



**PPIC**

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INSTITUTE OF CALIFORNIA

## Increasing Community College Transfers

### Progress and Barriers

## Technical Appendices

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## Appendix A. Data and Methods

Through a Memorandum of Understanding signed between the California Community College Chancellor's Office and PPIC, we have access to student-level longitudinal data from the California Community College Chancellor's Office Management Information System (MIS). The dataset includes students who enrolled across the 114 community colleges that comprise the California Community College system, and includes information on student characteristics (race/ethnicity, gender, low income status), course-taking behavior, course elements (title of course, levels below transfer level, credit status, transfer status and minimum/maximum number of credits), and student outcomes (grades, and credits earned). We rely on this data to analyze students' trajectories and achievement of momentum points, and to examine how it differs across student's racial/ethnic groups. We have data through the fall term of 2019.

In addition, we use the Chancellor's Office "Transfer Bucket" to determine if student had an enrollment in a four-year institution and when. The Transfer Bucket has three data sources: a custom match provided by the National Student Clearinghouse using Social Security numbers, a match done with the UC system using Social Security numbers, and a match done with the CSU system using Social Security numbers.

It is important to emphasize that the focus of this report is not on the total number of students who transfer in a given academic year, instead it describes the number of students from a given student cohort who transferred within a given period. Most of our analysis is based on the 2014-15 student cohort tracked for four years.

The California Community College system in its Students Success Metrics (SSM) dashboard provides information on the number of students who transferred to various types of postsecondary institutions based on the data in the "Transfer Bucket". According to the SSM, 125,974 students transferred to a four-year postsecondary institution in 2017-18. The SSM counts as a successful transfer in a given year, any community college student with a valid Social Security number who was enrolled in the system the year prior and who earned 12 or more units (anywhere and at any time in the system) prior to transfer to the four-year institution. The transfer count in the SSM is the number that the Chancellor's Office uses in the State of the System report and in tracking the Vision for Success transfer goal.

Also using the "transfer Bucket", in our study a student from a given cohort is counted as a transfer if he/she enrolled in a four-year institution at any time within four-year of initial enrollment (or other specified timeframe) and did not have any enrollment in the community college system in the subsequent year to its enrollment in the four-year institution. By this calculation, 41,007 students from the 201-15 cohort transferred within 4 years of initial enrollment and 19,000 additional students did so as of fall 2019.

Here there are other important definitions:

**First-time student cohorts:** Cohorts are defined by the term in which the student took their first credit course at a California community college. We exclude Special Admit students concurrently enrolled in K12. We included in our analyses, students for which that was their first enrollment at a postsecondary institution. We exclude students without valid social security number.

**Transfer rates:** In different parts of the report, we calculate transfer rates using different denominators. For example:

- We compare the number of transfers relative to the number of students with a degree/transfer goal;
- Or relative to the number of students who showed some progress during their first three years of initial enrollment by earning at least 12 units (transferable or no) and by enrolling in any math or English course (including remedial courses);
- Or relative to the number of students who enrolled in any math/English course in the timeframe of analysis.

**Degree/transfer students:** Students who declared a degree and/or transfer goal at any time during their first year of enrollment. We use their informed education goal in the student success MIS file (SS01) if available.

Otherwise we use their informal educational goal in the student basic data file (SB14).

**Successful complete of transfer-level math and/or English:** means that the student completed the course with a passing grade (A, B, C, P).

