

CHUTES OR LADDERS?

Strengthening California
Community College Transfer
So More Students Earn the
Degrees They Seek



Like Chutes and Ladders players, California community college students who want to transfer and earn a bachelor's degree are trying to make progress, but one bad roll of the dice can set them back several turns. Multiple barriers, including duplicative, ever-changing coursework requirements and a lack of unified, systemwide, transferrable course agreements between colleges and universities, have resulted in a complex transfer system. The Associate Degree for Transfer is a critical ladder to transfer and earning a bachelor's degree.

Limited major options for ADT earners

Lower-division course re-taking



Transferring to a low-performing for-profit university



Lack of course agreements between colleges and universities

Confusing course numbering systems

Remedial education

Transfer-level course placement

Guided Pathways

Associate Degree for Transfer



Trying to Climb Up, But Sliding Down

In the classic game of *Chutes and Ladders*, the player can see square 100—the finish line—but it is not easy to get there. The player may climb one ladder only to land on the wrong spot and be sent spiraling down a chute. In the game, players are aiming for the blue ribbon on square 100, but for students enrolling in college, the prize is a bachelor’s degree, and the key number is the 120 credits needed to get there.

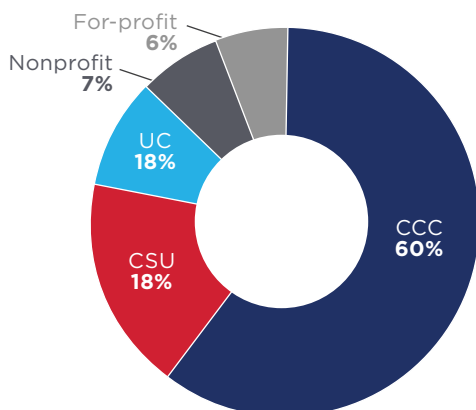
Like *Chutes and Ladders* players, California community college students who want to transfer to a four-year college or university are trying to make progress, but one bad roll of the dice can set them back several turns.

The California Community Colleges (CCC) are central to the economic strength and social mobility of California and its residents. They serve the majority of undergraduates in California. Each year, over two million students attend one of the 116 community colleges across the state, including the online campus—Cal Bright. In 2019-2020, these students included almost a half million first-time freshmen seeking to earn an associate degree and/or transfer to a four-year university.¹ Unfortunately, if past data trends persist, only 2.5 percent of them will transfer in two years, and fewer than a quarter (23 percent) will transfer in four.²

In this report, we examine the ways in which the transfer pathway is central to remedying racial inequity in higher education access and success and to producing the educated workforce California needs. We document the impact of the Associate Degree for Transfer (ADT) on improving the transfer pathway—the extent of its reach, notable variance by students’ race/ethnicity, and differences in access by college campus and major, both at California’s community colleges and at the state’s four-year universities. Finally, we offer recommendations to policymakers and campus leaders for removing remaining obstacles for students in the transfer process and for strengthening the ADT pathway and ensuring it becomes the preferred degree pathway for California’s transfer students.

60 percent of college students in California enroll in a California Community College.

Figure 1. California Student Enrollments by Higher Education Sector



Source: National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), Fall Enrollment Component (2019), Table EF2019A.

Among students who enrolled in the California Community Colleges in 2012-13, completed at least 12 credits within six years, and attempted transfer-level English or math:

2.5% transferred in two years or less

23% transferred in four years or less

40% transferred in six years or less

Source: Community College Chancellor's Office. (2021). Transfer Velocity; 2012-13 Cohort. Retrieved from datamart.cccco.edu





Transfer is Essential to Bachelor's Degree Attainment in California

The California Master Plan for Higher Education of 1960 was one of the state's most consequential achievements. This plan envisioned the California Community Colleges as a gateway to a four-year degree and as a mechanism to ensure that a college education would be broadly accessible to students across the state, regardless of gender, race, or socio-economic background. By 2018, California's expansion of access to higher education helped grow our economy into the fifth largest in the world.³ An open access path to the state's public universities via the transfer process was an essential element of the master plan, but transferring from a California community college to either of the state's public four-year university systems has not been seamless. And this has resulted in unacceptably low student transfer rates.

After six years—a lengthy time frame, even for part-time students—only 40 percent of transfer-seeking students actually transfer.⁴ This measure only counts students who completed at least 12 credits and attempted transfer-level math or English within six years of enrollment, and it leaves out students who never attempted transfer-level math or English due to remedial education requirements. In a recent analysis of students who enrolled in California community college for the 2013-14 academic year, the Public Policy Institute of California found that, of those who stated their goal was to a four-year school, only 28 percent actually transferred within six years, compared to 39 percent of students who completed at least 12 credits and attempted transfer-level English or math.⁵

A low transfer rate is not good for students, or for the state of California. By 2030, California's economy needs 1.65 million more college degrees and credentials—including 1.1 million bachelor's degrees⁶—to meet workforce demand. Because 60 percent of California undergraduate students are in community college *and* the majority of them belong to a racial/ethnic group with historically low bachelor's degree attainment, improving transfer is not just key to producing the bachelor's degrees the state needs, it also is key to achieving racial equity in higher education and economic opportunity for the state's diverse population.

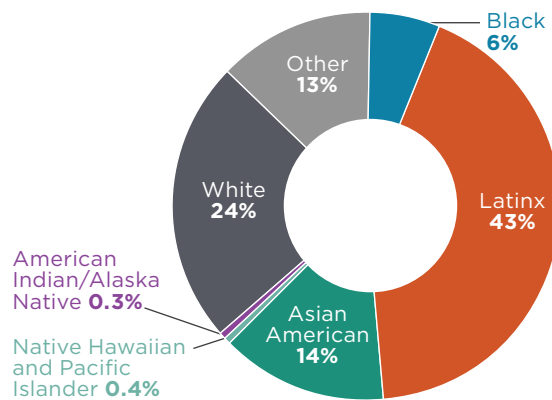
Transfer rates are low because navigating the process remains a cumbersome, confusing, and time-consuming experience for far too many students, despite reforms to improve transfer. **Multiple barriers, including duplicative, ever-changing coursework requirements and a lack of unified, systemwide, transferable course agreements between colleges and universities, have resulted in a system that more closely resembles a game of chance than a student-centered pathway that ends with a degree in hand.**⁷

California's current transfer process forces students, many of whom are first-generation college-goers, onto a path to a bachelor's degree that is far more difficult and complex than it needs to be. The consequence is that too few students end up reaching their transfer goals and achieving their dream of a four-year degree. Among those fortunate students who do transfer, the journey often includes climbing ladders only to fall down chutes, as students earn an average of 86 semester credits if they transferred with an ADT (and more if they transfer with a traditional associate degree, no degree, or multiple degrees), even though associate degrees and transfer requirements typically specify the need for only 60 credits.⁸

Our inability to fix and eliminate the complexity of the transfer pathway results in serious inequity because, as shown in Figure 2, the community colleges are the entry point to higher education for the majority of underrepresented minoritized Californians. We cannot grow the number of bachelor's degrees awarded or significantly increase the number of Latinx, Black, and Asian American Californians who earn these degrees without addressing this challenge.

California's colleges and universities enroll a diverse student body.

Figure 2. California Undergraduates by Race/Ethnicity, Fall 2019



Source: National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), Fall Enrollment Component (2019), Table EF2019A.



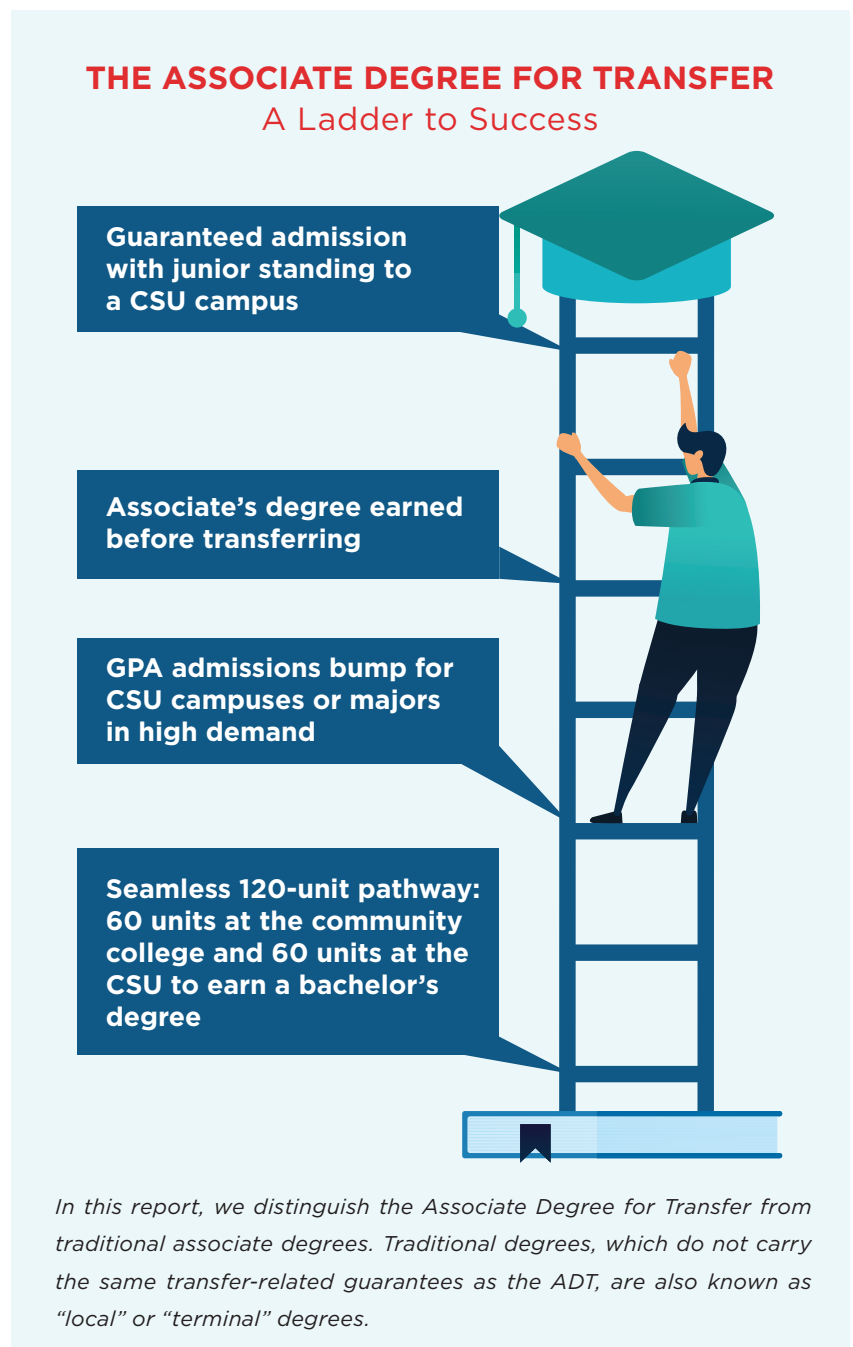
UNCLEAR ADMISSION REQUIREMENTS

“When I spoke to a counselor from Pasadena City College (PCC) I was told that I was basically done with all the classes that I needed so they said you are completely set to go to San Diego State University (SDSU) all the other schools it doesn't seem like you need to take any other classes. And I ended up speaking to one of the counselors from the admissions office ... from Pasadena City College and they told me that I was actually missing a class ...and then also when I spoke to PCC they told me that I had to check a specific website to know what I needed to take for SDSU but then when I spoke to SDSU they told me that they haven't even used that website for like over ten years and they actually have their own system and their own website that I have to look at. And it was real confusing because had I not gone to SDSU I would have been on a very different position than I am right now.”
Alexander Chacon, Pasadena City College student

The Associate Degree For Transfer— A Critical Ladder for Transfer Students

In 2010, recognizing the need to significantly increase the number of students who transfer and earn a degree, the Campaign for College Opportunity collaborated with then-State Senator Alex Padilla, as well as with leaders from both the California State University (CSU) and the California Community Colleges to enact historic transfer reform legislation, creating the ADT.⁹ The ADT was designed to become the preferred path by which students transfer to the state’s four-year universities. The degree made the transfer process simpler and more transparent, promising that every student who selected the ADT path and completed 60 transferable credits in the California Community Colleges would be awarded an ADT. In addition to earning a degree, the student would complete the requirements for transfer and earn guaranteed admission with junior standing to a corresponding degree program at the CSU. Companion legislation (AB 2302, Fong), requested that the University of California (UC) system offer a similar pathway for transfer that SB 1440 provides for the CSU. Unlike the CSU, the UC is governed by the Constitution of California and is not subject to direct legislative control.¹⁰ As such, the ADT does not guarantee admission to the UC, and transfer pathways to the UC do not generally ensure transfer students earn an associate degree on their way to their bachelor’s degree. The UC has, however, worked to align coursework patterns through the Transfer Pathways, Transfer Admissions Guarantee, and Pathways+ programs; and pilot programs are underway with ADT pathways to the UC in chemistry and physics at eight community colleges.

In 2013, the legislature passed SB 440, which amended the original ADT legislation to address initial implementation concerns.¹¹ This legislation established implementation benchmarks at both the California Community Colleges and the CSU; required the CSU to develop a redirection process for students with ADTs who were admitted to the system, but not to their campus of choice; and required the systems to develop student-centered communications and outreach strategies to help ensure students were aware of and taking advantage of this pathway. Only 27 community colleges have ADTs in all degree programs on their campuses for which an ADT could be offered.



Since the creation of the degree, 286,492 ADTs have been awarded by the California Community Colleges, and the share of graduates who are earning an ADT has continued to grow.¹² Students who transfer with an ADT do so with fewer excess community college credits and see higher two- and three-year completion rates after transferring to the CSU than their peers who transfer with associate of arts or associate of science (AA/AS) degrees.

GOOD NEWS

In this report, we note the ADT is improving the transfer pathway:

- 2,887 ADT pathways exist across the state's 115 degree-granting community colleges.
- Students earning ADTs graduate with **6.5 fewer excess credits** than students who earned traditional associate degrees.
- More than half of students who transfer to a CSU on a guaranteed ADT pathway are **graduating with their bachelor's degrees in two years**, and this share has been steadily growing.
- In 2020, 28,439 students enrolled at a CSU campus with an ADT in hand, and the proportion of transfer students enrolling on a guaranteed path is growing annually.
- More than half (54 percent) of Latinx students earning associate degrees from the California Community Colleges are earning ADTs.
- ADT enrollment has increased steadily at the CSU, but not all students with ADTs are on a guaranteed path, meaning they enroll without the benefit of junior standing. CSU campuses vary in the number of ADT students they enroll on guaranteed pathways.

BAD NEWS

As we celebrate the progress and role that the ADT has played, we also note that these improvements are not universal to all student groups, and significant room for growth remains:

- While the percentage of Black graduates who are earning ADTs has doubled over the past five years, **only 37 percent of Black community college students who earn associate degrees are awarded ADTs.**
- Students earning **ADTs still complete an average of 84 semester credits** at community colleges, despite the typical associate degree requiring 60 semester credits.
- Among incoming transfer students to the CSU, 21 percent have an ADT but are not on a guaranteed path.

Strengthening the ADT Ladder and Eliminating the Chutes

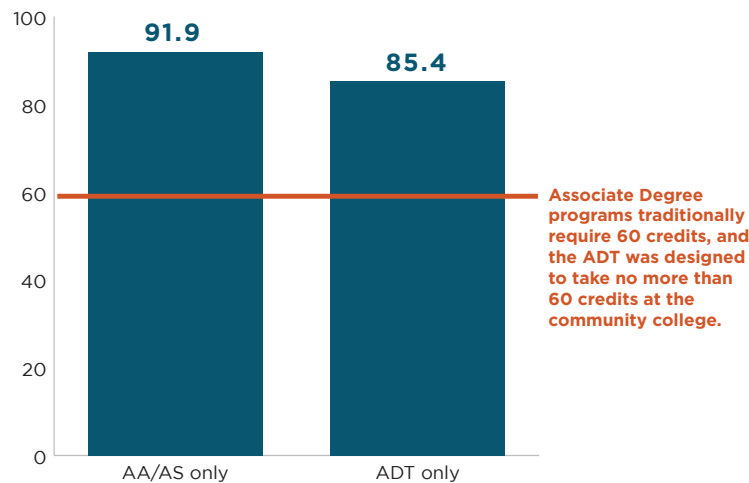
The ADT is an invaluable pathway for California’s community college students seeking a four-year degree. Ensuring the ADT is the preferred pathway by which students transfer requires us to strengthen the ADT ladder and to eliminate chutes and obstacles that persist for students.

The ADT is streamlining the transfer pathway for California community college students, but students are still taking more courses than required.

One of the goals of the ADT was to streamline the transfer process and ensure that students would not spend more time in community college than necessary. Initial evidence shows that students who earn an ADT graduate with fewer excess credits than their peers who graduate with traditional associate degrees. In comparing students who enrolled in the California Community Colleges in the 2017-18 academic year, the Wheelhouse Center for Community College Research and Leadership found that students who had earned an ADT (and who also earned an AA or AS degree) had an average of 85.4 credits, while students earning AA/AS degrees had an average of 91.9 credits – a difference of 6.5 credits. While this is better, it is still far higher than the 60 credits required for an Associate Degree for Transfer.¹³

Students earning an ADT complete their degrees with 6.5 fewer credits than students earning AA/AS degrees.

Figure 3. Credits Earned by Degree Type



Source: Baker, R., Kurlaender, M., & Friedman, E. (2020). *Improving the Pathway to the BA: An Examination of the Associate Degree for Transfer* [Report]. Davis, CA: Wheelhouse Center for Community College Research and Leadership.

Note: In their analysis, the authors also present the number of credits earned by students who had at least 60 credits, but no community college degree (77.69 credits), as well as students who had earned both a traditional associate degree and an ADT (90.98 credits). We focus here on the comparison between the set of students who earned an ADT only and the set of students who earned AA/AS degrees only, as this is the most meaningful comparison for purposes here. Students who have no degree represent a diverse set of students, many of whom are still actively enrolled in pursuit of a degree or transfer goal. From the same analysis, we note that, among students who have transferred, students with no community college degree accumulated more community college credits (86.87) than students with an ADT only (85.88), and, as noted below, fewer finish within two years of transferring to the CSU.

