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Executive Summary

The arrival of the fall 2019 cohort represents a watershed moment for Graduation Initiative 2025; the success of these students will determine whether or not we achieve our ambitious goals. It also serves as a reminder that closing equity gaps does not happen by accident; it requires the entire campus to work intentionally to ensure that support is accessible and beneficial to the students who need it most.

Equity gaps do not simply emerge at the time students graduate; they are rooted in inequities that begin before students arrive on campus and continue throughout their college careers. Closing equity gaps requires faculty, staff, and administrators to understand the nuanced ways in which underserved students are hindered in their pursuit of a CSU degree, and to work together to provide the necessary support to ensure all students are successful in achieving their academic goals.

This summary report provides an opportunity for the Sonoma State community to review data and strengthen its efforts to eliminate equity gaps. To facilitate this process, the CSU Chancellor's Office has launched an accompanying Equity Dashboardⁱ with detailed information about when and where equity gaps emerge for Sonoma State's historically underserved students (HUS),ⁱⁱ as well as Pell-recipient, and first-generationⁱⁱⁱ students. Please keep in mind that this report focuses on academic factors for which we have data. However, observed academic issues often arise from non-academic influences including financial challenges, campus social climate, and campus engagement. The data presented in this report and in the dashboard convey what is happening, but it is up to each campus to determine why it is happening and how to address it. We encourage you to leverage this summary report to uncover new opportunities for eliminating equity gaps at Sonoma State University.

Summary of Findings

- At the same time that historically underserved populations have increased, Sonoma State's 6-year graduation rates have reached all-time highs across all groups of students, indicating that the university's efforts to increase completion rates are improving opportunities for all.
- As a result, Sonoma State's historically underserved equity gap has decreased from 14% to 5%. Pell and first-generation equity gaps have been more variable.
- Equity gaps are prevalent in attrition patterns in first-time students' first years of enrollment. Recent trends indicate that after two years, Sonoma State's persistence rates among underserved students typically drop below levels necessary to achieve the campus's 6-year graduation and equity gap goals.
- At Sonoma State, taking a full load (15+ credits per term) is the strongest predictor of graduation within 6 years for Pell-recipients and first-generation students. For historically underserved students, earning fewer than 2 DFWs in the first two years is the strongest predictor of 6-year graduation rates. vi
- There are notable equity gaps in the rate at which Sonoma State's students who have attained junior status graduate within two years.
- Sonoma State courses with the largest GPA gaps between historically underserved students and their peers are concentrated in math and the sciences.

Equity Gaps in the Sonoma State Context

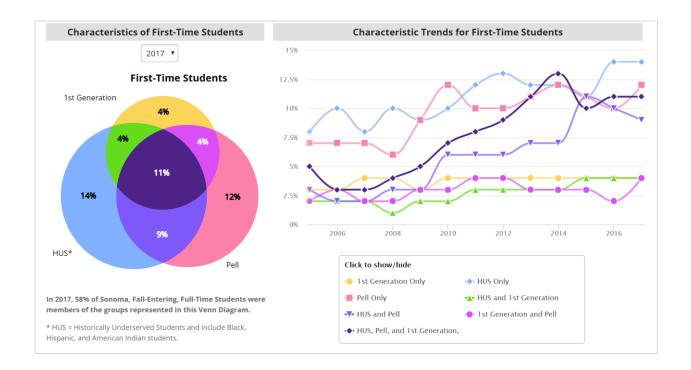
At Sonoma State, more than half of the overall student population is comprised of students who are Pell recipients and/or identify as historically underserved or first-generation, with significant intersectionality among these group identities. In assessing equity gaps related to these populations, it is important to note that the categories of historically underserved students and Pell recipients are not perfect. For example, the definition of historically underserved excludes Asian sub-populations (such as Pacific Islander and Southeast Asian nationalities) that may resemble other historically underserved groups in academic preparation, socioeconomic status, and first-generation designation. Inclusion of these students in the non-historically underserved comparison group may act to minimize real-world equity gaps that exist for individual ethnicities, independent of categorization methodology.

Similarly, students who do not qualify for Pell grants (such as undocumented students) are included in the non-Pell group by definition. Counting as non-Pell those students who are economically challenged enough to deserve Pell support, but for other reasons do not receive it, may lead to an underrepresentation of actual equity imbalances. These caveats and limitations are important to consider as the Sonoma State community takes action to achieve its 2025 Graduation Initiative goals.