**Unit accumulation:** units earned by the student with a D or better at any college in the system.

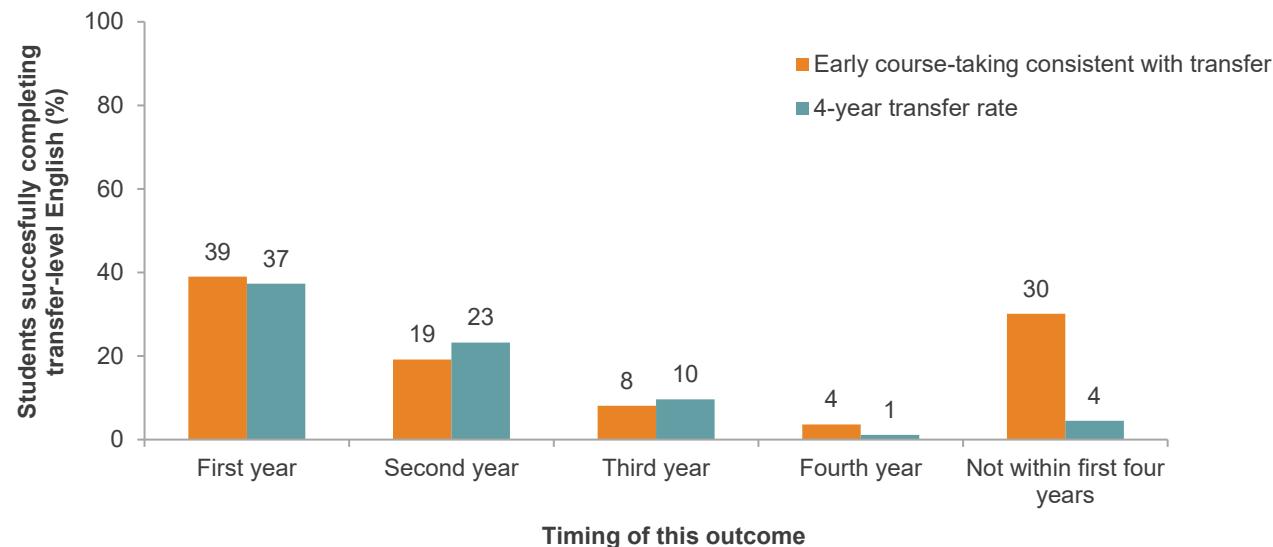
**Four-year outcomes:** we give each student 4 years to achieve a given metric. If the student's first term was fall 2014, we track this student until summer 2018. Likewise, if the student's first term was spring 2015 then we track that student until winter 2019.

**Transfer-level math:** Many students can satisfy the lower-division math requirement by completing a transfer-level course in statistics or quantitative reasoning. Throughout this report, any reference to transfer math includes those courses as well.

## Appendix B. Figures and Tables

**FIGURE B1**

Students are very likely to successfully complete a transfer-level English course in their first two years of enrollment