This same analysis shows that **ADT earners still complete about 25 more credits than necessary to transfer. For students attending full time, this is nearly an extra year of coursework.** This extra year is costly to students and their families, and to the state.



STRENGTHENING THE LADDER, ELIMINATING THE CHUTE

As colleges increase the number of students who are enrolling in ADT pathways, California community colleges' capacity to offer sufficient sections of high-demand courses is critical. Ensuring that transfer-seeking students are counseled into ADT pathways before taking courses that may not count toward their degrees is a vital step in eliminating the excessive course-taking documented above. The capacity to ensure counselors can work with students to identify the necessary courses so that students are earning their degrees without spending more time in community college than their degrees require, will ensure students do not take courses they do not need. An additional step to address the challenge of insufficient guidance would be to make the ADT the default pathway for students in fields of study where an ADT pathway is available.



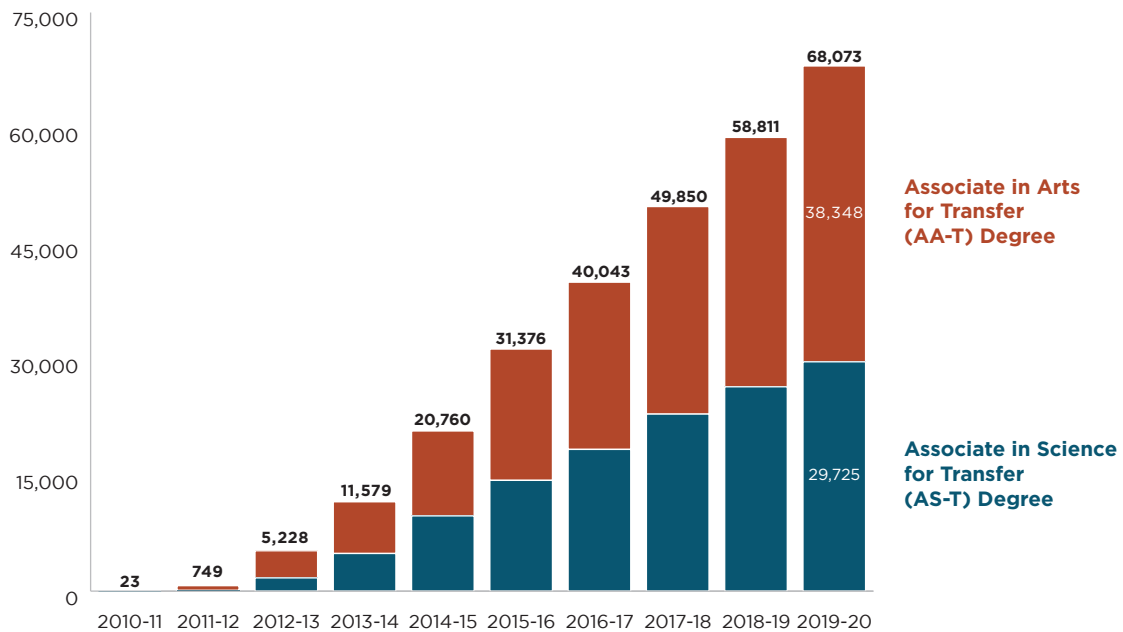


The ADT is rapidly growing; almost half of all associate degree earners received an ADT in 2020.

Figure 4 shows the number of Associate in Science for Transfer (AS-T) and Associate in Arts for Transfer (AA-T) degrees awarded since the ADT's creation. In the 2019-20 academic year, a total of 68,041 ADTs were conferred. Between the creation of the ADT and August 2020 **286,492** ADTs had been awarded by the California Community Colleges.¹⁴

The number of ADTs awarded annually has increased dramatically since the award was created.

Figure 4. ADTs Awarded by ADT Type

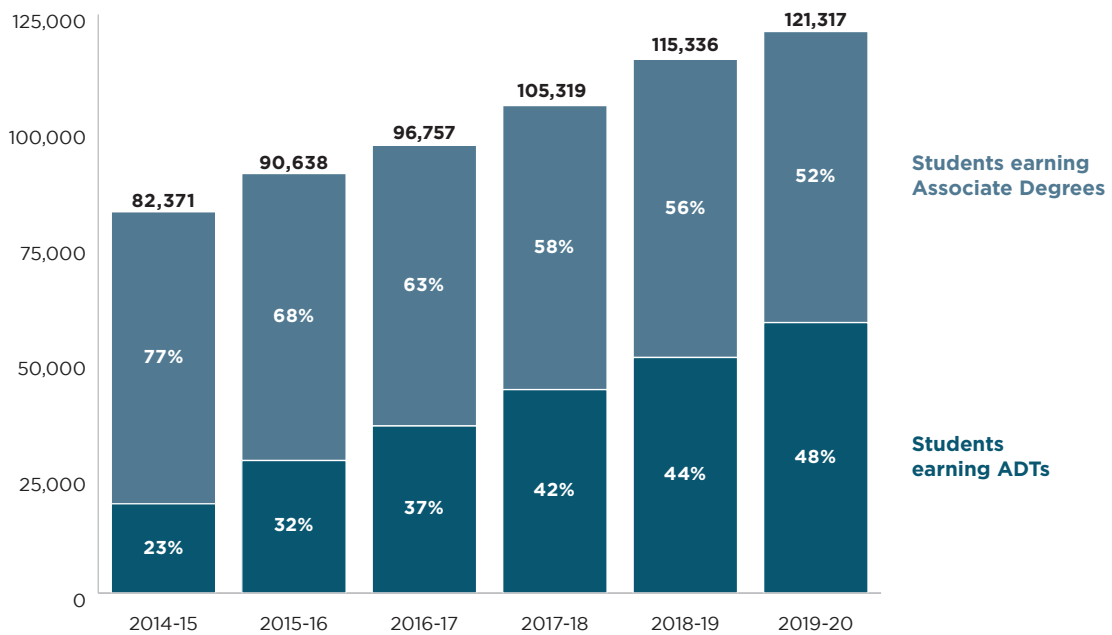


Source: California Community Colleges Chancellor's Office (2020). DataMart 2010-2019. Available from: <https://datamart.cccco.edu/>

Figure 5 shows that the California Community Colleges system is awarding more students with ADTs with every successive year. Of the students who earned an associate degree in 2019-20, 48 percent earned ADTs, a 25 percentage-point increase from 2014-15. When looking only at students who declare their intention to earn a degree and/or to transfer to a four-year college or university, 50 percent are earning ADTs, indicating that the ADT has clearly become an important pathway for California’s students.¹⁵

ADTs continue to grow as a share of associate degrees awarded at the California Community Colleges – nearly half of students earning associate degrees in 2019-20 earned an ADT.

Figure 5. Students Earning Degrees, by Degree Type



Source: Cal-PASS Plus. (2020). Student Success Metrics, [Data Dashboard]. Retrieved from: <https://www.calpassplus.org/LaunchBoard/Student-Success-Metrics>

Note: The dark blue regions include graduates who earned both an ADT and an AA/AS. Students earning multiple degrees are counted only once.



STRENGTHENING THE LADDER, ELIMINATING THE CHUTE

In addition to ensuring that ADT pathways are available to all students, colleges must ensure that students are aware of the ADT pathway and the real benefits it confers. A report from the California Legislative Analyst’s Office (LAO) noted the lack of awareness about the ADT pathway among students, as well as an incorrect belief among many who had earned a traditional associate degree that their degree was an ADT.¹⁶ **Both ensuring awareness and automatically enrolling students in an ADT pathway, when a suitable pathway exists, would significantly increase the number of students earning ADTs every year.**

Ensuring the ADT is the preferred pathway for students will save the state millions of dollars each year.

Students earning an ADT complete their degrees with 6.5 fewer credits than students who earn traditional associate degrees. Tuition for most students at the California Community Colleges is covered by the state through California College Promise Grants. Reducing the number of credits accumulated by students as they pursue their associate degrees saves students time, and it also comes with considerable savings to the state. **Given that the face value of a community college credit waiver is \$46, we estimate that students earning ADTs in 2019-2020 saved \$10,429,293 in community college fees (tuition).**

As can be seen in Table 1, if half of associate degrees awarded were ADTs, the 6.5-credit drop in excess credits would save the state over half a million dollars per year in fee (tuition) waivers that could be reinvested in financial aid and other vital supports, allowing colleges to expand access and ensure students receive valuable support once enrolled. **If ADTs were to make up 80 percent of associate degrees conferred, the state would save \$11.5 million in community college fee waivers annually, just through the 6.5 fewer credits. This savings could be invested in our campuses to provide greater access to high demand courses, counseling, and student support services.** These savings account for tuition savings, which we note does not cover the full range of savings that could be realized by graduating students with fewer excess credits.

If ADTs accounted for 80 percent of all associate degrees conferred, California could save an additional \$11.6 million/year in fee (tuition) waivers at the California Community Colleges. This is on top of the \$10.4 million in savings already realized.

Table 1. Savings to State in Community College Fee (Tuition) Waivers For Increasing ADT Awards

| % of associate degree earners with an ADT | Estimated additional annual savings from a 6.5-credit difference | Estimated additional annual savings from a true 60-credit pathway |
|---|--|---|
| 48% | | \$40,611,765 |
| 50% | \$666,748 | \$43,874,834 |
| 60% | \$4,299,707 | \$61,654,568 |
| 70% | \$7,932,665 | \$79,434,303 |
| 80% | \$11,565,624 | \$97,214,037 |

Notes: Initial savings of \$10,429,293 assumes students earning associate degrees (and who do not earn AA/AS degrees), earn one degree and save 6.5 credits each. Savings from additional students earning ADTs assume that students switch from AA/AS pathways to ADT pathways and maintain a 6.5-credit differential. Savings from achieving a true 60-credit pathway assume students who earn only ADTs graduate with exactly 60 credits and one degree.

As already noted, the ADT was designed to take 60 credits, but students are still accumulating more than 85 credits in earning their degrees. Table 1 also shows the estimated cost savings if the state and public institutions of higher education make a true commitment to support enrollment in ADT pathways, ensure adequate capacity in high-demand courses so students are earning credits that count for graduation and transfer, and support students to completion, all such that the degree truly is a 60-credit pathway. **If the state and its public colleges and universities made a true commitment to the ADT pathway and met the 60-credit goal in 2019-2020, California would have saved an additional \$40.6 million.** And if enough students switched from AA or AS pathways to ADTs to ensure that 80 percent of associate degree-earners are awarded ADTs, the state would have saved an estimated \$97 million. While 60 credits may be aspirational, **even cutting the number of excess credits in half—from 85 credits to 73—could save the state over \$54 million in fee (tuition) costs alone if applied to 80 percent of associate-degree-earners.**



Although the number of ADTs awarded is on the rise, there is substantial variation among community colleges in the rates at which they are supporting students to earn this valuable degree. In 2019-20, the percent of ADTs among all degree earners in a college ranged from a high of 63 percent to below ten percent. California community colleges where ADTs account for over 60 percent of associate degrees conferred were Berkeley City College, Glendale College, Evergreen Valley College, and College of the Desert.

Only 14 of 116 California community colleges awarded more ADTs than traditional associate degrees in 2019-2020.

Table 2. ADTs as a Percentage of Associate Degrees Awarded at the California Community Colleges, 2019-20

| College Name | ADTs as Share of Associate Degrees | College Name | ADTs as Share of Associate Degrees | College Name | ADTs as Share of Associate Degrees |
|-----------------------|------------------------------------|-------------------------|------------------------------------|--------------------|------------------------------------|
| Berkeley City | 66% | Lake Tahoe Community | 45% | Butte | 36% |
| Glendale Community | 64% | Cuesta | 44% | Columbia | 36% |
| Evergreen Valley | 63% | Modesto Junior | 43% | San Jose City | 36% |
| College of the Desert | 61% | Cerritos | 43% | College of Marin | 36% |
| Foothill | 59% | Monterey Peninsula | 43% | San Diego City | 36% |
| West Valley | 59% | Grossmont | 43% | Copper Mountain | 36% |
| Long Beach City | 59% | Canyons | 42% | LA City | 36% |
| Clovis Community | 57% | Bakersfield | 41% | Saddleback | 36% |
| Fresno City | 53% | Moorpark | 41% | Woodland Community | 35% |
| Reedley College | 53% | Gavilan | 41% | Chaffey | 35% |
| Diablo Valley | 52% | Crafton Hills | 41% | Feather River | 34% |
| Merced | 51% | LA Valley | 41% | Santiago Canyon | 34% |
| San Diego Mesa | 50% | College of the Sequoias | 40% | Los Medanos | 33% |
| Skyline | 50% | Chabot | 40% | West Los Angeles | 33% |
| Orange Coast | 50% | Mt. San Antonio | 40% | Fullerton | 33% |
| Cypress | 49% | Imperial Valley | 40% | Ventura | 32% |
| College of San Mateo | 49% | Napa Valley | 38% | Ohlone | 32% |
| Hartnell | 49% | El Camino | 38% | Porterville | 32% |
| Las Positas | 48% | Rio Hondo | 38% | Taft | 32% |
| Citrus | 48% | Antelope Valley | 38% | LA Mission | 31% |
| Southwestern | 48% | Folsom Lake | 38% | Pasadena | 31% |
| San Diego Miramar | 47% | Cañada | 37% | College of Alameda | 31% |
| East Los Angeles | 47% | Oxnard | 37% | Santa Monica | 31% |
| De Anza | 45% | Mission | 36% | Cuyamaca | 31% |

| College Name | ADTs as Share of Associate Degrees | College Name | ADTs as Share of Associate Degrees | College Name | ADTs as Share of Associate Degrees |
|-----------------------|------------------------------------|----------------------------|------------------------------------|--------------------------|------------------------------------|
| San Bernardino Valley | 31% | MiraCosta | 26% | LA Harbor | 19% |
| Mendocino | 30% | Laney | 25% | LA Southwest | 19% |
| Palomar | 30% | Shasta | 25% | Golden West | 19% |
| Compton | 30% | Barstow Community | 25% | Irvine Valley | 19% |
| Santa Rosa Junior | 30% | Mt. San Jacinto | 24% | Merritt | 18% |
| West Hills Lemoore | 30% | Yuba | 24% | LA Trade-Tech | 18% |
| Norco | 29% | Cerro Coso Community | 24% | Cabrillo | 18% |
| Sacramento City | 28% | City College San Francisco | 24% | Moreno Valley | 15% |
| Cosumnes River | 28% | Riverside City | 23% | College of the Siskiyous | 15% |
| West Hills-Coalinga | 28% | Solano Community | 22% | San Joaquin Delta | 12% |
| LA Pierce | 27% | Santa Barbara City | 22% | Palo Verde | 7% |
| American River | 27% | Allan Hancock | 21% | Coastline Community | 6% |
| Lassen | 27% | Victor Valley | 20% | | |
| Sierra | 26% | College of the Redwoods | 20% | | |
| Santa Ana | 26% | Contra Costa | 19% | | |

Source: California Community College Chancellor's Office (2020). DataMart. Available from: <https://datamart.cccco.edu/>



STRENGTHENING THE LADDER, ELIMINATING THE CHUTE

Once a Transfer Model Curriculum (TMC) has been approved for a given degree, California Community Colleges are required to develop an ADT in that pathway if they offer an AA or AS in that field within 18 months of the TMC's approval. **Only 27 colleges offer an ADT in every program on their respective campuses for which an ADT pathway exists, per the requirements of SB 440. An additional 36 colleges have one degree pathway for which an ADT could be—but has not yet been—developed, and 54 colleges must develop two or more ADT pathways to ensure that the campus has an ADT pathway for every program it offers in which an ADT could be developed.**

Appendix A contains a full list of California Community Colleges and the programs in which they offer ADTs, as well as where they must still develop ADT pathways.

As can also be seen in Appendix A, STEM fields account for a substantial number of undeveloped pathways. Of the 181 undeveloped pathways, 38 are in chemistry, 19 are in computer science, and 14 are in environmental science. Beyond ensuring that colleges are offering all ADTs that correspond to AA/AS degrees already offered on their campuses, policymakers must address aspects of the law that have made it difficult to create pathways for certain STEM and health fields. This includes finding ways to accommodate programs that require more than the typical 60 credits, either at the community college or the CSU level.



