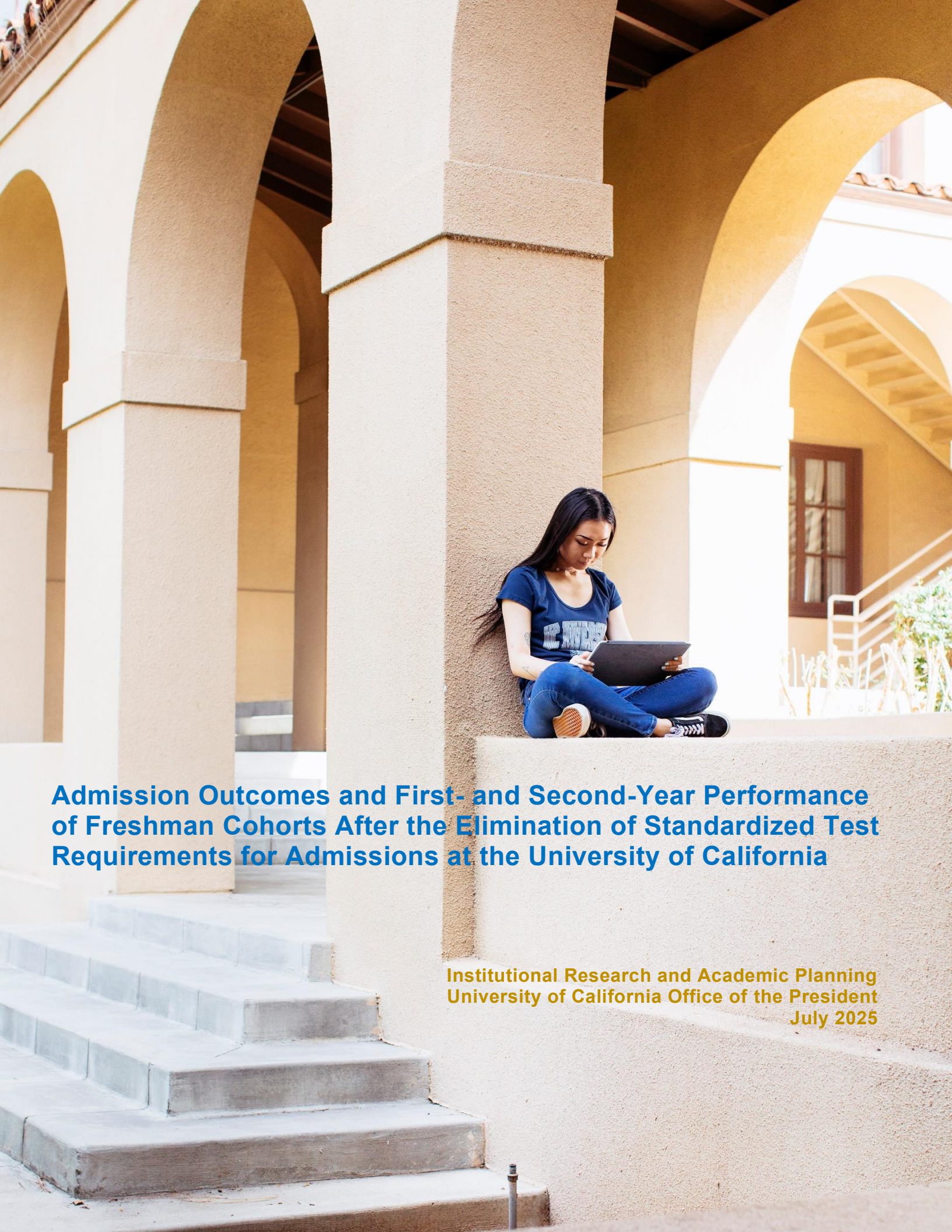

Admission Outcomes and First- and Second-Year Performance of Freshman Cohorts After the Elimination of Standardized Test Requirements for Admissions at the University of California

Institutional Research and Academic Planning
University of California Office of the President
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Executive Summary

The University of California (UC) saw a notable rise in freshman applicants from 2020 to 2021, with applications increasing from 171,708 to 204,079—a 19 percent surge. This spike may be partly attributed to the elimination of standardized test requirements, aligning with trends observed at other selective institutions adopting test-optional/test-free policies during the beginning of the COVID-19 pandemic.

The removal of standardized testing did not significantly impact UC's admission outcomes by high school GPA (HSGPA). While admit rates declined across HSGPA quintiles, particularly for lower HSGPA students, the trend was consistent with the overall increase in applications. The most academically prepared students, with HSGPAs above 4.00, have been increasing over time, mirroring national trends in high school grade inflation, which intensified during the COVID-19 pandemic as students had the option to choose Pass/No Pass grading.

UC's admissions policies, particularly its comprehensive and holistic review processes, which consider multiple factors beyond HSGPA, likely mitigated any significant shifts in admit rates despite the removal of test scores. This ensured continuity in admissions outcomes across various student populations.

Racial and ethnic diversity among UC applicants, admits, and enrollees changed gradually. While Asian students and those identifying with two or more races have been overrepresented compared to California public high school graduates, underrepresented groups (URG) such as African American and Hispanic/Latino students saw gains in admit and enrollment shares from 2020 to 2021. However, overall racial/ethnic diversity at UC did not change substantially, and the increase in underrepresented students is likely part of an ongoing trend rather than a direct result of test-free admissions.

First-generation students have seen a slight decline in applicant and enrollment shares from 2020 to 2021, largely due to a proportional decrease in first-generation applicants rather than policy changes. Similarly, geographic diversity in UC admissions remained stable, with the number of source schools continuing to grow, suggesting that test-free admissions did not drastically alter this pattern.

Analysis of student performance, including persistence rates, HSGPA, units completed, and three-year graduation rates, indicates that first- and second-year persistence rates remained stable at around 92 percent and 87 percent, respectively, from 2018 to 2022. There was a minor decline in the first-year persistence rate for the 2021 cohort, but an increase in 2022. While students with higher HSGPAs consistently had better persistence rates, those with HSGPAs below 3.0 saw a notable drop between the 2020 and 2021 cohorts, though rates improved in 2022. Across the UC system, the overall trend in three-year graduation rates appears relatively stable, with a slight increase in the graduation rate for the 2021 cohort compared to the 2020 cohort. This may suggest a modest recovery or improvement following potential disruptions from the COVID-19 pandemic.

STEM students did not show significant changes in persistence rates under the test-free policy. However, the analysis revealed mixed trends in GPA at UC (UCGPA) across fields of study between 2020 and 2021, with slight declines in some STEM and non-STEM areas. The performance in math and statistics courses showed a more pronounced drop in GPAs compared

to other courses which may be attributable to pre-UC math preparation, as California public school students experienced a notable decline in math pass rates based on California Smarter Balanced exams during the pandemic.

In terms of UC units completed, there was no substantial impact from the test-free policy or the COVID-19 pandemic, with first-year students completing around 30 semester units consistently from 2018 to 2022.

Finally, the analysis finds that HSGPA has become a stronger predictor of UC first-year GPA since the elimination of standardized test scores from admissions beginning 2021. This shift raises the question of whether HSGPA has played a greater role in the admissions review process as a result. Further analysis may be needed to better understand the factors contributing to this change.

I. Introduction

The University of California (UC) eliminated standardized test requirements for undergraduate admissions in 2020,[1] effective for the 2021 freshman entering cohort.[2] This report presents admission outcomes and first- and second-year performance data—measured by persistence rates, UCGPA, and units completed—for the 2021–2023 freshman cohorts, compared to the 2018–2020 freshman cohorts. The main purpose of this analysis is to provide a study to understand changes in admissions outcomes and student performance during the first two years at UC between the freshman cohorts who entered pre- and post-test-free admissions.

It is important to note that the COVID-19 pandemic, which began in spring 2020, substantially impacted high school students' academic preparation[3] and the performance of UC students across all three cohorts admitted without standardized test scores. Therefore, it is challenging to separate the impacts of the COVID-19 pandemic and test-free admissions on admission outcomes and student performance at UC. Additionally, it is possible that due to extra support and accommodations from UC faculty and staff on all campuses during this pandemic period, students continued performing well once enrolled at UC despite the many challenges to the learning experiences caused by COVID-19.

II. Admission Outcomes

The number of freshman applicants at UC decreased slightly from 2018 to 2020, but increased significantly from 171,708 in 2020 to 204,079 in 2021, as indicated by the blue line in Figure 1, representing a 19 percent increase. The trend then remained almost flat from 2021 to 2023. Could the increase in applications from 2020 to 2021 be attributed to the elimination of the standardized test requirement for admissions? National research done prior to COVID-19 and UC's move to test-free admissions suggest it is possible. A study released by the National Association for College Admission Counseling in 2018 shows that all 28 test-optional (TOP) institutions participating in the study saw a significant increase in applications after adopting the TOP policy, with an average increase of 29 percent at private institutions and 11 percent at public institutions.[4] As most TOP and Test-Required Peer (TRP) institutions experienced an application increase during the study period, the analysis also compared the application increase between these two groups of institutions. The research found that 57 percent of the TOP institutions in the study experienced greater proportionate growth in overall applications than TRP institutions during the same time period, while only six (26 percent) of them experienced less application growth than their TRP counterparts. Four institutions experienced essentially the same level of growth (within +/- 3 percentage points).

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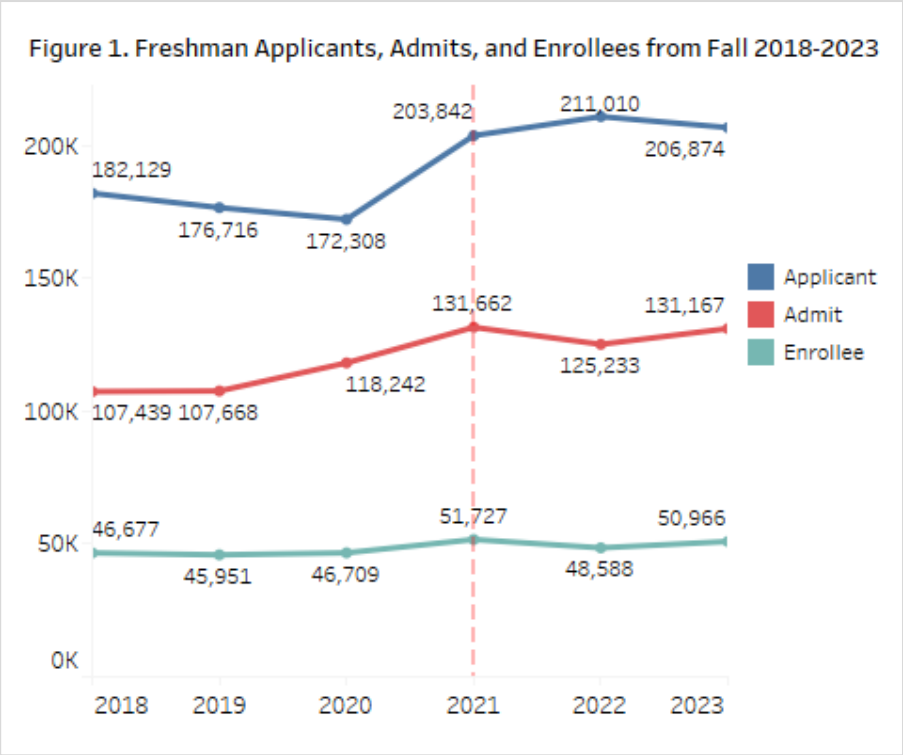
[1] Unless otherwise noted, years refer fall term of the given year, e.g., 2020 means fall 2020.
[2] The Regents of the University of California. College Entrance Exam Use in University of California Undergraduate Admissions. https://regents.universityofcalifornia.edu/minutes/2020/board5.21.pdf, pp. 26–37.
[3] Center on Reinventing Public Education. The State of the American Students: Fall 2024. https://crpe.org/wp-content/uploads/CRPE_SOS2024_FINAL.pdf.
[4] Steven Syverson, Valerie Franks, and William Hiss. Defining Access: How Test-Optional Works. https://nacacnet.org/wp-content/uploads/2022/10/defining-access-report-2018.pdf.



In an effort to increase total California resident enrollment by 1,600 for academic year 2020–21, UC admitted a record high of 79,577 California freshman applicants prior to the test-free admissions policy.[5] The total number admitted in 2020 was 118,242, as indicated by the red line in Figure 1, a record number of freshman admissions at UC prior to test-free admissions. UC continued to admit more freshmen in 2021, but the growth was only 11 percent from 2020, compared to the 19-percent increase in applications from 2020 to 2021. The admit number decreased from 2021 to 2022, even though the number of applications was the highest ever in 2022. To clarify, the increase in admissions from 2020 to 2021 was less likely due to changes in admissions policy and more likely driven by enrollment growth targets, as well as efforts to mitigate lower yield rates and enrollment uncertainty caused by the COVID pandemic.

Appendix 1 shows freshman applicants, admits, and enrollees from 2018 to 2023 by campus. All campuses experienced an increase in applicants from 2020 to 2021, reflecting the systemwide increasing trend. However, the three most selective campuses, Berkeley, UCLA, and San Diego saw a more significant increase during this period. Admission and enrollment patterns by campus align with the systemwide trends over the years.

