the rate of inflation between 1977 and 2018, and tuition at California State University (CSU) increased at approximately nine times the rate of inflation during the same period.[2] In 2020, the average student loan balance among California borrowers was $37,428, and trends suggest that debt levels are rising. This crisis is especially harmful to students from racially minoritized and/or economically disadvantaged communities.[3]

At the same time, public perception about college affordability and value is shifting. A Pew Research Center survey in 2024 found that just 47% of U.S. adults say that college is worth the cost but only if no loans are required, and only another 22% of U.S. adults say college is worth the cost, even with loans.[4] According to the Public Policy Institute of California's 2025 statewide survey, 69% of parents worry about affording college.[5] In 2022, a California Student Aid Commission survey found that 37% of students reported lacking resources for tuition and fees.[6]

Community colleges are consistently more affordable and accessible relative to other postsecondary education options in the U.S.[7] With the lowest fees in the nation, the California Community College (CCC) system is an attractive higher education option for students, particularly those from racially minoritized and/or economically disadvantaged communities.[8] In addition to offering associate degrees and certificates, the CCC system provides a more affordable pathway toward a bachelor's degree by allowing students to complete general education course requirements at a lower cost before transferring to the traditional 4-year sector. However, transfer rates from the CCC system remain low. Among CCC students who intend to transfer and who have completed 12 units, only 19% transfer to the 4-year sector within their first 4 years of enrollment.[9] Rates are even lower for Black/African American (13%) and Latine/x (16%) students.

Like other states, California has started offering 4-year bachelor's degrees at community colleges. California established the CCB program in 2014 with Senate Bill 850 and expanded it in 2021 with Assembly Bill 927.[10] The bills allowed California community colleges to offer "baccalaureate degree programs and program curricula not offered by the California State University (CSU) or the University of California (UC), and in subject areas with unmet workforce needs."[11] These programs aim to create more opportunities for students to earn bachelor's degrees and qualify for higher earning jobs.

Governor Gavin Newsom's 2022 Roadmap established the role of community colleges in meeting the goal of 70% postsecondary degree and certificate attainment among working-age Californians by 2030.[12] As of June 2025, there are 51 state-approved CCB programs across 42 CCC campuses.[13] Despite challenges, such as difficulty navigating disagreements about whether CCB programs duplicate programs offered by CSU and UC campuses, these programs continue to expand to meet the demands of local and regional labor markets. They offer an affordable path for attaining a bachelor's degree to students who may otherwise not have access to one.

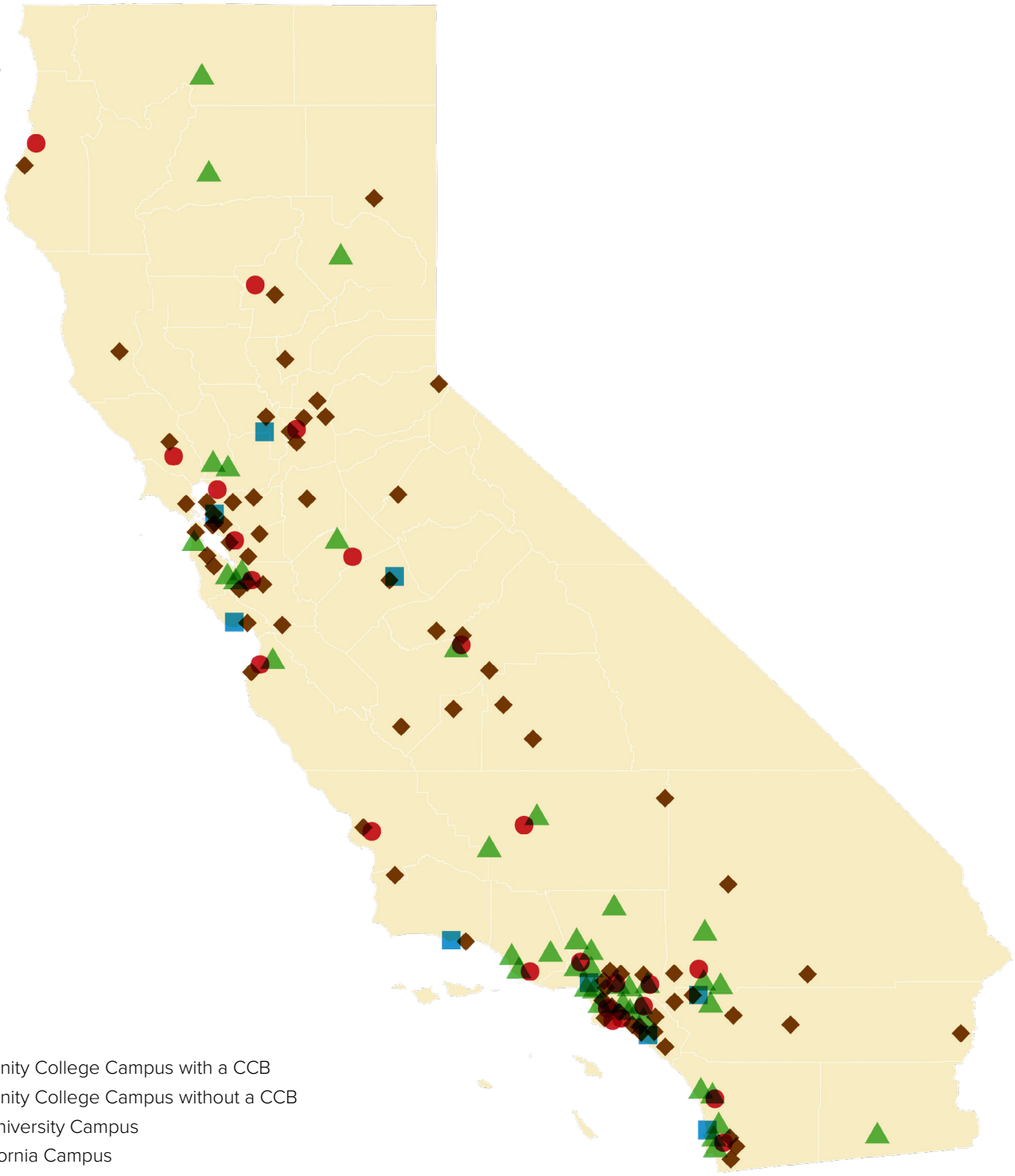
This brief builds on previous work examining students' perceptions of the access, affordability, and quality of CCB programs.[14] Our results support previous findings that CCB programs expand access to education and labor market opportunities among community college students. Graduates overwhelmingly reported that their CCB programs were worth the tuition cost and were affordable. Moreover, more than half of graduates reported that they would not have pursued a bachelor's degree if their community college had not offered the CCB program. Graduates also reported positive labor market experiences: 89% were employed in their field of study approximately 1 year after graduation, and their income increased by 49% on average after completing the program. However, some important differences by race/ethnicity warrant further examination of equity in CCB programs. Asian/Asian American and Black/African American graduates rated the value and affordability of CCB programs lower than other racial and ethnic groups did. Black/African American students, Middle Eastern/North African students, and White students reported lower postgraduation outcomes, such as employment rate and income gains.