With this context in mind, Sonoma State's historically underserved, Pell, and first-generation equity gaps for the 2007 through 2012 cohorts of first-time students are illustrated in the three figures below. While these trends provide a snapshot of Sonoma State's historic and current equity gaps, disparities in graduation rates between historically underserved, Pell-recipient, and first-generation students and their peers do not exist in a vacuum. They are heavily influenced by an institution's unique demographic landscape, geographic location, history, mission, and commitment to inclusion.



Sonoma State's underserved populations have grown tremendously over the last decade. As illustrated in the two figures on the following page, among Sonoma State's most recent first-time cohorts almost 40% of students are historically underserved (this represents a 126% increase from 2008); 36% are Pell recipients (141% increase); and 22% are first in their families to attend college (93% increase). Eleven percent of first-time students are members of all three groups, a 170 increase from 2008.^{vii}

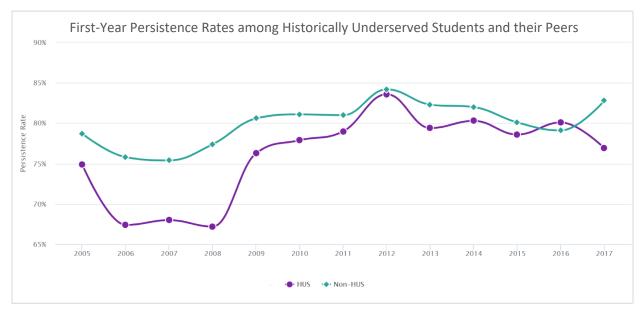


At the same time that historically underserved populations have increased, Sonoma State's 6-year graduation rates have reached all-time highs across all groups of students, indicating that the university's efforts to increase completion rates are improving opportunities for all. Graduation rates among underserved students have risen the most: by 17 percentage points since the 2007 cohort.

As a result, Sonoma State's historically underserved equity gap has decreased from 14% to 5%, although Pell and first-generation gaps have been more variable. Nonetheless, Sonoma State must continue to identify opportunities to enhance support for its historically underserved, Pell-recipient, and first-generation students to reach its 2025 equity gap goals.

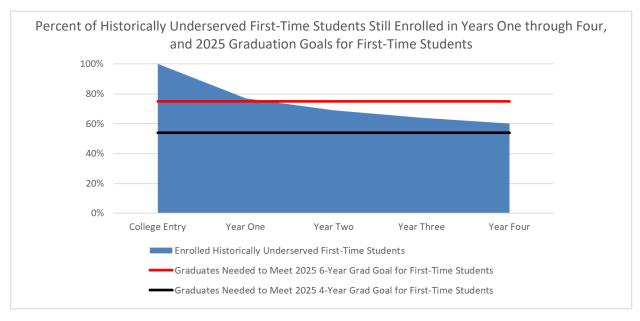
Equity Gaps in Student Persistence

Sonoma State's equity gaps are prevalent in attrition patterns during students' first years of enrollment. **Nearly half of all students who leave Sonoma State without graduating leave in their first year.** Indeed, only 77% and 79%, respectively, of historically underserved and Pell-recipient students in Sonoma State's 2017 first-time student cohort returned in fall 2018, compared to 83% and 81% of their respective peers. First-year persistence gap trends between historically underserved students and their non-historically underserved student peers are reflected in the figure on the following page.



Although attrition is at its highest in students' first year of enrollment, persistence rates among Sonoma State's historically underserved, Pell-recipient, and first-generation students drop another 8-10 percentage points in their second year^{viii}. Based on historical trends, **Sonoma State's early attrition rates among underserved groups are such that the institution would need to graduate 97% of all historically underserved students still enrolled after their first year in order to meet its 75% six-year graduation target and eliminate equity gaps.** While this observation indicates that more work needs to be done, it is important to remember that Graduation Initiative 2025 operates under the moral imperative to better serve our students. In this spirit, even if all Graduation Initiative goals are not fully met, progress towards those goals represents real gains for our students. Additionally, because this analysis is based on data from the past 5 years, it does not take into account recent changes, such as Executive Order 1110, that the campus and system have implemented to promote equity.

After two years, persistence rates among underserved students typically drop below levels necessary to achieve Sonoma State's 6-year graduation and equity gap goals. The figure below is indicative of this historical pattern for 2012 – 2018 first-time student cohorts.