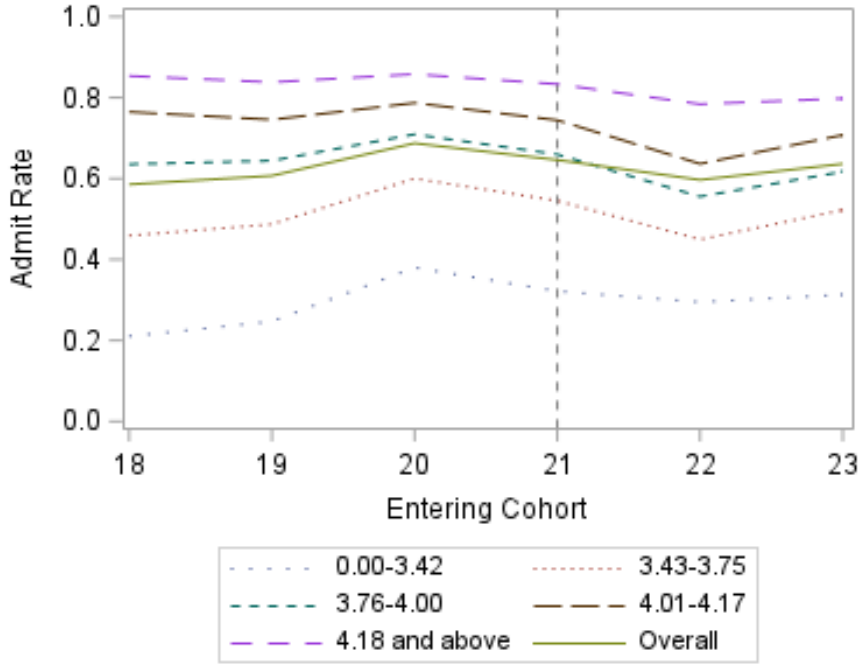
Figure 2 and Appendix 2 display systemwide and campus admit rates by HSGPA quintile[6] and entering cohort. A decline was observed in the systemwide admit rates and the rates on most campuses across all HSGPA quintiles from 2020 to 2021, with a slightly greater decline for applicants in the two lowest quintiles with a HSGPA below 3.76. This declining trend might be largely attributed to the substantial increase in applicants from 2020 to 2021 as described earlier. With test scores removed from admission requirements, HSGPAs became the most quantifiable indicator of applicants' academic preparedness. One would expect that the admit rate for applicants with a higher HSGPA would rise, but this was not exactly the case. All UC campuses utilize comprehensive review to assess applicants' qualifications, which means “students applying

[5] UC Admission of California Students at All-Time Record High. UC admission of California students at all-time record high | University of California.

[6] The high school GPA quintiles were defined based on the weighted, capped GPAs of freshman applicants from 2018.

to the University are evaluated for admission using multiple measures of achievement and promise while consider the context in which each student has demonstrated academic accomplishment."[7] Moreover, many campuses employ holistic review, which according to the statement of the Board of Admissions and Relations with Schools (BOARS), "should take into account both academic and non-academic elements in the application and the electronic 'read sheet' that pertain to the applicant's accomplishments in the context of opportunity to derive a single 'read score' to determine admission."[8]

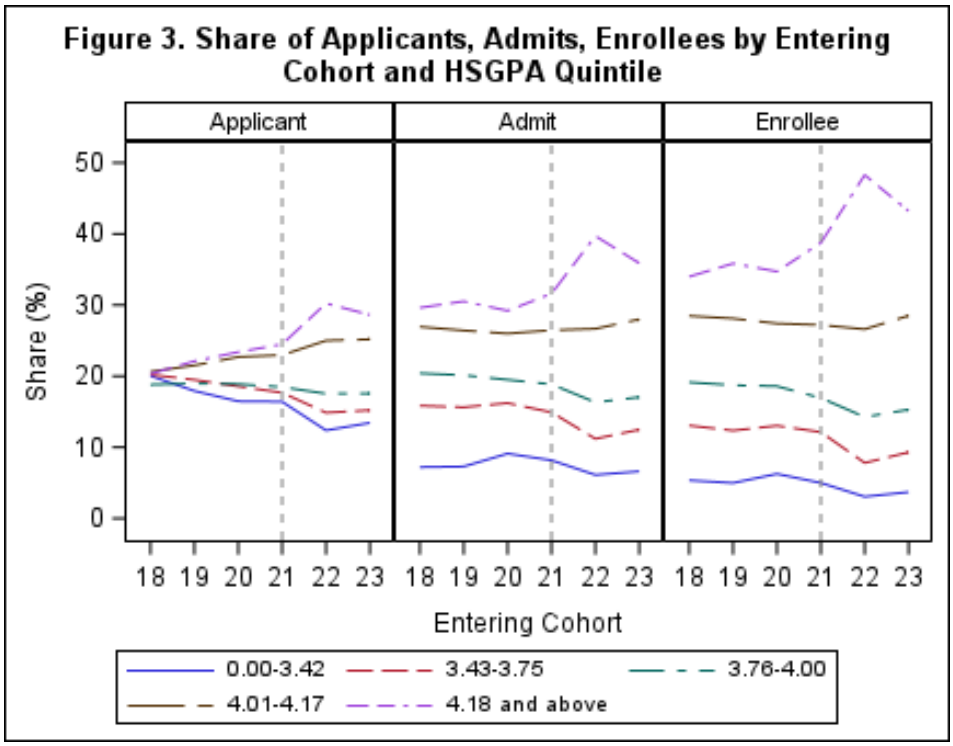
Figure 2. Systemwide Admit Rates by HSGPA Quintile and Entering Cohort



Additionally, UC campuses use multiple factors beyond HSGPA to evaluate applicants' academic preparation such as number of, content of, and performance in all A-G subject areas beyond the minimum requirements, in UC-approved honors and Advanced Placement courses, quality of a student's senior-year program, as measured by the type and number of academic courses in any A-G subject area in progress or planned. Consequently, removing any one measure from admission review may not have a significant impact on admission outcomes. This might also be due to test scores having less weight in admissions than high school grades according to a 2020 study the UC Academic Council Standardized Testing Task Force completed before the COVID-19 pandemic and the elimination of the standardized test score requirement.[9]

The data show that eliminating test scores from the admission review process has not resulted in significant differences in admit rates by HSGPA quintile, compared to the admit rates before the standardized test score requirement was eliminated. Although admit rates for all HSGPA bands have remained consistent over the years, or decreased from 2020 to 2021, the proportion of admits and enrollees with higher levels of academic preparedness, as measured by HSGPA, has increased significantly. This is largely because freshman applicants with a HSGPA of above 4.00 have been increasing faster than those with a HSGPA of 4.00 or below (Figure 3). For instance,

[7] University of California Board of Regents. Regents Policy 2102: Policy on Undergraduate Admissions. https://regents.universityofcalifornia.edu/governance/policies/2102.html.
[8] BOARS. Annual Report on Undergraduate Admissions Requirements and Comprehensive Review. https://senate.universityofcalifornia.edu/_files/committees/boars/boars-cr-report-june-2023.pdf.
[9] UC Academic Senate. Report of the UC Academic Council Standardized Testing Task Force. https://senate.universityofcalifornia.edu/_files/underreview/sttf-report.pdf.



in 2018, 41 percent of UC freshman applicants had a HSGPA above 4.00, compared to 54 percent of applicants with a HSGPA above 4.00 in 2023. The average HSGPA of UC freshman applicants has risen from 3.69 in 2010 to 3.90 in 2022, an increase of 0.21. The change mirrors the national trend in grade inflation in high school English, Mathematics, Social Studies, and Science course with grade point changes of 0.22, 0.30, 0.18, and 0.24, respectively, over the same period.[10] Most campuses have observed trends similar to the systemwide trend in the rise of HSGPA (Appendix 3). However, at Merced, Riverside, and Santa Cruz, the distribution of applicants, admits, and enrollees by HSGPA quintile has remained relatively flat over the years.

Although there was a noticeable increase in share of students with higher HSGPAs from 2020 to 2021, this was primarily an extension of previous years' trends and was unlikely to have been caused by test-free admissions. It is also important to note that a sharp increase in HSGPAs for UC applicants, admits, and enrollees from 2021 to 2022 was largely due to HSGPA inflation, as UC and school grading policies were relaxed during the pandemic. For instance, UC allowed students to complete A-G courses with Pass/No Pass grades.

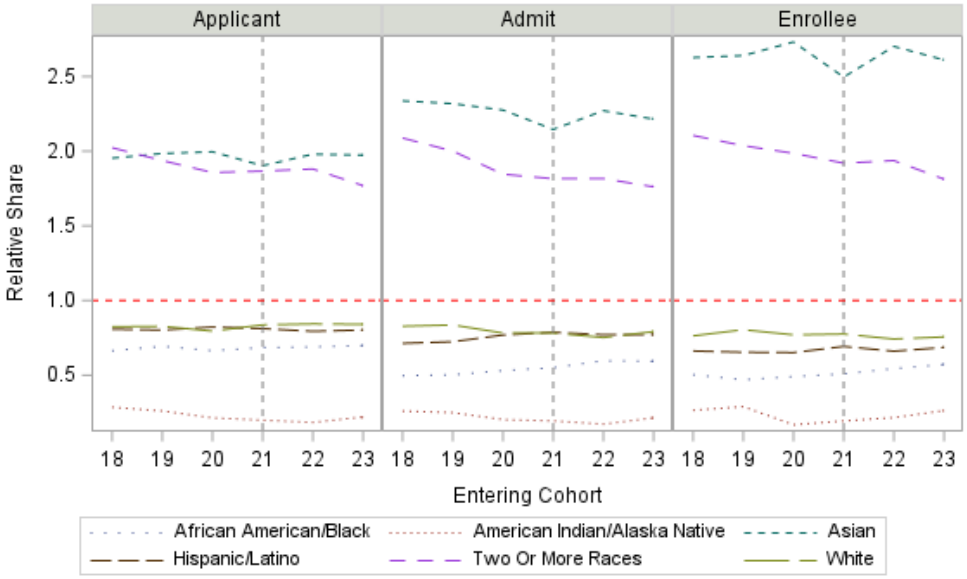
There has been a vibrant debate on TOP and test-free admissions, with some arguing that such policies would increase racial and socioeconomic diversity on campus. Many studies have shown that standardized test scores are significantly associated to race/ethnicity and family socioeconomic status such as family income and first-generation college status. Students from affluent backgrounds have more access to resources to improve their scores. A study conducted by Institutional Research and Academic Planning (IRAP) at UCOP, aimed at providing information for UC leadership to understand the relationship between standardized tests to college performance at UC, showed that race/ethnicity, parent education level, and family income together explained 43 percent of the variation in SAT scores in 2016, compared to 11 percent for

[10] ACT. Evidence of Grade Inflation Since 2010 in High School English, Mathematics, Social Studies, and Science Courses. https://www.act.org/content/dam/act/secured/documents/Evidence-of-Grade-Inflation-in-English-Math-Social-Studies-and-Science.pdf.

HSGPA.[11] These figures have increased significantly since 1996, when they were 26 and five percent, respectively. Among these three demographics, parent education level has the strongest explanatory power for both SAT scores and HSGPA. Nevertheless, UC has not seen any significant change in diversity by race/ethnicity and first-generation status over the past decade. However, geographically, UC applicants, admits, and enrollees have come from a broader range of schools.

Figure 4 shows the share of UC applicants, admits, and enrollees by race/ethnicity relative to California public high school graduates.[12] Those self-identifying as Asian students and those self-identifying with two or more races are overrepresented among applicants, admits, and enrollees compared to their share among California public high school graduates. In contrast, the share of African American, American Indican, Hispanic/Latino, and white students are lower than their respective proportions among California public high school graduates.

Figure 4. Share of Applicants, Admits, Enrollees by Entering Cohort and Race/Ethnicity Relative to CA Public High School Graduates



From 2020 to 2021, there was a noticeable drop in the share of Asian applicants, admits, and enrollees. Further analyses will be conducted to determine whether this decline is due to the impact of COVID-19, the test free admissions policy, or both. Similarly, students with two or more races have declined as a share of UC applicants, admits, and enrollees, although there was no significant change in the admit share between 2020 to 2021.

For other students, African American and Hispanic/Latino admits have experienced a slight increase in relative share over the years included in this study, as well as from 2020 to 2021. This

[11] Institutional Research and Academic Planning at UCOP. Relationship of the SAT/ACT to College Performance at the University of California. https://www.ucop.edu/institutional-research-academic-planning/_files/sat-act-study-report.pdf.

[12] "Relative Share" is defined as the ratio of the share of UC applicants, admits, or enrollees from a specific racial/ethnic group to the share of California public high school graduates from the same racial/ethnic group. This analysis includes only California public high school graduates and UC applicants, admits and enrollees from these schools as data on other high school graduates by race/ethnicity is not available. A ratio above one for a racial/ethnic group indicates that UC applicants, admits, or enrollees from that group are overrepresented, while a ratio below one indicates underrepresentation.

increase is also observed among African American enrollees. These changes suggest that UC applicants, admits and enrollees have become slightly more, if not significantly more, diverse. The increase from 2020 to 2021 may be more of a continuation of a previous trend rather than solely due to the test-free admission policy and/or the impact of COVID-19. Most campuses show similar trends (Appendix 4).