Our results support previous findings that CCB programs expand access to education and labor market opportunities among community college students.

Distance as a Barrier to Baccalaureate Degrees

California's CCB programs expand postsecondary access for students across the state. As of June 2025, 51 state-approved CCB programs were offered by 42 CCC campuses (see Appendix A for a table of all CCB programs in California). Figure 1 shows the geographical reach of California's CCB programs and 116 community colleges, many of which are located in regions that are distant from the 23 CSU and 9 UC campuses.[15] For example, 29 community colleges are farther than 30 miles from the closest CSU or UC campus and 7 are farther than 80 miles away.

Figure 1.
Map of California Community Colleges with and without CCB Programs, CSU and UC Campuses, June 2025



DATA AND METHODS

This analysis uses two data sources: the California Community Colleges Chancellor's Office (CCCCO) Management Information Systems (MIS) Data Mart and the California CCB Employment Outcomes Survey. CCCCO Data Mart is a publicly available data platform that contains CCB enrollment counts by campus and student subgroup (i.e., race/ethnicity, gender, and age). The survey is administered to all CCB graduates approximately 1 year after graduation and is available to researchers through a data sharing agreement.[16] Analysis captures survey results of the 2018–2023 graduating classes (n = 777). It asks graduates about their race/ethnicity, gender, and age, their perceptions of their CCB program's accessibility and value, and their postgraduation labor market outcomes.

A More Affordable Path to the Baccalaureate

California's CCB programs also promote access to bachelor's degree attainment because of their affordability.[17] The typical tuition for 4 years of full-time study in a California CCB program is $10,600.[18] By contrast, the average tuition for 4 years of full-time study in the CSU system is approximately $24,336, and in the UC system, it is $59,736.[19]

CCB tuition is also substantially lower than tuition at private university bachelor's programs in similar subjects. For example, West Los Angeles College's bachelor's degree in dental hygiene is at least one eighth the cost of private dental hygiene baccalaureate programs in the same region, which cost more than $120,000 (Table 1).[20]

Table 1. Comparison of West Los Angeles College Dental Hygiene Program Tuition to Private Dental Hygiene Programs in the Region, 2024

College/university	Program tuition
Loma Linda University	$73,550
University of the Pacific	$112,280
West Coast University	$127,106
West Los Angeles College	$8,848

Note. Tuition does not include additional student costs (e.g., general student fees, books, materials, and equipment).

Steady Enrollment Growth, Persistent Gaps

Enrollment in California CCB programs has grown steadily since their inception in the 2016–17 academic year.[21] Among the first 15 colleges that offered CCB programs, annual enrollment grew from 23 students in 2016-17 to more than 1,000 students in 2023–24. Due to lack of data availability, these estimates do not include enrollments at all 51 CCB programs and thus underestimate total CCB enrollment and the extent of its growth.

Table 2 shows CCB enrollment rates by race/ethnicity and gender compared to campus-wide enrollment in CCB-offering colleges between 2016–17 and 2023–24.[22] Latine/x (38%) and White (30%) students represent the majority of CCB enrollment. Female students (62%) outnumber male students (36%) by a greater margin than in the campus-wide population (54% and 44%, respectively).[23] Compared to campus-wide enrollment, CCB programs enroll fewer Latine/x students (38% vs. 47%) and more White students (30% vs. 24%).

California's CCB programs also promote access to bachelor's degree attainment because of their affordability.