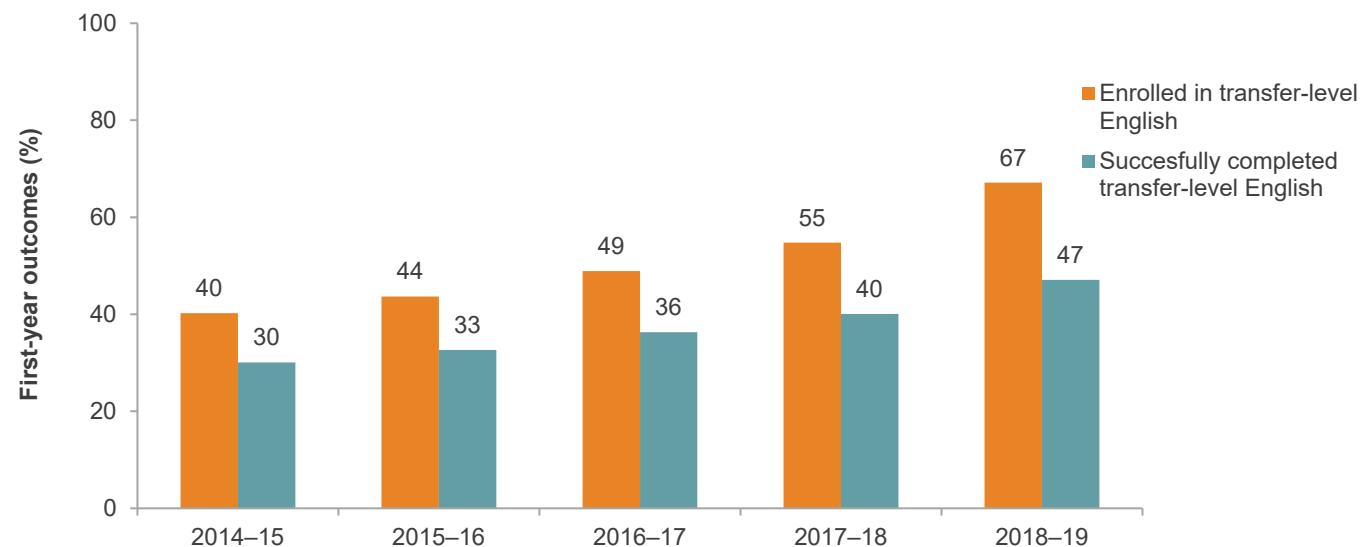


SOURCE: Authors' calculations based on MIS data.

NOTE: Based on students who showed course-taking consistent with transfer from the 2014–15 cohort (159,203 students) tracked over a 4-year period. Among these students 33,724 transferred within four years.

**FIGURE B2**

The share of students enrolling and successfully completing transfer-level English courses in their first year is on the rise



SOURCE: Authors' calculations based on MIS data.

NOTE: The figure shows the share of students achieving the outcome among all the students who took a course in the discipline within 4 years of initial enrollment. Successfully completed means passing the course with a C or better.

