



PPIC

PUBLIC POLICY
INSTITUTE OF CALIFORNIA

Pathways to College Completion in the Inland Empire

Technical Appendices

CONTENTS

Appendix A. Data and Methods

Appendix B. Additional Figures and Tables

Hans Johnson, Cesar Alesi Perez, Kevin Cook, Selina Gomez, and Marisol Cuellar Mejia

Supported with funding from the College Futures Foundation and the Gates Foundation

Appendix A. Data and Methods

Quantitative Data

We use multiple data sets to develop our models. These data and sources are:

- High school enrollment, completion, and college-going rate of recent high school graduates: CDE
- College enrollment and completion: ACS, IPEDS, and the institutional research sites of UC, CSU, CCC

For each source, we use the most recent data available (as noted below).

Quantitative Methods

To estimate the flow of students from 9th grade to college completion (or not), we developed a pipeline model that identifies key transitions as students move through their educational trajectories. The pipeline model shown in Figure 5 represents a synthetic cohort of 9th graders in public schools in California and the Inland Empire Region as they move through high school, complete the A-G courses, enter college (public or private, in California or another state), transfer from community college, and complete a bachelor's degree. The primary assumption of the model is that current rates of high school completion, a–g completion, college enrollment, transfer from community college, and college completion prevail throughout the cohort's high school and college years. Pipelines are developed separately for four large ethnic groups (Latinos, whites, Asian Americans, and African Americans) and two economic groups (low-income and middle- or high-income).

Four key transitions are identified and estimated in the model: (1) 9th grade to high school graduation (including a–g completion), (2) high school graduation to college enrollment (including community colleges and four-year colleges), (3) enrollment in four-year colleges (either as freshmen or transfer students), and (4) college enrollment to college completion (of a bachelor's degree).

The first transition is based on cohort graduation rates provided by the California Department of Education for the 2021-22 graduating class. Completion of the a–g courses is based on rates among public high school graduates in 2021-22, also provided by the California Department of Education.

The second transition is based on enrollment rates of recent high school graduates in community colleges and four-year colleges. College enrollment rates are calculated separately by type of college. California State University, the University of California, and the California Community Colleges provided 2015 data on public high school of origin for incoming freshmen. Data on private and out-of-state college enrollment rates was calculated from 2014 IPEDS data, adjusted to reflect public high school graduates. IPEDS data do not include information on ethnicity and gender of students based on their state of residence. Therefore, estimates of enrollment rates to private and out-of-state colleges by ethnicity and gender were derived by applying ethnic and gender distributions of young college-enrolled migrants (students who had left California) based on American Community Survey data. The third transition is derived from data on 2014–15 transfers from Community Colleges to UC, CSU, private colleges, and out-of-state colleges as provided by institutional research offices of UC, CSU, and the community colleges.

The final transition to college completion is based on six-year graduation rates of incoming freshmen and four-year graduation rates of transfer students. Rates are calculated separately by economic group and ethnicity for UC, CSU, private colleges in California, and out-of-state colleges. Our approach relies on multiple sources of data and multiple models. For the state's public universities, we use data from the systems' institutional research offices. For private colleges, we rely on data reported to the US Department of Education via the IPEDS database.

Qualitative Data

To help inform our quantitative findings, we conducted a series of semi-structured interviews to explore which factors may be contributing to higher college going rates for students in the Inland Empire. We interviewed three leaders at one K-16 regional collaborative, two K-12 district leaders, three community college leaders, two 4-year institutions (one UC and one CSU), and one IE focused non-profit. The qualitative exploration of the factors that might be contributing to these differences should provide us with a more nuanced understanding of the issues they face and what they are doing to address them. We purposefully selected school districts for an interview based on the California Department of Education's (CDE) college going rates for the most recent years available (e.g. high school graduating class of 2022). We considered the overall college going rates, as well as disaggregated by two vs. four-year colleges, and for students classified as socioeconomically disadvantaged. We selected a mix of higher and lower college going districts by comparing them to the regional and state average college going rates. By interviewing districts with both lower and higher college going rates we hope to better understand the similarities and differences in the programming, challenges, and opportunities they are confronted with in supporting the pathways into and through college for youth in the Inland Empire.