Table 2. Comparison of CCB and Campus-Wide Enrollment by Race/Ethnicity and Gender, 2016–17 Through 2023–24

	CCB (%)	Campus-wide enrollment (%)	Percentage point difference
Race/Ethnicity			
American Indian/Alaskan Native	0.4	0.3	0.02
Asian/Asian American	12.4	9.8	2.6
Black/African American	5.2	5.4	-0.2
Filipina/o/x	6.5	2.8	3.8
Latine/x	37.9	47.3	-9.4
Two or more races	4.6	3.9	0.7
Pacific Islander	0.7	0.4	0.3
White	29.7	24.2	5.5
Unknown	2.5	5.8	-3.3
Gender			
Female	62.4	53.8	8.6
Male	36.2	44.4	-8.2
Nonbinary	0.1	0.5	-0.4
Unknown	1.3	1.3	0.002
Total	**5,389**	**3,001,633**	

Source. CCCCO MIS Data Mart reports, Special population/group student count, datamart.cccco.edu/students/Student_Special_Population.aspx, and Annual/term student count report, datamart.cccco.edu/students/Student_Headcount_Term_Annual.aspx

Note. CCB = Community College Baccalaureate. The CCB column is CCB enrollment among the first 15 colleges with CCB programs. The campus-wide enrollment column includes all students enrolled in those same 15 colleges. Counts are duplicated for students who were enrolled in multiple years between 2016–17 and 2023–24. Due to data availability, no post-2020 data from West Los Angeles College are included in these calculations. Percentages are rounded to the nearest tenth, so subcategory sums may not equal 100%.

Student Perceptions: Strong Marks for Accessibility and Value

Amid an ongoing college affordability crisis, CCB graduates report that their programs offer high value and accessibility. Table 3 shows that most graduates perceived that tuition was affordable (90%) and worth the cost (90%). Broadly, respondents believed that community colleges should continue to offer bachelor's degrees (93%) and that their programs prepared them well for employment (82%). Fifty-eight percent of respondents indicated that they would not have pursued a bachelor's degree had it not been for the CCB program. Additionally, only 28% of CCB graduates reported taking out student loans (see Appendix B). While Middle Eastern/North African CCB graduates had higher loan rates relative to other racial/ethnic groups (41%), these rates are still significantly lower than the national average of federal student loan rates among college graduates (53%).[24]

Amid an ongoing college affordability crisis, CCB graduates report that their programs offer high value and accessibility.

Table 3. Perceptions of CCB Programs and Employment Outcomes of CCB Graduates

	Overall
i. Attitudes and perceptions of accessibility and value[a]	**(*n* = 769)**
The value of the bachelor's degree was worth the tuition cost	**90%**
Tuition cost for my bachelor's degree was affordable	**90%**
Community colleges should continue to offer bachelor's degrees	**93%**
If the bachelor's degree program was not offered at my community college, I would not have pursued a bachelor's degree	**58%**
The degree prepared me well for my employment	**82%**
ii. Employment status	**(*n* = 777)**
Active in the labor force	**94%**
Employed: not self-employed or freelance	**85%**
Employed: self-employed or freelance	**3%**
Unemployed: seeking employment	**6%**
Employed	**88%**
Employed: not self-employed or freelance	**85%**
Employed: self-employed or freelance	**3%**
Nonemployed[b]	**12%**
Unemployed: seeking employment	**6%**
Not seeking employment: working on industry credential or graduate degree	**2%**
Not seeking employment: personal reasons	**5%**
iii. Employment status among active in the labor force	**(*n* = 728)**
Employed within 3 months after searching	**74%**
Bachelor's degree helped get current position	**63%**
Employed in field of study	**89%**
Employed in California	**90%**
iv. Income among employed	**(*n* = 668)**
Pre-graduate income	**$43,000**
Post-graduate income	**$71,000**
Difference	**$28,000**

[a] The survey responses were based on a five-point Likert scale (Strongly Agree, Agree, Neutral, Disagree, Strongly Disagree); percentages represent the total rate of "Strongly Agree" and "Agree."

[b] The survey asks respondents to indicate their employment status as (i) employed, (ii) unemployed and seeking employment, or (iii) unemployed and not seeking employment. We report employment outcomes among respondents who were active in the labor force. Some students may be unemployed but not actively seeking employment for various reasons, including personal circumstances, pursuing an industry credential, or working toward a graduate degree. In alignment with employment calculations generated by the U.S. Bureau of Labor Statistics, we do not consider these individuals to be part of the active labor force.[25] Numbers in "Employment status: Nonemployed" are rounded to the nearest whole number, so the subcategory sums may not equal the total.

These findings highlight the importance of CCB programs, especially amid the ongoing college affordability crisis, in which most students are concerned about college costs and skeptical about the value of college.[26] CCB programs offer an affordable, accessible pathway toward attaining a bachelor's degree to students for whom the degree may otherwise be out of reach. Moreover, by providing an additional public pathway toward the bachelor's degree in fields that are relevant to local labor markets, CCB programs help address the projected shortage of 1.1 million California workers with a bachelor's degree by 2030.[27]

Positive Labor Market Outcomes

Table 3 shows that 88% of CCB graduates reported being employed approximately 1 year after graduation. Among the 12% of graduates who reported being nonemployed, only 6% were unemployed while searching for a job; the remainder were nonemployed because they were pursuing further education or for other reasons. Among graduates active in the labor force, 89% reported being employed in their field of study, and 90% reported being employed in California. Among respondents who were employed, the average postgraduate income was $71,000, which exceeds the estimated living wage income for an adult with no children in California ($56,826).[28] This represents an income gain of $28,000, 49% of the average pregraduate income ($43,000).

These findings suggest that CCB programs align with the CCCCO's Vision 2030 and Governor Newsom's roadmap for CCCs, which aim to increase attainment of bachelor's degrees and the number of community college graduates who earn a living wage.[29] By aligning colleges with regional labor markets, these programs also accomplish the goal set by CCB legislation.

Gaps by Race/Ethnicity, Gender and Age

California's CCB programs were not explicitly designed or legislated to address student equity.[30] However, documenting differences in experiences and outcomes across student groups is a crucial step toward understanding how to close equity gaps for CCB students. These differences may be attributed to many factors, including student locale (e.g., salary differences associated with regional cost of living, hiring discrimination, and residential or occupational segregation), program of study (e.g., salary differences by industry), CCB practices and policies (e.g., admission policies and instructional style), and broader systemic differences. The results in this brief are limited in disentangling these factors.