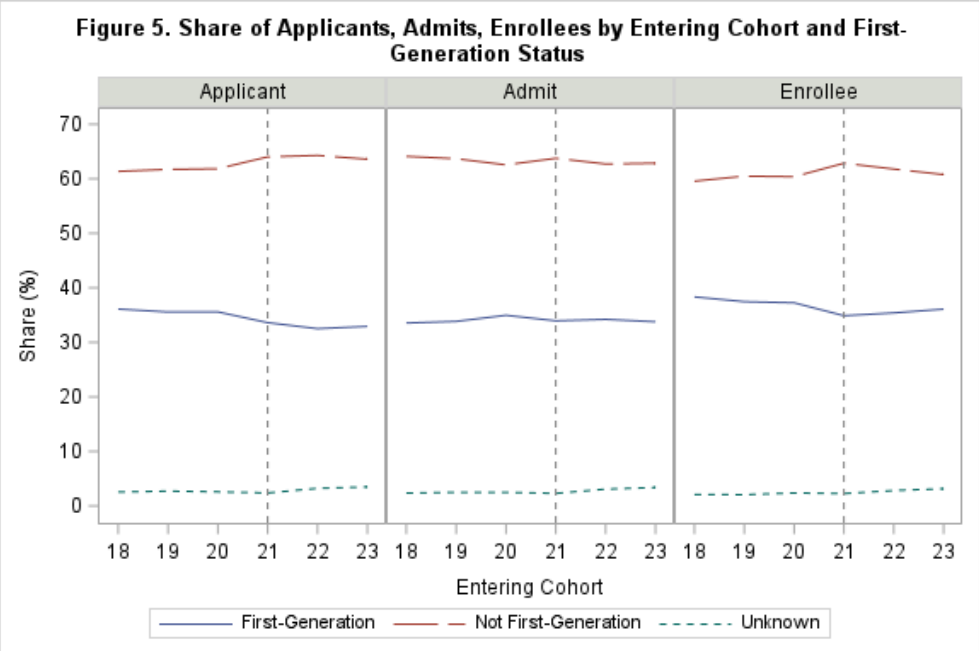


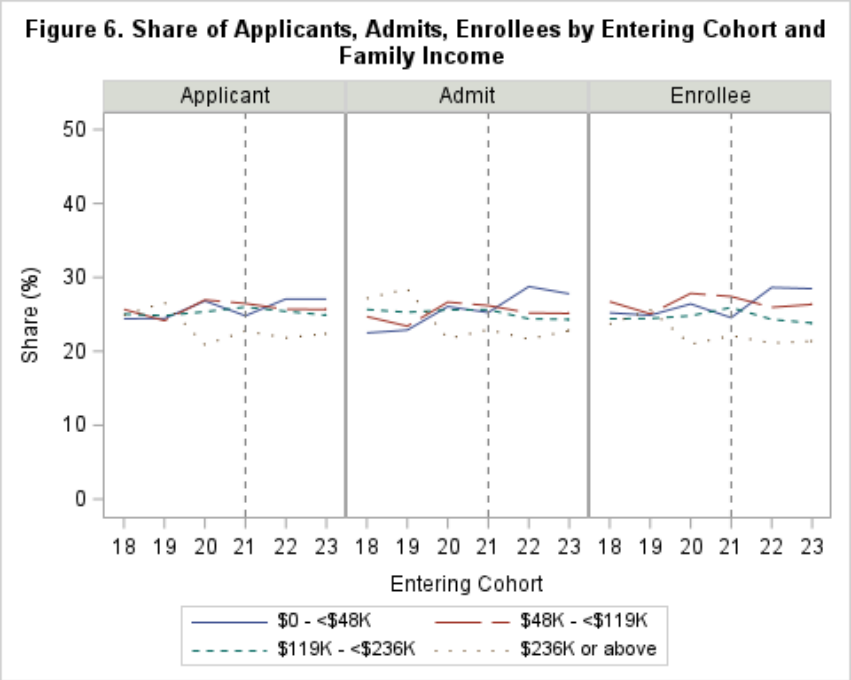
Figure 5 presents the distribution of applicants, admits, and enrollees by first-generation status. The blue line in the left panel shows a decreasing trend in the proportion of first-generation applicants at UC from 2018 to 2023, with a slightly larger drop from 2020 to 2021. In contrast, the red line indicates an increasing trend in the proportion of non-first-generation applicants over the same period.

However, the trends in admits remain relatively flat over the years, suggesting UC continued to admit first-generation applicants as a consistent rate. The more noticeable decrease in the share of first-generation admits and enrollees from 2020 to 2021 is likely due to the proportional decrease of first-generation applicants, rather than changes in admissions policy or the impact of COVID-19. This suggests that eliminating the standardized test requirement for admissions may not have significantly impacted admission and enrollment outcomes regarding first-generation status. Appendix 5 shows the share of applicants, admits, and enrollees by campus and first-generation status. More selective campuses, such as Berkeley, UCLA and San Diego, had a substantial increase in the share of first-generation admits, while Irvine and Merced trended downward.

Figure 6 illustrates the share of applicants, admitted students, and enrollees by family income across entering cohorts from 2018 to 2023. [13] The chart compares four income groups—ranging

[13] Family income quartiles are determined using applicant's self-reported family income, adjusted to 2023 constant dollars. The cutoff points are defined based on 2018 family income data, dividing 2018 applicants evenly into four groups. In other words, the applicants in 2018 by family income quartile are clustered together. However, the admit distribution varies, as students from different income quartiles may not be admitted by the same chance and admitted applicants may not be likely enrolled. Clustered lines across years indicate stability, while spread-out lines reflect shifts in the share of applicants, admits, and enrollees by family income quartile. Independent students and those with an unknown family income are exclude from this analysis.

from families earning under $48,000 to those earning $236,000 or more—and tracks their representation through the college admissions pipeline. Overall, the distribution by income group remains relatively stable over time, with only modest fluctuations. Applicants from lower-income families, particularly those in the $0–$48K and $48K–$119K brackets, consistently represent a larger share of the applicant pool compared to higher-income groups. This pattern largely persists in both the admitted and enrolled student populations, suggesting a degree of consistency and equity throughout the process.

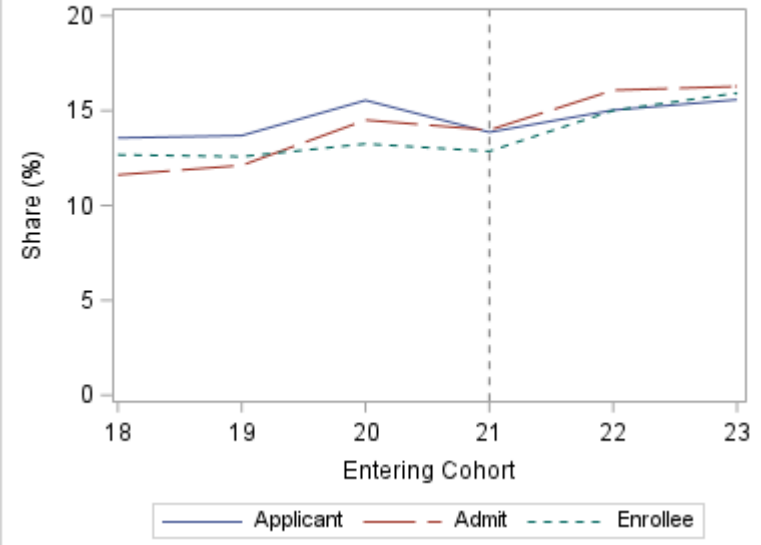


A notable shift occurs around 2021 entering cohort, marked by a vertical dashed line—likely reflecting the onset of COVID-19 or related policy changes. After this point, there is a slight but discernible increase in the share of students from the lowest income group across all three stages: applicant, admit, and enrollee. This suggests that lower-income students may have experienced a modest gain in access after 2021. In contrast, the share of students from the highest income group ($236K or above) have seen a significant decline from 2019 to 2020 but has remained relatively flat since 2020. This stability across income brackets indicates that while overall socioeconomic diversity is not changing dramatically, there has been a subtle improvement in representation among lower-income students in recent cohorts.

Figure 7 presents the share of applicants, admitted students, and enrollees from entering cohorts between 2018 and 2023 who are part of a combined group defined by URGs, first-generation college status, and low-income backgrounds. The data shows a gradual increase in representation for this combined group across the admissions pipeline over time. A dip in all three categories appears in 2021, potentially reflecting the impact of the COVID-19 pandemic on application behavior and institutional policies. However, from 2021 to 2023, the trend reverses, with steady growth across all three metrics. Notably, by 2023, the gap between applicants, admits, and enrollees narrows significantly, suggesting improved alignment between access and outcomes for students from these historically marginalized or economically disadvantaged backgrounds. Overall, the chart indicates that institutions have made measurable progress in supporting greater inclusion of URG, first-generation, and low-income students—not only in application rates but also in subsequent admission and enrollment decisions—particularly in the most recent cohorts.

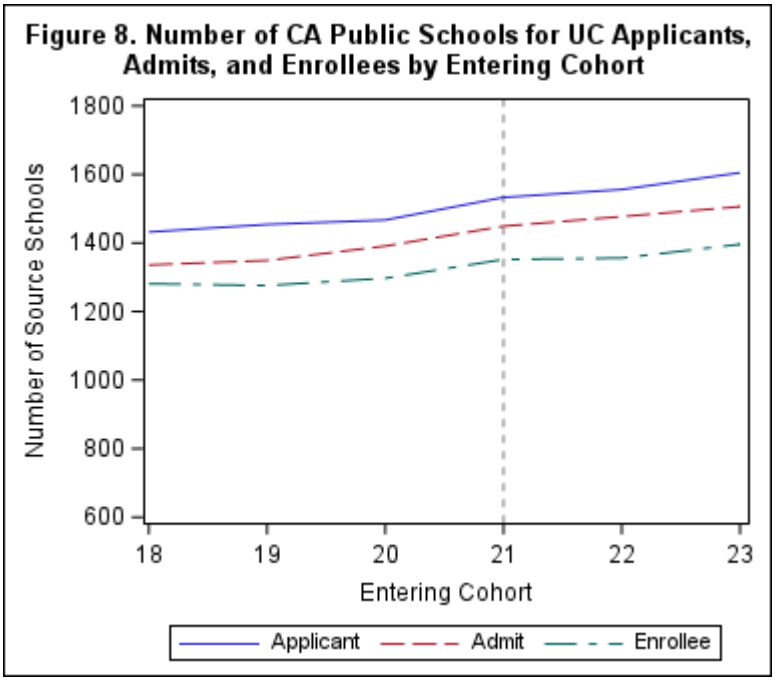
Geographic diversity can increase cultural diversity and offer networking opportunities that can enhance learning and broaden perspectives. One of UC's diversity goals is to increase the overall geographic diversity of freshman and transfer entrants. Over the years, UC has enrolled freshman students from nearly every county in California.[14] Figure 8 shows the number of California schools for UC applicants, admits, and enrollees. From 2018 to 2023, UC freshman applicants have come from a wide range of schools, with the number of source schools increasing from approximately 1,430 to 1,600 for applicants, 1,340 to 1,500 for admits, and 1,280 to 1,400 for enrollees. While there was a slightly sharper increase in the number of source schools from 2020 to 2021, this growth pattern aligns with earlier years and is observed across all campuses. The trends have continued beyond 2021 and were consistent for admits and enrollees at both the systemwide lever and on most campuses. This suggests that the elimination of the test requirement has not significantly impacted this trend. Appendix 6 presents campus-level data, which show a pattern similar to the systemwide trends.

Figure 7. Share of Applicants, Admits, and Enrollees by Entering Cohort and Combined URG, First-Generation and Low Income Status



In summary, UC freshman applications decreased slightly between 2018 and 2020, but saw a 19 percent increase from 2020 to 2021. This surge may be linked to the elimination of standardized testing requirements, a pattern observed at other test-optional institutions. However, the data suggest that changes in UC's admissions policies did not directly influence the increase in admissions from 2020 to 2021. Admit rates declined slightly, particularly for students with lower HSGPAs, due to the application surge,

Figure 8. Number of CA Public Schools for UC Applicants, Admits, and Enrollees by Entering Cohort



[14] UC Information Center. Admissions by source school. https://www.universityofcalifornia.edu/about-us/information-center/admissions-source-school.

while the proportion of students with higher HSGPAs increased, reflecting both long-term trends and high school grade inflation during the COVID-19 pandemic. Despite discussions surrounding test-free admissions and diversity, racial and socioeconomic diversity at UC has seen minimal change. Geographic diversity, however, has grown, with an increasing number of source schools represented among applicants, admits, and enrollees—a trend that began in 2018 and may not be tied to UC admissions policy changes but expansion of ELC (Eligibility in the Local Context) participating schools.

III. First- and Second-Year Performance at UC

A study based on 13 institutions with test-optional policies found that students who did not submit standardized test scores in their applications graduated at rates equivalent to, or marginally higher than those who submitted test scores.[15] However, the submitters had relatively lower first year UCGPA and cumulative UCGPAs compared to non-submitters. Additionally, research by the College Board on college retention during the era of the COVID-19 pandemic revealed that compared to students in the 2019 cohort, first-year retention rates for the 2020 cohort declined across nearly all types of colleges and for nearly all types of students.[16] This suggests that both the COVID-19 pandemic and admissions policy changes, such as test-optional policies, impact student completion.