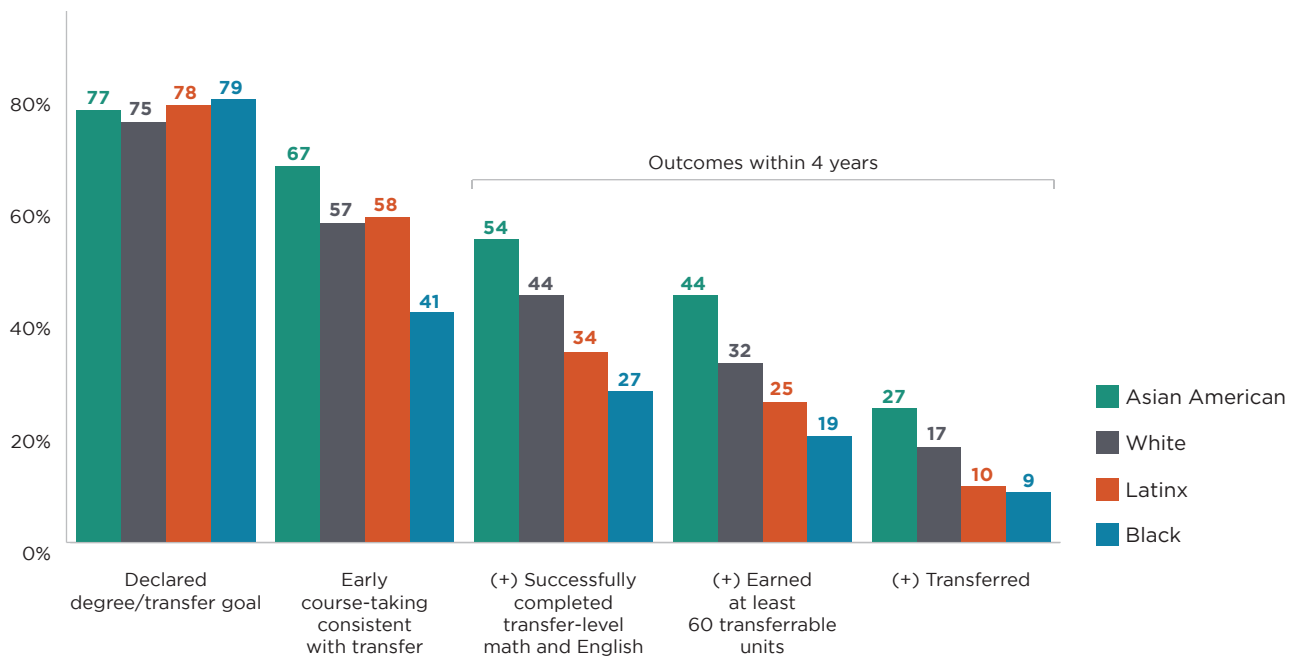


Minoritized Students Land on More Transfer Chutes Than Ladders

Inequities by students' racial and ethnic backgrounds are apparent at multiple stages in the transfer process. Although students across different racial and ethnic categories who enrolled in the 2014-15 academic year identified their goal of earning a degree and/or transferring to a four-year institution at comparably high rates, early course-taking patterns, the successful completion of transfer-level math and English, the accrual of transferable credits, and ultimate transfer rates vary widely by race/ethnicity. Indeed, only nine percent of Black students and ten percent of Latinx students enrolling that year were supported to transfer within four years, compared to 17 percent and 24 percent of their white and Asian peers, respectively.¹⁷

Only nine percent of Black students and ten percent of Latinx students enrolling in 2013-14 were supported to transfer within four years, compared to 17 percent and 24 percent of their white and Asian peers, respectively. This is in spite of roughly equal rates of declaring a goal involving earning a degree and/or transferring.

Figure 6. Community College Transfer-Related Outcomes by Race/Ethnicity



Source: Johnson, H. & Mejia, M.C. (2020). *Increasing Community College Transfers*. [Report]. San Francisco, CA: Public Policy Institute of California. Retrieved from: <https://www.ppic.org/wp-content/uploads/increasing-community-college-transfers-progress-and-barriers-september-2020.pdf>

More Latinx associate degree earners are earning ADTs than degree earners of any other race/ethnicity, while Black associate degree earners and American Indian/Alaska Native associate degree earners have been unsupported in reaching equity with their peers on the same measure (See Figure 7). While ADTs account for 39 percent of associate degrees conferred overall, there are only 15 California community colleges where ADTs account for 50 percent or more of associate degrees conferred.

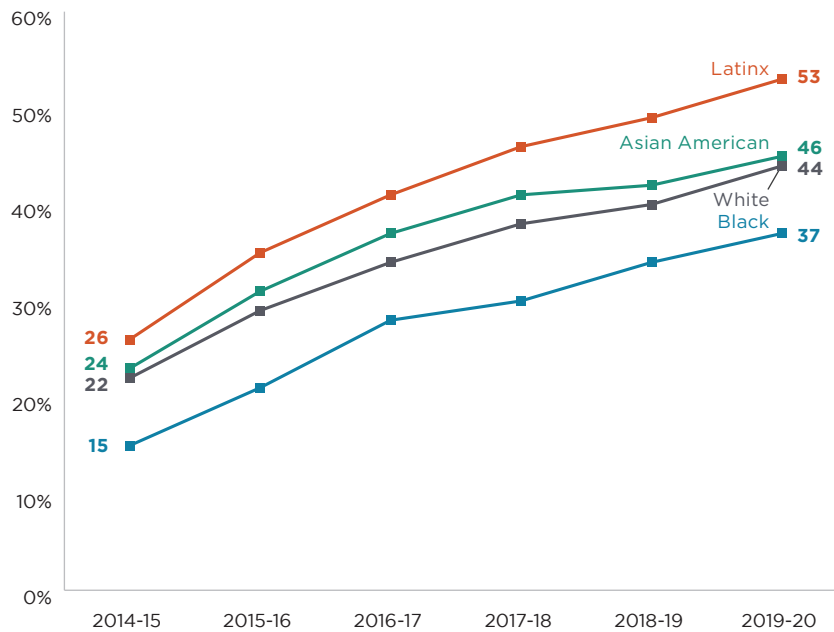
Latinx graduates are earning ADTs at relatively high rates, but Black students are not as well-supported in pursuing ADTs.

As noted, transfer outcomes for community college students vary widely by race/ethnicity (see Figure 6 on page 19). Figure 7 shows that **the ADT is now the preferred pathway for Latinx students graduating from the California Community Colleges.** Latinx students account for more than 46 percent of California’s community college population. Ensuring this pathway is accessible to the students from the largest demographic group in the state, and one that has been historically underserved by the state’s educational systems, will ensure the benefits of this degree are felt in the broadest possible terms.



More than half of Latinx associate degree earners are awarded ADTs, while only 37 percent of Black graduates are supported on the ADT pathway.

Figure 7. ADTs as a Share of Associate Degrees



Source: Cal-PASS Plus. (2020). Student Success Metrics, [Data Dashboard]. Retrieved from: <https://www.calpassplus.org/LaunchBoard/Student-Success-Metrics>

Figure 7 also clearly shows that transfer pathways are not serving all student populations equally, and the vision of making transfer pathways seamless and universally accessible remains unfinished. The percentage of Black graduates who are earning ADTs has doubled over the past five years, yet in the 2019-20 year, only one-third of Black associate degree earners were awarded ADTs. One potential explanation for disparities like this is that the ADT offerings are correlated with campus demographics. A recent report found that community colleges with fewer ADT offerings had larger populations of Black and Asian students, while campuses with larger proportions of Latinx students tended to have more ADT offerings.¹⁸ **ADTs seem to be a powerful way to support Latinx students’ transfer goals, but other minoritized groups may not be as supported by the ADT or have the same level of access.**

2020 EQUITY CHAMPIONS *of* HIGHER EDUCATION

In November 2020, the Campaign for College Opportunity honored five community colleges for leading the state in conferring ADTs to Black and/or Latinx students on their campuses. These campuses are awarding the highest number of ADTs to Latinx and/or Black students relative to the number of transfer-seeking Black and/or Latinx students on their campus. To do so, we used an equity index based on work by the Center for Urban Education at the University of Southern California.¹⁹ An equity index tells us how representation of Black and Latinx students among a college's ADT graduates compares to Black and Latinx representation on campus. Colleges where greater shares of minoritized populations are being supported to complete ADTs will have higher equity indices.

Looking at ADTs through a lens of equity ensures that institutions are held accountable for supporting students of different subgroups.

Each of these colleges were awarded as 2020 Equity Champions of Higher Education:

CERRITOS COLLEGE

Highest Equity Index Metric for Awarding ADTs to Black Students

WOODLAND COMMUNITY COLLEGE

Highest Equity Index Metric for Awarding ADTs to Latinx Students

MERRITT COLLEGE

High Equity Indices for Awarding ADTs to both Latinx and Black Students

LANEY COLLEGE

Highest Equity Index Growth Between 2016 and 2018 in Awarding ADTs to Black Students

BERKELEY CITY COLLEGE

Highest Equity Index Growth Between 2016 and 2018 in Awarding ADTs to Latinx Students

Appendix B of this report contains equity index scores for each of California's community colleges for their conferral of ADT awards to Black and Latinx graduates relative to their student populations.





Getting to the Goal: Increasing Bachelor's Degree Attainment in California

Associate degrees and high-value credentials offer premiums for those who hold them, but a bachelor's degree confers even higher earnings, greater job security, and better outcomes on a range of social and health indicators. A Californian with an associate degree earns around \$14,000 per year more than one with only a high school diploma. For Californians with a four-year degree, that premium grows to roughly \$40,000 per year.¹⁹ Over the course of a lifetime, a bachelor's degree translates to earning an additional \$1 million, on average, compared with individuals with only a high school diploma.²⁰

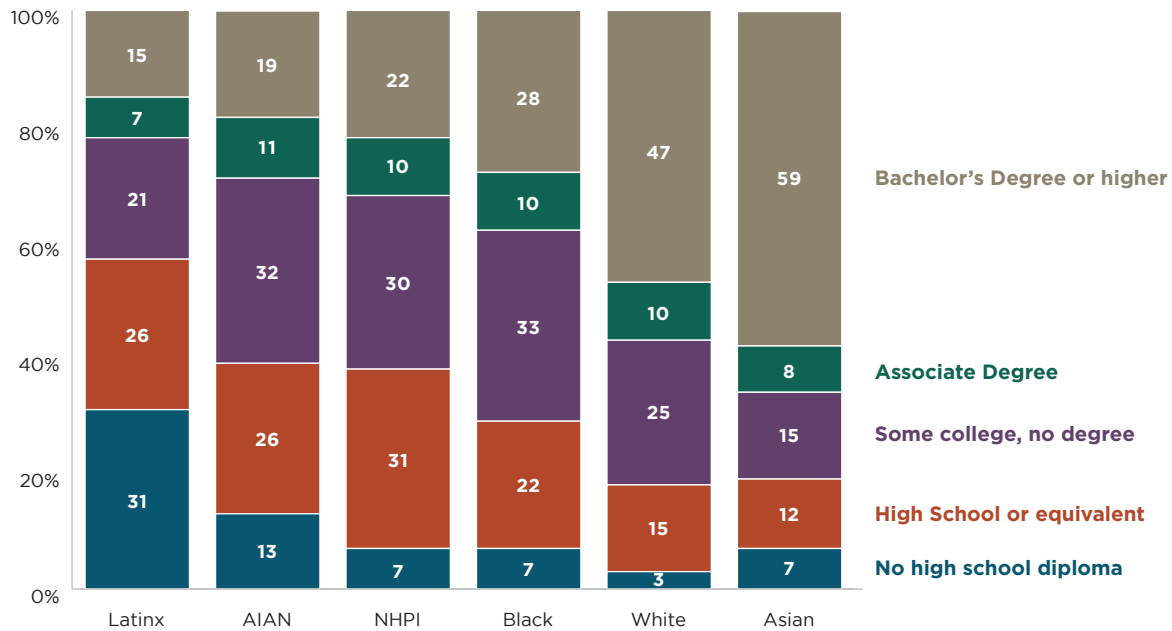
The COVID-19 global pandemic has further highlighted the economic importance of a college education and unmasked racial disparities. While a college degree has long been known to protect workers from losing their jobs,²¹ Californians with a college degree were more likely to be protected and recover more quickly from the economic shocks brought about by COVID-19.²²

California's elected officials also encountered a surprising windfall in the 2021 budget, which was the result of the fact that Californians with college degrees generate the majority of tax receipts for the state, and this group—largely white and Asian American—was impacted less severely by the pandemic-related loss of employment.²³ In February 2020, shortly before the initial wave of stay-at-home orders were issued by governors and mayors across America, 62 percent of workers with a bachelor's degree held jobs that could be teleworked, compared to 33 percent of those with some college education, but no degree, and 22 percent of workers with only a high school diploma.²⁴ This ability to work from home protected college-educated workers from both job loss and potential illness amid the growing pandemic and its impacts. A year later, initial COVID-19 vaccination rates differ by educational attainment.²⁵ Though this can be partially explained by early prioritization of health care workers who are more likely to hold college degrees, racial and ethnic disparities in college attainment are being reproduced in terms of COVID-19 vaccine rates.

In spite of the benefits and protections conferred by a four-year degree, bachelor's degree attainment in California varies significantly by race/ethnicity, as Figure 8 shows.

California’s Latinx population has the lowest bachelor’s degree attainment rate in the state. California’s Black residents have the highest rates of enrolling in college, but not completing a bachelor’s degree.

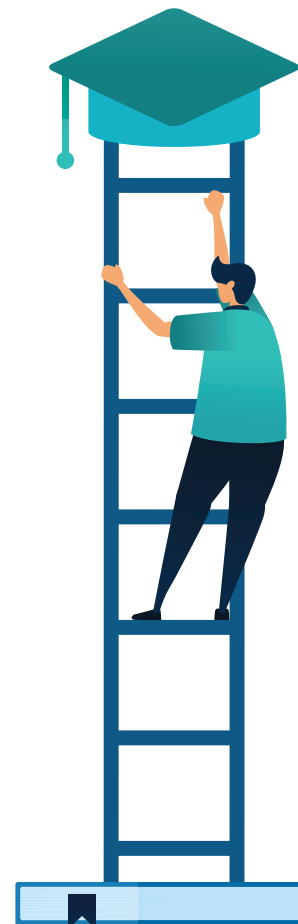
Figure 8. Educational Attainment Among California Residents Ages 25-64



Source: U.S. Census Bureau, American Community Survey 5 Year Estimates, 2015-2019 Public Use Microdata Sample

Building a strong transfer pathway that results in bachelor’s degree attainment is of particular importance for California’s Black, Latinx, and American Indian/Alaska Native populations, as well as subgroups within the Asian American, Native Hawaiian, and Pacific Islander populations.

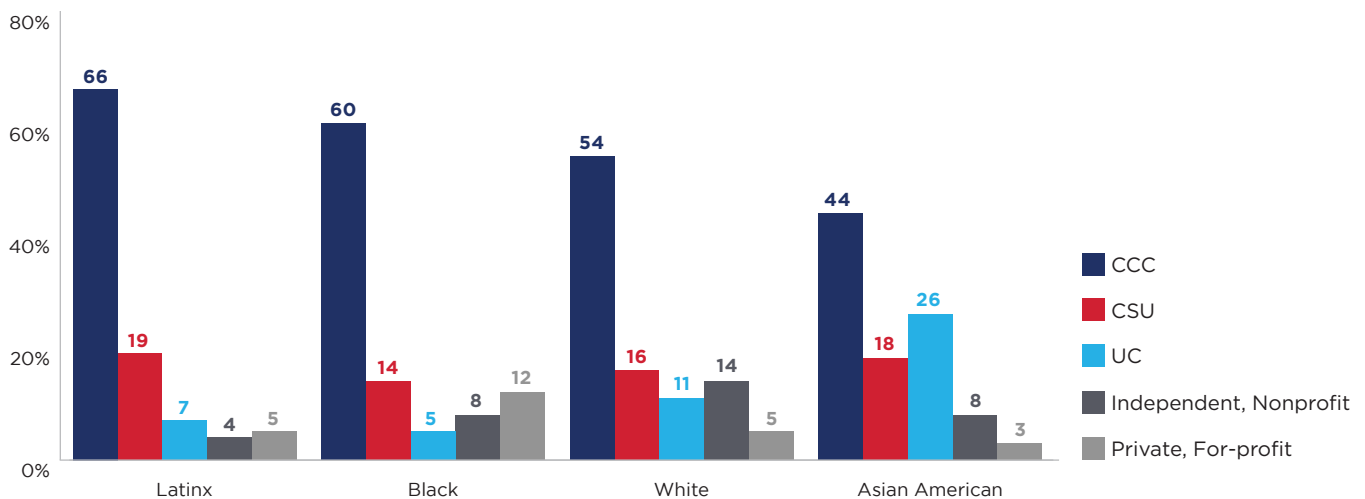
The transfer pathway is critical for the state’s minoritized and low-income residents, as the California Community Colleges enroll more first-time freshmen and undergraduates from these historically minoritized communities than any other college system in California.²⁶ **Ensuring equitable access to a four-year degree in California requires a robust transfer pathway that supports students who begin their higher education at one of the state’s community colleges.**





60 percent of Black first-time freshmen and 66 percent of Latinx first-time freshmen enrolled in the California Community Colleges in fall 2019.

Figure 9. Racial/Ethnic Composition of First Time Freshmen in California’s Higher Education Systems, Fall 2019



Source: National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), Fall Enrollment Component (2019), Table EF2019A.

A college-educated workforce is also critical to California’s economic future. Maintaining California’s status as the world’s fifth largest economy will require a workforce in which at least 60 percent of Californians hold degrees or high-value certificates, and California’s full potential cannot be realized unless we ensure that at least 60 percent of all racial/ethnic subgroups have a college education.²⁷ This level of attainment will generate an additional 2.5 million degree or credential holders by 2030, as well as around \$80 billion in additional income to Californians every year and an additional \$12 billion in annual tax revenues to the state by 2030.²⁸ **But this goal cannot be achieved without a strong transfer pathway; without significantly increasing and improving the transfer rates of Black, Latinx, and AANHPI students in community colleges; and without ensuring they are supported to graduate from CSU and UC campuses once they do transfer.**



Marissa Gutierrez: In Search of a Transfer Strategy

Marissa Gutierrez decided to attend a community college directly after high school because she was not sure what exactly she wanted to pursue. **A first-generation college student, she did not have anyone to walk her through the transfer process.**

Marissa attended community college part-time and worked full-time to pay for college. Although she was eligible for college support programs for veteran dependents, she was unsure of the resources and did not have anyone to ask about how to navigate them. Marissa changed majors at community college three times. It wasn't until after having met with several counselors that she became introduced to the field of health sciences . **"It took me two, three plus years to find**

out. And I never really had that person to sit down with me and say ok let me guide you because I didn't have older siblings or cousins or parents that could help me really figure that out." That person was Blanca, an academic counselor at Gavilan College who was instrumental in helping Marissa figure out a plan to transfer, as other previous counselors with whom she had met had assumed she wanted to go into the technical degree route. **"Blanca would print everything out for me. And I would walk out with a folder of all the information that I needed, and everything that she was planning for me and next steps for everything."** Blanca provided Marissa with a strategy for how to transfer, but it was several years after Marisa had started on this path. Marissa's previous counselors did not inform her of the ADT.