The survey has some other important limitations. First, it includes only the income data from graduates who had jobs both before and after graduating and who shared their salary information. To truly understand if these programs are making a difference, we would need more complete information, such as verified income records for both students in these programs and similar students in other programs. Also, the sample size for some subgroups of students in the survey was small, which makes drawing reliable conclusions about those groups more difficult.

Table 4 shows the differences in attitudes and perceptions of the accessibility and value of CCB programs across racial/ethnic, gender, and age subgroups. Some disparities emerged by race/ethnicity. Asian/Asian American and Black/African American graduates were less likely to view the programs as being worth the tuition cost (83% and 75%, respectively, compared to 90% overall) or affordable (84% and 79%, respectively, compared to 90% overall). By contrast, White graduates had the most positive views, with 94% finding the programs worth the cost and 92% reporting they were affordable. Graduates of different gender and age groups expressed similar attitudes toward their CCB programs. One exception is that CCB graduates older than 30 were more likely than younger graduates to report that they would not have pursued a bachelor's degree had it not been offered at a community college (64%–69%, compared to 58% overall).

These findings highlight the importance of CCB programs, especially amid the ongoing college affordability crisis, in which most students are concerned about college costs and skeptical about the value of college. CCB programs offer an affordable, accessible pathway toward attaining a bachelor's degree to students for whom the degree may otherwise be out of reach.

Table 4. Perceptions of CCB Programs by Race/Ethnicity, Gender, and Age

	The value of the bachelor's degree was worth the tuition cost (%)	Tuition cost for my bachelor's degree was affordable (%)	Community colleges should continue to offer bachelor's degrees (%)	If the bachelor's degree program was not offered at my community college, I would not have pursued a bachelor's degree (%)	The degree prepared me well for my employment (%)
Overall (*n* = 769)	**90**	**90**	**93**	**58**	**82**
Race/Ethnicity					
Asian/Asian American (*n* = 131)	83	84	89	60	77
Black/African American (*n* = 24)	75	79	83	50	79
Filipina/o/x (*n* = 71)	90	93	94	56	86
Latine/x (*n* = 196)	90	91	92	58	83
Middle Eastern/North African (*n* = 17)	88	88	100	59	94
Two or more races (*n* = 51)	90	94	94	47	84
White (*n* = 234)	94	92	96	60	83
Gender					
Female (*n* = 539)	89	89	93	60	82
Male (*n* = 211)	91	94	93	56	83
Age Group					
20–24 (*n* = 83)	93	94	95	47	89
25–29 (*n* = 208)	86	87	93	48	81
30–34 (*n* = 192)	94	92	95	64	87
35–39 (*n* = 110)	88	89	93	64	80
40–49 (*n* = 116)	87	91	91	67	78
50 or older (*n* = 55)	91	95	91	69	73

Note. The survey responses were based on a five-point Likert scale (Strongly Agree, Agree, Neutral, Disagree, Strongly Disagree); percentages represent the total rate of "Strongly Agree" and "Agree." To minimize lumping and maintain the confidentiality of racial/ethnic groups whose *n* size was less than 10, respondents who did not provide their demographic information as well as American Indian, Alaska Native, Native Hawaiian, and Pacific Islander graduates were omitted. However, their data are included in the calculations for overall rates. The same methodology was used for gender and age groups with respect to respondents who did not provide their demographic information, who were nonbinary, and who were 19 years old or younger. Numbers in red denote percentages that are at least five percentage points lower than the overall rate while numbers in green denote percentages that are at least five percentage points higher than the overall rate.

Tables 5, 6, and 7 report differences in employment outcomes across race/ethnicity, gender, and age. These findings require careful interpretation for two key reasons. First, Black/African American and Middle Eastern/North African groups had few respondents, which makes comparisons of these groups less reliable. Second, racial/ethnic groups entered the program with large differences in preprogram annual incomes, ranging from $28,000 to $63,000. These differences may be driven by several factors, such as prior work experience, region, and socioeconomic status, which imply that the increase in postgraduation income cannot be attributed solely to the CCB programs themselves.

Table 5. Percentage of CCB Graduates Who Are Active in the Labor Force, Employed, and Nonemployed by Race/Ethnicity, Gender, and Age

	Active in the labor force (%)	Employed (%)	Nonemployed (%)
Overall (*n* = 789)	**94**	**88**	**12**
Race/Ethnicity			
Asian/Asian American (*n* = 131)	90	86	15
Black/African American (*n* = 24)	79	63	38
Filipina/o/x (*n* = 71)	96	93	7
Latine/x (*n* = 196)	95	90	10
Middle Eastern/North African (*n* = 17)	94	77	24
Two or more races (*n* = 51)	96	90	10
White (*n* = 234)	95	89	12
Gender			
Female (*n* = 539)	93	88	12
Male (*n* = 211)	95	89	11
Age Group			
20–24 (*n* = 83)	95	89	11
25–29 (*n* = 208)	93	88	12
30–34 (*n* = 192)	94	89	11
35–39 (*n* = 110)	93	87	13
40–49 (*n* = 116)	95	88	12
50 or older (*n* = 55)	91	80	20