As previously noted, UC eliminated the standardized test requirement for freshman admissions from the 2021 entering cohort, a time when the COVID-19 pandemic was still affecting student learning. The following analysis compares student first- and second-year performance measured by persistence rates, UCGPA, and units completed among entering cohorts from 2018 to 2022. However, it is challenging to separate the effects of the test-free admissions policy from those of COVID-19.

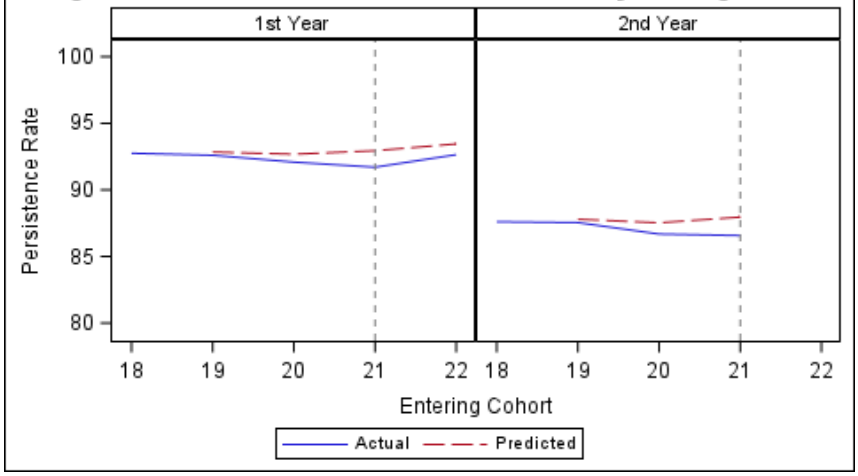
3.1 First- and Second-Year Persistence Rate

As shown in Figure 9, the overall first- and second-year persistence rates of freshman entrants at UC have remained relatively consistent, at around 92 percent and 87 percent, respectively, since 2018. The first year-persistence rate decreased slightly from 92.1 percent for the 2021 entering cohort to 91.7 percent for the 2021 entering cohort, but it increased by about one percentage point from the 2021 cohort to the 2022 cohort. There was essentially no change in the second-year persistence rate between the 2020 and 2021 cohorts. By campus, five campuses (Berkeley, Davis, UCLA, Merced, Santa Barbara, and Santa Cruz) observed a slight increase or no change in first-year persistence rates from 2020 to 2021, while the other three campuses saw a slight decrease (Appendix 7). The trend in second-year persistence rates by campus largely mirrors that of the first-year rates.

[15] Steven T. Syverson, Valerie W. Franks, & William C. Hiss. Defining Access: How Test-Optional Works. https://nacacnet.org/wp-content/uploads/2022/10/defining-access-report-2018.pdf.
[16] CollegeBoard. College Enrollment and Retention in the Era of Covid: Fall 2021 Update on Continued Pandemic Impacts.https://research.collegeboard.org/media/pdf/enrollment_retention_covid2021_post.pdf

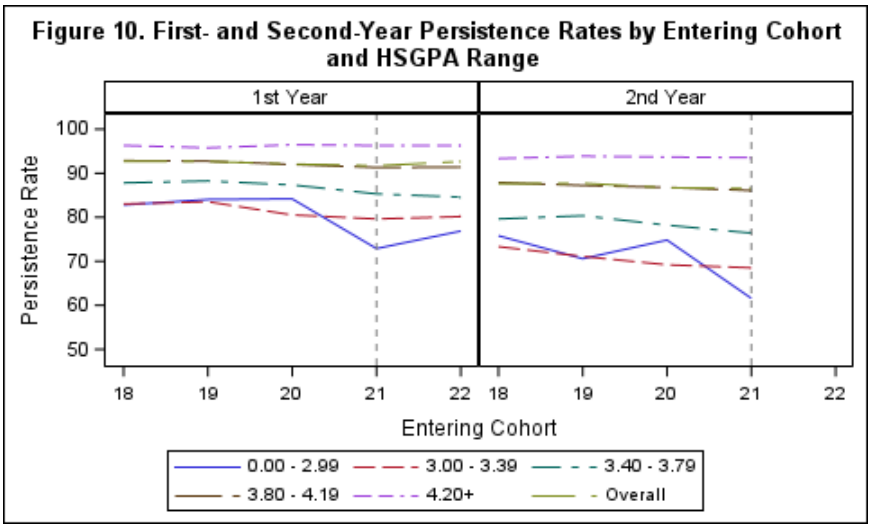
Figure 9 also displays predicted first- and second-year persistence rates, represented by broken lines.[17] Notably, the actual persistence rates have been below the predicted rates for all entering cohorts since 2019. As previously mentioned, the COVID-19 pandemic affected students across all types of institutions, and the gap between actual and predicted rates was likely influenced by COVID-19 rather than by changes in admissions policy. As the impact of COVID-19 diminished in 2022, the gap in first-year persistence rates between actual and predicted began to narrow. It was expected that the gap in second-year persistence rates between actual and predicted would be smaller for the 2022 entering cohort.

Figure 9. Actual and Predicted Persistence Rates by Entering Cohort



UC's historical data show that students with higher HSGPAs tend to have higher completion rates.[18] Those with a HSGPA of 4.20 or above are more likely to persist through their first and second year at UC with average persistence rates of around 96 percent for the first year and 95 percent for the second year (Figure 10). These rates have remained stable over time. However, there has been a decline in persistence rates for students with lower HSGPAs, particularly those below 3.0, who might have been admitted through the Admissions by Exception pathway due to not meeting the 3.0 minimum HSGPA requirement. Notably, this group experienced a significant drop in persistence rates between the 2020 and 2021 cohorts, although it represents a relatively small portion of the student population. Further investigation is needed to understand the reasons for this decline. Encouragingly, the

Figure 10. First- and Second-Year Persistence Rates by Entering Cohort and HSGPA Range

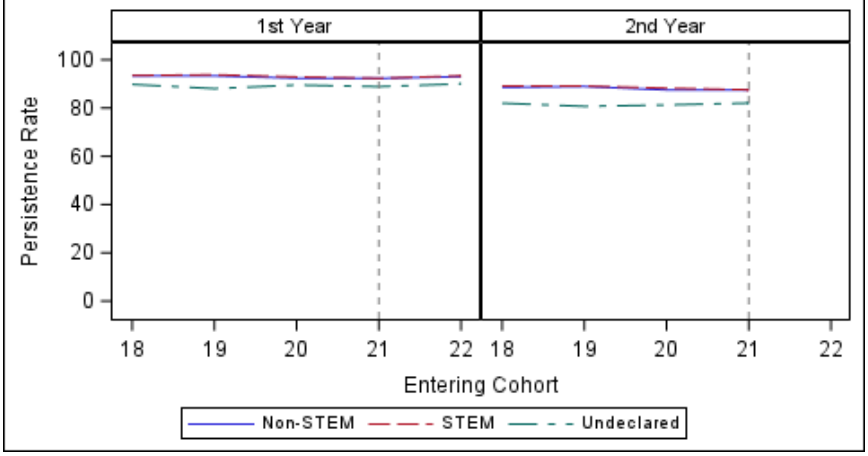


[17] The predicted persistence rates were estimated using General Linear Models with stepwise selection. The 2017 and 2018 entering cohorts were included for modeling. The predictors in the model include campus, high school GPA range, major, first-generation status, race/ethnicity, and gender identity.
[18] University of California Accountability Report 2024. https://accountability.universityofcalifornia.edu/2024/chapters/chapter-3.html.

first-year persistence rate for this group increased between the 2021 and 2022 cohorts. Appendix 8 presents first- and second-year persistence rates by campus and HSGPA range. Overall, the campus trends align closely with systemwide patterns, though there are some variations in the persistence rates for students with lower HSGPAs at certain campuses. For example, at Santa Barbara and Santa Cruz, the rates for students with lower HSGPAs increased from 2020 to 2021.

There have been some concerns about STEM student[19] performance under the test free admission policy. However, this analysis does not show significant differences in persistence rates between the 2020 and 2021 entering cohorts for STEM students nor for non-STEM students and those with undeclared majors (Figure 11). Appendix 9.1 provides persistence rates by STEM status for each campus. Across all campuses, STEM students continued to have higher persistence rates, similar to other student groups, throughout the period covered in this analysis. Notably, UC Merced saw a substantial increase of the first-year persistence rate for STEM students between the 2020 and 2021 cohort.

Figure 11. First-and Second-Year Persistence Rates by Entering Cohort and STEM Status

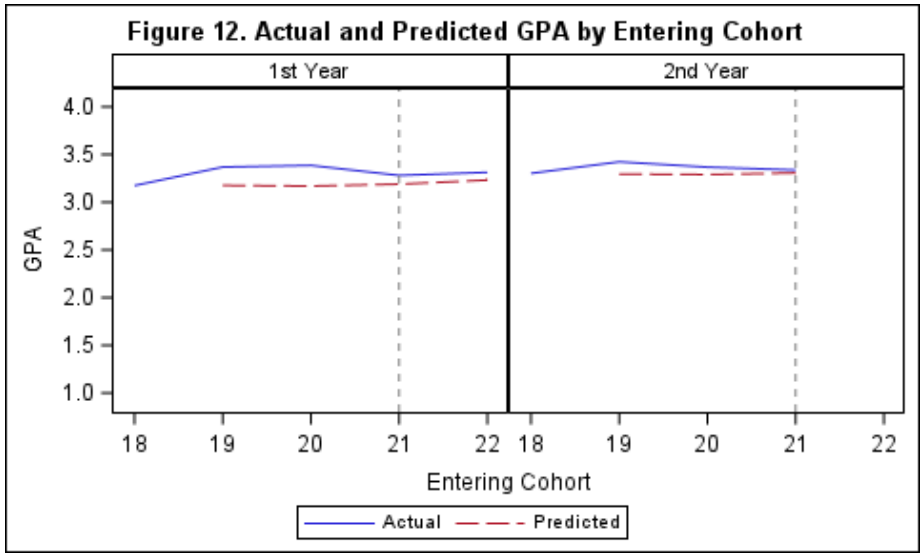


An analysis of persistence rates across various fields of study[20] in both STEM and non-STEM disciplines reveals mixed trends between the 2020 and 2021 cohorts (Appendix 9.2). Some fields saw an increase in persistence rates, while others experienced a decline. For example, the first-year persistence rate in Mathematics and Statistics rose by 0.7 percentage points, while Engineering saw a decrease of 1.4 percentage points. In non-STEM fields, English and Literature experienced a 3.6 percentage point increase in first-year persistence, whereas Communications and Journalism saw a decline of 1.4 percentage points.

[19] STEM status was determined based the major declared by the first-year students during the third week of the fall term at a UC campus.

[20] The Classification of Instructional Program (CIP) codes are used to categorize academic majors across campuses. Fields of study are groups of majors based on the first four digits of the CIP codes. For detailed list of STEM and non-STEM fields, refer to Appendix 9.2.

3.2 First- and Second-Year UCGPAs and Units Completed



First-year UCGPAs of freshman entrants declined slightly between the 2020 and 2021 cohorts, dropping by just 0.1, while second-year UCGPAs remained mostly unchanged. Interestingly, actual UCGPAs are higher than predicted UCGPAs,[21] likely due to grade inflation, as students could opt for Pass/No Pass grading during the COVID-19 pandemic (Figure 12). The gap between actual and predicted first-year UCGPAs has narrowed for the 2022 cohort, and it has nearly disappeared for second-year GPAs of the 2021 cohort. This trend holds true across most campuses and student subpopulations regardless of HSGPA ranges.

By STEM status,[22] STEM students experienced a slightly larger UCGPA decrease (0.12), compared to non-STEM students (0.09) and those with undeclared majors (0.06). However, an analysis of first- and second-year UCGPAs across various fields of study in both STEM and non-STEM areas shows mixed trends between the 2020 and 2021 cohorts (Appendix 10). While some fields saw UCGPA increases, others experienced declines. For instance, the second-year UCGPA in Biological and Biomedical Sciences rose from 3.15 to 3.18, whereas Computer and Information Sciences saw a drop from 3.38 to 3.32. In non-STEM fields, Liberal Arts and Sciences saw a 0.7 increase in second-year UCGPA, while Psychology experienced a slight decline from 3.35 to 3.32.

Concerns have been raised about whether the test-free admissions policy has impacted student performance in mathematics and statistics courses. Figure 13 compares first-year UCGPAs by cohort, course type (math/statistics vs. other courses), and STEM status. In 2019 and 2020, the average UCGPA for math/statistics courses was around 3.3 for both STEM and non-STEM students, compared to 3.4 in other courses. However, between the 2020 and 2021 cohorts, the math/statistics UCGPA dropped by 0.2 for both groups, while UCGPAs in other courses decreased by only 0.1. This suggests that either COVID-19, the admissions policy change, or

[21] The predicted UCGPAs were estimated using General Linear Models with stepwise selection. The 2017 and 2018 entering cohorts were included for modeling. The predictors in the model include campus, HSGPA range, major, first-generation status, race/ethnicity, and gender identity.
[22] STEM status was determined based the major declared by the first-year students during the third week of the fall term at a UC campus. The Classification of Instructional Program (CIP) codes are used to categorize academic majors across campuses. Fields of study are groups of majors based on the first four digits of the CIP codes. For detailed list of STEM and non-STEM fields, refer to Appendix 10.

both had a greater impact on math/statistics performance. However, a study based on California Smarter Balanced exams shows the COVID-19 pandemic affected school students' learning in math more than English.[23] This suggests that the decline in UC students' math performance may be more related to weaker pre-college math preparation than to the admissions policy change.