"I wish I would have met Blanca earlier in the stages and I felt like ok maybe I wasted two extra years figuring that out but that was...that was my road." They met in 2015, three years after Marissa graduated high school and enrolled in community college. Marissa applied for transfer in the 2016 which resulted in her 2017 transfer to CSU Channel Islands.

The transfer process does not stop after the point of transfer, as the need for good academic counseling continued for Marissa. Marissa retook a sociology class at CSU Channel Islands even after having passed it with an A at Gavilan College. **"I wasn't taught how to cross things off from my past transcript with passing grades to my new requirements for my bachelor's."** After a couple of course re-rakes, Marissa found an excellent counselor in the Nursing department who became her Blanca at CSU Channel Islands.

Marissa completed her bachelor's degree in Health Sciences from CSU Channel Islands a year and a half after transferring (Class of 2019). She is now pursuing a Master's in Public Health at San Jose State University.

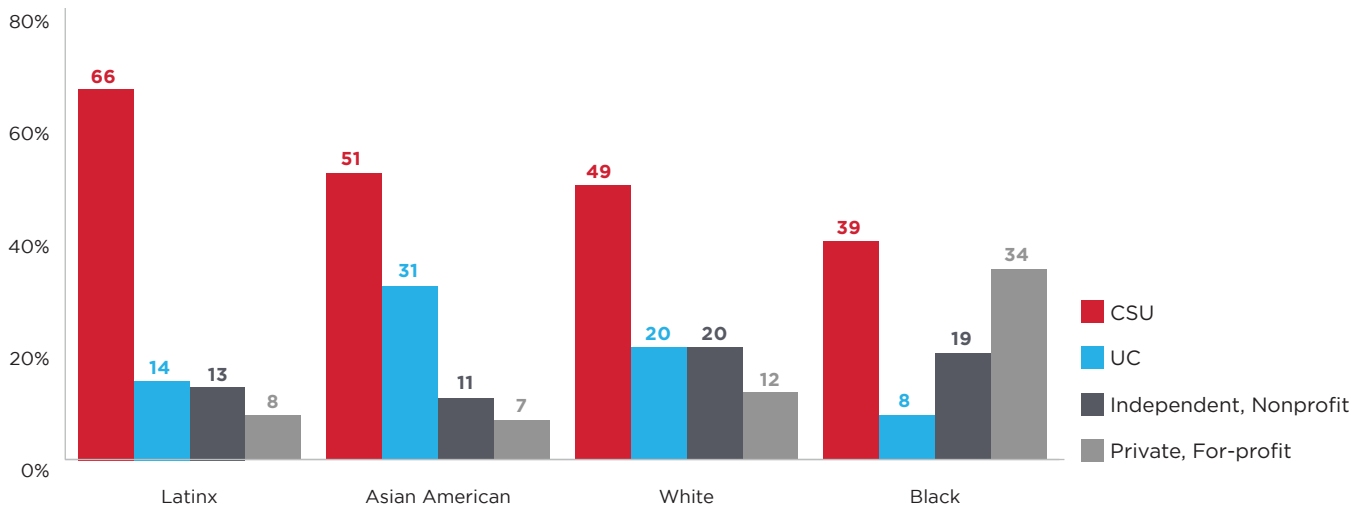


The Ladder Into and Through the CSU and UC

Inequities exposed in transfer rates from the California Community Colleges are evident in the racial/ethnic composition of transfers to the state’s public four-year systems. An area of added concern in today’s transfer landscape is the prominent position that the state’s for-profit sector occupies. As shown in Figure 10 below, over a third of Black transfer students enrolled in a private, for-profit college or university in fall 2019. Though this is a decrease from fall 2018, when more Black transfer students enrolled in a for-profit school (38 percent) than a CSU (34 percent),²⁹ it is still well over double the enrollment rate of any other racial/ethnic subgroup. For-profit attendance is concerning because of the low completion rates, high debt burdens and default rates, and the generally low payoff associated with for-profit institutions, both in California and nationally.³⁰

Almost as many Black students transferred to a private, for-profit institution in fall 2019 as transferred to a CSU.

Figure 10. First-Time Transfer Students to Four-Year Colleges and Universities by Sector of Enrollment, Fall 2019



Source: National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), Fall Enrollment Component (2019), Table EF2019A.

Figure 10 also shows that **the percentage of Black and Latinx transfer students enrolling at the UC is low, at eight percent and 14 percent, respectively.** Two-thirds (66 percent) of Latinx transfer students enrolled at CSU institutions in fall 2019.

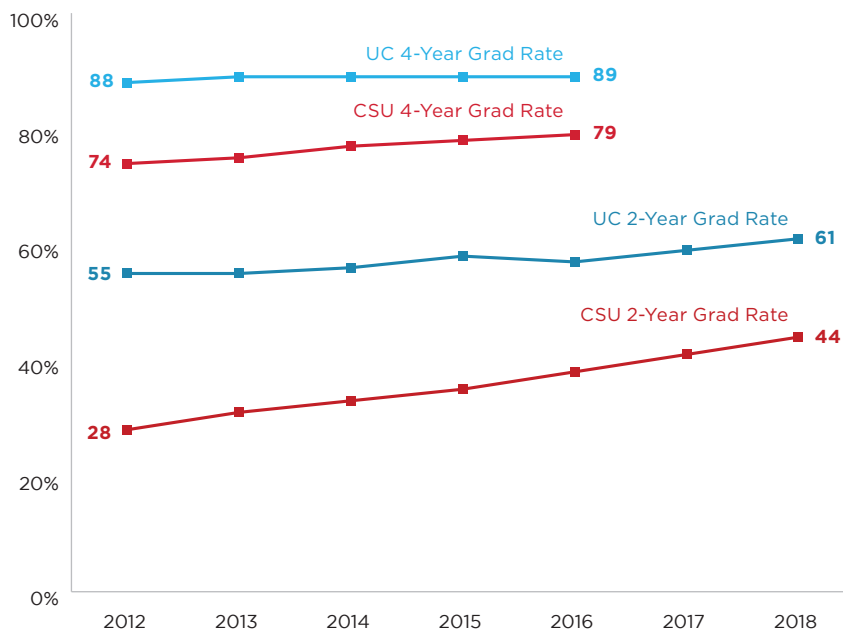
Inequities in community college outcomes and four-year enrollments are also reflected in outcomes at the CSU and the UC. Only 36 percent of Black students and 44 percent of Latinx students who enrolled in 2018 graduated from the CSU in two years, compared to 47 percent of white students in the cohort.³¹ At the UC, these numbers were higher, at 51 percent and 57 percent, respectively, but these figures are still below the two-year rate for white students in the cohort, which was 64 percent.³²

Transforming the transfer path is an economic imperative for the state, and the task is even more important given the implications for racial equity in California’s higher education landscape.

Figure 11 shows the two-year and four-year graduation rates for transfer students who enroll in either the UC or the CSU. Two-year graduation rates have risen at both the UC and the CSU, but still not enough students are supported to complete their bachelor’s degrees on time. At the CSU, 44 percent graduate within two years of transferring, an increase of 13 percent in five years, but still less than half. Four-year graduation rates for CSU transfer students have risen to 79 percent. Rates are better at the UC, but still only 61 percent of UC transfer students finish in two years. Among UC transfer students, 89 percent graduate after four years, though this number is 84 percent for Black students and 87 percent for Latinx students. A traditional transfer path is two years at the community college and two years at the university. The two-year graduation rates for transfer students at the UC and the CSU indicate that, despite recent improvements, still too many students are taking far too long to get their degrees.

While the two-year graduation rates are improving, less than half (44 percent) of CSU transfers and less than two-thirds (61 percent) of transfers to the UC are supported to complete their degrees in two years.

Figure 11. Two- and Four-Year Graduation Rates for Transfer Students at the University of California and the California State University



Source: California State University Office of the Chancellor, Division of Institutional Research and Analyses, 2020, Graduation Dashboard. Available at: <https://www2.calstate.edu/data-center/institutional-research-analyses>

In the ten years since California’s leaders took bold action to address a broken transfer process, the state’s colleges and universities have been supporting students to complete their bachelor’s degrees at increasing rates.

The ADT is a ladder helping CSU students finish their bachelor’s degrees in less time.

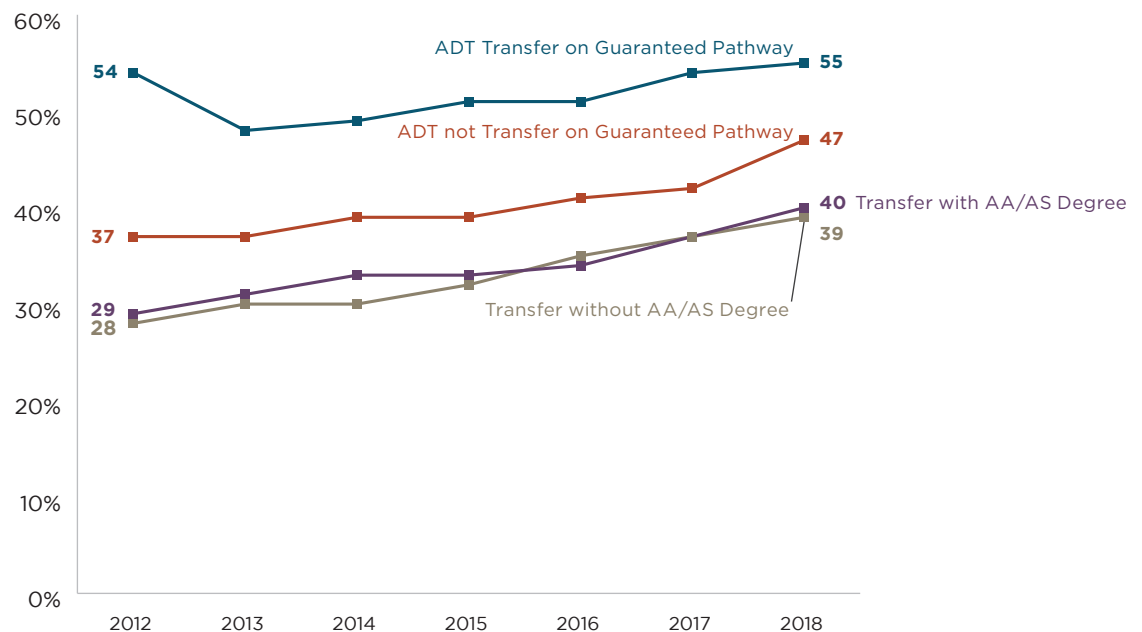
The ADT pathway is helping ensure that more students graduate in two years or less.

The two-year graduation rate among transfer students entering the CSU in fall 2018 was 44 percent. Of the students who transferred to the CSU on a guaranteed pathway in 2018, more than half (55 percent) graduated in two years, as shown in Figure 12. Even among students with ADTs who were not on guaranteed paths, 47 percent of students graduated in two years. Two-year outcomes for students who transferred with an AA/AS or no associate degree at all were 40 percent and 39 percent, respectively.



More than half of CSU students who have an ADT and are on a guaranteed pathway are graduating within two years of transfer, and even ADT earners who are not on a guaranteed path graduate more quickly than transfer students who do not have an ADT.

Figure 12. CSU Two-Year Graduation Rates by Transfer Pathway



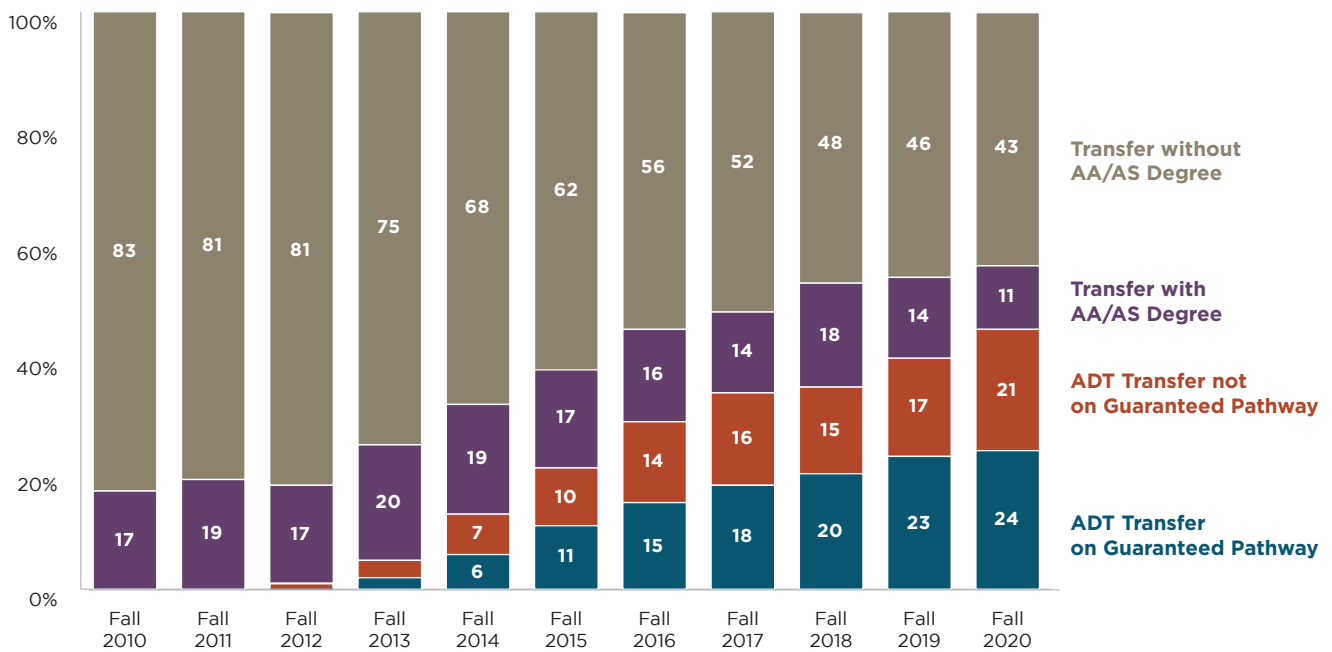
Source: The California State University. (2021). Graduation and Continuation Rates, California Community College Transfers [Data Dashboard]. Retrieved from: <https://www2.calstate.edu/data-center/institutional-research-analyses>

Figure 12 also shows that too many students, even ADT earners, are not completing a bachelor’s degree within two years of transferring to a CSU. In addition to ensuring that students are on a guaranteed path, the CSU must build on these positive trends to continue to support students to timely degree completion.

Currently, the CSU is the state’s primary recipient of transfer students with an ADT. One recent report showed that among students who enrolled in community college in 2014-15 and earned an ADT within four years, 73 percent transferred to a CSU, nine percent to a UC, and eight percent chose other colleges (private independent nonprofits and private for-profits, as well as out-of-state colleges).³³ The share of students with an ADT (both on guaranteed and not guaranteed pathways) among incoming CSU transfer students has steadily increased since the creation of the ADT pathway, as can be seen in Figure 13 below.

From fall 2014 to fall 2019, the percentage of CSU transfers who were on a guaranteed ADT pathway more than tripled.

Figure 13. Transfers to the CSU by Transfer Pathway



Source: California State University Institutional Research and Analyses. (2020). New Undergraduate Transfers from California Community Colleges or other Institutions. Available from: <https://www2.calstate.edu/data-center/institutional-research-analyses>

The ADT is clearly growing as a pathway for students to transfer from the California Community Colleges to the CSU, as tens of thousands of students now earn these valuable degrees each year. But it has yet to meet its full potential.

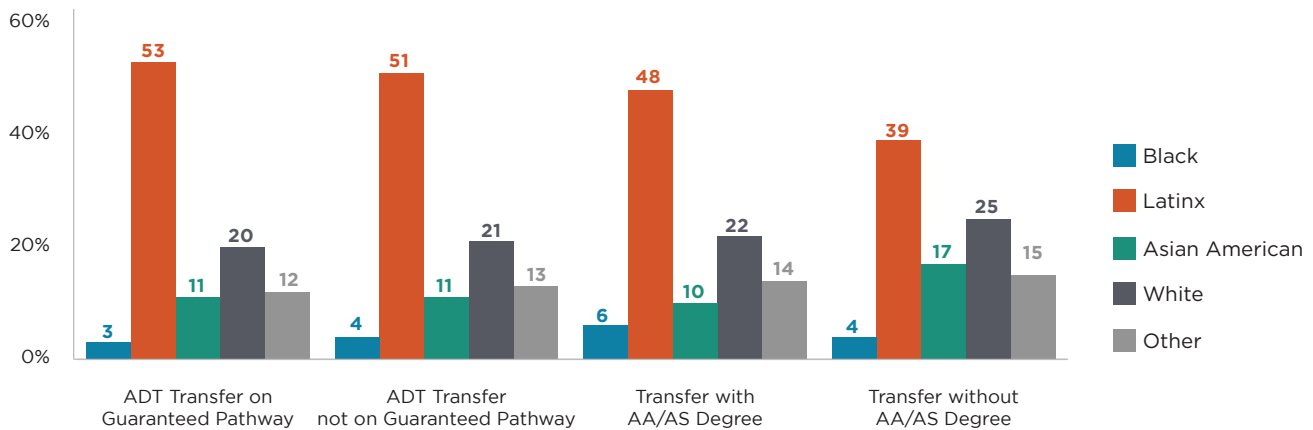
If the ADT is to transform transfer, we must recommit to the historic vision behind this degree with a guarantee.



The CSU incoming transfer class of fall 2020 comprised a total of 62,426 students. Forty-five percent of them (28,439) transferred into the CSU with an ADT (guaranteed and non-guaranteed paths combined). Looking at the racial/ethnic composition of CSU incoming transfer students, Figure 14 shows that some racial/ethnic groups are not well-represented in the transfer pipeline from community colleges to CSUs. Black students account for only three percent of transfer students with an ADT on a guaranteed path. Fortunately, Latinx students are well-represented among CSU transfers on a guaranteed path, accounting for more than half of this group.

Latinx students account for more than half of Transfer Students with ADTs. Black students are not as well supported onto this pathway, especially the Guaranteed ADT Pathway.