Note. The California CCB Employment Outcomes Survey asks respondents to indicate their employment status. The three primary employment statuses can be described as (i) employed, (ii) unemployed and seeking employment, and (iii) unemployed and not seeking employment. We calculated a series of employment outcomes only among respondents who were "active in the labor force." Since students may be unemployed but not seeking employment due to personal reasons, because they are working on their industry credentials, and/or because they are obtaining a graduate degree, we do not consider them to be "active in the labor force," to parallel employment calculations generated by the U.S. Bureau of Labor Statistics.[31] In other words, "active in the labor force" captures respondents who indicated that they were either employed or unemployed and seeking employment. "Employed" captures respondents who indicated that they were employed, including self-employed or freelance. "Nonemployed" captures respondents who indicated that they were unemployed and either seeking employment or not seeking employment due to personal reasons, because they are working on their industry credentials, and/or because they are obtaining a graduate degree. To minimize lumping and maintain the confidentiality of racial/ethnic groups whose *n* size was less than 10, respondents who did not provide their demographic information as well as American Indian, Alaska Native, Native Hawaiian, and Pacific Islander graduates were omitted. However, their data are included in the calculations for overall rates. The same methodology was used for gender and age groups with respect to respondents who did not provide their demographic information, who were nonbinary, and who were 19 years old or younger. For the Employed column, numbers in red denote percentages that are at least five percentage points lower than the overall rate while numbers in green denote percentages that are at least five percentage points higher than the overall rate; for the Nonemployed column, this coloring is reversed.

Table 6. Labor Market Outcomes of CCB Graduates Active in the Labor Force by Race/Ethnicity, Gender, and Age

	Employed within 3 months of searching (%)	Bachelor's degree helped get current position (%)	Employed in field of study (%)	Employed in California (%)
Overall (*n* = 769)	**74**	**63**	**89**	**90**
Race/Ethnicity				
Asian/Asian American (*n* = 131)	81	70	93	92
Black/African American (*n* = 24)	68	37	79	72
Filipina/o/x (*n* = 71)	75	60	91	94
Latine/x (*n* = 196)	78	70	90	94
Middle Eastern/North African (*n* = 17)	50	50	75	81
Two or more races (*n* = 51)	71	74	86	92
White (*n* = 234)	70	56	89	85
Gender				
Female (*n* = 539)	77	62	91	90
Male (*n* = 211)	66	66	86	87
Age Group				
20–24 (*n* = 83)	71	80	90	77
25–29 (*n* = 208)	74	72	90	92
30–34 (*n* = 192)	76	68	90	89
35–39 (*n* = 110)	69	58	90	94
40–49 (*n* = 116)	73	43	88	90
50 or older (*n* = 55)	78	38	83	90

Note. To minimize lumping and maintain the confidentiality of racial/ethnic groups whose *n* size was less than 10, respondents who did not provide their demographic information as well as American Indian, Alaska Native, Native Hawaiian, and Pacific Islander graduates were omitted. However, their data are included in the calculations for overall rates. The same methodology was used for gender and age groups with respect to respondents who did not provide their demographic information, who were nonbinary, and who were 19 years old or younger. Numbers in red denote percentages that are at least five percentage points lower than the overall rate while numbers in green denote percentages that are at least five percentage points higher than the overall rate.

Table 7. Income of Employed CCB Graduates by Race/Ethnicity, Gender, and Age

	Pregraduate income	Postgraduate income	Difference
Overall (*n* = 668)	**$43,000**	**$71,000**	**$28,000**
Race/Ethnicity			
Asian/Asian American (*n* = 108)	$34,000	$76,000	$42,000
Black/African American (*n* = 15)	$63,000	$86,000	$23,000
Filipina/o/x (*n* = 65)	$56,000	$83,000	$27,000
Latine/x (*n* = 173)	$40,000	$68,000	$28,000
Middle Eastern/North African (*n* = 12)	$35,000	$67,000	$31,000
Two or more races (*n* = 44)	$28,000	$58,000	$30,000
White (*n* = 203)	$46,000	$69,000	$23,000
Gender			
Female (*n* = 460)	$43,000	$71,000	$28,000
Male (*n* = 183)	$42,000	$70,000	$28,000
Age Group			
20–24 (*n* = 70)	$13,000	$54,000	$41,000
25–29 (*n* = 182)	$30,000	$65,000	$35,000
30–34 (*n* = 166)	$43,000	$73,000	$30,000
35–39 (*n* = 95)	$51,000	$76,000	$25,000
40–49 (*n* = 99)	$65,000	$78,000	$13,000
50 or older (*n* = 43)	$74,000	$86,000	$12,000

Note. To minimize lumping and maintain the confidentiality of racial/ethnic groups whose *n* size was less than 10, respondents who did not provide their demographic information as well as American Indian, Alaska Native, Native Hawaiian, and Pacific Islander graduates were omitted. However, their data are included in the calculations for overall rates. The same methodology was used for gender and age groups with respect to respondents who did not provide their demographic information, who were nonbinary, and who were 19 years old or younger.

Table 5 shows that 63% of Black/African American graduates and 77% of Middle Eastern/North African graduates reported being employed, compared to 88% among all CCB graduates. Table 6 shows that among those who are active in the labor force, Black/African American and Middle Eastern/North African graduates are also less likely to be employed within 3 months of searching for a job (68% and 50%, respectively, compared to 74% overall), to agree that the bachelor's degree helped them get their current position (37% and 50%, respectively, compared to 63% overall), to be employed in their field of study (79% and 75%, respectively, compared to 89% overall), and to be employed in California (72% and 81%, respectively, compared to 90% overall). These are meaningful differences, and future research should explore causes for lower success rates among these student groups.

Additionally, the average income gains reported by employed CCB graduates varied considerably by racial/ethnic group, from $23,000 to $42,000 (Table 7). Asian/Asian American, Middle Eastern/North African, and multiracial graduates had the largest income gains ($42,000, $31,000, and $30,000, respectively) and the lowest pregraduate incomes ($34,000, $35,000, and $28,000, respectively). Postgraduate incomes ranged considerably, from $58,000 to $86,000, with Black/African American and Filipina/o/x graduates reporting the highest postgraduate incomes of $86,000 and $83,000, respectively.