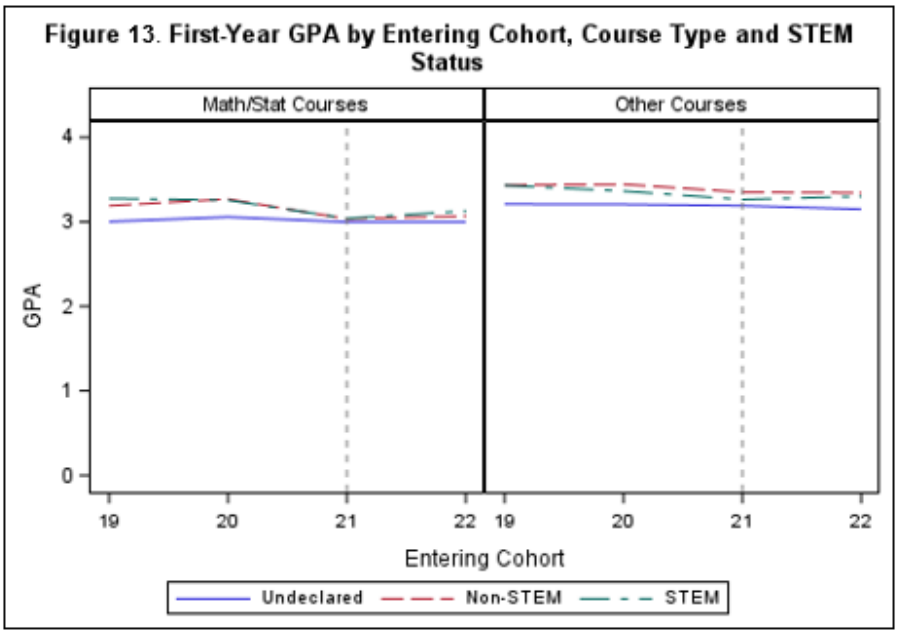
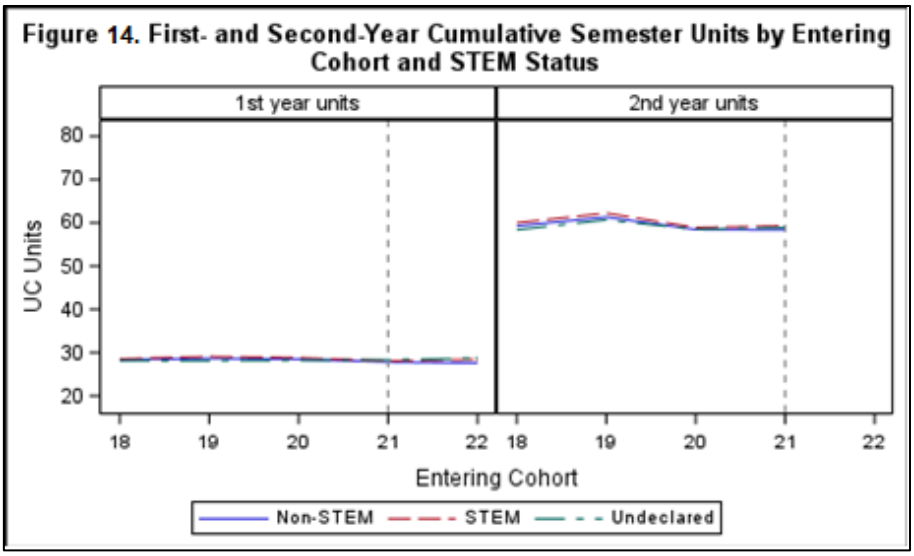


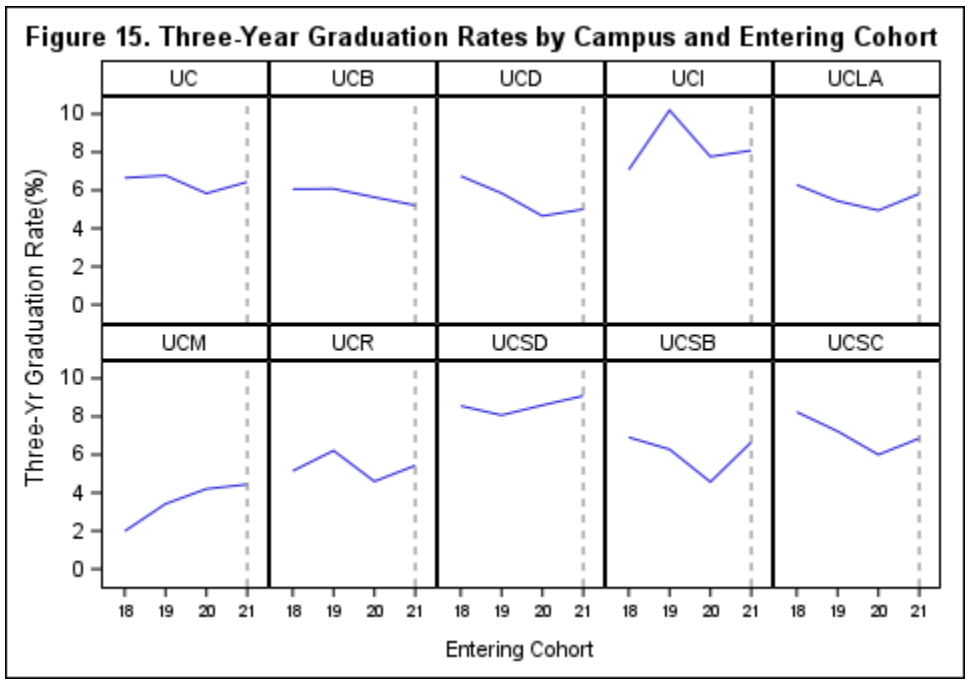
Figure 14 shows the cumulative semester units completed by students in the first and second years. On average, freshmen completed about 30 semester units in their first year, a number that remained consistent from 2018 to 2022. The COVID-19 pandemic and the shift to a test-free admissions policy do not appear to have affected the average of first-year unit completion. However, there was a decline in cumulative units completed in the first two years after entering UC between the 2019 and 2020 cohorts, but the average remained unchanged between the 2020 and 2021 cohorts. This suggests that neither COVID-19 nor the admissions policy change impacted student performance in term of units completed. This trend is consistent across campuses and students by STEM status.



[23] Heather J. Hough. Have Bay Area Students Recovered from Pandemic Learning Losses? Here's what State Test Scores Show. https://edpolicyinca.org/news/have-bay-area-students-recovered-pandemic-learning-losses-heres-what-state-test-scores-show.

3.3 Three-Year Graduation Rates

Traditionally, UC reports four-, five-, and six-year graduation rates. However, because data are not yet available for these measures for the 2021 entering admitted under the test free policy, three-year graduation rates are examined as a preliminary indictor of student completion. Future analysis will examine four-year graduation rates once data are available.



Across the UC system, the overall trend appears relatively stable, with a slight increase in the graduation rate for the 2021 cohort compared to the 2020 cohort (Figure 15). The decline in three-year graduation rates for the 2020 cohort was possibly due to students choosing not to graduate earlier, even if they were able to, because their first year was spent remotely rather than on campus. Nonetheless, this result may still indicate a modest recovery or improvement following the disruptions caused by the COVID-19 pandemic.

At the campus level, eight campuses except Berkeley saw noticeable improvements for three-year graduation rates from the 2020 cohort to the 2021 cohort. Merced showed a consistent upward trend over the four years, reaching its highest rate for the 2021 cohort. Davis, UCLA, Riverside, Santa Barbara and Santa Cruz experienced a noticeable decline from the 2019 cohort to the 2020 cohort but rebounded for the 2021 cohort. Irvine's rate remained stable after a peak for the 2019 cohort. Berkeley continued a slight decline, with the 2021 rate similar to or slightly below that of 2020.

3.4 Predictive Power of High School GPA on Outcomes

Table 1 presents the proportion of variance (R-squared values) in student outcomes as measured by first-year persistence, first-year GPA, and three-year graduation accounted by statistical models with weighted, capped HSGPA and controlled variables. When controlling for campus, HSGPA is a weak predictor of first-year persistence, explaining approximately two percent of the variance. After further controlling demographic variables, the predictive power of the model increases by about one percentage point, suggesting that HSGPA remains a limited predictor of first-year persistence. This pattern is true across all campuses and demographic groups, and it

holds both before and after the elimination of standardized test scores from UC admissions beginning 2021.

However, HSGPA is a relatively strong predictor of first-year UCGPA. When controlling campus, the model explained more than 15 percent of variance of first-year UCGPA, with a noticeable increase beginning the 2021 cohort, rising as high as 19 percent. When including demographic variables, the model accounts for approximately 23 percent of variance from 2012 to 2020, increasing to 28 percent for cohorts since 2021. This shift raises the question of whether HSPGA has played a greater role in the admissions review process following the elimination of standardized test scores from UC admissions starting in 2021. Further analysis may be needed to better understand the reasons behind this change.

Table 1 also presents the predictive power of HSGPA for three-year graduation rates. As found in previous analysis,[24] both HSGPA and standardized test scores are relatively weak predictors of graduation outcomes. This analysis reaffirms that HSGPA—regardless of whether demographic variables are controlled for—accounts for only about one percent of the variance of three-year graduation rates. It is important to note, as Figure 15 indicates, that the overall three-year graduation rate is about six percent and has remained relatively stable over the years.

Table 1. Percentage of Variance in Fist Year Persistence, First-Year UCGPA, and Three-Year Graduation Status Accounted for by HSGPA

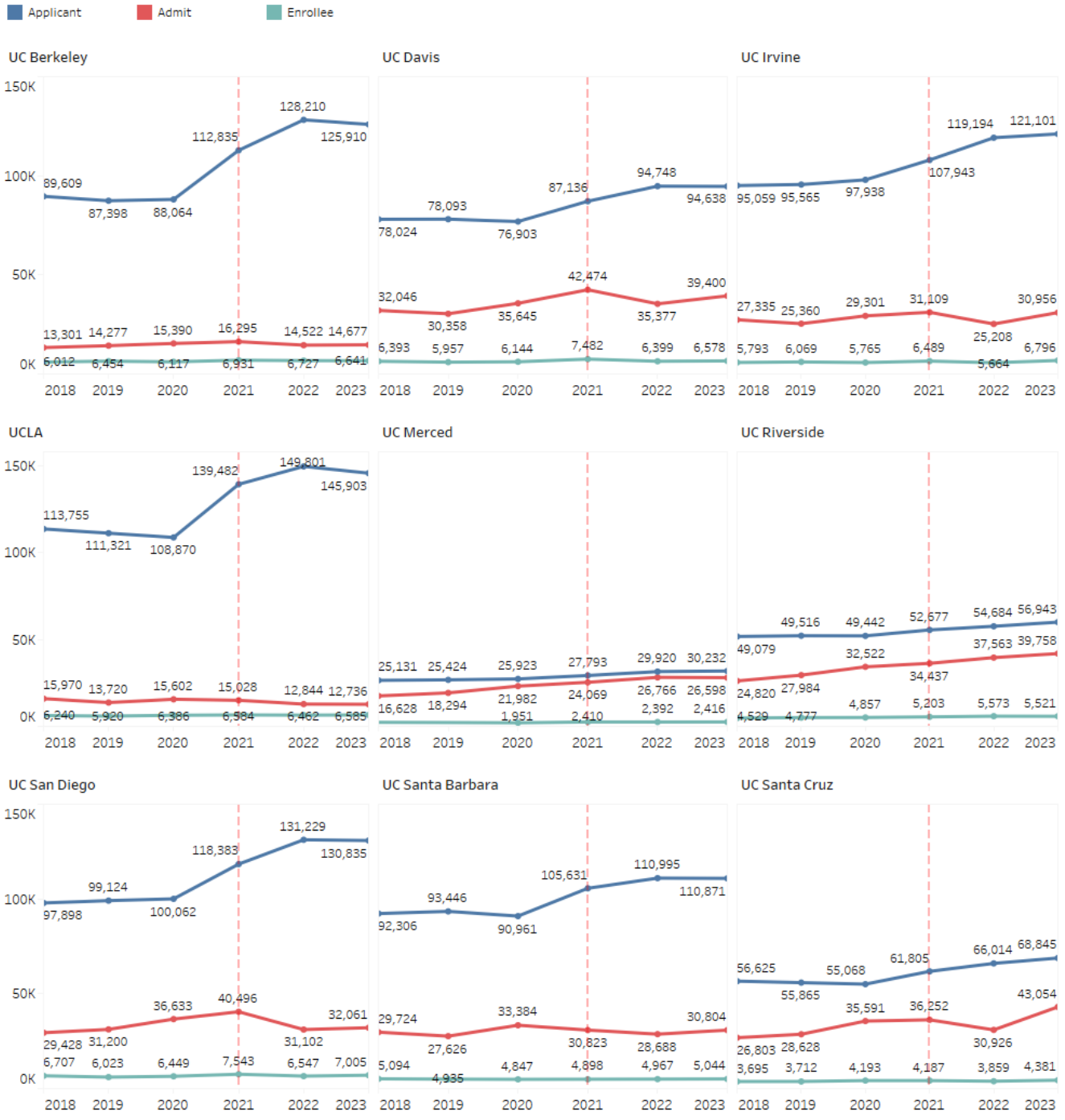
Model	2012	2015	2018	2019	2020	2021	2022	2023
1. First Year Persistence Status Model								
1.1 HSGPA + Campus	2.2%	2.0%	2.3%	2.2%	3.2%	3.2%	3.2%	3.3%
1.2 HSGPA + Campus + Demographics	3.1%	2.7%	3.3%	3.5%	4.8%	4.4%	4.2%	4.2%
2. First-Year GPA Model								
2.1 HSGPA + Campus	15.8%	15.0%	15.0%	15.9%	15.4%	19.7%	19.1%	19.2%
2.2 HSGPA + Campus + Demographics	22.2%	21.7%	22.5%	24.0%	23.0%	28.2%	28.5%	29.1%
3. Three-Year Graduation Status Model								
3.1 HSGPA + Campus	0.3%	0.5%	0.4%	0.5%	0.6%	0.8%	--	--
3.2 HSGPA + Campus + Demographics	1.0%	1.3%	1.9%	1.6%	1.4%	1.5%	--	--