Early Academic Outcomes Contributing to Equity Gaps

At Sonoma State, taking a full load (15+ credits per term) is the strongest predictor of graduation within 6 years for Pell-recipients and first-generation students. For historically underserved students, earning fewer than 2 DFWs in the first two years is the strongest predictor of 6-year graduation rates. vi

As the figures below illustrate, there is a 14-percentage point gap between the number of historically Pell recipients and their non-Pell peers who took a full load in their first two years at Sonoma State (see below chart, at left). However, graduation rates among Pell recipients who took a full load in their first two years are 32 percentage points higher than for those who did not (see below chart, at right). This pattern is also apparent among first-generation students, and a comparable relationship exists for historically underserved students and earning fewer than 2 DFWs in the first two years.



Despite the strong connection between taking a full load in the first two years and graduating within six, only 27% of historically underserved, 24% of Pell-recipient, and 23% of first-generation students accomplished this objective.

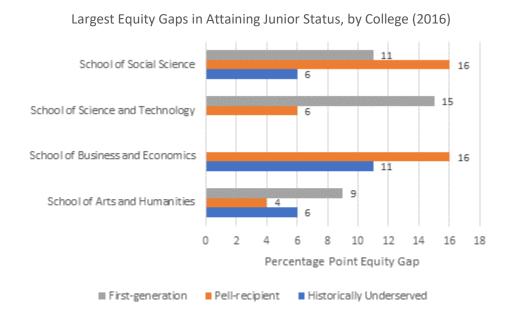
Taking less than a full load early in one's college career has a disproportionately negative impact on underserved students. Providing additional support to help Sonoma State's historically underserved, first-generation, and Pell-recipient students take 15 or more credits each term in their first two years would go a long way toward eliminating equity gaps.

Gaps in Attaining Junior Status



At Sonoma State, historically underserved, Pell-recipient, and first-generation students achieve junior status (equivalent to earning 60 semester credits) within two years at rates that are between 4 and 8 percentage points lower than their peers in the most recent year for which we have data. These rates vary considerably by school.

As the figure below illustrates, the Schools of Social Science and Business and Economics have the largest Pell equity gaps among students attaining junior status within two years (16 percentage points each). The School of Business and Economics also has a prominent historically underserved equity gap (11 percentage points), and the Schools of Social Science and Science and Technology have the largest first-generation equity gaps (9-15 percentage points). Although recent policy changes (e.g., EO 1110) and enhancements to academic support offerings are aimed to address these early equity gaps, it is critical to identify additional opportunities (both academic and non-academic) to help underserved students reach the junior status credit threshold within two years.

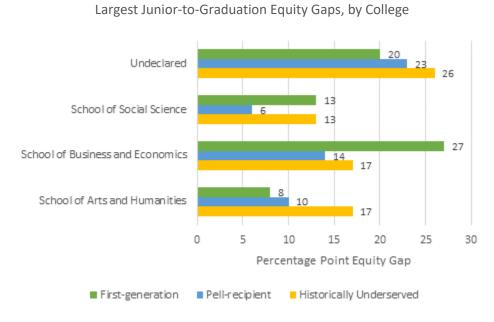


Gaps from Junior Status to Graduation



While gaps in academic preparation likely contribute to disparities in attaining junior status within two years, equity gaps among those who have already attained junior status can be more difficult to explain. Yet at Sonoma State, historically underserved, Pell-recipient, and first-generation students who have attained junior status graduate within two years^{xi} at rates that even more pronounced—8 to 13 percentage points lower than their peers—although there is substantial variation across colleges.

As illustrated in the figure below, junior-to-graduation equity gaps are especially pronounced (20 - 26 percentage points) among students who have attained junior status but have not yet declared a major. The Schools of Business and Economics, Arts and Humanities, and Social Science also have relatively large junior-to-graduation equity gaps.

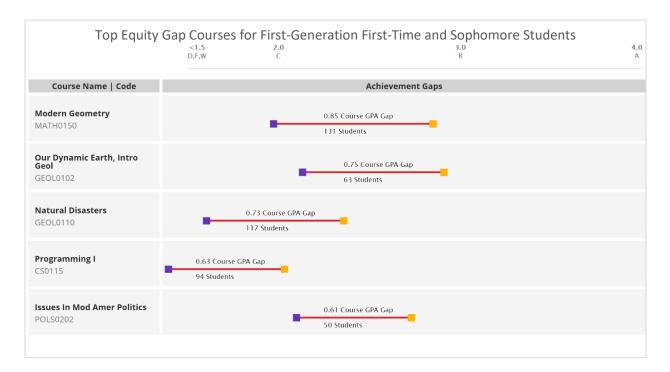


Across the three schools shown in the figure above (as well as undeclared students), 56 historically underserved students with junior status missed graduating within 2 years by just one term. Providing additional support to help underserved students cross the finish line within two years will have a disproportionately large impact on Sonoma State's ability to eliminate equity gaps in 6-year graduation rates.