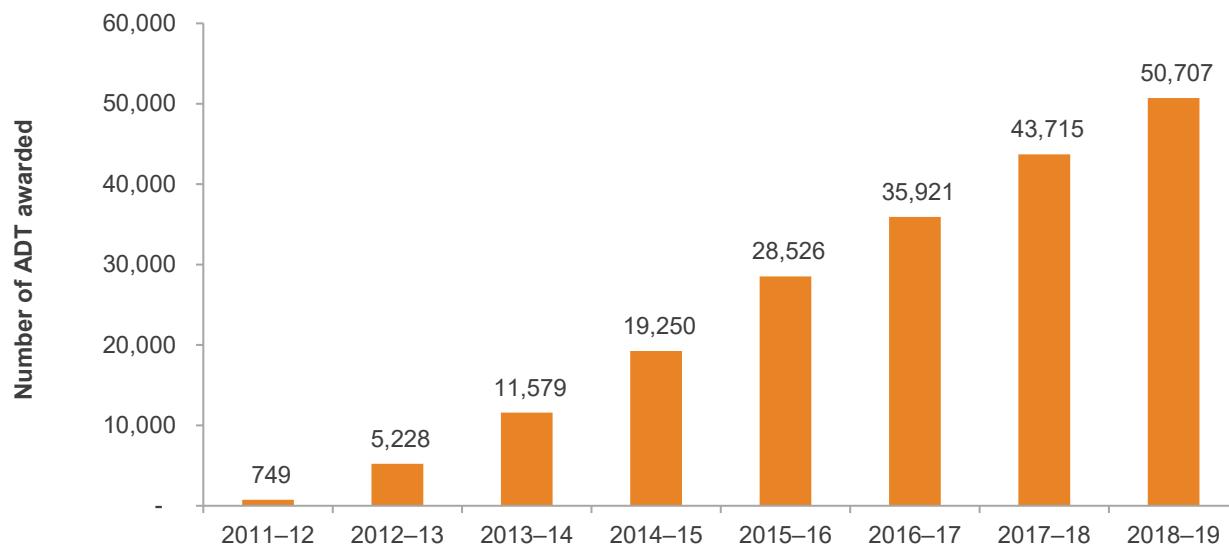
**TABLE B1**

Key milestones completion and transfer rates, 2014–15 cohort

	Students who declared a degree/transfer goal	Students who showed early course-taking consistent with transfer	Students who transferred	Share of degree/transfer goal students (%)	Share of students who showed early course-taking consistent with transfer (%)	Share among students who transferred (%)	Transfer rates among degree/transfer students (%)
Number of Students 2014-15	215,271	159,203	41,007	100	100	100	19
<b>Milestone 1: Math and English gateway completion</b>							
No math enrollment	55,073	13,609	8,366	26	9	20	15
No English enrollment	46,341	7,533	5,893	22	5	14	13
Started in developmental math	129,042	114,576	18,274	60	72	45	16
Successfully completed transfer-level math	37,366	40,901	13,794	17	26	34	37
Started in developmental English	103,598	89,839	14,109	48	56	34	14
Successfully completed transfer-level English	50,512	55,901	12,201	23	35	30	24
Started in transfer-level math	31,156	31,018	14,367	14	19	35	46
Successfully completed transfer-level math	25,212	26,702	13,307	12	17	32	53
Started in transfer-level English	65,332	61,831	21,005	30	39	51	32
Successfully completed transfer-level English	52,620	55,359	19,922	24	35	49	38
Successfully completed both Math & English	57,840	62,768	26,121	27	39	64	42
Did not successfully completed transfer math	97,620	77,991	5,540	45	49	14	6
Did not successfully completed transfer English	65,798	40,410	2,991	31	25	7	5
<b>Milestone 2: Unit accumulation</b>							
Less than 12	86,832	22,812	7,345	40	14	18	8
12-24	26,599	26,252	2,049	12	16	5	8
24-36	18,596	19,844	1,682	9	12	4	9
36-48	15,529	16,970	1,729	7	11	4	11
48-60	15,577	16,956	3,416	7	11	8	22
>60	52,138	56,369	24,786	24	35	60	48
<b>Milestone 3: Both Unit accumulation and transfer-level math &amp; English</b>							
Less than 12	404	163	36	0	0	0	Less than 12
12-24	1,050	1,145	199	0	1	0	12-24
24-36	2,386	2,692	481	1	2	1	24-36
36-48	4,007	4,490	783	2	3	2	36-48
48-60	7,382	8,108	2,426	3	5	6	48-60
>60	42,611	46,170	22,196	20	29	54	>60

**FIGURE B3**

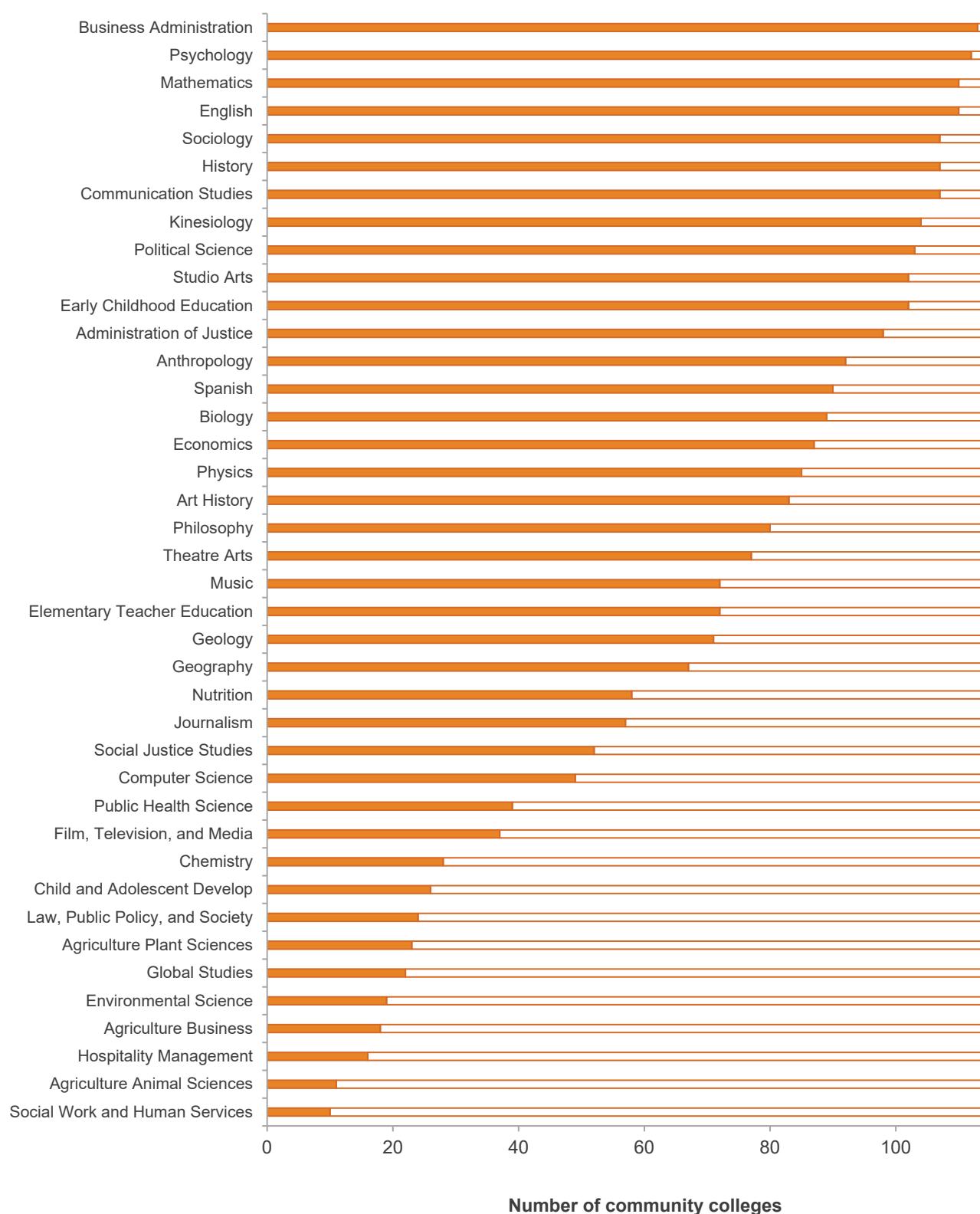
The number of students earning Associate Degrees for Transfer has increased rapidly