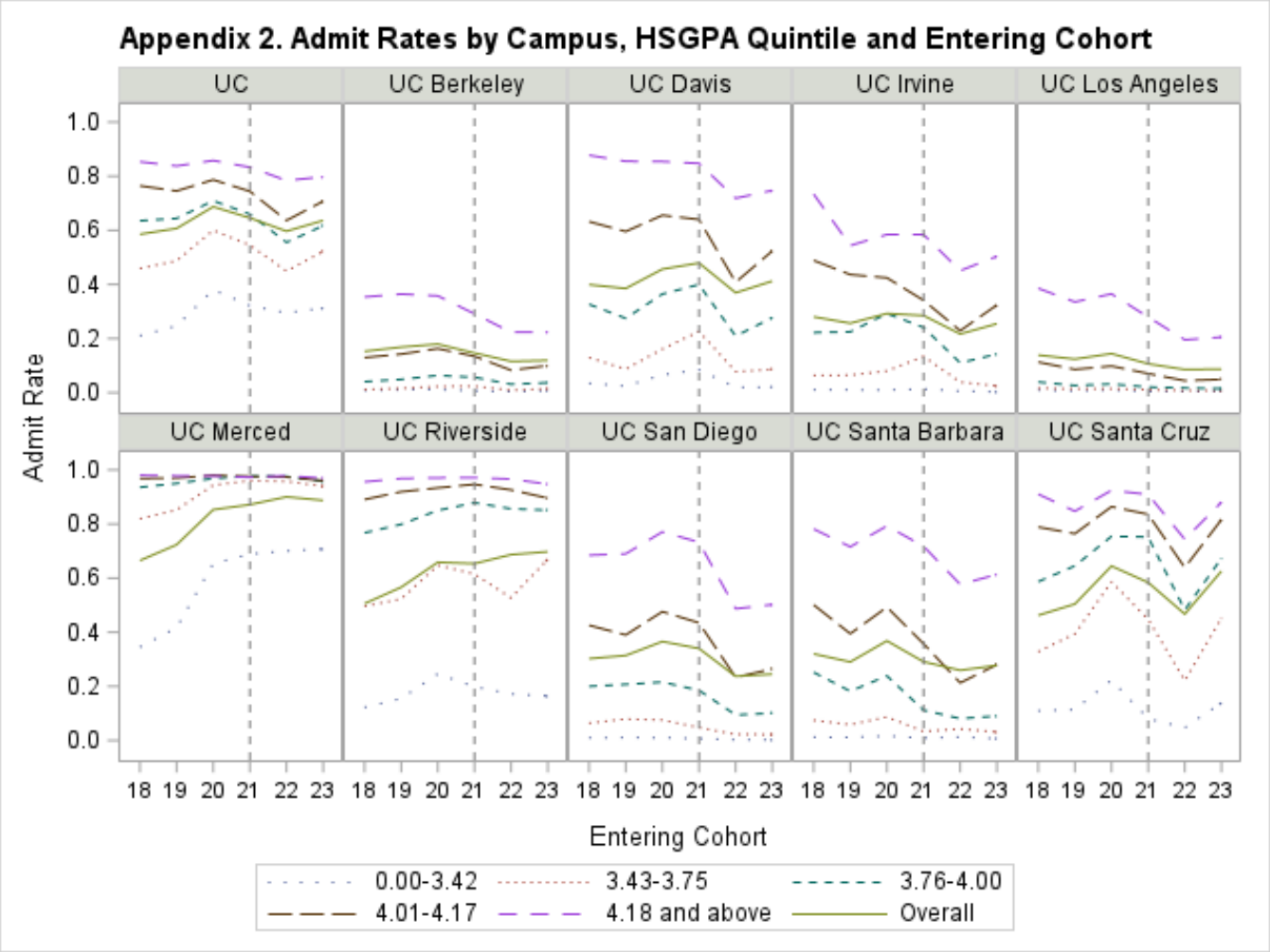
Note: Demographic variables include first-generation college, Pell grant status, race/ethnicity, residency, and gender identity.

[24] Institutional Research and Academic Planning at UCOP. Relationship of the SAT/ACT to College Performance at the University of California. https://www.ucop.edu/institutional-research-academic-planning/_files/sat-act-study-report.pdf.

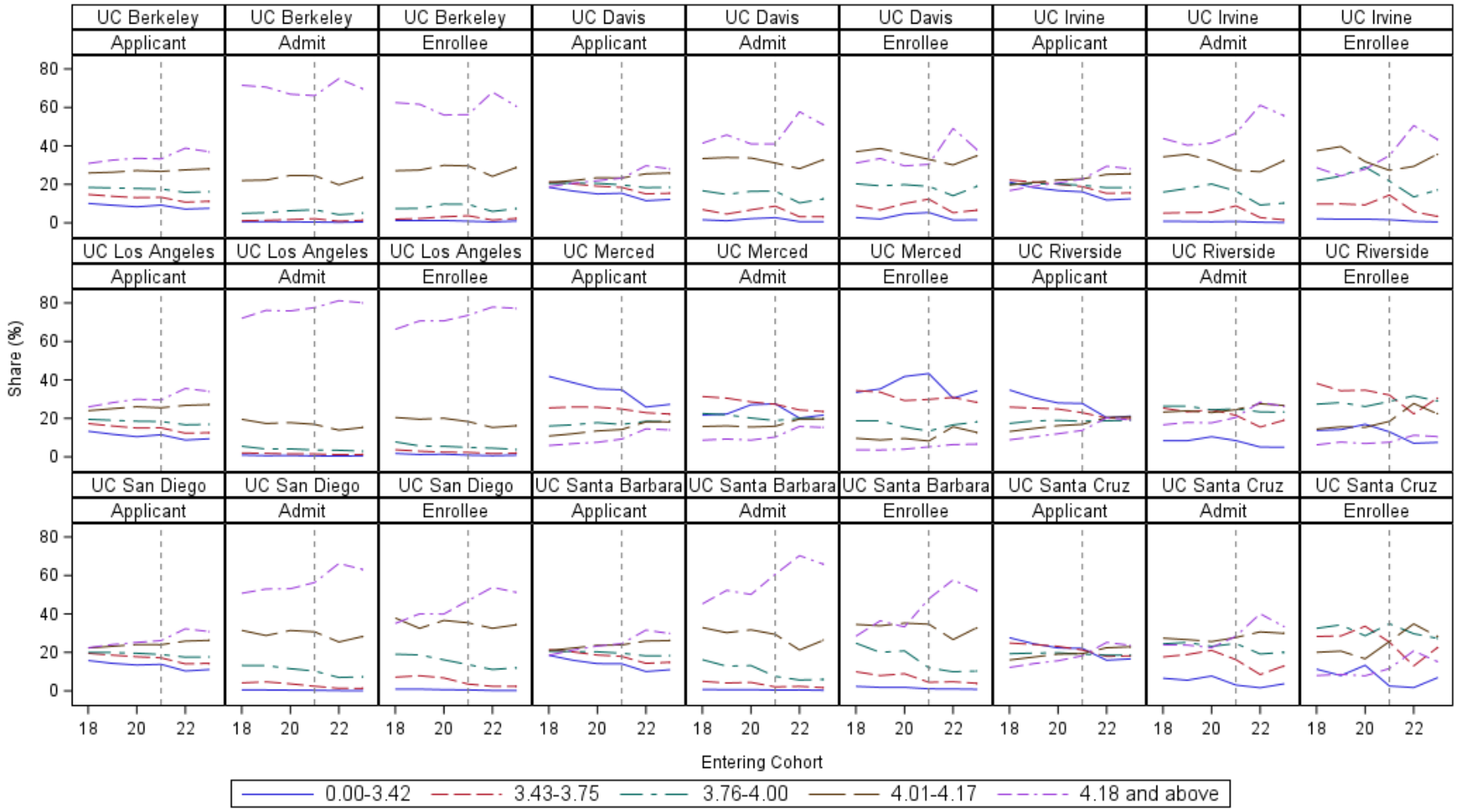
In summary, the data indicate that UC freshman entrants have maintained relatively stable performance in terms of persistence, UCGPA, unit completion, and three-year graduation, despite the disruptions caused by the COVID-19 pandemic and the elimination of standardized testing requirements. While some trends—such as slight UCGPA declines in STEM fields and reduced persistence rates for lower-HSGPA students, lower performance in math and statistics course—warrant further investigation, the overall impacts of these changes appear limited. The findings suggest that UC's comprehensive review policy, which considers multiple factors for admission beyond test scores, continues to ensure consistent student outcomes.

Appendix 1. Freshman Applicants, Admits, and Enrollees by Campus from Fall 2018-2023

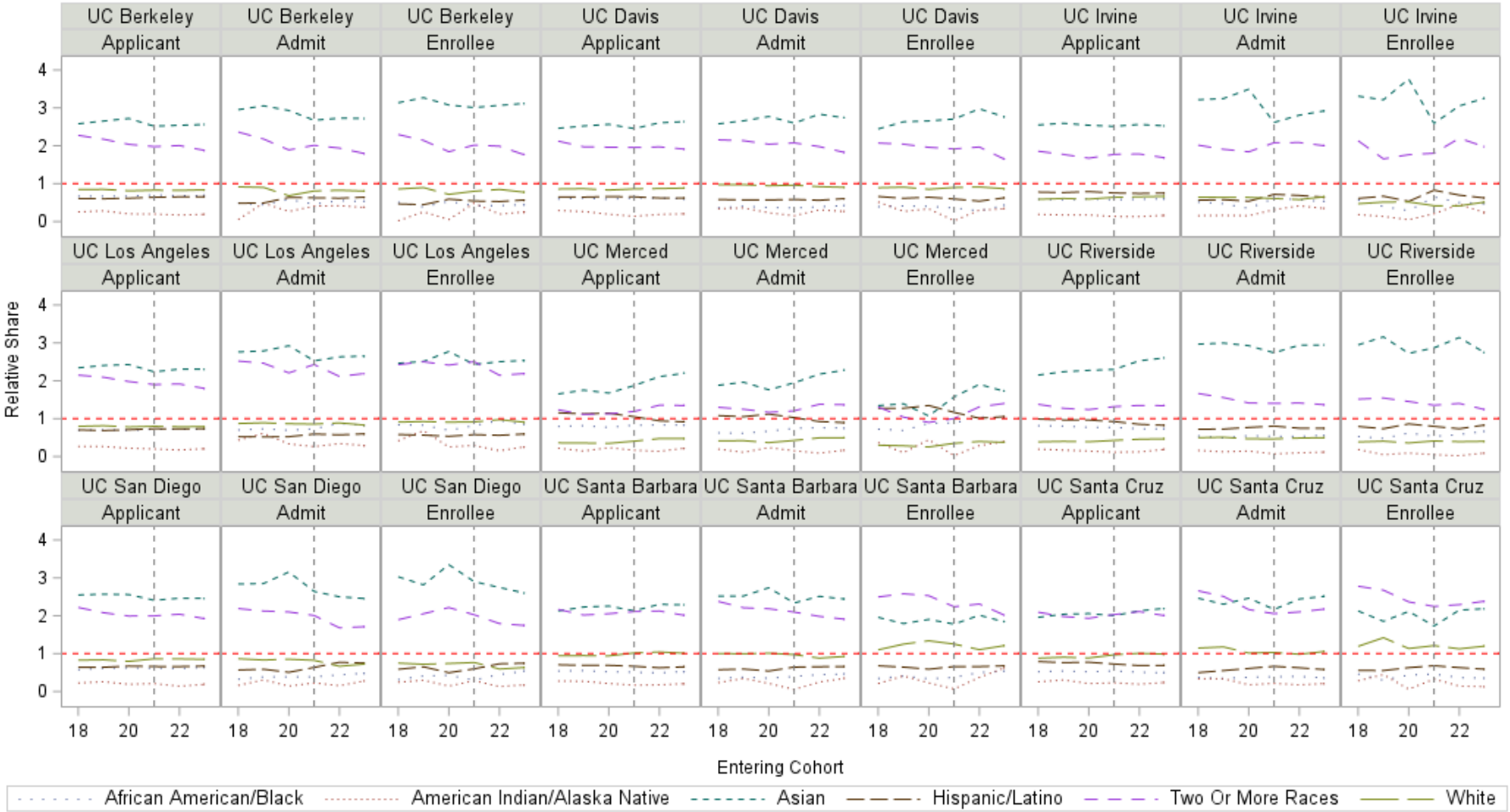



Appendix 2. Admit Rates by Campus, HSGPA Quintile and Entering Cohort
UC
UC Berkeley
UC Davis
UC Irvine
UC Los Angeles
UC Merced
UC Riverside
UC San Diego
UC Santa Barbara
UC Santa Cruz
Admit Rate
1.0
0.8
0.6
0.4
0.2
0.0
18 19 20 21 22 23
Entering Cohort
0.00-3.42
3.43-3.75
3.76-4.00
4.01-4.17
4.18 and above
Overall