Figure 14. Transfer Pathways of Incoming CSU Transfer Students by Race/Ethnicity, Fall 2020



Source: California State University Institutional Research and Analyses Dashboard (2021). New Undergraduate Transfers from California Community Colleges or other Institutions (2020). Available from: <https://www2.calstate.edu/data-center/institutional-research-analyses>

Note: Students in the Other category are those identifying as American Indian/Alaska Native, two-or-more races, nonresident alien, or unknown.



The demographic makeup (of the incoming class of fall 2020) of CSU transfer students with degrees is broadly similar, regardless of pathway. Students who transfer without a degree are more likely to be Asian than students who transfer with degrees, and less likely to be Latinx. Latinx transfer students at the CSU are overrepresented among the ADT population. According to the CSU Graduation and Success Board, Latinx students represent 46 percent of the total transfer population to the CSU and 52 percent of the CSU transfer students with an ADT. Asian students represent 14 percent of overall transfers and 11 percent of transfer students with an ADT. Black students represent four percent of all transfers to the CSU, but just under four percent of CSU transfer students with ADTs (a combination of guaranteed and not guaranteed pathways).

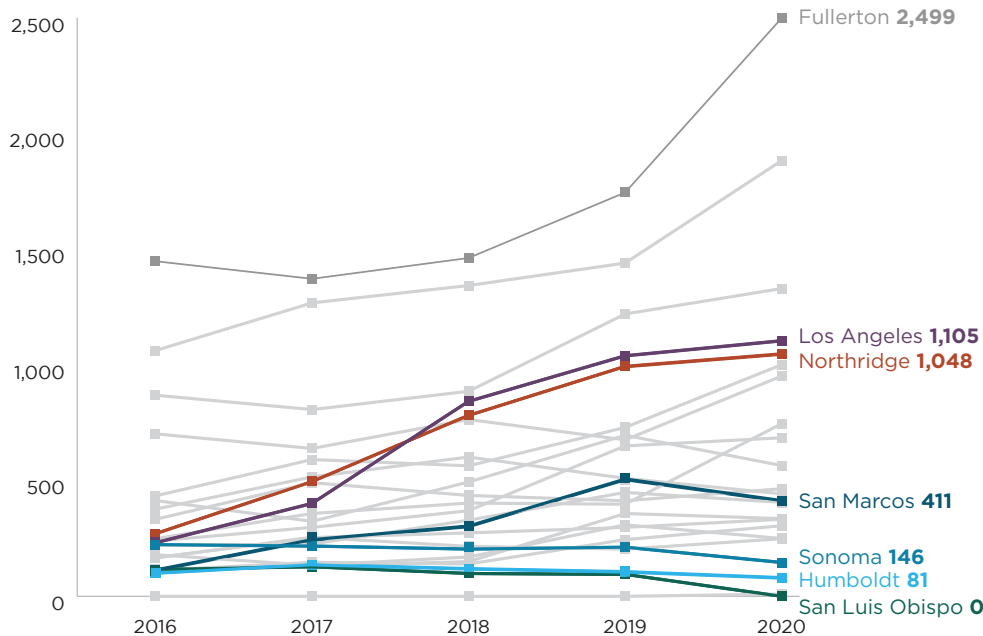
The number of students transferring with an ADT has grown at the CSU, but too many are NOT on a guaranteed path.

Most CSU campuses have a growing population of students with an ADT, but a few do not. CSU Northridge, CSULA, and CSU San Marcos—highlighted in Figure 15, below—have had the largest percentage growth from fall 2016 to fall 2020 in the number of students transferring in with an ADT and on a guaranteed path. CSU Fullerton has had the largest ADT-on-a-guaranteed-path student population for the past several years. The number of students with an ADT and on a guaranteed path has decreased at Sonoma State, Humboldt State, and Cal Poly San Luis Obispo over the last five years. At Cal Poly San Luis Obispo, no entering transfer students were on a guaranteed ADT path in fall 2020. The number of students with ADTs on a guaranteed path in fall 2020 is included for all campuses in Figure 15.

If a student is not on a guaranteed path, this means the student will likely have to take more than 60 upper division credits to complete a bachelor’s degree. This increases time and cost for the student, as well as for the state.

Between fall 2016 and fall 2020, the number of ADT students on a guaranteed path dropped at Humboldt State University, Sonoma State University, and Cal Poly San Luis Obispo. Over the same time period, Los Angeles, Northridge, and San Marcos saw the largest percentage gain in the number of transfer students on a guaranteed path.

Figure 15. Number of entering transfer students who are on an ADT-guaranteed path



| CSU Campus | ADT Students on Guaranteed Path, Fall 2020 |
|-----------------|--|
| Bakersfield | 250 |
| Channel Islands | 249 |
| Chico | 333 |
| Dominguez Hills | 406 |
| East Bay | 465 |
| Fresno | 1,001 |
| Fullerton | 2,499 |
| Humboldt | 81 |
| Long Beach | 1,883 |
| Los Angeles | 1,105 |
| Maritime | 10 |
| Monterey Bay | 305 |
| Northridge | 1,048 |
| Pomona | 746 |
| Sacramento | 952 |
| San Bernardino | 685 |
| San Diego | 1,330 |
| San Francisco | 443 |
| San Jose | 565 |
| San Luis Obispo | 0 |
| San Marcos | 411 |
| Sonoma | 146 |
| Stanislaus | 336 |

Source: California State University Institutional Research and Analyses Dashboard (2021). New Undergraduate Transfers from California Community Colleges or other Institutions (2020). Available from: <https://www2.calstate.edu/data-center/institutional-research-analyses>

In looking at Table 3 on page 32, we see there is variation among CSU campuses in the availability of ADT pathways in major and sub-major pathways. Of the 65 majors selected by students at Cal Poly, San Luis Obispo, 42 (65 percent) have an ADT pathway. At CSU Maritime, transfer students selected six different majors, only two of which have an ADT pathway. These two campuses are each somewhat unique within the CSU system. CSU Maritime is a small institution with more specialized programs, and Cal Poly San Luis Obispo has a reputation for its rigorous STEM programs. These characteristics partially explain low rates of ADT options seen at these campuses.

At CSU Long Beach, less than 70 percent of the majors selected by transfer students have an ADT-guaranteed pathway. CSU LA is below 80 percent coverage, meaning that at three of the CSUs covering the greater Los Angeles region (LA, Long Beach, and Pomona), less than 80 percent of majors selected by students have ADT-guaranteed options. The remaining Los Angeles area campuses are at or above 80 percent, with Northridge at 80 percent, and Dominguez Hills at 84 percent.

Table 3 only shows coverage among majors selected by transfer students. An important question for further research is whether there are substantial differences in the majors selected by transfer students and those selected by students who enroll at the CSU as freshmen. When students choose a major for which there is no ADT pathway at their CSU campus, they do not have the guarantee of automatic junior standing, meaning they may need to take more than the traditional 60 credits after transferring.

CSU campuses vary widely in the availability of ADT pathways in majors selected by enrolling transfer students.

Table 3. ADT availability in majors selected by CSU transfer students

| | Majors selected by CSU entering transfer students, 2019-20 | Majors that match to an ADT pathway | % Matched |
|-----------------|--|-------------------------------------|------------|
| Bakersfield | 50 | 44 | 88% |
| Channel Islands | 28 | 26 | 93% |
| Chico | 89 | 71 | 80% |
| Dominguez Hills | 64 | 54 | 84% |
| East Bay | 78 | 67 | 86% |
| Fresno | 82 | 68 | 83% |
| Fullerton | 71 | 62 | 87% |
| Humboldt | 59 | 52 | 88% |
| Long Beach | 110 | 76 | 69% |
| Los Angeles | 52 | 41 | 79% |
| Maritime | 6 | 2 | 33% |
| Monterey Bay | 51 | 44 | 86% |
| Northridge | 76 | 61 | 80% |
| Pomona | 81 | 60 | 74% |
| Sacramento | 63 | 50 | 79% |
| San Bernardino | 68 | 60 | 88% |
| San Diego | 89 | 72 | 81% |
| San Francisco | 89 | 76 | 85% |
| San Jose | 104 | 83 | 80% |
| San Luis Obispo | 65 | 42 | 65% |
| San Marcos | 46 | 43 | 93% |
| Sonoma | 58 | 54 | 93% |
| Stanislaus | 48 | 44 | 92% |
| Total | 1,527 | 1,252 | 82% |

Source: The CSU Institutional Research & Analyses TMC-Search site: <https://www2.calstate.edu/attend/degrees-certificates-credentials/Pages/TMC-Search.aspx>; CSU Institutional Research & Analyses Report, "CCC-Transfers-to-the-CSU-Concentration-and-Ethnicity-2008-2020." Retrieved from: <https://www2.calstate.edu/data-center/institutional-research-analyses/Pages/reports-and-analytics.aspx>. All estimates are based on the most available data as of March 2021.



A lack of capacity at the CSU means rolling the dice more times before transfer.

The promise and potential of streamlining the transfer pathway and the ADT guarantee depends on the capacity of the CSU to enroll students who have earned their ADT degrees. Presently, 15 of the 23 CSU campuses are impacted at the campus level, meaning that they receive applications from more qualified applicants than their physical and instructional resources can accommodate. All students attending California community colleges outside the designated local admission area for those campuses are held to higher admission standards than minimally required for transfer to the CSU. Seven of those 15 campuses are also fully impacted at the program level, meaning that even local transfer applicants to every program offered must meet higher admission standards. All but one CSU campus have some impacted programs. In addition to the seven fully-impacted

campuses, another six campuses have designated a quarter or more of their programs as impacted. Only CSU Dominguez Hills has no impacted programs for both first-time freshmen and transfer students.

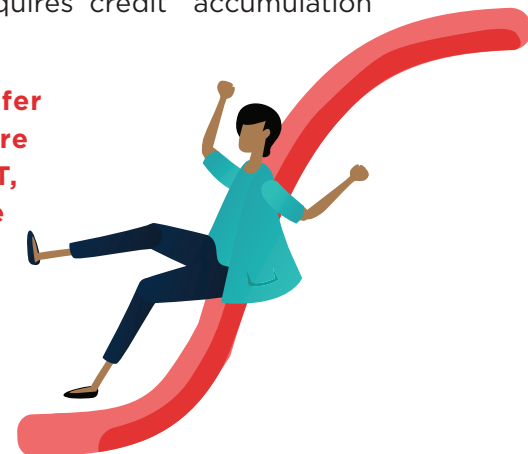
The CSU has a set of requirements for admissions eligibility, but impacted campuses and programs may supplement or raise these requirements, creating an **increasingly competitive** admissions environment. Impaction has multiple consequences for students who are struggling to find a campus that meets their needs and college goals. According to the CSU website, the system requires that students have a minimum cumulative 2.0 GPA for all transfer-level courses attempted. For admission directly into an impacted major, the GPA cutoff is typically much higher.

When the ADT was created ten years ago, impaction was a growing concern. As a result, leaders from the CSU and the California Community Colleges added admissions advantages for ADT earners to ensure the degree pathway would be desirable and beneficial to students. When ADT earners apply to an impacted program, their grade point averages receive a bump of 0.1 points to help with the competitiveness of their applications; students who are applying to a non-local campus receive an additional bump of 0.1 points if the campus to which they are applying is impacted, but the individual program is not.³⁴ These GPA bonuses, however, do not fully offset the impact to GPA requirements in the competitive applicant pools for spots at impacted campuses.

Despite the benefits of GPA bumps, many ADT earners find that the bump is not enough to get into the CSU's most competitive campuses, nor is it enough to get into the students' local campuses of choice. Some students applying to impacted programs may need to take additional courses to satisfy higher requirements or to increase the attractiveness of their applications. This runs counter to the goal of the ADT to hold unit accumulation to 120—60 at the California Community Colleges and 60 at the CSU.

If a student needs to study locally, not being admitted to a local campus may mean that student will choose not to enroll in the CSU or might transfer off the ADT pathway, which likely requires credit accumulation at the CSU beyond the 60 credits prescribed by the ADT guaranteed path.

The roadblock created by impaction at the CSU applies to transfer students, no matter which pathway they are on, as we described more fully in our 2015 report, Access Denied. The true intent of the ADT, however, cannot be realized unless four-year university systems have the capacity to enroll all students who qualify for admission, with sufficient seats for local applicants who meet the system's eligibility criteria.



Chutes and Ladders into the University of California

The provisions and guarantees built into the ADT do not apply to the UC.³⁵ This means that California Community College students intending to transfer often have to make a decision early in their trajectories on whether to apply to the CSU or the UC, instead of both. In California’s K-12 system, students in high school can take one curricular pathway (A-G) with different grade point average requirements to be qualified for admission to both systems. By not further aligning the ADT with UC admissions and creating an admission guarantee for ADT earners, the UC is adding to the complexity of transfer.

The Constitution of California grants considerable autonomy to the UC as a “public trust” with its own powers of self-governance, including the authority to determine policies related to program design and admissions.³⁶ The state supports a significant share of UC’s core operational costs through enrollment-based funding, giving the state some influence over the university’s decisions. But legislation can only request that the UC abide by requirements imposed on the community colleges and the CSU. Legislation passed at the same time as SB 1440 requested that the UC streamline articulation of major requirements across its campuses and implement transfer degrees that would guarantee admission.³⁷

Under a 2015 agreement between then-Governor Brown and then-UC President Napolitano, the UC agreed to articulate systemwide pathways for transfer to their system and increase transfer enrollment to achieve a two-to-one ratio of new freshmen to transfer students.³⁸ In 2018, the UC and the California Community Colleges signed a Memorandum of Understanding (MOU) to guarantee admission to the UC to all qualifying community college students in an effort to strengthen the transfer pipeline and streamline access to the UC.³⁹

This MOU aimed to ensure both that UC is providing a clear transfer pathway for community college students and that the community colleges are providing their students with the courses and preparation required for admission to the UC system. The UC Transfer Pathways⁴⁰—a set of 21 pathways into the most popular majors—and campus-level Transfer Admission Guarantee (TAG) programs are the central components of the MOU. While this MOU recognizes the academic rigor of the ADT and uses the ADT as the framework for their 21 guaranteed transfer pathways, ADT recipients still do not have an admission guarantee to the UC system.

The Pathways+ program combines elements of the Transfer Pathways and TAG programs, providing guaranteed admission to one of the six campuses that offer TAG in one of the 21 Transfer Pathways majors.⁴¹

| Transfer Option | Guarantee | Participating Campuses |
|-------------------|--|--|
| Regular Transfer | None | All CCCs and UCs, based on individual articulation agreements; course offerings vary by CCC, and course and GPA requirements vary by UC campus and major |
| ADT | None; some UC campuses consider the ADT as a factor during comprehensive review (the UC admissions process through which incoming applicants’ materials are read), but little information available about which campuses and majors do so or how it factors into admission | All CCCs, but number of degrees offered varies by college |
| Transfer Pathways | None | All CCCs, but some may not offer all courses required in some Pathways All UCs accept some Pathways, but acceptance varies by major, campuses may require different courses to meet specific Pathway course expectations, and GPA requirement varies by campus and major |
| TAG | Guarantee to specific campus and major; can only apply for one TAG | Six UCs (excluding Berkeley, Los Angeles, San Diego), but some majors are excluded, and GPA requirement varies by campus and major (ranges from 2.8 to 3.5) |
| Pathways+ | Guarantee to specific campus and major with a single TAG | Six UCs, but with the variation specified above for Transfer Pathways and TAG |

A Student Perspective: How Transfer into UC isn't Working

While intended to be responsive to the legislature's request, there are important limitations to the UC's Transfer Pathways from the student perspective:

- The UC has not standardized lower division major coursework across its nine campuses, so students may need to take more classes (and accumulate excess credits) to be prepared for transfer to multiple UC campuses, even when pursuing a major included in Transfer Pathways.
- Students face significant complexity in figuring out whether and how the potential benefits of the Transfer Pathways, TAG, and Pathways+ programs apply to their particular circumstances, given their major and campus of choice and the variation across UC campuses in TAG participation and in course and GPA requirements.
- Students do not generally receive an associate degree through these UC transfer programs when doing so would ensure that students have a credential representing their completion of lower division work and earning a degree is associated with a greater likelihood of completing the baccalaureate after transfer.⁴² Students completing the Transfer Pathway in chemistry or physics can earn a UC Transfer Pathways Associate Degree—a degree developed as a pilot project between the California Community Colleges and the UC. However, only six community colleges currently have a degree either approved or in pilot in both physics and chemistry: Chaffey College, LA Mission, Merced, Monterey Peninsula, Moorpark, and Sierra. Clovis College and LA City College have pathways in chemistry, but not in physics.⁴³
- Transfer Pathways course maps do not necessarily align with the coursework required to complete an ADT in the same majors, complicating transfer preparation for students who may wish to keep their options open, given the increasingly competitive nature of admissions across the UC and CSU systems. Some UC campuses give priority consideration to transfer applicants who complete an ADT, but there is little transparency about how each UC campus applies this factor during its comprehensive review of applications.



STRENGTHENING THE LADDER, ELIMINATING THE CHUTE

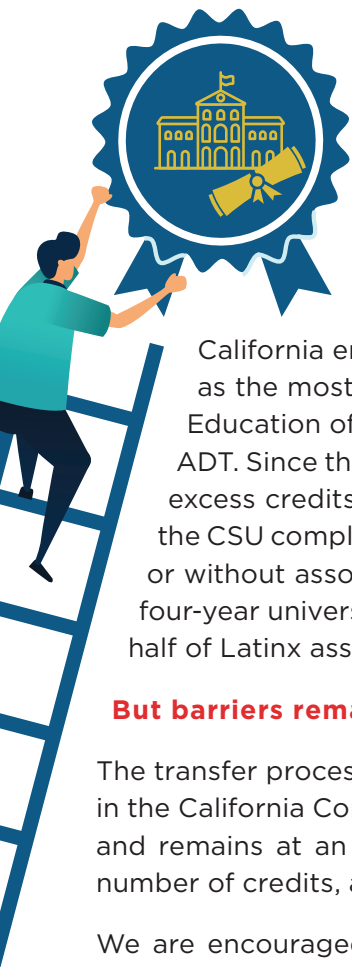
One important step toward streamlining transfer between the community colleges and the state's four-year systems, as well as toward better aligning UC and CSU admissions requirements, would be to consolidate the lower division general education pattern all students must complete to be eligible for transfer admission to the two systems. Currently, the UC requires transfer applicants to complete the Intersegmental General Education Transfer Curriculum (IGETC), and the CSU requires transfer applicants to either complete CSU General Breadth or the IGETC (with an additional course in oral communications and forgoing a requirement to demonstrate proficiency in a language other than English).