Courses with the Largest GPA Equity Gaps

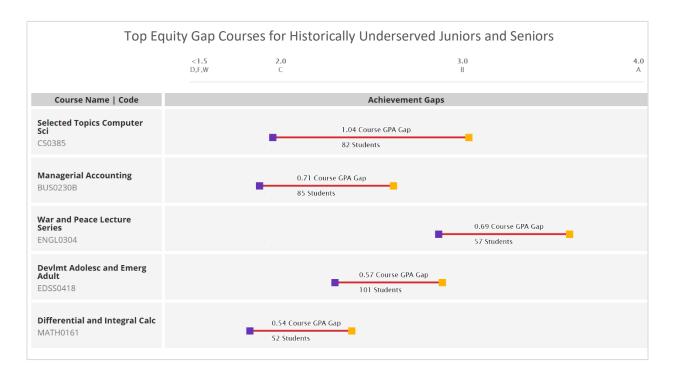
Equity gaps also exist within courses, some of which are far more pronounced than others. Courses with the largest GPA equity gaps for first-generation first-time and sophomore students, including those with large numbers of non-passing grades, are concentrated in math and the sciences.

The top 5 GPA equity gap courses for first-generation first- and second-year students (in courses with enrollments of at least 50 students and in the most recent term for which we have data) are shown in the figure below. (As noted previously, students who receive more than 1 DFW in their first two years are much less likely to graduate in 6 years).



Courses with the most pronounced GPA equity gaps for historically underserved Juniors and Seniors—including those where large numbers of underserved students, earn non-passing grades— occur in multiple colleges across campus.

The top 5 GPA equity gap courses for historically underserved third- and fourth-year students (with enrollments of at least 50 students and in the most recent term for which we have data) are shown in the figure below. Equity gaps for all Sonoma State courses (by student level) can be viewed in the Equity Dashboard's <u>course GPA gap page</u>. Equity gaps for all Sonoma State courses (by college) can be accessed in the Graduation Initiative Dashboard's <u>course GPA gap page</u>.



Suggested Actions

To achieve the 2025 Graduation Initiative's ambitious equity gap goals, the Sonoma State community must continue to work together with a renewed sense of purpose, mobilizing resources and expertise to ensure that opportunities for excellence are available for all students, regardless of background. This section outlines several ways that Sonoma State faculty, staff, and administrators can work together to achieve this goal.

1) Recognize the critical importance that advisors and other staff play in promoting the success of underserved students.

- Develop targeted, proactive advising and implement early alert systems that warn staff and faculty when a student is falling behind or is in danger of stopping out.
- Leverage campus data to determine which support programs and strategies might be implemented, enhanced, or redesigned to help improve first-, second-, and third-year persistence among historically underserved, first-generation, and low-income students. These may include:
 - Enhancing tutoring and expanding peer mentoring for underserved students.
 - Developing and expanding summer programming designed specifically to support students from historically underserved communities.
 - Reimagining the first year of college to improve the quality of learning and student experience for students from historically underserved communities.

2) Monitor participation data for various programs and services designed to improve student success.

- Ensure that program leaders regularly disaggregate data to determine whether their student support services are being distributed equitably, and that they implement strategies to foster more equitable participation.
- Survey and/or interview students who stop attending to find out why.

3) Implement initiatives aimed at ensuring an inclusive campus climate.

- Examine co-curricular activities to identify gaps in student engagement. Devise and implement plans that foster more equitable participation.
- Examine campus culture and climate from the students' perspective. Do historically underserved, first-generation, and Pell-recipient students feel a sense of belonging on campus? Do they have access to faculty, staff, administrators, tutors, and others who understand the issues they face and are familiar with the communities from which they come? Do faculty, staff, and students feel that the campus culture is committed to and supportive of diversity, equity, and inclusion?
- Conduct regular focus groups with underserved students to gain a better understanding of their
 experiences at the institution. Combine findings from these gatherings with campus data to
 identify opportunities for the institution to better serve these students. Focus group facilitators
 should be trained to handle conflicts that might emerge when sensitive topics are discussed.
- Dedicate resources to provide space, programming, and staff to support students from underserved communities.

- Implement programs to better inform and engage parents and families in their students' education.
- If not already doing so, enhance new student and parent orientation programs by offering them in languages other than English.
- Examine campus culture and climate from the perspectives of faculty, staff, and administrators. Have campus employees been offered and undergone training to equip them with the knowledge, skills, and tools they need to handle issues around diversity, equity, and inclusion?