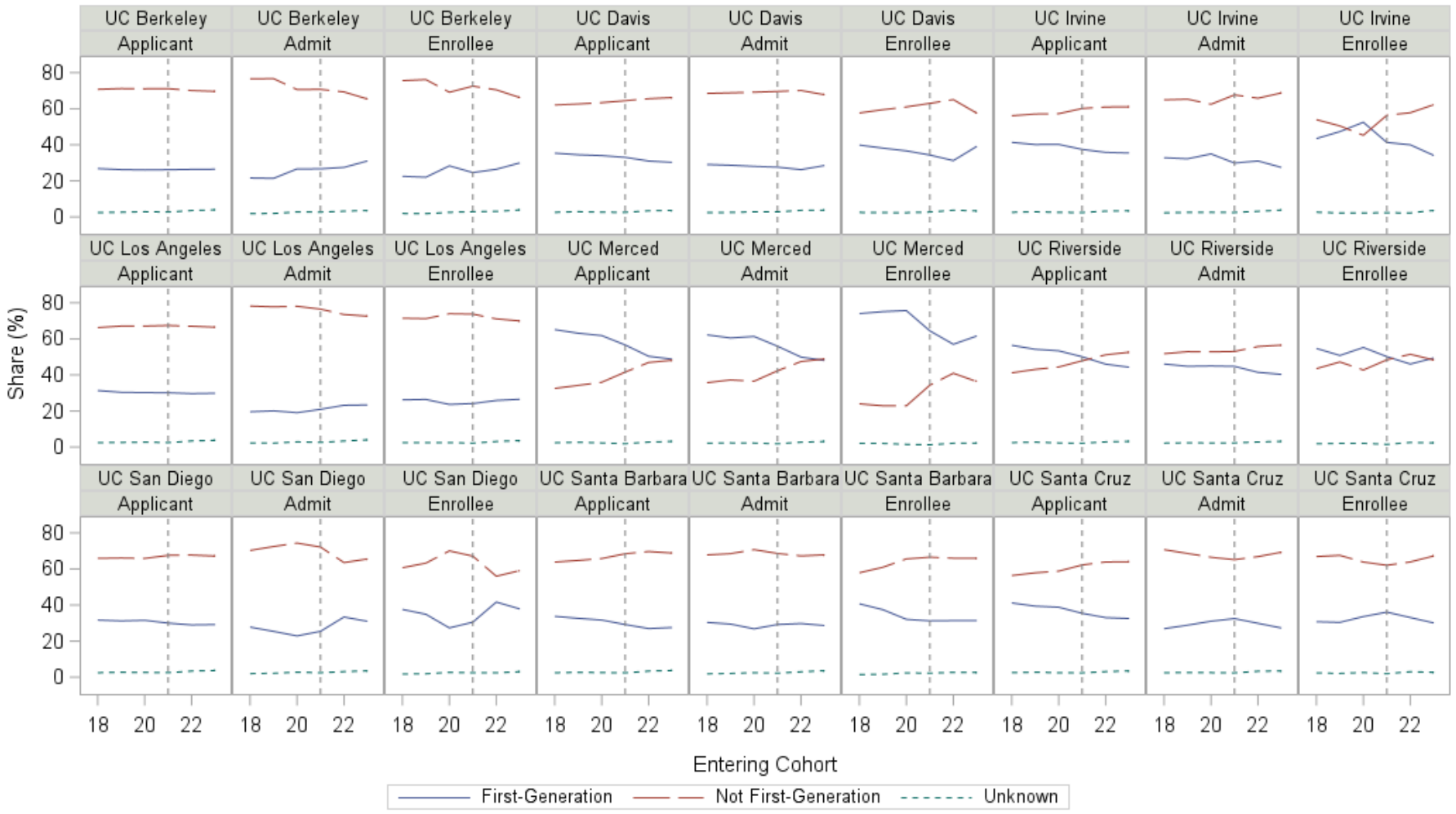
Appendix 3. Share of Applicants, Admits, Enrollees by Campus, Entering Cohort and HSGPA Quintile



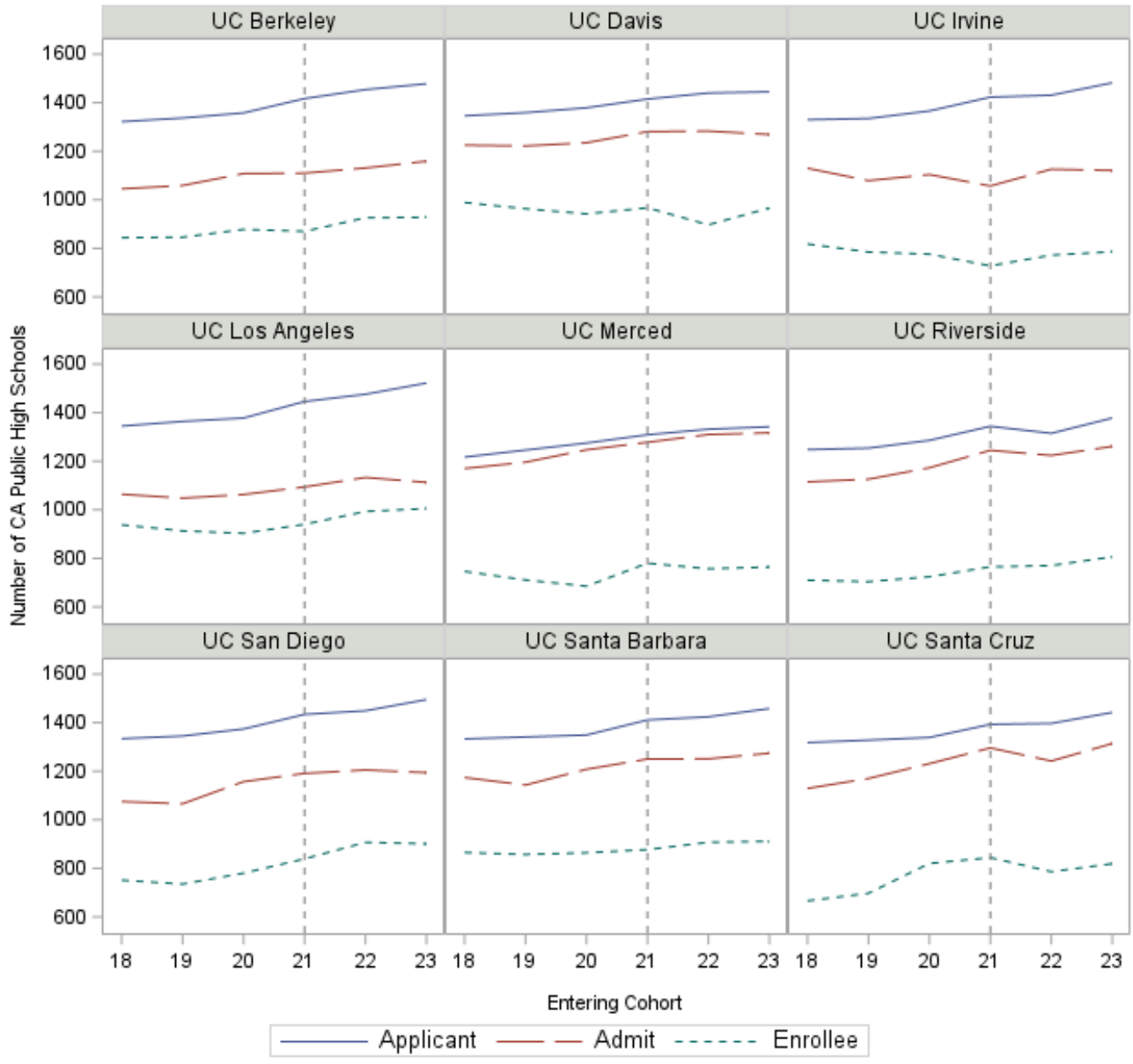
Appendix 4. Share of Applicants, Admits, Enrollees by Campus, Entering Cohort and Race/Ethnicity Relative to CA Public High School Graduates



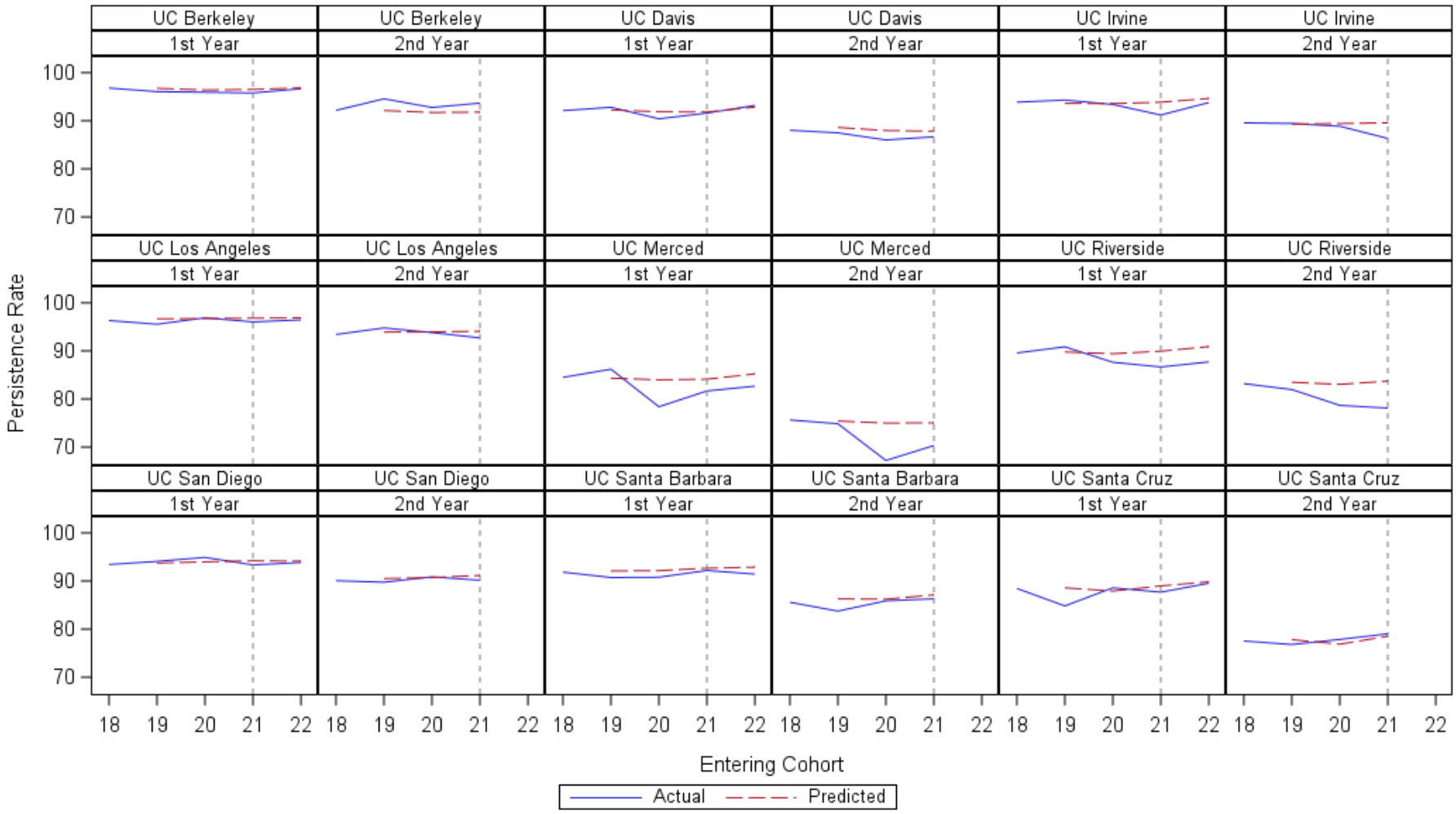
Appendix 5. Share of Applicants, Admits, Enrollees by Campus, Entering Cohort and First-Generation Status