Aligning these two pathways—which only differ by a few courses—would go a long way toward simplifying transfer from the California Community Colleges to the state's four-year systems. California's high school students seeking admission to the UC and the CSU have a single, common pathway to eligibility—albeit with different GPA cutoffs—to the different systems. This same standard should apply to transfer students applying to the state's four-year systems from California's community colleges.

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Reaching the Blue Ribbon— Recommendations to Improve Transfer in California for Students

California envisioned a higher education system accessible to all, with California community colleges as the most accessible point of entry. That vision, catalyzed by the California Master Plan for Higher Education of 1960, was re-energized by historic transfer reform ten years ago with the creation of the ADT. Since then, pathways to transfer have become clearer. Students earning ADTs graduate with fewer excess credits than students who earn traditional associate degrees, and ADT earners who transfer to the CSU complete their bachelor's degrees more quickly than students who transfer with AA/AS degrees, or without associate degrees at all. More and more students consider the ADT as a strong pathway to a four-year university, and Latinx students, in particular, are benefiting from transfer reform, with more than half of Latinx associate degree earners awarded ADTs.

But barriers remain.


The transfer process continues to be difficult, with more chutes than ladders. Among the 2.1 million students in the California Community Colleges system, the share of those who transfer has not increased substantially and remains at an unacceptably low level. Students at community colleges are still taking an excessive number of credits, and severe racial/ethnic equity issues remain unresolved.

We are encouraged by how the California Community Colleges' Vision for Success report embraces the reality that equity gaps need to be reduced and closed, with an emphasis on addressing, head-on, inequities by race/ethnicity, as well as regional differences across colleges.⁴⁴ The creation of the Vision for Success Diversity, Equity and Inclusion Task Force is another promising way forward to support and strengthen equitable transfer pathways and opportunities at community colleges.⁴⁵ We are also especially encouraged by Governor Gavin Newsom's Recovery with Equity initiative.⁴⁶ This initiative provides a road map for higher education after the pandemic that specifically and intentionally calls for the streamlining of pathways to degrees via an integrated statewide system for admission and transfer to provide clear, easy-to-navigate pathways to degrees.

To ensure a clear, easy-to-navigate pathway for transfer students, the Campaign for College Opportunity calls on California's leaders to:


Articulate a bold, intersegmental vision for transforming community college transfer with clear goals and benchmarks for improving timely transfer and completion, and for reducing racial equity gaps.

- Align lower division coursework, so that completion of a single-degree pathway will allow students to transfer to either the CSU or the UC.
- Increase the number of California Community Colleges students transferring annually to a UC, CSU, or private nonprofit college.
- Decrease the number of credits accumulated by students on their path to transfer and to earning their degrees.
- Reduce and close racial equity gaps, as well as regional disparities, in student outcomes.




Uplift and strengthen the ADT pathway, so that it becomes the preferred method of transfer for California community college students across the state.

- Communicate the benefits of the ADT to students as early as high school, and again at the front end of their community college journey.
- Establish ongoing professional development and staff training, so counselors and faculty have the necessary tools to guide students onto the pathway.
- Prioritize the ADT for more transfer-seeking students by automatically placing students in an ADT pathway if one is available in the academic major they intend to pursue.
- Phase out terminal associate degrees that do not give students the ability to transfer all their credits or provide them with on-ramps back into postsecondary in pathways for which equivalent ADTs have been developed.




Grow the number of subject offerings in STEM, where pathway development has lagged.

- Identify pathways where the 60-credit lower division pathway cap is impeding the development of ADT degree pathways, and determine a suitable alternative cap for STEM, health, and other higher than 60-credit majors.
- Examine industry relevance and emerging subject area majors to ensure the ADT can meet future workforce demands.




Ensure the California Community Colleges, CSU, and UC have the capacity, sufficient resources, and right incentives to enroll and support all students seeking a path to complete a four-year degree.

- Reverse longstanding community college system underinvestment in essential student support services and policies that promote successful transfer, such as through dual enrollment opportunities, advising, and public awareness campaigns.
- Fund the UC and the CSU to serve an increasing number of community college transfer students.
- Prioritize funding to the California Community Colleges, CSU, UC campuses that will help close racial equity gaps and improve timely college completion rates for transfer students.
- Encourage the UC to guarantee admission to ADT students, with a higher GPA threshold if appropriate, by tying their institutional aid to ADT enrollment expectations.
- Encourage the CSU to honor its admissions guarantee to ADT students at local campuses by establishing ADT enrollment goals and benchmarks and tying institutional aid to these expectations.



Create a transfer implementation and oversight body to enable more seamless coordination between the UC, CSU, California Community Colleges, and private nonprofit institutions.

- Establish an intersegmental committee that can provide state level guidance and accountability to tackle persistent barriers to the scaling of the ADT program and enable a statewide focus on simplifying transfer in the state. This intersegmental committee would do the following on a regular basis:
 - Review campus implementation of ADT pathways to ensure community colleges have an ADT pathway in all programs on their campus for which a Transfer Model Curriculum (TMC) has been approved;
 - Review the list of TMCs to ensure ADTs are being developed for all majors where students regularly transfer to four-year programs;
 - Review the matching of ADTs to CSU degrees deemed similar to ensure guaranteed pathways exist for students who earn ADTs;
 - Review and update a student-centered communications plan, including a review of the ADT website www.adegreewithaguarantee.com, to ensure students and stakeholders are aware of the ADT and the benefits it confers.
- The committee should provide recommendations to the legislature, identifying state goals for improving transfer and addressing the creation of additional industry-relevant majors.



Ensure the state's Cradle-to-Career data system can answer vital questions about academic trajectories and outcomes for students who follow different pathways to their degrees.

- Analyze system-level data and collect more qualitative student-level feedback to drive decisions regarding the ADT pathway; where students are falling off the path, and how to better support students pursuing bachelor's degrees in California.
- Develop an equity index comprised of data disaggregated by race/ethnicity, gender, and other relevant demographic characteristics to ensure California's systems of higher education are working for Californians of all backgrounds.





Acknowledgments

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We are particularly grateful to Susanna Cooper, Executive Director of the Wheelhouse Center for Community College Leadership and Research at UC Davis; Marisol Cuellar Mejia, Research Fellow at the Higher Education Center at the Public Policy Institute of California; Hans Johnson, Director of the Higher Education Center at the Public Policy Institute of California; and Colleen Moore for their expert reviews and feedback on this work at various stages of its development. We also thank the staff at the California Community College Chancellor's Office, the CSU Chancellor's Office, and the UC Office of the President who reviewed and commented on drafts of this work prior to publication.

Vikash Reddy, Ph.D., and Jessie Ryan co-authored this report, with guidance and significant contributions from Michele Siqueiros. Josefina Flores Morales provided excellent research assistance.

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APPENDIX A: ADT pathways in Health and STEM majors—fields that are central to California’s economic future—are not well-developed

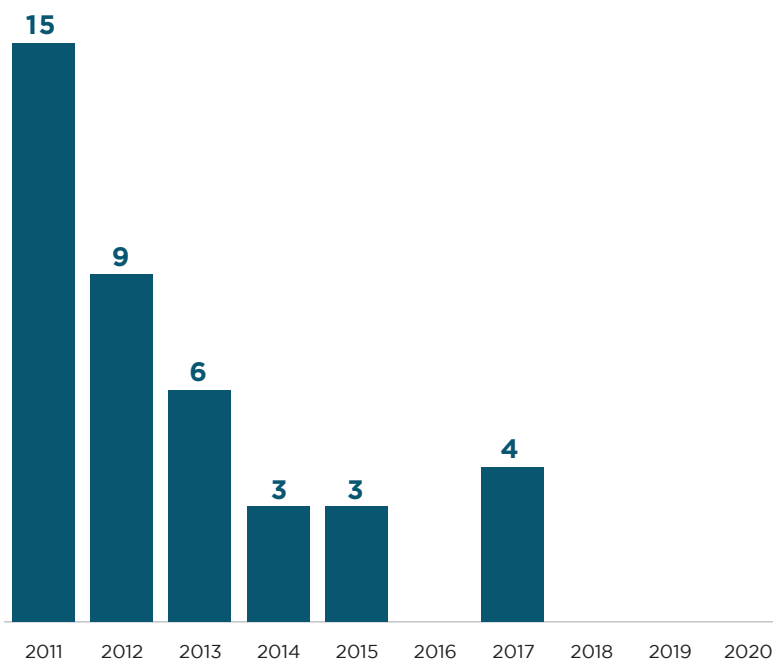
Before a college can offer an ADT in any given field, faculty must develop a Transfer Model Curriculum (TMC) around which the ADT pathway can be created. TMCs represent an integral component of the ADT framework and the historic reforms that created the ADT pathway. Faculty leaders from the community college and CSU systems work together to design TMCs. TMCs provide a road map to the transferable, major-specific coursework required to earn a given ADT, including required core courses and the course options students can select to complete the minimum 18 credits required for the major. The major-specific courses outlined in the TMCs are combined with general education and elective courses to complete the 60-credit degree.

As of publication, 40 TMCs had been developed and approved—though Social Justice Studies includes separate TMCs for African American Studies, Asian American Studies, Chicano Studies, Ethnic Studies, Gender Studies, General, LGBTQ Studies, and Native American Studies. Although the number of TMCs grew rapidly during the first few years of their inception and include both science and arts degrees, no new TMCs have been developed since 2017, and there are very few ADT pathways in STEM- and health-related fields.

The slowdown in the development of new TMCs may be explained by the findings of a 2015 California Legislative Analyst’s Office (LAO) report, referenced earlier, which noted that TMCs covered the majors of 80 percent of the students who transferred to a CSU.⁴⁷ TMCs should be periodically reviewed to ensure that they continue to cover with high-demand majors and pathways.

Only four Transfer Model Curricula have been approved since 2015.

Figure 16. Number of TMCs by Approved by Year of Initial Review



Source: California Community College Chancellor’s Office. (2021). Templates for Approved Transfer Model Curriculum. Retrieved from: <https://www.cccco.edu/About-Us/Chancellors-Office/Divisions/Educational-Services-and-Support/What-we-do/Curriculum-and-Instruction-Unit/Templates-For-Approved-Transfer-Model-Curriculum>

Note: Social Justice Studies includes separate TMCs for African American Studies, Asian American Studies, Chicano Studies, Ethnic Studies, Gender Studies, General, LGBTQ Studies, and Native American Studies. The source from which these data are drawn lists the Social Justice Studies TMCs as a set, submitted for review in 2015.

SB 440 requires colleges to develop an ADT pathway in any degree program for which there is an approved TMC *and* for which they offer an equivalent AA or AS degree. The law does not, however, require colleges to develop a degree program if a TMC exists or is approved in areas where the college does not already have a degree program. If the college does offer an AA or AS in a field for which an ADT is approved, the college must develop and offer an ADT within 18 months of the TMC’s approval. In our examination of data from the Chancellor’s Office Curriculum Inventory System, we find only **27 of the state’s 115 community colleges were fully compliant with the law—Cal Bright, the online college, does not offer degree programs. Of the remaining colleges that are not fully compliant, 36 must develop one degree to be compliant, 28 colleges must develop two ADT pathways to be compliant, and 26 colleges must develop three or more ADT pathways to reach compliance with the law.**

Only 27 California community colleges award ADTs in all programs for which a TMC exists.

Table 4. ADT Implementation and Compliance with SB 440

| ADT Implementation | Number of Colleges |
|---|--------------------|
| ADTs in all programs for which TMC is available | 27 |
| One AA/AS degree without corresponding ADT | 36 |
| Two AA/AS degrees without corresponding ADT | 28 |
| Three AA/AS degrees without corresponding ADT | 11 |
| Four AA/AS degree without corresponding ADT | 10 |
| Five AA/AS degrees without corresponding ADT | 5 |
| Total number of California community colleges with degree programs | 115 |

Source: The Chancellor’s Office Curriculum Inventory System (COCI), *Programs*. Retrieved from: <https://coci2.ccctechcenter.org/programs>

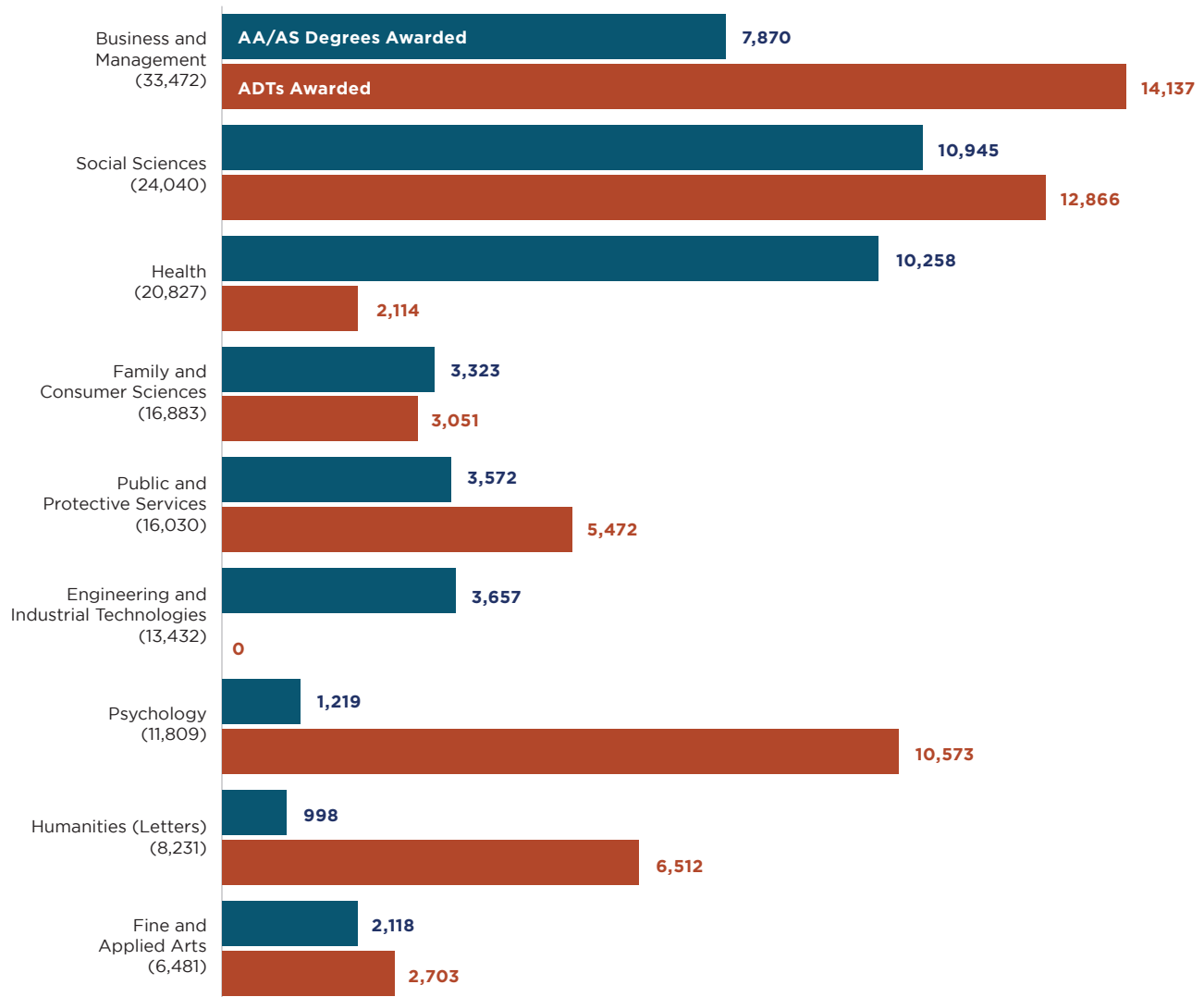
Notes: Based on author’s analysis of degrees offered by college. Colleges are flagged only if they offer only a traditional associate degree in a major for which an ADT is available. Majors are identified using the six-digit TOP code.

It should be noted that compliance with SB 440 measures only whether colleges have ADTs for degrees in programs that are offered on their campuses. The LAO has also noted major differences across community colleges in the number and specific disciplines of ADTs offered, an issue that continues to limit students’ access to the degrees based on the colleges they attend.⁴⁸

ADT pathways are better developed for some majors than for others. Figure 17 illustrates the top majors in the California Community Colleges in terms of associate degrees awarded, and the share of degrees in each discipline in 2019-20 that were ADTs. The most common major in the California Community Colleges in 2019-20—interdisciplinary studies—has a small share of ADT awards. In part, this reflects the fact that a number of TMCs associated with this major are relatively new. Additionally, this larger umbrella category is often a home for more programs that do not neatly fit into other disciplines with relatively small enrollments. In the 2019-20 academic year, the community college majors with the highest shares of ADT earners were psychology and humanities.

ADTs were the preferred degrees in five of the ten most popular majors at the California Community Colleges in 2019-2020.