Female and male graduates had nearly identical employment outcomes while there were small differences by age (Table 5). Most age groups had similar postgraduation employment rates (roughly 88%) except for graduates aged 50 and older, who had a lower employment rate (80%). Between 68% and 80% of graduates aged 20–34 reported their degree helped them get their current job, compared to 38%–58% of graduates aged 35 or older (Table 6). On average, older employed graduates had higher incomes before starting the program and after completing the program than younger graduates did (Table 7). Younger employed graduates saw larger income increases, which is expected given that they started from lower baseline salaries.

Recommendations for Policymakers and Practitioners

Results in this brief show that CCB programs have expanded pathways to baccalaureate attainment in California, particularly in regions of the state with limited options for 4-year enrollment. CCB graduates overwhelmingly view their programs as affordable and valuable, and more than half reported that they would not have pursued a bachelor's degree without access to their CCB program. Results also highlight some disparities in perceptions of program affordability and employment outcomes across student racial/ethnic groups.

As community colleges continue to expand CCB programs that are aligned with student needs and regional industries, policymakers and education leaders should consider the following recommendations.

1. Sustain and grow CCB programs as solutions to the college affordability crisis and higher education access.

As bachelor's degrees continue to be valued in the labor market, CCB programs should be leveraged as a public pathway to a bachelor's degree, particularly for students who likely would not have pursued higher education otherwise. Policymakers should continue to sustain and leverage the affordability and geographic reach of California's CCB programs. With 116 community colleges, California can continue to expand CCB programs in geographic and program areas that are unlikely to affect enrollments in the traditional public 4-year sector. In the context of concerns of CCBs duplicating programs offered by CSU or UC, the non-partisan nonprofit WestEd recently evaluated and suggested that proposed CCB programs to which CSU had objected are not necessarily duplicative.[32] California should continue to incorporate third-party analysis from organizations like WestEd to ensure that the CCB approval process supports broader access to higher education statewide. Additionally, the CCB programs that are approved should be responsive to local labor market needs to optimize their impact.

2. Equitably align CCB programs more closely with labor market needs.

While education leaders, policymakers, and practitioners recognize the unique ways that CCB programs address issues of educational and economic equity, there is much to be done to foster greater equity in CCB programs. Educational and economic equity must be centered in the development, implementation, and continuous improvement processes of CCB programs.[33] This means ensuring that students have equitable access to career services, paid internships and work-based learning opportunities, networking and mentorship opportunities, and pathways to good jobs.

Advancing this work requires strong community partnerships with regional workforce consortiums, employers, industry leaders, community organizations, and other educational institutions and systems. To foster college and career alignment, practitioners must recognize and build on students' rich labor experiences, histories, and trajectories. This can be done by focusing on students' strengths rather than on what they lack. For example, instead of assuming that students do not know about career options, educators can ask students to share knowledge and skills from their communities; for example, a student whose family runs a small business could teach entrepreneurship skills to classmates. Classrooms can also design lessons that connect to students' lived experiences and desire to help others, such as using local community health data that students care about to teach statistics or bringing in professionals from students' communities as guest speakers and mentors.

3. Improve data accessibility, management, and infrastructure for CCB programs.

Over the past decade, the CCC Bachelor's Degree Program Steering Committee has captured the experiences and outcomes of CCB graduates by administering the California CCB Employment Outcomes Survey. The CCCCO continues to build a data and information system that can capture students' trajectories prior to and during CCB admission as well as postgraduate outcomes. However, key information about CCB programs and students is not yet visible. For example, complete and verified admissions, retention, internship, graduation, employment, and earnings records remain largely unknown. These data are important for assessing equity in CCB programs.

California needs better systems for collecting and organizing information about these bachelor's degree programs at community colleges. With improved data and information, education leaders could answer important questions: Do these programs actually help students earn more money? Do they work differently for different students—for instance, students from low-income households versus ones with more economic or financial advantages? Do outcomes vary by location, or are they affected by discrimination based on gender, race, or age?

Beyond just numbers, community colleges need to gather and act on students' experiences and feedback regularly. When students share their stories—through interviews, focus groups, or surveys—they reveal what is working and what needs to change. For example, students may identify hidden barriers, such as textbook costs or scheduling conflicts, that the data alone would not show.

As CCB programs continue to expand, education leaders and policymakers must invest in research and data to ensure that these programs equitably serve students and communities.

Appendix Tables

Appendix A. List of Approved CCB Programs, June 2025

College	Degree
Antelope Valley College	Airframe Manufacturing Technology; Respiratory Care
Bakersfield College	Industrial Automation; Research Laboratory Technology
Cerritos College	Dental Hygiene
College of the Canyons	Building Performance
Crafton Hills College	Respiratory Care
Cypress College	Mortuary Science; Dental Hygiene
DeAnza College	Automotive Technology Management
East Los Angeles College	Respiratory Therapy
El Camino College	Respiratory Care
Feather River College	Equine & Ranch Management; Ecosystem Restoration & Applied Fire
Foothill College	Dental Hygiene; Respiratory Care
Fresno College	Dental Hygiene
Fullerton College	Drone and Autonomous Systems (coming soon)
Hartnell College	Respiratory Care
Imperial Valley College	Industrial Automation (coming soon)
Los Angeles Mission College	Biomanufacturing