4) Conduct analyses of the impact of Executive Order 1110 on your campus.

- Is this change improving equitable outcomes for underserved students?
- What additional changes or supports are needed to ensure that this policy change produces the
 desired outcomes for students? Identify opportunities to further enhance courses and better
 support students who arrive in need of additional academic support.

5) Encourage faculty to conduct analyses of degree requirements and course sequencing within majors to identify opportunities to better prepare students for courses that have high DFW rates.

- For colleges and majors that see a disproportionate number of students migrating to other majors and colleges, encourage faculty and departments to explore the data and identify course sequences that help students meet requirements that are not major-specific (e.g., GE and service courses).
- Seek to understand the factors contributing to disparate outcomes in courses and majors with the largest equity gaps. Are they resulting from technical or academic bottlenecks that may have a disproportionate impact on underserved groups?
- Consider redesigning high-enrollment, low-success courses with significant equity gaps.
- Support faculty in the implementation of equity-minded pedagogies and in the creation and strengthening of faculty learning communities aimed at identifying and advancing strategies for closing equity gaps in the classroom.

6) Focus on providing needed financial support for students from historically underserved and low-income communities.

- Implement programs to increase students' financial literacy to support them in making informed decisions when planning their course schedules and graduation timelines.
- Increase the number of student job opportunities on campus.
- Offer emergency funds, retention grants, and summer grants to students in need.
- Create initiatives to ensure the affordability of course materials.

7) Explore nuances in the ways in which ethnicity, gender, first-generation designation, academic preparation, and financial hardship intersect at campus and college levels to influence student success.

8) Maintain a focus on equity. Remember that the need to close equity gaps will not end in 2025; Sonoma State will continue to educate historically underserved students for many years to come. Your continued efforts to support equity are critical to those students as well as to the families and communities from which they come.

Endnotes

- Vhile this observation indicates that more work needs to be done, it is important to remember that Graduation Initiative 2025 operates under the moral imperative to better serve our students. In this spirit, even if all Graduation Initiative goals are not fully met, progress towards those goals represents real gains for our students. Additionally, the data available for this report do not capture the impact of recent policy and practice changes that hold potential for improving student outcomes. For example, Executive Order 1110 provides students with support courses and changes enrollment policies around continuation in ways that are expected to improve student outcomes and narrow equity gaps.
- vi The Chancellor's Office utilized Structural Equation Modeling (SEM) to identify the impact of 4 early academic milestones on graduation rates: earning fewer than 2 DFWs (grades of D, F, or unauthorized Withdrawal) within the first two years; reaching sophomore status within 1.5 years; taking a full load (15+ credits per term); and earning at least a 2.5 GPA in the first two years. The full methodology for this analysis can be accessed in the Equity Dashboard (calstate.edu/equitydashboard).
- vii The percent change is calculated by subtracting the proportion of 2008 cohort first-time students who were historically underserved, Pell, or first in their family to attend college from the proportion of first-time students in the same three categories for the most recent cohort year. The difference is then divided by the proportion of 2008 cohort first-time students to get the percent change.
- viii To capture outcomes of the campus's most recent efforts to increase persistence, the data cited here utilize the most recent cohorts available (i.e., the 2017 first-year cohort for first-year persistence; the 2016 cohort for second-year persistence, etc.). To view persistence patterns within specific cohorts, visit the CSU by the Numbers Dashboard (calstate.edu/csubythenumbers).

¹ The Equity Dashboard can be viewed at www.calstate.edu/equitydashboard.

The term "historically underserved students" or "HUS" refers to African American, Latina/o, and Native American students.

While not a formal goal of Graduation Initiative 2025, approximately one-quarter of Sonoma State first-time students are the first in their family to attend college. To close historically underserved and Pell equity gaps, it is essential to understand the additional challenges first-generation students face. Aligned with systemwide reporting, first-generation students are defined as those for whom neither parent attended college.

[™] The authors employ the gender-neutral term "first-time students" throughout this report in lieu of "freshmen."

ix There are also notable equity gaps in this measure when looking at 3- and 4-year timeframes.

^x Equity gaps in attaining junior status and junior-to-graduation equity gaps for the entire campus can be found in the Equity Dashboard (<u>calstate.edu/equitydashboard</u>). It is important to note that major and college switching patterns may affect the junior-graduation timeline.

xi There are also notable equity gaps in this measure when looking at 3- and 4-year timeframes.