The interviews were conducted via Zoom in Fall 2024 and delved into topics ranging from college readiness, career exploration, college knowledge, and making the college choice (see interview questions below). We audio recorded and took detailed notes during each interview to accurately capture the perceptions of each interviewee. Interview data was analyzed and used to synthesize themes, make observations, and to gain insights to investigate further and inform other interviews.

College Readiness

- When are students in your district introduced or exposed to the concept of becoming college ready? What does this look like?
- What policies and practices are in place that help/hinder access and completion of A-G courses?
- What policies and practices are in place that help/hinder access and completion of dual enrollment courses?
- Does your district provide other types of college preparation opportunities? Which ones?

Career Exploration

- When are students in your district/college introduced or exposed to career exploration to inform their major/program of study choice? What does this look like?
- Who provides guidance and information about identifying interests, researching career paths?
- When, if at all, do they create a plan to help students achieve their career goals?

College Knowledge

- What information is provided to students in your district/college to help them navigate the [college application, financial aid] process?
- What strategy has been most successful in helping students in your district/college navigate the [college application, financial aid] process?
- What are some of the top factors students in your district consider when choosing to attend a [community college, four-year college] after high school?
- What are the top factors students in your district/college consider when deciding whether to attend/transfer to a California State University versus a University of California?

Engaging with parents/caregivers

- How, if at all, do you engage parents/caregivers in the college readiness and college knowledge process?
- What are the most successful strategies your district/institution has used to engage with parents/caregivers?

Final thoughts

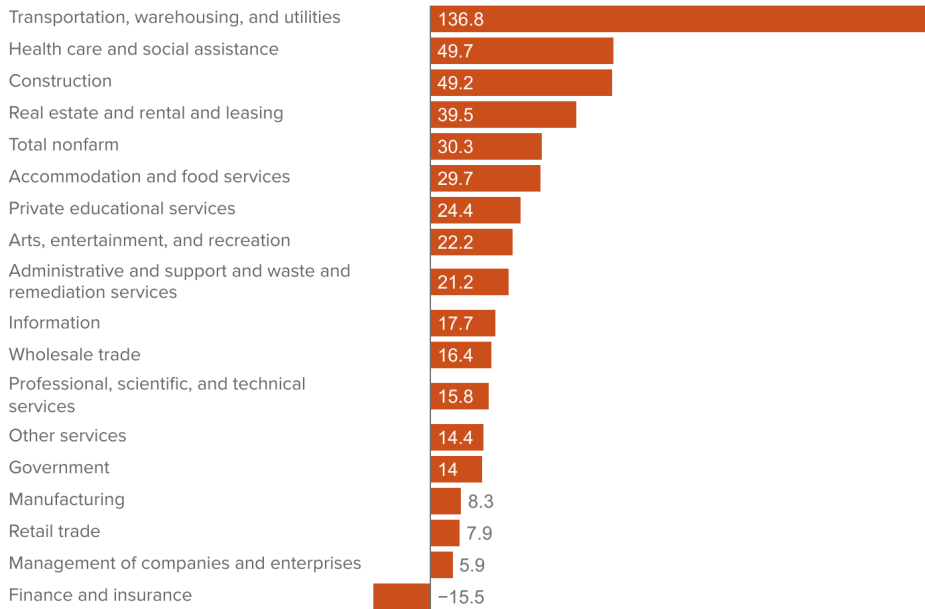
- If you had a magic wand and you could change any policy, practice, funding, mindset, etc. to improve college outcomes for students in your district/college, what would that be and why?

Appendix B. Additional Figures and Tables

FIGURE 1.