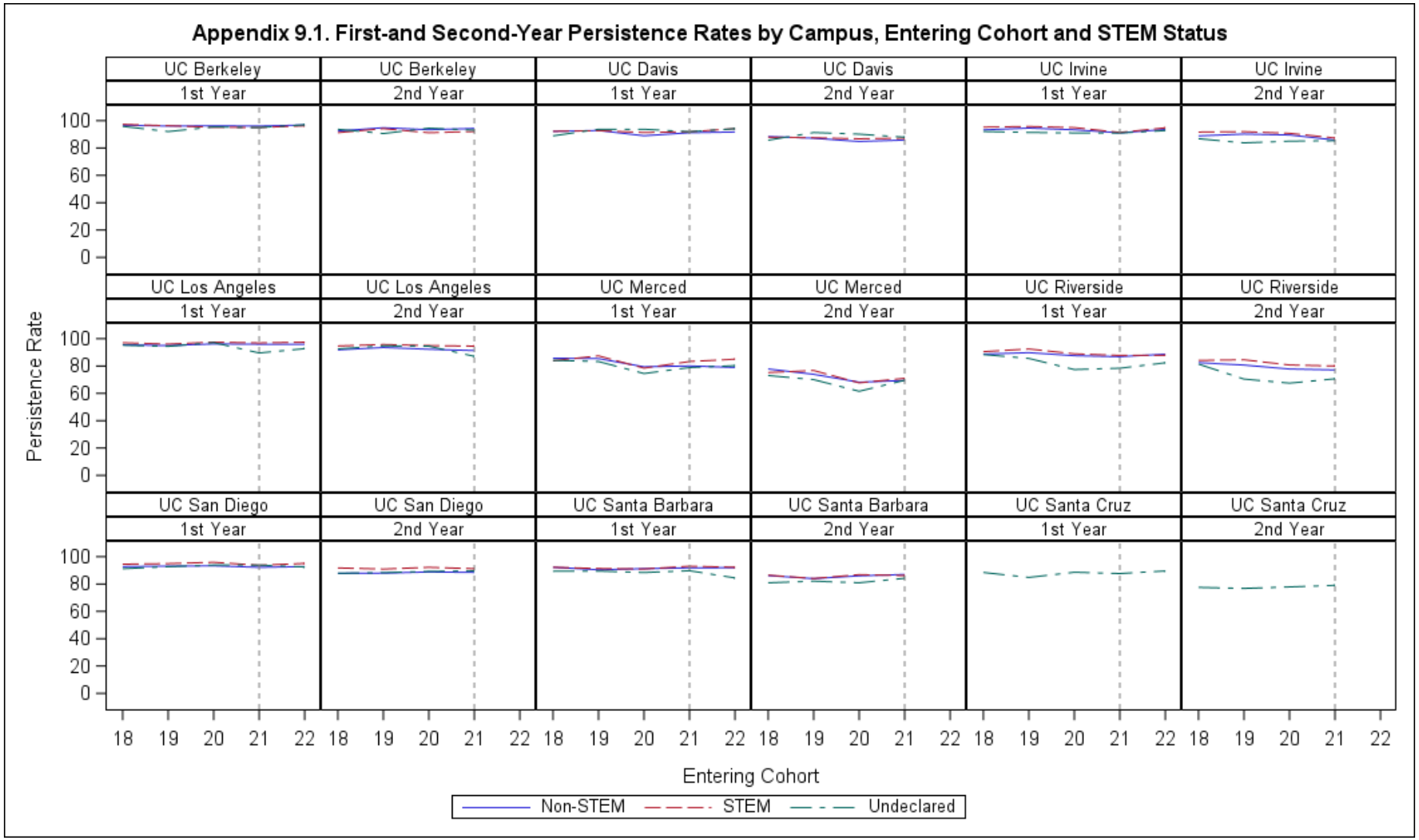
Appendix 6. Number of Source Schools (CA Public) for UC Applicants, Admits, and Enrollees by Campus and Entering Cohort



Appendix 7. Actual and Predicted Persistence Rates by Campus and Entering Cohort



Appendix 8. First- and Second-Year Persistence Rates by Campus, Entering Cohort and HSGPA Range


Appendix 9.1. First-and Second-Year Persistence Rates by Campus, Entering Cohort and STEM Status
UC Berkeley
1st Year
UC Berkeley
2nd Year
UC Davis
1st Year
UC Davis
2nd Year
UC Irvine
1st Year
UC Irvine
2nd Year
UC Los Angeles
1st Year
UC Los Angeles
2nd Year
UC Merced
1st Year
UC Merced
2nd Year
UC Riverside
1st Year
UC Riverside
2nd Year
UC San Diego
1st Year
UC San Diego
2nd Year
UC Santa Barbara
1st Year
UC Santa Barbara
2nd Year
UC Santa Cruz
1st Year
UC Santa Cruz
2nd Year
Persistence Rate
0
20
40
60
80
100
18
19
20
21
22
Entering Cohort
Non-STEM
STEM
Undeclared

Appendix 9.2 First- and Second-Year Persistence Rates by STEM status and CIP Family Name

		Enrollment				1st Yr Persistence Rate				2nd Yr Persistence Rate		
STEM	CIP Family Name	2019	2020	2021	2022	2019	2020	2021	2022	2019	2020	2021
NON-STEM	Area, Ethnic, Cultural, Gender, and Group Studies	176	196	218	237	90.9%	90.3%	80.7%	88.6%	82.4%	83.2%	73.9%
	Public Administration and Social Service Professions	123	143	142	138	92.7%	92.3%	90.1%	95.7%	92.7%	81.8%	84.5%
	Philosophy and Religious Studies	173	137	176	155	93.6%	88.3%	86.9%	88.4%	87.9%	80.3%	78.4%
	Communication, Journalism, and Related Programs	358	414	342	327	93.9%	92.0%	90.6%	95.1%	90.2%	87.4%	84.8%
	Education	298	260	363	331	93.3%	90.8%	90.1%	92.4%	87.6%	83.5%	83.2%
	Business, Management, Marketing, and Related Support Services	1,750	1,853	2,281	2,412	92.4%	92.9%	92.5%	91.0%	84.9%	87.2%	85.0%
	Psychology	2,528	2,583	3,022	2,984	92.9%	91.9%	91.3%	92.4%	88.8%	87.8%	87.4%
	Liberal Arts and Sciences, General Studies and Humanities	4,964	4,337	5,091	4,717	95.7%	96.0%	95.8%	96.7%	94.3%	93.1%	93.9%
	Social Sciences	4,155	4,466	4,956	4,492	92.0%	91.2%	91.0%	91.7%	86.1%	85.7%	84.7%
	History	266	292	351	320	94.4%	92.1%	92.0%	92.8%	86.1%	86.0%	86.6%
	Health Professions and Related Programs	644	641	723	776	95.7%	93.1%	93.2%	92.8%	92.2%	90.8%	90.2%
	Visual and Performing Arts	1,184	1,363	1,412	1,422	89.5%	89.0%	89.3%	91.8%	84.5%	81.2%	83.0%
	Agriculture, Agriculture Operations, and Related Sciences	474	482	568	515	92.8%	88.4%	91.4%	92.0%	84.6%	84.0%	85.4%
	Family and Consumer Sciences/Human Sciences	64	63	95	100	95.3%	93.7%	96.8%	96.0%	90.6%	87.3%	95.8%
	Foreign Languages, Literatures, and Linguistics	336	303	336	348	91.7%	85.1%	88.7%	92.8%	85.4%	78.5%	81.5%
	English Language and Literature/Letters	416	465	466	486	92.3%	89.7%	93.3%	90.1%	88.5%	83.0%	88.2%
	Total	**17,909**	**17,998**	**20,542**	**19,760**	**93.3%**	**92.3%**	**92.3%**	**93.0%**	**88.9%**	**87.5%**	**87.4%**
STEM	Engineering	5,360	5,331	6,374	5,987	94.3%	92.7%	91.3%	93.6%	89.4%	87.6%	86.1%
	Physical Sciences	2,336	1,849	2,148	1,808	92.4%	91.9%	91.2%	93.0%	87.3%	87.7%	86.5%
	Biological and Biomedical Sciences	8,457	8,973	9,657	8,670	94.2%	93.0%	92.4%	93.1%	90.0%	88.3%	88.3%
	Computer and Information Sciences and Support Services	1,091	1,207	1,294	1,415	96.2%	95.8%	96.4%	94.3%	92.4%	91.2%	92.5%
	Mathematics and Statistics	1,815	2,031	1,923	1,669	92.0%	91.9%	92.6%	92.0%	84.7%	87.0%	85.3%
	Natural Resources and Conservation	822	853	908	970	92.0%	93.4%	94.5%	95.6%	88.4%	91.3%	89.2%
	Architecture and Related Services	143	177	197	210	92.3%	93.8%	95.9%	96.2%	91.6%	89.8%	91.9%
	Total	**20,024**	**20,421**	**22,501**	**20,729**	**93.8%**	**92.9%**	**92.3%**	**93.4%**	**89.1%**	**88.2%**	**87.6%**
UNDECLARED	Undeclared/Multi/Interdisciplinary Studies	8,088	8,385	8,889	8,296	88.1%	89.5%	88.9%	90.0%	80.7%	81.2%	82.1%
	Total	**8,088**	**8,385**	**8,889**	**8,296**	**88.1%**	**89.5%**	**88.9%**	**90.0%**	**80.7%**	**81.2%**	**82.1%**
Grand Total		46,021	46,804	51,932	48,785	92.6%	92.1%	91.7%	92.6%	87.5%	86.7%	86.6%

Appendix 10 First- and Second-Year GPA by STEM status and CIP Family Name

		Enrollment				First Yr GPA				Second Yr GPA		
STEM	CIP Family Name	2019	2020	2021	2022	2019	2020	2021	2022	2019	2020	2021
NON-STEM	Area, Ethnic, Cultural, Gender, and Group Studies	176	196	218	237	3.28	3.32	2.89	3.07	3.19	3.22	2.96
	Public Administration and Social Service Professions	123	143	142	138	3.44	3.41	3.23	3.28	3.34	3.29	3.29
	Philosophy and Religious Studies	173	137	176	155	3.28	3.29	3.07	3.11	3.33	3.30	3.19
	Communication, Journalism, and Related Programs	358	414	342	327	3.47	3.38	3.37	3.40	3.48	3.32	3.50
	Education	298	260	363	331	3.26	3.38	3.15	3.22	3.26	3.31	3.23
	Business, Management, Marketing, and Related Support Services	1,750	1,853	2,281	2,412	3.34	3.38	3.23	3.22	3.33	3.25	3.24
	Psychology	2,528	2,583	3,022	2,984	3.34	3.40	3.24	3.25	3.40	3.35	3.32
	Liberal Arts and Sciences, General Studies and Humanities	4,964	4,337	5,091	4,717	3.53	3.42	3.37	3.43	3.47	3.29	3.36
	Social Sciences	4,155	4,466	4,956	4,492	3.36	3.36	3.29	3.30	3.38	3.31	3.29
	History	266	292	351	320	3.34	3.35	3.41	3.43	3.36	3.33	3.47
	Health Professions and Related Programs	644	641	723	776	3.23	3.39	3.17	3.17	3.30	3.24	3.20
	Visual and Performing Arts	1,184	1,363	1,412	1,422	3.43	3.34	3.33	3.35	3.38	3.32	3.34
	Agriculture, Agriculture Operations, and Related Sciences	474	482	568	515	3.13	3.12	3.06	3.16	3.24	3.06	3.09
	Family and Consumer Sciences/Human Sciences	64	63	95	100	3.51	3.33	3.23	3.35	3.48	3.35	3.40
	Foreign Languages, Literatures, and Linguistics	336	303	336	348	3.38	3.24	3.26	3.27	3.38	3.25	3.28
	English Language and Literature/Letters	416	465	466	486	3.41	3.36	3.31	3.32	3.47	3.40	3.33
	Total	**17,909**	**17,998**	**20,542**	**19,760**	**3.36**	**3.36**	**3.27**	**3.29**	**3.37**	**3.30**	**3.30**
STEM	Engineering	5,360	5,331	6,374	5,987	3.28	3.27	3.11	3.20	3.26	3.10	3.10
	Physical Sciences	2,336	1,849	2,148	1,808	3.28	3.27	3.15	3.19	3.25	3.14	3.13
	Biological and Biomedical Sciences	8,457	8,973	9,657	8,670	3.32	3.30	3.19	3.20	3.29	3.15	3.18
	Computer and Information Sciences and Support Services	1,091	1,207	1,294	1,415	3.50	3.52	3.42	3.42	3.41	3.38	3.32
	Mathematics and Statistics	1,815	2,031	1,923	1,669	3.42	3.36	3.36	3.38	3.36	3.24	3.31
	Natural Resources and Conservation	822	853	908	970	3.29	3.34	3.30	3.39	3.32	3.30	3.33
	Architecture and Related Services	143	177	197	210	3.35	3.36	3.30	3.40	3.54	3.25	3.35
	Total	**20,024**	**20,421**	**22,501**	**20,729**	**3.32**	**3.31**	**3.19**	**3.24**	**3.29**	**3.16**	**3.18**
UNDECLARED	Undeclared/Multi/Interdisciplinary Studies	8,088	8,385	8,889	8,296	3.25	3.28	3.22	3.27	3.31	3.21	3.23
	Total	**8,088**	**8,385**	**8,889**	**8,296**	**3.25**	**3.28**	**3.22**	**3.27**	**3.31**	**3.21**	**3.23**
Grand Total		46,021	46,804	51,932	48,785	3.32	3.32	3.22	3.26	3.32	3.22	3.23