SOURCE: California Community Colleges Chancellor's Office 2020 State of the System.

**FIGURE B4**

ADTs are offered only in certain majors and not at all community colleges



SOURCE: California State University.

NOTE: Accessed on 7/23/2020.

**TABLE B2**

Transfer projection scenarios

	Students who declared a degree\transfer goal	Students who transferred within four years	Four-year transfer rates among students who declared a transfer goal (%)
2014-15 cohort, observed totals	215,271	41,007	19
Successfully completed both Math & English	57,840	26,121	45
Successfully completed English, but not math	45,292	6,002	13
Successfully completed math, but not English	4,738	980	21
Did not successfully complete either math or English	107,401	7,904	7
First projection scenario	215,271	70,350	
Successfully completed both Math & English	136,094	61,461	45
Successfully completed English, but not math	26,746	3,544	13
Successfully completed math, but not English	11,148	2,306	21
Did not successfully complete either math or English	41,283	3,038	7
Second projection scenario	215,271	61,863	
Successfully completed both Math & English	136,094	54,438	40
Successfully completed English, but not math	26,746	2,942	11
Successfully completed math, but not English	11,148	2,007	18
Did not successfully complete either math or English	41,283	2,477	6

Table B2 shows actual experiences of the 2014-15 cohort followed for four years, and projections for future cohorts based on improvements in completion of gateway transfer level courses in English and math. We keep the size of the projection cohorts the same as the 2014-15 cohort for comparison purposes. Both projection scenarios assume that dramatic increases in access and completion of transfer level math and English courses will lead to large increases in the number of students who successfully persist towards transfer. The figures on math and English completion are based on our assessments of student outcomes in fall 2019 as AB 705 was fully implemented across all colleges (and as discussed in the main body of the report).

In the first projection scenario, we assume that transfer rates (within each benchmark of completion) remain the same even as more students complete the transfer level courses in English and math (as shown in the final column). In the second projection scenario, we assume that the much larger cohorts of students completing English and math will not move towards transfer as successfully as past cohorts, and therefore include a slight decline in transfer rates for each benchmark category.

In both scenarios, the overall four-year transfer rates increase, from 19% for the 2014-15 cohort to 33% in the first scenario and 29% in the second scenario. It is important to note that these transfer numbers will be realized only if

four-year universities have the capacity to accept and enroll many more transfer eligible students. The total number of transfers increases by 71% in our first scenario and 51% in our second scenario. Of course, even with these dramatic gains, the vast majority of students who declare a transfer goal still are not projected to successfully transfer within four years.



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