

Pathways to College Completion in the San Joaquin Valley **Technical Appendix**

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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 develop a pipeline model that identifies key transitions as students move through their educational trajectories. The pipeline model shown in Figure 4 represents a synthetic cohort of 9th graders in public schools in California and the San Joquin Valley 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 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 fouryear 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. We select a preferred projection based on our analytical models.

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 San Joaquin Valley. We interviewed three leaders at two K-16 regional collaboratives, six district/high school leaders, one SJV focused UC outreach program, and four student services leaders at one community college. 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 California Department of Education's (CDE) college going rates for the most recent years available (e.g. high school graduating class of 2021). 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 San Joaquin Valley. The two largest regional collaboratives, their four-year college partners, as well a subgroup of their community college partners were also invited for an interview.

The interviews were conducted via Zoom in spring 2023 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. The San Joaquin Valley Economy

Unemployment rates across the San Joaquin Valley continue to be the highest in the state ranging from 11.2 percent in the Visalia-Porterville metro area to 6.8 percent in the Stockton-Lodi metro area compared to 5.1 percent statewide (as of December 2023). At the same time, the region has seen the second largest year over year gains in nonfarm employment relative to pre-pandemic levels (6.4% versus 2.9% statewide).¹ However, employment growth has been disproportionately concentrated in industries that rely on relatively low-skilled labor.

FIGURE B1

The San Joaquin Valley has seen large employment gains since the pandemic, still, the metros in the San Joaquin Valley region have some of the largest unemployment rates in the state

Unemployment rate Employment change			
Dec 2023			
Visalia Portonvillo MSA	14 00/		
Visalia-Forterville WISA	11.2%		
Merced MSA	10.2%		
Hanford-Corcoran MSA	9.1%		
Bakersfield MSA	8.7%		
Fresno MSA	8.2%		
Madera MSA	7.9%		
Modesto MSA	6.9%		
Stockton-Lodi MSA	6.8%		
California	5.1%		

SOURCE: California EDD – Labor Market Information. NOTES: Data seasonally adjusted. Benchmark 2022.

During the last four years, employment gains in the transportation and warehousing industry have been the main source of employment growth in the San Joaquin Valley—at 31 percent, growth in this sector was nearly 2.5

¹ The Inland Empire saw the largest employment growth (7.1%).

times the rate as the next highest. In this sector, 38 percent of workers are employed in low-wage occupations.² Accommodation and food services is another industry with a large share of low-wage workers (67%), employment in this sector grew 13 percent in the San Joaquin Valley, which contrasts markedly to the modest gains observed elsewhere in the state. In these two industries—transportation and warehousing and accommodation and food services—the vast majority of workers are not college graduates (83% statewide and 91% in the San Joaquin Valley).

FIGURE B2

Employment growth in the San Joaquin Valley have been concentrated in industries with high share of low-wage workers

Percent

	Employment change	Share of low-wage workers
Transportation and Warehousing	31	38
Accommodation and Food Services	13	67
Health Care and Social Assistance	11	27
Other Services	10	41
Management of Companies and Enterprises	10	7
Construction	9	32
Arts, Entertainment, and Recreation	8	33
Manufacturing	8	26
Real Estate and Rental and Leasing	5	14
Retail Trade	3	36
Professional, Scientific, and Technical Services	3	4
Administrative and Support Services	2	53
Educational Services	1	11
Government	0	7
Wholesale Trade	0	21
Finance and Insurance	-8	4
Information	-12	4

SOURCE: California EDD – Labor Market Information and 2022 American Community Survey.

NOTES: Employment change between December 2019 and December 2023 in the San Joaquin Valley. Data not seasonally adjusted. We define low-wage workers as those earning less than two-thirds of the median wage. For calculating this threshold, we first compute the median wage of the full sample of prime-age full-time year-round workers using the American Community Survey. This is calculated for the state as a whole.

Not only has recent growth been concentrated in low-wages industries, but employment in the San Joaquin Valley is concentrated in low and middle wage industries. Only 12 percent of nonfarm jobs in the region are in industries

² We define low-wage workers as those earning less than two-thirds of the median wage, following a commonly used, relative threshold used for characterizing lowwage work relative to the full wage distribution. For calculating this threshold, we first compute the median wage of the full sample of prime-age full-time year-round workers using the American Community Survey (\$65,000).

with high shares of workers earning high wages (i.e., information, professional and business services, and financial activities). Finding ways in which workers in the San Joaquin Valley can access the high-skilled/ high-wage jobs within the logistics industry seems to be one way forward, at least in the short term, given the region's industry mix.

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