College	Degree
Los Angeles Pierce College	Biomanufacturing (recently approved)
Los Angeles Valley College	Respiratory Therapy
MiraCosta College	Biomanufacturing
Mission College	Emergency Services Administration (coming soon)
Modesto College	Respiratory Care
Moorpark College	Biomanufacturing
Moreno Valley College	Emergency Management (coming soon)
Mt. San Antonio College	Histotechnology
Napa Valley College	Respiratory Care (coming soon)
Oxnard College	Dental Hygiene
Palomar College	Building Performance and Environmental Design (coming soon)
Rio Hondo College	Automotive Technology; Electronic Digital Instrument
San Bernardino College	Water Resource Management (coming soon)
San Diego City College	Cyber Defense and Analysis
San Diego Mesa College	Health Information Management
San Diego Miramar College	Public Safety Management
Santa Ana College	Automotive Technology (coming soon); Occupational Studies; Paralegal Studies
Santa Monica College	Interaction Design
Shasta College	Health Information Management
Siskiyous College	Paramedicine (coming soon)
Skyline College	Respiratory Care
Solano College	Biomanufacturing
Taft College	Dental Hygiene Administration
Ventura College	Automotive Career Education
Victor Valley College	Respiratory Care (coming soon)
West Los Angeles College	Dental Hygiene; Aviation Maintenance Technology: Avionics

Source. CCCCO (2025)

Appendix B. Percentage of CCB Graduates Who Took Out Loans by Race/Ethnicity, Gender, and Age

	Percentage
Overall (*n* = 668)	**28**
Race/Ethnicity	
Asian/Asian American (*n* = 131)	26
Black/African American (*n* = 24)	29
Filipina/o/x (*n* = 71)	30
Latine/x (*n* = 195)	30
Middle Eastern/North African (*n* = 17)	41
Two or more races (*n* = 51)	29
White (*n* = 233)	26
Gender	
Female (*n* = 556)	31
Male (*n* = 215)	21
Age Group	
20–24 (*n* = 83)	27
25–29 (*n* = 208)	33
30–34 (*n* = 192)	33
35–39 (*n* = 108)	21
40–49 (*n* = 116)	22
50 or older (*n* = 55)	22

Note. To minimize lumping and maintain the confidentiality of racial/ethnic groups whose *n* size was less than 10, respondents who did not provide their demographic information as well as American Indian, Alaska Native, Native Hawaiian, and Pacific Islander graduates were omitted. However, their data are included in the calculations for overall rates. The same methodology was used for gender and age groups with respect to respondents who did not provide their demographic information, who were nonbinary, and who were 19 years old or younger. Numbers in green denote percentages that are at least five percentage points lower than the overall rate while numbers in red denote percentages that are at least five percentage points higher than the overall rate.

Author Biographies and Acknowledgments

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Endnotes

[1] Jez, S. J. (2025). *From institutions to individuals: A paradigm shift for California's master plan for higher education*. The Civil Rights Project/Proyecto Derechos Civiles, UCLA, and California Competes: Higher Education for a Strong Economy. californiacompetes.org/wp-content/uploads/2025/05/Master-Plan-Paper-Final.pdf; Rios-Aguilar, C., et al. (2023, April 6). *The potential of California's community college baccalaureate for closing racial equity gaps* [Research report]. The Civil Rights Project/Proyecto Derechos Civiles, UCLA. civilrightsproject.ucla.edu/reports/the-potential-of-californias-community-college-baccalaureate-for-closing-racial-equity-gaps; Yang Zhou, R., & Gomez, S. (November, 2025). *College affordability in California* [Fact sheet]. Public Policy Institute of California. ppic.org/publication/college-affordability-in-california