Figure 17. In-demand Associate degree majors at California community colleges and the % of ADTs awarded in each major, 2019-2020



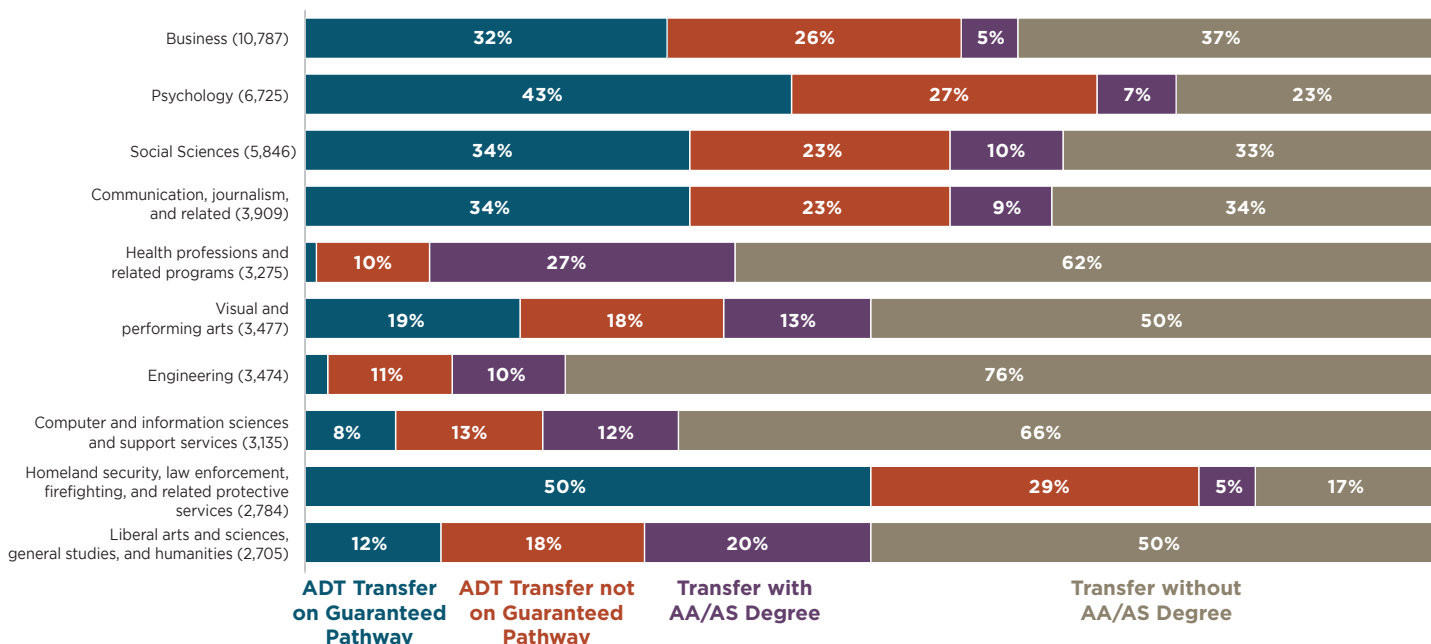
Source: California Community Colleges Chancellor’s Office (2020). Data Mart 2019. Available from: <https://datamart.cccco.edu/>

Nearly 21,000 students were awarded an associate degree in a health major, of which less than 20 percent were ADTs. The health sector has high projected job growth in the future. Improving transfer pathways via promoting ADTs among health majors may be a strategy to meet the future and current need for health professionals. Similarly, engineering is a relatively high demand major. The engineering and industrial technologies major had no ADT awards, as there is no engineering TMC to serve as the framework for developing an ADT. The 60-credit caps placed on coursework at the community college and the CSU level make it difficult to create ADTs in these fields, where degrees often deviate from the traditional 60-credit model seen in other disciplines.

Figure 18 shows the breakdown of transfer pathways in the CSU fall 2020 entering transfer class. This figure shows data for the top ten majors and the percent of incoming students who earned an ADT, AA/AS, or no degree before transferring.

ADT-earners make up the majority of transfer students in four of the ten most popular majors selected by transfer students.

Figure 18. Transfer Pathways for Ten Most Commonly Selected Transfer Majors, Fall 2020



Source: California State University Institutional Research and Analyses. (2020). Enrollment summary, fall 2020. <https://www2.calstate.edu/data-center/institutional-research-analyses>

The homeland security, law enforcement, firefighting, and protective services major had the highest percentage of students with an ADT, relative to other top ten majors. Health professions and related programs had the lowest percentage of students with an ADT (both with and without a guarantee). In these fields, the 60-credit caps specified by the legislation creating the ADT may be blocking the creation of an ADT pathway to the Bachelor of Science in Nursing degree, in which students earn 50 credits at a community college and 70 credits at the CSU. The demand for health professionals across the nation and in California is on the rise. According to a report from the College Futures Foundation, California was short 240,000 nurses with a bachelor’s degree in 2019.⁴⁹

Among transfer students who enrolled in the CSU system in 2020, the four most popular majors were Business; Psychology; Social Science; and Communications, Journalism, and Related Fields. In each of these majors, ADT earners who were on a guaranteed path outnumbered the students who enrolled with an ADT, but without the guarantees associated with the ADT.

Importantly, the science, technology, engineering, and mathematics (STEM) fields are not well- represented among ADT earners who transfer to the CSU. The handful of students on a guaranteed ADT path in engineering are mostly students in computer science, which is organized within the engineering departments at some CSU campuses. The current framework for the ADT may need to be revisited to better accommodate STEM and health fields.

STEM fields are critical to the state's future economy, with positive impacts for both California's workforce and its state budget. Clearly, more must be done to strengthen transfer pathways in these in-demand fields. The lack of STEM and health pathways is concerning for several reasons. For one, the demand for workers in STEM fields and health fields is projected to be quite high in the state of California.⁵⁰ TMCs in the sciences have been developed for biology, chemistry, physics, public health, agricultural plant sciences, and several others. These are newer TMCs, developed several years after the start of TMCs in 2011.

Although we encourage development of more TMCs, we also recognize that this will not be enough to fully support STEM students in community colleges. A report by the UC Davis Wheelhouse Center for Community College Leadership and Research found that one challenge hindering students interested in STEM is misplacement or misalignment between their high school math courses and initial math course enrollment in community college, with many students placed below the level of coursework that would reflect their true capacity. This is concerning, because even if such pathways are made available, students who are not placed at the appropriate level often take fewer STEM credits compared to their counterparts, whose high school and community college math courses match.⁵¹

Recent reforms to community college placement practices, incorporated in AB 705,⁵² have opened the door to transfer-level coursework for tens of thousands of students each year, but equity gaps remain between minoritized students and their peers. Encouraging the ADT as a pathway for students interested in STEM could strengthen transfer pathways for STEM students and help meet the demand for STEM professionals in California. These efforts should include providing STEM-interested students with a range of support and guidance, as well as appropriate placement in courses.



APPENDIX B: Equity Index Metrics For All California Community Colleges

As detailed on page 21 of our report, *Chutes or Ladders? Strengthening Community College Transfer So More Students Earn the Degrees They Seek*, the Campaign for College Opportunity named five Equity Champions of Higher Education in fall 2020. The new 2020 Equity Champions of Higher Education award is based on our new equity index, influenced by the Center for Urban Education at the University of Southern California.⁵³ The equity index looks at all 115 California Community Colleges awarding ADTs, to find the colleges awarding the highest number of ADTs to Latinx and/or Black students relative to the number of degree-/transfer-seeking Black and/or Latinx students at the campuses. The equity index tells us when campuses are acting with intentionality to ensure Black and/or Latinx students who have transfer goals actually earn ADTs.

$$\text{Equity Index for Latinx Students} = \frac{\text{Percent of ADT Earners who are Latinx}}{\text{Percent of Degree/Transfer Aspirants who are Latinx}}$$

| Equity Index | Interpretation |
|------------------|---|
| Greater than 1.0 | The target group is over-represented among ADT earners, relative to the degree/transfer-seeking population. |
| 1.0 | The target group has the same proportion of ADT earners, relative to the degree/transfer-seeking population. |
| Less than 1.0 | The target group is under-represented among ADT earners, relative to the degree/transfer-seeking population. |

Table B1. Equity metrics for Latinx students, 2018.

| College Name | # of degree-/transfer-seeking students 2018 | Equity index for Latinx students, 2018 | # of Latinx degree-/transfer-seeking students 2018 |
|--------------------------------|---|--|--|
| Woodland Community College | 3,889 | 1.40 | 1,945 |
| Merritt College | 5,811 | 1.27 | 1,727 |
| West Hills College-Coalinga | 3,421 | 1.22 | 2,349 |
| Los Angeles City College | 17,083 | 1.22 | 8,982 |
| Cañada College | 5,293 | 1.20 | 2,567 |
| Los Angeles Trade-Tech College | 14,344 | 1.19 | 9,501 |
| Contra Costa College | 6,222 | 1.19 | 2,701 |
| Napa Valley College | 4,782 | 1.19 | 2,213 |
| Cosumnes River College | 15,822 | 1.19 | 4,332 |
| Mission College | 5,606 | 1.18 | 1,808 |
| West Los Angeles College | 16,194 | 1.16 | 7,497 |

| College Name | # of degree-/transfer-seeking students 2018 | Equity index for Latinx students, 2018 | # of Latinx degree-/transfer-seeking students 2018 |
|-------------------------------|---|--|--|
| Santa Ana College | 20,590 | 1.15 | 13,871 |
| Sacramento City College | 21,913 | 1.14 | 6,893 |
| Mendocino College | 2,869 | 1.14 | 1,069 |
| Los Angeles Mission College | 11,767 | 1.14 | 8,647 |
| San Diego City College | 15,519 | 1.13 | 7,810 |
| Los Medanos College | 9,081 | 1.13 | 3,846 |
| Reedley College | 9,471 | 1.13 | 6,512 |
| Merced College | 9,543 | 1.13 | 5,339 |
| Santa Barbara City College | 13,564 | 1.12 | 5,205 |
| Oxnard College | 7,421 | 1.10 | 5,469 |
| Allan Hancock College | 8,248 | 1.10 | 5,360 |
| San Jose City College | 7,308 | 1.10 | 3,272 |
| Irvine Valley College | 12,804 | 1.09 | 3,454 |
| Hartnell College | 7,852 | 1.08 | 6,465 |
| San Diego Miramar College | 15,804 | 1.08 | 4,842 |
| Coastline Community College | 14,724 | 1.08 | 4,557 |
| Mt. San Antonio College | 29,096 | 1.08 | 18,598 |
| Cerritos College | 18,960 | 1.07 | 14,091 |
| Feather River College | 1,647 | 1.07 | 471 |
| Moreno Valley College | 11,795 | 1.07 | 7,750 |
| Santa Monica College | 29,090 | 1.07 | 12,334 |
| Butte College | 10,819 | 1.07 | 3,196 |
| West Hills College-Lemoore | 4,428 | 1.06 | 2,854 |
| Chabot College | 11,797 | 1.06 | 4,832 |
| Ventura College | 13,034 | 1.06 | 8,253 |
| Los Angeles Harbor College | 10,156 | 1.05 | 5,912 |
| Los Angeles Valley College | 20,545 | 1.05 | 10,360 |
| Fresno City College | 20,423 | 1.05 | 12,103 |
| Porterville College | 3,771 | 1.04 | 2,956 |
| Berkeley City College | 5,447 | 1.04 | 1,416 |
| El Camino College | 20,798 | 1.04 | 11,276 |
| Cabrillo College | 8,460 | 1.04 | 4,231 |
| Victor Valley College | 9,873 | 1.03 | 5,698 |
| Antelope Valley College | 14,480 | 1.03 | 8,152 |
| City College of San Francisco | 20,712 | 1.03 | 6,022 |
| San Joaquin Delta College | 18,228 | 1.03 | 8,890 |
| Imperial Valley College | 7,109 | 1.02 | 6,516 |

| College Name | # of degree-/transfer-seeking students 2018 | Equity index for Latinx students, 2018 | # of Latinx degree-/transfer-seeking students 2018 |
|-------------------------------|---|--|--|
| Shasta College | 5,036 | 1.02 | 916 |
| East Los Angeles College | 31,155 | 1.02 | 23,891 |
| Long Beach City College | 25,380 | 1.01 | 15,245 |
| Bakersfield College | 21,838 | 1.01 | 14,851 |
| Rio Hondo College | 14,662 | 1.01 | 12,888 |
| Sierra College | 17,198 | 1.01 | 4,777 |
| Riverside City College | 24,515 | 1.01 | 15,743 |
| Norco College | 11,862 | 1.01 | 7,050 |
| Fullerton College | 19,706 | 1.01 | 11,514 |
| San Bernardino Valley College | 14,096 | 1.01 | 9,608 |
| Citrus College | 11,340 | 1.01 | 7,283 |
| Ohlone College | 7,235 | 1.01 | 2,034 |
| San Diego Mesa College | 23,545 | 1.01 | 9,255 |
| Los Angeles Pierce College | 21,547 | 1.01 | 10,540 |
| Pasadena City College | 25,654 | 1.00 | 13,282 |
| College of the Sequoias | 12,592 | 1.00 | 8,796 |
| Glendale Community College | 12,997 | 1.00 | 4,369 |
| Gavilan College | 4,663 | 0.99 | 3,115 |
| College of the Desert | 9,722 | 0.99 | 7,135 |
| College of Marin | 3,436 | 0.98 | 1,307 |
| American River College | 26,348 | 0.98 | 6,423 |
| Golden West College | 11,713 | 0.98 | 4,175 |
| Chaffey College | 22,130 | 0.98 | 14,719 |
| Southwestern College | 17,605 | 0.98 | 11,787 |
| College of Alameda | 5,402 | 0.97 | 1,318 |
| Folsom Lake College | 9,382 | 0.97 | 1,955 |
| West Valley College | 6,134 | 0.96 | 2,040 |
| Cypress College | 13,056 | 0.96 | 6,360 |
| Monterey Peninsula College | 5,734 | 0.96 | 2,978 |
| Los Angeles Southwest College | 7,611 | 0.96 | 3,282 |
| Barstow Community College | 3,858 | 0.96 | 1,577 |
| Mt. San Jacinto College | 18,656 | 0.96 | 9,755 |
| College of the Canyons | 15,236 | 0.95 | 7,888 |
| Modesto Junior College | 18,659 | 0.95 | 9,830 |
| Solano Community College | 7,977 | 0.95 | 2,575 |
| Cuyamaca College | 9,960 | 0.95 | 3,329 |
| Crafton Hills College | 6,283 | 0.95 | 3,229 |

| College Name | # of degree-/ transfer-seeking students 2018 | Equity index for Latinx students, 2018 | # of Latinx degree-/ transfer-seeking students 2018 |
|------------------------------|--|--|---|
| De Anza College | 20,746 | 0.94 | 6,044 |
| Taft College | 3,995 | 0.94 | 2,257 |
| Evergreen Valley College | 8,629 | 0.94 | 3,788 |
| Cerro Coso Community College | 5,083 | 0.94 | 1,985 |
| Saddleback College | 17,133 | 0.93 | 4,842 |
| MiraCosta College | 14,519 | 0.93 | 5,947 |
| Las Positas College | 7,578 | 0.93 | 2,493 |
| Santa Rosa Junior College | 15,131 | 0.92 | 5,822 |
| Grossmont College | 19,304 | 0.92 | 7,180 |
| College of San Mateo | 6,904 | 0.91 | 2,327 |
| Diablo Valley College | 17,969 | 0.91 | 4,933 |
| Palomar College | 18,799 | 0.91 | 8,822 |
| Yuba College | 6,299 | 0.89 | 2,373 |
| Lake Tahoe Community College | 2,160 | 0.89 | 703 |
| Moorpark College | 13,891 | 0.87 | 5,294 |
| Cuesta College | 7,203 | 0.87 | 2,359 |
| Santiago Canyon College | 11,138 | 0.86 | 6,012 |
| Foothill College | 12,283 | 0.86 | 3,630 |
| Lassen College | 2,241 | 0.85 | 663 |
| Clovis Community College | 7,839 | 0.84 | 3,630 |
| Orange Coast College | 17,762 | 0.83 | 6,259 |
| Skyline College | 6,835 | 0.81 | 2,264 |
| Copper Mountain College | 1,472 | 0.76 | 566 |
| Laney College | 7,621 | 0.72 | 1,762 |
| College of the Redwoods | 4,637 | | 1,090 |
| College of the Siskiyous | 1,573 | | 277 |
| Palo Verde College | 2,750 | | 1,331 |
| Columbia College | 2,019 | | 410 |
| Compton College | 6,963 | | 4,178 |

Note: Schools that are missing an equity index had less than ten students awarded an ADT in the specific racial/ethnic group. Any group with a value of less than ten is masked to protect student privacy. Data source: Cal-PASS Plus. (2020). Student Success Metrics, California Community Colleges.

$$\text{Equity Index for Black Students} = \frac{\text{Percent of ADT Earners who are Black}}{\text{Percent of Degree/Transfer Aspirants who are Black}}$$

| Equity Index | Interpretation |
|------------------|---|
| Greater than 1.0 | The target group is over-represented among ADT earners, relative to the degree/transfer-seeking population. |
| 1.0 | The target group has the same proportion of ADT earners, relative to the degree/transfer-seeking population. |
| Less than 1.0 | The target group is under-represented among ADT earners, relative to the degree/transfer-seeking population. |

Table B2. Equity metrics for Black students, 2018.