Job growth in the Inland Empire has been mostly in low-wage sectors

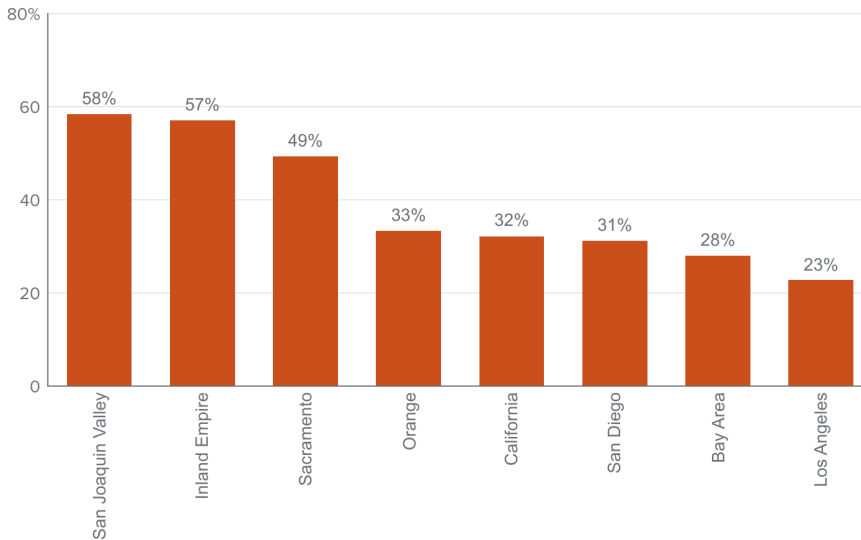
Percent change between 2014 and 2023



SOURCE: EDD - Labor Market Information.

FIGURE 2

College graduates in the Inland Empire are significantly more likely to own their homes than graduates in regions with higher college wages premiums



SOURCE: 2021-2023 American Community Survey, 1-Year Estimates.

NOTES: Homeownership rates for households headed by a full-time, year-round worker ages 23-34 with at least a bachelor's degree.

TABLE 1.

Most job openings between 2020-30 in the Inland Empire will be in occupations where only a small portion of workers have a college degree

Occ	Occupations	Projected job openings	Median annual wage	Job ads	Share workers with at least a BA in 2023
20	General and Operations Managers	24,810	\$106,940	583	49.31
3255	Registered Nurses	22,320	\$130,905	1,802	77.45
705	Project Management Specialists and Business Operations Specialists, All Other	17,390	\$100,635	183	73.47
2310	Elementary School Teachers, Except Special Education	16,950	\$102,783	96	96.36
2320	Secondary School Teachers, Except Special and Career and Technical Education	10,120	\$110,027	238	98.15
9130	Heavy and Tractor-Trailer Truck Drivers	59,100	\$61,399	930	6.95
5120	Bookkeeping, Accounting, and Auditing Clerks	18,400	\$50,501	308	16.27
2545	Teaching Assistants, Except Postsecondary	17,130	\$47,915	317	30.47
3645	Medical Assistants	14,660	\$40,737	378	9.08
3603	Nursing Assistants	11,590	\$44,747	144	17.66
3601-3602	Home Health and Personal Care Aides	127,220	\$33,280	615	15.7
4055	Fast Food and Counter Workers	103,870	\$35,200	549	15.59
9620	Laborers and Freight, Stock, and Material Movers, Hand	100,440	\$48,465	1,020	7.26
9645	Stockers and Order Fillers	88,830	\$44,299	327	12.15
4720	Cashiers	84,450	\$35,846	396	12.24

Source: EDD, 2020-2030 local employment projections. Riverside-San Bernardino-Ontario MSA (Riverside and San Bernardino Counties).



PPIC

PUBLIC POLICY
INSTITUTE OF CALIFORNIA

The Public Policy Institute of California is dedicated to informing and improving public policy in California through independent, objective, nonpartisan research.

Public Policy Institute of California
500 Washington Street, Suite 600
San Francisco, CA 94111
T: 415.291.4400
F: 415.291.4401
PPIC.ORG

PPIC Sacramento Center
Senator Office Building
1121 L Street, Suite 801
Sacramento, CA 95814
T: 916.440.1120
F: 916.440.1121