[2] Mello, F. (2019, November 13). *The soul-crushing cost of college in California, explained*. CalMatters. calmatters.org/explainers/california-cost-of-college-explained
[3] Vargas, M., & Dancy, K. (2023, August 16). *College affordability still out of reach for students with lowest incomes, students of color.* Institute for Higher Education Policy. live-ihep-wp.pantheonsite.io/college-affordability-still-out-of-reach-for-students-with-lowest-incomes-students-of-color
[4] Fry, R., Braga, D., & Parker, K. (2024, May 23). *Is college worth it?* [Report]. Pew Research Center. pewresearch.org/social-trends/2024/05/23/is-college-worth-it-2
[5] Zhou, R. Y., & Gomez, S. (2025, November). *College affordability in California*. Public Policy Institute of California. ppic.org/wp-content/uploads/college-affordability-in-california.pdf
[6] California Student Aid Commission. (2022, November 15). *2021–22 student expenses and resources survey: Insights brief.* csac.ca.gov/sites/default/files/file-attachments/sears_initial_insights_2022.pdf?1668526145
[7] National College Attainment Network. (n.d.). *College affordability*. ncan.org/page/affordability
[8] Legislative Analyst's Office. (2024, February 21). *The 2024–25 budget: California community colleges*. lao.ca.gov/Publications/Report/4853; Rios-Aguilar et al., 2023; Zhou & Gomez, 2025.
[9] Cuellar Mejia, M., et al. (2023, August). *Strengthening California's transfer pathway* [Report]. Public Policy Institute of California. ppic.org/publication/strengthening-californias-transfer-pathway
[10] Cal. Assemb. B. 927 (2021), Chapter 565. leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill_id=202120220AB927; Cal. Senate B. 850 (2014), Chapter 747. leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill_id=201320140SB850
[11] Cal. Assemb. B. 927, 2021.
[12] Governor's Office of California (2022). *Multiyear roadmap between the Newsom Administration and the CCC*. dof.ca.gov/media/docs/programs/education/CCC-Roadmap-May-2022.pdf
[13] California Community Colleges Chancellor's Office. (n.d.). *Baccalaureate degree program*. cccco.edu/About-Us/Chancellors-Office/Divisions/Educational-Services-and-Support/What-we-do/Curriculum-and-Instruction-Unit/Curriculum/Baccalaureate-Degree-Program
[14] Hoang, H., Vo, D., & Rios-Aguilar, C. (2022, August). *California's community college baccalaureate programs: Benefits and opportunities* [Research brief]. Wheelhouse: The Center for Community College Leadership and Research. education.ucdavis.edu/sites/main/files/file-attachments/wheelhouse_research_brief_vol_7_no_1_final.pdf
[15] Segovia, D., & Cooper, D. (2024, November). *Distance matters: Exploring geographic barriers to transfer for California community college students*. The RP Group. rpgroup.org/Portals/0/Documents/Projects/Exploring_Geographic_Isolation_Barrier_Equitable_Transfer_Outcomes/DistanceMatters_ExploringGeographicBarriers_November2024.pdf?ver=2024-12-20-201519-053
[16] In coordination with the CCC Bachelor's Degree Program Steering Committee, each individual CCB college administers the survey to students who graduated from their CCB program approximately 1 year after graduation.
[17] Rios-Aguilar et al., 2023.
[18] Tuition is determined according to state per-unit costs of $46 per lower division credit and $130 per upper division credit. A student's actual tuition may vary depending on the number of upper and lower division credits required to earn a given CCB credential. Tuition does not include additional costs or fees that may be incurred and that can vary by college (e.g., general student, book, material, or equipment fees).
[19] On average, students' out-of-pocket tuition costs will be substantially less once financial aid is applied. See: California State University. (n.d.). *Current tuition*. Retrieved April 20, 2025. calstate.edu/apply/paying-for-college/csu-costs/tuition-and-fees/Pages/basic-tuition-and-fees.aspx; University of California. (n.d.). *Tuition & cost of attendance*. Retrieved April 20, 2025. admission.universityofcalifornia.edu/tuition-financial-aid/tuition-cost-of-attendance
[20] Aguiar, A., et al. (2022, August). *Pioneering the California community college baccalaureate in California: The experience of West Los Angeles College* [Research brief]. Wheelhouse: The Center for Community College Leadership and Research. education.ucdavis.edu/sites/main/files/file-attachments/wheelhouse_research_brief_vol_7_no_2_final.pdf?1659636381
[21] California Community Colleges Chancellor's Office. (n.d.-a). *Special population/group student count*. MIS Data Mart. datamart.cccco.edu/students/Student_Special_Population.aspx; CCCCO. (n.d.-b). *Annual/term student count report*. MIS Data Mart. datamart.cccco.edu/students/Student_Headcount_Term_Annual.aspx
[22] California Community Colleges Chancellor's Office. n.d-a, n.d.-b.
[23] Since enrollment shares of colleges with CCB programs campus-wide and all California community colleges were comparable, we only report the enrollment shares at the CCB and state levels. State-level enrollments are inclusive of CCB enrollment headcounts. However, given the size of CCB program enrollment, campus- and state-level enrollment counts would be relatively consistent.
[24] Hanson, M. (2025, August 8) *Student loan debt statistics*. Education Data Initiative. educationdata.org/student-loan-debt-statistics
[25] U.S. Bureau of Labor Statistics. (2024, December 18). *Labor force statistics from the current population survey: Labor force characteristics* (CPS). bls.gov/cps/lfcharacteristics.htm
[26] Hurtt, A., et al. (2024, March). *The transition to college: Voices from the class of 2023* [Policy brief]. Policy Analysis of California Education. edpolicyinca.org/publications/transition-college; Yang Zhou, 2024; Fry et al., 2024.
[27] Johnson, H., Bohn, S., & Cuellar Mejia, M. (2015, October). *Will California run out of college graduates?* [Report]. Public Policy Institute of California. ppic.org/publication/will-california-run-out-of-college-graduates; Johnson, H., & Cuellar Mejia, M. (2021, May 18). California remains on track to close the degree gap. *Public Policy Institute of California Blog*. ppic.org/blog/california-remains-on-track-to-close-the-degree-gap
[28] Estimated living wages are calculated on what a household must earn to support itself while working full-time in a given geographic location and are estimated to account for expenses such as food, housing, health care, taxes, and transportation. Massachusetts Institute of Technology. (2025, February 10). Living wage calculation for California. *Living Wage Calculator*. livingwage.mit.edu/states/06
[29] California Community Colleges. (2023, September 26). *Vision 2030: A roadmap for California community colleges*. cccco.edu/-/media/CCCCO-Website/docs/report/Vision-2030-A-Roadmap-for-California-Community-Colleges.pdf?la=en&hash=3B83F5221C4A7A8BEFA7E94D5BCBF540D2718013
[30] Cuellar, M. G., & Gándara, P. (2017, August). *A missed opportunity for improving equity? Early observations on California's community college BA pilot* [Research brief]. Wheelhouse: The Center for Community College Leadership and Research. education.ucdavis.edu/sites/main/files/ucdavis_wheelhouse_research_brief_vol2no2_final_online_0.pdf
[31] U.S. Bureau of Labor Statistics, 2024.
[32] Burke, M. (2025, December). *Blocked by CSU, community college bachelor's degrees closer to approval following new analysis*. EdSource. edsource.org/2025/blocked-by-csu-community-college-bachelors-degrees-closer-to-approval-following-new-analysis/747647
[33] Vo, D., & Rios-Aguilar, C. (2024). Exploring economic & workforce development alignment: A content analysis of California's community college baccalaureate program applications. *Community College Review, 53*(1), 61–84. doi.org/10.1177/00915521241274279