| College Name | # of degree-/transfer-seeking students 2018 | Equity index for Black students, 2018 | # of Black degree-/transfer-seeking students 2018 |
|-------------------------------|---|---------------------------------------|---|
| Cerritos College | 18,960 | 1.24 | 244 |
| Merritt College | 5,811 | 1.10 | 1,615 |
| Los Angeles Southwest College | 7,611 | 1.03 | 3,361 |
| San Jose City College | 7,308 | 0.99 | 469 |
| College of Alameda | 5,402 | 0.97 | 1,079 |
| American River College | 26,348 | 0.96 | 2,332 |
| Ohlone College | 7,235 | 0.95 | 244 |
| West Los Angeles College | 16,194 | 0.87 | 3,792 |
| San Bernardino Valley College | 14,096 | 0.85 | 1,795 |
| Laney College | 7,621 | 0.84 | 1,846 |
| Los Angeles City College | 17,083 | 0.83 | 1,467 |
| Cosumnes River College | 15,822 | 0.81 | 1,690 |
| Los Medanos College | 9,081 | 0.81 | 1,393 |
| Moreno Valley College | 11,795 | 0.79 | 1,422 |
| Los Angeles Pierce College | 21,547 | 0.78 | 1,187 |
| Pasadena City College | 25,654 | 0.78 | 1,054 |
| San Diego Mesa College | 23,545 | 0.77 | 1,735 |
| Contra Costa College | 6,222 | 0.77 | 1,158 |
| MiraCosta College | 14,519 | 0.76 | 543 |
| Grossmont College | 19,304 | 0.75 | 1,362 |
| San Diego City College | 15,519 | 0.75 | 1,585 |

| College Name | # of degree-/transfer-seeking students 2018 | Equity index for Black students, 2018 | # of Black degree-/transfer-seeking students 2018 |
|-------------------------------|---|---------------------------------------|---|
| Napa Valley College | 4,782 | 0.74 | 288 |
| Norco College | 11,862 | 0.73 | 849 |
| Sierra College | 17,198 | 0.73 | 639 |
| Mt. San Jacinto College | 18,656 | 0.73 | 1,364 |
| College of the Canyons | 15,236 | 0.71 | 907 |
| Sacramento City College | 21,913 | 0.71 | 2,348 |
| Modesto Junior College | 18,659 | 0.69 | 717 |
| Chabot College | 11,797 | 0.69 | 1,370 |
| Berkeley City College | 5,447 | 0.68 | 982 |
| Southwestern College | 17,605 | 0.68 | 930 |
| Fresno City College | 20,423 | 0.67 | 1,249 |
| Santa Rosa Junior College | 15,131 | 0.66 | 422 |
| Chaffey College | 22,130 | 0.65 | 1,858 |
| Long Beach City College | 25,380 | 0.65 | 2,994 |
| Barstow Community College | 3,858 | 0.64 | 672 |
| College of the Desert | 9,722 | 0.61 | 291 |
| City College of San Francisco | 20,712 | 0.61 | 1,900 |
| El Camino College | 20,798 | 0.61 | 2,983 |
| Bakersfield College | 21,838 | 0.61 | 1,012 |
| De Anza College | 20,746 | 0.60 | 689 |
| Foothill College | 12,283 | 0.60 | 548 |
| Citrus College | 11,340 | 0.59 | 496 |
| Santa Monica College | 29,090 | 0.59 | 2,708 |
| Victor Valley College | 9,873 | 0.58 | 1,115 |
| Riverside City College | 24,515 | 0.58 | 2,057 |
| Orange Coast College | 17,762 | 0.57 | 303 |
| Mt. San Antonio College | 29,096 | 0.56 | 1,074 |
| Saddleback College | 17,133 | 0.56 | 361 |
| Los Angeles Harbor College | 10,156 | 0.55 | 1,134 |
| Cypress College | 13,056 | 0.55 | 630 |
| San Diego Miramar College | 15,804 | 0.53 | 884 |
| Antelope Valley College | 14,480 | 0.52 | 2,283 |
| San Joaquin Delta College | 18,228 | 0.51 | 1,657 |
| Los Angeles Valley College | 20,545 | 0.51 | 1,148 |
| Diablo Valley College | 17,969 | 0.46 | 1,200 |
| Solano Community College | 7,977 | 0.46 | 1,088 |

| College Name | # of degree-/ transfer-seeking students 2018 | Equity index for Black students, 2018 | # of Black degree-/ transfer-seeking students 2018 |
|-----------------------------|--|---|--|
| Fullerton College | 19,706 | 0.39 | 643 |
| Cabrillo College | 8,460 | | 127 |
| West Valley College | 6,134 | | 168 |
| Mendocino College | 2,869 | | 74 |
| Merced College | 9,543 | | 311 |
| College of Marin | 3,436 | | 154 |
| College of San Mateo | 6,904 | | 223 |
| Reedley College | 9,471 | | 287 |
| Copper Mountain College | 1,472 | | 114 |
| Columbia College | 2,019 | | 35 |
| Hartnell College | 7,852 | | 164 |
| Mission College | 5,606 | | 221 |
| Cuyamaca College | 9,960 | | 561 |
| Compton College | 6,963 | | 1,764 |
| Monterey Peninsula College | 5,734 | | 211 |
| Cañada College | 5,293 | | 200 |
| Ventura College | 13,034 | | 308 |
| Rio Hondo College | 14,662 | | 172 |
| Feather River College | 1,647 | | 280 |
| Evergreen Valley College | 8,629 | | 225 |
| Yuba College | 6,299 | | 239 |
| Butte College | 10,819 | | 266 |
| Woodland Community College | 3,889 | | 81 |
| East Los Angeles College | 31,155 | | 1,032 |
| Golden West College | 11,713 | | 237 |
| Santa Barbara City College | 13,564 | | 443 |
| Coastline Community College | 14,724 | | 2,074 |
| Palo Verde College | 2,750 | | 501 |
| Skyline College | 6,835 | | 201 |
| Crafton Hills College | 6,283 | | 280 |
| Cuesta College | 7,203 | | 229 |
| College of the Redwoods | 4,637 | | 183 |
| Taft College | 3,995 | | 155 |
| Oxnard College | 7,421 | | 178 |
| West Hills College-Lemoore | 4,428 | | 248 |
| Santa Ana College | 20,590 | | 386 |
| Lassen College | 2,241 | | 506 |

| College Name | # of degree-/transfer-seeking students 2018 | Equity index for Black students, 2018 | # of Black degree-/transfer-seeking students 2018 |
|--------------------------------|---|---------------------------------------|---|
| Shasta College | 5,036 | | 124 |
| Gavilan College | 4,663 | | 99 |
| Cerro Coso Community College | 5,083 | | 436 |
| Los Angeles Mission College | 11,767 | | 462 |
| Palomar College | 18,799 | | 681 |
| Irvine Valley College | 12,804 | | 259 |
| Imperial Valley College | 7,109 | | 124 |
| Folsom Lake College | 9,382 | | 427 |
| Las Positas College | 7,578 | | 391 |
| Los Angeles Trade-Tech College | 14,344 | | 2,628 |
| Clovis Community College | 7,839 | | 224 |
| Santiago Canyon College | 11,138 | | 242 |
| Lake Tahoe Community College | 2,160 | | 211 |
| Allan Hancock College | 8,248 | | 196 |
| College of the Sequoias | 12,592 | | 306 |
| College of the Siskiyous | 1,573 | | 87 |
| Porterville College | 3,771 | | 36 |
| Moorpark College | 13,891 | | 327 |
| West Hills College-Coalinga | 3,421 | | 177 |
| Glendale Community College | 12,997 | | 351 |

Note: Schools that are missing an equity index had less than ten students awarded an ADT in the specific racial/ethnic group. Any group with a value of less than ten is masked to protect student privacy. Data source: Cal-PASS Plus. (2020). Student Success Metrics, California Community Colleges.

Endnotes

- 1 Cal-PASS Plus. (2021). Student Success Metrics, [Data Dashboard]. Retrieved from: <https://www.calpassplus.org/LaunchBoard/Student-Success-Metrics>
- 2 California Community Colleges Chancellor's Office (2021). DataMart Transfer Velocity. Available from: <https://datamart.cccco.edu/>
- 3 Cooper, J.J. (2018, May 04). "California now world's fifth largest economy, surpassing UK." Associated Press. Retrieved from: <https://apnews.com/article/dfe5adff6d3640249e63f5637dfeb995>
- 4 California Community Colleges Chancellor's Office (2021). DataMart Transfer Velocity. Available from: <https://datamart.cccco.edu/>
- 5 Johnson, H. & Mejia, M.C. (2020). *Increasing Community College Transfers: Progress and Barriers*. San Francisco, CA: Public Policy Institute of California.
- 6 Johnson, H. (2020). *Testimony: California is on track to close the degree gap* [Testimony to CA Assembly Budget Subcommittee (No. 2) on Education Finance]. Available at: <https://www.ppic.org/blog/testimony-california-is-on-track-to-close-the-degree-gap/>
- 7 Shorette, R. & Byrd, D. (2016). *Keeping the Promise: Going the Distance on Transfer Reform*. Los Angeles, CA: Campaign for College Opportunity Retrieved from: https://collegecampaign.org/wp-content/uploads/2016/03/2016-Keeping-the-Promise_Full-Report-FINAL.pdf; Baker, Kurlaender, & Friedmann (2020). *Improving the Pathway to the BA: An Examination of the Associate Degree for Transfer*. Retrieved from: https://education.ucdavis.edu/sites/main/files/wheelhouse_report_pathway_to_the_ba_1220_final.pdf
- 8 Baker, R., Kurlaender, M., & E. Friedmann (2021). *Improving the Pathway to the Baccalaureate: The Effect of California's Associate Degree for Transfer*. [Ed Working Paper No. 21-359]. Retrieved from Annenberg Institute for School Reform at Brown University: <https://doi.org/10.26300/569x-2a48>
- 9 California Community Colleges: student transfer. Cal. Sen. B 1440 (2009-2010). Chapter 428 (Cal. Ed. Code). Retrieved from: https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill_id=200920100SB1440
- 10 Campaign for College Opportunity (2020). *Higher Education in California: An Introduction to the State's Public Colleges & Universities*. Los Angeles, CA: Author.
- 11 Student Transfer Achievement Reform Act, Cal. Sen. B 440 (2012-2013). Chapter 720 (Cal. Ed. Code). Retrieved from: https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill_id=201320140SB440
- 12 California Community Colleges Chancellor's Office (2021). DataMart Program Awards. Available from: <https://datamart.cccco.edu/>
- 13 Baker, Kurlaender, & Friedman (2020).
- 14 California Community Colleges Chancellor's Office (2021). DataMart Program Awards. Available from: <https://datamart.cccco.edu/>
- 15 Cal-PASS Plus. (2021). Student Success Metrics, [Data Dashboard]. Retrieved from: <https://www.calpassplus.org/LaunchBoard/Student-Success-Metrics>
- 16 Taylor, M. (2015). Implementation Update: Reforming Transfer from CCC to CSU. Sacramento, CA: Legislative Analyst's Office. Retrieved from: <https://lao.ca.gov/reports/2015/edu/reforming-transfer/reforming-transfer-020215.pdf>
- 17 Johnson & Mejia (2020) *Increasing Community College Transfers: Progress and Barriers*.
- 18 Baker, R., Kurlaender, M. & E. Friedmann (2020).
- 19 Reddy, Siqueiros, & Itzkowitz (2020). *The Personal Payoff of a College Education in California's Colleges and Universities*. The Campaign for College Opportunity. Retrieved from: <https://collegecampaign.org/wp-content/uploads/2019/10/Personal-Payoff-Brief-v3.pdf>
- 20 Reddy, V. & Dow, A. (2021). *California's Biggest Return: Raising college attainment to 60 percent for all by 2030 will generate \$133 billion in additional federal and state revenue*. Los Angeles, CA: Campaign for College Opportunity.
- 21 Hoynes (2020), cited in : Daly, M.C., Buckman, S.R., & Seitelman, L.M. (2020). *The Unequal Impact of COVID-19: Why Education Matters*. San Francisco, CA: Federal Reserve Bank of San Francisco. Retrieved from: <https://www.frbsf.org/economic-research/publications/economic-letter/2020/june/unequal-impact-covid-19-why-education-matters/>
- 22 Johnson, H. & Mejia, M. C. (2020). *Higher Education and Economic Opportunity in California*. San Francisco, CA: Public Policy Institute of California. Retrieved from: <https://www.ppic.org/wp-content/uploads/higher-education-and-economic-opportunity-in-california-november-2020.pdf>
- 23 Petek, G. (2020). *The 2021-22 Budget: California's Fiscal Outlook*. Sacramento, CA: Legislative Analyst's Office. Retrieved from: <https://lao.ca.gov/reports/2020/4297/fiscal-outlook-111820.pdf>
- 24 Parker, K., Horowitz, J. M., & Minkin, R. (2020). How the Coronavirus Outbreak Has—and Hasn't—Changed the Way Americans Work. Retrieved from: <https://www.pewresearch.org/social-trends/2020/12/09/how-the-coronavirus-outbreak-has-and-hasnt-changed-the-way-americans-work/>
- 25 Carnevale, A. (2021, March 24). Vaccinations Have Ramped Up, But Has Distribution Been Equitable? [Blog Post]. Retrieved from: <https://medium.com/georgetown-cew/vaccinations-have-ramped-up-but-has-distribution-been-equitable-ac76d91b6bfd>
- 26 Rodriguez, O., Mejia, M.C., & Johnson, H. (2019). *Increasing Equity and Diversity*. Sacramento, CA: PPIC Higher Education Center. Retrieved from: <https://www.ppic.org/wp-content/uploads/higher-education-in-california-increasing-equity-and-diversity-october-2019.pdf>
- 27 Reddy & Dow (2021).
- 28 *ibid*
- 29 Reddy, V. & Siqueiros, M. (2021). *The State of Higher Education for Black Californians*. Los Angeles, CA: Campaign for College Opportunity. Retrieved from: <https://collegecampaign.org/portfolio/state-higher-ed-black-californians-2021/>
- 30 Reddy, Siqueiros, & Itzkowitz (2020).
- 31 The California State University. (2021). *Graduation and Continuation Rates, California Community College Transfers*. [Data Dashboard]. Retrieved from: <https://www2.calstate.edu/data-center/institutional-research-analyses>
- 32 University of California (n.d.). *Infocenter: Undergraduate Graduation Rates* [Data Dashboard]. Retrieved from: <https://www.universityofcalifornia.edu/infocenter/ug-outcomes>
- 33 Johnson & Mejia (2020) *Increasing Community College Transfers: Progress and Barriers*.

- 34 Taylor, M. (2012). *Reforming the State's Transfer Process: A progress report on Senate Bill 1440*. Sacramento, CA: Legislative Analyst's Office. Retrieved from: <https://lao.ca.gov/reports/2012/edu/progress-sb-1440/progress-sb-1440-051112.pdf>
- 35 Bustillos, L.T. (2017). *The Transfer Maze*. Los Angeles, CA: Campaign for College Opportunity; Douglass, J.A. (2015). *How and Why the University of California Got Its Autonomy*. Berkeley, CA: UC Berkeley Center for Studies in Higher Education.
- 36 Douglass, J.A. (2015). *How and Why the University of California Got its Autonomy*. Research & Occasional Paper Series: CSHE.4.15. Berkeley, CA: Center for Studies in Higher Education, University of California, Berkeley.
- 37 Postsecondary education: student transfer. Cal Assem B 2302 (2009-2010), Chapter 427 (Cal. Ed. Code). Retrieved from: https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=200920100AB2302
- 38 Higher Education. (n.d.). California State Budget 2015-16. Sacramento, CA: State of California. Retrieved from: <http://www.ebudget.ca.gov/2015-16/pdf/Enacted/BudgetSummary/HigherEducation.pdf#>
- 39 California Community Colleges & University of California (April, 2018). Enhancing Student Transfer – A Memorandum of Understanding Between the California Community Colleges and the University of California. Retrieved from: <https://www.universityofcalifornia.edu/sites/default/files/UC-CCC-MOU.pdf>
- 40 University of California Admissions. (n.d.) *Transfer Pathways*. Retrieved from: <https://admission.universityofcalifornia.edu/admission-requirements/transfer-requirements/transfer-pathways/>
- 41 University of California Admissions. (n.d.) *Pathways+*. Retrieved from: <https://admission.universityofcalifornia.edu/admission-requirements/transfer-requirements/pathways-plus.html>
- 42 Baker, Kurlaender, & Friedman (2020); Crosta, P.M. & Kopko, E.M. (2014). Should Community College Students Earn an Associate Degree Before Transferring to a Four-Year Institution? Working Paper No. 70. New York, NY: Community College Research Center, Teachers College, Columbia University.
- 43 The Chancellor's Office Curriculum Inventory System (COCI), Programs. (2021) Retrieved from: <https://coci2.ccctechcenter.org/programs>
- 44 Foundation for California Community Colleges (2019). *Vision for Success: Strengthening the California Community Colleges to Meet California's Needs*. Retrieved from: https://foundationccc.org/Portals/0/Documents/Vision/VisionForSuccess_web_2019.pdf
- 45 CCCCCO (2020). *Vision for Success Diversity, Equity and Inclusion Task Force*. Retrieved from: https://www.cccco.edu/-/media/CCCCO-website/Reports/CCCCO_DEI_Report.pdf?la=en&hash=69E11E4DAB1DEBA3181E053BEE89E7BC3A709BEE
- 46 California Governor's Council for Post-Secondary Education. (2021). *Recovery With Equity*. Retrieved from: <https://www.capostsecondaryforall.org/initiatives/recovery-with-equity/>
- 47 Taylor (2015)
- 48 Baker, Kurlaender, & Friedman (2020)
- 49 College Future Foundation (2019). Making Room for Success: Addressing Capacity Shortfalls at California's Universities. Retrieved from: https://collegefutures.org/wp-content/uploads/2019/10/Making-Room-for-Success_2019Oct.pdf
- 50 Employment Development Department, State of California. (n.d.) *Employment projections*. Retrieved from: <https://www.labormarketinfo.edd.ca.gov/data/employment-projections.html>
- 51 Park, E., Ngo, F., & Melguizo, T. (2019). *Starting Off on the Wrong Foot: Math Misalignment and STEM Outcomes in California Community Colleges*. Davis, CA: Wheelhouse Center for Community College Leadership and Research
- 52 Mejia, M.C., Rodriguez, O., & Johnson, H. (2020). *A New Era of Student Access at California's Community Colleges*. San Francisco, CA: Public Policy Institute of California. Retrieved from: <https://www.ppic.org/publication/a-new-era-of-student-access-at-californias-community-colleges/>
- 53 Bensimon, E. M., Hao, L., & Bustillos, L. T. (2006). Measuring the State of Equity in Public Higher Education. In P. C. Gándara, G. Orfield, & C. L. Horn (Eds.), *Expanding Opportunity in Higher Education: Leveraging Promise* (pp. 143-165). Albany, N.Y: State University of New York Press.



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